Interobjectivity in architectural research and theory

Towards a meta-theory of materiality and the effects of architecture and everyday life.

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Abstract: *The aim of this article is to introduce a meta-theoretical discussion in architectural research about materiality and its effect on everyday life and use. Taking a relational perspective, I distinguish between three different perspectives on materialities as described in theories in recent decades. From these perspectives I develop three possible conceptualisations of interobjectivity. The first perspective sees interobjectivity as collaboratively constructed 'cross-road effects'. The second perspective sees interobjectivity as the process of stitching together material heterogeneities. The third perspective sees interobjectivity as the radiance of a persistent identity through different contexts. These three perspectives each contribute to the ways architectural objects and spaces interact and produce effects. These effects are often discussed within separate paradigms. Putting them together as different modalisations of interobjectivity enables a much richer empirical analysis, where the notion of 'material effects' can be differentiated and compared.*

Key words: interobjectivity, architectural theory, materiality, meta-theory, actor-network theory

The question of materiality and form has always been one of the core issues in architecture and architectural theory, both in terms of style and expression and as a philosophical issue concerning the different roles and impacts of built form. In recent

years materiality has also become an important issue in philosophy, cultural studies and the social sciences. Materiality has become an issue of renewed importance through theories of e.g. praxeology,¹ material semiotics,² actor-network theory,³ non-representational theory⁴ and object oriented philosophy.⁵ However, these theories have yet to benefit from decades of architectural theories and research on the issue of materiality, and it also remains to be investigated which paths of architectural research are made possible through the contemporary philosophies of materialities and objects.

The aim of this article is to develop a meta-theoretical discussion on how the effects of architectural materialities can be investigated. I do this by gathering and framing materiality theories as three different takes on interobjectivity. One of the basic assumptions in this paper is that the world meets us in chunks and pieces (humans, non-humans, subjects, objects, entities or whatever one wants to call them), and interobjectivity is about investigating the relationships between these ‘chunks’. Furthermore, my meta-theoretical aspiration lies in the attempt not to just review different takes on materiality but to frame them in a way that makes them commensurable. It should also be noted that this framing can never be innocent or objective, and that it, comes from a perspective of relational ontology (following the notion that the meanings and effects of objects must be seen and valued from a relational perspective).⁶

In the first part of the paper, I introduce the concept of interobjectivity, and go on to advocate a meta-theoretical approach of modalisation as an alternative to the more common iconoclastic approaches to comparisons between theoretical paradigms. In the second part, I discuss different theories of materiality addressing issues of interobjectivity. This is not a comprehensive or representative review of the theories from these decades, but a very deliberate selection of interesting but different takes on materiality. These perspectives are dealt with in chronological order:

1. Theories on materiality originating from the 1970s and 1980s: time-geography,⁷ space syntax,⁸ and socio-materiality.⁹
2. Theories on materiality originating primarily from the 1980s and 1990s: actor-network theory¹⁰ and material semiotics.¹¹
3. Theories on materiality originating from the 2000s: object oriented philosophy¹² and vibrant materiality.¹³

All of these perspectives have earlier influences as well, and all of them are frequently used in research today. The aim of this discussion is to fuel a meta-theoretical modalisation and the development of three different takes on interobjectivity: interobjectivity as (i) cross-road effects, (ii) stitching, (iii) radiance, suggesting that these three aspects might well gain from being discussed together, rather than always be separated into different paradigms or discourses.

1. Interobjectivity

In order to frame this discussion in a way that does not predefine the problem of meta-materiality within a dualistic or dialectical approach (like society and matter, or form and function), I will discuss the effects in terms of interobjectivity. The concept of interobjectivity was introduced by Latour to describe a relational process of events or actions that includes both humans and non-humans, and where it must be acknowledged that agency is not just a human affair but the effect of an association of human and non-human actors.¹⁴ Latour also uses the concept of interobjectivity in discussions on how every inter-action is never just local, but in fact part of an actor-network (that is, not framed within a certain scale).

Interobjectivity has more recently been discussed in cultural studies and cultural psychology from a somewhat different perspective, addressing aspect of intersectionality.¹⁵ Moghaddam argues for interobjectivity as ‘understandings that are shared within and between cultures about reality’.¹⁶ The concept is used here more specifically to balance the concept of intersubjectivity in studies of culture and inter-group processes. The combination of these two different meanings of interobjectivity has, furthermore, been developed and used in a study on street-art in London,¹⁷ arguing that radical differences in the view and construction of street art as an object were also bound together by certain cross-cultural similarities.¹⁸

These different takes on interobjectivity as a relational process of material heterogeneities (Latour) and as a product or objectification of cross-cultural commonality (Moghaddam) suit the arguments in this article well (as clarified below), in that I argue for an approach that would encompass both (and more). Interobjectivity, in its broadest sense, can be defined as the relationship between objects, where object can be defined as ‘anything that has a unified reality that is autonomous from its wider context and also from its own pieces’.¹⁹ This is similar to Whitehead’s notion of the object as something reoccurring, or as he puts it: ‘Objects are the elements in nature which can ‘be again’’.²⁰ Thus an object could basically be of any size, durability, or level of simplicity. An object could be non-material, like a

dream or a mental image, but in this article I focus on the intersection of materiality and objects. In other words, I deal foremost with objects that can be given a location or position in the life world (not only can you say ‘there it is again’ but you can also point at the object). Such an approach would not be limited to discussing objects of certain densities or condensations (such as stones, walls and designed artifacts) but would include objects of all kinds of material and spatial media (air, water, vacuum, etc.).

Finally, it should be pointed out that my reconceptualisation of interobjectivity is meant to embrace a senso-motoric and praxic perspective.²¹ This perspective is rooted in anthropology, in Marcel Mauss’ ‘Techniques of the Body’ (1936) and in material culture studies as developed from Appadurai’s and Kopytoff’s contributions to the social life and cultural biographies of things (which Kopytoff’s student, Warnier, has further developed into a praxeological approach). Warnier compares praxic values to sign value: where the former only can be seen in motion (gestures, bodily techniques, etc.), the latter is often static.²² The praxic perspective is fundamental to understanding the effects of architecture. Our basic being-in-the-world is dependent not only on deliberate thought or reflection, but also on movements and bodily techniques. Furthermore, many of our actions are pre-reflexive and must be studied through materialities and senso-motoric conduct.²³

2. Reviewing perspectives on materiality: From dichotomization to modalisation.

The relationships between objects, between non-humans and humans, or more specifically between material effects/constraints and the doings of everyday life, have been dealt with in research areas such as time-geography, space syntax actor-network theory, socio-materiality, non-representational theory and affordance theory, and others, but not many efforts have yet been made to discuss and evaluate these theories from a meta-theoretical perspective. Instead, it seems as if an open-ended analytical position in comparative discussions on different materiality theories is often abandoned for a more critical and dichotomic position in which the good theories are distinguished from the bad. The discourse on space syntax has, for example, traditionally been divided between ‘insiders’, working from within the paradigm, and more critical ‘outsiders’, often dismissing the theory as modernistic or positivistic.²⁴ It is interesting to note that even explicitly non-dichotomic researchers (for example in actor network-theory), arguing for a relational approach to research,

seem to subscribe to this rhetorical figure in their review of different approaches, often focusing on dismissing non-relational theories rather than on putting some of their insights in a relational context. Latour criticises the way in which sociology has divided objects into either bad and deceptive (fetish) or good and natural (forces or facts), in the first case as doing too little and the second too much.²⁵ However, in terms of rhetorics, Latour does a somewhat similar trick himself as he gathers the three ‘bad’ perspectives on objects, to see them: ‘as invisible and faithful tools, as the determining superstructure and as projection screens’²⁶ in order to argue for the ‘good’ view of objects as actors ‘making a difference’ in an actor-network. Albenia Yaneva makes a similar move in *Mapping Controversies in Architecture*,²⁷ where she dismisses two different and well-represented approaches in architectural theory in order to advocate a third (the ANT-approach), and finally, Harman’s critique of materialism, which argues that most theories tend to either undermine or overmine materiality, seem to subscribe to the same iconoclastic rhetoric.²⁸

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There might be times when classifying one perspective on materiality as better than another can be justified, but this paper taxes the less common approach of embracing different traditions by transforming them into different modalities or takes on the same subject (in this case, that of interobjectivity based on relational ontology). Although I try to avoid iconoclasm, the approach is not without a certain violence of its own: the theories reviewed all have their specific histories and contexts, and gathering them into three different collectives as I try to do below by necessity also entails a fair portion of abstraction. A meta-theoretical approach is based on the idea that it could be productive to study the practice and outcome of theorising itself. The aim of this study is not to preserve or sort, but to find pragmatic uses for theories in new contexts. Although this article may seem to be structured like a review article, its aim is to establish a conceptual framework that allows for a differentiated and commensurable set of analytical tools useful in investigating the roles of architectonics and materiality in everyday use.

3. Interobjectivity as cross-road effects

The first interobjectivity approach is developed from Moghaddam’s notion of interobjectivity as shared or ‘collaboratively constructed objectifications’,²⁹ meaning that certain objectifications act as cultural crossroads, having similar impacts in

different contexts. If we want to include a praxic perspective this would not only mean including objects of shared understanding but also objects of shared bodily techniques and practices, i.e. some bodily techniques are different between cultures (sitting or squatting), some might be quite similar (not walking through walls, or sleeping standing up).

In architectural theory this approach to materiality has often been used implicitly. In architectural theories and discussions from Louis Kahn to Jan Gehl,³⁰ it is often a kind of common denominator notion of interobjectivity that is sought after in questions like: What do these bricks want to be? How can a bench be located as efficiently as possible? These theories tend to focus on commonalities rather than differences, where the architectural object as a collaboratively constructed objectification often remains hidden or unexpressed.

Some more elaborated theories on materiality, such as space syntax, time-geography and socio-materiality, may be linked to this perspective on interobjectivity. Dag Østerberg began to develop his theory of socio-materiality, inspired by Marx and Sartre, in the 1970s,³¹ and it had some influence on Scandinavian architectural theory in the 1980s and 90s.³² With his point of departure in a class perspective, Østerberg points out that although the working class may be in the majority in terms of numbers, the material structure bids resistance to change, it has a certain inertia that mediates power.³³ In fact, people can even be reduced, in certain situations, to a kind of bodily facticity (I cannot pass through this wall, or this crowd, or this queue). Materiality for Østerberg is thus something that can be manipulated, and that tend to have major effects on the on-goings of everyday life. Østerberg's theories and nomenclature can sometimes resemble those of Elaine Scarry who, in *The Body in Pain*, views objects as a kind of pain-projecting, a tool for externalising bodily problems into the world where objects can be described as 'perceived-pain-made-gone',³⁴ although Østerberg tend to focus on the capability of material structures to oppress or induce feelings of pressure and inertia, rather than relief.

Space syntax is arguably one of the most successful research paradigms in architectural research in recent decades. Although Hillier argues that space syntax is a theory about space (and that 'space is the machine'), it has also always been a theory about materiality. As early as in the *Social Logic of Space* (1984), Hillier and Hanson make it clear that individuals and space are both socio-material from the start, and they are put on an equal footing. Space (like the moving human body) is given 'a descriptive autonomy'³⁵ and seen as an 'objective entity in itself'.³⁶ In space

syntax spaces and spatial configurations are often (although implicitly) treated as collaboratively constructed objectifications. Such objectification does not comprise a common view on the discursive meanings of the space as much as certain praxic similarities – that is, the use-aspects of the space being studied are treated (for example, the movement patterns of certain spatial configurations) treated as similar across different groups and cultures. Space syntax studies deal with cross-road effects almost in the literal sense, investigating how configurations of roads could have equal (statistical) effects on movement across different cultures (space syntax studies are often interested in *series* rather than *groups*, to use Sartre's concepts). There might of course be instances where the interobjectivity of spatial configurations (in terms of praxic similarities) fails, and instances where they do not (discussed by Hillier and Hanson as the difference between long and short models).³⁷

In his last book, *Tillvaroväven* (translating into something like 'The weave of existence'), published posthumously in 2009, Hägerstrand sums up and develops the ontology he presented in his earlier writings on time-geography, and he develops a kind of infra-language in order to describe the human condition as contingent on the fact that we are spatial and have bodies. Hägerstrand takes a kind of senso-motoric perspective on time and space, discussing the relationship between spaces and bodies in terms of time and movement, and his contribution lies in the way he begins to establish a coherent terminology, setting up basic concepts such as *complementary space*, (the space at disposal for movement) and *next-to-each-otherness* (stating that all things on earth are materially connected), beginning to relate these concepts to each other and developing a kind of phenomenological material ontology based on conditions and terms set by physical necessities. Hägerstrand thus, for example, initiates discussions on how things continuously change spatial configurations, e.g. as cars line up in a queue they also change complementary space and restrict each other's possibility of movement.³⁸

Summing up, the theories above take a rather classical perspective on space as a kind of physical and static entity that can be described and measured in terms of physics, geometry or topology. This view is fairly common, and often seems to form a kind of implicit backdrop to contemporary architectural discourses on aspects such as density or urban design. The three theories could all be criticized for a tendency towards universalism and/or normalisation, where a common view on objects is more or less taken for granted. A telling example is Hillier's way of tagging cities that do not fit in with his idea of a relationship between form and function as 'strange cities'.³⁹ However, the three theories all bear resemblances with

Moghaddam's view on inter-objectivity, addressing praxic cross-cultural effects of space and materiality (that are common to some different groups or cultures). In order to escape universalism and to stress how interobjectivities are always relational at the core, but where similarities still must be dealt with, it is important to emphasise the basic presumption that we are dealing with interobjectivity as a constructed cross-cultural effect that only can be described *a posteriori*. One way of describing this might be to draw an analogy to Ludwik Flecks concept of facticity. Fleck calls the consequences of collectively established matter of facts (often upheld as a kind of passive and taken-for-granted connections) facticity.⁴⁰ Facticity presents a kind of resistance to arbitrary thinking, an inertia to free action, which might seem like 'hard objective facts', but which nevertheless depends on a specific and collaboratively constructed thought collective (called *denkkollektiv* by Fleck, but which also could be seen as praxic collectives). The perspective of interobjectivity as cross-road effects might be very useful for investigating praxic and non-discursive facticities of architecture and everyday use. To temporarily focus on praxic interobjectivity (rather than the negotiations of intersubjectivity) enables a differentiated discussion on the effects of architecture in an everyday life context. It should also be noted that this perspective on interobjectivity actually opens up for discussions on both similarities and differences. Although Hillier, Hägerstrand and to a certain extent Østerberg tend to discuss material effects in terms of similarities, one could also use this approach in a more critical perspective, discussing how an object might be at the crossroads of different meanings, a boundary object,⁴¹ or a matter of controversy. Mauss' classical example of the 8,000 spades that had to be replaced when the British infantry replaced the French during World War I is a clear-cut example of failed interobjectivity.⁴² One of the interesting things about praxic interobjectivity is that it opens up for the intersectional analysis of architectural objects, analysing their roles in relation to different situations, human beings, collectives, groups, species and cultures. It might also be used to analyse the entanglement and overlapping aspects of objectifications, for example how the way we walk might be similar in some cultures, the way we swim in others, etc.

4. Interobjectivity as stitching

The second interobjective approach is a more clear-cut example of relational ontology that can be developed from, for example, Latour and actor-network theory (ANT). The relational perspective on objects has often been seen as in opposition to

the perspective on objects as substantial or singular as expressed, for example, by Nietzsche, in his critique of Kant, in *The Will to Power*:

The ‘thing-in-itself’ is nonsensical. If I remove all the relationships, all the ‘properties’, all the ‘activities’ of a thing, the thing does not remain over; because thingness has only been invented by us owing to the requirements of logic, thus with the aim of defining, communication (to bind together the multiplicity of relationships, properties, activities).⁴³

This view may be seen as similar to the view of Latour in his writings on actor-network theory, and which has been connected to architectural theory by, for example, Albena Yaneva,⁴⁴ in the sense that all that can be known about a thing is the sum of what it performs in its different relations (its actor roles in different networks, where networks must not be understood as fixed figures, but more in terms of effects).

Interobjectivity in this context is the forming of material heterogeneities: humans, objects, spaces linked together in more or less stabilised networks. Buildings and spaces in this perspective are often seen as controversies, an ‘architecture on the move’⁴⁵ where architecture is the result of a process rather than a predefined box to be filled or stripped of qualities or power relations. ANT advocates an irreductivist perspective where no monolithic concepts such as society, nature or architecture can be seen as pre-given or stable entities, they are always ‘in the making’, and the only way to know them is by following their every step. Yaneva pursues this means of investigation as she maps controversies through different building projects (Sydney Opera House, the Eiffel tower, London 2012 Olympic Stadium, etc.,) following the actors preceding their construction. Yaneva shows us that architecture is an activity dependent on a number of heterogeneous actors (rather than just the autonomous architect or ‘architectural world’). Architecture is a connector assembling new and different worlds around it every time. The role of architectural theory should, from this perspective, be to ‘witness and describe the modes of existence of various architectural objects’.⁴⁶

A key issue in ANT is thus to pinpoint the relevant actors in any given event. As the theory does not focus on what objects are, but on what they do, we need to follow processes where different objects (humans or non-humans) take on actor roles. The actor is defined foremost by the fact that it has an effect in a network, which means that actors sometimes differ from more everyday categorisations of the world. Every artefact can take on a series of different actor roles, and as soon as one actor is

related to another new effects and meanings (transforming the original actors) are produced. The assemblage of two entities becomes, it could be argued, a new 'species' (at least when defined by the ways in which the affordances of an environment suddenly might differ),⁴⁷ in the sense that a stabilised actor cannot be seen as the pure adding up of the effect of the two original entities. The assemblage take on a new agency of its own that is more than the addition of the two original actors.⁴⁸ As early as in *The Image of the Body* (1935), Paul Schilder described how a material object can become interior to a body and its agency. The bicycle, for example, might become part of the 'image' I have of my body as I go to work in the morning. The bicycle is of course a material object, but in terms of agency I become one with my bike as I navigate between cars and fellow road-users.⁴⁹ It is thus an important empirical endeavor to trace events by finding the actors and actor assemblages (such as me+bike) that condition a certain effect.

The perspective on interobjectivity as stitching implies that objects can only be known by tracing the relations in which they take part, that is by investigating their actor roles in different networks. An ordinary bus stop could be a very different thing depending on the relations in which it takes part. As new actors become enrolled, the bus stop also becomes a new object. The role of the bus stop in the life of a hedgehog family is very different from its role as part of the public transport system or its possible role in a local gang war. The perspective on interobjectivity as the stitching together of material heterogeneities has several advantages. Contrary to the previous perspective, it is much harder here to fall into the trap of presupposing commonality or universality, since the interobjectivity studied is not that of products but of events. Empirical ANT investigations do not tend to start with an object or a place but with a process or a series of events.⁵⁰ The researcher needs to be very clear about what processes are being described, and very concrete about the actors enrolled. Since the actor never equals the artefact, but instead what the actor does in a certain context, all artefacts must by default be regarded as multiple objects.⁵¹ This perspective embraces the complexity of the world, and rather than making it comprehensible through abstractions and panoramic snapshots, it follows its every move with a never ending proliferation of actors and descriptions. It is thus quite well suited to a processual perspective on architecture, and perhaps especially in ethnographic studies of ongoing everyday life, e.g. of the architect designing a building or the uses of a built environment.⁵² It also makes it possibility to trace different relational systems and how they interact at a specific place or in relation to a specific artefact.⁵³ Traditionally, this perspective has, however, been weak in

descriptions of praxic aspects and bodily techniques. The reasons for this might first of all be that it never starts its investigation in the complexity of networks assembled in a single artefact or space, and second, that it tends to follow a narrative logic, following the trajectory of assembling actors, which makes the spatial simultaneity of bodily situations (where the order of assembling is harder to pinpoint, and perhaps also of less interest) difficult to describe.

5. Interobjectivity as radiance

A possible third way of seeing interobjectivity is as a kind of radiance. In his writings on OOP, Graham Harman argues that objects can never be fully known or exhausted in terms of use or knowledge. There will always be aspects of the object that are hidden. Although clearly in debt to ANT, Harman takes object agency in a new direction, as he reinstates the autonomy of the object in a much more explicit way than proposed by ANT. Objects, to Harman, are always more than the sum of the relations in which they participate. In fact, there will always be aspects of the object that are hidden, not yet or perhaps never to be made visible in an actor role. Both ANT and OOP can to some extent be seen as related to ‘actant semiotics’,⁵⁴ where the concept of actor/actant is simply used as a way of distinguishing what an object does (the actor/actant role) from what an object is. This distinction is a basic assumption in both ANT and OOP. We look at what actors do in order to understand the world, but whereas the ANT researcher is satisfied with describing the artifact through its actor roles, the OOP researcher is not. An object cannot be reduced to what it does, one must also speculate about what it is (since this is always something different). This might seem to be a problematic statement. What possible rewards could there be in arguing for the existence of forever hidden meanings or potentials of architectural objects? Still, what we can learn from Harman is that there is autonomy, and singularity to all objects. Every object is radically and incomparably itself, and is not reducible to anything else, not even to human intentions or power play.

OOP has certain similarities to Gibson’s theory of affordance when it comes to stressing the importance of the object as a whole, beyond any specific situation. Gibson notes, for example, that affordances are always ‘*taken with reference to an observer*’ but not [to] properties of the experiences of the observer’.⁵⁵ The affordance of an object thus does not change as the observer changes, but as Gibson notes, it is ‘invariant, [and] is always there to be perceived’.⁵⁶ Affordances seem somehow to

reside in objects, and although their detection also relies on the observer they do not rely on being perceived as affordances by the observer. Gibson also states that:

Phenomenal objects are *not* built up of qualities; it is the other way around. The affordance of an object is what the infant begins by noticing. The meaning is observed before the substance and the surface, the color and form, are seen as such.⁵⁷

We can discover a thing beyond its qualities and relations in networks. Harman calls this separation of an object from its accidental qualities *allure*.⁵⁸ Harman gives a large number of examples: 'In language, names call out to objects deeper than any of their features; in love, the beloved entity has a certain magic hovering beneath the contours and flaws of its accessible surface'.⁵⁹ What affects me are not just the qualities of the thing, but the object as an irreducible whole. Harman objects are thus primarily aesthetic in the sense that they can be perceived for their own sake, they have singularity and are appreciated beyond cognition and utility.⁶⁰ A comparison to Benjamin's concept of *aura* can also be made. The concept was introduced in Benjamin's essay 'The work of art in the age of mechanical reproduction',⁶¹ and is used to describe the inanimate and singular quality of an object that disappears as art is reproduced. Aura can be described as that within the object that has the capability of returning the subject's gaze, thus producing a distance, and the object as something other than the subject, something not dominated by the subject.⁶² The auratic aspect is thus (as is the object to scholars such as Bennett and Harman) in a certain sense hidden and beyond the reach of the subject. In his seminal article on Benjamin, Alan Latham writes:

Voided of aura the world becomes estranged from the human, from society. It becomes reduced to that which is useful for humanity; it is endowed with an instrumental existence but none of its own'.⁶³

Interobjectivity as *radiance* connotes a relation to the object produced through investment in a series of different relations to the objects, but that evades these specific relations. Rather, the meaning can be seen as that which is produced by a similarity between that which repeatedly is made absent through different relations and situations. This has to do with the fact that an object can persistently produce certain qualities through its relation to itself across different timespaces. The crucial question is not just about singularity, that the object is something-in-itself, and has a singular identity, but also about a kind of animated quality: this identity of the object is stabilized through the proliferation of new relations. An object might produce new

actor roles through every new relation, but this production of different actors also produces ‘a sameness’ – that-which-still-remains (the object produced by this ‘sameness’). This kind of relational system implies an on-going proliferation of new actor roles, roles which, over time, manages to produce a continuous shape precisely through the persistence of a certain sameness sustained by the radiance of constantly new relations. There are always some aspects of the objects that will not change – a small parking space will never become a hypermarket – and these aspects will be better known, the object will stabilize, as we investigate it. It is this radiant aspect of interobjectivity small children produce as they try the same object over and over again until they get to know and trust it, and it is also a basic way in which we as adults stabilize certain materialities as trustable and recurrent artefacts or spaces. Just as this kind of stabilization can be a way of getting to know and stabilizing a yet-to-be-known-world, it can also be a way of producing new architectural effects out of everyday life interactions (the yet-to-be-produced-world). The appropriation and persistent use of an architectural object might lead to a reconceptualisation of its identity.

Going back to the quotation from Latham above, it should be noticed that rather than seeing increased usefulness as something demeaning to the radiance of an object, radiance increases as usefulness increase. The more an object is put to the test in different situations, the more the object is also stabilized through this interobjectivity of radiance. If this seems abstract, it also opens up for a retake on one of the oldest traditions in architectural theory: the anthropomorphic perspective.⁶⁴ The anthropomorphic perspective is an ancient tradition in human history, and we find examples of it, from the classical era of Plato,⁶⁵ to English law of the mid-19th century,⁶⁶ and all the way to the modernistic architectural theories of Louis Kahn. Anthropomorphism was strongly criticised during the 20th century, and for understandable reasons, since human history is full of negative examples such as slavery and the instrumentalisation of human beings.⁶⁷ But the anthropomorphic perspective (through this ‘guilt by association’) may have been discarded too easily and quick. Jane Bennett argues:

If green materialism requires of us a more refined sensitivity to the outside-that-is-inside-too, then maybe a bit of anthropomorphizing will prove valuable. Maybe it is worth running the risks associated with anthropomorphizing /.../ because it, oddly enough, works against anthropomorphism: a chord is struck between person and thing, and I am no longer above or outside a nonhuman ‘environment’.⁶⁸

Things are not reducible to human action or intentions, and the popular process of demystifying them, Bennett suggests, only leads to the revealing of something human, other-to-the-object.⁶⁹

From the perspective of radiance, anthropomorphism is just one in an infinite list of possible x-morphisms that could be used to investigate architecture and architectural spaces. The point is that this perspective on interobjectivity, investigating stable relationships of the object to itself over time, as it gets enrolled in a series of different relational systems (networks), is an important way of discussing production of new uses and meanings in everyday life (not yet collaboratively constructed as a cross-road effect, or even as stitched together in a stabilised network).

7. Concluding discussion

In this text I have argued that in order to by-pass dichotomic and iconoclastic positions in the materiality debates, it is important to address the issue of meta-materiality in a more comprehensive manner. I have suggested three discourses (although it would of course be possible to suggest more) on materiality as three different perspectives on interobjectivity, each with its own advantages and problems. The first perspective saw interobjectivity as a praxic and collaboratively constructed product. The focus was on how material objects have similar impacts across cultures. A concrete wall in a public space might come to influence a whole series of different groups and different usages, affording a range of different activities, from leaning to graffiti. The wall also comes to play a part in already existing praxic facticities (some of them common across different cultures) affecting accessibility, visibility, etc. The second perspective saw interobjectivity as the stitching together of material heterogeneities where objects are always on the move. The focus was on how material effects become stabilised (and destabilised) through relations between different actors. The wall is part of an ongoing production of actor roles connecting to other actors such as concrete producers, car-drivers, playing children, graffiti-artists, gardeners, municipal inspectors, etc. Different aspects of the wall thus play roles in everyday events and networks, transforming the intentions and programs of the people and actors that comes in contact with it locally or from other times and spaces. In the third perspective of interobjectivity, the focus changes from the object as part of networks to the object and its different relations to itself. In ANT we follow different aspects of the wall as it connects to actors of all sorts. However, as the wall becomes mobilized in all these series of different situations it

seems as if certain qualities of the wall remain similar. The wall is never fully described just by its historical connections to others, there is something more to it, there is shape produced by the way in which some aspects of the objects remains the same. These aspects might at first seem obscure, but they become clearer as one explores an object in yet new ways, discovering new possibilities and perhaps even producing new and unintended usages (e.g. the production of a climbing culture on the elaborated facades of Cambridge during the early 20th century.⁷⁰

A relational view on materiality enables us to make use of insights from a series of theories which, although related in terms of subject, have seldom (if ever) been put together. Communication between different strands of research and between seemingly incommensurate theories might seem tricky, but it is certainly worth the effort, especially as a division of labour (in terms of theoretical paradigms, disciplinary clusters, etc.,) makes itself more apparent in social sciences, humanities and even within narrower scopes such as architectural research and theory.

If we want to take the effects of architectural design seriously, we need to establish concepts that enable differentiation and to investigate architectural objects from different perspectives. Meta-theoretical investigations and concepts might seem like abstract and rather theoretical paths to walk, but in fact such an approach might very well result in very concrete effects. They can, for example, be used as strategies enabling the empirical case to be put at the centre of interrogation rather than being used to exemplify a specific theoretical paradigm (in opposition to other paradigms). For example, I sympathize with Yaneva's approach in *Mapping controversies*, and I appreciate her theoretical clarity and development. However, to make the case studies richer and more materially focused, her studies would benefit from (careful) adoption of some of the qualitative tools found in the perspectives she criticizes. Using a meta-theoretical approach is not saying that anything goes, or that we could aspire to build a logical and coherent conceptual system. Meta-theoretical work is a careful and eclectic *assembling*, a crafting of tools,⁷¹ a *bricoleur* approach, crafting concepts from the pieces of a theoretical heritage that can never be made (or that never was) systematically coherent.⁷² Although an inter- or transdisciplinary perspective is a possible and often advocated starting point for more exhaustive investigations of an empirical phenomenon, one still need tools to develop such connections outside and inside disciplines. A meta-theoretical approach is a good start, and although the focus of this article has been to enable differentiation and comparison of material effects in architectural research, the concepts suggested both borrow from and could find usages outside the discipline of architecture.

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⁵ Graham Harman *The Quadruple Object* (Winchester, Zero books, 2011).

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¹¹ John Law, (1999)

¹² Graham Harman, *Prince of Networks, Bruno Latour and Metaphysics* (Melbourne, Re.press, 2009), Graham Harman *Towards Speculative Realism* (Winchester, Zero books 2010) and G. Harman, *The Quadruple Object*, *op. cit.*

¹³ Jane Bennett, *Vibrant Matter, A Political Ecology of Things* (Durham, Duke University Press, 2010).

¹⁴ B. Latour, ‘On interobjectivity’ *op. cit.* and B. Latour, *Reassembling the Social*, *op cit.*

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¹⁶ F. Moghaddam, ‘Interobjectivity and culture’, *op. cit.*, p. 221.

¹⁷ Gordon Sammut, Paul Daanen and Mohammad Sartawi, ‘Interobjectivity: representations and artefacts in cultural psychology’ *Culture Psychology* 16 (2010) pp. 451-463.

¹⁸ G. Sammut, P. Daanen and M. Sartawi, ‘Interobjectivity’, *op. cit.* 459 f.

¹⁹ G. Harman, *The Quadruple Object*, *op. cit.*, p. 116.

²⁰ Whitehead as cited in Isabelle Stengers, *Thinking with Whitehead* (Cambridge MA, Harvard University Press, 2011), p. 75.

²¹ J-P. Warnier, ‘A Praxeological Approach to Subjectivation in a Material World’ *op. cit.*

²² *Ibid*, p. 3.

²³ Cf. G. Sammut, P. Daanen and M. Sartawi, ‘Interobjectivity’, *op. cit.* p. 453.

²⁴ Edward Soja, ‘In Different Spaces, Interpreting the spatial organization of societies’, *Proceedings, 3rd International Space Syntax Symposium*, eds. J. Peponis, J. Wineman, and S. Bafna (Ann Arbor, Taubman College of Architecture and Urban Planning, Michigan, 2001), pp. 1.1-1.7, Sara Westin *Planerat, allför planerat* (Uppsala, Uppsala University, 2010), and Mattias Kärrholm ‘Space syntax and meta theory’ *The Journal of Space Syntax*, 1, 1 (2010), pp. 251-253.

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- ³⁶ B. Hillier, *Space is the machine*, *op.cit.*, p. 15.
- ³⁷ B. Hillier and J. Hanson, *The Social Logic of Space*, *op.cit.*, p. 11 ff.
- ³⁸ T. Hägerstrand, *Tillvaroväven*, p. 88, cf. M. Kärrholm 'Space syntax and meta theory' *op.cit.*
- ³⁹ B. Hillier, *Space is the machine*, *op.cit.*, pp. 215 ff.
- ⁴⁰ Ludwik Fleck, *The Genesis and Development of a Scientific Fact* (Chicago: University of Chicago Press, 1979 [1935]), cf. Mats Rosengren, *Doxologi* (Åstorp, Retorikförlaget, 2002), pp. 35-53.
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- ⁴³ Friedrich Nietzsche, *The Will to Power* (New York, Random House, 1967) p. 302. Translated from German by W. Kaufmann and R. J. Hollingdale.
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- ⁴⁷ Cf. James J. Gibson, *The Ecological Approach to Visual Perception*, (New York, Psychology press, 1986), pp. 127-43.
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- ⁴⁹ J-P. Warnier, "A Praxeological Approach to Subjectivation in a Material World' *op. cit.*, p. 17.
- ⁵⁰ B. Latour *Reassembling the Social*, *op. cit.*, p. 196.
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⁶⁷ Igor Kopytoff, 'The Cultural Biography of Things', in *The Social Life of Things*, ed. A. Appadurai (Cambridge University Press, 1986), pp 64–91, and J. Bennett, *Vibrant Matter, op. cit.*, pp. 11 f.

⁶⁸ J. Bennett, *Vibrant Matter, op. cit.*, p. 120.

⁶⁹ Ibid., p. xv.

⁷⁰ Emma Nilsson, *Arkitekturens kroppslighet/Staden som terräng*, (Lund, LTH, 2010), pp. 185 f.

⁷¹ John Law, *After Method, Mess in Social Science Research*, (London and New York, Routledge, 2004), pp. 41-2.

⁷² This is Derrida's reflection on Lévi-Strauss' distinction between the bricoleur and the engineer, see Mats Rosengren, *De symboliska formernas praktiker* (Göteborg, Art Monitor, 2010), pp. 47 f.