

The Philosophy of Education and the Educational Challenge of Complexity

Elsa M. Bruni

Full Professor, University “G. d’Annunzio” of Chieti-Pescara

e-mail: embruni@unich.it

The essay aims to delve deep into the authentic, albeit not always explicit, dimension of the philosophy of education in relation to contemporary cultural and educational issues and urgencies. Consistent with the claim that the philosophy of education plays a meta-reflective role on the foundations of pedagogical knowledge, the article emphasises the centrality of the philosophy of education in tackling the real problems that arise when thinking or doing education, the empirical spaces of educational planning, the possible and desirable implementations of the concept of *paideia*, and the tension between this, the places of *educere*, and the teaching profession.

Keywords: Complexity, *Paideia*, Reflexivity, Educational Planning, Educational Institutions.

La filosofia dell’educazione e la sfida educativa della complessità

Il presente contributo intende esplorare la più autentica – sebbene non sempre esplicita – dimensione della filosofia dell’educazione in relazione alle attuali e urgenti questioni culturali e educative. Secondo un approccio che guarda alla filosofia dell’educazione nel ruolo meta-riflessivo sui fondamenti del sapere pedagogico, il saggio afferma la centralità della filosofia dell’educazione nell’affrontare i concreti problemi che emergono nel pensare e nel praticare l’educazione, gli spazi materiali della progettazione educativa, la possibilità – ivi auspicata – di comprendervi il concetto di *paideia* e la tensione tra questa, i luoghi dell’*educere* e la professione insegnante.

Parole-chiave: complessità, paideia, riflessività, progettazione educativa, istituzioni educative.

On the engineering drift in educational research

The title of this essay refers to the need to consider the philosophy of education as a cognitive “domain” closely intertwined with the phenomena and educational needs that have marked the current historical period, which is characterized by traits that can hardly be interpreted through the existing system of logic.

This premise therefore entails a firm stance and, at the same time, a clear methodological choice. In other words, this assumption places intelligence and the exercise of critical, questioning, doubtful thought as sources of formation and understanding of an unprecedented human condition, and of the complex current historical period. Indeed, it is such complexity – understood as a web of increasingly convoluted interconnections – that has radically and structurally overturned the ways and forms, identities and destinies, of Man and the Planet¹. Complexity therefore demands forms of thought that allow for deciphering, connecting, making sense, and exercising constant criticism.

It is clear that this premise generates consequences above all in the field of education, and questions pedagogy. In particular, it triggers a chain of reflections dealing with the issue of the scientific legitimation of knowledge-action in education, i.e., its claim to be acknowledged as a “science”. In parallel, it relates to the discourse on rationality (predictive vs. interpretative; Galilean-Newtonian vs. critical-reflexive; technical-instrumental vs. doubtful rationality), which, in turn, involves the issue of values, the dialectic between objectivity and subjectivity, between rationality and irrationality, the tension between education-formation-instruction, between theoretical practice and training actions, as well as the criticism against educational institutions and their role.

These are all real issues – tangible and undeniable ones, if you like – but, in practice, they are being blurred by new ideologies, new patterns of reduc-

¹ See, among many others, the seminal works by Rosnay (1978) and Waldrop (1992). For a general review of recent works, see Gandolfi (2008); Florita (2016); Ceruti (2018); Grassi, Temporelli (2018).

tionism that feed and are fed by impersonal, bourgeois rationality (conformist pedagogy) as well as by ordered and ordering educational intentionality (pedagogy of the essence, didacticism, pedagogism). In other words, the complexity and heterogeneity of the educational experience are constrained within syllabi that are planned and controllable through rationalistic intentionality, which is merely bound to what is material, to what is visible, to the will of regulating behaviours, normalising excesses, and denying differences.

In this scenario, three intertwined preconceptions can be identified about the philosophy of education, which characterize the present age, influence the scientific debate and, even more, educational planning.

1) The philosophy of education is detached from practical, small-scale, everyday problems and, moreover, it does not play a central role in elaborating effective educational strategies;

2) the philosophy of education is neutralised by the engineering anxiety to professionalise and specialise education, thus passively updating it on the basis of the cultural, social and economic trends of the moment;

3) the philosophy of education, wrongly identified with the “theoretical” aspect *tout court*, is degraded as a form of weak thought within pedagogy, detached from the old osmotic relationship with philosophy (unlike in the fertile times of *Paideia* and *Bildung*); it is viewed with suspicion by philosophers themselves, who have dissolved the relationship of contamination between philosophy and pedagogical-related aspects, thus incorporating them *de facto* within philosophy.

First of all, the three preconceptions recall the dilemmas about the structure of pedagogical knowledge. In other words, they raise questions about the presuppositions of the Western educational and cultural canon, which emerged above all at a time when the great political and social changes disavowed Cartesian-style scientific paradigms, with their operations aimed at educational standardisation as an instrument for selecting and reproducing the best form of man in a definite geometric space (the *polis*, the *Res publica*, the City, the State, the Nation). It is this rationalistic, technical-logical schematisation that has regulated both pedagogical theory and educational-didactic practice. And it is the rationalising exasperation – especially at the turn of the two world wars – that paralysed the spirit of the great projects aiming to identify the best form of education and the best form of society.

Secondly, the preconceptions about the philosophy of education summarised above indicate that something is missing, which also implies an urgent need to fill this void: the search for a reason, a narration, to be understood as a “tendency to”, a “motivation towards”, something that “moves within”, a type of *curiositas*. This is what lacks in today’s pedagogical discourse and in the field of education and teaching practices.

Once again, the criticism refers to the categorical foundations of pedagogical gnoseology which trigger, and it could not be otherwise, a short-circuit between the proclamations (about change, transformation, evaluation of multidimensionality, overcoming the parcelling out of science) offered by the pedagogical science itself and the educational actions that are developed on the theoretical level around anachronistic hermeneutical paradigms, and on the practical level around the disillusionment with the results expected through a certain intentionality.

The course of the philosophy of education: between pedagogy and philosophy

It is undeniable that most people – even a wide circle of scholars who examine educational actions and processes – find it perplexing to mention “philosophy” and, in particular, the “philosophy of education” in relation to the real, urgent problems of everyday life. From a practical point of view, moreover, the “philosophy of education” is regarded more as a sort of mannerism and as a self-referential exercise of some specialists rather than as a valuable, if not indispensable, interpretive key to think, plan, and act towards a transformation, a new construction, and a change. For some the philosophy of education is even an anachronistic, abstract subject, so much so that a quick review of the most recent publications is sufficient to denounce a real marginalization of the philosophical perspective in educational and didactic research. Pedagogy and didactics are mostly anxious to propose recipes that can be used when needed and to introduce didactic practices and pedagogical theories that are periodically modernised in the light of socio-cultural imperatives, fashions and the most fascinating current codifications.

In this perspective, the tendency to analyse educational phenomena “scientifically” is related to a distorted process whereby rigid epistemic itineraries are regarded as unquestionable; they end up being retrospective and reproductive epistemic itineraries. Still in the wake of technicism and the

efficiency-focused view of education, examining educational phenomena “scientifically” means invoking rationality-based syllabi, aimed at setting models for educational and training processes, with the false claim of controlling them and with the deleterious effect of depriving them of their vital essence, namely their generative and transformative nature. These epistemic itineraries can be seen, for example, in the real places of education and take shape in the general obsession with defining the perimeter of educational actions, simplifying learning processes, rationalising teaching processes, over-bureaucratising evaluation, and making educational activities utilitarian².

These can be considered signs of the separation between educational-formation experience and existential experience. They show the ruinous current state of education, of the inadequate structure of educational agencies, which implement a partial and illusory idea of education and fail to support the formative and existential growth of young people³.

Suffice to think about the way in which disciplines are conceived in the present-day school organisation: they are self-referential subjects, unrelated from each-other; therefore, the student perceives them as totally abstract subjects and approaches them by necessarily resorting to passive memorisation. The knowledge approach is limiting not only for the student, but also for the teacher. In fact, if teachers cannot count on solid pedagogical competences (reflective and meta-reflective ones), it is difficult for them to establish formative connections between the discipline they teach and real cultural issues, thus failing to activate the motivational drive that boosts the learning and education processes.

On the one hand, these are tangible effects. On the other, the causes must be sought in the image, identikit and function of a pedagogical science that has lost its identity, which had been clearly delineated in the 1980s. It has missed the chance and lost its potential to keep the balance between the meta-theoretical coordinates (ideology-science-utopia) – and to ensure their continuous interplay – as they preside over the theoretical investigation and the educational practices⁴.

Dewey had already identified the problem in the logical-formal premises of educational theorisations; he criticised the methods of theoretical pro-

² See Bruni (2020), pp. 161-169.

³ See, in particular, Chomsky (2000); Mottana (2011); Morin (2014); Bonetta (2016).

⁴ See Cambi (1986); Granese (1986); Sola (2015).

ceeding in the field of pedagogy, which found their epistemological foundation in their connection with the foundationalist approach and with the modern-positivist paradigm of the “strong” sciences⁵.

At the end of the nineteenth century, moreover, under the impulse of positivism, a type of observation and analysis began to be promoted so that even educational phenomena came under the scientific lens. These phenomena were therefore investigated on the basis of “experimental reasoning”, through laboratory methods, certainly in a new perspective compared to the previous, more literary and more philosophical approaches, by recognizing the centrality of the developmental and motivational processes – which was revolutionary at the time and whereby that period was named the era of the “discovery of the child”. Let us consider, for example, Wundt’s laboratory research in Leipzig, the pedagogy influenced by Decroly and Claparède’s theories as well as the experimental pedagogy by Simon and Binet first, and Mialaret and Buysé later on.

The attempt to think and study education and formation with a scientific approach arose from the emergence of practical problems and situations typical of formalized courses of study, made available to, and attended by, a large number of citizens who otherwise would have been excluded from school education. In those years, therefore, new problems and new ways of investigating aspects of education generated the attitude to mingle research and action hypotheses: in particular, elements directly derived from the context and real situations of the time were added to the well-known and consolidated theoretical framework. The aim of putting “theory into practice” – a phrase used by many at the beginning of the twentieth century – gave rise to research studies specifically focused on the teaching and learning processes. It is clear – and it is significant for the present discussion – that the then arising sciences of education and their disciplinary sub-fields started to analyse processes, aspects, phenomena, and educational actions in a specialized way, but at the same time they had to face the impossibility to define their field of study precisely, i.e., to limit the scope of their research. Such studies could only go beyond the scope of investigation: the specific approaches of the new educational sciences went further, crossed their borders, went beyond the limits of their own field.

The course of the philosophy of education in Italy is part of this complex history of issues and themes concerning pedagogy and philosophy at the

⁵ See, amongst other works, Dewey (1938).

same time⁶. The twentieth century started with the commitment for scholars in both fields to rethink the epistemic status of the two subjects as well as the terms and conditions characterizing their relationship, which had undoubtedly been “natural” and physiological for long periods, but problematic and uncertain in the cultural climate of that time. The way to redevelop the alliance between pedagogy and philosophy – which is as much old as debated⁷ – appears to be a necessary horizon for theorization and practice, both at the macro level (on the level of general issues concerning educational research) and at the micro level (on the frontier of emerging historical-experiential themes).

This entangled history has had to deal not only with a framework of reflections and theorizations strongly imbued with myths, ideologies, rigid approaches, but also with the bonds of a type of scientificity and rationality that have been thoroughly aligned with the univocal Newtonian view. It had also to face the ambition to conceive educational practice in a critical way, by freeing it from the obsessive pursuit of predictability and assured results. As a consequence, the philosophy of education had to better redefine the relationship between pedagogy and philosophy. It followed a process that closely involved the history of scientific pedagogy and, more deeply, the controversy about pedagogical epistemology (status, categories, language, rationality, models), in the difference and sometimes in the divergence between cultural and scientific positions. This process was carried out with the aim of overcoming the prevailing neo-idealism of the twentieth-century, increasingly perceived by many as an anachronistic constraint limiting the necessary new interpretations and implementations of education practice.

Future Perspectives

Different approaches and theories have marked the history of pedagogy over the last century, in relation to its image and functions. The different approaches share the idea of pedagogy as a science that goes through an ongoing self-construction process, that is to say, pedagogy as knowledge of education which exists and works only thanks to continuous critical analysis based

⁶ For an overview of the topic, see, in particular, Cives (1978).

⁷ See Granese (2015, pp. 9-49).

on three elements, i.e., subject, culture, and society. As analytic knowledge, it works to unveil the complexity of experience and of doing science in order to deconstruct and reformulate the fundamental categories of its discourse, interpret the node education-formation-training, and look at individual and social transformations in a projective way.

In particular, it was the hermeneutic-deconstructive approach, through its criticism of the manifestation of the logocentrism of the Western educational paradigm, that paved the way in the eighties for a reconsideration of the regulatory requirements of the pedagogical knowledge with the objective of determining its fundamental structures “by way of negation”. In pedagogy, deconstruction – meant as a philosophical-educational method – has aimed at reorienting the meaning of education-pedagogy towards a more realistic and authentic interpretation of the human formation process, intercepting not only its formal, observable aspects, but also its more hidden elements related to non-rational logics⁸.

The deconstructive turn involved the relationship between pedagogy and educational sciences and, in particular, on the level of ontology, it concerned the *proprium* of the object education-formation-training in its several dimensions (from the empirical one to planning, from verification-falsification to possible prefiguration) and in the relationship between *theorein* and *praxis*⁹.

This implied – from Dewey’s lesson up to Bateson’s and then to Morin’s and in Italy to Ceruti’s pedagogy – the reinterpretation of pedagogy in a historical sense (from the Socratic model to today) and in a phenomenological sense (in relation to the new frontiers opened up by post-modernity). This new interpretation started from the transdisciplinary basis of pedagogy and from a deeper analysis of epistemological “neo-paradigms”, so as to intercept and understand the interconnections within the material and human reality and the most authentic human needs (Laporta, 1996; Bonetta, 2017).

The role played by the philosophy of education, therefore, is a pivotal one by virtue of its double anchoring, both with the fields of theoretical research in education, and with the cognitive practice of *educere* and forming individuals. In this regard, the philosophy of education is more than specific

⁸ See Mariani (2008).

⁹ On the consolidation of pedagogy in its own epistemic structure, see in particular the contributions ranging from Evandro Agazzi to Carmela Merelli di Lallo, from Franco Cambi to Raffaele Laporta, from Alberto Granese to Eliana Frauenfelder, from Bertin to Bertolini, from Banfi to Spadafora.

knowledge, since it crosses and goes beyond – both in theory and in practice – the vast and complex field of pedagogy, regarded as science of education, as “an archipelago and a crossroad of knowledge, hence multifaceted, tensional and polycentric” (Cambi, 2000, p. 3). It lies both on the level of description and analysis, and on that of the awareness of the practical possibility of a theoretical and theorized expectancy. In any case, the philosophy of education is “something” necessary, even indispensable when investigating educational problems that change over time and space. It is the drive whereby models for thinking and interpreting are chosen, whereby practices are reconsidered and analysed. Thus, it contributes, in the field of educational research, to the progressive replacement of the positivistic notion of rationality with a more appropriate perspective that takes into consideration the authentic nature of human rationality and therefore of the cognitive and practical activities of human beings (from learning to teaching, from adaptation to transformation)¹⁰.

Nowadays the philosophy of education represents much more than the possibility of affirming a pedagogical concept in line with the current complexity: concretely, it is functional to an educational project that may go beyond the limited boundaries of a system that is almost completely school-centred, still based on narrow-minded approaches to thinking, learning, teaching, and educating that are unsuitable to grasp the most essential nature of man. Indeed, although school and institutional agencies are important, well-established actors, unintentional educational experiences also occur in many environments and diverse contexts of everyday life; albeit informal, such experiences play a significant role in the formation of individuals and radically affect people’s lives¹¹.

In the light of these considerations, the dualism between knowledge and the environment should be overcome, and a more realistic interplay should be established between codified knowledge – typical of formal disciplinary areas – and informal knowledge, arising from the daily experience in the living environment and acquired from the subject through a spontaneous learning process.

In other words, the philosophy of education is the main way for a necessary and desired pedagogical revolution aimed at interconnecting – also

¹⁰ See, in particular, Granese (2008).

¹¹ For further reading, see Durst (2010).

in view of a better understanding of human nature– the multiple contexts in which and through which civilization acquires global dimensions. On the other hand, the formation of man passes through the cohesion of a variety of languages and a new, more articulated encyclopaedia of knowledge. Thus, transformative dynamics – which act in the real world and, above all, respond to ways of thinking and living conceived as exercises of constant research – need to be taken into due consideration. Far from considering the issue of formation as a pure discussion about the acquisition of specific skills, packages of knowledge deemed necessary, but going «beyond a taming education», the profound need of this age and of contemporary human beings is thus interpreted through the redefinition of an all-encompassing intellectual education.

This idea of education, which aims to develop complex critical skills and needs the support of a new, radically transformed pedagogy, becomes the solution to ensure the practice of debate, openness, decentralization, discussion, deep critical analysis against homogeneity, as well as the search for multifarious hypotheses to build and experiment with new, different approaches¹².

¹² See Cambi (2006); Mortari (2008); Madrussan (2017); Bruni (2021).

References

- Bonetta G. 2017. *L'invisibile educativo. Pedagogia, inconscio e fisica quantistica*. Roma: Armando.
- Id. 2016. Il docente e la cura. Oltre la pedagogia razionale. In *Pedagogia oggi*. 1/2016. 156-168.
- Bruni E.M. 2021. *Ispirarsi alla paideia. I modelli classici nella formazione*. Roma: Carocci.
- Id. 2020. Oltre l'autonomia autoreferenziale. La dimensione culturale della scuola e della formazione. In *Nuova Secondaria Ricerca*. 10: June 2020. 161-169.
- Cambi F. 1986. *Il congegno del discorso pedagogico. Metateoria ermeneutica e modernità*. Bologna: CLUEB.
- Id. 2000. *Manuale di filosofia dell'educazione*. Roma-Bari: Laterza.
- Id. 2006. *Abitare il disincanto. Una pedagogia per il postmoderno*. Novara: UTET.
- Ceruti M. 2018. *Il tempo della complessità*. Milano: Raffaello Cortina Editore.
- Chomsky N. 2000. *On mis-education* (edited and introduced by Donaldo Macedo). Lanham: Rowman & Littlefield Publishers.
- Cives G. 1978. *La filosofia dell'educazione in Italia oggi*. Firenze: La Nuova Italia.
- Dewey J. 1938. *Experience and Education*. New York: Kappa Delta Pi, International Honor Society in Education.
- Durst M. 2010. *Filosofia dell'educazione per la scuola*. Milano: Franco Angeli.
- Florita M.O. 2016. *L'intreccio. Neuroscienze, clinica e teoria dei sistemi dinamici complessi*. Milano: Franco Angeli.
- Gandolfi A. 2008. *Formicai, imperii, cervelli. Introduction to Complexity Science* (new edition). Torino: Bollati Boringhieri.
- Granese A. (Ed.). 1986. *Destinazione pedagogia. Itinerari di razionalità educativa*. Pisa: Giardini Editori e Stampatori in Pisa.
- Id. 2008. *La conversazione educativa: eclisse o rinnovamento della ragione pedagogica?* Roma: Armando.
- Id. 2015. Introduzione. In G. Sola, *L'epistemologia pedagogica italiana e il "Documento Granese-Bertin"*. Genova: Il Melangolo. 9-49.
- Grassi W., Temporelli M. (2018). *Farfalle e uragani. Complessità: la teoria che governa il mondo*. Milano: Hoepli.

- Laporta R. 1996. *L'assoluto pedagogico. Saggio sulla libertà in educazione*. Firenze: La Nuova Italia.
- Madrussan E. 2017. *Educazione e inquietudine. La «manoeuvre» formativa*. Como-Pavia: Ibis.
- Mariani A. 2008. *La decostruzione in pedagogia. Una frontiera teorico-educativa della postmodernità*. Roma: Armando.
- Morin E. 2014. *Enseigner à vivre*. Arles: ACTES SUD/PLAY BAC.
- Mortari L. 2008. *A scuola di libertà*. Milano: Raffaello Cortina.
- Mottana P. 2011. *Piccolo manuale di controeducazione*. Milano: Mimesis.
- Rosnay de J. 1978. *Le Macroscopie*. Paris: Editions du Soleil.
- Sola G. 2015. *L'epistemologia pedagogica italiana e il "Documento Granese-Bertin"*. Genova: Il Melangolo.
- Waldrop M.M. 1992. *Complexity*. New York: Simon & Schuster.