Intelligence development and the Process of Initiation

Two different developmental principles which overlap to the cognitive developmental process we observe

Introduction

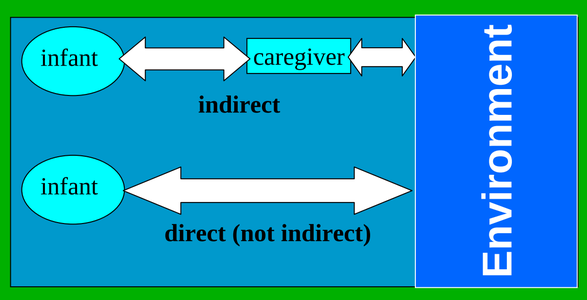
Around the year 1990 Vienna was one of the centers of the rising international debate on evolution and cognition. The debate focused on Piaget as an empirical epistemologist and a biologist interested in human cognition but not on Piaget as father of stage theory and test methods as common in psychology. During this debate a model was developed called Process of Initiation (Kress 1993), which might be still helpful for today's debate on Positive Adult Development.

Argument

Piaget argues that intelligence development is an epigenetic process caused by the interaction between organism and environment. The subject-object-distinction is seen as the highest achievement of cognitive development. In contrast to Piaget´s approach the Process of Initiation is based on the hypothesis that the subject-object-distinction is the result of long term cognitive disequilibrium on the basic level of the coordination of the need-satisfying actions. Therefore two different modes of thought with low or no subject-object-distinction exist, before („primary integration") and after („secondary integration") the long term cognitive disequilibrium. The phenomenon of „secondary integration" is described by Abraham Maslow as „Self-actualizing people", by Zen-Buddhism as „Beginner's Satori" and by philosophical Taoists as „Wu Wei". It is important to mention that experiencing „Beginner's Satori" is only opening the door to a new mode of thought. For full enlightment of the whole person a life long training and experience with this mode of thought is needed.

Initiation Process

From an evolutionary point of view it's argued that the basic function of the human cognitive system is to coordinate the need-satisfying-actions of the human organism. In contrast to common sense which argues that every human being has only to adapt and to cope with the normal world we know as grown ups, it is argued that human beings have in fact to adapt and to cope with two fundamentally different environments for satisfying their needs.

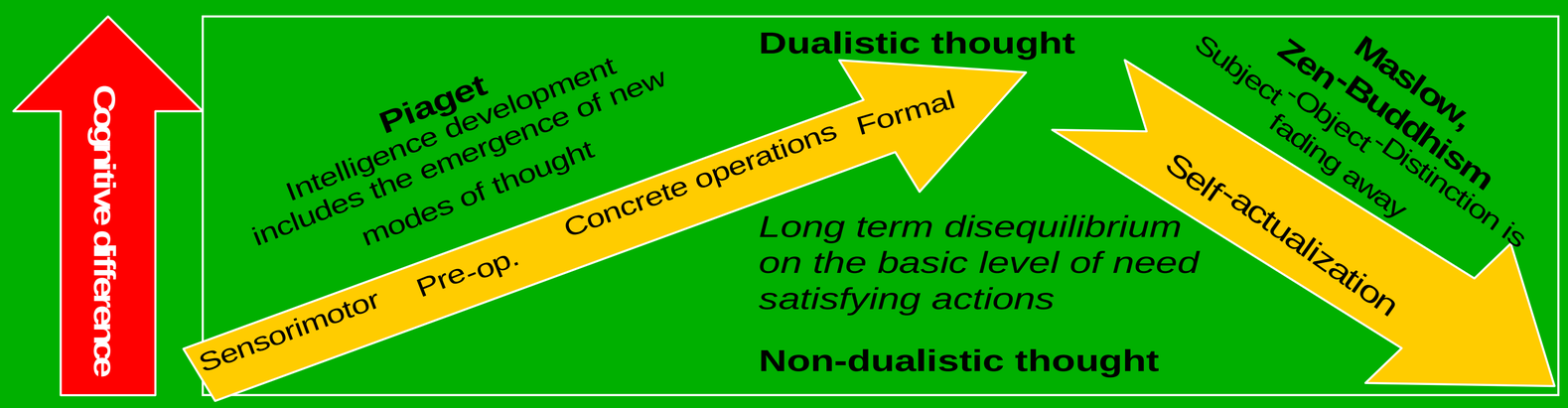


As babies humans have to adapt to and cope with the caregiver who is its first need-satisfying-environment (indirect need-satisfying-actions). Out of this symbiosis with the caregiver language and socialisation arises. At the same time the baby starts to make its first experiences with gravity and the natural world around us. A grown up has to develop the ability to adapt and cope as well with the natural world around us to satisfy the needs (direct need-satisfying-actions).

As we know from Piaget the human cognitive system is a self-organising system which always tends to go back to equilibrium (equilibration). In contrast to Piaget it is argued that long term disequilibrium can arise at the basic level of the coordination of the need-satisfying-actions as long as the organism survives as a whole.

How does the Subject-Object-Distinction emerge?

Piaget argues that intelligence development is an epigenetic process caused by the interaction between organism and environment. The subject-object-distinction is seen as the highest achievement of cognitive development, because the organism-environment-interaction is given and cannot fade away like a long-term cognitive disequilibrium.	**The Process of Initiation** is based on the hypothesis that the subject-object-distinction is the result of long term cognitive disequilibrium on the basic level of the coordination of the need-satisfying actions. Therefore two different modes of thought with low or no subject-object-distinction exist, before („primary integration") and after („secondary integration") the long term cognitive disequilibrium.
Disintegration (Long-term Disequilibrium): Sometimes when we visit a country very different to our own we can experience a culture shock. At home our cognitive maps fit well to our social environment to coordinate our need-satisfying-actions in a successful way. During a culture shock we experience a very strong frustration because our cognitive map (schema) doesn't fit to the social environment anymore. It feels like a glass wall between us and the people around us. This is an experience of high **cognitive difference**. On the basic level of the need-satisfying-actions every human is experiencing long-term cognitive disequilibrium with high cognitive difference causing the experience of Subject-Object-Distinction, which can be idealized like in dualistic cultures (e.g. Western Materialism or Idealism) or can be seen as a problem that has to be overcome like in non-dualistic cultures (e.g. Buddhism, philosophical Taoism). Piaget recognized that it is possible to imagine such a psychogenesis different from our own during his study of Chinese science (Lourenço & Machado (1996:151)). It is assumed that long-term disequilibrium on the basic level of the need-satisfying-actions is an endogenous cause of psychological and physical stress, which can cause diseases and less quality of life in the long run.	**Primary and Secondary Integration:** People in this mode experience Flow during the coordination of their actions as well as Flow during their thought processes. (Csikszentmihalyi 2014) That means that the so called EGO has less or no control function in the coordination of the body or of the thought processes. In Zen arts like karatedo, kendo, aikido or kyudo the effectivity of these states is demonstrated. (Deshimaru 1991) In primary integration the spiritual soul is seen as the essence of the cosmos (e.g. Achuar (Descola 2013), Hinduism (Michaels 2003)) and in secondary integration this notion is rejected (e.g. Buddhism (Conze 1962)). The pattern of the waves of the ocean are a common model of spiritual causality, which sees the ocean as the cause and not an individualistic causal essence inside a thing, which moves things like the EGO moves humans. Dualistic thinking and materialistic causality is connected to the notion of isolated things, which is a projection of the Subject-Object-Distinction onto the "waves of the ocean" and therefore isolates them from the ocean. Dualistic mode of thought needs to emerge Apriority space and time to enable these isolated things to interact with each other driven by individualistic causal essence. (e.g. Loy 1988, Kress 1993, cf. Nisbett 2003)



The process of initiation describes the correlation between different states of the cognitive system and different modes of thought:

Primary integration	Disintegration (Long-term Disequilibrium)	Secondary integration
cognitive system = indirect ↔ need satisfying environment = indirect	cognitive system = indirect ↔ need satisfying environment = direct	cognitive system = (indirect) direct ↔ need satisfying environment = direct

- the primary integration of the baby in symbiosis with the caregiver,
- the rising long term disequilibrium (disintegration) caused by the requirement to adapt and cope with two fundamentally different need-satisfying environments and
- the secondary integration after re-establishing the equilibrium (equilibration) on the basic level of the coordination of the need-satisfying-actions after a life long conscious dialectical process.

Conclusion

Piaget defines intelligence development and the development of different modes of thought as the same process. In contrast to Piaget's approach the Process of Initiation makes it possible to separate the development of different modes of thought from the development of intelligence by epigenesis. It's argued that intelligence development is independent from the used mode of thought. Therefore a new definition of intelligence is required, which focuses on its evolutionary function and on the growing complexity of the thought processes.

Further Reading

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