



Der Griff nach dem Intuitiven Praxis, Positionen, Perspektiven

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Übersicht



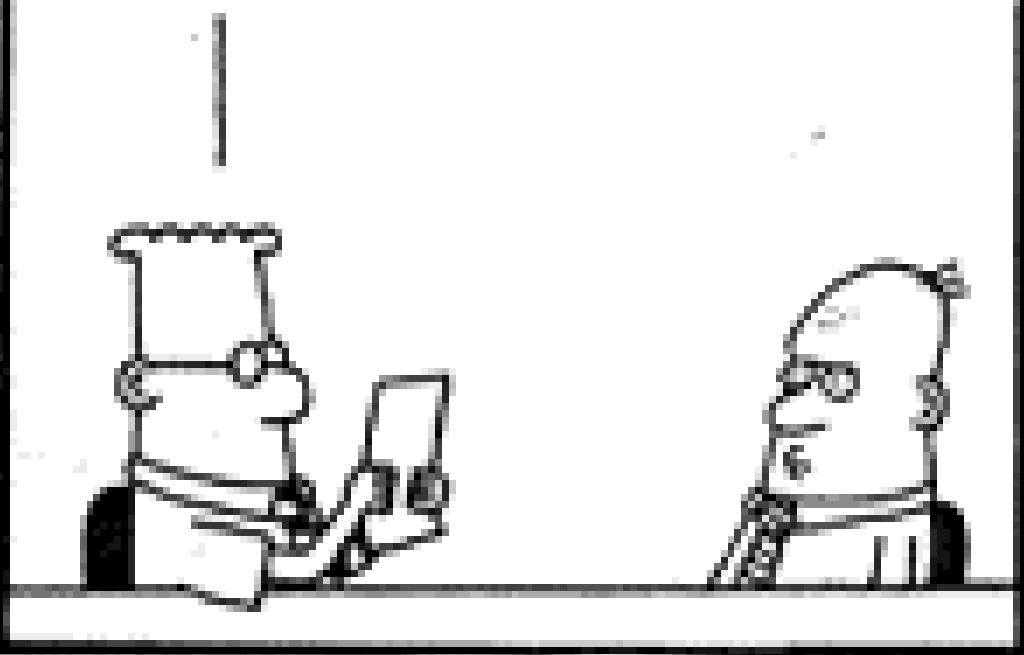
- Einleitung
- Sprachgebrauch im Sachgebiet Technik
- Psychologie und “Intuitivität”
- Die drei Ebenen der Verhaltensregulation
- Rasmussen-Modell revisited



Dilbert



YOUR USER REQUIRE-
MENTS INCLUDE FOUR
HUNDRED FEATURES.



Featuritis...



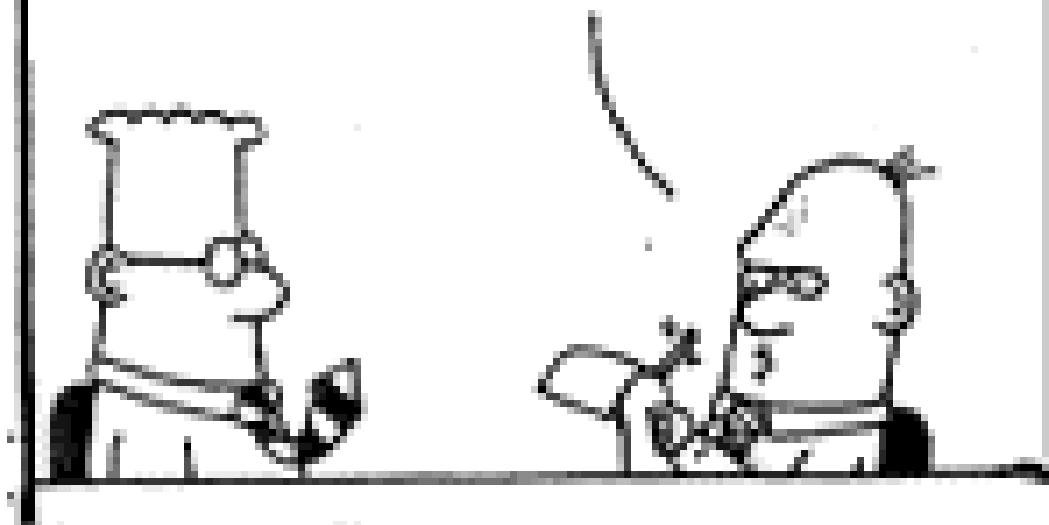
DO YOU REALIZE THAT
NO HUMAN WOULD BE
ABLE TO USE A PRODUCT
WITH THAT LEVEL OF
COMPLEXITY?



Featuritis... +1



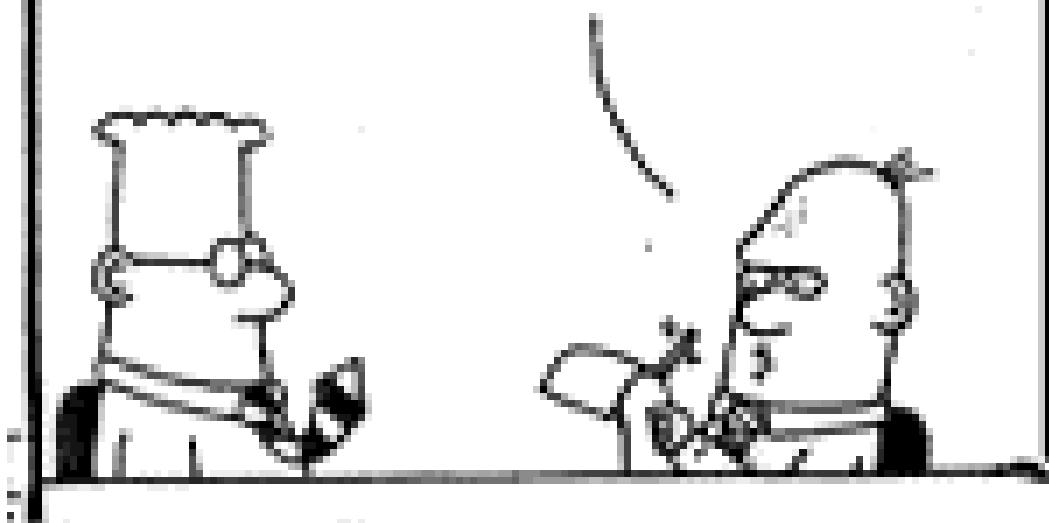
GOOD POINT.
I'D BETTER ADD
'INTUITIVE TO USE'
TO THE LIST.



IUUI = EUUI ?



GOOD POINT.
I'D BETTER ADD
"EASY TO USE"
TO THE LIST.



Deutscher Sprachgebrauch



Signifikante Kookkurenzen für intuitiv:

erfassen (28), Bedienung (27), sie (21), eher (20), bedienbar (19), zu (17), erfaßt (16), was (16), spontan (15), Benutzeroberfläche (14), bedienen (13), er (13), Entscheidungen (13), Künstler (13), das (12), erkennt (12), bedienenden (12), ist (12), bedienende (12), richtig (11), erspürten (11), rational (11), richtige (11), verstehen (11), oft (10), gestaltet (10), RAF-Umfeld (10), gespürt (10), Gefühl (10), wir (9), Bilder (9), Verstandes (9), begriffen (9), so (9), Fähigkeit (9), erschaffenen (9), erfassende (9), Umgang (9), ganz (9), sondern (9), logisch (9), begreift (9), intellektuell (8), rein (8), nicht (8), Einstiegern (8), Handhabung (8), Icons (8), arbeitet (8), erfaßbar (8)



Deutscher Sprachgebrauch



Signifikante linke Nachbarn von intuitiv:

eher (10), rein (8), ganz (6), begreift (4), Rein (4), Programmen (4)

Signifikante rechte Nachbarn von intuitiv:

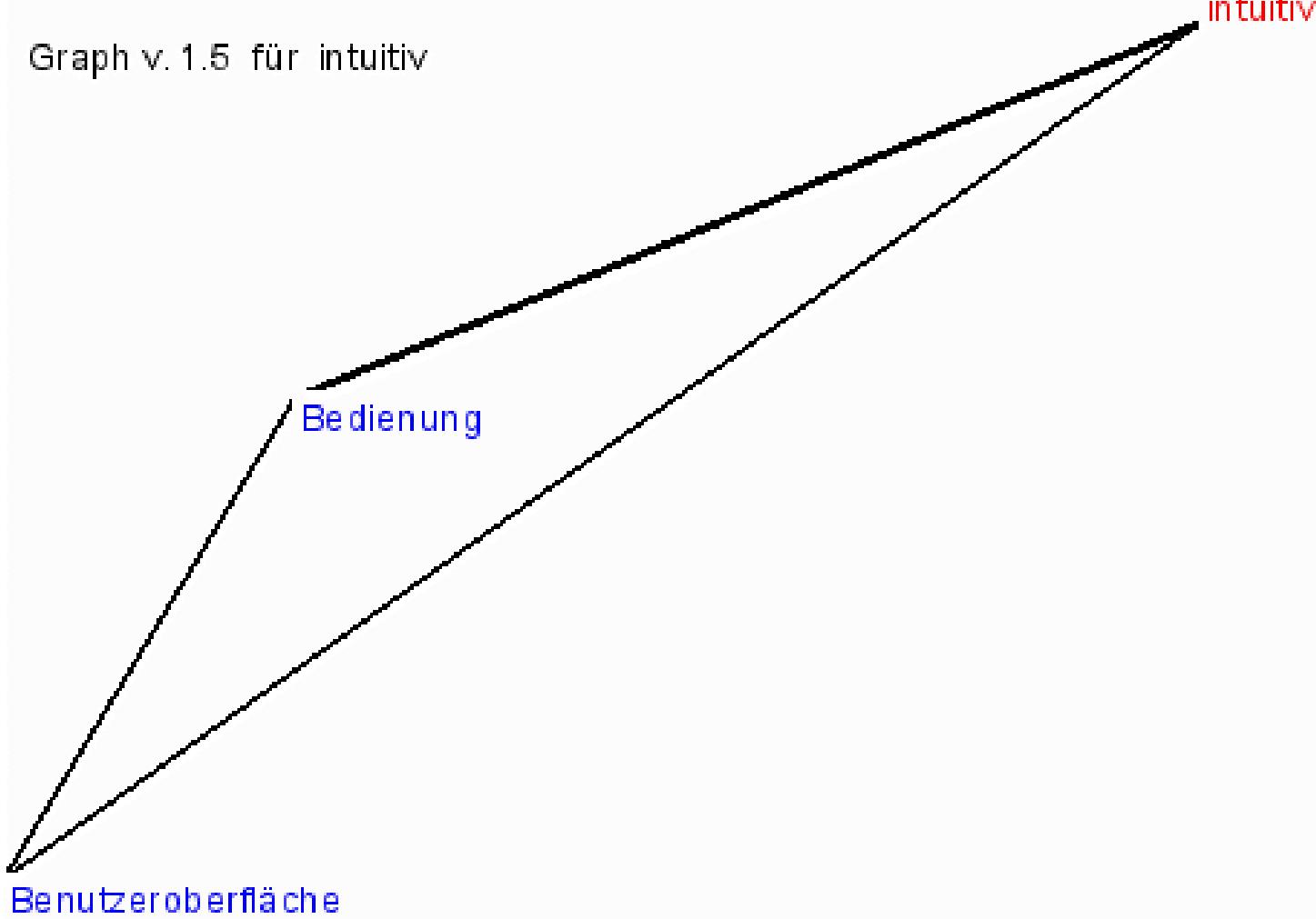
bedienbar (19), erfaßt (9), erahnt (7), umgehen (6), erfassen (6),
erfaßte (5), richtig (4), kreativ (4), gespürt (4), zugänglich (3)



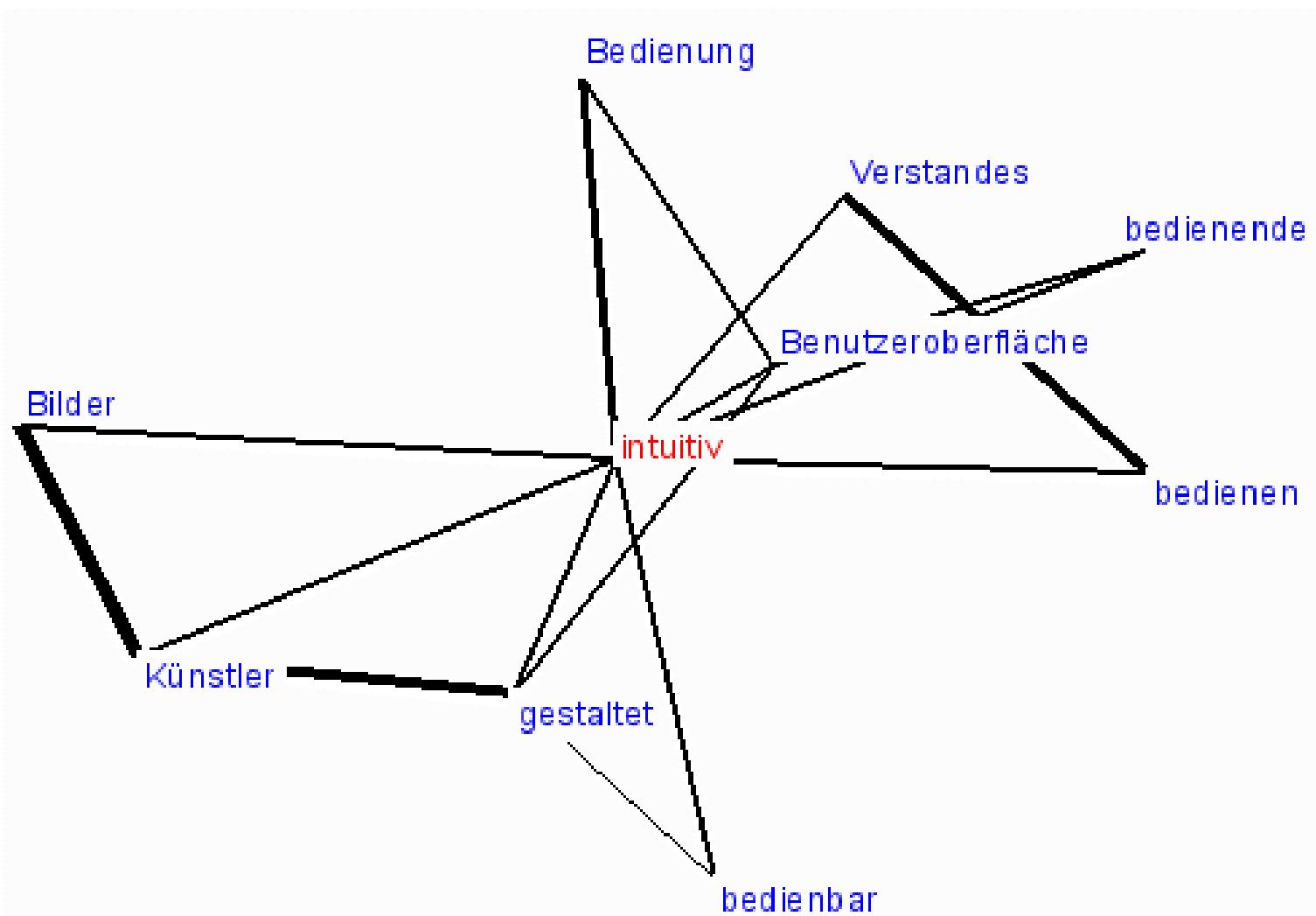
Deutscher Sprachgebrauch



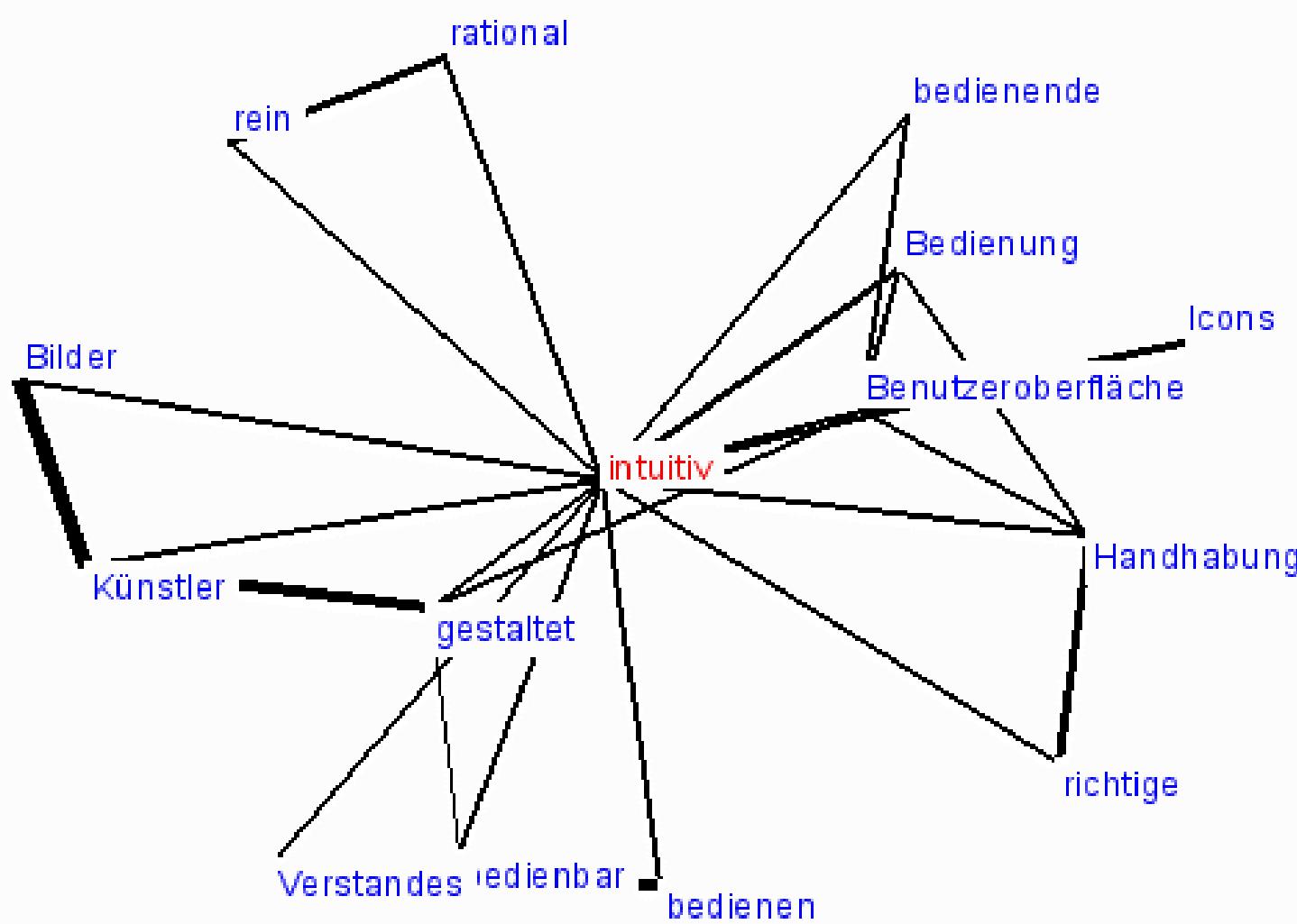
Graph v. 1.5 für intuitiv



Deutscher Sprachgebrauch



Deutscher Sprachgebrauch



Englischer Sprachgebrauch



significant cooccurrences of intuitive:

interface (500), user (152), easy (116), use (76), more (68), graphical (66), users (62), menus (59), Windows (58), simple (54), features (48), program (45), menu (45), an (40), very (33), learn (33), powerful (31), tools (27), pull-down (25), commands (25), manual (24), fairly (24), icons (23), makes (22), easier (21), provides (19), help (19), interfaces (19), offers (19), program's (18), applications (17), mouse (16), documentation (16), structure (16), Mac (16), context-sensitive (16), Macintosh (15), user-friendly (15), easy-to-use (15), software (15), command (14), tool (14), ease (14), functions (14), on-line (14), menu-driven (14), flexible (14), most (14), visual (14), feel (13), operation (13), environment (13), approach (13), package (13), less (13), GUI (13), reasonably (12), Its (12), metaphor (12), design (12), way (12), process (12), find (12), creating (11), graphics (11), dialog (11), make (11), lacks (11), graphic (11), highly (11), application (10), fast (10), it's (10), feature (10), familiar (10), word (10), method (10), logical (10), programming (10), create (9)



Englischer Sprachgebrauch



significant left neighbours of intuitive:

more (200), **an** (178), **very** (70), **and** (40), **less** (34), **fairly** (33), **not** (23),
most (22), **is** (21), **highly** (20), **reasonably** (18), **particularly** (16), **always**
(14), **as** (14), **so** (13), **quite** (12), **completely** (10), **extremely** (9), **relatively**
(8), **entirely** (6), **An** (6), **its** (6), **exactly** (6), **wonderfully** (5), **totally** (5), **truly**
(5), **program's** (5), **Its** (4), **nor** (4), **provides** (4)

significant right neighbours of intuitive:

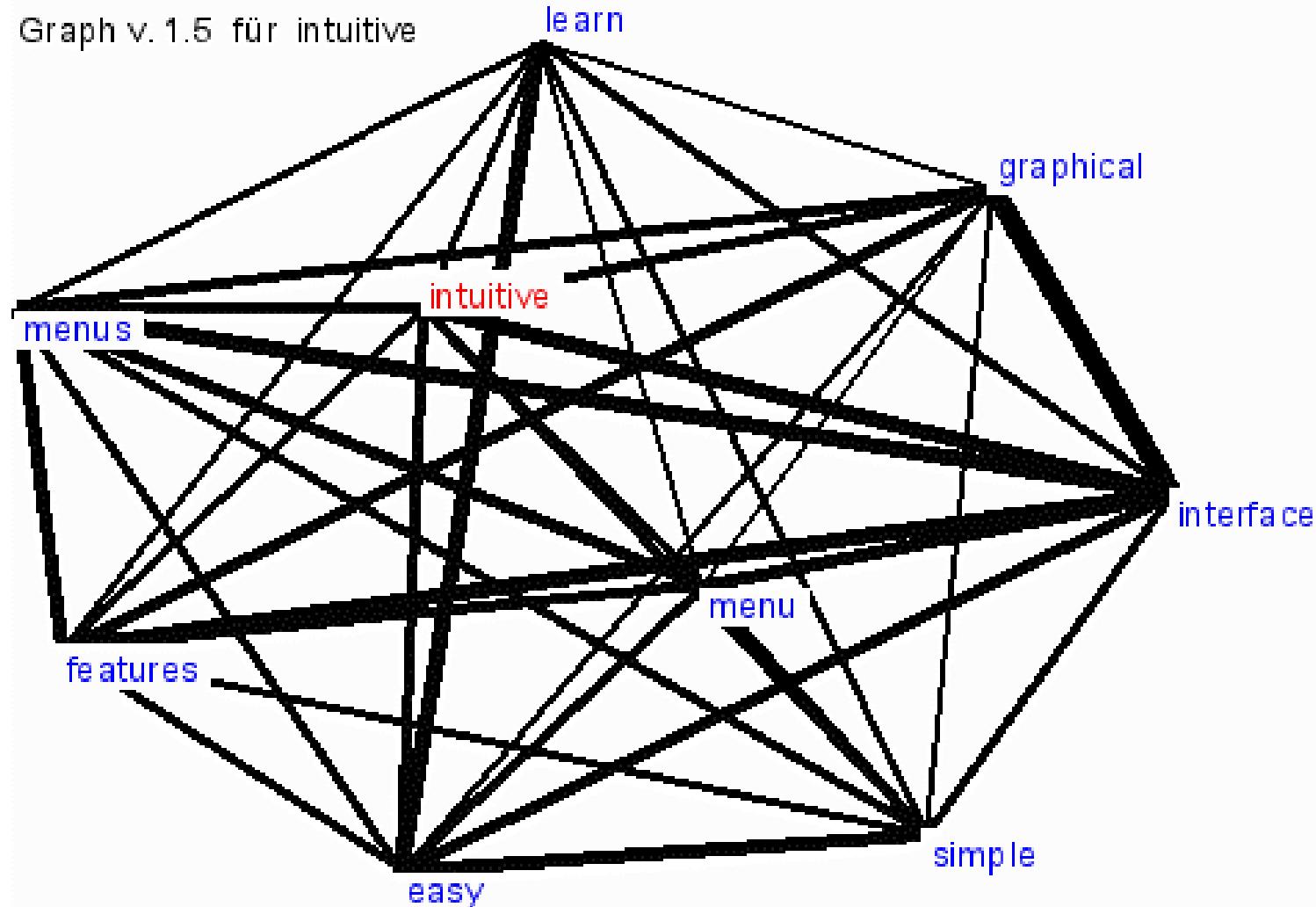
interface (195), **user** (71), **and** (38), **graphical** (27), **than** (24), **way** (22), **feel**
(18), **approach** (17), **menu** (15), **understanding** (15), **sense** (11), **design** (11),
as (11), **menus** (10), **operation** (10), **interfaces** (9), **manner** (9), **enough** (8),
nature (8), **fashion** (7), **ways** (7), **windowing** (5), **point-and-shoot** (5), **leaps**
(5), **icon-based** (5), **commands** (5), **appeal** (5), **method** (4), **grasp** (4),
access (4)



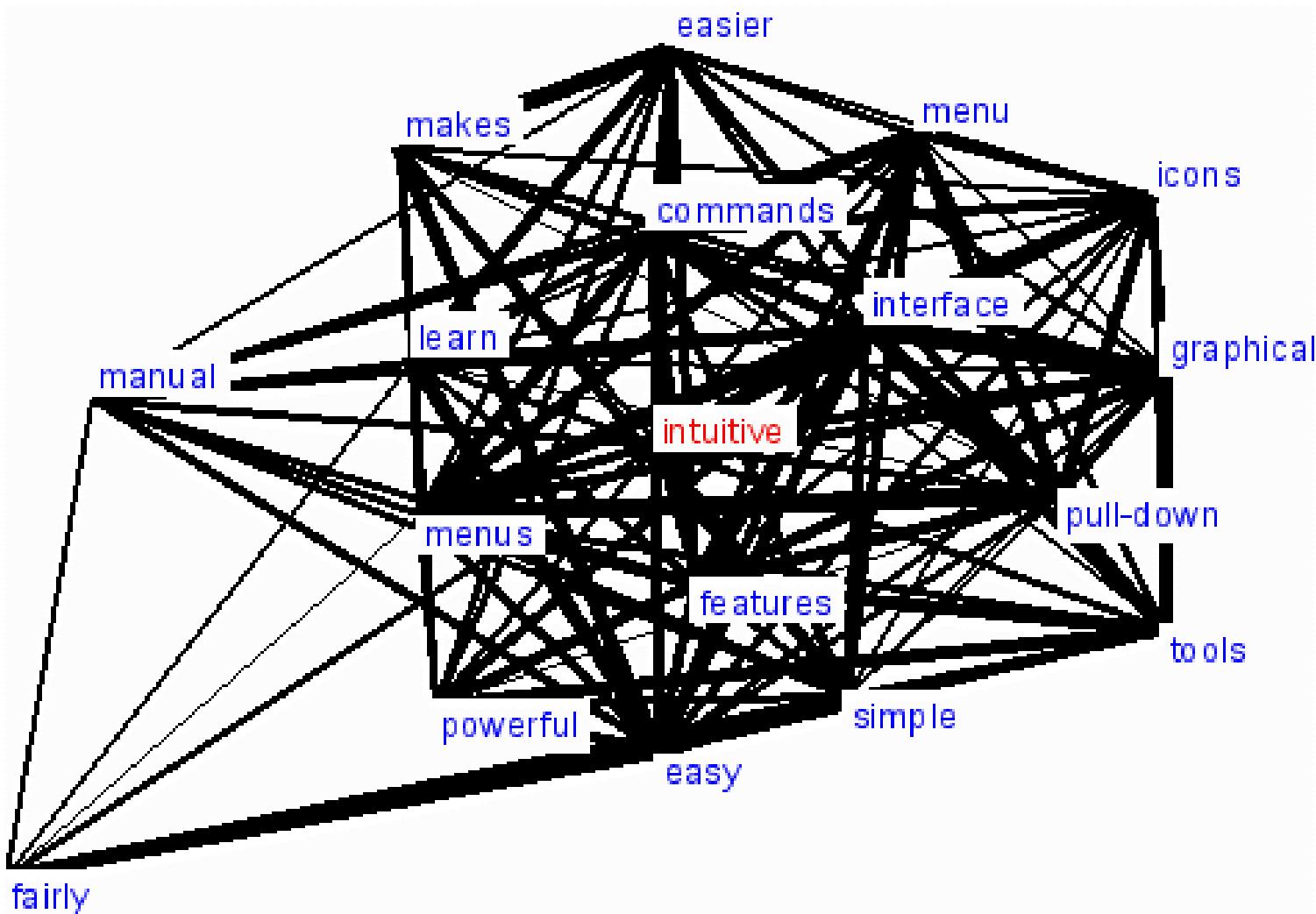
Englischer Sprachgebrauch



Graph v. 1.5 für intuitive



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280.000 Seiten für „intuitive Bedienung“



Web Bilder Groups News Produkte Desktop **Mehr »**
"intuitive Bedienung" Erweiterte Suche

Suche: Das Web Seiten auf Deutsch Seiten aus Deutschland

Web Ergebnisse 1 - 10 von ungefähr 280.000 Seiten auf Deutsch für "intuitive Bedienung". (0,10 Sekunden)

[XACTI - Sanyo - XACTI VPC-S6](#)

Intuitive Bedienung. **Intuitive Bedienung**, übersichtliche Menüführung sowie die integrierte Hilfe-Funktion machen das Fotografieren einfach.

www.sanyo-xacti.de/produkte/features.asp?Xacti=S6 - 7k - [Im Cache](#) - [Ähnliche Seiten](#) - [Filter](#)

[Computer 1998, Prozessoren, Preise, intuitive Bedienung ...](#)

Damit aber wird die **intuitive Bedienung** sehr erschwert. „**Intuitive Bedienung**“ ist das Stichwort für die Zukunft: Wie kann man solche hoch komplexen ...

www.storyal.de/story1998/compu98.htm - 9k - [Im Cache](#) - [Ähnliche Seiten](#) - [Filter](#)

[Intuitive Bedienung | Kommunikation und Technik von übermorgen](#)

Datenkompression um den Faktor 6000 ermöglicht TV über GSM-Handynetze, E-Books der zweiten Generation lösen das Papier ab. Doch ohne **intuitive Bedienung** ...

www.tecchannel.de/kommunikation/extra/402452/index8.html - 61k -

[Im Cache](#) - [Ähnliche Seiten](#) - [Filter](#)

[ComputerWorks: 01 | Intuitive Bedienung](#)

01 | Extrem einfache und wirklich **intuitive Bedienung**. Das Beste ist, wenn alles so



1.830.000 Seiten für „intuitive interface“



The screenshot shows the Google search interface with the query "intuitive interface" entered in the search bar. Below the search bar are several search filters: "Suche:" followed by radio buttons for "Das Web", "Seiten auf Deutsch", "Seiten aus Deutschland" (which is selected), and "Anpassen". To the right of the search bar are links for "Mehr »", "Erweiterte Suche", and "Einstellungen". The main search results are listed below, each with a title, a snippet of text, and links for "Diese Seite übersetzen", "Im Cache", "Ähnliche Seiten", and "Filter".

Web Ergebnisse 1 - 10 von ungefähr 1.830.000 Seiten auf **Englisch** für "intuitive interface". (0,10 Sekunden)

[What Makes a Design Seem 'Intuitive'?](#) - [[Diese Seite übersetzen](#)]

When someone is asking for an **intuitive interface**, what they are really asking for is an interface that they, themselves, can intuit easily. ...

www.uie.com/articles/design_intuitive/ - 20k - [Im Cache](#) - [Ähnliche Seiten](#) - [Filter](#)

[Intuitive Interface LLC :: Creative Solutions in Web and Graphic](#) - [[Diese Seite übersetzen](#)]

At **Intuitive Interface** (II), we create graphic design that solves our clients' problems effectively and effortlessly. We design and develop unique websites ...

www.intuitive-interface.com/ - 6k - [Im Cache](#) - [Ähnliche Seiten](#) - [Filter](#)

[The Only Intuitive Interface Is The Nipple](#) - [[Diese Seite übersetzen](#)]

I can get back as far as August 1994, where Scott Francis suggests the nipple as the only **intuitive interface**, in response to "There really is no user ...

www.greenend.org.uk/rjk/2002/08/nipple.html - 5k - [Im Cache](#) - [Ähnliche Seiten](#) - [Filter](#)

[The Universal Intuitive Interface](#) - [[Diese Seite übersetzen](#)]

The Universal **Intuitive Interface** of the future. ... The Universal **Intuitive Interface**. By: Sam

...



Intuitive Man-Machine Cooperation (*"Future"*)



People's interaction with the computer - using standard user interfaces, keyboard and mouse - will one day be replaced by intuitive user interfaces. Before using that new mobile phone, DVD recorder or digital camera, you must these days set aside a few hours to first study the operating instructions. This will soon change. New intuitive man-machine interfaces will give us video recorders that react to voice commands, computers that scan our eyes to determine what we want and robots that move when we merely point a finger. In the future, man will simply engage machines through speech, facial expressions and gestures.

H.-J. Bullinger



Intuitive usability („Sell“)



Today, "intuitive usability" is a pivotal customer requirement. **Awkward** services and functions must become **simple** enough for all customers to use.

Deutsche Telekom Laboratories



Intuitivity as good usability ("Research")



Good usability, or, "intuitivity", you might say. Ah, that wondrous neverland concept to which all operating systems and applications aspire. **How does one define good usability?**

Pages tagged with "intuition" on del.icio.us



Intuitive as compliment



One of the most common terms of praise for an interface is to say that it is “intuitive”.

Jef Raskin



INTUITIVE EQUALS FAMILIAR



Intuitive = uses readily transferred, existing skills.

Jef Raskin



Super duper easy to learn



I like what Don Norman says: there is no such thing as an “intuitive” design for the Web.

Humans weren't wired to intuit things related to technology. The question is how quickly they can learn it.

“Intuitive” really means (in this context) that it's super duper easy to learn (or that it's like you've already learned it).

Peter Merholz



Bye bye „ease of use“ ?



Let us stop talking about vague concepts like “ease of use” and “user friendly”. A more productive formulation of what we are trying to do is accelerate the process whereby novices begin to perform like experts.

Bill Buxton



Fünf-Stufen-Modell zum Fertigkeitserwerb



- 1) Neuling (Anfänger)
- 2) Fortgeschrittener Anfänger
- 3) Kompetenz
- 4) Könnertum
- 5) Expertentum

H. L. Dreyfus und S. E. Dreyfus (1986)



Design around existing skills



Performance is the exhibition of skilled behavior. While skills are difficult to acquire, new users don't come to a system completely vacant in this regard.

Bill Buxton



New look on “know the User”

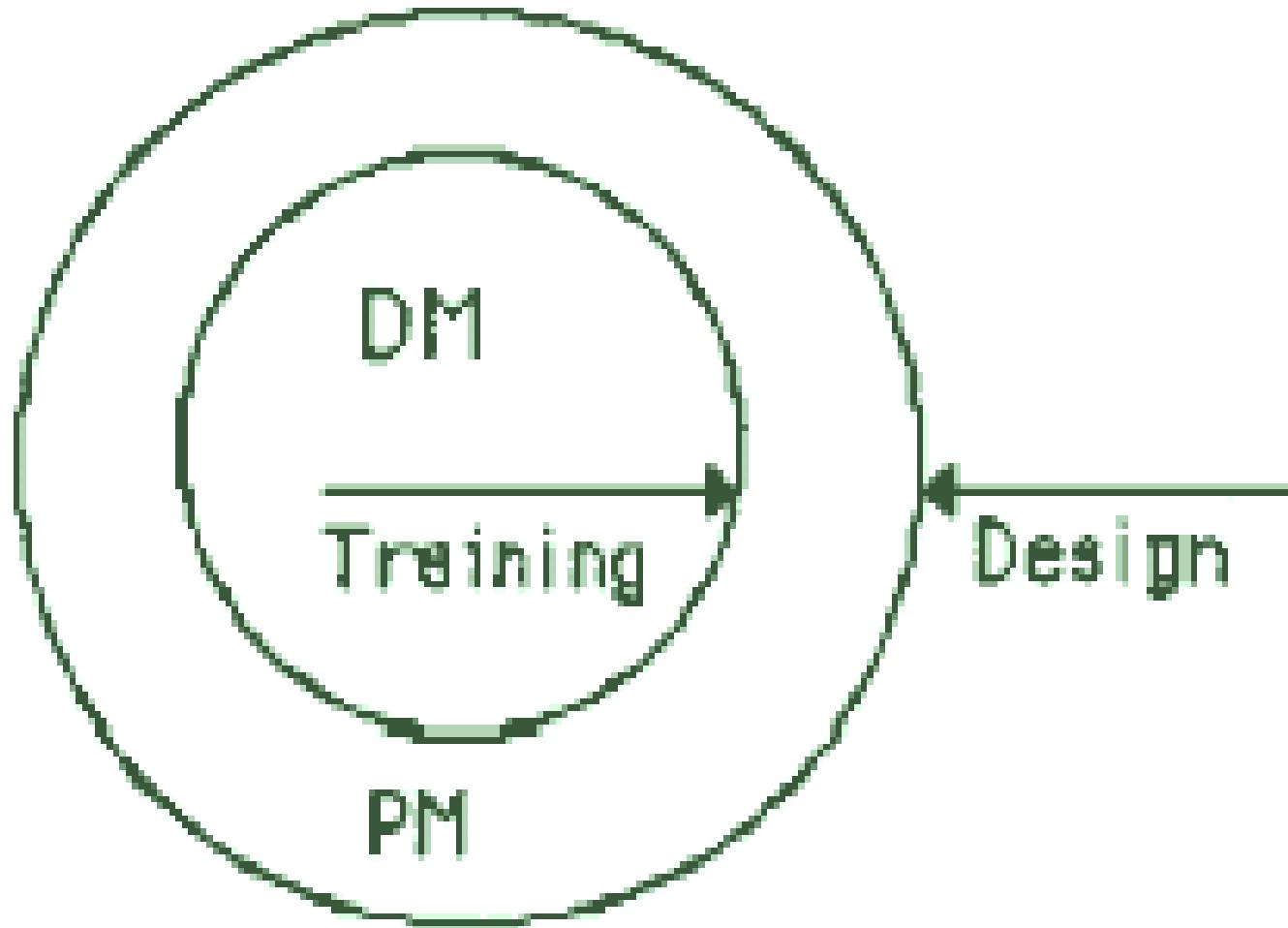


Analyzing the target population with respect to possible exploitable skills gives a whole new direction and bite to the often-heard platitude, “know the user”.

Bill Buxton



Two set screws: Training and Design



Bill Buxton



Theory



A desire to make systems easier to use is a good starting point, but we can't get very far without a theory of how to do so.

Bill Buxton



Intuition & Psychology



Historically, psychologists have ignored the notion of intuition.

Also today, intuition is not used as technical term in the discourse of the scientific community.

Conceptual development thus remains poor and elusive.



No pains, no gains.



Psychologists don't deny, that sudden inspiration can happen. However, they are convinced that this can only be a result of preceding learning processes.

No „Aha“-experience without a period of incubation, no skill without training, no work without effort.



Aha!

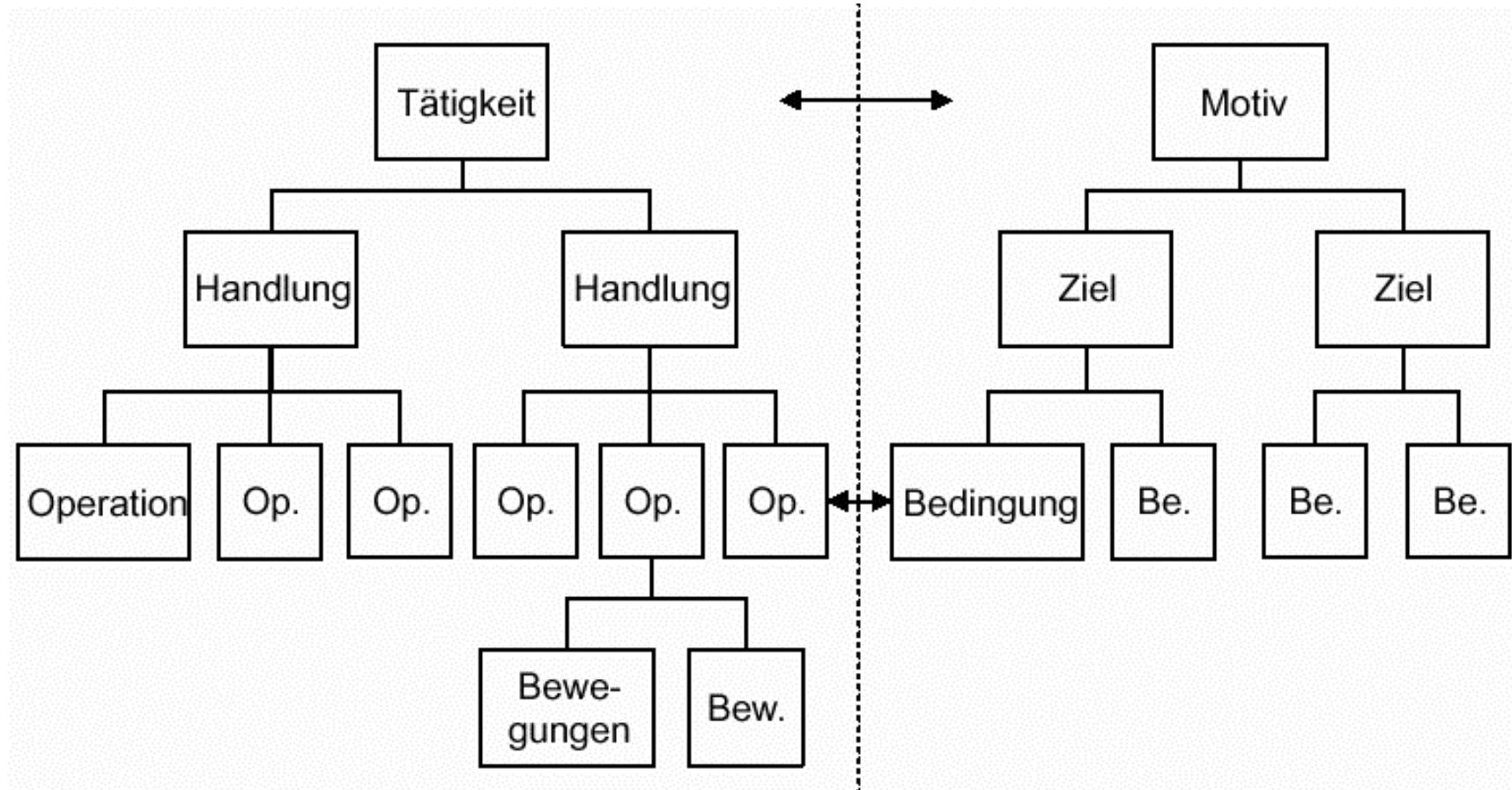


Using the notion intuition is suspected to neglect preparatory work.

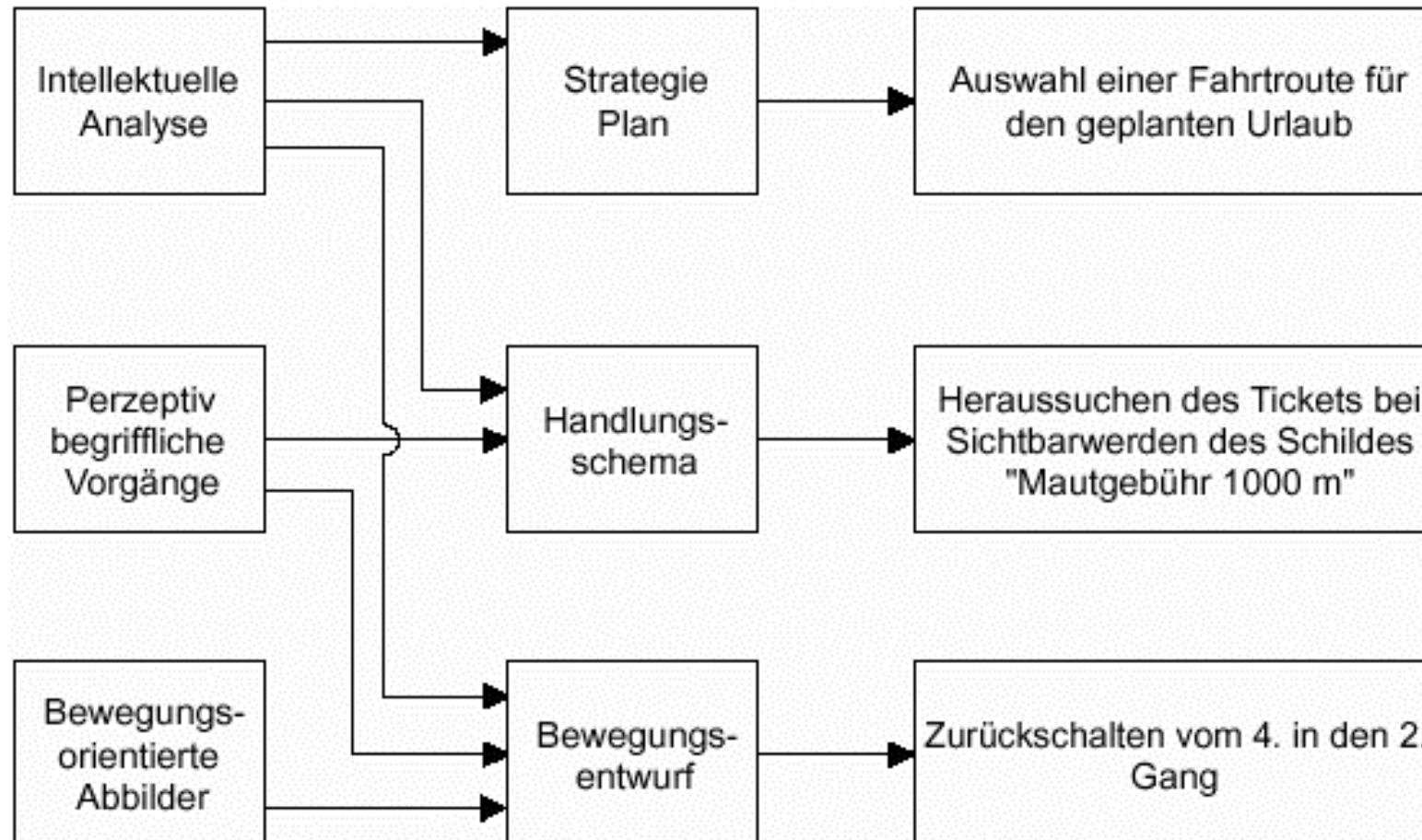
Observation and prediction of the influence of preparatory work/previous experiences is part of basic research in the fields „Learning, Memory and Cognition“, „Human Perception and Performance“, „Motivation and Emotion“ et al.



Makrostruktur einer Tätigkeit



Regulation: Komponenten u. Ebenen



Hacker (1973)



Dreistufung der Verhaltensregulation

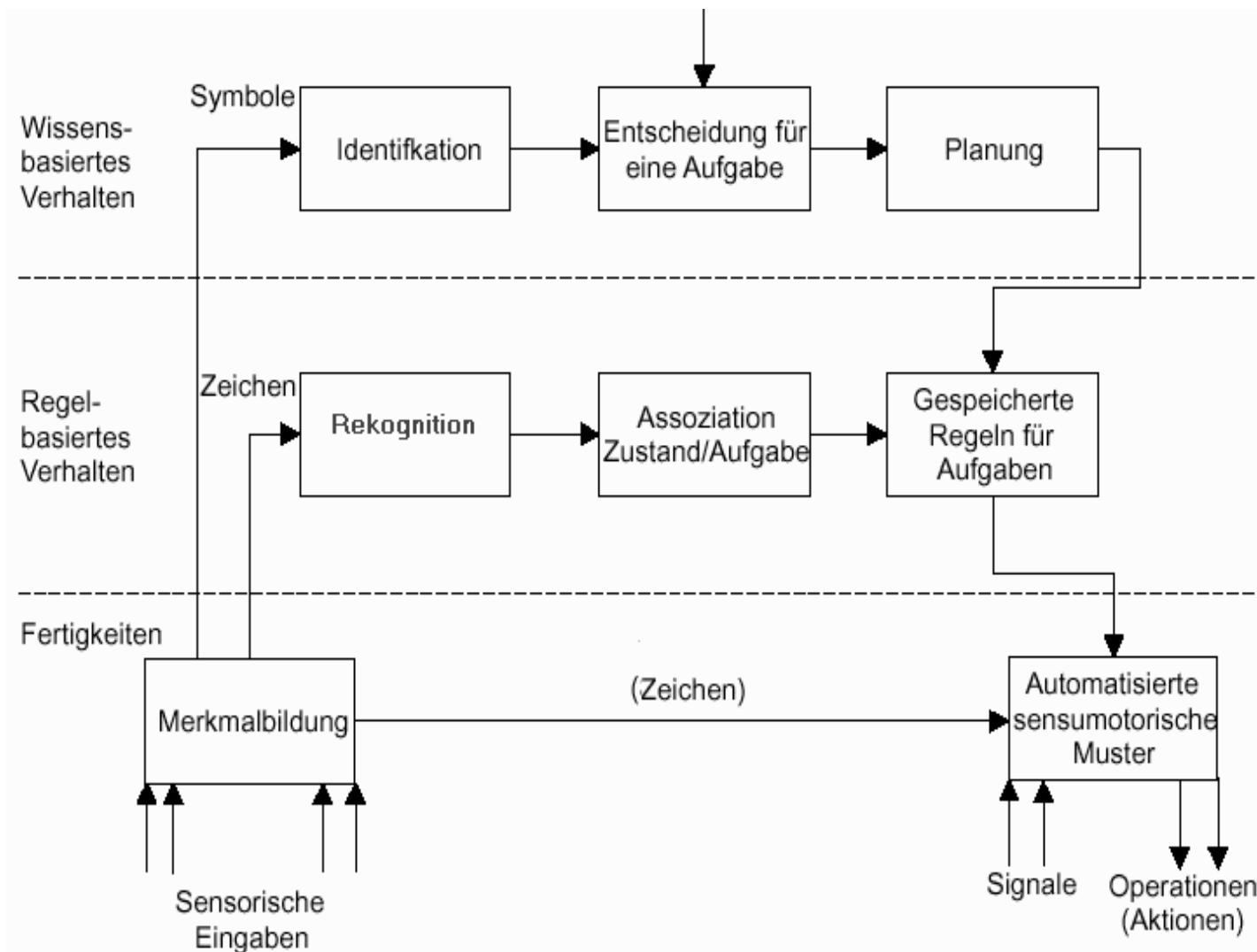


- Wissen
- Regeln
- Fertigkeiten

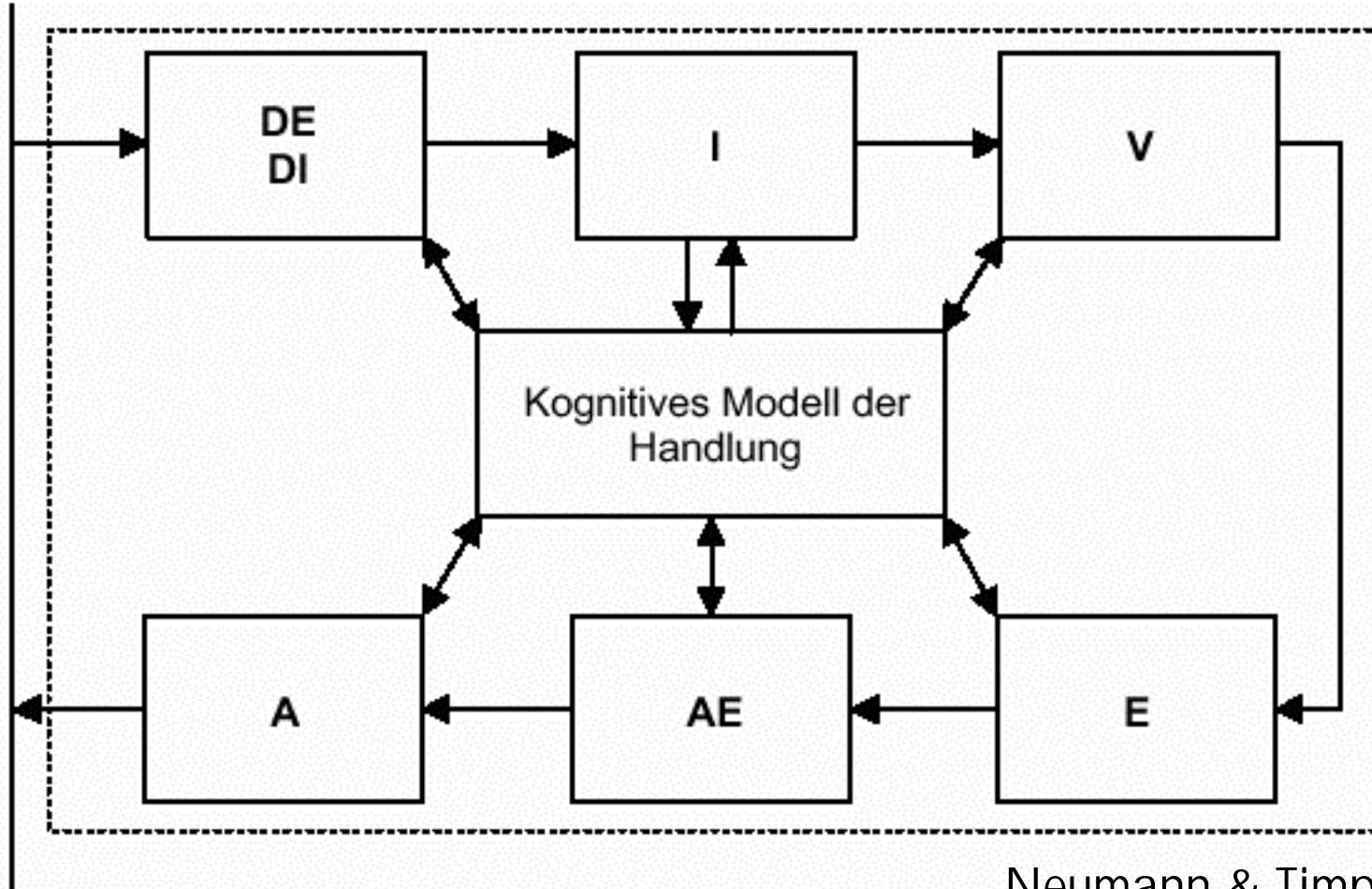
Jens Rasmussen (1983)



Rasmussen (1983)

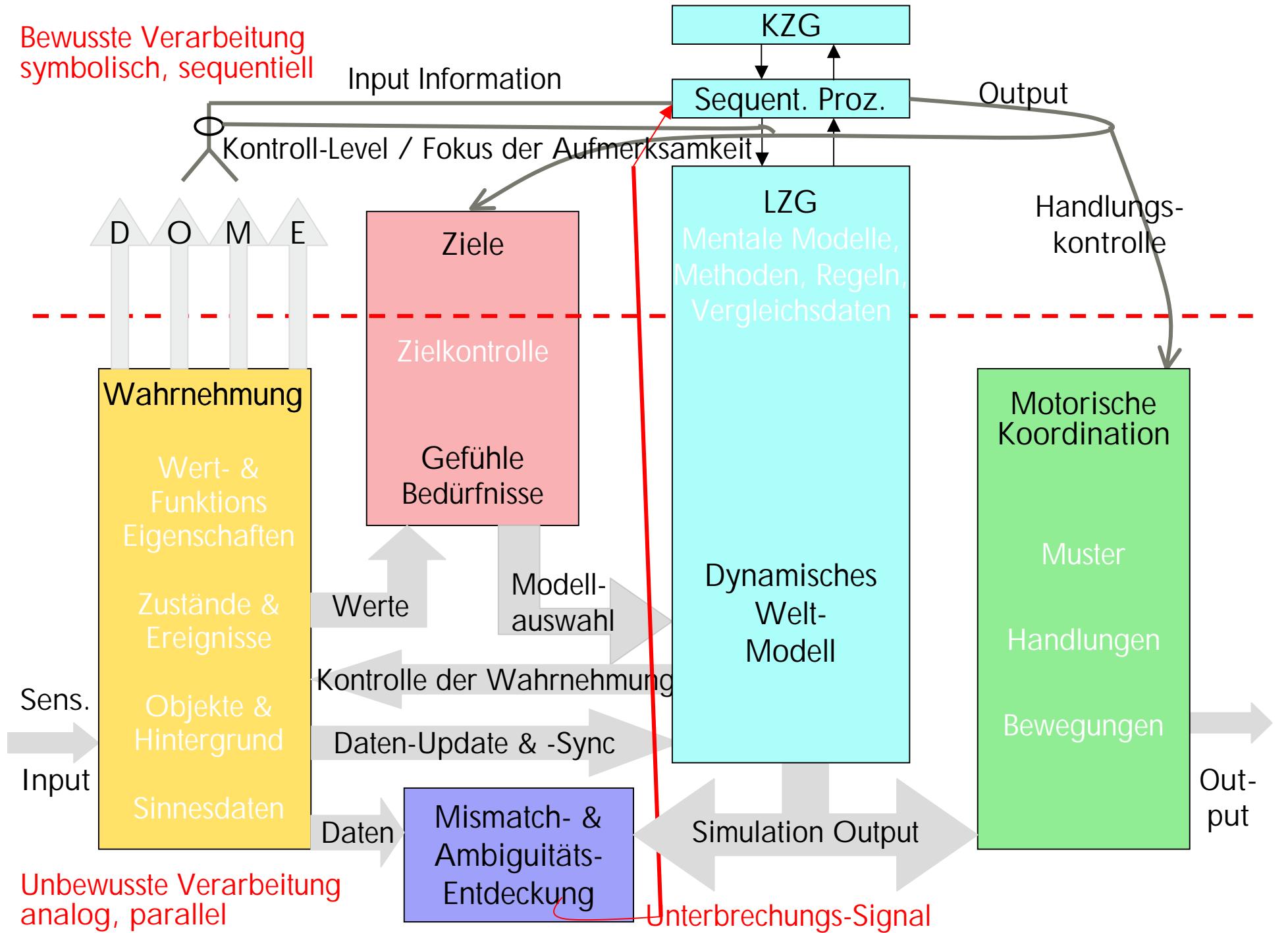


Kognitives Modell der Handlung



Neumann & Timpe (1976)





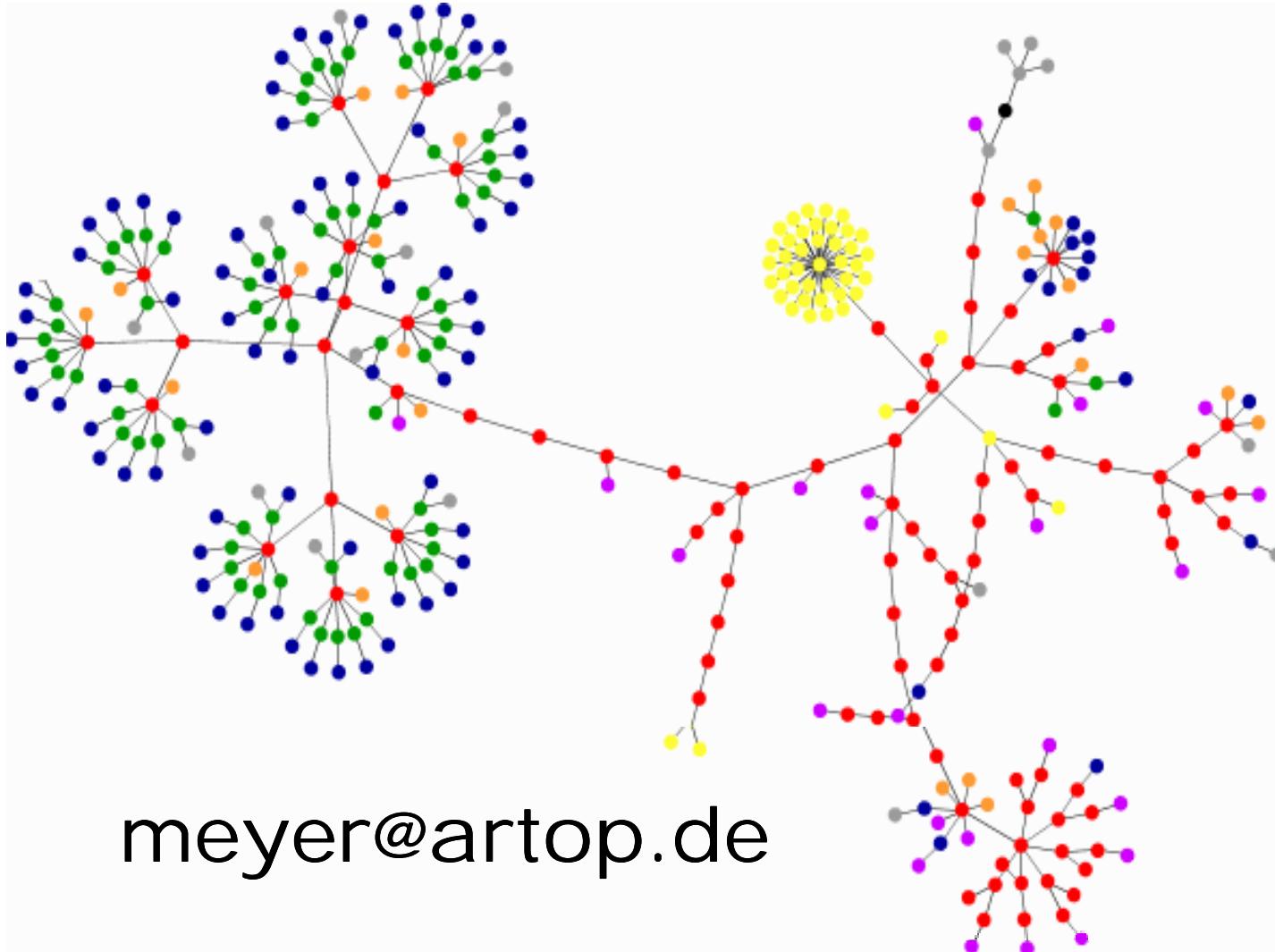
Das interne dynamische Weltmodell



- Kognitives Modell der Handlung (Lomow)
- Phänomenale Repräsentation (Bischof)
- OAS - Operative Abbildsystem (Hacker)
- Image (Miller)
- Inneres Auge-Funktion (Singer)



Vielen Dank für Ihre Aufmerksamkeit!



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