

# The Feeling of Being Alive

Organic Foundations of Self-Awareness

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**ABSTRACT:** The feeling of being alive points to an intricate connection between the organic process of life and subjective experience, or between *Leben* and *Erleben*. On this basis, the paper argues that self-awareness cannot be conceived as an internal mental space or a self-model that could be produced and localized somewhere in the organism, but that it is a manifestation of the life of the organism as a whole. This is shown by (1) distinguishing two components of the feeling of being alive, namely *vitality* (basic mood or attunement) and *conation* (drive, need, affect), (2) by pointing out the necessary foundations of both components in self-regulatory processes involving the living organism. Hence the sufficient basis of self-awareness cannot be found in single “neural correlates of consciousness”, but rather only in the self-organization and the life process of the organism in relation to the world.

## 1. Introduction

The feeling of being alive is situated at the threshold of life and experience, or of *Leben* and *Erleben*. Thus it constitutes the turning point between the *vital processes* of an organism’s self-preservation in its continuous exchange with the environment and the *psychic processes* of sentience and agency based on the organism’s sensorimotor interaction with its surroundings. Put another way, the feeling of being alive marks the transition from the autopoietic, self-producing structure of the organism as described by dynamical systems theory (Varela 1991; 1997; Thompson 2007) to the living being’s pre-reflective self-awareness as grasped by phenomenology (Zahavi 1999). *Leben* and *Erleben* are thus not only connected etymologically, but also ontologically: The intransitive ‘living’ or being alive (*Leben*) and the transitive ‘living through’ or experiencing (*Erleben*) may be regarded as two aspects of

one and the same process of life.<sup>1</sup> With experience, this living process is intensified or augmented, as it were, and becomes aware of itself.

The concept of life is thus essentially ambiguous, implying an outward and an inward process which are inextricably intertwined. This is mirrored in the duality of the *living* and the *lived body*: the body as a living system (*Körper*) and the body as lived or experienced (*Leib*) are two aspects of organismic life.<sup>2</sup> An integral concept of life should take both aspects into account and analyze their “chiasmatic” interconnection.<sup>3</sup> In a way, the Aristotelian concept of the *psyche* as the primary actuality of a natural organic body was an attempt to do just this: the *psyche* is not a substantial soul, but the animateness or living form of the organism itself. It refers to the order and dynamics of the life process that differentiates itself into various functions, among them sentience, movement and thought. The *psyche* is not something beyond the physiological processes, but rather their integration.

In the wake of Cartesian dualism, however, modern biology and psychology have dismissed this integral concept of life. Instead, life has been reduced to a complex of biochemical processes, yet at a high price: Everything that we associate with the existence of living beings – sentience, feeling, striving, self-movement – was excluded from the investigation of life and shifted into a subjective inner world where it now fell into the domain of psychology or of the philosophy of consciousness. Today, their role is being increasingly taken over by neurobiology, which localizes subjectivity inside the brain. Thus, at first sight dualism has been replaced by a physicalist monism, but in fact it has only seemingly been overcome. For neither cognitive neuroscience nor neurophilosophy operate with a genuine and integrative concept of life. If they take it into account at all, they regard it as fundamentally different from the mind – life as an external, functional property of certain physical systems, mind as a sequence of internal and disembodied states. Mental processes are not considered as operations or functions of a living organism, but as a “movie-in-the-brain” (Damasio 2003), an “ego-tun-

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1 This has been pointed out particularly by Barbaras (2008) who refers to the German notions (*Leben* and *Erleben*) and the French *vivre*, which has both the intransitive and the transitive meaning (*vivre quelque chose* = to experience something).

2 On this double-aspect conception of life see also Fuchs (2010, 95 ff.).

3 The terms “chiasma” and “chiasmatic” were used by Merleau-Ponty (1968) to describe the intertwining of the perceiving and the perceived body, or subjective and objective body.

nel” or a “phenospace” (Metzinger 2009, 221), in any case separated from the living body as a whole. In other words, the brain is conceived and investigated in such a way as if it could equally produce consciousness as a brain in a vat.

Thomas Metzinger has drawn the most radical consequence from this conception. He starts from the following question:

[...] to the best of our current knowledge there is no thing, no indivisible entity, that is *us*, neither in the brain nor in some metaphysical realm beyond this world. So when we speak of conscious experience as a *subjective* phenomenon, what is the entity *having* these experiences? (Metzinger 2009, 1).

Since a self cannot be attributed to a biological organism as a complex machinery, as Metzinger claims,<sup>4</sup> this entity can only be a “phenomenal self-model”, i. e. a model of the organism’s own state computed by the neuronal system from bulks of data. This self-model is periodically activated, namely in the waking state, and embedded into a simulation of the external world produced simultaneously. The experience of subject and world are therefore equally illusory, trapped in a “naive-realistic self-misunderstanding” (Metzinger 2009, 108). In fact we are “[...] mental self-models of information-processing biosystems [...]. If we were not computed, we would not exist” (Metzinger 1999, 284). “Conscious experience is like a tunnel” (Metzinger 2009, 6), a Platonic cave that is furnished by the brain with the “Technicolor”-qualities of the experienced world (ibid., 23). The basis of this *Matrix*-world is nothing but “[...] a highly specific activation pattern in your brain. In principle, you could have this experience without eyes, and you could even have it as a disembodied brain in a vat” (ibid. 21).

In what follows, I will argue for a position opposed to such concepts of an isolated cerebral consciousness. Conscious experience, I contend, is not an internal mental space or tunnel that could be localized somewhere in the organism, but it is *a manifestation of the life of the organism as a whole*. Hence, it is at the same time the manifestation of the current relation of organism and environment. Not single “neural correlates of consciousness” are the sufficient basis of phenomenal self-awareness, but the self-organization and the life process of the organism as a whole. In other words, there is a fundamental continuity of life and ex-

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4 “A biological organism, as such, is not a self” (Metzinger 2009, 8).

perience, *Leben* and *Erleben*. The feeling of being alive, as I will show, is particularly suited to demonstrate this continuity.

*Erleben* or experience in its most basic form may be differentiated into two components from which the feeling of being alive results:

1. a continuous bodily background feeling that may be termed *vitality* or *Befinden* (well- or ill-being). It also includes *mood* or *attunement* as an overall feeling for one's present life situation.
2. a basic striving that manifests itself in drive, instinct, need and affect, and that I will term *conation* (from the Latin *conatus* = impulse, drive, desire).

Both *vitality* and *conation* as basic forms of experience are derived from corresponding processes of life that cannot be restricted to brain processes and are instead based on an *integration of the whole organism*. These are processes of homeodynamic self-regulation, accomplished through recurrent cycles of shortage, need and compensation in an active exchange with the environment. As we will see, the feeling of being alive and with it consciousness are ultimately rooted in these vital processes of self-preservation. Granted, conscious experience probably arises only in those higher forms of life that are characterized by a centralized nervous system. Nevertheless, the biological structures and processes on which consciousness is based extend beyond single organs or subsystems to include the whole body and even the environment of the living being. Thus, the feeling of being alive turns out to be one of the most important proofs for the embodiment of subjectivity, that is, for its emerging from the organism as a whole.

I will now look at vitality and conation in more detail, describing in each case first the phenomenology of experience and then its biological foundations (2). I will then interpret the feeling of being alive as elementary self-experience and relate it to the autopoietic, self-productive structure of the organism (3). Finally, I will discuss the thesis of a continuity of *Leben* and *Erleben* as opposed to a self-model theory of subjectivity (4).

## 2. The feeling of being alive as an integration of the life processes

### (a) Vitality and attunement

Let us start with the foundational layer of experience that constitutes the unnoticed background of our intentionally directed perceiving, feeling or acting, and which may best be captured by the German word “*Befinden*” (or Heidegger’s *Befindlichkeit*). *Befinden* is bound to the body, but less to the body as consciously experienced than to the body as lived in the background – as a realm of diffuse ease or unease, relaxation or tension, restriction or expansion, freshness and vigour or tiredness and exhaustion. These feelings with their basic polarity of *Wohlbefinden* and *Missbefinden* (well- and ill-being) may be regarded as indicators of our particular state of life in its ups and downs and can be subsumed under the term *vitality*.

Vitality is concentrated in the lived body but also spreads without borders into the environment and tinges our relationship to the world. *Missbefinden*, as in diffuse unease, tiredness or exhaustion, also lends a more flat or monotonous coloring to the surroundings. The objects lose their richness and interest and appear dull or annoying, while the bodily source of this alteration does not become conscious at first. Thus, feelings of vitality should always be considered as *media* of perceiving the world as well; they color and pervade all experience. As such they are closely related to *moods* such as serenity, euphoria, dysphoria, melancholy or boredom, which, however, are not experienced close to the body but rather as qualities of the particular situation as a whole. They may also be described as states of *attunement* to the world and assigned to a vertical polarity of elevated or depressed moods.

Vitality, freshness or tiredness are not just internal bodily states, but rather already refer to the relation between bodily heaviness, mobility and spatial distance, i. e. to the accessibility of objects. Similarly, in moods the background feeling of the body is connected to the *potentialities* of a given life situation. “The mood has already disclosed, in every case, Being-in-the-world as a whole, and makes it possible first of all to direct oneself towards something” (Heidegger 1962, 176). Moods, then, disclose the quality of specific *possibility spaces* of a living being. Drawing on Heidegger, Ratcliffe speaks of *existential feelings* that are “[...] both ‘feelings of the body’ and ‘ways of finding oneself in the world’” (Rat-

cliffe 2008, 2). These also include feelings of freedom, wideness and openness, or feelings of restriction or suffocation, feelings of vulnerability or protection, uncanniness or certainty, familiarity or estrangement, reality or unreality, and feeling alive or feeling dead.

Let us now look at the *biological foundations* of these basic feeling states. According to Damasio (1995, 2000) and Panksepp (1998) they are closely connected to the vital regulatory processes that serve the preservation of the “inner milieu” and encompass the state of the body as a whole. Moreover, moods and existential feelings tell organisms where they stand with respect to their environment and to actions that will enhance the likelihood of their own survival. Various centres in the brain stem, hypothalamus, and the insular and medial parietal cortex process the neuronal and humoral signals from the body and integrate them into a “body landscape” that is constantly changing. This landscape includes the present state of the inner milieu (hormone concentration, glucose, oxygen, carbon dioxide, pH-value of the blood, etc.), interoceptive signals from the viscera and proprioceptive signals from the whole musculoskeletal system including the heart, blood vessels, skin and the vestibular system.

According to Damasio, this interaction of brain and body is constantly processed in higher brain centers – the thalamus, cingular gyrus, colliculli superiores, and the insular and somatosensory cortex – thus serving as a basis for an elementary “feeling of life itself” (Damasio 1995, 207). Damasio also speaks of a “core consciousness” on which the extended, autobiographical or personal consciousness is based. The feeling of being alive, then, results from the interaction of subcortical and cortical brain centers with the whole organism. “The somatic background feeling never subsides, though we sometimes rarely notice it, because it does not represent a particular part of the body, but the over-arching state of virtually all domains” (ibid., 210). Thus at the roots of consciousness are the homeodynamic regulatory processes that take place between the body and the brain on many levels. “The earliest origins of the self are to be found in the totality of those brain mechanisms that constantly and unconsciously ensure that the states of the body vary within the small range of relative stability that is necessary for survival” (Damasio 2000, 36). Processes of life and of experience, *Leben* and *Erleben* are thus inseparably bound to each other. Every conscious state is ultimately rooted in the homeodynamic regulation between brain and body, and, in a sense, integrates the present state of the organism as a whole.

The organismic basis of vitality is most obvious in the case of its disturbance, such as in a simple indigestion which immediately alters the whole bodily state and particularly in affective disorders. Kurt Schneider already emphasized the impairment of the vital feelings (*Vitalstörungen*) as the hallmark of severe depression: feelings of oppression, anxiety, leaden heaviness and exhaustion may be summarized as a generalized bodily restriction (Schneider 1959; Fuchs 2005). However, these can by no means be taken as mere projections of altered brain states onto the body. Rather, depression implies a stress reaction affecting the whole organism: Mediated by prefrontal and limbic centers and with significant participation by the amygdala and the hypothalamus, an over-activation of the CRH-ACTH-cortisol and the sympathetic nervous system ensues, accompanied by dysfunctions of the immune, circulatory and respiratory systems. The disruption of the regulatory cycles connecting brain and organism results in a prolonged state of stress that manifests itself in subjective experience as disturbance of vitality and bodily restriction (LeDoux 1998; Glannon 2002).

Thus the vital disturbances felt in depression manifest the continuous stress state of the organism. Similarly, the altered existential feelings of depression express the actual inability of the organism to open up to the world and to disclose potentialities and resources of life. The senses become blunt, the gaze tired and empty, the taste stale. The general decline that manifests itself in numerous organ systems also lends a void, blunt or dull coloring to the environment. With the loss of attunement, feelings of distance and unreality may arise. In extreme cases, this results in nihilistic delusion or Cotard's syndrome, where the patients deny the existence of themselves or the world (Fuchs 2005). They no longer sense their body, everything seems to have gone dead, and there is no taste, smell, feeling of warmth or pain any more. This leads to the delusional conviction that they are already dead and should be buried. The extreme alteration of the basic existential feelings no longer leaves any freedom to the higher cognitive processes of judgment.

#### (b) Conation

I have now described the sense of vitality and its organic basis. The second component of *Erleben* is the fundamental "energetic" dynamics of life that can be described by terms such as drive, instinct or urge, for which I have introduced the umbrella term of *conation*. It comprises

the spontaneity, activity, affective directedness and tenacious pursuit of goals that characterizes living beings in general.

As an unspecific source of energy, drive is present in all bodily activities and gains its specific direction in each. It manifests itself as urge and desire in the different instincts and strivings, as dynamics and intensity in the affects, as vigor and tension in motor action, as persistence in the will, but also as attention and interest in perception. This energetic and vital bodily dynamics always emerges anew. In drive and urge we experience an underivable origin of our existence.

This dynamics is not enclosed within itself, but rather transcends itself as an elementary “being-after-something” that is directed toward the environment. At the roots of drive and desire we find *shortage and need* as an unspecific experience of bodily tension, unease, imbalance or agitation. Shortage means first the experience of an undetermined negativity which urges towards its own sublation, but does not yet know about it. The fitting objects in the environment only come to be disclosed over time. Hungry babies rummage in the blankets, stretch their body and seek until the tension is resolved when their lips find the nipples and they nurse. In this way, they learn to know the object of their instinct. Thus in the course of ontogenesis unspecific instincts become specifically directed desires or needs. Then hunger discloses food in the environment, the drive for protection finds a shelter, the drive for exploration finds the unknown, the sex drive discloses the partner, etc.

The emergence of the direction of the drive towards what is lacking goes hand-in-hand with the felt “not-yet” of possible satisfaction. Shortage thus opens up a *time differential* or *time span* that is experienced as an appetitive tension and discharged in directed movement. This tension and directedness towards the anticipated satisfaction is one of the major roots of time experience (Fuchs 2011b). Affects in particular constitute the object-directed intentional arcs that bridge the delay between drive and fulfillment and accompany the movement toward the object of the drive (“e-motion”). For the goal to remain present as one comes nearer, it has to be affectively “cathected”. “Desire lies at the root of hunting, fear at the root of flight” (Jonas 1966, 103). Through affects, environmental objects gain valence and emotional significance. They appear as desirable, attractive, or as aversive, threatening, etc. In sum, the perceiving, instinctive, affective and active relation to the environment bridges the gap that arises between need and satisfaction, or between threat and flight.



Turning to the *biological foundation* of the conative dynamics, we can ultimately see it in the dialectical relationship between the living being and its environment. Life constitutes itself in delimitation from the constant processes of decay, the entropy of physical nature. It builds up an inner-outer difference that remains precarious, however, since it depends on the metabolic exchange with the environment. The difference is translated into the negativity of shortage and need, this being the price life has to pay for its negentropy to the physical world. Animal life differs from plant life in that its dependence on the environment becomes internal for it in the form of felt shortage and the drive to compensate for it through incorporation. The dynamics of shortage, drive, desire, expectation, fulfillment and satisfaction are the subjective side and the driving-force of the processes of self-preservation and exchange that characterize animal life.

Therefore conation is not an inner state of the living system or of one of its subsystems. Nor does it mean mere self-preservation, as the *conatus* conceived by Spinoza, but rather always implies a self-transcending of the organism towards the environment in order to find in it the resources for its constant self-production, and thereby to adapt to changing environmental circumstances. This applies even to the most primitive organisms: Mobile bacteria react to increasing concentrations of glucose in the surroundings by moving along the gradient to places of higher concentration (chemotaxis). They regulate their inner state through active interaction with the environment, assigning specific relevances or meanings to certain of its features. On the most basic level, these manifest themselves in simple tendencies such as “towards” or “away from”. The world becomes “[...]a place of valences, of attraction or repulsion, approach or escape” (Thompson 2004, 158). Thus living means sensing, and sensing means *sense-making*.

As we can see, the capacity to react to the inner and outer conditions of the milieu and to act on this basis can be found even in monocytes.

The unwitting and unconscious urge to stay alive betrays itself inside a simple cell in a complicated operation that requires ‘sensing’ the state of the chemical profile inside the boundary, and that requires unwitting, ‘unconscious knowledge’ of what to do, chemically speaking, *when the sensing reveals too little or too much of some ingredient at some place or time within the cell* (Damasio 2000, 138).

This basic instinct is not created a new, but only taken up and expanded by the developing brain.

Life and the life urge inside the boundary that circumscribes an organism precede the appearance of nervous systems, of brains. But when brains appear on the scene, they are still about life, and they do preserve and expand the ability to sense the internal state, to hold know-how in dispositions, and to use those dispositions to respond to changes in the environment that surrounds brains. *Brains permit the life urge to be regulated ever so effectively and, at some point in evolution, knowingly* (Damasio 2000, 139).

Conation is an integral function of the organism. Even at higher levels of life that are equipped with central nervous systems, it is still based on the autoregulation of the organism as a whole. A living being's need for food, water, recreation, sleep or reproduction must be sensed as shortage or drive and must be translated into goal-directed actions supported by emotions. This requires the constant feedback of signals from the inner milieu to the hypothalamus, the basal forebrain and several brainstem nuclei. Motivational physiology, which conceives felt needs as homeodynamic requirements of the whole organism, has identified these connections between peripheral body states and central regulatory processes (Lang et al. 1998; De Catanzaro 1999). It shows that an adequate understanding of the brain requires a "neuropsychosomatics" of motivational behavior that conceives brain, body and environment as a systemic unity.

### 3. The feeling of being alive as self-awareness

I have described the sense of being alive as vitality and conation, both based on integral states of the organism in relation to its environment. Now the question arises: Is this basic feeling of life of an anonymous nature or can it be conceived as a basic form of self-awareness? I will answer this question first from a phenomenological, then from a biological point of view.

If we start from our self-experience of life, its peculiar feature is a constant self-withdrawal (Waldenfels 2002, 412). Our prethematic conduct of life recedes from direct self-observation and always precedes conscious self-reflection. To be hungry is not to be conscious of one's hunger, to be tired is not to be conscious of one's tiredness. For in order to become aware that we are hungry or tired, we must already *have become* hungry or tired, and we are not able to say what the hunger or tiredness was before becoming conscious. Similarly, we sometimes only become aware of a latent noise when it stops and suddenly silence

occurs. Thus, life is what has already happened to us and affected us before we can notice it and respond to it (Fuchs 2010, 96 f.).

Only upwards of a certain degree of intensity does *Erleben* or experience become conscious; and yet even before this it was not anonymous, but already *my* experiencing. “For when I become conscious of my hunger, I do not discover just any hunger whatsoever and make it my own, but I discover that it is me who already had hunger before becoming aware of it” (Spaemann 1996, 64, my translation). The hunger may be “lived” as a diffuse background sensation of unease or as the standing-out of appetizing objects in the environment, similar to Sartre’s example of the latent pain in the eyes that is implicitly given or lived in the growing difficulty of reading and understanding the sentences of a book (Sartre 1962, 332). But when I become conscious of the hunger or pain, I can only ascribe it to myself because *a basic mineness* already characterizes my lived embodiment, which is only taken up in conscious awareness. Thus, self-experience does not arise *de novo* at a certain point, but rather takes up and continues the pre-reflective mineness of the feeling of life. The body does not become mine through my reflective appropriation – on the contrary, self-consciousness is only possible because it originates from basic bodily self-awareness.

From this it follows that life cannot be fully attributed either to the conscious subject or to the object side. It belongs to the bodily, constituting subjectivity. It is the ground and principle, not the object of experience, thus preceding all thematization and calculation. In bodily self-affection, in the feeling of being alive lies the primordial subjectivity from which we constantly originate. “It is not thinking that gives us access to life; it is life which allows thinking access to itself”, Michel Henry writes (2002, 145, my translation). The *cogito* owes itself to a pre-reflective, obscure ‘becoming’, not to a clear and distinct perception (*clara et distincta perceptio*, in Descartes’ terms).<sup>5</sup>

If we now turn again to the *biological* point of view, we see that the living being is characterized by a basic selfhood as well. Jonas saw it in the identity of the form or organization of the living being which maintains itself against the change of matter. “The introduction of the term ‘self’, unavoidable in any description of the most elementary instance of life, indicates emergence, with life as such, of internal identity” (Jonas 1968, 242). Kant, in his *Critique of Judgment*, had already characterized the self-organization of the living system as a reciprocal production of

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5 *Mediationes de prima philosophia*, III, § 2.

the parts and the whole.<sup>6</sup> This has been taken up and specified in the theory of autopoiesis put forward by Varela: the living, autopoietic system is constituted by a semipermeable membrane that delimits the system from the environment, while at the same time allowing for the metabolic exchange by which the system constantly regenerates itself.<sup>7</sup> Such a system, by virtue of its operational closure and autonomy over and against the environment, is equivalent to an organismic individual or *self*.

How far down the chain of life the forms of subjectivity that we know from our self-experience reach – this is a question that might be impossible to answer definitively. A minimal form of self-awareness may be seen, on an elementary level, in the linking of an organism's own state with relevant aspects of what it encounters, a capacity that may already be termed *sentience*. This allows the living being to actively regulate its interaction with the environment, to adapt itself by means of its metabolism to changing circumstances, or in other words, *to put itself in a relationship to what is other than self*. Through sentience, movement and metabolism living beings actively produce and preserve an *inner/outer* or *self/non-self distinction* – which we might see as the most basic degree of 'self-awareness'.<sup>8</sup> However, this primary stage is not yet connected to consciousness. The preconditions of conscious awareness

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6 In this critique, Kant states the requirements for a thing to be a natural purpose or end in itself: First, "[...] the possibility of its parts (as concerns both their existence and their form) must depend on their relation to the whole". Second, "[...] that the parts of the thing combine into the unity of a whole because they are reciprocally cause and effect of their form." If a product of nature meets these two conditions, it will be "[...] both *an organized and a self-organizing being*, which therefore can be called a natural purpose" (Kant 1987, 252 f.).

7 "An autopoietic system – the minimal living organization – is one that continuously produces the components that specify it, while at the same time realizing it (the system) as a concrete unity in space and time, which makes the network of production of components possible" (Varela 1997, 75). See also Varela 1991.

8 This active production and preservation of an inner/outer or self/non-self distinction also motivated Jonas to attribute some kind of awareness even to the most basic organisms: "Whether we call this inwardness feeling, sensitivity and response to stimulus, appetite or *nisus* – in some (even if infinitesimal) degree of 'awareness' it harbors the supreme concern of the organism with its own being and continuation in being" (Jonas 1966, 84). – "The challenge of 'selfhood' qualifies everything beyond the boundaries of the organism as foreign and somehow opposite: as 'world', within which, by which, and against which it is committed to maintain itself. *Without this universal counterpart of 'other', there would be no 'self'*" (Jonas, 1968, 242 f., emphasis added).

probably consist, firstly, in the development of separate sensory and motor organs and corresponding capacities; and secondly, in the appearance of a central nervous system which connects receptors and effectors to each other and which represents the unity of the organism in a particular way.<sup>9</sup> Such a living being is not only capable of perceiving and moving autonomously, it also distinguishes between the changes it perceives in the environment and the changes caused by its own movements (Fuchs 2010, 117 ff.). Thus it gains intentional access to its own sense-making, which we may regard as equivalent to pre-reflective yet conscious self-awareness.

However, the subjectivity which thus emerges in the realm of life is not a purely mental and internal world. Rather, it is always embodied in as well as related to the environment and present and effective within it. Subjectivity is the integral aspect of an organism that displays a certain degree and differentiation of self-organization as well as a self-regulated relation to the environment. The feeling of being alive, as an elementary subjectivity, is not based on a self-model produced in the brain, but rather continually integrates the entire state of the organism-in-its-environment (Fuchs 2011a).

This is in accordance with concepts of affective neuroscience. Thus, Damasio postulates a so-called “proto-self” as the precursor of self-experience and regards it as “[...] a coherent collection of neural patterns which map, moment by moment, the state of the physical structure of the organism in its many dimensions” (Damasio 2000, 154). The systemic unity of the organism thus becomes the precondition of the unity of self-experience (“one person, one body”, Damasio 2000, 142). Similarly, Panksepp considers the primary self to arise from a “convergence of visceral, somatosensory, and kinesthetic information” on the primal body map in the periventricular grey of the diencephalon (1998, 578). The brain thus appears primarily as an organ of regulation and integration of the whole organism. The body is the actual “player in the field” whose homeostasis and relation to the environment is at stake,

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9 According to Jonas, “the dissociation of moving and sensing, with neural mediation between them”, reached in the metazoic stages of life, is the decisive step towards centralized control, and with it sentience and agency. “The nervous system, as a system of intercommunication distributed throughout the body, may then be said to constitute the ‘higher level’ we have indicated, and in this role provides a first answer to the question of who or what is the source of the control: it would be *the organism as a whole*, functionally integrated by its nervous system” (Jonas 1968, 246 f., emphasis added).

and whose inner states may best indicate the suitable ways of outward reaction and behavior. Brain and body are therefore most intimately connected and influence each other in constant circular feedback. The background feeling of the body or the basic sense of being alive is the result of this continuous interaction. Through it the living, physical body becomes the lived and experienced body, or the basis of self-awareness.

#### 4. Conclusion

The purpose of this article was to demonstrate the fundamental connection of life and experience, *Leben* and *Erleben*, which on higher levels of animal life crosses over into conscious awareness. Experience, in whatever degree of consciousness, is always the self-experience of the organism in its actual relation to the environment. It is not a pure mental space or phenomenal tunnel produced inside the brain, but rather a manifestation of the animateness of the organism as a whole. Both vitality and conation as basic and indispensable dimensions of experience are derived from autopoietic processes of life that cannot be restricted to brain activity. Thus, the process of life is not just a limiting condition, but instead plays a *constitutive* role for the emergence of subjectivity and self-awareness.

For eliminative materialists like Metzinger, on the contrary, the way we are given to ourselves through conscious experience can be nothing but an illusion. To be sure, biological organisms exist, but according to Metzinger (2009, 8), an organism is not a self. Some organisms only possess something like self-models, i. e. representational models of a given state of the cognitive system produced by this system itself. This model is basically equivalent to a complex but circumscribed brain state or the neural correlate of consciousness (Metzinger 2003, 563, 626). All that really exists is the information-processing system itself which is engaged, among other things, in operations of self-modeling, and we should not commit the mistake of confusing a model with reality. This at least is Metzinger's account of phenomenal self-awareness. In contrast, the feeling of being alive testifies to a bodily self that is more than a self-model computed by neural machinery. Vitality and conation are the primary ways in which the living being experiences itself in meaningful relations to the world. They could not result from the activities of an isolated brain, nor would they make any sense as such.

Until today, the brain centeredness of neuroscience and neurophilosophy has resulted in a neglect of the living organism. However, the investigation of the basic, bodily and affective functions of awareness shows that they arise from the vital regulatory processes that continuously run between brain and body and keep the inner milieu constant. The nervous system does not stop at the brain, but is spread all over the organism, receiving feedback from its various sensors as well as from the biochemical and hormonal milieu of blood and other liquids. This continuous ‘resonance’ between the brain, the nervous system and the entire organism is the precondition for conscious experience.

The body is not simply the accidental carrier of the brain as an information-processing machine that produces consciousness out of itself. Rather, it is organized and centralized in such a way that it displays the suitable structure and dynamics to produce the conscious manifestations of life. We may say: *Just as subjectivity is necessarily embodied, so a suitably organized, living body is necessarily subjective.* It is a self insofar as it centralizes itself, delimits itself from the outside and constitutes an indivisible functional whole; and it is a self because it constantly transcends itself through its boundaries and relates to the environment by assigning meaning to it. Such a living being possesses at least an elementary subjectivity: sentience, feeling, striving, and awareness. Subjectivity is primarily life, animateness; and all experience is a manifestation of life. More than all other forms of experience, vitality, conation, and the basic feeling of being alive show us that we are neither pure minds nor self-models produced somewhere in the brain, but rather incarnate creatures – beings made of flesh and blood.

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