"Nature has its own evolutionary history, within which old motifs are discernible in every new form. In just the same way, art is based on a few standard forms and types that derive from the most ancient traditions; they reappear constantly yet offer infinite variety, and like nature's types they have their own history. Nothing is arbitrary; everything is conditioned by circumstances and relations."

Gottfried Semper, Style, 1860.





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PRESENTATION

SUPERMORPHE MR 2019

We design products for the flexible future of mass production/ customization (caring for the individual's integrity)

Supermorphe's raison d'etre is to look for what is constant through what is variable, as opposed to the modern dictum, our main interest is to rescue the values that remain constant regardless of the constant change. We are not seeking for the "unique", nor to transcend by just being different or the ephemeral's acclaim, we are convinced how this values are leading us into a consumerism emptiness which is rapidly degrading the historical tissue together with the cultural values of our cities while producing a massive amount of trash.

Our goal is to make a change into our profession, to recover the meaningful value of proportion and other solid values like reasoning, freedom and stability. We look for variability through proportion, just as the one who master a lenguage dominates its grammar, the one who master proportion directs and controls form. We are theoretically and actively searching for what remains constant into the diverse. It's not about a poetic act nor an aesthetic inquiry, we seriously consider reclaiming for a lost tradition, the separation between form and function. For the classics the embodiment of form and function was not arbitrary; an arch supports while entices the observer.

We stand for a long term thinking, a search for reasoning into the past. Our theory and practice is built upon the theoretical research of Bernard Cash at the EPFL in Switzerland whose references such as Gottfried Semper, Albrecht Durer, Plato, Euclid or Vitruvius are actually essential to the knowledge we articulate together with high-end technology to create our designs. As a result of this combination we gain the consistency and the power to, in first place, start a global change devoted to improve the quality of our present lives and over all be able to face the demands of a more flexible future.

We use associative parametric CAD/CAM software and geometry as our main language to program variable forms able to be transformed while their proportions remain invariant. Thanks to associative software our designs are the point of control for the whole manufacturing and creative process, and our key to achieve the highest fidelity all the way from the model to the final product.

Supermorphe means control and precision in design and manufacturing; it's an intertwining system of principles and relations that create a new traditional form of design.



SUPERSPENCE URBAN (non-standard) WASTE CONTAINER

Research report published by the Berlage Institute© 2005, Rotterdam, Netherlands. "ASSOCIATIVE DESIGN AND MANUFACTURING" (P. 104-147)

Published in Archithese, Schweizerbau Dokumentation 4.2006 "CAAD CAAO" (P. 44-39)



C O N T E X T :

In cities where trash is being collected by crane abled trucks, the available standard waste containers for such system are often oversized to fit on the strategic sites defined according to an optimal collecting route therefore the route has to be nearly manually re-calculated in order to collect overfilled containers sometimes next to empty ones. This problem costs millions of dollars in logistics every year.





Superspence, is a design adaptable to the volume for the amount of trash accumulated in a period of time and the number of households relying in that spot, and the site specific formal constrains.

This project solves a problem for the system of collection by adapting the design and not the system to the needed flexibility. The familiarity among variations creates a consistent formal landscape of objects that volumetrically and individually express social behavior.

VARIANTS:

- _ Available depth underground _ Waste Kind, and number of openings
- _Volume according to the amount of waste collected periodically

_Planar and inclination modification of the perimeter.

INVARANTS:

- _User comfort ergonomics (when the volume has to grow overground) _Maximum crane lifting capacity
- _Center of gravity for crane lifting stability
- _Spatial optimization according to trash stacking angle _Manufacturability under the same proceses



PROJECT:

VARIABLE BUS STOP AND ADVERTISING QUIOSK

Mention in Südkultur's call, Canton of St. Gallen, Switzerland 2010.



CONTEXT:

Construction regulations in Switzerland are strict and clear about the formal results and being empathetic and respectful with the context. This urban furniture must be placed in different regions where building typologies change drastically in very short distances.



DESIGN:

The objective with the variable bus stop and pillar was to create the simplest formal solution provided with thermic and acoustic insulation that could adapt its shape to blend with the different local typologies and be easily manufactured.

VARIANTS:

_Size and formal adaptation of the quadrilateral base, according to size and site specific conditions. _Roof inclination, inclination axis translation, or flattening.

INVARANTS:

_Frame's proportion constrained to structural resistance

_Minimum framing modules according to material standards

_Manufacturability under the same proceses



"The art of assembling stiff, plantlike elements into a rigid system is indisputably the most important art for the theory of monumental style, if only because the gable roof with its supports has been the traditional symbol of the sanctuary, the consecrated house of God, since the most ancient times and among all peoples. The framework embodies the highest and most universal theme of architecture..."

Gottfried Semper, Style, 1860.

SUPERMORPHE

Associative design & manufacturing

TECTONICS

PROJECT:

SUPERMORPHE TECTONICS FINE WOODWORKING AND CARPENTRY

The first non-standard line of production fully developed by Supermorphe in 2012



C ONTEXT:The way furniture is being consumed and produced has inscribed this products into
the so unfortunate disposable category. The logic set by the markets of lowering
quality in favor of price to reach more people and quality to be exclusive for a very
small niche has put a whole tradition to fall into oblivion.





DESIGN:

The aim of this design is to exploit the efficiencies gained by the use of technology and invest this resources to produce a superior quality product at a price that is more democratic than what the actual market offers.

This project rescues the tradition of fine woodworking by making it accessible again. Handcrafted quality and flexibility manufactured with automatized industrial technology.

So far we have developed 14 types of designs among which we have stairs & staircases, doors, windows, desks, tables, cabinets of different kinds, bookshelves, stools, benches and chairs. Each design consists of a basic supporting frame upon which flexible components (crossbars, arches, top sets, drawer sets, doors,...) can be added to create new designs for different purposes, uses or tastes.

This library of flexible assemblies and components is a perfect tool to comply with the mass customization market for domestic and corporate purposes.

The material selection is certified solid wood and 100% natural oils and waxes for the finishings, which provide a much easier care and over all the object will wear out with dignity.



VARIANTS:

The formal consistency of this design is directly related to the flexibility of the concept itself, which is not conceived as a single instance, lets say a stool, but rather as a set of smart adaptable components and assembles which potentially turns it into a stool, bench or table while it remains congruent structurally and aesthetically.

USER:

_Component combinations for particular needs

_General dimensions can be gradually adjusted

_Wood and finishings selection (mahogany , cedar, beech, maple, teak, walnut and stationary woods,

linseed, pine, teak and tung oils, bees and carnauba wax, charred wood (SHOU SUGI BAN))

TECHNICAL AND DESIGN:

_Proportions

_Joint and panel gap tolerances according to humidity and temperature variations

INVARIANTS:

_Proportions according to models and styles

_User ergonomics

_Manufacturability, wood thickness and cutting tools constrains

- _Consistency for assemblage
- _Hardware and material standards











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Jorge Becerra, México, 0000.



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