

Alvar Aalto's associative geometries

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This paper, written from a practitioner's point of view, aims at describing Alvar Aalto's use of associative geometries as an inspiration for contemporary computational design techniques and his potential influence on a place-specific version of today's digital modernism.

In architecture the introduction of digital design and communication techniques during the 1990s has established a global discourse on complexity and the relation between the universal and the specific. And however the great potential of computer technology lies in the differentiation and specification of architectural solutions, 'place' and especially 'place-form' has not been of greatest interest since.

Therefore I will try to build a narrative that describes the possibilities of Aalto's "elastic standardization" as a method of well-structured differentiation in relation to historical and contemporary methods of constructing complexity. I will then use a brief geometrical analysis of Aalto's "Neue Vahr"-building to hint at a potential relation of his work to the concept of 'difference and repetition' that is one of the cornerstones of contemporary 'parametric design'.

With the help of two projects (one academic, one professional) I will furthermore try to show the capability of such an approach to open the merely generic formal vocabulary of so-called "parametricism" to contextual or regional necessities in a 'beyond-digital' way.

Standardization

"...for it is a commonplace that repetition of the same things for the same purposes exercises a settling and civilizing influence on men's minds.[...] A prudent limitation of variety to a few standard types of buildings increases their quality and decreases their cost; thereby raising the social level of the population as a whole."

Walter Gropius' *The New Architecture and the Bauhaus* (1925)

The concept of standardization as the repetition of same elements was at the core of 20th Century modernism. Inspired by early industrialization and Henry Ford's production chain that produced "identical copies" of the same thing, standardization in architecture relied on "visual identity" that subsumed "objects [that] are machine-made, as a banknote is, mass-produced, [and] exactly repeatable mechanical imprints".¹ This culture of mechanized production continued the "growing intellectual and social estrangement between architects and builders"² as it increased the separation of mind (planning) and matter (production). 'Das Neue Bauen' gained momentum because it put aside the European tradition of local craft in

¹ Mario Carpo: *The Alphabet and the Algorithm*. Cambridge 2011, p.4

² Carpo, p.15

favour of Industrialization and the American production chain. “In this second typology, architecture was now equivalent to the range of mass-production objects”³ – and thus, as a closed system related to industrialization, it did not rely on vernacular type, specific place or local tectonics and materialization anymore.

This architecture was not only about “a matter of technique”, but it fully embraced the images and aesthetics of the globalized machine age. As important as technique was “visual resemblance” as the representation of standardized building processes with the means of architectural form⁴. And, as it is all well known, standardization’s regularity and rigor lay behind the formal appearance of what was then promoted as an epochal “International Style”. So, the modernist’s understanding of standardization contained a distinct aesthetic agenda⁵ that was applied both to, buildings, their discrete tectonic elements and typologies, but also to drawings and their respective geometries.



Fig. 1: The Cover of Walter Gropius’ publication “Bauhausbauten Dessau”, by László Moholy-Nagy, 1930, shows a row of identical houses as if coming out of a production chain. Reproduced from Magdalena Droste. Bauhaus 1919-1933. Köln 1998

Walter Gropius’ housing-settlement in Dessau-Törten (1926-28) clearly illustrates such an approach: here beams and walls are conceived as discrete repetitive elements and each housing-unit is the same. The building-process does not result in one single unit, but standardization is organized in several specialized production chains that are established on site. Accordingly Gropius’ axonometric projection drawings show the houses in a kind of procedural state as they depict not only the house, but illustrate its industrialized assembly. Here, the “allographic architect” (Carpo) is not involved in the building process as such.

³ Antony Vidler: The Third Typology. In: Michael K. Hays (ed.). Architecture Theory Since 1968. New York 2002, pp.291

⁴ See Bernard Cache: Earth Moves. The Furnishing of Territories. Cambridge 1995, p.95

⁵ „The idea of standardization, which simply means order, regulation, the bringing of measure and rule where order is lacking, as such is intrinsic to man [...] The repetition of a standard motif is a primary aesthetic principle...” H.P. Berlage. “Normalisatie in woningbouw”, 1918; quoted Richard Padovan: Towards Universality. Le Corbusier, Mies and De Stijl. London 2002, p.96

Instead, he conceives such process with the means of his discipline (the drawing). And according to the aesthetics of early modernism Gropius did not use perspective construction, but axonometric projection as an abstracted, undistorted, thus engineer-like way of rendering the project.

Drawing Differentiation

Compared to the “individual” characteristics of perspective projection axonometric projection is often described as comparably autonomous and absolute because (linear) perspective is related to a (fictional) viewer and axonometric projection is related to the object itself. Here the drawing’s elements do not geometrically depend on each other, nor is their form depending on an overall geometry. Instead, one or two a priori applied angles determine any element everywhere on a drawing.

Perspective construction, however, is a relational or associative geometrical system. Robin Evans describes the procedures of drawing and effects of renaissance perspectives and the ways that “the particular means of its construction [...] give bias to its content”⁶. Within Alberti’s perspective projection all its elements are set in relation to an overall oblique geometry that is controlled by a vanishing point or “prince of rays”.



Fig. 2: Piero della Francesca. Tilted Head, based on a point cloud that was a key-feature of his so-called “other method”. Reproduced from Robin Evans. *The Projective Cast. Architecture and its Three Geometries.* Cambridge 1995

In Piero’s so-called “other method”, however, the drawn elements are held in a state of continuous transformation or animation, as Evans explains. Based entirely on orthographic projection, not on a fixed vanishing point, the “other method” enables variation and differentiation to a completely different degree compared to Alberti’s perspective. With this and the help of “point clouds” Piero was able to translate (or compute, as we would say today) complex geometry such as a ‘tilted head’ into his perspective projection. Piero then used the gathered geometrical information “in the imaginary, constructed space of orthographic

⁶ “It shows with equal force that that the artist is tied to something, namely the method of construction. Everything else points this way too: it is not perspective as such but the particular means of its construction that gives bias to its content.” Robin Evans: *The Projective Cast. Architecture and Its Three Geometries.* Cambridge 1995, p.140

projection”⁷ to not just draw one instance, but series of alike, yet not identical faces. This is important, because the comparably stiff perspective grid of Alberti is exchanged with a process-oriented and relational system, based on “projective rotation”. However, as Evans also notes while analysing Piero’s “five women from The Proving of the True Cross”, there is no rigid application of this method in Piero’s painting, but a rather loose and deliberately imprecise application of an actually very rigorous relational tool.

So, supposed that the Albertian perspective projection was a closed system, and axonometric projection would entirely rely on the object itself as a “self-contained entity”⁸, then Piero’s “other method” might enable an “open form” that can be adapted to external parameters. In this sense Piero’s series shows the potential of such associative geometries to introduce ‘elasticity’ into an early example of standardized geometry⁹.

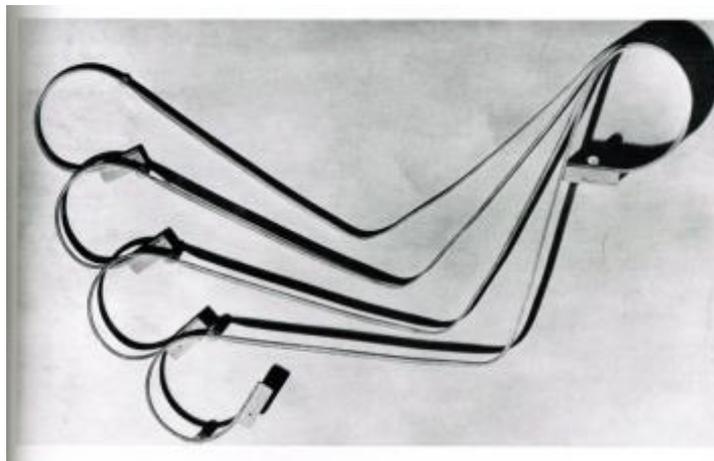


Fig. 3: Alvar Aalto. Material Studies on the Paimio Chair showing the bending possibilities of plywood.
In: Bernard Hoesli (ed.): Alvar Aalto. Synopsis, Basel 1970, p.23

Elastic Standardization

“The [...] misconception of style has led to widespread standardisation, Gleichgestaltung, which is one of the biggest obstacles to the expression of the innermost quality of architecture. If architecture is to fulfil its task in supporting broadening humane, socio-economic, and psychological decisions, it must be given the widest possible freedom of manoeuvre, both internally and in external form.”

Alvar Aalto: Lecture at the Nordic building congress, Oslo, 1938¹⁰

⁷ Evans, p.156

⁸ “Gemeint ist eine Darstellung, die mit mehr oder weniger tektonischen Mitteln das Bild zu einer in sich selbst begrenzten Erscheinung macht, die überall auf sich selbst zurückdeutet, wie umgekehrt der Stil der offenen Form überall über sich selbst hinausweist, unbegrenzt erscheinen will, obwohl eine heimliche Begrenzung immerfort da ist und eben den Charakter der Geschlossenheit im ästhetischen Sinne möglich macht.“ Heinrich Wölfflin: Kunstgeschichtliche Grundbegriffe: das Problem der Stilentwicklung in der neueren Kunst. München 1915, p.130

⁹ “Es ist typisch, wie fest eine Gruppierung von Köpfen mit verschiedenen Neigungswinkeln sich bei den Cinquecentiste darstellt und wie dann das Verhältnis mehr und mehr in Atektionisch-Unmeßbare überführt wird”. Wölfflin, p.133

¹⁰ Göran Schildt: Alvar Aalto In His Own Words. New York 1998, p.99

Aalto's critique on what he called "technical functionalism" aimed merely at the "schematic" application of standardization that would "impose a fixed scheme on (the) life"¹¹ of its inhabitants. He argued that mechanization and standardization would not result in the same quality of objects for many, but that the aim for equality would result in a degradation of standards. Thus, he asked for "a standardization which did not command us, but one which we would command"¹². With what he called "elastic standardization" he opened the monotony of a global "International Style" towards site-and user-specific geometrical differentiation and apparent visual divergence. While establishing a sort of geometrical softness (that was then called "irregularity") he would replace the perpetuation of sameness with differentiation and similarity. In this sense his architecture is not conceived as an autonomous and abstracted building volume that – similar to a "Ford T" – would not relate to specific place or people, but it would clearly embrace "man and his environment as a globalizing system consisting of complex relationships (relations réciproques)."¹³ Thus, from this point of view the remarkable aspect of Aalto's buildings would not be their apparent "irregularity" (Giedion), but much more the way geometry has been used to build internal and external relationships in order to adjust the geometry of buildings and furniture.

However Aalto emphasized intuition and a discontinuous approach towards design, he also used experiments and geometrical analyses to explore and develop a project's possibilities. Therefore, the results of his artistic and intuitive sketching¹⁴ obviously underwent a precise geometrical translation to – for instance – correspond with the acoustics of a library or auditorium.

And the experiments with bent plywood that he and his wife did for the Paimio-chair aim not at all at formal irregularity. When both explored the performance of wooden fibres¹⁵ in relation to the needs of a human body they apparently investigated and defined an object's 'elasticity' both literally and conceptually. It is this combination of geometrical and material specificity that successfully developed the rationalization of "technical functionalism" towards a much "deeper"¹⁶ approach. An approach that established elastic constructs that were open to variability instead of aiming at identity.

¹¹ "The goal should be a kind of standardization that does not impose a fixed scheme on life, but increases its development potentiality in all directions." Göran Schildt: Interview with Alvar Aalto. In: Karl Fleig. Alvar Aalto. Das Gesamtwerk, Band I. Basel 1995, p.232

¹²In: Alvar Aalto. The R.I.B.A Annual Discourse, 1957 In: Bernard Hoesli (ed.): Alvar Aalto. Synopsis, Basel 1970, p.23

¹³ Dieter Bogner: Friedrich Kiesler, 1890-1965: inside the Endless House, Wien-Köln-Weimar 1997, p.19

¹⁴ "While designing the municipal Library in Viipuri [...], I spent a great deal of time making children's drawings [...] In themselves these drawings had nothing to do with architecture, but from these seemingly childish drawings sprang a combination of plans and sections which, although it would be difficult to describe how, where all interwoven." (Abstract Art and Architecture) In: Hoesli, p.18

¹⁵ "The inner structure of the fiber, the grain, always plays a part; here I cannot apply force." (The Relationship between Architecture, Painting, and Sculpture) Ibid., p.26

¹⁶ Ibid., p.15

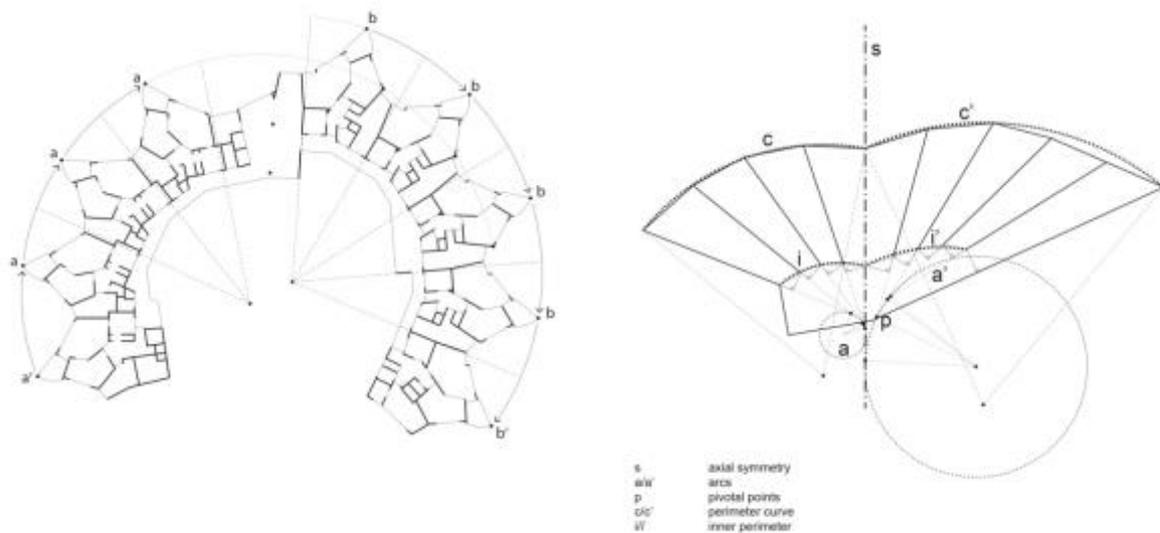


Fig. 4: Floorplan diagram of Scharoun's "Julia" Housing tower, Stuttgart; and of Alvar Aalto's "Neue Vahr". The diagrams show the repetitive structure of Scharoun's identical units compared to the elastic standardization of Aalto's units, that are not identical but similar.

Own illustrations, 2017

Gradual Transformation

Here, the comparison of Hans Scharoun's Romeo and Julia-project in Stuttgart with Aalto's housing tower at Neue Vahr in Bremen might be of interest. Both buildings were designed and built at the end of the 1950s and show a seemingly similar approach to "irregularity" or "organic shape" – at least when assessed from a merely formalist point of view.

However, the plan clearly shows the difference: while Scharoun creates a row of complex shaped but generally identical apartment-units¹⁷, the units in Aalto's tower¹⁸ are all conceptually identical, yet geometrically different. Here, in a sort of irregular gradual transformation the partitioning walls are rotated and adjusted in lengths. And however the overall layout suggests a sort of continuous transformation a closer look at the building's geometry also shows that this transformation deliberately deviates from a sort of 'ideal' geometry: The gradual increase and decrease of the applied rotation angles is just not precisely continuous, but changes slightly. Accordingly, the change of length of the partition walls partly reacts to a circular perimeter line, but also escapes this boundary where needed. One could say that the drawn plan-layout shows a locally adjusted – or elastic – version of an actually generic set of rules. In this sense Aalto's approach appears to be similar to Piero's drawn head-transformations that also escaped the rigor of a universal geometrical set up. And as in his description of the apple trees, all units are standardized and repetitive but obviously differentiated.¹⁹

¹⁷ Each unit could be adjusted internally by the buyer, but the unit's perimeter remained unchanged.

¹⁸ Because the earlier design-stage shows a clearer treatment of the geometrical concept I have used an earlier design-stage of the "Neue Vahr" building, not the final and built version, for my geometrical analysis.

¹⁹ "Aalto: The blossoms on the appletree are standardized, but they are all different. In the same way we ought to learn how to build." Göran Schildt: Interview with Alvar Aalto. In: Karl Fleig. Alvar Aalto. Das Gesamtwerk, Band I. Basel 2014, p.232



Fig. 5: The Folly@HC2, DME, University of Wuppertal.

A structure that was made of ~800 bent plywood-pieces, which are all geometrically different, yet identical in terms of structural and spatial performance.

Photo: Matthias Lehner, 2017

Digression: The Folly@HC2, DME, University of Wuppertal

The exploration of highly differentiated architectural structures is part of our research at the Faculty of Architecture and Civil Engineering in Wuppertal. Here, and with a recently built folly we have investigated typological morphologies in relation to recent “material gestalt”-approaches towards structure and tectonics. First the elastic or associative geometry defined by an algorithm engendered a series of constitutive typologies that were coalesced to be furthered as one 1:1 structure, the folly. The definition of the folly’s tectonics that consisted of a multiplicity of similar, yet different plywood-components again relied on associative computer models. Beyond the top-down definition of building geometry however, the introduction of bending-stiffness (that literally depends on the elasticity of the material) into each of the plywood-components introduced literal elasticity as well as a certain degree of inexactness into the standardized structure. However all components had been computed and lasercut with utmost precision the exact bending of the plywood pieces could only be estimated to a certain degree. Then, the jointing process dealt with, a combination of precise cut-geometry, the estimated bending of the intersecting elements, and a probably not entirely precise manual interlocking of the elements.

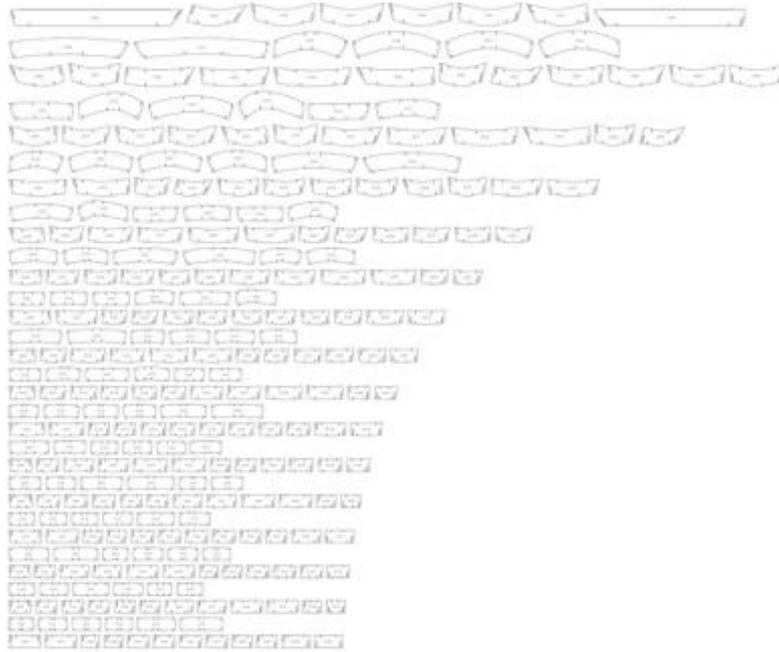


Fig. 6: The Folly@HC2, DME, University of Wuppertal.
Collection of differentiated pieces to be lasercut for one of the “columns”
own illustration (DME), 2017

Difference and Repetition

As the Folly illustrates the importance of digital design techniques when it comes to “elastic standardization”. And as Deleuze’s concept of “difference and repetition” was crucial to the development of ‘digital architecture’ Greg Lynn’s transfer to architecture might be enlightening: “There are two kinds of series: a discrete, or repetitive series and a continuous, or iterative series. In a continuous or iterative series, the difference between each object in the sequence is critical and individual to each repetition.”²⁰

I have used Aalto’s tower at ‘Neue Vahr’ as an early example of such iterative differentiation, because it clearly shows the interaction of partly unrelated, yet partly associative geometrical “variables” that were used to undermine the predictability of the series of units. The building’s geometry is created by the interplay of various geometrical techniques, such as rotational symmetry and axial symmetry or the intersection of lines and arcs. The plan diagram shows axial symmetry that is arranged not quite at the centre of the building. From here the fan opens in two directions with – more or less – decreasing angles that make the partition walls appear as if they would rotate around a virtual “pivotal hinge”.

Pivotal Points

This, again, is a recurring scheme in several of Aalto’s buildings. But what looks like a fairly simple centralized geometry related to one pivotal point is in fact a way more complex interplay of geometrical relations (see Fig.2). Aalto disrupts the concept of a main denominator (the pivot), in favour of a much softer application of a row of related hinges or pivots (p). And again compared to Alberti’s rigorous determination of central perspective by

²⁰ In: Greg Lynn: Animate Form. New York 1999, p.33

one vanishing point, Aalto's shifted distribution of several related pivots (p) shows a Piero-like softness in application. The analytic plan diagram of "Neue Vahr" shows that Aalto's pivots are not arbitrarily positioned, but distributed along two arcs (a and a'). Thus, here the formal irregularity that had been widely acknowledged as a necessary corrective to modernism's monotonous standardization is not just a result of pure intuition, but it appears to be a deliberate deviation from an otherwise defined geometrical relations. And in today's discourse on digitally engendered geometry such relations are called, 'associative', 'relational', or 'parametric'.

Nonstandard Seriality

Patrik Schumacher has postulated "parametricism" as the one contemporary "epochal style" because it alone would answer the "challenges and opportunities of the (post-fordist) information age, just as modernism was architecture's answer to the (fordist) mechanical age."²¹

And quite obviously the digitalization of the architectural discipline has not only changed building procedures (E-Mail, CAD, CAM, BIM, etc.), but the sheer potential of computational design techniques has also amplified formal, structural, and spatial complexity. Many of the truly digital projects (such as FOA's Yokohama Terminal (1995-2002) or UNStudio's Mercedes Benz Museum (2001-2006)) are directly related to the computer's capability to algorithmically differentiate repetitive systems. The Deleuzian concept of the "objectile" introduced the geometrical elasticity of "an algorithm – a parametric function" in order to enable "nonstandard seriality"²² that replaced the copying of identical objects. The Albertian concept of identity that also fostered the production-chain standardization of early modernism is replaced by digital production processes that enable customization at hardly any extra costs.

Parametricism

And then it is somewhat perplexing to see a method that is entirely based on differentiation and approximation interpreted as a "style", with a similar attitude regarding the universalism of a specific formal language as we know it from "International Style". And similar to functionalist modernism such a reading of computational design techniques functions as a closed system, because form is first of all derived according to technological specificities: "splines, nurbs, subdivs, particle-spring systems, agent based systems ect." Then, "these new 'elements' become the fundamentally new building blocks for dynamical compositions that can be made to resonate with contexts and with each other via scripts."²³ The important term here is "via scripts". Scripts are algorithms that channel, abstract, and quantify (contextual) information, which is then mostly subjected to an a-priori defined formal diagram: the impact of sunlight, for instance, is used to vary the size of windows; structural forces define the size of building elements, and so forth. But the general formal expression of each of the elements

²¹ Patrik Schumacher: The Concept of Style and Parametricism as Epochal Style

Url.:<http://www.patrikschumacher.com/Texts/The Concept of Style and Parametricism as Epochal Style.html> – Web. 27.4.2017

²² Carpo, pp. 40

²³ Schumacher. The Concept of Style and Parametricism as Epochal Style

Url.:<http://www.patrikschumacher.com/Texts/The Concept of Style and Parametricism as Epochal Style.html> – Web. 27.4.2017

has been defined previously; it is just varied geometrically in a kind of genotype-phenotype-relationship. If applied in such an abstracted manner Schumacher's soft "primitive" would be used in a similar way as the "rigid geometrical figures" of modernism he criticizes; just with a different shape.

Still, the in-depth exploration of computational design techniques since the 1990s has helped to establish the iterative differentiation of repetitive structures (i.e. Aalto's "elastic standardization") effectively as a successor to both modernist standardization and post-modern individuation.

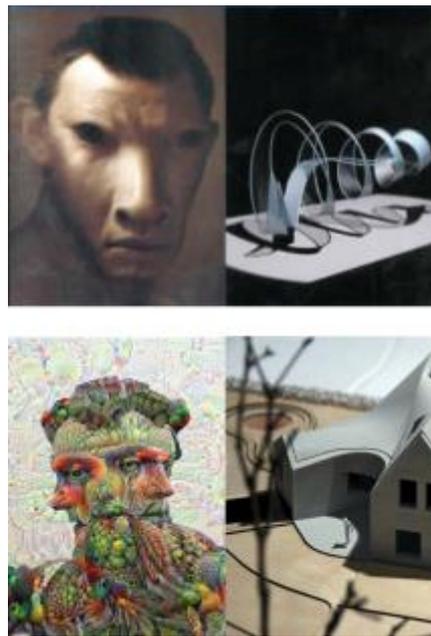


Fig. 7: UNStudio's concept of a "seamless organisation of disconnected parts" (above), as in UNStudio: MOVE. (2) Techniques. Amsterdam 1999, p. 85

vs.

one fine day: defamiliarization of well known figures (own illustrations)

Beyond Digital

At the end of the 1990s Dutch architectural office UNStudio postulated the hybridization of form as a main formal dogma that would correspond directly to the capabilities of a digital design process: the cross-breeding of different shapes into a new whole was best illustrated by citing one of Daniel Lee's "Manimal"-Images²⁴. UNStudio developed and cultivated an attitude of what they called "inclusiveness" that aimed at the "seamless organization of disconnected parts"²⁵ as a refutation of modernist collage-techniques. This aim was – similar, to what Patrik Schumacher later described as "Parametricism" – to inscribe differentiating information into a superordinate formal system in order to erase any figurative characteristics other than the vocabulary of digital form making – a so-called "indexical" process. This approach guaranteed the abstraction of information: typology was replaced by organization (i.e. routing diagrams), tectonics were covered by the continuous white topological surface

²⁴ Daniel Lee: 1949-Year of the Ox. Computer Generated Photograph. *Manimals*, 1993

²⁵ UNStudio. *Move. (2) Techniques*. Amsterdam 1999, p. 85

(that actually inherited a lot of modernism's ideology expressed by its white plaster walls), and the specificity of 'place' was overruled by a cosmopolitan attitude towards design.

Nearly twenty years later computational design techniques are considered to have reached a kind of 'post-digital' phase. A phase that Nicholas Negroponte described as "beyond digital"²⁶ already in 1998 (one year before Greg Lynn published his book "Animate Form" as one of the main foundations for computational design as we know it today) as a state in which "being digital will be noticed only by its absence, not its presence."²⁷ This means that anything we as architects conceive today relies on digital media – but it also means that architectural innovation is not necessarily restricted to the possibilities of computer generated form or aesthetics (i.e. "parametricism") as it was at the beginning of the 21st Century. This is a chance to open parametric design methods towards important influencing factors from outside the machine. Thus, we currently see a significant questioning of a formalist 'digital' paradigm that appears to be similar to the critical assessment of functionalist modernism in the 1950s and later. These recent projects do not merely show the above described digital vocabulary but significantly deviate from "parametricism" as style towards an approach that incorporates and processes information such as vernacular form.

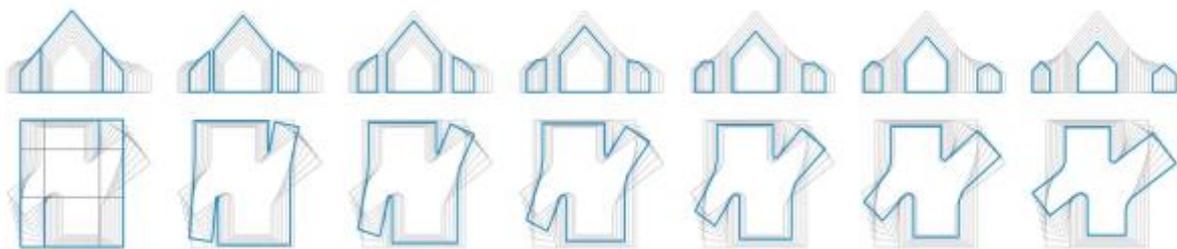


Fig. 8: Digital transformation of a "Vierständerhaus"-typology towards a contemporary building design.
one fine day: Villa H, Germany 2013

Digression: Villa H, one fine day

As an example I would like to briefly describe one house that we are currently finishing in Germany: Villa H has been developed through a morphological transformation of vernacular farm-house typologies (a so-called "Vierständerhaus") that are very common in the respective region. These typologies were not entirely abstracted. But – as a response to so-called 'place form' – we have explicitly fostered figurative themes such as the gabled roofs that point at different directions, which is a typical regional pattern. Thus, it was important to not dissolve representational moments through hybridization but deliberately express themes that are recognized and understood as belonging to the 'place'. The use of current algorithmic transformation tools has thus resulted in a sort of 'gestalt-amalgam' that is both: a truly digital *and* a deeply contextual project.

²⁶ I prefer the term 'beyond digital' over 'post-digital' because it does not impose the idea of 'the digital' being finally overruled or not important anymore. This is what 'post' in the sense of 'after' often suggests. 'Beyond' however clearly highlights that the digital has reached the status of a 'conditio-sine-qua-non' and that everything we do emerges from the howsoever use of digital media and is then further developed beyond the medium itself.

²⁷ Nicholas Negroponte: Beyond Digital. Url.: <https://www.wired.com/1998/12/negroponte-55/> - Web. 27.4.2017



Fig. 9: one fine day: Villa H, Germany. Construction site. Two of the four gabled roofs protrude in north and west direction. The angular space in between connects the interior central living area directly with the exterior.
Photo: Holger Hoffmann, 2017

Parametric Regionalism

Such a “beyond-digital computation”-approach might be a potentially successful way to contextualize the results of ‘parametric design’. In order to incorporate outer influences the so-far propagated medium-specific formal vocabulary is diminished (“splines, nurbs, subdivs, particle-spring systems, agent based systems ect.”). Then, such an approach does not privilege information that can be quantified, such as the impact of, sunlight, wind, noise, routing, etc. Instead, ‘qualitative’ information is taken into account: specific typologies, the aura and tectonics of (local) material definition, manufacturing-processes²⁸, or figurative themes²⁹, (to name a few) are processed with the help of associative geometry.

Similar to Aalto’s geometric layout for “Neue Vahr” as well as similar to Piero’s “other method” those relational constructs produce variants of related themes. By changing the position of relevant input geometry (such as Aalto’s “pivotal point”) the overall geometry of a structure is adjusted. Then the performance or meaning of what is geometrically described (for instance a figure such as a gabled roof) changes and – depending on the degree of change – is increasingly estranged.

Thus, a parametric approach to ‘regionalism’ does not mean a sort of ‘identity’ with the pre-existing or vernacular, as also Frampton describes the difference between “Critical

²⁸ Today’s ‘file-to-factory’-processes are of special importance here because they enable (or force) architects to integrate information related to manufacturing or ‘digital-craft’ processes into their early design-stages. This information is decidedly local, as it directly depends on the capabilities of local contractors, the disposability of certain materials, etc.

²⁹ Philipp Yuan. Parametric Regionalism In: AD Vol02. Parametricism 2.0 Guest.Ed. Patrik Schumacher. London 2016. p.93

Regionalism and Vernacular Form”³⁰. Instead, parametric tools simply allow for the gradual distortion of ‘place-form’ in order to defamiliarize the seemingly well-known. “The estrangement of context is a crucial aspect of realism, where a shift allows one to see the familiar in new terms.”³¹ Such “parafictional strategies are oriented less toward the disappearance of the real” (as modernism intended) “than toward the pragmatics of trust.”³² In this sense similar to Aalto’s approach to modernism and place both are equally transformed: the formal vocabulary of a global ‘digital modernism’ as well as the potentially new reality of a specific place.

Conclusion: Why Aalto?

Thus, when Alvar Aalto answered international modernism with a distinct Finish touch then both changed: the vocabulary of global modernism as well as the reality of Finish architecture.

Accordingly, I have tried to illustrate in how far Aalto’s use of ‘associative geometry’ could be an inspiration for the recent transformations of ‘parametric design’: methodologically in regards to an increasingly playful approach towards associative geometry as well as literally with the integration of place-specific information (typology, tectonics, etc.) into the conventions of a global discourse. And because today’s so-called ‘post-digital’ attitude often emphasizes the estrangement of contexts by means of architectural design, the way this estrangement is constructed is of special interest. In this sense a clear understanding of “elastization” as a geometrical approach but also as a conceptual opening towards influences outside the digital realm would help to develop the recent discourse beyond the digital and towards a new and maybe estranged version of contexts.

³⁰ Kenneth Frampton: Ten Points of an Architecture of Regionalism. A Provisional Polemic. In: Vincent B. Canizaro (ed.): Architectural Regionalism. Collected Writings on Place, Identity, Modernity, and Tradition. New York 2007, pp.378

³¹ Kutan Ayata & Michael Young: Still life interventions, 2014

³² Carrie Lambert-Beatty: Make-Believe: Parafiction and Plausibility. October Magazine, Ltd. and Massachusetts Institute of Technology 2009, Url.: www.mitpressjournals.org/doi/pdf/10.1162/octo.2009.129.1.51 – Web. 27.4.2017

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