

„Reading“ design semantics – from various perspectives

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Basic premise

Objects and images not only signify their basic function, but they also connote meanings.

Both is communicated by means of visual forms (2-d and 3-d shapes, lines, proportions etc.), colors, materials, textures, tones ...



users' / general audience's
interpretation of meaning: according to
the cultural, social background, values
and lifestyle



„scientific“ interpretation of meaning
according to the body of knowledge
of the discipline:

- history of the discipline
- theories, concepts
- professional terminology
- methods



Thorstein Veblen, economist,
Theory of the Leisure Class, 1899

- ***leisure class...***
- ***conspicuous consumption & conspicuous waste ...***
- ***status emulation...***
- ***products enhance the status of their owners...***



Gerhard Schulze, sociologist,
Die Erlebnisgesellschaft
Kultursoziologie der Gegenwart, 1992

- ***from use value towards sign value and experiential value of products***
- ***products as symptoms of societal change***
- ***life itself becomes sort of experiential project***



Paul du Gay, Stuart Hall, sociologists,
*Doing Cultural Studies, The Story of the Sony
Walkman, 1997*

- ***culture is connected with the role of meaning in society ...***
- ***meaning by association: semantic networks***
- ***curcuit of culture: representation, identity, production, consumption, regulation***



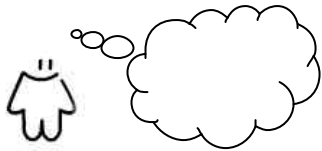
Roland Barthes, philosopher
Mythologies, 1957; Système de la mode, 1967

Marshall Sahlins, anthropologist
Culture and practical reason, 1981

Mihaly Csikszentmihalyi / Eugene Rochberg-Halton, psychologists
The meaning of things, domestic symbols and the self, 1981

Pierre Bourdieu, sociologist,
Distinction, A social critique of the judgement of taste, 1986

Friedrich Heubach, psychologist,
*Das bedingte Leben: Entwurf zu einer Theorie der psycho-logischen
Gegenständlichkeit der Dinge, 1986*



Jean Baudrillard, philosopher
*Das System der Dinge, Über unser Verhältnis zu
den alltäglichen Gegenständen, 1991*



Jochen Gros, designer, HfG-Offenbach

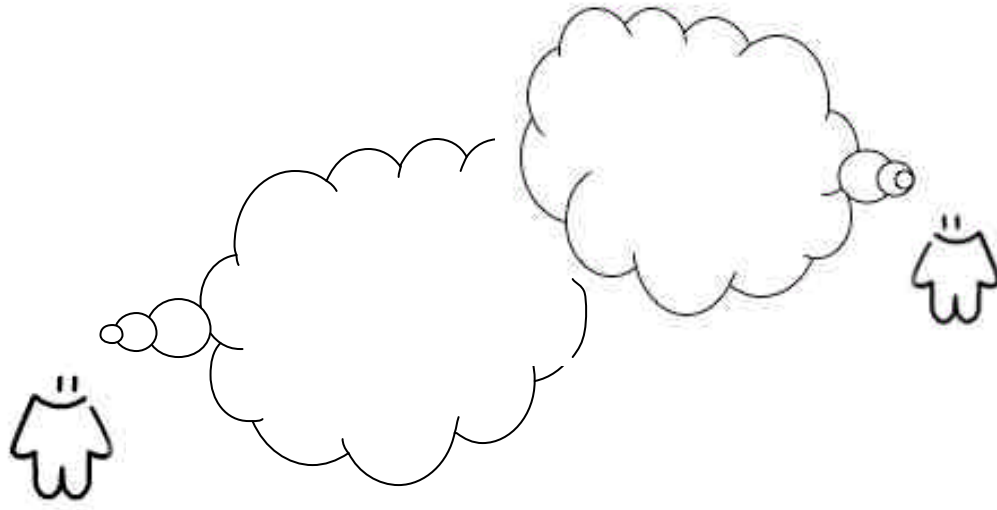
Theory of product language:

*The Offenbach approach towards product semantics,
since 1976*

- **product language (meaning of products) in accordance with cultural contexts (technological, economical, ecological, social issues, lifestyle)**
- **construction of meaning through design (visual elements ...) and by context**

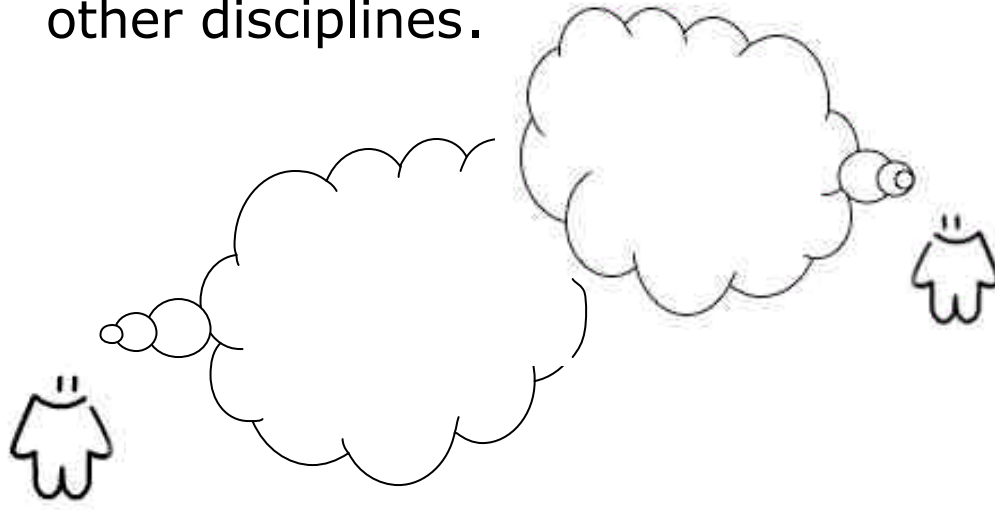


interpretation of meaning from the perspective of various disciplines (and from users' perspective) are overlapping ...



... but:

design theory has to define a specific competence,
a point of view that distinguishes design from
other disciplines.



Theory of product language is based on concepts from:

- school of symbolism

Susanne Langer: *Philosophy in a new key*, 1963

- concepts of perceptual and Gestalt theory
(Christian v. Ehrenfels, Max Wertheimer,
Wolfgang Köhler, Rudolf Arnheim)

sign

-

symbol

syntax

Susanne Langer:

“Symbols are ... vehicles for the conception of objects.

In talking *about* things we have conceptions of them, not the things themselves; and *it is the conceptions, not the things, that symbols directly ‘mean’.*

A term which is used symbolically and not signally does not evoke action appropriate to the presence of its object. If I say: ‘Napoleon’ you do not bow to the conqueror of Europe as though I had introduced him, but merely think of him.“

(Langer p. 60/ 61)

Susanne Langer:

“A sign indicates the existence – past, present, or future – of a thing, event, or condition.

For example: Wet streets are an indication that it has rained.

A patter on the roof is a sign that it is raining.

A fall of the barometer or a ring round the moon is a sign that it is going to rain.” (p. 57)

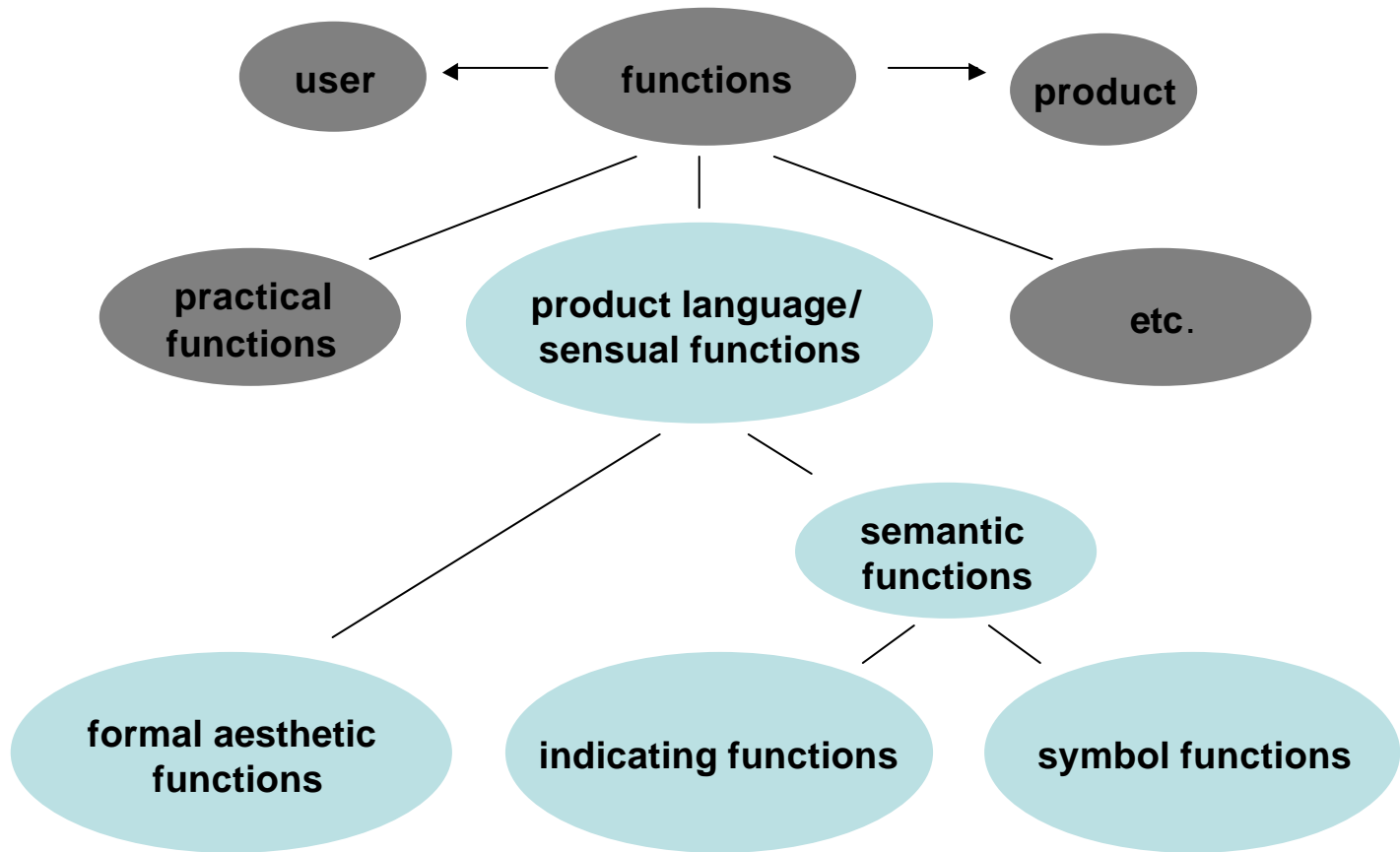
Signs are directly connected with the object/ event which they indicate; they announce their objects to someone.

Furthermore Langer distinguishes between artificial signs ...
... and natural signs ... (p. 59)

Susanne Langer:

“Grammatical structure, then, is a further source of significance. (...)

It ties together several symbols, each with at least a fragmentary connotation of its own, to make one complex term, whose meaning is a special constellation of all the connotations involved.” (p. 67/ 68)



Product functions according to the „theory of product language“

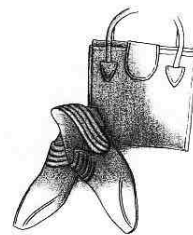
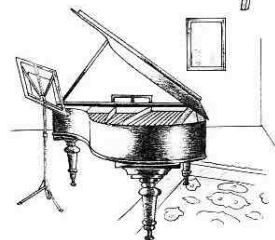
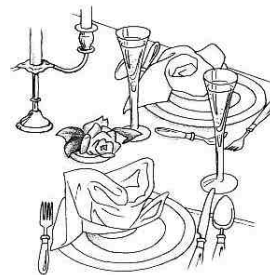
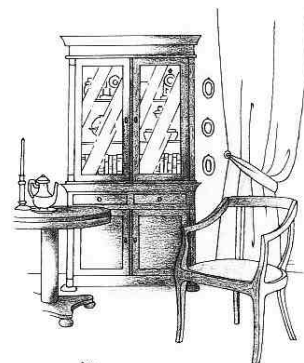
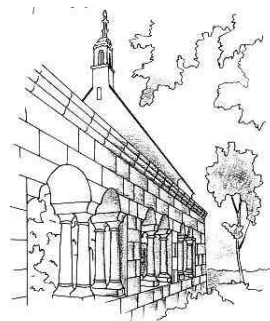


symbol functions



symbol functions







symbolic functions

symbol functions

period style

- baroque
- classicism
- historicism
- art nouveau
- functionalism/modernism
- „post modernism “

§ styles of the future, which are fed by partial styles, as far as they are in accordance with the cultural contexts

symbol functions

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§ styles of the future, which are fed by partial styles, as far as they are in accordance with the cultural contexts

partial style

- look
 - ethno look
 - high tech look
 - retro look etc.
- national style
 - German design
 - Italian design
 - Scand inav. Design etc.
- concept design
 - styling / streamline
 - new design
 - **customization design**
 - eco-seman tic etc.
- corporate style / brand
 - Braun
 - Swatch etc.
- designer 's style
 - Colani
 - Starck etc.
- target design
 - yuppies
 - seniors
 - Milieus lt. Sinus -study etc.
- etc.

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partial style

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 - high tech look
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 - German design
 - Italian design
 - Scandinavian design etc.
- concept design
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 - new design
 - **customization design**
 - eco-semantic etc.
- corporate style / brand
 - Braun
 - Swatch etc.
- designer's style
 - Colani
 - Starck etc.
- target group design
 - yuppies
 - seniors
 - Milieu et. Sinus-study etc.
- etc.

association regarding expression

old – young
cold – warm
traditional – modern
natural – artificial
strong – weak
rational – emotional
happy – serious
extraordinary – casual
interesting – boring
etc.

Symbol functions in product language:

- communicate the period/ the country in which the product was designed
- are based on cultural and social backgrounds and emotional factors
- express various cultural and social values, ideas, dreams ...
- communicate and support the identity of a person (lifestyle) / the identity of a company (brand)
- make a product meaningful and desirable

Indicating functions in product language:

- are based on practical product functions and characteristics
- mediate between technic and human beings
- support the understanding of the practical product functions / the material world
- contribute to ease of use / user-friendliness / self-explanation of the product
- communicate reliability of the product

indicating functions

indicating character

- Š identification as
chair, as stool, as
easy chair etc.
- material
patina
production technic
etc.
- etc.

indicating functions

indicating character

- § identification as chair, as stool, as easy chair etc.
- material
patina
production technic
etc.
- ec.

indicating practical functions

- pointing to a direction
- handling
- ergonomic appearance
- stability
- stableness
- stackability
- dismanteling
- recyclebility
- interaction with GUI
- etc.



indicating good grip



indicating function: stableness



indicating function: stableness ?

Formal aesthetic functions in product language:

- are based on Gestalt principles, i.e. order and complexity
- give structure to visual elements (form, color etc.), to acoustic elements (tones) ...
- support the expression of meaning by giving grammatical structure to the visual, acoustic etc. elements

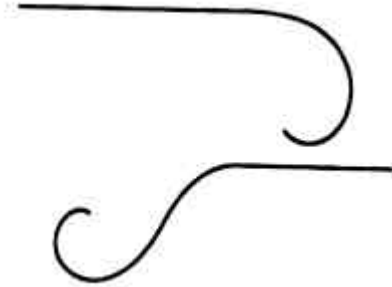
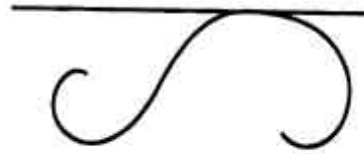
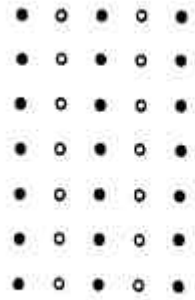
formal aesthetic functions

order

- simple
- enclosed
 - enclosed by proximity
 - enclosed by good curve
- similar
- symmetrical
- clear
- horizontal/vertical
- in balance
- familiar
- fitting with context

complexity

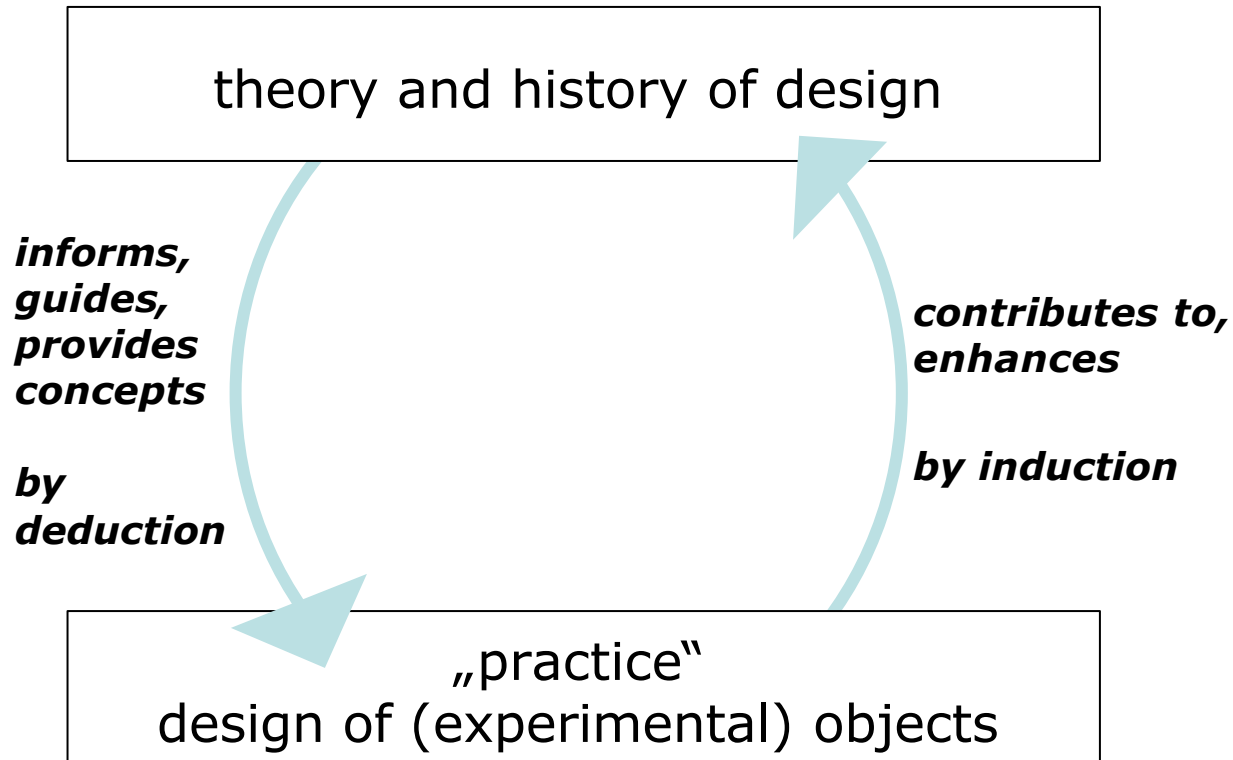
- manifold
- open
 - open by distance
 - open by disconnection
- dissimilar
- asymmetrical
- unclear
- out of horizontal/vertical order
- out of balance
- unfamiliar
- contrasting with context



order: similarity and enclosure



Knowledge building in theory of product language



Application of theory of product language:

- analysis and criticism of existent artefacts
(design history up to the present
products from competitors ...)
- analysis before, during and after the design process
(briefing, evaluation ...)
- inform changes: “experimental” and “new” designs

Case study: C_furniture

1985 M. Piore & Ch. F. Sabel

The Second Industrial Divide, Possibilities for Prosperity

1993 Davidow & Ch. Mallone

The Virtual Corporation, Structuring and Revitalizing the Corporation for the 21st Century

1994 B. Joseph Pine

Mass Customization, The New Frontier in Business Competition

1998 Frank Th. Piller

*Kundenindividuelle Massenproduktion:
die Wettbewerbsstrategie der Zukunft*

Semantics of the post-industrial, neo-craft production

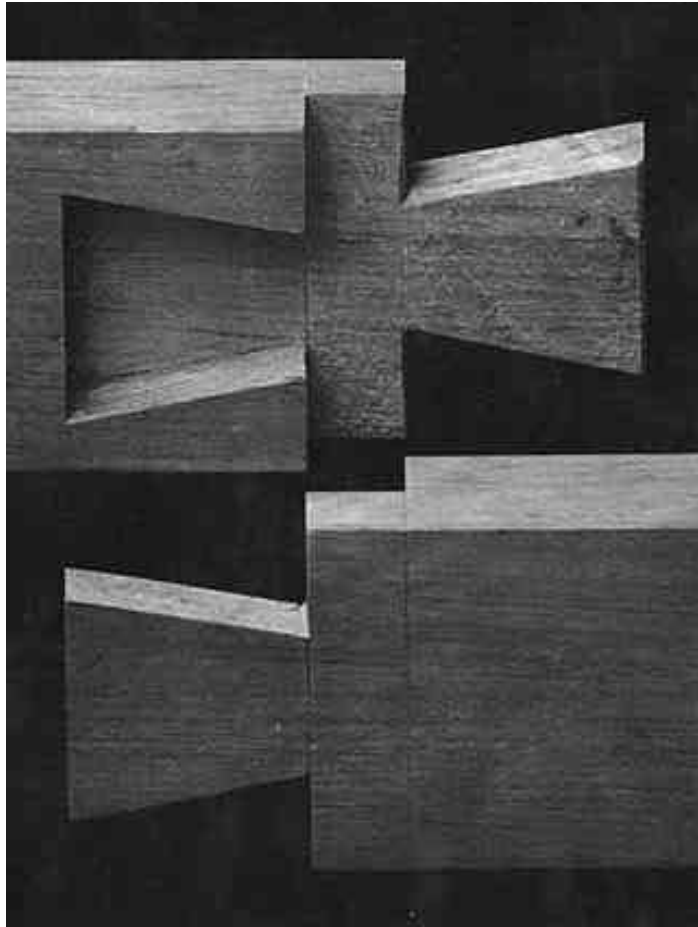
Products that are rigorously designed to the conditions of digital technology (CNC, Internet ...)

- Indicating signs of the digital production technology in furniture design ??

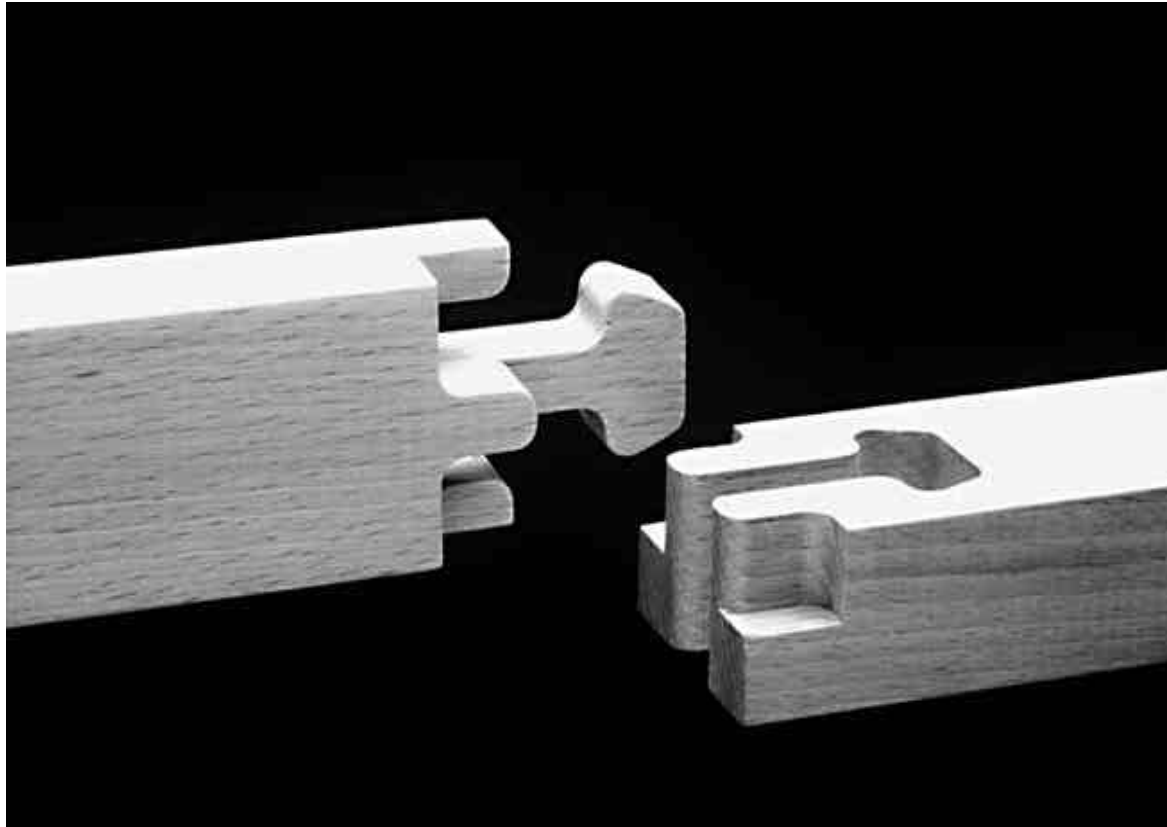
Products that express the characteristics of the new production technology symbolically

- How can individuality be expressed in a truly meaningful way today?
Might historical citations and regional identity patterns contribute to individualisation?

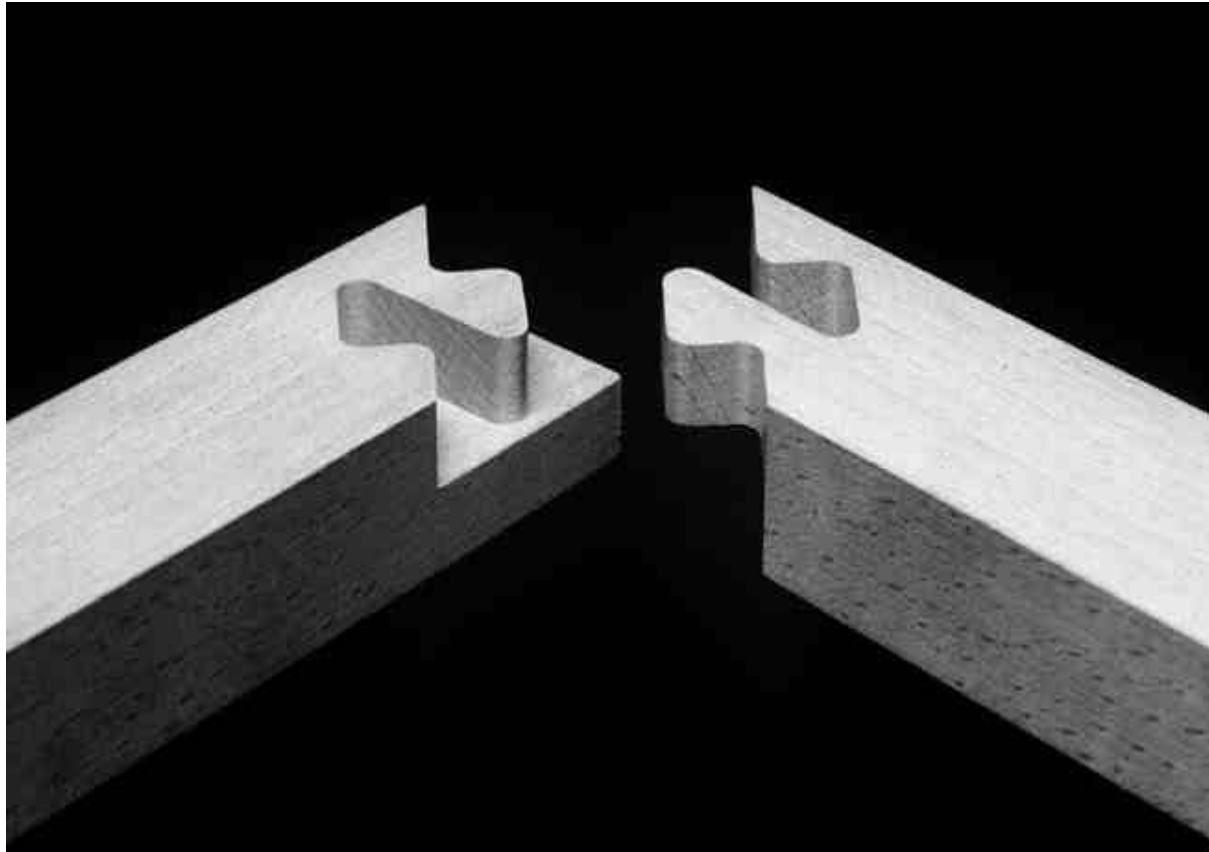
Traditional woodjoints



Transformation into digital woodjoints



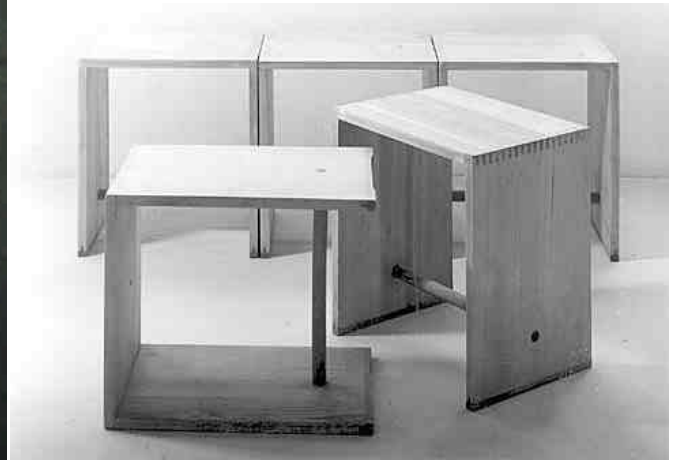
Digital woodjoints



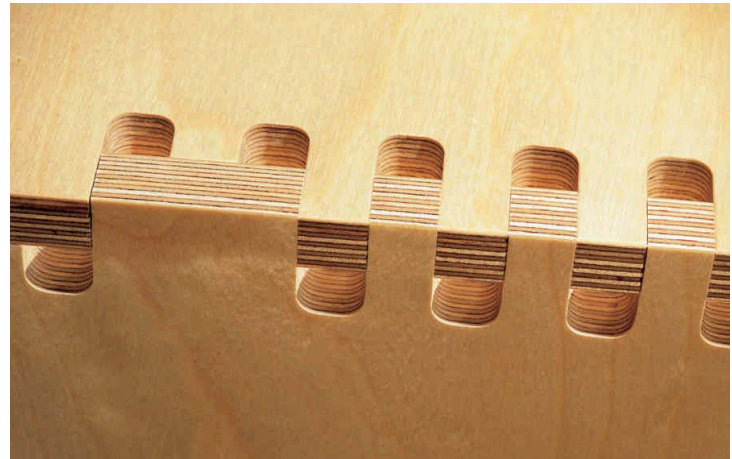
CD-ROM: 50 digital woodjoints (incl. processing data)



Furniture, based on digital woodjoints ...

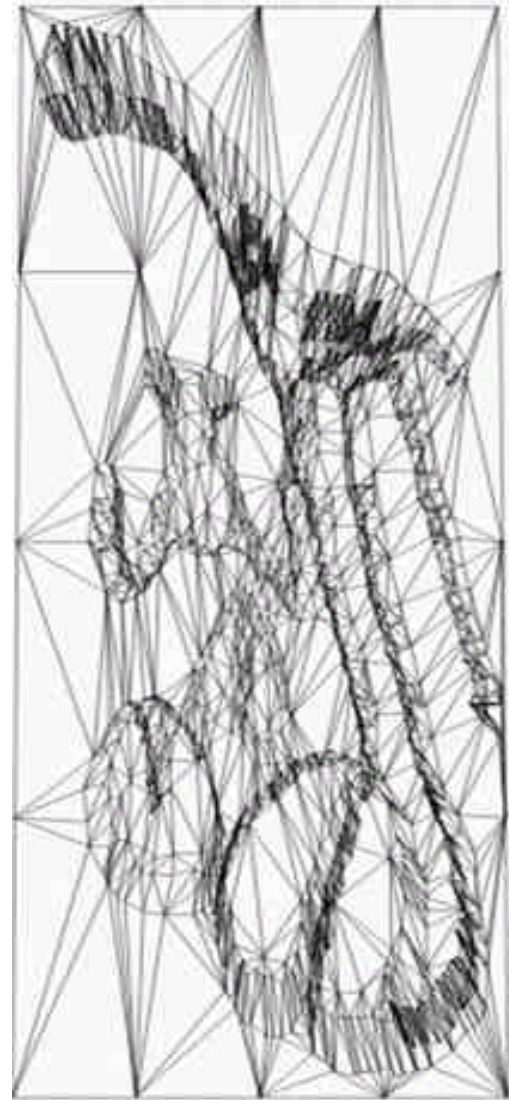


customized versions ...



Art Customization:
„New Arts and Crafts“

... individualization
through engravings



„New Arts and Crafts“

... individualization through engravings



... individualization through form



... individualization and personalization
through laser intarsia



Criticism of product semantics

„Product semantics is borrowed theory, rationalised with the definitions appropriated from other disciplines. It lacks contextual definition, methodology and techniques of validation.“ Charles Burnette, 1992

*„The operational insufficiency that affects both **semiotics** and **rhetoric** is that they do not help the decision-making process beyond the display of possibilities.*

This is where the pragmatics of communication have to reach over for sociology, psychology and marketing ... to develop the information required for the construction of effective communications.“ Jorge Frascara, 1997

Literature:

English:

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- Steffen, Dagmar (1997): On a Theory of Product Language, Perspectives on the hermeneutic interpretation of design objects, in: formdiskurs, Journal of Design and Design Theory, Nr. 3, 2/ 1997

German:

- Gros, Jochen (1976): Sinn-liche Funktionen im Design, in: form, Zeitschrift für Gestaltung, Teil 1+2, Nr. 74 und Nr. 75 /1976.
- Gros, Jochen (1983): Grundlagen einer Theorie der Produktsprache, Heft 1, Einführung, ed. by Hochschule für Gestaltung Offenbach.
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- Fischer, Richard/ Mikosch, Gerda (1984): Grundlagen einer Theorie der Produktsprache, Heft 2, Anzeichenfunktionen, ed. by Hochschule für Gestaltung Offenbach.
- Steffen, Dagmar: Design als Produktsprache, Der `Offenbacher Ansatz` in Theorie und Praxis, Frankfurt am Main 2000.

