

# Being No One:

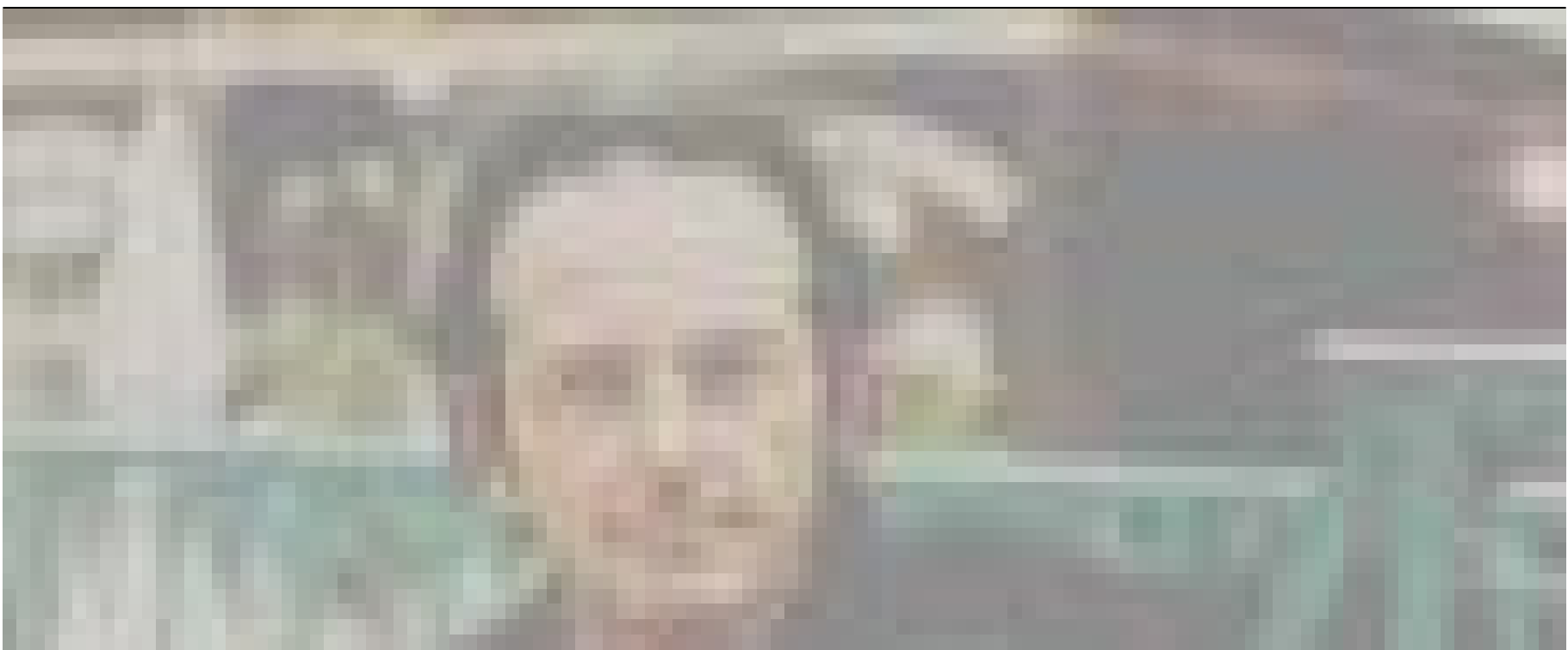
What makes a phenomenal state  
*a subjective state?*

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I guess I've had only one question all my life. Why do emergent selves, virtual identities, pop up all over the place creating worlds, whether at the mind/body level, the cellular level, or the transorganism level?

In J. Brockman, ed., (1995). *The Third Culture: Beyond the Scientific Revolution*. Simon & Schuster.

# *What is the “phenomenal first-person perspective”?*

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Three phenomenological target properties:

- **Mineness:** A higher-order property of *particular* forms of phenomenal content.

Examples: I experience *my* leg subjectively as always having belonged to me; I always experience *my* thoughts and *my* emotions as part of *my own* consciousness; voluntary acts are initiated by *myself*.

# *What is the “phenomenal first-person perspective”?*

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Three phenomenological target properties:

- **Selfhood („prereflexive self-intimacy“):** The phenomenal *target* property.

Examples: I am *someone*; I experience myself as being *identical* through time; the contents of my phenomenal self-consciousness form a *coherent whole*; before initiating and independently of any intellectual operations I am already „directly“ acquainted with the contents of my self-consciousness.

## *What is the “phenomenal first-person perspective”?*

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Three phenomenological target properties:

- **Perspectivalness:** A global, *structural* property of phenomenal space as a whole: It possesses an immovable center.

The problem: I am this center *myself*. To be phenomenally aware means to possess an inward perspective, and to take on this perspective in the subjective experience of the world and of one's own mental states.

# Representationalist analysis of the three target properties (1)

- Introduction of a new theoretical entity:  
The *phenomenal self-model* (PSM).
- It forms the representational instantiation-basis of the phenomenal properties to be explained.

# Representationalist analysis of the three target properties (2)

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## *What is a self-model ?*

- An episodically active representational entity, the content of which is formed by properties of the system itself.
- Simulation → Emulation → Self-modeling.
- Background assumption: It possesses a true neurobiological description, for instance as a complex activation pattern in the human brain.

# Representationalist analysis of the three target properties (3)

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## *What is a self-model ?*

- The *phenomenal* self-model is that part of the *mental* self-model, which is currently embedded into the highest-order, integrated representational structure, the global model of the world (cf. Yates 1975, Baars 1988, 1997).
- The phenomenal content of the self-model *supervenes locally*.



# Representationalist analysis of the three target properties (4)

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## *What is a self-model ?*

- The phenomenal self-model is a plastic, multimodal structure, possibly evolving from a partially innate and „hard-wired“ model of the spatial properties of the system (e.g., from a „*long-term body image*“: O'Shaughnessy 1995; Damasio 1994, Melzack 1989, 1992, 1997, Kinsbourne 1995, Metzinger 1993).

# Representationalist analysis of the three target properties (5)

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## *What is a self-model ?*

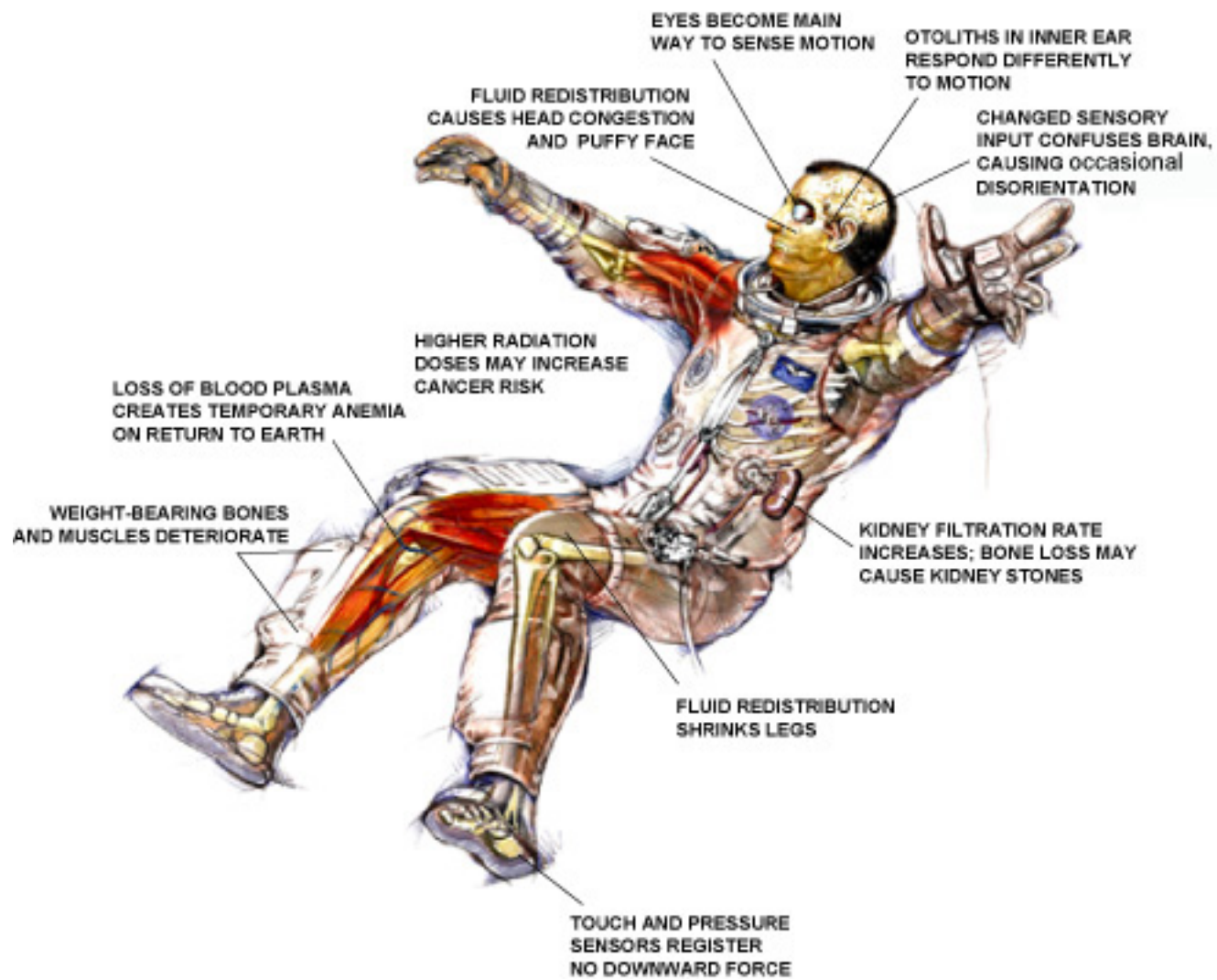
- An active self-model is a **subpersonal functional state**. It plays a specific *causal role*, i.e., from an analytical perspective it is a discrete set of causal relations.
- Example: Under a classical-cognitivist description it is a *transient computational module*, which is episodically activated by the system in order to regulate its interaction with the environment (cf. Conant & Ashby 1970).

# Representationalist analysis of the three target properties (6)

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## *What is a self-model ?*

- Teleofunctionalist background-assumption: The development and the activation of this computational module plays a role *for* the system.
- The functional self-model possesses a true **evolutionary description**, i.e., it was a *weapon*, which was invented and optimized in the course of a „cognitive arms race“ (cf. Clark 1989, p. 61; Millikan 1989, Dennett 1987, Lycan 1987).
- The functional instantiation-basis of the phenomenal first-person perspective consists in a specific cognitive achievement: The capacity to open and employ *centred representational spaces*.





# Representationalist analysis of the three target properties (7)

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- **Mineness:** All representational states which are embedded into the currently active self-model gain the additional higher-order property of phenomenal mineness („*Nonconceptual sense of ownership*“).
- If this **integration process** is disturbed, different neuropsychological syndromes or altered states of consciousness result:



# Representationalist analysis of the three target properties (8)

## Examples:

- Consciously experienced thoughts are not my *own* thoughts any more: florid **schizophrenia**.
- My leg is not my *own* leg any more: **unilateral hemi-neglect**.
- My arm performs goal-directed actions without my *own* control: *Alien Hand Syndrome*.
- I am a robot; I am transformed into a mechanical puppet; volitional acts are not my *own* volitional acts any more: **depersonalization**. Loss of phenomenal „*Vollzugsbewusstsein*“ (Jaspers).
- I am the whole world, *all* events in the world are controlled by my own volitional acts: **mania**.

# Representationalist analysis of the three target properties (9)

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- Selfhood, „*präreflexive Selbstvertrautheit*“: The existence of a single, coherent, and temporally stable self-representation forming the center of the overall representational state.
- If this representational module is damaged, if it disintegrates, or if multiple structure of this type alternate within the system, different neuropsychological syndromes or altered states of consciousness result:



# Representationalist analysis of the three target properties (10)

## Examples:

- **Anosognosia and Anosodiaphoria:** Loss of higher-order insight into existing deficits, e.g., in blindness denial (*Anton's syndrome*).
- **Dissociative Identity Disorder:** The system uses different and alternating self-model in order to deal with extremely traumatizing and socially inconsistent situations (e.g., sexual abuse by one parent; cf. Dennett & Kinsbourne 1989).
- **„Ich-Störungen“:** Identity disorders, delusional misidentification, etc. – a large class of psychiatric disturbances accompanied by deviating forms of the conscious experience of one's identity.

# Representationalist analysis of the three target properties (11)

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- **Perspectivalness:** The existence of a single, coherent, and temporally stable model of reality, which is representationally centred around or „on“ a single, coherent, and temporally stable phenomenal subject, i.e., around a model of the system *as experiencing* (PMIR). This structural feature of global representational space then leads to the instantiation of a temporally extended and **non-conceptual first-person perspective**.
- If this global representational property is lost, phenomenology changes and different neuropsychological syndromes or altered states of consciousness result:

# Representationalist analysis of the three target properties (12)

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## Examples:

- **Complete depersonalization:** Loss of the phenomenal first-person perspective, accompanied by dysphoric states and functional deficits. („*Angstvolle Ich-Auflösung*“; „dreadful ego-dissolution“)
- **Mystical Experiences:** Selfless and non-centred global states, which are being experienced and described as non-pathological and non-threatening. („*Ozeanische Selbstentgrenzung*“; „oceanic boundary-loss“)

## The central theoretical problem on the functional level of description:

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- **Question:** In which way does the phenomenal self-model *differ* from all other phenomenal models currently active? Which functional property characteristically marks it out, how precisely does it become the *center* of the phenomenal space of representation?

## The central theoretical problem on the functional level of description (2):

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- **Answer:** The self-model is the only representational structure which is anchored in the brain by a *persistent functional link*, i.e., by a **continuous source of internally generated input**.
- Whenever conscious experience exists at all (= whenever a stable, integrated model of reality is active), this continuous source of internal, proprioceptive input does exist as well. The activity of that („hard-wired“) partition of the **neuromatrix underlying the spatial model of one's own body** which is independent of external input becomes the *center* of phenomenal space.

## The central theoretical problem on the functional level of description (3):

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- Empirical hypothesis 1: New results concerning pain experience in phantom limbs point to the existence of a genetically determined neuromatrix, the activity pattern of which could form the basis of more invariant aspects of bodily self-consciousness. („Phylomatrix of the body image“; cf. Melzack 1989, 1990, 1992, 1997).
- Empirical hypothesis 2: Homeodynamics as regulated by upper brain-stem and hypothalamus (“emotional embodiment”; cf. Damasio 1994, 1999).

*In essence, I postulate that the brain contains a neuromatrix, or network of neurons, that, in addition to responding to sensory stimulation, continuously generates a characteristic pattern of impulses indicating that the body is intact and unequivocally one's own. I call this pattern a neurosignature. If such a matrix operated in the absence of sensory inputs from the periphery of the body, it would create the impression of having a limb even when that limb has been removed.*

*(Cf. Melzack 1992: 93)*

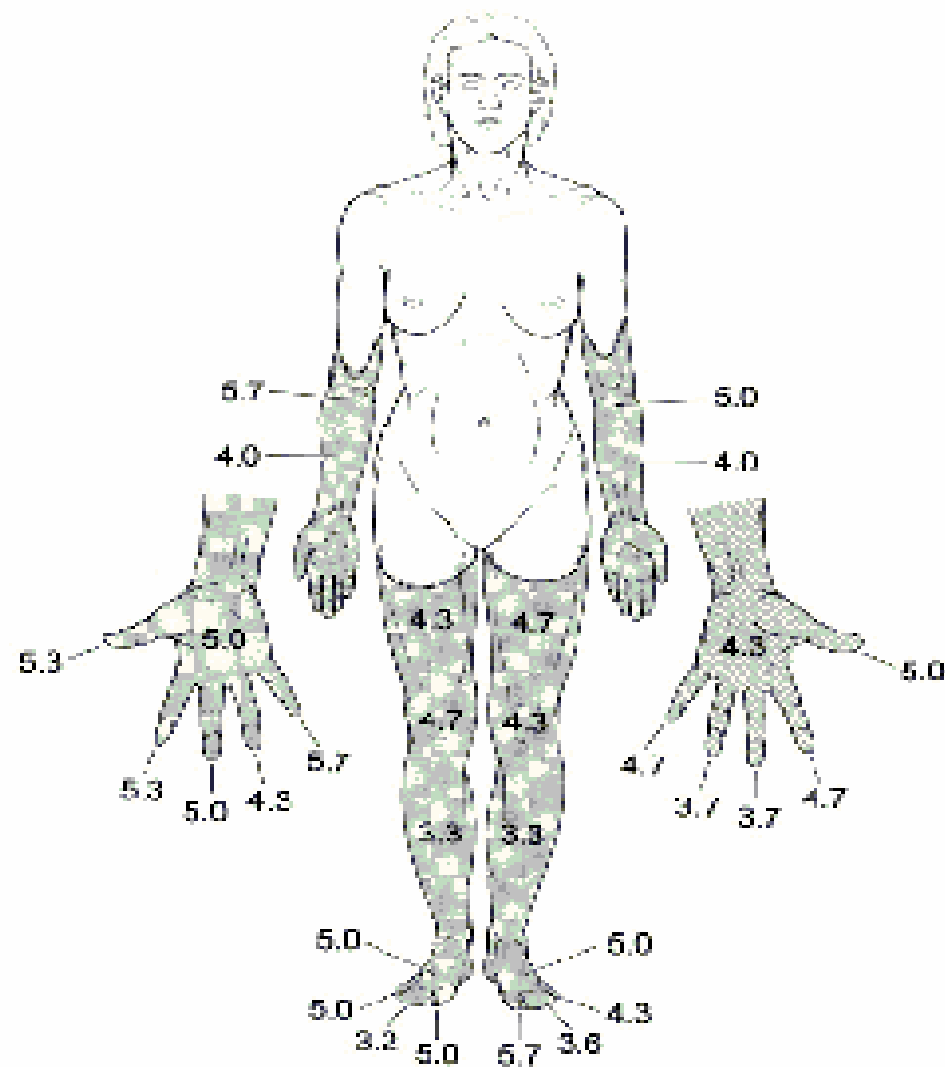


Fig. 1. Phantoms (shaded areas) in a subject with limb amelia. The numbers are vividness ratings (means of three measurements) for the felt presence of different phantom body parts on a 7-point scale from 0 (no awareness) to 6 (most vivid impression).



*Of course, the brain does represent muscles and joints and bones, but before it ever gets to the muscles and bones, there are other aspects of the body to consider, namely, the viscera and the internal milieu (the internal milieu corresponds to the chemistries of the fluids in which all of our living tissues are immersed). Not only must the “body-model-in-the-brain” include the latter aspects of the organism, it is likely that the model is anchored on those aspects because they are indispensable for the maintenance of life. The dynamic structure and operation of internal milieu and viscera are the beginning of the body-minded brain. (...)*

*The important point to note is that the first division - the one concerned with the organism's interior - is permanently active, permanently signaling the state of the most internal aspects of the body proper to the brain. (...) The brain is truly the body's captive audience.*

*(Cf. Damasio 1999: Chapters 2 & 6)*

## The central theoretical problem on the representationalist level of description :

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- **Problem:** There seems to be **no necessary connection** from the functional and representational basis-properties to the *phenomenal* target-properties of „mineness“, „selfhood“, and „perspectivalness“.
- All this could conceivably take place *without* the emergence of a genuine phenomenal self or a subjectively experienced first-person perspective: One can imagine biological information-processing systems, which develop and use centred representational spaces without the emergence of true self-consciousness. **A „self-model“ is not a self**, but only an internal representation of the system itself, i.e., a *system-model*.

## The central theoretical problem on the representationalist level of description (2):

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- **Question:** How does one get from the functional property of „centredness“ and the representational property of „self-modeling“ to the phenomenal property of **selfhood** („präreflexive Selbstvertrautheit“)?

## The central theoretical problem on the representationalist level of description (3):

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- Answer: „Transparency“ of the data-structures used by the brain.
- **Only content-properties** of the representational structures used by the brain are **introspectively available**. The representational vehicles employed by the system are *transparent*, i.e., they do not represent the fact *that* they are representations on the level of their content (cf. Moore 1903; Van Gulick 1988a, b; Metzinger 1993, 1995b).
- Therefore the system “looks through” its own representational structures, as if it were in **direct and immediate contact** with their content.

## The central theoretical problem on the representationalist level of description (4):

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- Empirical hypothesis 1: The respective data-structures are being activated so fast and are so reliable that the system cannot recognize them as such any more, e.g., because of a lower temporal resolution of *metarepresentational* functions (☞ no attentional availability of earlier processing stages).
- Empirical hypothesis 2: There has been no evolutionary selection pressure on the relevant parts of our functional architecture: Naïve realism has been a functionally adequate background assumption for biological systems like ourselves.

## The central theoretical problem on the representationalist level of description (5):

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### Application of this point to the self-model:

- We are systems, which are not able to recognize their own subsymbolic self-model *as* a model.
- Therefore we operate under the condition of a „naive-realistic self-misunderstanding“: We necessarily experience ourselves as being in direct and immediate epistemic contact with ourselves.



[Quoting Fodor 1981: 298] „In intellectual history, everything happens twice, first as philosophy and then as cognitive science.“ (...)

It is our contention that the rediscovery of Asian philosophy, particularly of the Buddhist tradition, is a second renaissance in the cultural history of the West, with the potential to be equally important as the rediscovery of Greek thought in the European renaissance.

In Varela, F., Thompson, E., and Rosch, E. (1991). *The Embodied Mind: Cognitive Science and Human Experience* (p.22). Cambridge, MA: MIT Press.

# Representationalist analysis of the three target properties (13)

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What is *subjective* experience?

- Introduction of a *second* theoretical entity:  
The **phenomenal model of the intentionality-relation (PMIR)**.
- The PMIR is a dynamical and transparent model of the „*self in the act of knowing*“. A PMIR is a continuously changing inner representation of ongoing **subject-object-relations**: E.g., the relationship between subject and perceptual object or between subject and internally represented action-goal.



# Representationalist analysis of the three target properties (14)

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What is *subjective* experience?

- If the phenomenal model of (e.g.) one's own perceptual states contains a transparent representation of their *causal history*, then convolved global states result, the content of which can only be truthfully described by the system itself using statements of the following type:

# Representationalist analysis of the three target properties (15)

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## What is *subjective* experience?

- I myself\* [= the content of the currently active, transparent self-model] am seeing this object [= the content of a transparent object-representation] and I am seeing it **right now** [= as an element within a virtual window of presence] **with my own eyes** [= the simple story about “direct” sensory perception, which sufficed for the evolutionary purposes of the brain].
- *A phenomenal first-person perspective is a transparent PMIR.*



**Thomas, this is all very nice and I agree with most of your ideas – but you will *never* get anywhere as long as you cling to this old-fashioned representationalist nonsense!**

Personal communication; April 24, 2001  
(CREA-meeting, Ministère de la Recherche, Paris)