# A Brief Biography of Jean Piaget

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Earliest photograph, with his family.

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### Personal History

- Born in 1896 in Switzerland; died in 1980
- Idolized his father, an academic, and came to fear his mother, who he experienced as emotionally unstable
- Student of naturalistic science as a child. Published a short piece at age 10.
- In his teens, became engaged with questions of evolution as a serious student of mollusk adaptation
- Confronted a philosophical /religious/emotional crisis as a university student
- Wrote a philosophical treatise in the form of a novel while recovering
- Came to feel that, in the absence of scientific evidence, philosophy tended toward mere (yet tantalizing) speculation; referred to it as "the demon philosophy"
- Began an eight year search for a method upon graduation in 1918, a search which took him to Bleuler's psychiatric clinic and Simon and Binet's research laboratory
- Was published and hired by famed psychologist Edouard Claparède to oversee experimental pedagogy at The Jean Jacques Rousseau Institute in 1921
- Married a student, Valentine Châtenay -- who worked on *The Moral Judgment of the Child* and who later helped him study their three children -- in 1923
- Began his lifelong collaboration with Barbel Inhelder in 1929



Jean Piaget, early teens.

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From Biology to Philosophy to Genetic Epistemology

Followed philosopher Henri Bergson's use of the Greek notion of "genera" for the distinctive set of impetuses that enables and constrains the emerging organization of all life forms

In the biological, psychological, and social realms, natural forces challenge "wholes" and their parts to move into ever more complex forms of equilibrium

In psychological realm, reciprocal systems of cognitive operations came to represent wholes

In the social realm, social systems represented wholes and individuals their parts

Sought to discover the biological basis of morality, which he linked to formal logic



Piaget, early middle age, pictured with his wife

## **Key concepts**

*Mental Structures* – The conceptual framing with which one makes sense of the world

**Assimilation** – Making sense of world with one's existing mental structures

**Accommodation** – Adjusting one's mental structures to new realities

**Equilibration** – A regulatory process whereby the individual balances the demands of assimilation and accommodation in order to maintain intellectual stability

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Piaget with Barbel Inhelder, his closest colleague and collaborator for fifty years

Psychological Museum & Resource Center, Oklahoma State University

## Brief Annotated Bibliography

Bergson, H. (1998/1911). Creative Evolution. (A. Mitchell, trans.) New York: Dover. A defining text for the young Piaget

Bringuier, J. (1980). *Conversations With Jean Piaget*. (B.M. Gulati, trans.) Chicago: University of Chicago Press.

Thoughts of Piaget's on his work and its legacy as he neared the end of his life

Chapman, M. (1988). Constructive Evolution: Origins and Development of Piaget's Thought. Cambridge: Cambridge University Press.

A tracing of the philosophical roots of Piaget's lifework

Kamii, C., (1982). Number in Preschool and Kindergarten: Educational Implications of Piaget's Theory. Washington, D.C.: National Association for the Education of Young Children.

A clear, quick look at the educational implications of a structuralist stance toward knowledge construction. See especially the appendix "Autonomy as the Aim of Education."

Mayer, S., "The Early Evolution of Jean Piaget's Clinical Method." *History of Psychology*, vol. 8, November 2005.

Traces the early evolution of Piaget's "clinical method," beginning in Simon & Binet's laboratory

Piaget, J. (1952). Autobiography. In E.G. Boring, H.S. Langfeld, H. Werner, & R.M. Yerks (Eds.), *A History of Psychology in Autobiography: Volume IV.* (pp. 237-256). Worchester, MA: Clark University Press.

Piaget's frequently cited account of the early sources of and influences on his work.

Piaget, J., (1970). Structuralism. New York: Harper Torchbooks.

A pithy volume on competing views of structuralism and on its lasting merits as a method

Piaget, J. & Inhelder, B., (1969). The Psychology of the Child. New York, Basic Books, Inc.

A 160-page overview of Piaget's central questions and findings, written with Inhelder a decade before Piaget's death

**Vidal, F. (1994).** *Piaget before Piaget.* **Cambridge: Harvard University Press.** A probing study of the sociological contexts and psychological dynamics that shaped the adolescent Piaget into the scholar he became

### **Educational Implications**

Most fundamentally, Piaget's work tells us that minds learn best when they are actively constructing meaning relative to their existing mental (or conceptual) structures (rather than trying to keep pace with someone else's reasoning). This can involve modification of those structures (accommodation) or the use of those structures to incorporate previously unknown parts of the world (assimilation). In most (arguably all) situations, it will include some mix of these two processes.

The key point is that a child's conceptual structures differ from an adult's in ways that adults have trouble imagining. (Subsequent research has shown that cultural and individual differences further complicate the situation.) This requires educators to become students of their students' thinking, which requires, in turn, that they create contexts in which students must make sense of the world themselves. Otherwise, the teacher risks missing or misinterpreting the character of the students' questions and understandings.

This point is made in the Inhelder, Sinclair, and Bovet book, *Learning and the Development of Cognition*. Inhelder adapted Piaget's 'clinical method' -- which inspired intellectual engagement in order to maximize the chances children were expressing their true convictions -- to her own research into children's learning in order to study the character of the learning as it took place (as opposed to simply administering pre- and post-tests). She, Sinclair, and Bovet (and others) accomplished this by purposefully destabilizing notions that children of given ages were known to hold, first by exposing them to some contradictory material demonstration and then by probing their thinking as it progressed. Some children, however, entirely ignored the contradictory evidence and, even when it was pointed out, did not let it trouble them. These children were theorized to be still firmly ensconced in their own sensibilities in that regard.

This leads to a second fundamental educational implication of Piaget's research, namely that one cannot force certain types of understandings on others before their time. (What this will mean in specific contexts must, to a large extent, remain an open question as we now begin to appreciate how complex the variables are.) If we want to nurture students' curiosity about the world and, at the same time, encourage them to face underlying limitations in their existing conceptions of that world, then we need to challenge them to construct increasingly reliable understandings on their own terms rather than primarily providing the fruits of others' (expert) labors. The appendix of the book by Connie Kamii on the bibliography, called "Autonomy as the Aim of Education." is quite clear on this. The entire book, in fact, is a very readable treatment of the educational implications of Piaget's work relative to number construction.