

WW19

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W. Material Qualities

W. Curio

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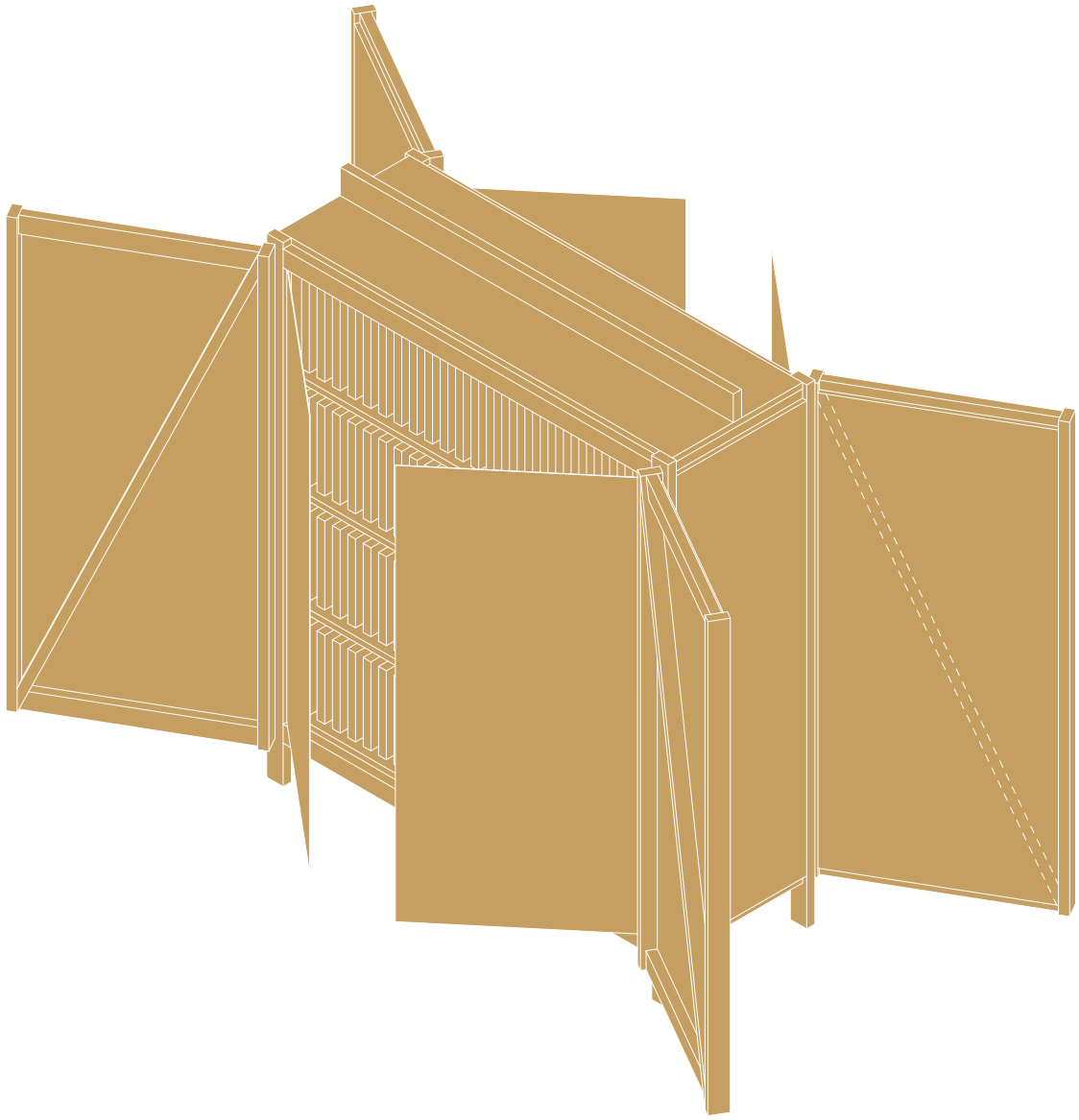


Fig. 1: Curio, Isometric Projection

Investigation. Materials are meaningful and essential to the world, they are something we physically interact and exchange with every moment of every day, usually in a tacit mode of ‘knowing how’ rather than an intellectual of ‘knowing what’.¹ The experience of material qualities is directly connected to the sensory capacities of our bodies, and it may be in part through these physical gestures that we access architecture, and conversely how architecture addresses the world.²

Sustainable building culture may, according to Andersen, be understood as a question of architectural quality ‘based on long-term technical, functional and aesthetic solutions,’³ characterized by the ‘ambition to pass on meaning to future generations.’⁴ Within the field of construction, it seems as if the historical knowledge of material qualities,⁵ has, to a degree, been omitted as a fundamental part of the architectural vocabulary. As evident in current debate⁶ and observed in current development, architecture may, to a certain extent, have lost its ‘existentially grounded plastic and spatial experience’, buildings have, according to Pallasmaa, ‘turned into image products detached from existential depth and sincerity.’⁷

Global statistics, reports and articles on climate change reveals that society has to reconcile that it is exhausting the planets resources at an ever-increasing rate. The consequences are overwhelming, all-encompassing and reveal all to clearly the need for reform within all fields in general and within the building sector in particular.⁸ Even though complexity at the magnitude of climate change defies any single way of knowing, it seems that the current discussion on sustainability within the building sector is generally reduced to a question of technical solutions.

Willis argues that ‘one defining characteristic of modernity has been our cultural de-emphasis on an architecture based on material imagination.’⁹ Reform based solely on a technical approach to sustainability neglects the multitude of agents and approaches ranging from the technical, to experimental, to observation and sensing. If we expand the field and acknowledge materials as being other than something technical, it may result in a discussion of sustainability that may gain depth and reveal solutions other than technical.

The thesis for the W+W investigation is that material qualities and their implication to spatial character¹⁰ may hold a significant position in a sustainable building culture. A question to ask might then be, how may materials and material qualities be reinserted as a measure of architectural quality, contributing to a sustainable building culture?

Bricolage. Rather than attempting the task of being all-inclusive, the work and the words are guided by a bricoleur attitude. Such a work process has a pragmatic aspect; ‘it is relative not only to availability and immediate needs, but also to the eyes and the skill of the collector.’¹¹ Bricolage as a method, is thus not only to gather bits and pieces and re-using available materials, but also to creatively synthesize them - using old parts in order to solve new problems.¹²

The work and the words may as such, be considered a permanently unfinished collection of thoughts and materials with related technical and phenomenological descriptions that want to reveal possibilities and connections that may inspire and nuance a more sustainable building culture. They do not offer a final conclusion, rather, they put forward a series of tests, experiments and observations that might form the basis for further investigations.

Medium, Substances and Surfaces. James Gibson, describes the perceived environment as not merely congeries of forms, angles, and edges. Rather than being static, the visual experience is, according to Gibson, dynamic, and the world is made up of perceptually meaningful features that are experienced continuously as wholes by actively engaged perceivers.¹³ In *The Ecological Approach to Visual Perception*, he describes three components of the inhabited environment: *medium*, *substances* and *surfaces*.

For humans, the environmental *medium* is commonly air. It affords respiration, permits locomotion, transmits radiant energy, mechanical vibrations and emanations.¹⁴ In other words, the medium affords movement and perception so that we can ‘do things, make things and touch things.’¹⁵ *Substances* are the more or less rigid physical foundations for life that ‘do *not* freely transmit light or odor and that do *not* permit the motion of bodies and the locomotion of animals,’¹⁶ such as rock, soil, sand, mud, clay, oil, tar, wood, minerals, metal, tissues of plants etc. Separating the medium from substances, the *surface* acts as an interface with certain experiential properties.¹⁷

Vibrant Matter. The philosophical project of Bennett, is ‘to think slowly an idea that runs fast through modern heads: the idea of matter as passive stuff, as raw, brute, or inert,’ which encompasses ‘parsing the world into dull matter (it, things) and vibrant life (us, beings).’¹⁸ Vital materialism describes ‘an ontological field without any unequivocal demarcations between human, animal, vegetable, or mineral.

Bennet argues for a materiality that is both force and matter, constructing a theory of *thing-power* in which things aren't simply alive in a mechanistic way, or imbued with a spiritual supplement or a non-material *life-force*. Rather, they are alive in an ecology of complex interrelationships and entanglements. As actants in assemblages, alongside other humans and nonhumans, they are all affecting each other, and constantly undergoing transformation.

According to Bennett, 'deep down everything is connected and irreducible to a simple substrate.'¹⁹ In other words, things are alive because of their capacities make a difference in the world, by forming alliances with other bodies and effecting the web of interrelationships of which they are a part. It is not only *us* that affect and influence the world, everything is alive, interconnected, and in process.

Resonating Bodies. As with Bennett's *vibrancy*, Rosa employs a sensory term, *resonance*, to develop a 'sociology of world-relations'²⁰ that suggest an alternative way of being-in-the-world or 'encountering the world, that is, people, things, matter, history, nature and life as such.'²¹ According to Rosa, resonance is something that happens in the inter-space, between 'actors', constituting an experiential relationship that is possible through a) af←fection: 'we feel truly [emotionally, cognitive and bodily] touched or moved by someone or something we encounter'²², and b), e→motion: 'we feel that we answer this "call", we react to it with body and mind, we reach out and touch the other side as well.'²³

Through the process of being touched and affected by something, i.e. reacting and answering to it, Rosa argues that 'we are transformed - or we transform ourselves in the sense of a co-production. Whenever someone has an experience of resonance – with a person, a book, an idea, a melody, a landscape etcetera – he or she comes out as a different person. And the other side is transformed as well.'²⁴ Resonance is in this sense not a passive quality, but rather an *elusive*, mutually active and transformative process in which we are not only moved but also are able to touch.

Curio. The name – *Curio* – stems from *Kuriosum*, describing an object which arouses interest.²⁵ It is a physical piece of furniture that may be regarded as a collection of architectural materials and techniques developed in accordance with the bricolage method, containing a continually developing collection of manufactured (*fremstillede*) architectural materials and techniques likewise developed in accordance with the bricolage method.

It takes a cue from 17th and 18th century *Cabinets of Curiosities*, and in particular the smaller cabinets kept in homes. The rise of science as an established discipline during this period, meant that the focus of collections shifted from the purely eclectic, in which the distinction between artefacts and natural objects was blurred, to trying to make sense of the world in a more objective way.

Furniture, as architecture, is bound to gravity, material and the scale of the human body. Giving shape to furniture traditionally constituted a slow development with slight changes for every iteration, in which knowledge from previous generations was honed. Think of *Shaker Chairs* (1800s) that inspired the *Kirkestol* (Klint, 1936), that in turn developed into the *Folkestol* (Mogensen, 1947) and so on. These slow changes provided means to carry a historical, cultural and technical knowledge on to new generations.

Neither prose nor poetry, *Curio* sits somewhere in the field between an *Ivar* shelving system by Ikea, a *brick factory* photographed by Meyer, a *vestry* by Utzon, the *Ise Shrine* and a *picture gallery* by Soane. It speculates somewhat naïvely, that materials are not only something we can think about but something that we can think with.

It is constructed from scraped, quarter sawn Kalmar pine, cut by a sawmill southern Sweden to the dimensions 64x32mm or dividends of said. This type of cut is dimensionally stable, moisture resistant, less prone to surface checking, and has traditionally been used for exposed elements such as doors and windows. Quarter sawn timber is characterised by a glistening sheen to the surface and has a straight grain pattern with few knots. Hinges and internal doors are manufactured from mechanically fastened, glass blasted, recycled aluminium. The finish of the materials is thought of as permanently unfinished. As such, the structure and cladding will go through further iterations such as limewashing, pigmenting and tooling.

Structurally, it consists of two ladders that are connected by horizontal shelves affixed to the rungs. As to provide structural integrity, ties connect the ladders towards the top and bottom. Furthermore, joist that are connected directly to the shelves increase the load bearing capacity and ensure a division between the two sides. The doors are similarly built as ladders, with two studs and two plates stiffened by a diagonal brace. The structural system is designed in such a way that it can readily be extended further by ladders and shelves to incorporate future additions to the collection.

Spatially, it gives an impression of both poise and animation – proposing both reflection and action. When closed, it is mute and falls in with the background. When open, the doors articulate a space on either side, allowing for views through and revealing additional layers of spatial and material complexity. The direct form of construction and reduced material palette, allow for a direct physical understanding of the spatial and tectonic system and heighten the material qualities of commonplace materials.

Material Qualities. Criticising ocularcentrism and image making in architecture, Pallasmaa argues that ‘vision separates us from the world, whereas the other senses unite us with the world’.²⁶ From the practitioners point of view, Zumthor states that ‘architectural gestures may say more than words, or at least something different than words’ and that ‘the physical gestures of a building are more primal, more directly connected to the sensory capacities of our bodies than to thoughts and words.’²⁷ If this is true, then perhaps more attention to the bodily experienced effects of material qualities in architecture may contribute to further substantiating a material language.

Vital materialism pursues a more radical displacement of the human subject than phenomenology, and by placing everything within vibrant networks of change that operate inside and alongside human beings, Bennett questions the idea of the exclusive human-centred act. If all forces and flows (materialities) are or can become lively, affective and signalling, an affective, speaking human body is then not radically different from the affective, signalling nonhuman. The notion of humans as composed of and part of a vital materiality all affecting each other, further implies that humans aren’t autonomous subjects, challenging a number of common dichotomies, such as life/matter, subject/object, and will/determination.

As pointed out by Rosa, resonance is something that happens in the inter-space, between actors, constituting an experiential relationship in which humans and the world are ‘formed, coined by and even constituted in and through their reciprocal relation.’²⁸ Resonance presupposes a relation in which both sides ‘are *closed* or consistent enough to speak with their own voices, and *open* enough to be affected,’²⁹ leading to mutual reinforcement and thereby magnifying the amplitudes of the vibrations. So far as perception is concerned, *surfaces* are according to Gibson, ‘where most of the action is.’³⁰ In this view, architecture, or more narrowly the material qualities of architecture, are not passive. Instead they are active - they work on us through the surface via resonance. What material qualities might do, is reveal the world of matter.

Bennett states that, ‘the figure of an intrinsically inanimate matter may be one of the impediments to the emergence of more ecological and more materially sustainable modes of production and consumption.’³¹ If we recognize matter as being other than dull, it may allow us to enter a more resonant relationship with the material world, in which the principal measure for being-in-the-world and by extension architecture, no longer is ‘domination and control but listening and answering.’³²

Distinct spatial arrangements of materials with particular qualities are continually available to our senses, and may be considered a material language. In this perspective, material qualities may in themselves be understood to be sense-making, and as such, one way in which human communication as resonance with the world may take place. Curio does not offer a final conclusion or a complete framework, rather, it curates a series of material tests, experiments and observations that might constitute an optics for how we think, shape and experience a sustainable building culture.

What is the primary problem that the project addresses? Materials are meaningful and essential to the world, they are something we physically interact with every day, usually in a tacit mode of ‘knowing how’ rather than an intellectual of ‘knowing what.’ (Olsen, 2010) The experience of material qualities is connected to the sensory capacities of our bodies, and it may be in part through these gestures that we access architecture, and conversely how architecture addresses the world. Bennett argues that, ‘the figure of an intrinsically inanimate matter may be one of the impediments to the emergence of more ecological and more materially sustainable modes of production and consumption.’ (Bennett, 2010) Following this, material qualities may be one way in which human communication as resonance with the world may take place and may as such be an important parameter in a sustainable building culture.

What characterizes the exhibition material and how does it relate to the central idea of the project? The work is a physical piece of furniture that may be regarded as a collection of architectural materials and techniques developed as per the bricolage method, containing a continually developing collection of architectural materials and techniques developed as per the bricolage method. Neither prose nor poetry, the work sits somewhere in the field between an *Ikea* shelving system, a *brick factory* by Meyer, a *vestry* by Utzon and a *picture gallery* by Soane. It speculates somewhat naïvely, that materials are not only something we can think about but something that we can think with.

What is the contribution of the work? Rather than attempting the task of being all-inclusive, the work and the words are guided by a bricoleur attitude. Such a work process has a pragmatic aspect; ‘it is relative not only to availability and immediate needs, but also to the eyes and the skill of the collector.’ (Olsen, 2010) Bricolage as a method, is thus not only to re-use available materials, but also to creatively synthesize them - using old parts in order to solve new problems. The work and the words may as such, be considered a permanently unfinished collection of thoughts and materials that want to reveal possibilities and connections that may inspire and nuance a more sustainable building culture.

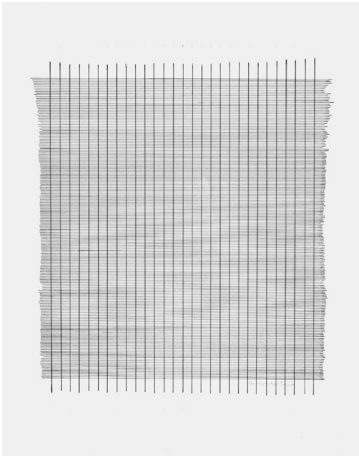


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Title - Words

Material Qualities

Title - Work

Curio

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- 5 This essay understands the term *material quality* on three levels: a technical, mechanical and chemical level of *material properties*; a visible level of *material qualities* and a level of *experienced effects* as argued in the paper *Spoken Matter*.
- 6 Among others: <https://politiken.dk/kultur/art7126452/De-haenger-forende-arkitekter-ud-hader-firkantede-kasser-og-karer-den-grimmeste-by>, <https://www.facebook.com/groups/ArkitekturoproretDanmark/>, <https://arkitekten.dk/2017/06/er-arkitekturen-doedssyg/> (accessed 21 September 2019).
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- 10 It likewise recognizes the experience of architecture as an event taking place between the

perceiver and the perceived. What is perceived is, in this case, not the whole material body of architecture, but rather the nuanced spatial organisation of articulated material elements with specific material qualities.

- 11 Olsen, B., *In Defense of Things: Archaeology and the Ontology of Objects* (California: AltaMira Press, 2010), p. 152.
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- 15 Ingold, T., *Materials against materiality*, *Archaeological Dialogues* 14 (Cambridge University Press, 2007), pp.1-16.
- 16 Gibson, J., *The Ecological Approach to Visual Perception* (New York: Taylor & Francis Group, 1986), pp. 19.
- 17 Gibson, J., *The Ecological Approach to Visual Perception* (New York: Taylor & Francis Group, 1986), pp. 19.: The *surface* is where ‘light is reflected or absorbed’, where ‘vaporization or diffusion of *substances* into the *medium* occurs’, where ‘vibrations of the *substances* are transmitted into the *medium*’, and it is ‘what touches the animal.’
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