

RESUMEN

El pensamiento de Piaget se basa en un marco conceptual ecléctico integrado por varias líneas teóricas. Así, el presente estudio tiene como objetivo explicitar las bases metafísicas y teológicas del proyecto intelectual del joven Piaget para demostrar la relativa unidad y continuidad entre las categorías forjadas para tratar cuestiones teológicas y éticas y las categorías biopsicopedagógicas, prestando especial atención a la dialéctica immanencia-trascendencia y conflicto-cooperación. En efecto, si la importancia formativa de las primeras exploraciones biológicas de Piaget ya fue estudiada cuidadosamente, las cuestiones referidas a los fundamentos religiosos o teológicos del pensamiento del joven Piaget en los años 1910-1920 han sido menos desarrolladas. Sin embargo, sostenemos que la elucidación de su ética protestante immanentista ofrece una valiosa clave hermenéutica para entender la necesidad lógica de la transición de Piaget a la experimentación psicológica y, por lo tanto, a la construcción de conceptos explicativos en la epistemología genética, permitiendo reconocer el valor de la Educación Activa, defendida y practicada en el Instituto J.-J. Rousseau.

Palabras clave: Jean Piaget; constructivismo; ética protestante; educación moral; educación activa.

SUMMARY

Piagetian thought draws on a hybrid foundational matrix in which multiple theoretical lines merge together. Thus, the present study intends to make explicit the metaphysical and theological anchorage of the intellectual questioning of the young J. Piaget so as to demonstrate a relative unity and continuity between categories forged to deal with theological/ethical issues and bio-psycho-pedagogical categories, by yielding special emphasis to immanence-transcendence and cooperation-conflict dialectics. Indeed, if the formative relevance of Piaget's early biological explorations has been carefully studied, one observes a certain neglect concerning his religious or theological inquiries in the 1910-20's. However, we hold that the elucidation of his immanentist Protestant ethics provides us with a valuable hermeneutic key to understand the logical necessity of Piaget's transition towards psychological experimentation, and thereby to Piaget's construction of explanatory concepts within Genetic Epistemology, favoring the acknowledgment of the value of New Education movement, promoted by the J.-J. Rousseau Institute.

Key words: Jean Piaget; constructivism; Protestant ethics; moral education; active education.

SOMMAIRE

La pensée de Piaget s'appuie sur une matrice fondationnelle hybride dans laquelle fusionnent multiples lignes théoriques. Ainsi, la présente étude vise à

rendre explicite l'ancrage métaphysique et théologique du questionnement intellectuel du jeune J. Piaget afin de démontrer l'unité relative et la continuité entre les catégories forgées pour traiter des questions théologiques et éthiques et les catégories biopsychopédagogiques, en accordant une attention particulière à la dialectique immanence-transcendance et conflit-coopération. En effet, si l'importance formative des explorations biologiques précoces de Piaget fut déjà soigneusement étudiée, on remarque une certaine négligence concernant ses recherches religieuses ou théologiques des années 1910-1920. Cependant, nous soutenons que l'élucidation de son éthique protestante immanentiste fournit une clé herméneutique précieuse pour comprendre la nécessité logique de la transition de Piaget vers l'expérimentation psychologique et, par là même, vers la construction de concepts explicatifs au sein de son épistémologie génétique.

Mots clés: Jean Piaget; constructivisme; éthique protestante; éducation morale; éducation active.

The theologico-metaphysical matrix of Piaget's Genetic Epistemology has been neglected. This article aims at signaling that matrix, and identifying a remarkable unity and continuity between the great categories mobilized by the young Piaget, first of all, in order to address his theological concerns, and then to produce a unifying, explanatory framework, one whose fundamental architecture combines the immanence of the transcendent with the self-poietic function of the endogenous equilibrium between epigenetic bio-psycho-logical landscapes. In a word, the aim of our study is to apprehend the original sources of Piaget's thought, in the 1910s and 20s, as well as to reconstruct a significant transition in his work, and underscore the unity underlying his heuristic project.

1. FORMATIVE YEARS AND THEOLOGICO-METAPHYSICAL REFLECTIONS

If the aim is to identify some landmarks in the genesis of Piaget's psychological and pedagogical reflection, then we must start by considering his early writings, and analyze the founding and forming scope of his first ethico-theological concerns. Precociously destined to a scientific vocation, later expressed in malacology, while educated in an atmosphere of intense religious fervor, instilled by his mother's family, Piaget seeks, from his youth onwards, to base his belief on grounds and arguments that are rationally convincing and arguable, much like scientific theses themselves. In this sense, his reading, at age 15, of Protestant theologian A. Sabatier's *Esquisse d'une philosophie de la religion d'après la psychologie et l'histoire* had a decisive impact in his formation, allowing him to discern the possibility of rendering faith and science compatible. Indeed, Sabatier shows how the historical analysis of both the evolution of theological beliefs and the psychological description of religious feeling enables us to capture the nature of humankind's bond with the divine, that is, the essence of religious conscience.

By presenting God as the transcendence that shows itself in the interiority of human consciousness, the theologian does not find any intrinsic contradiction between the mythico-transcendent phenomenon and modern science, for science itself stresses «the ascending evolution of beings»:

cosmic evolution proceeds always from that which is poorer to that which is richer, from the simple to the complex, from the homogenous to the heterogeneous, from brute matter to living matter, and from life to spirit. At each stage Nature surpasses itself by a mysterious creation that resembles a true miracle in relation to an inferior stage. What then shall we conclude from these observations except that in Nature there is a hidden force, an incommensurable potential energy, an ever open and inexhaustible source of life, at once magnificent and unexpected? How could such a universe escape the theological interpretation of religious faith? (Sabatier, 1897, in Ducret, 1984, vol. I, 226).

If reading Sabatier's work confirms Piaget in his religious beliefs, thus enabling him to overcome an early crisis sparked by the dogmatism of catechumenal teaching, his acquaintance with Bergson's metaphysical works, in 1912, causes a true «emotional clash», proving the possibility of a pantheistic identification between «God and life itself». Following this idea in Sabatier's work, the young Piaget has a small article published in 1914, *Bergson et Sabatier*, which is his first production in the scope of religious philosophy. Though incipient, this first reflection already denotes the kind of intellectual concerns that were to lead Piaget towards genetic epistemology, with his proposal to elaborate a constructivist theory of knowledge. Thus he remarks, quite critically, that «Sabatier could not stress psychological evolution enough», and adds: «We feel perfectly well that a dynamism is continuously processed in us, with or without an exterior influence, and that it varies our conceptions perpetually [...], in a continuous progression» (Piaget, 1914, in Ducret, 1990, 33). Although this statement already projects a future epistemic view, the truth is that the tragic events of World War I were to arouse an even greater interest for theological and socio-moral issues, as is proved by his activity in the Swiss *Christian Students' Association*. Hence, in a session in 1915, Piaget declares himself among those who await a blooming new world from the tragic conditions of war, and expresses «a burning desire for equilibrium» (Vidal, 1987, 278). In this very session, he presents a communication entitled *Essay on the Empirical Genesis of Consciousness and its Reconciliation with Religion*, later published in the Association's Bulletin, which in November 1915 would announce a «poem-essay» by the author, entitled *The Mission of the Idea*. Displaying Plotinian connotations, the aforementioned essay etches a metaphysical framework wherein mystical experience is valued as a sublime attempt to approach truth. Conversely, religious conservatism and nationalism are mentioned as forces opposed to the realization of the absolute principle, inasmuch as the transcendental reality imprisoned in these particularist representations can only be pursued by replacing them for others of a more universal nature, and better adapted to the dynamics of historical

evolution itself. Piaget intends to show that, since the *mission* of the idea is the rebirth of a true Christianity through the fulfillment of the various communitarian ideals of justice, democracy and socialism, then the identification of youths with the figure of Christ becomes inherent to the historical future itself¹. The very divine humanity of Christ substitutes theo-centrism for subjective idealism, and «announces a sort of biological hope by identifying evolution and morality» (Vidal, 1987, 279).

In 1916, Piaget publishes a learned reflection on *The mysteries of Divine Suffering*, in *L'Essor*², the progressive journal founded by Pastor P. Pettavel. Resuming some of the topics of *La mission de l'idée*, this meditation is something like a last commitment with the religious belief of a transcendent God, and predicts the blooming of later constructivist perspectives. As Vidal says, «when reading *The mysteries of Divine Suffering* retrospectively, so as to understand his following work, one grasps the decisive moment in which Piaget founds his constructivist conception» (1994, 102). Indeed, if in *The mission of the idea* man pursued an idea of the absolute that was transcendent, and that only Jesus could attain, then the humanity of the *Mysteries* encapsulates the immanent absolute. The conviction is that man auto-creates himself, and that the very divinity of the Creator emerges in that construction process:

Like you (man), I do not know everything. Like you, I was born in the night, for if everything has always existed, it was because my consciousness has followed stages – the stages of my creation – and so it was, little by little, that I understood my life [...]. Will I ever arrive at the absolute I search for? Will I absorb in myself the world I created? Will I be «God» one day? That depends on you. Life is a return to my being through the matter I thrust out of myself... (Piaget, 1916, in Vidal, 1994, 116).

In truth, this theological constructivism, which opens up a scatological horizon and answers the ontological problem of evil, shows a clear affinity with Bergson's philosophy in *L'évolution créatrice* (1907); so much so, that one may assert the author had already integrated the thesis of the vital impulse (*élan vital*) in his theology (Vidal, 1994, 106). Thereafter, Piaget would cleanse his reflection from metaphysical theses, and would focus on the problem of knowledge. Yet,

1. As suggested by Vidal, the very divine humanity of Jesus replaces theocentrism by idealism and «announces a sort of biological hope by identifying evolution and morality» (VIDAL, 1987, 279). Therefore, by operating a divisionist intent, religious dogmatism is presented as one of the greatest obstacles to science and social construction.

2. The weekly journal *L'Essor* was one of the heralds of the Romand intellectuality of the time. The aims of the journal, founded in 1905 by two Pastors of the Free Protestant Church at the Vaud canton, were simultaneously social and religious. Pierre Bovet, future director of the Rousseau Institute, collaborated with the journal, which, under the direction of Paul Pettavel (pastor of the independent Church of Chaux-de-Fonds), became renowned for its pacifist and progressive stance.

throughout that intellectual path, which seems to abandon the theological-moral concerns of his youth, his encounter with psychology will make him discover education as a field that provides the same regenerating and propulsive hope as the Christian theodicy. Thus, Piaget's indirect link to the Active School movement and his work at the *Bureau international de l'éducation* (BIE) reenact, under a secular guise, the scatological trust and the ethico-social compromise that result from the harmonization between Protestant faith and rigorous scientism. The analysis of his first publications is an important exegetic source, one that explains the biographic-heuristic context that configures the genesis of his psycho-pedagogical reflection.

2. THE ENCOUNTER WITH PSYCHOLOGY AND EARLY PSYCHOGENETIC RESEARCH

If Piaget's «conversion» to psychology is an absolutely necessary preamble to the future construction of his epistemological project, and secondarily, to his compromise with pedagogy, then we must understand how that interest was originated and consolidated. The logics underlying his encounter with Psychology leads us back to his double reaction to the reading of Bergson. Initially, he explains in his *Autobiography*, an enthusiasm that would cement his bond to Biology, initiated with P. Godet; but ultimately, he was disappointed with the lack of an empirico-experimental ground.

During this phase of philosophical dismay, he obtained his doctorate in Natural Sciences, and publishes his philosophico-biographical novel, *Recherche* (Piaget, 1918a). A projective mirror of his own intellectual concerns, this work, following in the line of *The mission of the Idea* (1915), proposes a social reform through the rebirth of Christianity and the establishment of a federal socialism. However, the rebirth of Christian values is no longer sought in a metaphysical reason, rather in positive science, and in the organic logics that overcomes the exogenous disequilibrium by means of an endogenous re-equilibrium³. The war of 1914-18 would dis-equilibrate the European social organism, which should evolve towards more stable equilibria: *federalism* (the equilibrium between nationalism and internationalism) and *socialism* (the equilibrium between bourgeois liberalism and collectivism). The same concept of internal evolutionary regulation is evoked to establish a biological fundament to ethics, though an act of faith is required to

3. In Piaget's own words, «societies are *organisms* whose evolution is due to two causes, an internal, logical one, and an external one, depending on the contingency of circumstances, which prevents us from predicting it. But when society faces an accident of this kind, either the latter is sufficiently strong to destroy the first, or it accommodates to the consequences of the event. Hence, the latter enters the *patrimony* of society as a new *habit* in the *mentality* of an individual. An equilibrium is established between the new state and the old state, and this equilibrium is the prosecution of the *internal logic* of the social organism» (PIAGET, 1918, in DUCRET, 1984, 435).

impart a moral meaning to scientific data⁴. Hence the pertinence of the reflection on his lost faith, here translated interrogatively:

Why did he now lose his faith? Because it was dead. Against his will, the work he had finished led him to this final conclusion. And this work was the conclusion of four years of his labor, of two years of peace during which he had worked for himself, and the two war years during which social suffering had haunted him daily with its bridle. This work finalized itself automatically, and forbade him all religion (Piaget, 1918, in Ducret, 1990, 36).

Despite the theist rupture to which he alludes in this autobiographical narration, the metaphysical and religious questions that had marked his early intellectual horizon endure, now assuming a new configuration, due to the fact that the scatological ends that religious faith postulated were justified by science itself, and due to the convergence between the autonomous movement of singular assertion and the sense of social cooperation⁵. In order to understand this, we have to clarify the conceptual path that will lead the young biologist to his activity at the Rousseau Institute, and analyze the most important stages of his encounter with Psychology.

If from the time of his enrolment in the University of Neuchâtel, Piaget had been encouraged by A. Reymond to specialize in «biological philosophy» (Ottavi, 2009), it was his acquaintance with E. Claparède⁶ that led him to settle in Zurich to work in Experimental Psychology with Lipps and Wreschner, while attending Burgolzi's psychiatric clinic, where he listens to Bleuler's and Jung's seminars. Despite the relevance of these early contacts to his formation in Psychology, Piaget barely tolerates the narrowness of the intellectual atmosphere around him, and so, having lost interest in the study of psychoanalysis and pathological psychology, he retires to the Valais, and for a whole semester resumes his studies in malacology.

Ultimately deciding to extend his formation to other fields of Psychology, after that brief interval the young Swiss heads to Paris, where he settles in the fall of 1919. His stay in Zurich had allowed him to overcome an introspective

4. Through Sébastien's voice, he states: «By sufficiently detailing biological evolution, one lays the grounds for a moral of obligation and a moral of altruism, thus addressing the most sublime aspirations of human consciousness» (PIAGET, 1918, in DUCRET, 1984, 436).

5. As is stated by F. VIDAL (1987, 289), «by questioning, during his youth, the hiatus between Science and Faith, Piaget resumes the tradition of liberal Protestantism that emphasized this kind of debate, as is evident in Flournoy's own writings». While gathering the contributions of that tradition, the young scholar operated a rupture, for, as is stated by Vidal, «his scientific axiology was partly delineated in order to show that immanentism was the noblest, most objective attitude, and to justify God's identification with the norms of a universal and impersonal reason».

6. There is documentation proving such contacts around the time of his prolonged stay at the sanatorium, in 1916.

conception of psychology, and hence, it is with renewed hope in finding conceptual and empirical basis more suitable to his research project that he will search for new teachings in the French capital. There, he takes part in practical work oriented by psychiatrist G. Dumas, in Saint-Anne's clinic, and attends P. Janet's, H. Piéron's and H. Delacroix's courses in Psychology, while simultaneously attending C. Lalande's and L. Brunschwig's lectures on logics and philosophy of sciences. And if, in a cumulatively enriching manner, the interaction between these various teachings allowed him to start etching, with much more precision, his future research field, one must first of all acknowledge the crucial influence of P. Janet, visible in Piaget's interest for the evolutionary study of cognition. The practical work he develops alongside Th. Simon becomes equally important for his formation, especially because in correcting the intelligence tests, he does not just enumerate the errors and flaws, but tries to analytically reveal the processes of reasoning underlying the «incorrect» answers, thus rehearsing a «clinical» method similar to the one Bleuler and Dumas practiced in their clinical interviews. Hence, by adapting his questions to the verbalizations of the subjects, the young Piaget distances himself from the simple quantitative register of the tests, and through observing the verbal reasoning of «abnormal» children at the Salpêtrière, he attempts to infer data concerning the cognitive processes of normal children, namely as far as mathematical reasoning is concerned (Piaget, 1966,136-137).

In its complex heterogeneity, his Parisian formation allowed Piaget to discover the central core of his scientific interests, the Psychology of development assuming a capital importance in explaining the processes that regulate the genesis and evolution of knowledge (Bennour & Vonèche, 2009; Taborda Simões, 2002; Taborda Simões & Formosinho, 1999). Parallel to this fact, and in accordance with this interest for genetic psychology, Piaget begins to reveal an interest for educational matters, as is inferred from the introduction to a conference delivered in 1919, by invitation of Th. Simon, entitled *La psychanalyse dans ses relations avec la psychologie de l'enfant*, in which Piaget refers to the educational uses of psychoanalysis and its limits. In this text, he maintains that in order to overcome these questions, it would be convenient to investigate «the correlation between unconscious development, which is studied by means of psychoanalytical techniques, and mental development», which should be analyzed by means of the metrical methods conceived by Binet, in collaboration with Simon (Piaget, 1920, 58). To support this assertion, and as a result of his research, the author publishes three articles during this period – *Essai sur quelques aspects du développement de la notion de partie chez l'enfant*; *Une forme verbale de la comparaison chez l'enfant*; *Un cas de transition entre le jugement prédicatif et le jugement de relation*; and *Essai sur la multiplication logique et les débuts de la pensée formelle chez l'enfant*–, which might be considered his first experimental studies in genetic epistemology (Ducret, 1984, 502). After devoting the second of these articles to the appreciation of Claparède, the director of the *Archives de Psychologie*, Piaget is invited to occupy

the post of «chief of work in Psychology» at the Jean-Jacques Rousseau Institute in Geneva, which he will assume in 1921. With his departure from Paris, the formative stage of his method, the defining stage of his heuristic field⁷ – the psychological genesis of intelligence – is concluded (Ducret, 1984, 507).

3. PIAGET'S PEDAGOGICAL WORK AT J.-J. ROUSSEAU INSTITUTE

Piaget would carry out his professional work in a context where education assumed a fundamental role. As Oelkers recalls (1996, 176), just like New York, London or Brussels, Geneva becomes an international center of the New Education Movement, and the Rousseau Institute acquires a central role in divulging new ideas. Identified with the intellectual atmosphere of the Institute, famous for its social and educational vanguard⁸, Piaget refers in his *Autobiography* that he planned to devote the two or three first years of his stay in Geneva to the study of child psychology, and then to devote himself to the construction of «a psychological and biological epistemology»: «Hence, above all, I should refrain from all non-psychological concerns, and empirically study the development of thought for itself» (Piaget, 1966, 138). According to this autobiographical excerpt, psychological questioning is clearly his main interest, and there is no allusion to any other heuristic interests. However, the truth is that, according to Vidal's investigations (1987), it is inconsistent not to acknowledge that his theologico-moral concerns underlie those psychological issues as its background, even if permeated by the experimentalist and conceptual rigor of his original scientific formation. Proving this is the fact that in 1921, and in line with the intellectual concerns that had marked his youth, Piaget started developing research in the field of psychology of religion and values, which was not at all foreign to the educational aims of the Institute and the conceptual concerns of the Director himself, Pierre Bovet, who had a very keen interest in moral and religious philosophy (Vidal, 1987, 283). So, while resuming the aim to *psychologize* the study

7. As is stated by DUCRET (1984, 507), «it was in Paris that some of the great axes of his upcoming research were elaborated, such as his method, or his first intuition of how much logics may contribute for the psychology of intelligence».

8. In 1933, after the Parliament had appointed an academic commission to arbitrate the criticism made by the conservative parties after the tragic events of 32, which had violently opposed socialist demonstrators and the police, Bovet requests his resignation as President of the Institute. In his view, the changes proposed by the Commission and the scientific «neutrality» that was imposed to the activity of the Institute perverted the mission of the Genevan pedagogical institution, initially destined for a broader intervention. In fact, Bovet's moral idealism was perfectly harmonized with Claparède's social liberalism, which opposed not only the fascist stance of some Swiss conservative parties, but also the revolutionary extremism of some leftist groups.

of the religious phenomenon, following Théodore Flournoy's teachings⁹, Piaget (1923a) discerns in his article «La Psychologie et les valeurs religieuses» the possibility to interpenetrate scientific analysis with religious experience. For «if the value, properly speaking, escapes science, then the judgment that asserts that value is, in a certain way, scientifically explainable» (Piaget, 1923a, 53). Without falling into absolute relativism, but refraining from any dogmatic prescription, Piaget considers that the psychology of values must encourage a normative criterion regarding «an immanentist and biological point of view» (1923a, 77) that validates axiological parameters. Thus, this principle is presented as a law of «equilibrium between successive states» (1923a, 78), for one of the criteria used to determine a value will be the very fecundity of the value in framing other values, admitting that Love stands as a supreme value, thus fulfilling this imperative of coherence.

Hence, we can clearly conclude that by the same year as the publication of *La logique et la pensée chez l'enfant*, Piaget's ethico-religious concerns had not faded, rather the author configured them in the scope of the educational mission of the Institute, in relation to his own research on child logic. As he explains in the aforementioned article, «in experience we cannot think or live coherently outside the principle of values» (1923a, 81) – which is why he invites the students of the *Christian Association* to develop a psychology of religious values. In his view, this kind of investigation would have the advantage of dissolving any divisions, for, as he himself states, «it will never divide us if it is carried out from a psychological point of view, because from this point of view one single ideal and one single service are realized from different opinions» (Piaget, 1923a, 82). Indeed, in an attempt to render his early religious beliefs more and more secular, the conception of «service» and «ideal» that underlies Piaget's scientific activity in the Institute becomes obvious. Accordingly, while in his writings on religious psychology Piaget came nearer to an immanentist conception of divine transcendence itself, and attempted to replace the authority of the dogma by the biological logics of fideist values themselves, his studies on the development of child logic guaranteed broader and more consistent scientific grounds for the pursuit of the ideal of an *active pedagogy*, as it was promoted *in and by* the Institute (Piaget, 1929a). Therefore, the two kinds of intellectual concerns are not dissociated, for the claim for the child's autonomy was articulated with the project of building more democratic societies, in which citizens could freely cooperate towards the common good. But, in order to understand how the unity of Piaget's project is edified – of which educational concerns cannot be excluded –, it is important to analyze how pedagogy is for Piaget «the functional aspect of his psychology», as is stated by Parrat-Dayan (1997), and to what extent

9. In the words of PIAGET himself, this psychologization would lead him «to explain every single fact of (religious) experience without resorting to transcendence, and therefore to reduce it to a biological interpretation» (1923a, 43).

this pedagogical discourse is part of an epistemic context that configures it and renders it meaningful.

4. PSYCHOLOGICAL RESEARCH AS AN EMPIRICAL BASIS FOR THE ACTIVE SCHOOL'S POSTULATES

Piaget's article «Pour l'étude de la psychologie», written in 1928 and published in the journal *La nouvelle semaine artistique et littéraire de Neuchâtel*, may help us to understand the unity of his project, for it stresses his educational concerns in connection with his interests in the field of psychology, namely, in the field of religious psychology¹⁰. In this article, the researcher starts by stressing the growing scientific importance of psychology, indicating that «the 20th century will perhaps strike future science historians as the century of psychology». However, the triumph of psychology may only be achieved through a reformulation of its methods, according to which experience and observation must substitute «all deductions *a priori*, all verbal and personal syntheses» (Piaget, 1928, 12, in Parrat-Dayan, 1997, 261). Reflecting on the fecundity of the new discipline with respect to its pedagogical uses, Piaget criticizes the dogmatism of traditional pedagogy, and defends the ideas and practices emphasized by the Rousseau Institute (Hofstetter, 2010; Xypas, 1997). If, on the one hand, pedagogy is, in his reflexive-heuristic discourse, «the functional aspect of his psychology» (Parrat-Dayan, 1997, 256), on the other hand, it is in the psychological study of pre-logical child mentality that are laid the scientific foundations of the reformist ideals of the *Active School* are laid.

The concept of qualitative alterity of child mentality was not a novel one, when Piaget started his studies in child psychology; for if Rousseau is considered its great inspirer, it is precisely because he asserts the *sui generis* character of the child, unlike then existing conceptions, which presented the child as a miniature adult. This concept of an *alterity* of child mentality, which had some affinity with Rousseau's theory of the «noble savage» and Lévy-Bruhl's description of primitive morality, enriched by psychoanalysis, was still a guideline in Active School and configured the very idea of a «Copernican revolution» in education, as was indicated by Claparède. However, we must grant that, in spite of this conception's directive character, it only acquired its due dimension in the scope of Piaget's epistemological project (1923b, 1928e, 1930e). Hence, if we consider the bibliography published by the Genevan investigator, both in the 1920s and early 1930s, we realize that one of the core concepts for the typification of child mentality

10. Indeed, in 1928 he has another conference published, «Deux types d'attitudes religieuses: immanence et transcendance», delivered at the 31st Student Conference of Romand Universities, held at Sarraz, in March of that same year.

is the concept of *egocentrism*¹¹, which translates a strict centration in one's own point of view, an indifferenciation between objective and subjective elements in physical and social representation (Piaget, 1928c, 34). Indeed, the different concepts that characterize child mentality, as Piaget describes it in works such as *Langage et pensée chez l'enfant* (1923), *Le jugement et le raisonnement chez l'enfant* (1924), *La représentation du monde chez l'enfant* (1926), *La causalité physique chez l'enfant* (1927), namely, *realism, animism, artificialism, finalism, syncretism, transductive reasoning*, may be explained in view of egocentrism, conceived as the absence of a normative holistic structure that is developed only through the processes of accommodating *socialization*. As the author refers in the study *Logique Génétique et sociologie*, "while symbolic thought obeys one's anarchic content [...], reason must adapt to reality and to others"¹² (1928b, 183) that is, it must dissociate subject and object. According to this train of thought, and conceding that the social process is fundamental to the very genesis of reason, the author clearly differentiates processes of social influence, distinguishing between *constraint* or *coercion (contrainte)*, and *cooperation*¹³. In his perspective, coercion is ineffective in promoting the child's logical and moral development, as it is unable to make it evolve in its egocentrism towards a progressive decentration. If that which characterizes child egocentrism is the spontaneous consideration of one's own point of view as absolute, due to the inability to differentiate and coordinate, then the asymmetrical relation with adult thought, ever impregnated with unilateral respect, does not allow the cognitive value of truth to be assimilated without a deforming

11. Child egocentric thought, though anticipating the laws of an adult logic, still shares the laws of symbolic thought, which is a more rudimentary or economical form of thought. We must also stress that the heterogeneity that the Swiss researcher denotes in child mentality is not, as he himself concedes, a radical heterogeneity in relation to adult mentality, for that would presuppose a total rupture in ontogenetic evolution, which he always shuns. In this sense, he states: "Child mentality configures, with respect to adult mentality, the same relation that a new animal species holds with the species from which it descends, if, with transformism, we admit that the new epistemic characteristic that typifies the pre-logical thought of the smaller child, egocentrism, asserts itself as a state of indifferenciation between the subjective aspects of the I and the objective aspects of the physical or the social world, which induces the subject to center exclusively in his own point of view, thus deforming his representation of reality and of others" (*Psychopédagogie et mentalité enfantine*, 1928c, 34).

12. As is stressed by PARRAT-DAYAN, "leaving egocentrism does not mean acquiring knowledge about things or the social group, rather dissociating the object from the subject. To leave egocentrism, one needs to gain consciousness of what is subjective, to take place amidst a set of perspectives and to establish a system of common and reciprocal relations between things, people and the I itself. Egocentrism opposes objectivity inasmuch as the latter assumes relativity" (1998, 540).

13. Piaget uses the term *social constraint* to designate a kind of interaction based on authority, though it may be exerted in a mild manner by someone prestigious, who naturally instills respect in a child, as is the case with parents and teachers; constraint may also be exerted in a more anonymous manner, through tradition or public opinion, which is complied without evidence. Conversely to this social influence mechanism stands *cooperation*, which implies a relation between equals, or as people as such, without the intervention of any element of authority or prestige.

accommodation to the value of an arbitrary authority¹⁴ (1928c, 58). Social coercion reinforces egocentrism, typified by «syncretic logics» and «assertion without proof». Only cognitive cooperation generates the need for a proof, the objectivity and reversibility of logical operations, in balancing confrontation and unifying perspectives. Cooperation develops a *normative structure* that dissociates subjective associations from objective links, thus releasing child mentality from the «sophism of the implicit» (1928b, 174).

By turning the principle of cooperation into the propeller of the conquest of logics, Piaget attempts to establish a new, more intimate connection between psychology and the proposals of modern pedagogy: «The fight between traditional pedagogy and the active school is [...] the crucial experience, by excellence, of child psychology» (1928c, 56). In this sense, the crucial problem in teaching would not be to instill an adult mentality in a child mentality, rather to propel the socialization process that favors the development of rational habits of thought, and to turn school into a proper means to the outbreak of that process. In other words, it is a matter of discovering «by which means the child effectively moves from a puerile mentality to an adult mentality, and allowing for that evolution to take place spontaneously, in the classroom, as it does in life» (1928c, 57); and this by presupposing a structural isomorphism between the psychogenetic processes themselves and the principles of the Active School. That is why, at this phase, psychological questioning may be seen as a functional aspect of Psychology's aim at scientificity, which should integrate a teleological or teleonomical principle (Piaget, 1929c).

It follows that one cannot dissociate Piaget's scientific goals from his psychogenetic research on socio-moral ideals, present in his early works, which are embodied in the liberal and reformist atmosphere of the Rousseau Institute. Sharing the same religious and ethical concerns as the founders of the Institute, Piaget did not intend to exclude from his research project the moral-theological reflection that had led him to a psychology of religious values. After 1930, the «psychologization of the transcendent» attains a new stage when Piaget aims his research at the study of the child's moral development; and in 1932, he publishes the renowned work *Le jugement moral chez l'enfant*, whose religious and social-political observations prove the pursuit of his reflection, for they reveal his relative position concerning the immanentization of transcendence (Piaget, 1928a).

14. Emphatically defending that adult authority changes nothing as to the child's egocentric mentality, Piaget stresses the deficiencies of traditional school: its verbalism and authoritarianism. In fact, he states, «the adult's oral teaching is indeed inseparable from an element of prestige, of moral authority, and that is why one may speak of a *constraint* to characterize the pressure that adult thought exerts upon child thought. The respect the child has for adults stops it from assimilating adult thought as it does the result of a personal experience: the value of truth is fatally burdened with authority, and if one judges reason for its critical intents, and not for its material results, then we could not speak of reason when, even without deformation, the child adopts the opinions of the adult» (1928c, 58).

Seeking to apply the positivist methods of sociology and psychology to the analysis of religious beliefs, Piaget (1928a) admits the existence of a strict correlation between the structure of social groups and the structure of religious beliefs, and distinguishes between *conformist* and *differentiated* societies. In the first ones, the traditions of a closed and rigid system subdue individuals; in the second ones, subjects have the freedom to critically examine the norms and rules of society, and therefore, social cohesion does not depend on the exerted coercion, rather on a freely exerted cooperation. On a logical scope, social differentiation presupposes the assumption of a rational *normativity*, surpassing egocentric subjectivism and founding the symmetrical intersubjective communication that, in an ethical scope, forms the autonomy of the subject. *Moral realism*, correlative to the heteronomy occasioned by social coercion, foreshadows the work of 1932, and establishes a bridge between the sociological approach of moral and religious phenomena and the psychological approach that will depart from P. Bovet's positions (1925). Between these two approaches there could only be a parallelism, and in no way a conflict (Piaget, 1928a, 17); although it means to acknowledge that, in a developmental level, social coercion is represented by a feeling of the child's unilateral respect for the adult, which is distinct from a mutual respect, generated among equal relations. Consequently, from a psychological or internal point of view, there is a duplication of the afore-established sociological distinction between social conformism and social differentiation (Fedi, 2008). With the parallelism between the social and individual spheres, child moral heteronomy is assimilated to the adult feeling of duty in traditional societies, where ritual prescriptions or interdictions (taboos) are felt as sacred and obliging, though its content has no real meaning (Piaget, 1928a, 23). From a religious perspective, moral heteronomy induces a belief in the transcendence of the divine, whereas mutual respect, the basis of moral autonomy, supports an immanentist view of the divine, and both express different social and educational experiences (Piaget, 1930a, 1930b, 1930c, 1930d, 1930f). Indeed, Piaget explicitly states that every type of social structure corresponds to a specific mode of educational relationship:

Every social structure does indeed have a sui generis education mode. To social coercion or conformism corresponds an authoritarian education that reinforces the symbols of transcendence and heteronomous morality in every new generation. To social differentiation and cooperation corresponds a more liberal education that makes mutual respect prevail over unilateral respect, and therefore develops an autonomous morality and a religion of immanence (Piaget, 1928a, 24-25).

CONCLUSION

To sum up, Piaget's early psychogenetic studies were moved by philosophical and moral concerns that had accompanied him ever since his youth, and found ample resonance in the pedagogical and reformist activity carried out by

Claparède and Bovet at the Rousseau Institute. The critical review of Darwin's and Lamarck's theses (Piaget, 1918b), in favor of the principles of «cooperation» and «equilibrium», shall provide an essential part of the matrix of his future epistemological project, which would include biology, psychology, sociology and pedagogy, in its structural and dynamic isomorphism. In this sense, the psychological research of the young Piaget reveals a deep consistency with the principles of Active Education, and his previous reflection on ethics and religion. Such consistency nurtures the epistemic framework that will be developed and whose ground lies in the self-constructive activity of human reason. Piaget refused the static character of Kant's *a priori* criticism, promulgated by the thinking of the Gestalt school, and asserted instead that structures proceed from an epigenetic structuration. In this sense, every possible experience happens within the structuring activity that produces universal laws and communicational rationality, through a continuous re-equilibrium. In the genetic fusion between the objectivity and the normativity that operate in thought, the isomorphism between moral and logics becomes apparent: «morality is the logics of action, and logics is the morality of thought» (1928a, 37); therefore, the analysis of moral development clarifies both cognitive and socio-emotional development, in which the epistemic subject opens up to semiotic and dialogical mediations.

If this article considers Piaget's work in an historical perspective, examining roots of Piaget's thought that animate his concerns, theoretical endeavors, and research, throughout his career, readers would do well to be aware that Piaget's impact continues to influence fundamental research in the psychology of human development and educational sciences, and their applications in educational practice, as well as the psychology of religion (see, e.g. Brandt & Day, 2013), where there is renewed interest in some of the very concerns and debates, which were so much part of Piaget's own trajectory of thought, and his contribution to human knowledge.

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