## The permanence of change: Empedocles, Dewey, and two kinds of pluralist metaphysics of force

A permanência da mudança: Empédocles, Dewey e dois tipos de metafísicas pluralistas de força

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Abstract: This paper sets forth three main claims. First, in light of an interpretation of Empedocles's pluralistic account of nature (as consisting of the four eternal material or root elements of fire, air, earth and water and the two eternal forces of love and strife), I move beyond a longstanding scholarly dispute (between some commentators who interpret Empedocles as holding that there is an endlessly recurring two-part cosmic cycle and others who hold Empedocles as claiming that there is a single positive movement from cosmic separation and manyness to unity and oneness) to the view that love and strife are an integrated cosmic force that constitutes a permanence of change. It is this view that allows Empedocles to embrace the Parmenidean commitment to the permanence of being (and the impossibility of its passing into non-being) and also to affirm the reality (rather than mere appearance) of the many changes evident in our experience. (And it is this view that the Strasbourg papyrus supports.) Second, I am concerned to establish parallels between this metaphysics of forces and the pragmatism of John Dewey, who held that nature is a mix of the precarious and the stable. The point here is not that Dewey and Empedocles hold the same views; they are separated by radically different accounts in biology, physics, psychology, and morality. The point, rather, is that both set forth metaphysical accounts that are at once pluralistic and centrally attuned to change, process, force, and activity. And it is that Dewey heeded Empedocles's warning not to boast one knows the general nature of things. Third, I want to explain how Dewey's view might be seen as a development of the philosophy of Empedocles-a development in which the notion of process or force or activity is reconstructed without any teleology and in which the notion of root elements is understood functionally rather than ontologically. I take this to be a movement within the development of metaphysical pluralism from being to becoming-a movement in which an Empedoclean focus on force may prefigure pragmatism and, thus, a way of viewing Empedocles as not merely pre-Socratic but also pre-pragmatic.

**Keywords**: John Dewey. Pragmatism. Metaphysics. Force. Empedocles. Permanence. Change. Pluralism.

**Resumo:** Este artigo apresenta três argumentos principais. Primeiro, à luz de uma interpretação da concepção pluralista da natureza de Empédocles (como consistindo dos quatro elementos materiais ou de raiz, do fogo, ar, terra e água, e as duas forcas eternas de amor e conflito), vou além de uma disputa acadêmica de longa data (entre alguns comentaristas que interpretam Empédocles como defensor de um infindo e recorrente ciclo cósmico de duas vertentes, e outros que argumentam que Empédocles afirma que existe um único movimento positivo de separação cósmica e multiplicidade para unidade e unicidade) para a visão que amor e conflito são uma força cósmica integrada que constitui uma permanência da mudança. É esta visão que leva Empédocles a assumir o compromisso parmenidiano com a permanência do ser (e a impossibilidade de sua transformação em o não-ser) como também afirmar a realidade (ao invés da mera aparência) das muitas mudanças evidentes em nossa experiência. (E é essa visão que o papiro de Estrasburgo apóia). Segundo, preocupo-me em estabelecer paralelos entre essa metafísica de forças e o pragmatismo de John Dewey, que argumentava que a natureza era um misto do precário e do estável. A questão aqui não é que Dewey e Empédocles tenham a mesma visão: eles divergem em explicações radicalmente diferentes em biologia, física, psicologia e moralidade. A questão, ao invés, é que ambos apresentaram explicações metafísicas tanto pluralistas quanto centralmente afinadas à mudança, processo, força e atividade. E é que Dewey acatou o alerta de Empédocles de não se vangloriar de saber a natura geral das coisas. Terceiro, gostaria de explicar como a visão de Dewey pode ser considerada como um desenvolvimento da filosofia de Empédocles – um desenvolvimento onde a noção de processo ou força ou atividade é reconstruída sem qualquer teleologia, e no qual a noção de elementos de raiz é entendida mais funcionalmente do que ontologicamente. Considero isso um movimento dentro do desenvolvimento do pluralismo metafísico de ser para se tornar - um movimento onde o foco Empedocliano na força pode prefigurar o pragmatismo e, assim, um modo de considerar Empédocles não como simplesmente pré-socrático, mas também pré-pragmático.

**Palavras-chave:** John Dewey. Pragmatismo. Força. Empédocles. Permanência, Mudança. Pluralismo.

For purposes of context and as an opening admission of the vista before me, I begin with this observation about ancient Greek metaphysics from John Dewey's Experience and Nature:

If classic philosophy says so much about unity and so little about unreconciled diversity, so much about the eternal and permanent, and so little about change (save as something to be resolved into combinations of the permanent), so much about necessity and so little about contingency, so much about comprehending the universal and so little about the recalcitrant particular, it may well be because the ambiguous and ambivalence of reality are actually so pervasive. Since these things form the problem, the solution is more apparent (although not more actual), in the degree in which whatever of stability and assurance the world presents is fastened upon and asserted.  $^{\rm 1}$ 

Almost 2,500 years earlier, seeming to squash from the start the possibility of metaphysics (understood as inquiry into the universal rather than the contingent), Empedocles wrote:

The life of mortals is so mean a thing as to be virtually un-life; their doom is swift, they are blown away and vanish like smoke. Each one forms opinions according to what he has chanced to experience as he drifts about, yet each vainly boasts of knowing the general nature of things. Such universal matters, however, are beyond the reach of sight and hearing, and even beyond the mind's grasp.<sup>2</sup>

Taken by itself (or in combination with the similar observation that "as men live differently the thoughts that come to their minds are different"<sup>3</sup>), this fragment of ancient Greek thought may seem to resonate with George Santayana's observation that different systems of philosophy all mistakenly view as total and universal knowledge their simply partial and particular claims which are always (just) some personal expression from "a chance vista in the cosmic labyrinth."<sup>4</sup> However, Empedocles advised "Friends, I know well that truth resides in what I shall utter; but it is hard for men to accept it, for they are hostile to beliefs that challenge their ways of thinking." And he immediately added that there is a way—a kind of passive reception of revelation rather than active inquiry into our existence—for impermanent mortals, or at least for a few of them, including him, to grasp universal matters and to know the nature of reality:

Avert from my tongue the madness of such men, O gods, and let pure streams of speech flow forth from my reverent lips. And you, O Muse, white-armed and virgin, whom many invoke, come forth from the house of Piety in your well equipped chariot, bringing me such words as are right and proper for ephemeral creatures to hear.<sup>5</sup>

- 3 EMPEDOCLES, fragment 108, p. 137.
- 4 SANTAYANA, 1936, p. 44-47.
- 5 EMPEDOCLES, fragments 114 and 2, p. 139, and 126. See also HARDIE, 2013, p. 209-246.

<sup>1</sup> DEWEY, 1981, p. 46. Hereafter EN.

<sup>2</sup> EMPEDOCLES, fragment 2, 1966, p. 126. I do not in this paper enter into the debate about whether the Strasbourg papyrus fragments prove that "On Nature" and "Purifications" constitute one poem or two, though it seems clear to me (as to Osborne, Janko, Inwood, et. al.) that Empedocles's account of nature is closely interrelated with his views on ethics and religion.

Surely this is a fine wish: Let us have words that are right and proper for ephemeral creatures to hear. Empedocles, of course, thus viewed his own account of the general nature of reality not as a personal expression rooted in some time and place or as a kind of special pleading on behalf of some particular view of reality but, instead, as eternal "pure streams of speech" approved by the gods and inspired by the muses. (Wow: It must be very hard to philosophize this way—approved by the gods and inspired by the muses; I may steal that for the back cover of my next book!).

What then is the general nature of things? What is the nature of reality? What is Being? For my purposes, Empedocles made four main points (and, yes, this does seem fitting given the subject matter). In the first place, Empedocles echoed the claim that Parmenides had made that Being cannot arise out of, or pass into, Not-Being, that nothing can be created out of nothing, that what is always has been and always will be. Being is permanent. Empedocles clearly and strongly agreed with Parmenides on this point:

> They are fools, with no ability to reach out with their thoughts, who suppose that what formerly Was Not could come into being, or that What Is could perish and be utterly annihilated. From what utterly Is Not it is impossible for anything to cometo-be, and it is neither possible nor conceivable that What Is should utterly perish. For it will always be, no matter how it may be disposed of.<sup>6</sup>

What follows from this claim that Being cannot come into or pass out of existence and that the notion of Not-Being is meaningless? It is clear that Parmenides was a metaphysical monist, that he thought Being was one rather than plural or differentiated.Empedocles disagreed, and I take this to be a second main point in his writings. Consider three sub-points here. (i) Parmenides presented no argument, or at least no strong argument, for monism-which may be why Zeno sought to defend him on just this point-and so any defense by Empedocles of some form of pluralism would not undercut conclusions that Parmenides reached merely the assumption with which he began. (ii) It surely is not a logical contradiction to hold both that Being cannot be created from, or perish into, Not-Being and also to hold that Being, though permanent, is plural, that there is more than one kind of permanent Being. And, (iii) many post-Parmenidean ancient Greek thinkers apparently saw no need to present anti-monist arguments but instead simply and "blithely" began with pluralist assumptions.<sup>7</sup> Empedocles thus claimed that there are four-i.e., more than one, i.e, not one-basic elements or materials or kinds of being. Empedocles listed four roots: earth, air, water, and fire. Each of these roots is a Parmenidean one: uncreated, indestructible, unchanging, eternal. In this light, Empedocles can be viewed as having pluralized a Parmenidean philosophy.

Now, Parmenides also denied the reality of motion. To repeat: To be, for Parmenides and Parmenideans whether monists or pluralists, is to be uncreated,

<sup>6</sup> EMPEDOCLES, fragments 11, and 12, p. 127. The point here, I take it is that what might appear to be destruction or passing into Not-Being is not really destruction at all but instead only "disposal" beyond human experience.

<sup>7</sup> See GRAHAM, and DANIEL W., 2009, p. 186-223. And ALTHOFF, 2012, p. 293-299.

indestructible, unchanging, and eternal. Must one next conclude, with Parmenides and Zeno, that motion does not exist, despite appearances—appearances that include Achilles beating the tortoise to the finish line even after beginning behind the tortoise? Empedocles's pluralism allowed him to answer this question in the negative by characterizing motion not as monistic being entering an empty space, a space of Not-Being, but rather as one kind of plural being taking the place (or displacing or replacing or disposing) of another kind of being. Empedocles seems to have thought that he possessed empirical evidence of this process: Noting that water will not enter a tube if one holds a finger over its top end while placing the other end in water, Empedocles observed that as soon as the finger is released then water enters the tube. The water does not wait for the tube to become empty, but flows in as the air flows out the other end. This is motion in a plenum—a possibility if reality is plural—and it is not motion in empty space—considered by Empedocles, as by Parmenides, to be a logical impossibility.<sup>8</sup> For my purposes, this is a third major point in Empedocles's philosophy. The permanent plural root elements, Empedocles held, move and divide (though they do not change qualitatively or become indistinct) in a permanent, unchanging process of change and impermanence. Empedocles wrote that in so far as the nature of things "consists in growing out of many into one and then being parted as under again out of one into many, they are changeable and have no lasting life; but in so far as they never cease from continuously interchanging, in that respect they are unalterable as they continue on their course."9 This is a twofold process with qualitatively plural, vastly plural, results, as Empedocles explained:

> At one time there grew to be a single One out of many, while at another time it divided itself to make many out of One. Twosided is the coming-to-be of perishable things, and two-sided is their passing away. The uniting of all things both creates and destroys; while the contrary phase involves both growth and scattering as thing become divided. And this thoroughgoing interchange never ceases; at times all things are united by the power of Love, while at other times they are repulsed and borne apart by the hostile force of Strife.

He continued:

Thence have sprung all the things that ever were, are, or shall be—trees and men and women, beasts and birds and waterdwelling fishes, and even such honored bings as the longlived gods. In reality there are only the basic elements, but interpenetrating one another they mix to such a degree that they assume different characteristics.<sup>10</sup>

<sup>8</sup> See, for example, fragment 100, p. 135-136.

<sup>9</sup> EMPEDOCLES, fragment 17, p. 129. See also SHAW, 2014, p.170-193. And, in the context of Empedocles and Deleuze and Guattari rather than Empedocles and Dewey, see MACAULEY, 2005, p. 281-314.

<sup>10</sup> EMPEDOCLES, fragments 16, 17, and 21, p. 128-129, 130.

And so the coming to be and passing away that we seem to experience is not really the creation or destruction of Being. It is simply the permanent "interpenetrating" by which the four root elements "become one thing in one place and another in another," mixing "to such a degree that they assume different characteristics" for ephemeral minds. And for good measure, Empedocles added this: "Let not your mind fall into the error of supposing otherwise, since you have heard the tale from a divine source."<sup>11</sup>

This permanent two-fold process of change is the result of two permanent forces. The operation of these two forces is what I am calling "the permanence of change" (But which equally accurately might be termed "the change of permanence") in the writings of Empedocles: "Change goes incessantly on its course."<sup>12</sup> I take this to be the fourth point of central importance in his philosophy. To explain the motion and change that we experience as the incessant interpenetration of metaphysically root elements, Empedocles set forth a metaphysics of force—or, more exactly, a metaphysics of two forces. One of these forces is unification, a process of drawing together. Empedocles described this force as a growing "to be a single One out of many," "the uniting of all things," and a coming together of all parts "so as to be a single whole."<sup>13</sup> The other force is differentiation, a process of individuation. Empedocles characterized this force as Being dividing "itself to make many out of One," a "scattering," and a carrying "off in different directions."<sup>14</sup> Emphasizing that these two forces are permanent and stressing that they are both always present and integrally reciprocal, Empedocles called these forces Love and Strife: "These two forces, Strife and Love, existed in the past and will exist in the future; nor will boundless time, I believe, ever be empty of the pair."<sup>15</sup> He continued:

Now one prevails, now the other, each in its appointed turn, as change goes incessantly on its course. These alone truly are, but interpenetrating one another they become men and tribes of beasts. At one time they are brought together by Love to form a single order, at another they are carried off in different directions by the repellant force of Strife; then in course of time their enmity is subdued and they all come into harmony once more. Thus in the respect that by nature they grow out of many into one, then divide from one into many, they are changing things and their life is not lasting, but in respect of their perpetual cycle of change they are unalterable and eternal.<sup>16</sup>

In this light, Empedocles is commonly said to have set forth a pluralism that ran to six kinds of things: the four root elements (that do seem to mix and move on their own in some passages) and the two basic forces of love and strife.

<sup>11</sup> EMPEDOCLES, fragments 17, 21, 23, p. 129, 130, 131.

<sup>12</sup> EMPEDOCLES, fragment 26, p. 131.

<sup>13</sup> EMPEDOCLES, fragments 17, 36, 35, p. 129, 131, 132.

<sup>14</sup> EMPEDOCLES, fragments 17, 26, p. 128, 131.

<sup>15</sup> EMPEDOCLES, fragment 16, p. 131.

<sup>16</sup> EMPEDOCLES, fragment 26, p. 131.

And in this same light, Empedocles (who defended a doctrine of reincarnation even though his account of death as the separation of material elements seems to leave little basis for belief in immortality) is frequently viewed as having anticipated Darwinian evolutionary theory (including the notions of the survival of the fittest and change brought about by chance rather than design). Empedocles wrote that as the mingling of the eternal root elements "went on, innumerable kinds of mortal creatures of great diversity of forms were produced and scattered forth—a wonder to behold!" He continued:

There sprang up on earth many heads without necks, arms wandering unattached to shoulders, and eyes straying about in want of foreheads. Isolated limbs were wandering about. [...] Many creatures were born with faces and chests turned in different directions. There were offspring of oxen with faces of men, while on the other hand there were human offspring that had the faces of oxen. And there were creatures in which the masculine and feminine natures were combined, the result of which was sterility. [...] There were shambling creatures with innumerable heads. [...] As daemon copulated with daemon, things came together by pure chance, with the result that many novelties sprang into being."<sup>17</sup>

Empedocles thus presented us with an eternally changing and qualitatively pluralistic world, an always in-process mixing of unchanging root elements that constitute identity and individuation, unity and multiplicity, one and many. Empedocles claimed that Love and Strife are eternal forces and that their results are matters of chance rather than purpose—indeed, he even observed that "It is by chance that men have come to conscious thought."<sup>18</sup> However, at the same time, Empedocles made two other clusters of claims that seem to be in tension with this metaphysics of force. First, he called this whole process "god" and he worshipped it (as, for examples, Xenophanes had worshipped the world process he described). He claimed both that god, this process, cannot have human characteristics and also that god is, or has, mind:

It is not possible to reach out to God with our eyes, nor to take hold of him with our hands—the two most usual ways of persuasion that lead into men's minds. He has no human head fitted on to his body, nor does a pair of wings branch out from his back; he has no fee, nor hairy parts. He is purely mind, holy and ineffable, flashing through the whole world with swift thoughts.<sup>19</sup>

Even if they are as Empedocles claimed, why are Love and Strife—god—to be worshipped? How can Love and Strife—god—be purely mind if mind is a product

- 17 EMPEDOCLES, fragments 35, 57, 58, 60, 59, 62, p. 133, 134, 135. See also TRÉPANIER, 2014, p. 172-210.
- 18 EMPEDOCLES, fragment 103, p.137.
- 19 EMPEDOCLES, fragments 133 and 134, p. 140.

of the intermingling of these two root forces? More broadly still, how can the coming to be of new things from eternal things happen? And how can the eternal things recombine but stay separate? Here in the conversion of cosmic temporal chance to divine eternal mind, metaphysics may seem to have become, or still be, theology.

Second, Empedocles appeared to believe that he lived after a bygone age of harmony and innocence in which love prevailed—"All creatures, beasts and birds alike, were tame and gentle to man, and friendly feelings were kindled everywhere"— and in a (then) present time of evil and strife—"a land without joy, where bloodshed and wrath and agents of doom are active; where plagues and corruption and floods roam in darkness over the barren fields."<sup>20</sup> Empedocles described each evil and wicked mortal of this time as "a fugitive from the gods and a wanderer at the mercy of frenzied Strife."<sup>21</sup> And he asked, as we today might do well to ask: "Will you not cease from the evil noise of bloodshed? Do you not see that you are devouring one another in heedlessness of mind?"<sup>22</sup> If one is a wanderer at the mercy of Strife (and Love)— god—how can one be a fugitive from god? Why is a life of greater individuation and differentiation and even antagonism heedless of mind—god—Love and Strife themselves—than a life of greater holism, unification and even harmony? Here, in the linkage of cosmic forces to a program of personal purification, metaphysics may seem to become a conservative moral system or cultural quietism.

Now, there is much in Empedocles's metaphysics that may make it appear a contemporary vista in the cosmic labyrinth: Its human world is *pluralistic*; it makes *change* the central, permanent fact of the world and lives of human beings (who are transient events and, like all mixtures, not permanent or root elements but existences of a secondary sort whose very individuality is incompatible with immortality); as such, it is a *process or activity* metaphysics rather than a metaphysics of substance— or at least a process phenomenology in its location of the centrality and irreducibility of change within human experience;<sup>23</sup> and, it is process in which multiple *forces*, energies, and powers are at work.

Even so, clearly there is something decidedly ancient rather than contemporary in Empedocles's doctrine of forces. For example, today physicists claim that there are four, not two, fundamental forces in our universe. Instead of Love and Strife, we now have strong interaction (holding together nuclei of atoms), weak interaction (at work in radioactive decay and neutrino interactions), electromagnetic force (creating electric and magnetic effects) and gravity or gravitational force (matter's long range attraction). The relevant point here is not whether there are four forces or two or one or some other number,<sup>24</sup> but rather the very different conception of force itself that

- 20 EMPEDOCLES, fragments 130, 121, p 140.
- 21 EMPEDOCLES, fragment 115, p. 142.
- 22 EMPEDOCLES, fragment 136, p. 142.
- 23 Empedocles claimed, for example, that "There is no substance of any of all the things that perish nor any cessation for them of baneful death. They are only a mingling and interchange of what has been mingles. Substance is but a name given to these things by men." Fragment 8, p. 129.
- 24 Here I take it that physicists who disagree with each other about, for example, warrant for a Grand Unified Theory of force or a Superunified Theory of force share relevantly similar conceptions of force in their efforts to make sense of the universe.

stands separate from any moral theory, theology, or teleology. I cite just three short definitions of this very different contemporary conception of force:

(The intensity of) an agency or influence that produces or tends to produce a change in the motion of a moving body, or produces motion or stress in a stationary body; the cause of motion, heat, electricity, etc., conceived as a principle of power.<sup>25</sup>

A force is a push or pull upon an object resulting from the object's interaction with another object. Whenever there is an interaction between two objects, there is a force upon each of the objects. When the interaction ceases, the two objects no longer experience the force. Forces *only* exist as a result of an interaction.<sup>26</sup>

In general, a force is an interaction that causes a change. In mechanics, a force is that which causes a change in velocity or, if you prefer, that which causes an acceleration. When more than one force acts on an object it is the net force that is important. Since force is a vector quantity, use geometry instead of arithmetic when combining forces. External force: For a force to accelerate an object it must come from outside it. You can't pull yourself up by your own bootstraps. Anyone who says you can is literally wrong.<sup>27</sup>

This naturalistic account of force is one example of what American philosopher John Dewey in works such as *Experience and Nature, Logic: The Theory of Inquiry,* and *The Quest for Certainty* called modern science presenting "us with an immense amount of material foreign to, often inconsistent with, the most prized intellectual and moral heritage of the western world" (EN, 5). As such it is a site of naturalistic and experimental method's destruction, "winnowing," and transformation of things once treasured—including Empedocles's pluralistic philosophy of change, process, and force. The destruction that naturalistic method.

What are the steps or stages in this winnowing that transforms Empedoclean pluralism and its forces into pragmatic pluralism and its forces? I believe there are three. First, Dewey rejected Empedocles's two-tiered or dualistic metaphysics that posits both a timeless and unchanging reality—the four root elements and the two eternal forces—and also an ephemeral and changing, always intermixing and shifting human experience. Because Empedocles, following Parmenides, thought that Being could not come into existence or pass out of existence, if he was to account for change and motion at all, he had to consign it to the order of human experience rather than the order of the general nature of things. Dewey, of course, rejected this reality/ appearance dichotomy declaring that "experience is not a veil that shuts man off from nature; it is a means of penetrating continually further into the heart of nature" (EN, 5). As the extinction of species and the having of children, climate change and gardening, earthquakes and homebuilding, pandemics and software viruses, fossils and death, loves lost and loves sustained and renewed, and the careers of ideas all show-so many meteors passing this way only once, the real things of experience change. It is not simply that experience changes; nature changes.

<sup>25</sup> The New Shorter Oxford English Dictionary (Oxford: Clarendon Press, 1993), p. 998.

<sup>26</sup> The Physics Classroom: http://www.physicsclassroom.com/class/newtlaws/Lesson-2/ The-Meaning-of-Force

<sup>27</sup> ELERT: http://physics.info/newton-first/

For Dewey and pragmatists more generally, this meant that Empedocles's unchanging root forces, strife and love, must be re-understood within experience and nature itself: Strife and love are recast as the precarious and the stable. But unlike Empedocles's unchanging, unchanged root elements and forces,<sup>28</sup> even the stable in experience and nature is precarious, in process, undergoing change, and anything but permanent:

Anything that can exist at any place and at any time occurs subject to tests imposed upon it by surroundings, which are only in part compatible and reinforcing. These surroundings test its strength and measure its endurance. As we can discourse of change only in terms of velocity and acceleration which involve relations to other things, so assertion of the permanent and enduring is comparative. The stablest thing we can speak of is not free from conditions set to it by other things [...] The fixed and unchanged being of the Democritean atom is now reported by inquirers to possess some of the traits of his nonbeing, and to embody a temporary equilibrium in the economy of nature's compromises and adjustments. A thing may endure *secula seculorum* and not be everlasting; it will crumble before the gnawing tooth of time, as it exceeds a certain measure. Every existence is an event. (EN, 63).

Dewey's philosophy thus reversed, or stood on its head, the thought of (Parmenides and) Empedocles. Here we have not the permanence of change—root elements always interacting—but rather the change of permanence—ephemeral motion without metaphysical root, substance, or essence. For Dewey, every being has come into existence, every being exists (when and as it exists) only relatively, and every being perishes from existence (whether relatively quickly or relatively slowly).

The second step or stage in the transformation of Empedoclean pluralism into pragmatic pluralism concerns force. It is not simply, as noted above, that Dewey explicitly took up a modern scientific conception of force that involves no teleology, no theology, and no morals; it is also that Dewey extends pluralism to forces themselves. For Empedocles the four root elements may be combined in infinite ways by the two root forces. But there are two, and only two forces and these forces are separate from the root elements on which they work. Two subpoints of contrast are important here.

(A) Dewey viewed force not as some existent separate from and independent of other things but as the result of one object's interaction with another. Force is no more separate from change of motion or objects in motion or interactions of things than, for example, stimulus is separate from response in a non-disjointed, fundamentally unified stimulus-response circuit.<sup>29</sup>It is transactional; it is "double-barreled."

<sup>28</sup> For an interpretation of Empedocles that stresses fluidity rather than fixed elemental substances, see BUTLER, 2005, p. 215-231.

<sup>29</sup> See DEWEY, 1972, p. 96-110.

(B) On a naturalistic, pragmatic view the operation of force is not one-directional. Motion, change, interaction are all pluri-directional. Dewey explained:

There is no action without reaction; there is no exclusively oneway exercise of conditioning power, no mode of regulation that operates wholly from above to below or from within outwards or from without inwards. Whatever influences the changes of other things is itself changed. The idea of an activity proceeding only in one direction, of an unmoved mover, is a survival of Greek physics. It has been banished from science but remains to haunt philosophy. [...] Natural events are so complex and varied that there is nothing surprising in their possession of different characterizations, characters so different that they can easily be treated as opposites. Nothing but unfamiliarity stands in the way of thinking of both mind and matter as different characters of natural events, in which matter expresses their sequential order, and mind the order of their meanings in their logical connections and dependencies. (EN, 65-66).

What Dewey wrote about the terms "mind," "matter," and "consciousness" might well be extended to term "force": "It is a plausible prediction that if there were an interdict placed for a generation upon the use of mind, matter, consciousness as nouns, and we were obliged to employ adjectives and adverbs, conscious and consciously, mental and mentally, material and physically, we should find many of our problems much simplified" (EN, 66). As Jessica Wahman has reminded me, Charles Peirce made this point about 50 years earlier in his well-known" How to Make Our Ideas Clear:"

Whether we say that force *is* an acceleration, or that it *causes* an acceleration, is a mere question of propriety of language [...] The idea which the word "force" excites in our minds has no other function than to affect our actions, and these actions can have no reference to force otherwise than through its effects. Consequently, if we know what the effects of force are, we are acquainted with every fact which is implied in saying that a force exists [...]<sup>30</sup>

For a naturalistic metaphysics of the permanence of change, forces of change themselves change. Here it is process not just part way down but all the way down.

This points directly to the third step or stage in the transformation of a pluralistic metaphysics of force of the Empedoclean variety to the Deweyan type. For Empedocles, the root forces of Love and Strife may be worshipped but they cannot be changed—they do not change—they certainly cannot be changed by human beings. They may be understood—and in this understanding we may change ourselves, we may "purify" ourselves or entreat each other to refrain from bloodshed—but the forces of this Being cannot be changed. This fact renders philosophy a theoretical

<sup>30</sup> EP 1:136.

enterprise; indeed, given this sort of metaphysics, the very notion of a pragmatic philosophy appears to be a contradiction in terms.

If philosophy, this sort of philosophy, is born in wonder, its gods are born in fear and experienced helplessness and its piety is ultimately quietist and turned away from everyday and practical matters. As Dewey observed (and this is a point that he made over and over in many books):

> The need for security compels men to fasten upon the regular in order to minimize and to control the precarious and fluctuating. In actual experience, this is a practical enterprise, made possible by knowledge of the recurrent and stable, of facts and laws. Philosophies have too often tried to forgo the actual work that is involved in penetrating the true nature of experience, by setting up a purely theoretical security and certainty. The influence of this attempt upon the traditional philosophic preference for unity, permanence, universals, over plurality, change and particulars is pointed out, as well as its effect in creating the traditional notion of substance, now undermined by physical science. [...] We long, amid a troubled world, for perfect being. We forget that what gives meaning to the notion of perfection is the events that that create longing, and that apart from them, a 'perfect' world would mean just an unchanging brute existential thing. (EN, 5, 58).

A philosophy that does take up these practical matters is melioristic. It is without advance or certain guarantee but it has hope that problems may be ameliorated a least a little, that the stable and the precarious may be adjusted or readjusted at least a little (or in reconstructed Empedoclean terms that we can create more love and less strife), that our greater satisfactions and fulfillments may be enacted in the "interest, thinking, planning, striving, consummation and frustration" that Dewey called "a drama enacted by forces and conditions" (EN, 67).

A philosophy born of such hope, rather than mere wonder, requires (if that hope is to be more than mere wish) a strenuous faith in possibilities, a strenuous faith in powers, and a strenuous faith in choices. Precisely because this is a matter of faith, it is not possible to provide justification in advance of action rooted in it. In this sense, perhaps intelligence, as understood in Dewey's philosophy, is a kind of force to be worshipped—if worshipped more at construction sites and in laboratories than on prayer rugs or in churches. From this perspective, however, it does not follow that our choice of gods is arbitrary, at least not, as Dewey remarked, "in a universe like this one, a world which is not finished." He added:

Or, if we call it arbitrary, the arbitrariness is not ours but that of existence itself. And to call existence arbitrary or by any moral name, whether disparaging or honorific, is to patronize nature. To assume an attitude of condescension toward existence is perhaps a natural human compensation for the straits of life. But it is an ultimate source of the covert, uncandid and cheap in philosophy. (EN, 67).

This marks the difference between, on the one hand, philosophy itself understood as a force of mere wonder and registration and, on the other hand, philosophy understood as a force of imagination, hope, and will. But along with this very large difference, perhaps there is a shared point, one marked more by love than strife, a bit of harmony among different metaphysicians .Perhaps both Empedocles's pluralistic metaphysics of force and also Dewey's pluralistic metaphysics of force, each taking its own sincerity as truth for all, advises: "Friends, I know well that truth resides in what I shall utter; but it is hard for men to accept it, for they are hostile to beliefs that challenge their ways of thinking."<sup>31</sup>And if so, as George Santayana realized, perhaps a consequence—not the origin, but a consequence—of all metaphysics might be a smile.<sup>32</sup>

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- 31 EMPEDOCLES, fragments 114, p. 139.
- 32 I mean to recall Santayana's observation at the beginning of *Scepticism and Animal Faith*: "Here is one more system of philosophy. If the reader is tempted to smile, I can assure him that I smile with him [...] I am merely attempting to express for the reader the principles to which he appeals when he smiles. (New York: Charles Scribner's Sons, 1923), p. v.

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Data de envio: 13-11-16 Data de aprovação: 10-12-2016