

JOHN DEWEY'S CHOICE  
FOR EDUCATION:  
EDUCATIONAL VALUES  
AND THE PANDEMIC

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The pandemic is a tremendously difficult situation. To address it, we should return to Dewey for new insight. One of the less explored areas in the Deweyan academic literature is, undoubtedly, the philosophical, historical, and cultural issues present in the thought of the young John Dewey.<sup>1</sup> In this domain we might find new resources to address our current problematic pandemic situation. Young Dewey represents an important interpretative laboratory to apprehend the genesis and the construction of the philosopher's thought and, in particular, to clarify how his philosophy developed from an Absolute Hegelian conception, as Dewey affirms in his autobiography

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<sup>1</sup> See: Neil Coughlan, *Young John Dewey: An Essay in American Intellectual History* (Chicago: University of Chicago Press, 1975); Teodora Pezzano, *L'organismo sociale nel giovane Dewey* (Cosenza, Italy: Periferia, 2010).

(See: LW 5),<sup>2</sup> to a theory of experience which clarifies the complexity of the subject-object relation.<sup>3</sup>

The starting point was already present in his early critiques of dualism, which one can even find in his earliest work, a piece on Spinoza written in 1882, considered by Dewey a “juggler” (See: EW 1). But the root of his philosophy was also exemplified in the relation “mind-body,” as he discussed in his essay *Soul and Body* (1886) (EW 1, 93-115) up through *The Reflex Arc Concept in Psychology* (1896), considered the *manifesto* of classical American Pragmatism (EW 5, 96-110).

Obviously, this path should be analyzed in relation to his secondary educational literature, but in this context, it is opportune to focus only on the main points of the Reflex

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<sup>2</sup> Citations of John Dewey’s works are to the thirty-seven-volume critical edition published by Southern Illinois University Press under the editorship of Jo Ann Boydston. In-text citations give the series abbreviation followed by volume number, and then the page number. For example: (LW 10, 12) is page 12 of *Art as Experience*, which is published as volume 10 of *The Later Works*. Series abbreviations for *The Collected Works*: EW *The Early Works* (1882–98), MW *The Middle Works* (1899–1924), and LW *The Later Works* (1925–1953).

<sup>3</sup> See: Stephen Fesmire, *John Dewey and Moral Imagination: Pragmatism in Ethics* (Bloomington, IN: Indiana University Press, 2003).

Arc theory as linked to the educational issues expressed in *The School and Society*. In this perspective, a crucial problem is to understand why Dewey focused on educational issues, became the point of reference for educational democracy in the 20<sup>th</sup> century, and the most known theorist of education in our contemporary culture. In order to analyze this problem and draw out some consequences of this Deweyan choice of education, it could be interesting to focus on certain aspects of reflex arc theory, so as to understand how this theory was able to shape the central vision of the laboratory school and to produce certain educational values, which can be applied to this new cultural paradigm shaped by the pandemic. In other words, if the heart of Deweyan philosophy is education, then perhaps understanding how it emerged for Dewey as a central subject of interest, and how it became his central legacy, can help us better understand what values it can offer for responding to our pandemic situation.

## **The Reflex Arc Concept in Psychology: The Theory of Experience**

Educational scholarship has two clear roots: perennial educational values and relativist educational values. The first aims to comprehend the perennial being of education, the second analyzes its becoming. One proposes a theoretical and fundamental account of ontological nature, which can become dogmatic or arbitrary; the other tries to give up any theoretical pillar, substituting it with the relativity of actions and opinions.

In this perspective, it is necessary to analyze Dewey's thought, which does not accept either of the two perspectives, offering an original interpretation, which is an educational theory grounded in his account of experience.<sup>4</sup> As can be concluded from the structure of Dewey's thought, for him education is generated by experience and reconstructs it. The pillars on which his theory of education are based can be found in the principle of the *continuity of*

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<sup>4</sup> For more, see: Teodora Pezzano, *Le radici dell'educazione. La teoria dell'esperienza in John Dewey* (Milan: Franco Angeli, 2017).

*experience and the transaction with the environment.*<sup>5</sup> In his theory, in fact, we do not find evident traces of relativism or perennial educational values, because it maintains the principle of the mutual relation between the subject and the object, which defines the educational nature of experience: generating growth, enriching the individual with the possibilities of reconstructing experience. The individual, thus, is a subject, who transforms himself/herself mutually with the historical and social environment in which he/she lives.

The focal meanings of *The Reflex Arc Concept in Psychology* (1896), based on William James's *Principles of Psychology* (1890), center on the Cartesian theory of the reflex arc, which Dewey refutes. This essay from the young Dewey is fundamental and is still debated. It also brings together the origin of both his account of experience and

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<sup>5</sup> For more, see: Jim Garrison Jim, eds., *Reconstructing Democracy, Recontextualizing Dewey: Pragmatism and Interactive Constructivism in the Twenty-First Century* (New York: State of New York University Press, 2009); Larry Hickman and Giuseppe Spadafora, eds., *John Dewey's International Philosophy in International Perspective: A New Democracy for the Twenty-First Century* (Carbondale and Edwardsville, IL: Southern Illinois University Press, 2009).

education. Further, he determines an epistemological break with the Cartesian paradigm, present in the psychological studies of that period, giving life to a new orientation which constitutes the matrix of his thought.

In this essay, in a detailed way, Dewey analyzes the meaning of the individual's nature and behavior, setting the principles of his educational method. To do so, he examines the relation between mind-body and thought-action. Analyzing why the body responds to external stimulus is not easy. Therefore, to understand what are the conditions that give meaning to knowledge is complex as well. However, Deweyan theory is based on the idea that everything that can be inquired within experience is an expression of the relation between the subject and the object.

Analyzing reflex arc theory, Dewey makes the case that individual's acts begin not with a conscious will, but with activity, which successfully will be transformed into a conscious will. Through the refutation of Cartesian theory, inspired by William James' philosophy, Dewey demonstrates how every individual can make use of the inner resources at one's disposal, to orient in a good

direction the stimulus imposed by the environment. The stimulus-response relation is not mechanical, as according to the interpretation of the Cartesian theory, but is rather the expression of sensorimotor coordination, which overcomes the traditional dualism. “The older dualism between sensation and idea is repeated in the current dualism of peripheral and central structure and functions, the older dualism of body and soul finds a distinct echo in the current dualism of stimulus and response” (EW 5, 96). Due to this situation, the stimulus-response relation is considered a sensorimotor coordination, referring to the famous experiment proposed by William James of the child and the candle. In order to overcome the reflex arc concept, we have to recognize it as treating us like a “patchwork of disjointed parts, a mechanical conjunction of unallied processes” (EW 5, 97).

However, this relation could also be problematic. It is a “spontaneous” and “not spontaneous” coordination between the individual’s thought, action, and the environment. The spontaneous coordination determines a certain kind of adaption of the individual to the



environment's stimulus; in another sense, it is not spontaneous, but structured coordination in regard to the use that the individual makes of his/her own intelligence. In the first case, in fact, coordination is mechanic as a response to a stimulus; in the second case, coordination demonstrates a reasoned response to modify the external stimulus and to face the problems that experience presents. In both cases, however, Dewey talks about coordination, since he does not separate stimulus from the response, but he considers both to be deeply linked, because they favor the experience itself, which presents the contemporaneous presence of the material and the spiritual. Thus, the reflex arc formulation is neither physical (or physiological) nor psychological; it assumes a mixed materialistic-spiritualistic existence:

There is simply a continuous ordered sequence of acts, all adapted in themselves and in the order of their sequence, to reach a certain objective end, the reproduction of the species, the preservation of life, locomotion to a certain place. The end has got thoroughly organized into the means. In calling one stimulus, another response we mean nothing more

than that such an orderly sequence of acts is taking place. (EW 5, 104)

In other words, Dewey analyzes the structure of the stimulus-response coordination, which is problematic, determining the constitution of experience and the possibility that the individual has to solve a problem, which, in reality, constitutes the structure of the same experience. Experience cannot exist without problems to solve.

From this perspective, there is a need to know and understand nature and its laws. This effort of knowledge is endless, because nature is “life,” “bios” and for this reason acts and reacts continuously. Every living being is pushed continuously to react to the environment, trying to be in an equilibrium within it. First, the individual acts spontaneously with a will, which will be transformed into a conscious will. In this way, he/she can choose how to orient to the environmental stimulus. The individual needs to fill out all kinds of differences present in nature, determining that the various elements can be functional to improve individual and social wealth.

Descartes considered these problems within the concept of science. For the French philosopher we are supposed to be *ajusté au niveau de la raison* (adapted to the level of reason).<sup>6</sup> Science “speaks” and “works” only through intellectual operations, in which a clear and distinct idea is the only possibility for knowledge. In fact, Descartes imagines nature as an indeterminate space, regulated by reason. “Man” and “Reason” represent a mechanical cog.<sup>7</sup> The concept of the mind and its relationship with the body is fundamental, because in this relation Dewey refutes the Cartesian theory of the mind-body relation. Dewey, in fact, argues that to define the conception of the subject we must study his/her behavior. It is also necessary to study the mind, the brain, and the cerebral organs and how they cooperate with the world to generate experience. In this perspective, the individual generates thought on the basis of its organic structure, body-mind, receiving the sensation produced by the environment.

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<sup>6</sup> See: Renes Descartes, *Oeuvres*, eds. C. Adam and P. Tannery, reprinted with the contribution of H. Gouhier, (Paris: Vrin, 1965).

<sup>7</sup> See: Delfina Giovannozzi and Marco Veneziani, eds., *Natura* (Florence: Olschki, 2008).

For Dewey, the coordination that mind-body generates is experience. The reflex arc theory is studied to understand the importance of the mind in behavior. Since the mind is oriented to function for a continuous communication between the individual and the environment, it is necessary to study the function of the mind in relation to action. It is essential to understand the function that the mind has in the process of experience, in which one's method of knowing, of inquiry, produces knowledge, and above all, shows how to respond to the environment stimulus.

The heritage of Dewey's response to reflex arc theory is his vision of complex mind-body tension, which constitutes the nucleus of Dewey's thought. This is a particular form of pragmatism and finds clear definition at the end of the essay, when he clarifies the true meaning of stimulus-response: "The stimulus is that phase of the forming coordination, which represents the conditions which have to be met in bringing it to a successful issue; the response is that phase of one and the same forming coordination which gives the key to meeting these conditions,

which serves as instrument in effecting the successful coordination” (EW 5, 109).

The epistemological consequences of this theory are based on the principle that sensorimotor coordination is functional in constituting experience and that makes sense only if it is constituted by the possibility to solve the problem. Because of this situation, the continuity between mind-body finds its realization in the reciprocity between the individual and the environment. But this reciprocal and continuous action between the individual and the environment will always further determine the specificity of the individual, in the singularity and unrepeatable situation in which he/she lives. This relation to be concrete must have a necessary correlation with these three phases: mind, body, human action, and, also, inevitably with education.

### **The Philosophical Choice of Education**

Dewey is universally considered one of the most important educational theorists of modern times. His thoughts on education matured in a clear way during his time in Chicago (1894-1904). Exactly in these years, Dewey’s thought

achieved a new decisive orientation in its philosophical, educational, and political dimensions. A clear project focusing on educational issues was determined just in this period. In fact, *My Pedagogic Creed* (1897) is tied to the thought of young Dewey, influenced by the religious, congregationalist education of his mother Lucina Artemisa.<sup>8</sup>

A specific year, 1896, is fundamental for him. In fact, in this year, the philosopher developed his most important theory, and at the same time, in a professional way dealt with his most meaningful germinal theory, and simultaneously he occupied himself with exploring educational issues linked to the school. In fact, 1896 is the year of publication for *The Reflex Arc Concept in Psychology* and also the beginning of the laboratory school experiment, which continued until 1903.<sup>9</sup> Does a connection exist between the laboratory school and this essay? It is

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<sup>8</sup> For more, see: Robert Brett Westbrook, *John Dewey and American Democracy* (Ithaca, NY: Cornell University Press, 1991) [Italian edition edited by Teodora Pezzano (Rome: Armando, 2011)], 83-116.

<sup>9</sup> For more, see: *Ibid.*, 93-111.

fundamental to underline that at the same moment that Dewey broke away from his fascination with the Absolute as a central theme of his philosophy, he built his educational, democratic theory.

*The School and Society* (1899) was a report on the first three years of the activity of the “Laboratory School” at the University of Chicago. It demonstrates the most significant aspect of the relationship between philosophy and education. The second edition of the book, with the addition of certain significant writings, was published in 1915, the year prior to the publication of *Democracy and Education*, which testifies the continuity between philosophy, education, and the construction of democracy in his thought.<sup>10</sup>

There are two principles on which Dewey builds the connection between the theory that emerged from his paper on the reflex arc concept and his idea of the school as the laboratory of democracy. First, the school must necessarily be linked to social progress. As Dewey noted in *The School*

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<sup>10</sup> See: Leonard J. Waks and Andrea R. English, *John Dewey’s Democracy and Education: A Centennial Handbook* (New York: Cambridge University Press, 2017).

*and Society*, this means that the school must construct for society a double action. On one hand, what is studied and organized within the school can influence what happens in the interior of society and, on the other, it is fundamental to what happens to society and, in particular, in its historical, industrial, and scientific transformations (See: MW, 1).

This first principle makes evident how science can be the relation between the school and social progress. “Under present conditions, all activity, to be successful, has to be directed somewhere and somehow by the scientific expert. It is the case of applied science... the scientific insight thus gained becomes an indispensable instrument of free and active participation in modern social life” (MW 1, 15-16). The first principle of the Laboratory School is tied to the fact that the school must help science to develop its possibilities to guide social development in an ever reconstructing democracy. Furthermore, this principle demonstrates clearly how the school must adapt itself to the social situation to transform scientifically a democratic society. Nevertheless, this adaptation, as was already demonstrated in *The Reflex Arc Concept in Psychology*, is a fundamental



characteristic of the school that adapts itself to the social system to achieve a democratic shared goal.

Due to these conditions, the second fundamental principle, which regulates in a certain way the renewal of education in a democratic perspective, is centered on student learning, which is connected to the problem of social life.

A good deal might be said about the studying of the child, but the school is not the place where the child *lives*. Now the change which is coming into our education is the shifting of the centre of gravity. It is a change, a revolution, not unlike that introduced by Copernicus when the astronomical centre shifted from the earth to the sun. In this case, the child becomes the sun about which the appliances of education revolve; he is the centre about which they are organized. (MW 1, 23)

Through the method of “learning by doing,” the student determines his/her centrality in the school, because he/she must reconstruct the meaning of the action in the

environment. However, the student also reconstructs the sense of his/her learning through logical and practical reconstruction with the guide of science and technology.

In this perspective, the teacher is no longer a transmitter of knowledge, but he/she is an expert, a “gardener” who protects and takes care of the learning environment with the aim of reconstructing experience. Probably, for Dewey the teacher is a metaphor for science, which orients in a meaningful way the student’s life and develops his/her embedded powers. The student’s life is guided by science and by school organization in order to avoid waste in education. Organization, then, is a fundamental aspect for the school, according to its cultural and historical traditions (See: MW 1, 45).

Dewey’s reconstruction of educational theory is a fundamental aspect of his research, as matured from his original contribution to the reflex arc concept. Most likely, Dewey explored a specific field of research concerning educational issues, because education and schooling became the verification of his philosophical reconstruction, which was already defined in his work on the reflex arc. Therefore,

that essay exemplifies the model of Deweyan philosophy, which finds in education and in the school an important approach and a further step for theoretical reconstruction. Education, in fact, is the laboratory of a new theory, as the philosopher clarified in a series of successive reflections. However, the relation between the reflex arc concept and educational issues brings forth a further aspect to deepen the Deweyan path.

In fact, the school is a place in which philosophy and education become concrete. For this reason, the relation of reflex arc theory and education brings us to the idea of democracy. The school is the laboratory of democracy, because it is a place in which philosophy finds the possibility of experimentation to build and improve democracy.<sup>11</sup>

Obviously, this topic helps us clarify why the American philosopher chose education as an important aspect of his reflection, as in contradiction to the other philosophers of classical American Pragmatism, in particular, William James and Charles Sanders Peirce. This

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<sup>11</sup> For more, see: Giuseppe Spadafora, *L'educazione per la democrazia. Studi su John Dewey* (Rome: Anicia, 2018).

particularity is determined by his domain of reflective focus. Dewey considered education a decisive aspect of his theory. For this reason, Deweyan theory is quite distinct from other pragmatic and neopragmatic approaches, because the relation between philosophy, education, and democracy is held in a unique way, which they are not in other philosophical methodologies.

Thus, the school is the laboratory of democracy because it determines the intercourse between the diversity of students in a classroom. The classroom is a metaphor for democratic society. The school is a place for the heterogenous learning of students as they develop and hold relationships among each other. The continuous reconstruction of this intercourse determines the possibility of democracy, because it gives the opportunity to organize a system of dialogue and a continuous reconstruction of different cultures. Education, in this perspective, is the origin and the bridge, which links the epistemological structure of the subject-object relation to the political dimension of human action. The heart of Deweyan philosophy is education. This reconstruction generates

values and habits, which can help us to better understand how science can face the mysterious challenge of the pandemic for a new organization of society.

### **Consequences: Resilience and Solidarity during the Pandemic**

It is difficult to assess the importance of a thinker in our contemporary world context. Thus, it is necessary to contextualize an author in his/her historical time and place. Dewey's thought was developed almost in a prophetic way, since his birth in 1859, the same year of the publication of Charles Darwin's *On the Origin of Species*. Furthermore, his life and works waded through the American Civil War, American industrialization, the terrible experiences of two World Wars, economic development, the 1929 crisis and subsequent depression, and the New Deal recovery of American and global capitalist economies. His project of social action as a new theory of liberalism adapted to democracy (as he discusses in *Liberalism and Social Action*) continued throughout these years (See: LW 11). Obviously,

within this network there is the central meaning of science and technology linked to the establishment of democratic development in social democracy.<sup>12</sup> Thus, Deweyan thought may be considered a permanent model of research to better understand democracy in relation to the perspectives of technology and economic development.

In the pandemic situation in which we live, without having a real project for a new educational post-Pandemic paradigm, it is obvious that Dewey's theory, considered as a fundamental root, is a point of cultural reference to understand the aptitudes of the individual to cope with this new situation. The pandemic is a complex phenomenon not well defined. It is not clear when it will cease, even though the vaccines and new medical research and medications should help address this difficult challenge. Undoubtedly, this health emergency could indicate a risk to our survival as a species, but it is also an opportunity to propose a new paradigm on which to organize social life for the next generations.

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<sup>12</sup> For more, see: Larry A. Hickman, *Philosophical Tools for Technological Culture: Putting Pragmatism to Work* (Bloomington: Indiana University Press, 2001).

Probably, Dewey, being open to innovation and social change, would have shared this point of view. Yet, what are the educational values that can be drawn from the Deweyan ideas and theories we have explored, which could be put into practice to define this new cultural and scientific paradigm? From our previous reflections concerning the relationship between reflex arc theory and educational issues, certain epistemological consequences can be drawn out. I think that there are two Deweyan educational values that can be applied to our pandemic situation.

The first value is the need for reciprocal adaptation to the unforeseen changes in the environment. The pandemic clearly demonstrates that only with this mutual adaptation can we become resilient and cope with the difficulties of the new organization of social life. Therefore, resilience to the effects of the pandemic is very important. Such resilience is an expression of the continuous coordination between the subject and its environment. In my opinion, the *Reflex Arc*

*Concept in Psychology* establishes a more dynamic concept of resilience than one can find in contemporary studies of it.<sup>13</sup>

The second value is the solidarity which must be consequent to this resilience, so as to establish the “new individualism” theorized by Dewey (See: LW:5). Solidarity must cope with the world of technology, which Dewey well analyzed throughout his career. In fact, the main problem of our global and digital world is “surveillance capitalism”<sup>14</sup>, understood as the global, digital system governed by the dominant classes to control our society, which has also changed the meaning of the privacy of each individual,

In terms of the first value, the pandemic, inevitably determines an intelligent adaptation of the individual to protect his/her survival and to prevent the risk of illness. This aspect can become an important reference point to clarify the behavior of each individual in this dangerous situation. The individual must acquire resilience to be

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<sup>13</sup> For more, see: Andrew Zolli and Ann Marie Healy, *Resilience. Why Things Bounce Back* (New York: Simon and Schuster, 2013); Alain Goussot, *Pédagogie et resilience* (Paris: L'Harmattan, 2014).

<sup>14</sup> For more, see: Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for A Human Future at The New Frontier of Power* (New York: PublicAffairs, 2019).



prudential so as to prevent and solve the possible risk of an invisible and mysterious enemy (like the virus).

This kind of adaptation which becomes resilience, in relation to Dewey's theory of the *Reflex Arc Concept in Psychology*, is different from Jean Piaget's psychological theory. In Piaget the concept of "assimilation and accommodation," which explains the genetic development of each individual from his/her birth to his/her adult education is not clearly linked to action as connected to the environment.<sup>15</sup> In fact, concerning Deweyan theory, this dimension of individual activity is linked to solving problems. Therefore, the relation between the individual and the pandemic is established by resilience, the willingness to transform individual and social life to reconstruct new social values, while respecting fundamental rights.

The second educational value is a consequence of this resilient behavior. Resilience must not condemn the individual to be isolated in the social world. The individual, during the pandemic, must be resilient, not as a monad, but

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<sup>15</sup> See: Jean Piaget, *L'équilibration des structures cognitives: problème central du développement* (Paris: Presses University de France, 1975).

to promote new social situations. The relation between reflex arc theory and education in Dewey can inspire a new possible form of solidarity in a world dominated by *algorithm dictatorship*.

The pandemic has revealed ever more starkly the possibility of digital control of the world. Due to this risk, education is fundamental to clarify the link between theory and action, and its application to solve problems in a specific situation. In order to realize such an adaptation, however, it is necessary to have faith in the democratic use of science and technology, which is very difficult in our contemporary world. Due to the Pandemic, education is the key for the reconstruction of democracy, that is, if it promotes the transformation of individual resilience in solidarity so as to limit the immense power of digital capitalism.

In certain famous passages of *Democracy and Education* (1916), Dewey deals with the necessity of democracy based on communication, considered as a transmission of values from one generation to another. This transmission can be put in total crisis by an epidemic, which can inhibit social values and thus limit the democratic process (See: MW 9,

6). In reality, the challenge of the pandemic is demonstrating that only with democracy can we avoid the risk of technocratic dictatorship.<sup>16</sup>

In conclusion, the educational values which have clearly emerged for us can constitute the basis to write a new page of *Democracy and Education* during the pandemic. From this perspective, we can understand how in Deweyan educational theory there is a potentiality to extract some educational principles very useful to face this unexpected situation. First, it is fundamental to reconstruct a socially ethical organism to orient the new possibilities of social organization. The need for democracy is based on developing social cooperative networks, which for Dewey were represented by the school, and which today are represented by digital and social networks, and very often by virtual communities. The meaning of democracy today is expressed by digital communities which represent the primary educational values in the social-global world.<sup>17</sup> In

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<sup>16</sup> For more, see: Derrick De Kerckhove, *Connected Intelligence: The Arrival of the Web Society* (Toronto: Somerville House, 1997).

<sup>17</sup> For more, see: Pierre Lévy, *Cyberdémocratie. Essai de philosophie politique* (Paris: Odile Jacob, 2002).

facing the danger of war or catastrophe, democracy ought to be the point of reference for humankind. Probably, the Deweyan idea of democracy as a “way of life” could be even better confirmed by the pandemic, which has demonstrated how an intersubjective philosophy of solidarity is the real significance of democracy.

The second insight we can draw from the Deweyan theory we have explored in this essay is that we need new kinds of social solidarity to face the challenge of this “reset.” The pandemic suggests this new opportunity. It is not possible to survive without new kinds of solidarity which can challenge new global world crises, from climate change and mass migrations to over population and deepening income inequality. Dewey has demonstrated with his theory that a “new individualism” could try to solve the problems of humankind.

I hope that this terrible situation can be overcome by these educational, democratic values that Dewey focused on during his time in Chicago. I also trust that these values can be stronger than the temptation to use authoritarian politics

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to solve the pandemic crisis. Hopefully, this can be the future challenge of humanity. The pandemic could relaunch the question of democracy in the global world, and in this perspective Deweyan educational values will be fundamental for “the task before us.”