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CAN ARTIFICIAL INTELLIGENCE THINK WITHOUT THE UNCONSCIOUS ?

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Moreover, it must be confessed that perception and that which depends upon it are inexplicable on mechanical grounds, that is to say, by means of figures and motions. And supposing there were a machine, so constructed as to think, feel, and have perception, it might be conceived as increased in size, while keeping the same proportions, so that one might go into it as into a mill. That being so, we should, on examining its interior, find only parts which work one upon another, and never anything by which to explain a perception. Thus it is in a simple substance, and not in a compound or in a machine, that perception must be sought for. Further, nothing but this (namely, perceptions and their changes) can be found in a simple substance. It is also in this alone that all the internal activities of simple substances can consist (Leibniz, 1714, The Monodology, 17.)

 ABSTRACT

Today, humanity is trying to turn the artificial intelligence that it produces into natural intelligence. Although this effort is technologically exciting, it often raises ethical concerns. Therefore, the intellectual ability of artificial intelligence will always bring new questions. Although there have been significant developments in the consciousness of artificial intelligence, the issue of consciousness must be fully explained in order to complete this development. When consciousness is fully understood by human beings, the subject of “free will” will be explained. Therefore, human consciousness should be re-examined and perceptions that we are not aware of from a philosophical point of view should be examined. The relevance of the perceptions we do not realize to the unconscious, and finally the impact on consciousness goes back to the sources of philosophy. Hegel, in particular, we may find information about these perceptions unusual. Consciousness cannot be separated from the unconscious. Consciousness should be rethought in the context of memory models and unconscious in this sense. Seeing how Hegel's human cognition acts, especially in Hegel's perception, raises the unconscious question again. If we expect something different from an artificial intelligence, we need to rethink the artificial cognitive model. This paper argues that without the unconscious component of artificial intelligence, it cannot approach human cognition.

Key Words: Artificial Intelligence, Creativity, Memory, perception

 Perception has involved a lot of cognitive processes. For instance, perception starts with the sensation, after subjects try to make sense of what they percieve. At the end, they make their own desicion about what they percieve. In fact, no matter how easy it may seem, it is not. When we perceive something, think, even talk, we think we are conscious. However, we don’t know where is the perceptions of which we are not consciously aware. Leibniz criticize Cartesian:

The passing condition, which involves and represents a multiplicity in the unit [unite] or in the simple substance, is nothing but what is called Perception, which is to be distinguished from Apperception or Consciousness, as will afterwards appear. In this matter the Cartesian view is extremely defective, for it treats as non-existent those perceptions of which we are not consciously aware (Leibniz, 1701, 7).

But, if we're trying to understand what consciousness is today, we need to re-think what perception is. According to Apa Dictionary of Psychology, the perception is:

the process or result of becoming aware of objects, relationships, and events by means of the senses, which includes such activities as recognizing, observing, and discriminating. These activities enable organisms to organize and interpret the stimuli received into meaningful knowledge and to act in a coordinated manner (Apa, 2019).

On the other hand, according to philosophical terms of use, perception is, “perception, the extraction and use of information about one’s environment (exteroception)” (Audi, 1999, p.654). We are extracting something from the things. For example, when we see an extraordinarily designed, we are trying to recognize it. At last our habits tell us what it is. Because if we can not recognize the things, secondly, we try to determine the instrumental properties of things we are used to. The problem occurs where the information comes from the determination and/or identification process, as we try to understand what things are. In other words, how we extract to information about things. But, is perception only what we can consciously perceive ? Do we only perceive things as they are? Other question, how effective is the unconscious information during detection? Today we are researching about machine learning, but the learning not seems like a simple process. If we are talking about the concepts of learning perception and consciousness, we cannot think of the unconscious separately from them.

But how do we trace the unconscious? G. W. Friedrich Hegel’s (1770-1831) *The Phenomenology of Spirit* (1807) can give us the key of unconcious. If we can fully comprehend consciousness, we may be able to understand how the unconscious is shaped.

However, to knowing, the goal is as necessarily fixed as is the series of the progression; the goal is the point at which knowing no longer needs to go beyond its own self, where knowing itself finds itself, and where the concept corresponds to the object and the object to the concept. The progression towards this goal is thus also unrelenting, and at no earlier station is satisfaction to be found (Hegel, 2018, p. 52).

What is important to us here, is the dissatisfaction we experience in this process.

Claim: The number of concepts in the mind of each subject is less than the number of objects.

Explanation: We can identify the simple things for example; chair, table, pencil etc. On the other hand if we encounter something new, first try to define its form properties. Suppose we see a new statue: this statue does not resemble any object we have seen before. Our consciousness will endeavor to identify this new object. In other words, it will try to match the information we perceive from the form of the object to the concepts we already have. But such a match would be insufficient. What our mind performs here, is the bending movement. The reason why I called the bending movement, even if the concept does not fit the object, it tries to match it with an approximate concept in the mind. What we need to explain now are the traces that occur in the mind during the bending movement process. Within this framework we must return to Hegel:

It is an issue for that consciousness whether or not its knowing of the object corresponds to the object. To be sure, for consciousness, the object seems to be such only in the manner that consciousness knows it; consciousness seems, as it were, to be incapable of getting behind the object to the object as it is in itself and not as the object is for consciousness. However, consciousness therefore also seems to be incapable in its own self of testing its knowing of the object. Yet precisely because consciousness knows of an object at all, there is already present the difference that something is, to consciousness, the in-itself, but another moment is knowing, or the being of the object for consciousness. It is upon this difference which is present that the testing depends. If, in this comparison, the two do not correspond to one another, then it seems as if consciousness must alter its knowing in order to make it adequate to the object (...)While it therefore finds on its object’s part that its knowing does not correspond to the object, the object itself also does not endure ( Hegel, 2018, pp. 56-57).

When the concepts do not usually correspond with the objects, the problem is usually overcome by analogy. The problem here is that during the analogy, the object will become different from the one in itself. Although we can determine the quantitative properties of an object, we may remain undecided about its qualitative properties. Qualities cannot be easily pointed. This is one of the difficulties of perception and interpretation.

Since the object’s principle, the universal, is in its simplicity a mediated simplicity, the object must express this on its own as its nature, and it thereby shows itself to be a thing of many properties. The wealth of sensuous knowing belongs to perception, not to immediate certainty, in which the object was only ancillary, for only the former (perception) has negation (the difference, or multiplicity) in its essence ( Hegel, 2018, pp. 68-69).

The features already present in our perception will be used to identify the object in front of us. Of course, the properties contained in the object will match some of the multiplicity in our perception. But where do the analysis incompatible with the object from this determination process disappear? The decision-making process on what the issue is, slows it down and invites it to review. If we had slowed down this process with a frame work program, we would have been able to see how many times the object had changed shape until we decided what it was. Hegel's determination of the subject and the object is important for our subject:

Now, this is the way that the thing of perception is constituted, and consciousness is determined as perceiving consciousness insofar as thisthing is its object. It *only has to take the object* and to conduct itself as pureapprehension, and what thereby emerges for it is the true. If in this taking,it itself were to do something, it would alter the truth by adding or omittingsomething. While the object is the true and the universal, like unto itself, and while consciousness, to itself, is what is alterable and inessential, it can happen to consciousness that it apprehends the object incorrectly and deludes itself. The one who is perceiving is aware of the possibility ofillusion, for in universality, which is the principle, *otherness* itself is immediatelyfor him, but as *nullity*, as what is sublated. His criterion of truth isthus *self-equality*, and his conduct is to be grasped as self-equality. At the same time, while what is diverse is for the perceiver, the perceiver is a relatingof the diverse moments of his comprehending to each other. If aninequality differentiates itself in this comparison, then the relating is notan untruth of the object, for the object is what is equal to itself. It is anuntruth of perceiving itself (Hegel, 2018, p. 71).

What interests us here; is our anuntruth. According to Hegel, anuntruth seems to consist of various addition and subtraction movements that the subject applies to the object. But there's one more question we should ask. Can anuntruth become reality? Can it affect our decisions? If this is the case, we open the door of perceptions we do not realize.

 In this case, we need to take a look at how memory works. Do we only store object-identical information in our memory? Antonio Damasio, gives the defination of “The Nature of Memory Records”

The brain makes records of entities, the way they look and sound and act, and preserves them for later recall. It does the same for events. Usually the brain is assumed to be a passive recording medium, like film, onto which the characteristics of an object, as analyzed by sensory detectors, can be mapped faithfully. If the eye is the passive, innocent camera, the brain is the passive, virgin celluloid. This is pure fiction (Damasio, 2010, p. 104).

When we are recording of the entities also recording to all our anuntruth perceptions. This information as if it is real is now in our memory. “Our memories of certain objects are governed by our past knowledge of comparable objects or of situations similar to the one we are experiencing. Our memories are *prejudiced*, in the full sense of the term, by our past history and beliefs” (Damasio, 2010, p. 104). We can say that we do not only record the information learned, but we also store the information we have bent. When we see a tree, we can compare it to more than one thing: A face, maybe a cloud or a big monster head. Sometimes this is all about light. Bu it is not important, once we put the tree into more than one form, these are just our additions and extractions from the object. Although we decide what an object is, the images in the process until the decision process are stored in memory. Most of the time we do not realize these images become part of the unconscious. This key that Hegel gave us long ago in explaining the subject-object relationship seems to be the rule of thinking.

 Later, Jung said that the subconscious contents were actually a loss of energy.

In personal consciousness, the forgotten memories are suppressed, pushed back (even forgotten) painful memories, sub-threshold, affections that will emerge on the surface of consciousness, and then there are immature contents for consciousness (Jung, 2006, p.145).

All these energy losses will then become part of the contents of consciousness. In this case, it cannot be said that the unconscious is standing far away from consciousness. Conscientiously bending is essential in creative action.

ARTIFICIAL INTELLIGENCE AND UNCONSCIOUS

 We know that the content of consciousness is not just awareness. If we plan to create an artificial intelligence, we must make the unconscious states the content of consciousness. Decision-making, thinking and analysis capabilities of the human mind are not only composed of conscious states. The flexible structure of the mind consists of the interaction of consciousness and unconscious.

There is more than one unconscious information in the brain. episodic and autobiographical memories include information about our personal history. Semantic memory, on the other hand, includes information about learned phenomena, concepts and words (Revounsuo, 2016, p. 155).

In particular, Episodic and Semantic memory suggested by Endel Tulvig are interrelated. Episodic memory is related to our experiences. For instance, what we ate last morning etc. On the other hand, Semantic memory is realated our concepts and it is about words, symbols, relationships between things and rules. Finally, operational memory establishes connections between stimuli and responses (Solso & M. Maclin & O. Maclin, 2018, pp. 267-269).

 At this point, if we recall Hegel's relationship between the subject and the object, we can see how not only the object's own knowledge is transferred to the operational memory, but also the bends. It is not possible to completely remove the false sensations which do not match the object that are stored in operational memory. As Jung says, they're just losing energy. However, if we reevaluate the triple relationship in the Tulving hypothesis, we can say that semantic memory does not consist only of truths. An operational memory formed in this way is the source of artistic creativity while conveying information to semantic and epsodic memory. Unexplained magic in artistic creativity is the result of these bends. Today computers can do much better than human thinking, however, generalization, creativity, such as operations can not do better than people. The unconscious is still under investigation. However, the relationship with memory is quite clear. The important point is the way in which the information stored in the memory is used during the process. It is not the conformity of the relations between things and objects that are unique to men. It is not the ability to calculate precisely. The ability to process artificial intelligence is helpful for human beings, but it is not the desired feature of artificial intelligence. If an artificial intelligence is expected to be human, it must have an artificial unconscious as well as an artificial consciousness.

 CONCLUSION

 Artificial intelligence cannot think in the similarity of a human's consciousness structure without being unconscious. Subjects define and think things according to their quantity and quality characteristics. Hegel's subject, while defining the frame, performs many operations until he finds the appropriate one with his object. While doing this, it discards features that are not in things, but stores them as a memory rule. All of this stored data can create unconscious data by losing energy, until the subject who encounters another object uses this data. Therefore, subjects think about what happens when they encounter objects or they make different evaluations about an art object from each other and all these differences form the characteristics of people. If we did the same bends when we encountered objects, then we'd be an artificial intelligence. Being different from each other shows that there are different unconscious phenomena, except for the learned collective. When confronted with Hegel's discourse, a cognition stimulus surely returns to itself. Considering artificial intelligence, this return must involve more than one process which can be called as Multi-process. This multi-process means that the semantic and episodic memory are rich. As the infrastructure of memory is enriched, creativity and meaning are enriched. It's not just a calculating machine, but a mind-bending mind is necessary if we want to have "decision-makers". But here again a new ethical question comes to mind. What will be the unconscious contents of the collective artificial intelligence created by culturally diverse societies?

**REFERENCES**

Apa, (2019) *Apa Dictionary of Psychhological*, American Psychology Association, <https://dictionary.apa.org/>

Audi, R. (1999) *The Cambridge Dictionary of Philosophy Second Edition*, Cambridge, New York.

Damasio, A. (2010) Self Comes to Mind Constructing the Conscious Brain, Newyork: Pantheon Books

Hegel, (2018) *The Phenomenology of Spirit, translation*, T. Pinkard, Cambridge University Press

Jung, G. C. (2006) *Analitik Psikoloji, translation, E. Gurol, İstanbul: Payel.*

Leibniz, (1701) *The Monodology, translation*, R. Latta, The University Adaleide, eBooks@Adelaide

Revonsuo, A. (2016) Bilinç, Öznelliğin Bilimi, Translate: S. Değirmenci, İstanbul: Küre

Solso, R &Mclin, K. M. & Mclin, O, H. Bilişsel Psikoloji, Çev: A. Ayçiçeği- Dinn, İstanbul: Bilge Kültür Sanat, 2016.