Dewey and Vygotsky on social cognition and consciousness

Cristian Vasile*

Petroleum – Gas University of Ploiesti, Bd. Bucuresti, 39, 100680, Ploiesti, Romania

Abstract

Dewey’s approach on education includes the concept of experience, with its two major mechanisms: the continuity and the interaction. Enlargement and emancipation of experience have been also addressed. Vygotsky analyzes the cognitive development through the socialization process and discuss about human consciousness development by the language and the concept internalization. Both theories have been analyzed especially from the educational view, but we propose an integrative view on consciousness emergence. The interference between experience, social cognition and brain functions could be the foundation of human consciousness. The influence of anxiety and boredom on consciousness and human specific functions has been also discussed.

Keywords: Dewey; Vygotsky; social cognition; consciousness

1. Introduction

According to John Dewey’s theory of experience, there are two major directions for an efficient human experience: continuity and interaction. Continuity implies that past experiences will influence the present experience and situation and the actual experience will influence the future situations in a subjective manner. If one tries a rational/logical view on this idea, the result would be that the past will impact the future. Interaction means that past experience interacts with the present situation, this way resulting the present experience (Dewey, 1938).

Yet the above mentioned directions should be corroborate with the enlargement of experience, by extending the experience limits, and emancipation of experience, by letting free the experience. (Dewey, 1938). All these considerations are foundations for a proper education, taking into account that an efficient education must be based on experience and Dewey discuss in this regard about the experiential education.

According to Vygotsky’s theory of social cognition, the human cognitive development cannot reach its highest level without the social assistance that is the mediator. One of the assumptions made by Vygotsky was that “every function in the child’s cultural development appears twice: first, on the social level and, later on, on the individual level; first, between people (interpsychological) and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals” (Vygotsky, 1978).

Another major aspect of Vygotsky’s theory says that the potential for cognitive development depends upon the zone of proximal development (ZPD), which is the level of development attained when children engage in social behavior. ZPD reach its full development in full social interaction.

* Corresponding author.
E-mail address: clinical_psycho@yahoo.com
2. Social cognition, experience and consciousness

Both approaches, Dewey’s and Vygotsky’s, complete each other and lead us to similar views on learning, but also on consciousness development. Vygotsky's theory was a tentative to explain the consciousness as the final outcome of the socialization process. In his opinion language could create human consciousness: “A word relates to consciousness as a living cell relates to a whole organism, as an atom relates to the universe. A word is a microcosm of human consciousness” (Vygotsky, 1986).

On the other hand, Dewey’s theory on human experience related to time is referring also to the human consciousness. A person cannot be aware of his/her experience without consciousness. One cannot know that he/she experience something unless self-reflection. Dewey’s reflections were focused mainly on education, but the experience is central within consciousness.

Different philosophical approaches have influenced both theories, so Dewey and Vygotsky concepts are similar from this view.

![Philosophic influences on individual and social theories of learning](http://gerrystahl.net/cscl/papers/ch20.htm)

Starting with Hippocrates assumption that the brain is the source of the mind, we can go on to Descartes which has arrived to res cogitans concept, continue with Kant’s a priori forms, but none of these major conceptions haven’t identified the consciousness (Graziano, 2013). Somehow both Dewey and Vygotsky have been influenced by this lineage continued by Hegel and Marx (Fig. 1).

2.1. How is experience related to learning?

As we know, learning is a fundamental activity in our life and most of the educational objectives start from this point. Learning is accompanied by subjective experiences and we would like to use Dewey’s theoretical background using
Vygotsky representation of ZPD in order to underlie the interrelation between the two approaches.

As we know, a pleasant experience will be learnt much easier due to the positive emotional state of the individual. We also know that negative emotional state (e.g. anxiety) and/or low interest (e.g. boredom) will trigger resistance and low efficacy in the learning process. Moreover ZPD is influenced by the emotional state and cognitive interest of the subject. Consequently we can discuss about Vygotsky’s ZPD as being influenced by Dewey’s concepts on experience. (Fig. 2)

Figure 2. Diagram on ZPD (retrieved on http://www.mmiweb.org.uk/egyptianteachers/site/people_theories/vygotsky.html)

The diagram above indicates that in cases where high challenges occur and there is no knowledge or skills of the subject (student) a state of anxiety will negatively influence the experience. On the other hand, if the challenge is low and the subject has the necessary knowledge or skills, the boredom could arise and this will also influence negatively the experience. The most efficient area is that of ZPD where there is assistance in acquiring new knowledge and the subject experience a positive internal state, both emotionally and cognitively.

3. A new model of consciousness

John Dewey and Lev Vygotsky theories cannot be analyzed in a proper way without discussing about few brain functions in order to a better understanding of learning, consciousness and education process. In his early approach Vygotsky suggested a model of consciousness as a “transmission mechanism between systems of reflexes” (apud. Zavershneva, 2014). Consciousness is “a system of transmission mechanisms from some reflexes to others which functions properly in each conscious moment. The more correctly each internal reflex, as a stimulus, elicits a whole series of other reflexes from other systems, is transmitted to other systems – the better we are capable of accounting for ourselves and others for what is experienced, the more consciously it is experienced (felt, fixed in words, etc.). “To account for” means to
translate some reflexes into others . . . The act of consciousness is in our opinion not a reflex, i.e., it cannot also be a stimulus, but it is the transmission mechanism between systems of reflexes.” (Vygotsky, 1997).

John Dewey also analyzes the reflex with referrals to consciousness in his work *The reflex arc concept in psychology*: “It is the coordination which unifies that which the reflex arc concept gives us only in disjointed fragments. It is the circuit within which fall distinctions of stimulus and response as functional phases of its own mediation or completion. The point of this story is in its application; but the application of it to the question of the nature of psychical evolution, to the distinction between *sensational and rational consciousness*, and the nature of judgment must be deferred to a more favorable opportunity.” (Dewey, 1896).

The model we propose based on the two theories suggests that consciousness is an interface which occurred from the intersection of three major areas of human life: Experience, social cognition and brain functions. (Fig. 3)

![Fig. 3. A model of consciousness emerging from Dewey and Vygotsky theories](image)

### 4. Discussions

Even it seems for some people that Dewey and Vygotsky doesn’t have too many common points and that the consciousness aspect is under evaluated, both scientists have had major interests in consciousness. Their ideas were used mainly within educational area, but any educational process cannot occur without the foundation of the consciousness. The self-reflection, the intent, motivation and not only drive, all
these are processes specific to human consciousness, but also involved in the education.

The new approaches on education have to consider not only the experience (subjective) and social cognition (subjective and objective) but the brain functions (objective) too. The neurons oscillation theory and the emerging quantum psychology together with the new digital instruments/gadgets already changed the way the consciousness is understood and they have to be considered in the emerging education approaches.

References