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## SUMMARY

A Note from the Editor

President's Corner

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## Children in the history of psychology

We know that childhood is a concept constructed and dependent on the historical and cultural context (Aries, 1960/1973). Although the work of Philippe Aries indicated that childhood, as a stage differentiated from adulthood, can be located in the Renaissance, this statement is the subject of debate, because it underlies a unique vision of childhood.

Against this idea, historians point out that in no historical epoch have children or childhood been seen in a unique way, in other words, diversity within cultures, societies and individuals is what characterizes this moment of life.

The concept of childhood is particularly sensitive to historical and cultural reality and, moreover, cuts across several disciplines (sociology, history, anthropology, economics, demography and, of course, psychology). The beginning of the 20th century is the moment in which concern for children and childhood acquires a total and unprecedented relevance in society, whether European or American (Puche-Navarro, in press).

According to Jaan Valsiner (1997), the science of development and its view of children and their development is interdependent with the society in which it is immersed. From the historical-cultural approach of developmental psychology, Valsiner poses a question that is still very valid: how should we understand development? Valsiner's conceptual and epistemological legacy provides the elements to elaborate this question "we will better understand the child and his development if we make use of the narrative forms that developmental science requires to describe itself".

References

- Puche-Navarro, R. (in press). Relations between the concept of childhood and developmental psychology
- Valsiner, J. (1997). Culture and the Development of Children's Action: A Theory of Human Development. John Wiley & Sons Inc.

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## Child and Human Development in perspective



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The history of the notion of development shows strong divergences and transfers of knowledge between multiple fields of studies. In one way or another, it is difficult to find any discipline, whether scientific, philosophical or artistic, that has not dealt with the problem of development. But the first question that arises is about the entity: development of what?

In very broad terms, ‘development’ usually refers to the progressive series of changes in a behaviour, a function or a structure over a period of time of existence of a person, an organism or a society. When the notion of development refers explicitly to the ‘child’ or the ‘human’, it can suggest changes in phenomena as diverse as those concerning the biological body, the mind or the political and economic macro-processes that take place in large societies. While the notion of ‘human development’ is most often used as a syncretic category, bringing together in a holistic way all these biological, psychological or social dimensions, ‘child development’ is presented as an equivalent notion, but restricted to a specific period of human life.

The non-existence of a conceptual field in which this notion is inscribed with full legitimacy, is another aspect of the dispersion of its uses. In fact, it is a transversal concept, and no single discipline can claim complete jurisdiction over it. In any case, it is inevitable to recognise in it a number of ideas with which it overlaps or is confused: change, evolution, growth, transformation, increase of certain magnitudes or the passage from a potential and latent state to a current and expressed one.

### THE PROBLEM OF TIME IN CHILD AND HUMAN DEVELOPMENT

Any theory concerning development, whether explicitly stated in its research agenda or not, presupposes a particular conception of time (Lenzi, Borzi & Tau, 2010). Nevertheless, not every theory that considers a temporal dimension implies a theory of development. In fact, not just any change or modification across time is development. In other terms, a diachronic perspective of a phenomenon is not sufficient to inscribe a theory in the field of development. On the contrary, if we assume that in any kind of development there is always a dialectical relation between variation and transformation, the decisive aspect is the emergence of novelties, starting from previous states, systems or structures that do not contain them (Overton & Müller, 2003; Valsiner, 1998; 2006).

Conceptions of time are often expressed in the visual form of lines, arrows, trees, surfaces, which account for trajectories, divergences, turning points, loops, inversions, etc. (Yamada & Kato, 2006). All of these spatial representations are often linear or unidimensional (Rudolph, 2006), and they have implications for the modelling of theory—or they just expose the underlying assumptions of the researchers. Although mathematicians have developed complex structures that could be used to represent complexities of developmental time, social and human sciences have either ignored these discoveries or simply fallen back repeatedly on some version of physics’ ‘clock time’ (Rudolph, 2006).



La persistencia de la memoria (Salvador Dalí, 1931).

Indeed, even if ‘irreversibility of time’ is accepted as an axiom in theories on human development, this claim may be insufficient or inaccurate, depending on the system and scale under consideration. Psychoanalysis, for example, has shown that, with regard to the effectiveness of certain representations for the production of symptoms, timelessness must be admitted for the psychic unconscious system. Something comparable happens with retroaction, afterwardsness or *après-coup* (Arlow, 1986).

With other objectives, Piagetian genetic psychology showed that memory is reconstructive, and progress in the child's cognitive organisation affects the mnemonic traces, transforming memories from the same factual event, but evoked at different moments (Inhelder, 1970). One of the many consequences of this observation is that the evocation of a memory is never a return to a fixed and stable point or mark. In any of these cases, the representation of time as a line, or even with loops and inflections, is limited and poor in relation to the complexity of the temporal processes involved in these changes.

## DEVELOPMENT CHANGE

To understand the conceptual variability of child and human development, it is necessary to examine the general notion of development. Although it is usually adjectivised, its generic use designates changes in a behaviour, function or structure, something that occurs in a person, a living organism or in human institutions—culture, economy, family, normative systems, etc. In almost all uses, it is an idea often confused with the notion of evolution, with continuist connotations (Doron & Parot, 1993; VandenBos, 2007).

In other words, development is assumed to be the passage from one moment, stage, phase or level to another quantitatively or qualitatively different, that keeps some link with the previous one. In this transition, the subsequent moment is usually recognised as more stable or complex than the previous ones, being those that preceded it a necessary condition.

Occasionally, development is associated with some

variety of finalism or teleology: changes have a direction or even a purpose (Monod, 19070; Rosenblueth, Wiener & Bigelow, 1943). This idea about the direction of changes, although criticised in biology and other sciences (Wagner-Egger, Delouvé, Gauvrit & Dieguez, 2018), today takes on a new meaning for cybernetics and artificial intelligence, domains in which artificial systems evolve and self-generate according to a set of general goals defined from their initial construction (Contreras-Koterbay, 2019; Kamath & Liu, 2021).

On the contrary, there are conceptions on development that do not appeal to a form finalism, but to a certain efficiency, as in Darwin's theory of evolution (1959), in which changes in the structure and function of biological organisms are random, being adaptation to the environment the basis of selection, orientation and fixation of transformations. Following these theses, contrary to any preformism that considers the final stages as the manifestation of what was already latently anticipated (Van Gertz, 2003), studies on phylogenesis greatly expanded theorisations on development (Futuyma, 2017).

Detailed exploration of the coordination between genetic mutations and the adaptation that results from the somatic expression of these genes consolidated the study of the dynamics between organism and context. Thus, while recognising the zygote as the key point in the development of a biological organism, changes that will occur in its development are unpredictable at some scales and predictable at larger ones—for example, we know with certainty that it will die, and from there, it is possible to predict other events with a different degree of possibility. This difficulty in predicting at all levels is not due to a lack of information—operational chance, in Monod's (1970) terms—but to the essential chance that regulates the processes of open and complex systems (Chapman, 1988; Garcia, 2006; Overton, 2006).

The initial genetic conditions do not determine the subsequent course of development, but just the great field of possible orientations. Without strong prediction, the path of transformations that actually occur can be reconstructed only retroactively and explained as the result of the complex and incessant interactions between the organism's dispositions and the conditions of the environment (Waddington, 1957; Valsiner & Connolly, 2003).

Following Overton (2003), it is possible to recognise some basic conceptions of change in different theories on development. On the one hand, ‘transformational’ change is the one that gives rise to the emergence of novelties. It is a change that produces something qualitatively new, which was not announced in the previous forms or organisations and, consequently, implies a discontinuity. This transformational change leads to increasingly complex forms and involves a dialectical relationship between continuities and

discontinuities (Overton & Reese, 1981), since it is not a creation *ex nihilo*, but neither is it reducible to the preceding organisations. ‘Variational’ change, on the other hand, is a modification of a predominantly continuous and quantitative nature. Strictly speaking, it refers to a change in the degree or scope of a function or capacity—as in the acquisition of a new lexicon or the inclusion of new beneficiaries in a legal system that remains essentially unchanged.

At least three metatheoretical solutions can be identified from these two types of change: it is possible to emphasise one, the other, or to assume the complementary participation of both. In the first case, development can be conceived essentially as the result of a variational change. Thus, qualitative changes are the phenomonic appearance of the cumulative variations. This solution disregards transformations and reduces them to linear and additive processes. The second solution, on the contrary, characterises development as an essentially transformational process of qualitatively different steps, in which variations are irrelevant. Finally, in a relational model, variation and transformation can be a necessary part of a theory of development, since it is assumed that variations can result in transformations, and transformations can lead to variations (Overton, 2003).

Any of these three perspectives on development has methodological and theoretical consequences (Valsiner, 2006). The strategies for data production and analysis in order to study development will necessarily be different if one of these changes is considered predominant or if they are recognised as coexisting. In terms of theoretical implications, the variational approach presupposes linear changes, in which unpredictability is lower. It was precisely this summative approach of American behaviourism that led Watson (1958) to make one of the most famous and enthusiastic claims in the history of psychology: that through training and conditioning it is possible to shape the future of a healthy child, making him, for example, an artist, a doctor or a criminal.

Transformational perspectives on development, on the other hand, often fail to explain the occurrence of changes. If change results in ruptures or in radically different moments, it is difficult to see any kind of common denominator in such a series, which puts into question the very idea of development as a process. Unless an invariable sequence is admitted—which, in turn, renders useless any effort to modify a future confused with destiny—in such a model, transformations can neither be provoked nor predicted. However, the broad spectrum of relational approaches, in which transformation and variation are dialectically coordinated, expands the field of the possible futures (Piaget, 1983), opening up a potential zone that is not reached in a chaotic manner, but also does not follow a pre-designed path. From this standpoint, development can follow completely different directions and still show

a progression in which the coexistence of continuities and discontinuities can be recognised (Chapman, 1988).

## **HUMAN DEVELOPMENT AND SOCIO-MATERIAL CONDITIONS**

While much of the literature on development is concerned with the growth of the living organism, as well as with affective or cognitive changes in a period of time—child or human development in their biological and psychological versions—, other traditions have been interested in the socio-material factors of development. Since the 1990s, the United Nations Development Programme (UNDP) has been promoting a specific paradigm for studying, promoting and measuring ‘human development’. According to this international organisation, human development is “the process of enlarging people’s choices by expanding human functioning’s and capabilities” (UNDP, 2000, p. 17).

In this framework, the focus is explicitly on ‘humans’ and the creation of life opportunities, although, comparatively speaking, contextual aspects are much more relevant than in other research traditions. In fact, the Human Development Index (HDI), a statistical indicator derived from this paradigm, “measures the average achievements in a country in three basic dimensions of human development—a long and healthy life, knowledge and a decent standard of living” (p. 17). Through this index, countries—not individuals or regional populations—are ranked on the basis of life expectancy, access to education and per capita income—associated with no further consideration of the notion of ‘quality of life’.

The HDI is an instrument that aims to identify the field of present and future opportunities for human development. That is, to define objectively whether people are in a position ‘to be’ and ‘to do’ in the course of their lives. From this angle, human development is conceived as a field of possibilities that is amplified when certain socio-economic conditions are achieved, being the freedom of individuals one of the fundamental pillars.

## **CONVERGENCE FRAMEWORKS IN HUMAN DEVELOPMENT**

Since the 21st century, what is known as the ‘convergence explanatory framework’ or ‘developmental science’ (Lewis, 2000) has become more firmly established, a perspective that, based on complex systems theory, aims to establish the general principles of human development, regardless of the type of phenomena considered (Lenzi, Borzi & Tau, 2010). This relational systemic approach (Lerner, Hershberg, Hilliard, & Johnson, 2015), built on a relational metatheory and on the dynamic relationship between individuals and contexts, configures a field informed by science, but also by philosophical, methodological and

epistemological reflection. The main challenge of a unified model of human development is to avoid the different reductionisms into which disciplinary models lead. This implies linking the level of an embodied agency with that of its different levels of contextual integration. This approach draws on different considerations of change as it is studied and explained in human studies, but also in natural disciplines, as well as in the models offered by the formal sciences.

Of all the aspects involved in a general theory of development based on complex systems, it is unavoidable to mention the critique to classical causal explanation (Castorina & Baquero, 2005; García, 1999), because of its inadequacy to produce consistent explanations of change over time. Classical causalism establishes injective relations between causes and effects—where for an event ‘a’ to be the cause of an event ‘b’, three conditions must be met: that ‘a’ happens before ‘b’, that whenever ‘a’ happens ‘b’ happens, and that ‘a’ and ‘b’ are proximal in time and space (Ferrater Mora, 1965). Current models of change, and especially the interactions between variation and transformation, cannot be captured if change is reduced to a succession of causes in the classical sense (Overton & Müller, 2003; Valsiner, 1998). Instead of exploring the underlying causes of observable changes in human development, a convergent perspective will attempt to explain the emergence of novelty through self-organisation, as well as the exploration of the orientations, attractions, disturbances, transformations, interactions and reorganisations of a complex system.

In sum, the notion of development has been historically related with other related ideas about time and change. Beyond the cross-influences and the impact of the theory of the evolution of species, each discipline promoted a particular angle. Nowadays, conceptual frameworks of convergence in human development focus on the notion of change and on the emergence of novelties, in a meta-theoretical and transdisciplinary way. A general theory of development in the field of complex systems still requires great conceptual efforts but seems to be a gateway to more sophisticated models of the child and the adult, and an opportunity for renewed inter-theoretical dialogues.

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#### Note

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