

A Deeper Understanding of *Now*

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Abstract. A theory for the representation of *everything* is derived by a closer examination of the term *now* and concepts of cells in the human brain and atoms in the universe. Here *everything* is not limited in any way. The theory has important far-reaching consequences and leads to the understanding of the human mind and brain, considerable progress in the solution of unsolved problems, the construction of an artificial intelligence and a new philosophy about human life.

Key words: artificial intelligence construction, understanding the human mind and brain, unsolved problems, philosophy, universe, Nowpoint Theory, now, everything

1 Introduction

In recent years, science has made considerable progress in understanding the functions of the the human mind and brain. However, exact comprehensive theories about its in-depth functionality are still a mystery. This article intends to make a contribution towards developing such theories.

2 The Nowpoint

Generally speaking, one does not think about or investigate the term *now* to any great extent. It very often describes a dull impression of time, meaning *the current 5 minutes* or *today* or this year or even *this decade*. The true meaning of *now*, however, can be and should be further investigated. When examined more precisely, *now* turns out to be not a period of time, but an infinitely miniscual point in time, a point in a mathematical sense. I call this point *the Nowpoint*.

The Nowpoint has some very important properties:

1. It keeps moving along the time axis.
2. Every human has a precise perception of the Nowpoint within their mind (limited by the speed of its neurons).
3. The Nowpoint can not be talked about in the Nowpoint, because when you say a word, the Nowpoint moves along with the word and makes you keep talking about the past. When you want to produce a deeper understanding of the Nowpoint, you have to talk about it in lengthy texts like this one. The Nowpoint cannot be grasped by single words.

4. Since the Nowpoint cannot be talked about in the Nowpoint, everybody has to cope with the reactions of their mind in the Nowpoint themselves. The Nowpoint can be described by a text, but the last step to recognize and handle ones own Nowpoint has to be made by every individual on their own. This is called the existential loneliness at the Nowpoint.
5. The components of the human brain have complex interactions in the Nowpoint.

These properties have important consequences and raise further questions as follows:

- Which components and structures exist in the human mind and brain seen by a subjective observer?
- How do these components interact?
- What consequences do these interactions have?
- How can the concepts of these components and structures together with the Nowpoint be expressed in a mathematical theorem?
- What consequences does such a mathematical theorem have?

3 Nowpoint Lines

The following components can be identified when considering ones own thoughts:

- Our understanding that enables us to draw logical conclusions and to do mathematical calculations.
- Our feelings which enable us to have desires and make subjective judgments.
- Our will which makes us act and decide.

These three components have a perpetually changing state in the Nowpoint. They influence each other and this way they not only develop their own state in the Nowpoint by themselves, but also process the input from the other two components. Here is a description of each component:

- First of all, our understanding works pretty much like a computer. However, some people may have had the experience that it is possible to solve problems designed for analysis by listening to their feelings. Especially when quick decisions have to be made, it is very helpful to solve problems by listening to ones feelings and incorporating the results into an overall result. Of course, when used in the wrong way, this result may be nonsensical from an analytical point of view. In this case, the feelings are not a good solution in helping to solve a problem. An example of the interaction of an someones analytical ability and their feelings may be seen in professional chess players. They are said to do calculations about positions with the help of their feelings. The influence of our will upon our understanding is simple. Our will just decides which problem is to be solved next.

- Our feelings produce a property of our Nowpoint. This property is called feeling. In this way, the property also describes the input of the other two components. How do we feel regarding our will? How do we feel regarding our understanding? These three properties are used to produce the next state of our feelings. In reality, this process is a floating process and cannot be separated into different states. However, a possibility to simulate this is to compute as many discrete states as necessary.
- Our will decides what to think next. It is obvious that our will is influenced by our understanding and our feelings. The next state of our will is computed from the current state of our will, the current state of our understanding and our current feelings.

When the balance between these three components is disturbed, psychic illness arise. For example, when our will decides not to recognize our feelings in a positive way too often, we become depressed. All psychic states can be expressed in terms of the three components. The results of current research on the human mind and brain give the impression, that there must be more than these three components. However, the division into these three components, as described, intends to describe the minimal set of components necessary to produce intelligent behavior. The author is convinced that all other components necessary for intelligent behavior are created automatically when trying to implement the concept of the said three components.

Our brain consists of billions of single cells which all have a state in the Nowpoint. When we take one dimension of a vector space for each cell we can express the current state of the brain in the Nowpoint as a point in this vector space. Since the Nowpoint moves along the time axis, all the Nowpoints in the vector space form a line along the time axis. This line describes the whole life of the respective individuals brain.

Since the human minds thoughts do not seem to be limited in an analytical sense, this Nowpoint line leads to a further statement:

Everything can be expressed as a line in a vector space.

In this statement *everything* is not limited in any way. It seems to be difficult to prove this statement. To better understand this statement, take a fixed number of dimensions to describe the state of an atom. Then take dimensions for every existing atom. You get a vector space for describing the universe.

4 Conclusion

However, if we consider the statement to be true, it has important far-reaching consequences. The author is convinced that with the help of the Nowpoint Theory described above, it will be possible to achieve major progress in the solution of unsolved problems, e. g. the development of a world formula in physics or the proof that P does not equal NP in complexity theory in computer science. The above statement will lead to the development of a method about how to solve

problems with the help of the mechanics of Nowpoint lines. This, in turn, will lead to the development of a truly artificial intelligence implementing the three components described above and be able to pass the Turing Test. Furthermore, with the help of the Nowpoint Theory it will be possible to develop a philosophy about how to conduct a humans life to happily reach what we are looking for in unison. The authors aim is to produce artificial intelligence.

Since everything can be expressed as a Nowpoint line, how can God be expressed as such a line? Suggestion: God is the Nowpoint line of *everything*.