

To probe the mind of a self identity “I” (Fig. 1a), we must first realize its objective representation “oI”, the effect of the ever-evolving ensemble of neural impulse trains. Obviously, no neuron can extend its processes beyond the body of “I”. The interaction with the world was left to the subjective representation “sI”, the subject matter of psychological and philosophical inquires since Plato’s time, or, the apparent mind as we all are familiar with. Bits and segments of the interactive experience were reflected and represented in introspection, dreams, free will, self-consciousness and etc. in sI. In contrast oI was the rather unfamiliar true mind and the subject matter of neuroscience, or neural physiology, if physiology is not taken as about materialism but about function. In essence sI served as the “broker” for oI in dealing with the world, and the brokerage called for a conversion or transform $\Lambda(oI) \rightarrow sI$ in mathematical terms (Fig. 1b). Knowing oI fully implied knowing sI completely, unveiling the sI’s fancy for spirit, soul or Cartesian dualism, etc.. However, the inverse transform $\Lambda^{-1}(sI)$ was different, discrete and patchy, hinting on oI not completely knowable through sI. “I” have no way to meddle with the working of the neuron at will, as an expedient example.

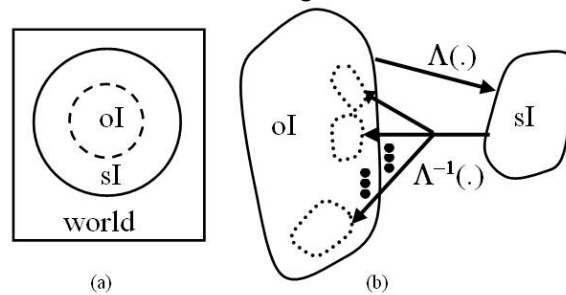


Fig. 1. Human brain mapping metamodel

The metamodel indicates that oI, the true mind is the prime mover and that sI, the apparent mind is only endowed with the feelings of awareness and free will. There is indeed neuroimaging evidence demonstrating a causal oI activity prior to the sI decision. Obviously, the model implies an inconvenient truth that sI is a somewhat illusory scratch pad or simulator for oI to interact with others and the world for the very survival and existence of "I" in a particular environment. Thus, the apparent mind sI must be coded or honed in compliance with its societal norm and moral there and then. The simulator analogy highlights sI’s agency role in oI’s sampling of the behavior of interactive others and self, making the existence of the mirror neuron class in oI more than plausible. The model may also remind some of being labeled as deterministic and mechanistic “zombies”, but actually dismiss it, for the model does admit choices or free will in oI as imbued by evolution, as we alluded to in a "quantum dendritic cloud", previously [1]. The one self “I” fully owns oI, and thus, it cannot escape from responsibilities. Even though our world is deterministic as some claim, which resorts to an infinity concept to arrive at it, biological choices and free will stand, because life or evolution is thus far finite. There must be choices for life somewhere in a finite truncation of an infinite continuum or a limit cycle in chaos. None of the old labels such as compatibilism or naturalism alike apply in this case. Clearly, oI has always evolved regardless of sI’s knowledge. Life just began to study life a brief moment ago in the long history of life. The inverse transform $\Lambda^{-1}(sI)$ forewarns us taking precautions in conceptualizing findings in oI with our sI habit. The "where" and "what" streams in the brain, e.g., should not be so suggested unless we further formulate $\Lambda^{-1}(sI)$, perhaps. The true mind “speaks” a different language and operates in different temporal and spatial scales, leaving behind a trajectory easily explained in a non-Euclidian space, probably.

Reference

Leith CC et al., OHBM, 2012