

## Intentionality and the Emergence of Meaning

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**Abstract:** In my thesis I attempt, on one hand, to classify some main problems of the philosophy of mind (as intentionality- the body mind problem- qualia and subjective experience of the world). On the other hand, I am trying to formulate a hypothesis for the naturalistic foundation of human mind and intelligence. The common field in this investigation, was the question of the meaning, in other words the mental content, or otherwise “how something means one thing and not something else”.

**Keywords:** intentionality, emergent properties, mental content, meaning, downward causation

As starting point, I took Heidegger's consideration that humans are capable of “meaning-giving” to their world. This Heideggerian hypothesis prompted, in a way, the philosophical context of my research and the sources I used, such as: Heidegger's works of first period (lectures in Marburg and *Sein und Zeit*) and cotemporary philosophers who were influenced by him, such as Hubert Dreyfus and John Haugeland. Of course, addressing issues such as language, meaning and behavior, but also the “question of the background”, the works of Wittgenstein (and also other philosophers of the same direction) were extremely important, while the total work of John Searle was in many points really helpful. Additionally, at several points I took in account theories and claims of important neuroscientists, such as Walter Jackson Freeman III, Damasio and Ramachandran.

The thesis is divided into three chapters. The first chapter deals with the problem of intentionality, the second examines the body mind relationship, and the third, after a

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<sup>1</sup> Gounaris, A. (2011). Intentionality and the Emergence of Meaning. *Philosophia*. Journal of the Academy of Athens. Volume 41, pp. 318-321. Retrieved January 14<sup>th</sup>, 2019 from <https://alkisgounaris.gr/gr/research/intentionality-and-the-emergence-of-meaning/>

brief discussion of the problem of qualia, ends up with the formulations of the case and presents the findings of the investigation.

So, I started looking at the problem of intentionality. In general, the term "intentionality" refers to the property of minds to be directed\_towards "something", things, objects (real or imaginary), events, situations, relations and ideas of the world, which are mostly external, "outside" the mind itself, that thinks. For example, when we think, we think of something, when we decide, we decide something, when we want, we want something, and so on. The formation of a specific mental content, of a meaning, is a fundamental characteristic of this property.

But, what is the so called "the problem of intentionality", and why it is important to start an investigation by understanding this point? One part of the problem is to answer how, a biological- physical event inside one's head, i.e. neurons or brain, directs towards something that is "outside", in the world and how during this process, a certain mental content, a certain meaning, arises. The second part of the problem relates with the nature of intentionality. Is the intentionality in fact a physical process or it is merely a psychological or linguistic interpretation in our attempt to explain mental phenomena? If the answer, to the second part of the question, is "yes", and we consider the intentionality as a natural process, naturalistically founded, then we should explain the first part of the question and look at the relationship between intelligence and matter, mind and body, and furthermore in order to see what exactly is the mental content, the meaning of intentional conditions.

This study is important because by considering the intentionality as a "directionality\_toward something" we examine a problem that includes both: an unknown and inaccessible factor such as the mind process, and also a known and accessible factor such as world.

For the naturalistic foundation of intentionality, some philosophers suggests that this "direction\_towards", does really exist both in natural and artificial phenomena. For example, a flock of birds heading to their destination, or a map which refers to a path which is outside of the map itself, can be considered as having intentionality. But what makes the intentionality of the human mind really unique, is the natural-inherent- tendency, to continuously test the mental content, of the meaning, and confirm or modify the way in which the world of the subject that thinks is interpreted.

This can be better understood if we look at what happens to various human activities, with the sciences as a leading example: what is happening after all, is a "try and change" procedure, through which the problems are being solved. If an hypothesis cannot be proved and the problem is not resolved then what happens is what Kuhn calls "crisis" and Heidegger calls "anxiety". This situations are leading to a "paradigm shift" or, in Heideggerian point of view, to a "change" of the way we are giving meaning to the world.

The deniers of intentionality consider, that supporting intentionality is like advocating for a mind - body dualism. Consequently trying to explain the biology of psychological conditions, is in vain. This account has resulted in the elimination of all mental phenomena as the remains of a folk - and unscientific- psychology. Heidegger and

the supporters of intentionality- whose view I adopt- consider, in contrary, that this is a purely natural phenomenon. This phenomenon tends to be rejected due to some philosophical misunderstandings starting from Descartes and supported by Brentano. Unlike others, Heidegger assumed that intentionality is not a metaphysical notion but a feature of the way we are experiencing the world. Dasein (the human subject that thinking and being in the world) when directed toward something, doesn't come out of the inner "sphere" of itself where it is supposed to be enclosed. Dasein is already there in the world, and when it thinks or realizes something, it doesn't "return" into a "chamber" of consciousness, but remains, as in the word Being, in the same structural level with the rest of the world.

Based on this position, neuroscientists, like Walter Freeman III, conceived an explanatory model which shows that the human body (brain - nervous system - sensors) is in a constant interaction with the environment. This interaction continuously modifies the content of the intentional statements updating the way that subject interprets its world.

So we can say that intentionality is a "wayness", in other words intentionality is the way that humans (via their brain, central nervous system and sensors) being in the world and interact with it. In this sense intentionality can be naturalistically established.

However, if intentionality is naturalistically founded, we have to define the theory that explains the relationship between mind and the biological background. Through my study I have concluded that the emergence theory, can adequately explain this relationship. Specifically, the emergence theory accepts the concept of mental phenomena as properties of certain structural level. In other words, it accepts a duality of properties but a monism of entities. To understand this, we have to remember how the matter is organized into different structural levels. At the primary – lowest- level for example there are the elementary particles. Concentration of such particles constitutes the level of atoms. Concrete structure of these atoms determines the level of molecules. Molecules gatherings constitute the level of cells, and so on. The theory of emergence argues that in high complexity systems, from one structural level to another, new properties are emerging. These properties do not have the features of the level from which they emerged nor are the sum of the properties of the parts of the lower level. While it is usually explainable how these new properties have been emerged, they are not predictable by studying only the individual properties of the level from which they become from. For example, liquidity and transparency of water are emergent properties of a particular chemical compound of hydrogen and oxygen in certain conditions but cannot be predicted by studying the properties of hydrogen or oxygen separately. Thus, if we know the laws which are governing the higher level of organization, the lower level could be explained, but if we just know the laws governing the lower level, we cannot (always) predict the emergent properties of the higher level.

What is interesting here is, that the emerging properties are often causally affect the lower level of organization. This is the so called "problem of downward causation", which seems to be one of the most powerful argument against the emergence theory. How is it possible for an emergent property to affect causally the lower

structural level from which it becomes from? For example, how is it possible the property of solubility of the sugar in the water to affect causally the molecular structure of sugar?

The supporters of the theory of emergence, argue, that there is no problem with downward causation, when occurring in high complexity conditions. For example, imagine a car traveling on the road. Then imagine more vehicles moving in the same direction, and then some more. The actual movement of these vehicles creates traffic and congestion. This traffic jam is an emergent property of the system that includes the moving car and the other vehicles, the road, the traffic lights etc. The “bottleneck effect” is nothing but a downward event that affects causally the car (and other vehicles) and finally slows down or stops the car.

So, according to the theory of emergence, mental phenomena are emergent properties of a system of a certain complexity. The question is to approach the appropriate level of the system. As it has been noted, the proper level at which the research is been done, is crucial for each scientific discovery. For example, if Crick and Watson studied the inheritance at cell or quantum level they probably would have never discovered the helices of DNA.

At this point, my hypothesis is being formulated. The mind process is a natural process, at the appropriate structural level at which, a property is emerging. This emergent property affects downward some parts of the structural level from which it became. But which is the appropriate structural level and which is the emergent property?

Studying the topic of qualia and subjective experience and the debate between internalists and externalists -those who argue that the mental content is 'within' or 'outside' the subject's mind (i.e. the mental content: “is in” the mind, or “is in” the neurons, or “is out” in the language, or “is out” on the things of the world themselves, etc)- concluded that the meaning - the mental content- depends merely on neither the subject, nor things or language. It thus does not depend only on internal or external factors. It is an emergent property of a system, unique for each thinking subject.

For the existence of mental content there must be world and language. As Aristotle emphasizes, "no one can learn or understand anything in the absence of sense". Imagine a man who once he born, he lives and grows artificially enclosed in a dark shell, without any sensory stimulus. We assume that without any stimulus, without any contact with the environment, the body will not experience mental events, except, perhaps, the mental events which are being directed at his own body, such as pain, thirst, hunger, etc.

If we start out to provide stimulus to the encapsulated man, first words, then images and finally complete empirical experiences we will see that the mental content, the meaning, is progressively transformed.

Therefore, we can assume that the meaning is an emergent property of a system consisting of a human body - environment, and linguistic community.

This thesis combines the Heideggerian theory of Dasein and the theory of emergence.

Based on this assumption, the mental content, the meaning, is not in a metaphysical mind, or in an external third entity (such as language), but also there is not in the things themselves. In fact, the meaning is nowhere. It is a property of the certain system and it cannot be understood apart from it, the same way that the transparency of the water cannot be understood separately from the water. Asking "where is the mental content" or "where is the meaning", is like asking where is the liquidity, or the whiteness.

We can assume that there is an operational structure in the brain which is affected downward by the meaning. There is not something unnatural on this. We just don't know yet the physical mechanism.

Heideggerian philosophers argue that no representations or "knowledge" are contained in the brain. The mental content is embedded in the world and embodied in the human body (as a total). It is neither internal nor external. The meaning then, as an emergent property of the system, when affects downward the brain (for example), strengthens or weakens somehow this "embodiness". In this sense, each new mental event depends on how previous mental events are "embodied" in the body (brain, neurons and organism as a totality).

The meaning, thus, can be read as: the emergent property, that will strengthen, weaken or modify the mental "paradigm" (as in Kuhn's theory) that constitutes the background of the embodied knowledge.

What belongs to us is the "paradigm" - the way, the theory- on which we give meaning to the world. The meaning itself does not belong to us. It is a common property of the system in which we are integrated, and can causally affect downward, our neural operating background.

In conclusion I would say that if we really want to preserve the scientific and naturalistic foundation of mental phenomena, cognition and mental content, we must understand that the brain is just a structural level in the organization of the matter. The total body (nervous system, senses etc) and the world - as environment and linguistic community – linked in a system, are necessary, indispensable, factors for a naturalistic interpretation.