A TASK OF OURS THROUGH AN UNUSUAL COMPARISON

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This paper is an attempt to make sense of James's conception of truth as a valid source of philosophical inspiration to Newton da Costa's paraconsistent notion of *pragmatic truth*, later called *quasi*truth. Typically, da Costa's quasi-truth is more easily understood as an attempt to give a mathematical interpretation of Peirce's convergent theory of truth. However, da Costa publicly recognized his own preference for James's writings rather than for Peirce's. From this initial motive, the paper proceeds to the difference between Peirce's and James's brands of pragmatism. From this, I address Peirce's conception of inquiry as truth-oriented. Next, I pass to James's account of truth and purposiveness. I then move to what James intended to reject, noting one divergence concerning Peirce's proposal. I then criticize formal definitions of truth, which leads to considering what it means to verify truths and why James's theory of truth, in spite of being not particularly mathematical, can still retain value for exact or quasi-exact scientists. The last section is a sort of incitement grounded upon contemporary art directed at anyone who pursues and values truth over lies.



n 2012, at the 15th Meeting of the Brazilian Association for Graduate Studies in Philosophy (ANPOF), in Curitiba-PR, I asked Professor Newton da Costa about the possible relationship of his ideas on truth with American pragmatism, particularly C. S. Peirce. As is known, da Costa has engaged with Peirce's theory of truth, not to make an exegesis of the latter's ideas, but treating them as a source of motivation for his own theory of pragmatic truth. 1 Within da Costa's body of work, this is not an isolated claim, being repeated always with a cautious note: even though the notion of pragmatic truth is not exegetic, it mainly stems from the ideas of Peirce, with James and Dewey being secondary. Parting from Peirce, inspired by him, but without merging in his ideas to the point of indistinguishable conflation, da Costa developed his original notion of quasi-truth: "Maybe it would be better to call our kind of truth quasi-truth, instead of pragmatic truth."² Quasi-truth is indeed not a philosophical theory of truth, rather it is a formal definition of truth, which can be philosophically interpreted as "an epistemic possibility of truth." As widely remarked, the notion of quasi-truth as worked out by da Costa captures essential features of Peirce's definition of truth as the end of inquiry, e.g., the idea of self-correction over time, or the derivation of predictions from hypothetical propositions about practical consequences, or even the notion of satisfiability in a logical system, about which Peirce's ideas appear as forerunning Tarski's semantic conception of truth. 4 So, da Costa's quasi-truth is a mathematical treatment of Peirce's general account, using the logico-mathematical machinery of the twentieth century. Given Peirce's concerns with probability and statistical methods, this makes a lot of sense. However, in 2012, Prof. da Costa answered me in a surprising way. His own words were something like: "It has to do yes, of course. Truth is what works. And I have always preferred James to Peirce. I read a lot of James, how well he writes! I like James better than Peirce because James is more literary, his prose flows. Of course, I like Peirce a lot too, I admire him a lot, but Peirce ... well, Peirce is too much logical." Besides being absolutely unexpected, coming from whom it does, these statements

notwithstanding all we know, give other clues about how da Costa philosophically understands truth. And, if the conceptual denomination of his theory changed from pragmatic truth to quasitruth—the Latin prefix meaning as if to highlight the conventional character of the idea—this nonetheless should not stop us short of trying to identify a Jamesian stream in da Costa's proposal.⁶

Now, at least one aspect of da Costa's quasi-truth can be criticized from a Peircean perspective, to wit, its reduction of scientific inquiry to language:

Inquiry is controlled by the scientific community, being a social task. Therefore, it seems reasonable to suppose that *practice* can be identified with a collection of *primary statements*, which one can use to test, between certain limits, the propositions (theories and hypotheses) obtained in the way of inquiry.⁷

From a Jamesian perspective, this would be too restrictive as well, since James is trying in fact to expand Peirce's primordial ideas from the practice of science to everyday practice. Nonetheless, da Costa's mathematical definition of pragmatic truth as quasi-truth preserves the essential idea of the partial and incomplete nature of our knowledge, which nonetheless makes it less useful and employable, be it scientific, as for Peirce, or quotidian, as for James.

So, my plan will first be to present Peirce's ideas; then, pass on to James's; then, finally, to highlight da Costa's most important points in his philosophical interpretation of his own theory in comparison to my presentation of Peirce's and James's points. Of course, my exegetical aim might not seem interesting from da Costa's own perspective. However, my suggestions can—at least, I hope—be helpful in clarifying how James's understanding of truth can be interpreted as a resource for a philosophical interpretation of Newton da Costa's quasi-truth.

THE BIRTH OF PRAGMATISM

James was indeed the very first person to use the word "pragmatism," in a public lecture and in print, as a denomination for

his own philosophy. He used it at a conference on August 26, 1898, before the Philosophical Union of Berkeley University. Shortly after, the conference was published in the *University Chronicle* under the title "Philosophical Conceptions and Practical Results." In this lecture, James attempted to show his audience "the most likely direction in which to begin on the path of truth," in the course of which he introduced the "principle of practicalism or pragmatism," explicitly naming it "Peirce's principle," since he states he has heard it from Peirce's own mouth in the early 1870s. 8 As the common story goes, Peirce came to invent his ugly word "pragmaticism" to differentiate himself from such readings of his "principle" as James's. As a matter of fact, Peirce seems not to have used the term "pragmatism" in his own writings until James started talking about it, for the "principle" was originally thought of as a method for the clarification of conceptual terms; that is, with a view to eliminating intellectual confusions of a purely formal nature. Let us see Peirce's context first.

Against the background of modern philosophy, Peirce sought to overcome the characteristic subjectivism of his antecessors. His opinion is that modern philosophy was insufficient to explain the success of science, attached as it was to mentalistic conceptions. Peirce considered as quite inappropriate the categories of clearness and distinctness of thought, as Descartes defined and bequeathed to all philosophers who followed him. The point should rather be to explain objective knowledge resorting to an objective methodology, and not to a subjective epistemology. So, Peirce argues, to achieve a higher degree of clarity in our conceptions, we should not think in terms of what is clearer or more distinct to us, since we may be wrong about how clear an idea actually is no matter how familiar we are with it. Besides, "to accept propositions which seem perfectly evident to us is a thing which, whether it be logical or illogical, we cannot help doing." Peirce also refuses to allow that the clarity needed may come from establishing the definition of a concept, such as Leibniz defended. Of course, although "nothing new can ever be learned by analyzing definitions," we can put our ideas in order by defining them and reach a further degree of clarity. ¹⁰ But this is not

good enough for Peirce, to whom a third and higher degree of clarity comes only if we relate our concepts with our actions. This is the point when the pragmatic maxim is introduced:

Consider what effects, which might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object.¹¹

Read in isolation, this passage is rather difficult. But, from the context, we capture the suggestion of verificationism, as the author immediately adds: "our idea of anything is our idea of its sensible effects."12 These sensitive effects, together with the repeated use of "conceiving," give the maxim a psychological tone Peirce will later seek to eliminate, and James will retain in a very personal interpretation. The expression "practical bearings" nonetheless reveals Peirce's main intended point: we may be mistaken even when we use a conception in a definition, but when we actually use it, when the conception is described in our practical uses of it, there is little space as to how it should be interpreted. This is highlighted in later formulations of the maxim, where Peirce emphasizes circumstances and desires¹³ and existential situations.¹⁴ The emphasis falls not on consciousness, but on a logical and rational process of production of possible meaning, which makes a good candidate for being mathematized. The pragmatic maxim is primarily a logical principle relevant to the scientific method, not psychology, its main function being to help us select hypotheses, which makes pragmatism a logic of abduction. 15 However, more than a criterion for ascertaining formal meanings, Peirce states a maxim implying logical and practical consequences: how we should act once we accept certain habits of thought or conventions of meaning. This sense becomes clearer when Peirce returns to the topic after James starts talking about pragmatism, especially in the treatment of concepts such as truth, reality, probability, etc. In fact, if we experimentally test a theory that we believe is true, we expect certain effects to happen, preparing ourselves to face certain

practical consequences. If nothing we expect happens, the maxim tells us that something in our conceptions is not consistent with what is observed, and this influences not only our way of thinking, but above all our way of acting.

Now, consider James's rendition of Peirce's words:

To attain perfect clearness in our thoughts of an object, then, we need only consider what effects of a conceivably practical kind the object may involve—what sensations we are to expect from it, and what reactions we must prepare. Our conception of these effects, then, is for us the whole of our conception of the object, so far as that conception has positive significance at all. ¹⁶

In spite of being more specific than Peirce, James is also vague in a sense. For one can wonder whether it is possible to determine how one should understand "effects of a conceivably practical kind" in relation to the meaning of any idea, since not every practically conceivable consequence of an idea necessarily defines its meaning, for "may involve" is rather vague. Lastly, James's identification of practical consequences with "sensations" and the restriction to "positive significance" give his expression of Peirce's ideas a very authentic one sufficiently distant from the latter's original methodological context. As will be clearer from now on, the main difference is that James is developing the human consequences of Peirce's formulations rather than trying to understand how science works. All this vagueness of expression is really intended by James, as he professes: "I think myself that it [i.e., the principle of pragmatism] should be expressed more broadly than Mr. Peirce expresses it. The ultimate test for us of what a truth means is indeed the conduct it dictates or inspires."¹⁷

The main point of disagreement would be James's psychological reduction of the expression "practical bearings" in the original formulation of the pragmatic maxim to particular subjective reactions and sensations. As soon will be seen, this is fair enough for James's rendering of Peirce's expressions. However, if carefully read, Peirce's complaint does not say exactly that he disagreed with

James. Instead, the passage can be read as a token of Peirce's toleration of James's psychologism (and possibly of F. C. S. Schiller's "humanism" as well). Peirce's explicit motivation for naming his doctrine pragmaticism was his dissatisfaction with the use of the term pragmatism in too loose a way in "literary journals, where it gets abused in the merciless way that words have to expect when they fall into literary clutches." The proper way to understand this passage is, in my opinion, that Peirce never saw the differences between his pragmaticism and James's pragmatism as insurmountable. Given the way James himself introduced the term, this can be fairly stated for him as well.

Do I mean to say there are differences? By all means, absolutely. My point is that, besides their acknowledged differences, there is still much in common to regard Peirce's and James's projects as complementary in strong and fruitful ways. In the following, I will stress the differences, hoping in the end they lead us to understanding them as complementary perspectives. As I think James's dedication of his *The Will to Believe* to Peirce should be taken as seriously as it is, let us first examine Peirce's ideas before turning to James's.

PEIRCE ON INOUIRY AND TRUTH

For Peirce, truth is an opinion, so it is semiotic in nature: a sign of the agreement between reality and what we assert about it, the conformity of a sign and its object, the result of our inquiries. ¹⁹ So, it is not transcendental or lofty in any sense, it is mundane and utterly intelligible, without being like just any common arbitrary opinion whatsoever: in the ultimate end of inquiry, truth will be that opinion that represents whatever inquiry discovers is the real. So stated, it seems Peirce is adhering to some sort of correspondent theory of truth; that is, the agreement between signs and their objects that in the ideal end of inquiry will—hopefully—be achieved. As such, this type of agreement is not a given, but we need to search it out. The importance of research follows: if pursued long enough by the right methods, inquiry will sooner or later lead us to discover truth. In other words, we will arrive at a satisfactory opinion about reality, capable of expression in sufficiently abstract signs. ²⁰

This is, in a few words, Peirce's notorious theory of the convergence of inquiry to truth, which during the twentieth century received vehement criticism by many important philosophers and epistemologists. Would it mean scientific method is infallible, that is, that there are no errors in scientific research? Would it mean there is an a priori truth since forever? Now, all of this seems absurd and implausible, given Peirce's radical fallibilism, according to which our knowledge is imperfect and we can never be sure our predictions will be verified, his adherence to the principle of synechism, according to which continuity is real and pervasive in experience, and his doctrine of tychism, according to which chance is objective and operative in nature. It is impossible to address here all aspects of or criticisms to Peirce's theory, but it is possible to clarify some basic points.

Let us recall pragmaticism, a term "ugly enough to keep itself safe from kidnappers," as Peirce ironically came to say. ²² Peirce chose this label to differentiate his specific methodological understanding of pragmatism as a method for clarifying the meanings, not of all ideas, but only of "intellectual concepts." ²³ To achieve the maximum degree of clarity in our intellectual conceptions, then, we should imagine where they would take us in practice, that is, what course of action could possibly follow from them.

Recovering modern philosophy once more, let us remember beliefs were held by Hume to be "nothing but the vivacity of those perceptions they present." But Peirce maintains that a belief is a sort of a willingness to act, claiming pragmatism is but a corollary of this idea. Shat he essence of a belief "is the establishment of a habit; and different beliefs are distinguished by the different modes of action they bring about," beliefs prompt us to act. Doubts, on the contrary, interrupt our mental habits, paralyzing our actions. When we become dissatisfied with our opinions, doubts irritate us. So, we feel the urge to inquiry to get rid of doubts. Doubt is indeed the driving force of investigation, the object of which is the establishment of belief. If the function of thought, as Peirce says, is to guide our actions, to clarify habits of thought is to clarify rules of

action: what kinds of habits lead to what kinds of action? Inquiry comes to an end only when another opinion capable of settling doubt is reached, whether true or false. Truth alone is not capable of prompting us to investigate or resolve our doubts, because it is independent of us; it is not given from the start, it is discovered in the end. Hence the importance of pursuing the right methods: fixing beliefs is not enough; we need to find a way of fixing true beliefs. The intertwinement of truth with belief and doubt is encapsulated in Peirce's remark: "Your problems would be greatly simplified, if, instead of saying that you want to know the 'Truth,' you were simply to say that you want to attain a state of belief unassailable by doubt."²⁷

Let us remember that Peirce's original perspective on scientific methodology lies in his insistence upon non-deductive methods of inquiry, most notably on abduction, besides the more popular induction and deduction.²⁸ Abduction is probably more correctly defined as the instinctive capacity or inference to an explicative hypothesis. For Peirce, the very logic of scientific advancement proves that "man's mind must have been attuned to the truth of things in order to discover what he has discovered." This is the only plausible hypothesis to explain the advancement of modern science: "unless man have a natural bent in accordance with nature's, we have no chance of understanding nature, at all."29 According to Peirce, this is what Galileo Galilei meant with "il lume naturale": a natural ability of the human mind to guess correctly. For Peirce, human beings, like all other animals, developed instincts to the conservation of the species. Human rationality, defined as the instinctive capability of guessing rightly, developed in the same evolutionary way. This continuity between human mind and nature grounds the refusal of a substantial duality between matter and mind, subject and object, theory and practice. Since such continuity does not guarantee that we will unavoidably obtain truth, it is only the first step of inquiry, for instinctive suggestions must be submitted to experimental testing. ³⁰ Now, what interests us here is that such continuity leads, first, to the continuous reformulation of the terms in which experience happens, while it is adopted as a norm

for action that guides conduct; second, inquiry is consequently a communal activity, for science is, above all, a mode of life:

Science is to mean for us a mode of life whose single animating purpose is to find out the real truth, which pursues this purpose by a well-considered method, founded on thorough acquaintance with such scientific results already ascertained by others as may be available, and which seeks cooperation in the hope that the truth may be found, if not by any of the actual inquirers, yet ultimately by those who come after them and who shall make use of their results.³¹

This is an infinite process, always recommencing and going on. Truth and knowledge appear then as semiotic products of our collective efforts to make sense of the world. So, this general picture inevitably leads to the abandonment of the ideas of absolute necessity, mechanicism, and determination. As Peirce says, "we must reject every philosophy or general conception of the universe which could ever lead to the conclusion that any given general fact is an ultimate one."³²

This is the general meaning of his philosophy, which can be inferred from his early writings: if we remember abduction has no logical security, the connection with the other inferential forms becomes clear, for the maxim allows us to distinguish the meanings of different abductive suggestions, showing how each one could influence our practical conduct in a different way.

In Peirce's thought, science is above all a way of inquiring, a public, collective, and communicative way of making science, wherein communication and cooperation between scientists are crucial factors. Knowledge is a collective construction, so truth—however uncertain and controversial with respect to individual opinions in the present—will be reached by the collective union in a methodic and continuous effort to attain it in the future: "I hold that truth's independence of individual opinions is due (so far as there is any 'truth') to its being the predestined result to which sufficient inquiry would ultimately lead."³³

In its general lines, Peirce adopts this perspective since his early writings. Truly speaking, he became less deterministic over time. In 1878, Peirce said it was a "great law" of scientific inquiry that truth would inexorably be found by anyone who followed the right methods:

Different minds may set out with the most antagonistic views, but the progress of investigation carries them by a force outside of themselves to one and the same conclusion. This activity of thought by which we are carried, not where we wish, but to a foreordained goal, is like the operation of destiny. No modification of the point of view taken, no selection of other facts for study, no natural bent of mind even, can enable a man to escape the predestinate opinion. This great law is embodied in the conception of truth and reality. The opinion which is fated to be ultimately agreed to by all who investigate, is what we mean by the truth, and the object represented in this opinion is the real.³⁴

But later on, Peirce softened this claim, leaving it open to a more modest fallibilism and replacing "law" with "hope," as if hope is our regulative principle in inquiry: we proceed believing that by the right methods we are able to reach truth. Since we cannot say there is something wrong with statistical induction, we must as a matter of fact acknowledge that we are all fallible, humanly too fallible – even if we die before attaining truth, the universe will nevertheless go on. Hence the old Peirce, already hardened by the renitent hardness of life, came to claim:

We all *hope* that the different scientific inquiries in which we are severally engaged are going ultimately to lead to some definitely established conclusion, *which conclusion we endeavor to anticipate in some measure*. Agreement with that ultimate proposition that we look forward to,—agreement with that, whatever it may turn out to be, is the scientific truth.³⁵

Now, this means we are guided in our search for truth by "an intellectual hope" that truth can be found, and things explained.³⁶

Truth as the aim of inquiry is something we strive for, but nonetheless we can never fully and once and for all attain. We can miss it, we can even die before we discover it. Is there something wrong with the logic of inquiry? Absolutely not! Is there something wrong with truth itself? Still the less! In the first place, we all can be wrong. In what sense then are we allowed to speak of convergence to truth? How can we hope to reach it?

The ground of Peirce's confidence is his long-held understanding that the law of large numbers justifies induction, making it a self-corrective method.³⁷ Now, if there is a reality, the iterated employment of inductive methods can reveal to us something about it. I risk saying induction is an idempotent operation: if persisted upon, it will furnish us a definite result as the ideal limit of our inquiries. To say that inductive methods are selfcorrective means we use them to test the adjustment of our hypotheses to the reality of phenomena in a progressive way. So, even if we are presently wrong, if we continue to inquire, we should be able to correct ourselves by devising new hypotheses, developing them, testing them, and so forth indefinitely.³⁸ In other words, provided it continues by the right methods, and without predefined spatio-temporal limits, inquiry tends to truth; that is, partial truths can be overcome or even become more acutely true. There are not ultimately inexplicable or unintelligible facts—to suppose so is to give up all inquiry. But the idea of a sort of possible correspondence between the sign and its object is not totally absent from the theory.

Peirce's account of truth cannot be separated from his account of inquiry, once intertwined pragmatic, cognitive, and epistemological assumptions ground it. In the end, all of this leads to different respects in which truth and inquiry can be related.³⁹ Since inquiry is communal and knowledge is semiotic, truth can be understood as a common heritage, for science is above all a mode of life, as seen.

First, inquiry is a social, historically situated, and collective activity. ⁴⁰ A poem by João Cabral de Melo Neto may help us here:

Um galo sozinho não tece uma manhã:

ele precisará sempre de outros galos. De um que apanhe esse grito que ele e o lance a outro; de um outro galo que apanhe o grito de um galo antes e o lance a outro; e de outros galos que com muitos outros galos se cruzem os fios de sol de seus gritos de galo, para que a manhã, desde uma teia tênue, se vá tecendo, entre todos os galos. 41

The poem subtly illustrates the general idea: multiple inquiries, simultaneously pursued, each contribute a small parcel to the body of knowledge that is being simultaneously constructed and shared by different inquirers. Compare with Peirce's statements:

The scientific world is like a colony of insects, in that the individual strives to produce that which he himself cannot hope to enjoy. One generation collects premises in order that a distant generation may discover what they mean. When a problem comes before the scientific world, a hundred men immediately set all their energies to work upon it. One contributes this, another that. Another company, standing upon the shoulders of the first, strike a little higher, until at last the parapet is attained. 42

Inquiry is like the cry of the roosters: it does not depend on any individual agent, but on the union of all the efforts that end up building a common objective. As in the poem, wherein the cries of roosters finally agree in the sunrise, truth is the agreement we hope to reach: an adjustment between being and being represented. The web of the morning is progressively weaved by the collective integration of beams of sunlight called in by the actual singing of roosters; so partial discoveries of each inquirer in the semiotic-linguistic level progressively compound a true iconical isomorphic net, by integrating anaphoric and cataphoric elements in the syntax of knowledge—each inquirer recovers previous steps and advances forward by integrating pieces of knowledge, so the web of signs becomes as complex and as voluminous as it continually grows in

multiple directions. This is a never-ending process wherein truth appears as the limit of our efforts to know reality. As such, truth is public, that is, of the nature of a shared opinion. A private truth does not make any sense: either truth is intersubjectively recognized as such or it cannot be called so.

As a limit, we can only approximate to truth without ever being certain to have absolutely found it. When we know our beliefs are false, this means we know what we know only because it is not possible to ascertain any other conclusion given the present state of inquiry. Peirce is unequivocal about this: truth is what can be known and cannot be avoided if we follow the right methods. Now, we can measure determinable probabilities; thus, we can with sufficient certainty determine a certain regularity in the course of experience. Of course, this certainty can never be absolute, it can only be as certain as are the mathematical measured probabilities. The point is there is no reason to doubt in such cases where inquiry has shown no other results are expectable, for in the long run the same general aspects will remain. This is Peirce's central point concerning the justification of induction in inquiry.

We inductively test our theories and hypotheses. There is no determinism here, for the stress is not upon the definite way events happen, but in attaining one definite stage, and not another. Different lines of action may in fact lead to the same final result not utterly final, but final in the sense that it closes some inquiry, not all inquiries. Once this stage is achieved, to get back and begin the questioning process again is unreasonable. If it is humanly impossible to attain absolute and ultimate truth, we should not because of that give up establishing partial truths, truths that are mathematically and probabilistically exact so to be precise enough for our concerns. So, this is a second aspect of truth: we can never claim we definitely know truth, for it is predestined or fated to be known in the future, which means we would be able to know it on the condition we inquire well and long enough. 46 Sooner or later, we shall be forced to represent the real as it is—and only this will satisfy our quest. It may never definitely happen, but once it happens,

inquiring any further is idle since there are no real and living doubts. As Peirce says:

In sciences in which men come to agreement, when a theory has been broached it is considered to be on probation until this agreement is reached. After it is reached, the question of certainty becomes an idle one, because there is no one left who doubts it.⁴⁷

This leads to truth as convergence as the very agreement of inquirers. Even if we can only attain partial, situated, and particularly determinate truths, inquiry never ends. A definite conclusion is but a conclusion that is beyond reasonable doubt, that is, our knowledge is not absolutely beyond any possible doubt, but to doubt of what inquiry has revealed to us is unreasonable. Whereas scientific beliefs can in principle always undergo a revision, we should not be so quick to dismiss scientific findings, insofar as objective truth is a function of the communal nature of inquiry, not a predicament of individual inquirers asserting it. In sum, truth is a processual result; its recognition is directly bound to collective inquiry, not to individual certainties. Only in the ideal end of inquiry could reality and true opinions (in principle) be asserted as matching, for reality does not bend to what any individual wishes it to be. 48 Now, even though the community itself may be finite, knowledge is potentially infinite: the community's repertoire is capable of infinite growth, just as the difference between truth and falsity—which signs do represent reality as it is, and which signs do not—may grow in terms of increasing complexification without ever being denied. And even though there is no difference in nature between our feelings, our reactions to our feelings, and our thoughts—they are all semiotic in nature—this point is a consequence of Peirce's semiotic theory of mind, a special consequence of his refusal to attribute to sense impressions, to emotional dispositions, and to subjective insights the same gnoseological status as objectively assessable logical arguments. For reality endures, i.e., it persists in time; so, the truth or falsity of our beliefs might eventually be fixed. As scientific activity keeps running, the ultimate assertion of truth lies always in the future.

Peirce thought his version of realism could explain what ancient scholastic realism and modern philosophy did not even have the means to sustain. For on purely psychological grounds modern forms of subjective idealism (mentalism, individualism, the myth of the private self, etc.) are incapable of accounting for the success of modern science. A rigid separation between subject and object makes it impossible to explain the success of objective knowledge, since the external object becomes the unknowable cause of cognition. This is where Peirce sees the historical permanence of nominalism, that is, the reduction of ontology to a theory of meaning, so all universality is confined to language and expelled from the real world.⁴⁹ Nominalism expels all normativity from inquiry, thus remaining unable to explain how it is possible to predict the future course of events. Confined within the receptacle of the individual mind or relegated to language, ideality is severed from ontology. Merely finding there are uniformities or regularities in experience is not enough, for it is still necessary to draw accurate consequences from such findings, and this is what Peirce thought his own position could do. In short, provided with a proper semiotic epistemology, realism avoids both the reduction of reality to subjectivity, operated by modern philosophers, metaphysical dogmatism of ancient and medieval philosophers.

In its more general sense, then, Peirce's theory presents truth as closely related to a regulative hope, as a sort of horizon at once unattainable and unstable, nevertheless consistent and, therefore, normative, in relation to which we can assess our current conduct. At this point, the correlation between truth, reality, and scientific method is crucial. For besides being a presupposition of scientific activity, realism is the only hypothesis that, according to Peirce, allows us to explain how we can self-correct. Therefore, the realist position favors self-control and the reflected adoption of beliefs and inferences beyond individual idiosyncrasy, throwing to the community the responsibility of judging the truth or falsity of assertions. For if there is a reality, the repetition of inferences will

lead to the discarding of erroneous inductions overall, even though individually or circumstantially we can never completely exempt ourselves from error. Truth is not a narrative like any other, which we can prefer without any major consequences. Truth and knowledge compose our common heritage as human beings. Of course, truth and knowledge are subjective, and, as such, semiotic: at the ultimate and ideal end of all inquiries, our opinions should represent the real. Consequently, if truth consists in the agreement of a sign with its object, then that agreement is not given, but will be discovered—or, as Peirce came to acknowledge at various times, we must keep on hoping it will be discovered.

PURPOSIVENESS AND TRUTH IN JAMES

Notwithstanding their fundamental differences, there is at least one respect in which James and Peirce agree. In James's *The Principles of Psychology*, we find the strong link between mind and purposefully oriented actions that offers the key to interpreting James's brand of pragmatism, as well as his entire philosophy: "only actions that are done to an end and that show a choice of means can be considered undoubted expressions of Mind." In point of fact, this is the immediate context for the introduction of the pragmatic maxim. When introducing Peirce's ideas in his 1898 lecture, James quotes a full passage where Peirce relates beliefs and habits, thus giving the key to interpreting his own use of Peirce's ideas. James's theory of truth must indeed be understood in the context of this general idea: purposiveness is the key to our mental life and actions.

Unlike Peirce, for whom the truth with a capital T is the ideal end of the investigation, the limit of our efforts to make sense of reality, James is much more concerned with partial truths, and much less than Peirce—at this point, perhaps confirming Newton da Costa's claims—turns his attention to our logical methods of obtaining truth, preferring to stress our quotidian dealings with what can or may be true. James certainly would not disagree with the nominal definition of truth in terms of correspondence to reality, going so far as to insist that it makes a huge difference whether how,

and how much, a belief does or does not correspond to reality. Substantially extending the idea of truth as satisfaction to belief, James emphasizes the human benefit of holding true beliefs, as this allows us to cope with factual harshness, to challenge the insubordination of experience to our idiosyncrasies. False beliefs, on the contrary, will sooner or later prove useless and be discarded. While it is possible one lives fairly well with false beliefs until the moment of one's death, the main point for James is not defining truth by the utility of what each of us actually believes, but by the utility of the belief of an ideal agent, situated in ideal conditions at the edge of the investigation.⁵² Thus, there are epistemic criteria to establish the usefulness of an idea, of any idea, and not only intellectual concepts, as Peirce held. This clarifies the meaning of James's preferred metaphor: what is true has a cash value, an exchange value, it pays, and this pay is cognitive; knowledge is value, ignorance is not. The meaning of cash, in English, has confused a lot of interpreters of James's philosophy. Meaning, in prosaic situations, money that is on hand and ready to be used, originates in the Latin capsa, which refers precisely to the utensil where the money was kept—the box where it was kept. James's vocabulary is vernacular, quotidian, and intended to convey a very practical and mundane idea. Vague as it is, James never tried to make his language less so. Indeed, he thought that would give an intellectual, snobbish tone to his philosophy he would rather avoid: "In this real world of sweat and dirt, it seems to me that when a view of things is 'noble,' that ought to count as a presumption against its truth, and as a philosophic disqualification."53 This indeed seems to be the distinct character of James's style of philosophizing:

A pragmatist turns his back resolutely and once for all upon a lot of inveterate habits dear to professional philosophers. He turns away from abstraction and insufficiency, from verbal solutions, from bad a priori reasons, from fixed principles, closed systems, and pretended absolutes and origins. He turns towards concreteness and adequacy, towards facts, towards action and towards power.⁵⁴

So, when James speaks of pragmatic method, he sees in pragmatism a method to put an end to otherwise unending disputations of an excessively formal and artificial character. For James, pragmatism abandons the "rationalist temper" and allies itself to the "empiricist temper," but not in a naïve fashion. James indeed believed pragmatism could ameliorate the empiricist temperament in philosophy, making the search for truth knowable in terms of what practical consequences are necessary to determine what any question really means. ⁵⁵ Roughly speaking, when we try to decide what is the best approach to a disputed question of practical significance (such as abortion, vaccination, etc.), the best we can do is to apply the disputing judgments to specific concrete cases, as James's famous squirrel example shows. This is not a reduction of truth to usefulness, as a common mistake goes. In fact, just as Peirce rejected the spirit of Cartesianism, so James is refusing all sorts of epistemology based upon a dualistic causal account of knowledge, as if we humans were subjective spectators, endowed with cognition and rationality to examine the material object, utterly inert and directly opposed to us, that causes our cognitive affections.

Specifically, pragmatism has been identified with raw utilitarianism, but that is also a mistake.⁵⁶ In a word, truth is the parameter for measuring the usefulness of beliefs, not what will be measured by them. Whereas a first reading of James's principle of practicalism may convey the idea of a behaviorist tenor, that is nonetheless not the whole story. James sought to draw a much closer connection to our practical lives than a mere theory of impulsive reactions, more adequate to a crude stimulus-response model. Instead, James's interest was in the consequences that can make a practical difference, and not just in those that are of theoretical value:

The ultimate test for us of what a truth means is indeed *the conduct it dictates or inspires*. But it inspires that conduct because it first foretells some *particular* turn to our experience which shall call for just that conduct from us.⁵⁷

This formula interestingly suggests an equivalence of truth and meaning—being true means being pragmatically true, that is, being conducive to a certain conduct by prompting us to expect a certain down-to-earth result. Knowledge, in first place, is an act of knowing; as such, it is goal oriented, purposive, incarnated, and not isolated from practice. If it is possible to point to an idea's practical consequences in the lives of those who believe in it, then that is what the idea means for those who believe it. In other words: "The actual meaning of any philosophical proposition can always be brought to the ground for some particular consequence, in our future practical experience, whether passive or active."58 Notice there is a difference relative to Peirce, and to Wittgenstein as well, to whom James is frequently connected.⁵⁹ James is not emphasizing a method of illative experimentation, nor pointing out specific local practices of ordinary language use; rather, James is stressing that our ideas should not be assessed exclusively by their internal rationality, or logical coherence, or scientific value, or functionality within a specific language game, but also, and maybe mainly, by their fruitfulness to how we are going to lead our lives if we accept them. In other words, James is interested in how our ideas become true to us as we live by them.

Now, for Peirce, as seen, pragmatism is a method, the logic of abduction, that is, a method employable to any kind of inquiry to help us select which hypotheses are the simpler ones that explain away our doubts and make sense of the facts under consideration. Pragmatism is not a doctrine of living, a philosophy of life, in the sense of an organized ideology of any sort. For James, this is true as well, but with a development. Pragmatism is a method that leads to a theory of how truth emerges in human experience: "Such then would be the scope of pragmatism—first, a method; and second, a genetic theory of what is meant by truth." Of the many ideas James retains from Peirce, perhaps the link between practical experience and truthful meanings is the prime one. And so, the inquiry into truth is a direct consequence of the method, being inseparable from it. The gist of James's philosophy is captured in the idea that the assessment of all ideas, and not only of scientifically verifiable concepts

(whatever that can mean), should be related to what they make us think and how we consequently act.⁶¹

This leads James to reject two very common theories of truth. First, he rejects the concept of truth as a copy of reality. Second, he rejects truth defined as correspondence to reality. In the end, James assumes truth cannot be severed from its very process of verification, of what makes it true in experience. How an idea becomes true, in the first place, is the question to start from. Pragmatism, for James, is a method for construing the genesis of truth in experience, not a philosophical theory of truth like correspondence, coherence, etc.

TRUTHS ABOUT TRUTH

James's pragmatism, then, acquires a definite scope when compared to Peirce's general method of inquiry. When questioning how ideas come to be true in our human daily practices, how truth becomes important for us, the only utility pragmatism has is to help us choose which philosophies, hypotheses, theories, worldviews, and ideologies are most useful in guiding our thoughts and actions. For our actions change when we adopt one or the other ideology. For instance, I may decide to become a vegan because I believe in reincarnation of the soul regardless of mammalian species, or because I believe industrial animal husbandry is harmful to the planet, or because other sentient, mammalian species deserve the same kind of respect I give to other human beings, or because I simply cannot digest meat, and so forth. So, where should we look for the differences? In practice. Different people act differently when they believe different things; if there is a difference in the will to believe it will be reflected in the will to act. Maybe the difference in the worldviews is not a difference of values, as commonly stated, but just of how beliefs are organized. This, James believes, pragmatism can show: it can help us build ideas, theories, philosophies, etc. that are indeed useful and reliable. So, the positivistic reading of pragmatism as a verification method totally misses the main point, which is not how ideas can be shown to be

true, but how ideas do come to be true and what we do with them in practice. 62

Based on this, James concludes that the traditional theory of truth as correspondence, as if truth were a faithful copy of something other than and outside of itself, is too restrictive. However, his rejection of a dualistic model of truth as a copy of an external object does not lead to a complete dismissal of the very idea of correspondence. This point will reappear further on, and we will see James's statements may lead to a sort of paraconsistency. The important point to retain here is to understand how ideas or beliefs can copy their objects, and then, in turn, to distinguish which ones are and which ones are not capable of copying their objects. In sum, James is concerned with what correspondence means and how it happens.

Now, if not every utility is true, every truth is still useful, because, in the first place, it satisfies the conditions for correctly copying its object. The meaning of a true idea is what it can reveal in the conduct it dictates or inspires. And a conception inspires a certain conduct precisely because it points out the need for that conduct. James's pragmatism, then, takes practice and its needs seriously. Therefore, more than a method, James's pragmatism is also an existential attitude, a way of conceiving the universe and our place and role within it.

This should inform a better understanding of what James is refusing. This is important because pragmatism has long been associated with a narrow positivistic worldview. In fact, James refuses the dualism of subject-object opposition in the name of an actor theory of knowledge, wherein indeterminism is the main factor—as humans, individually and in our societies, we are in the world, concomitantly and mutually living and evolving with the environment. Neither we nor the world we know can be considered as absolutely opposites, but only as co-determining each other. This is the gist of James's approach to the idea of truth as a copy—it needs to be a satisfactory copy, in the sense that we can use it within the very same reality we are in, and not only to make sense of reality, as if we were not a part of it.

We find here a difference between James and Peirce. Peirce did endorse the idea that truth, as the ideal end of inquiry, is assimilable to satisfaction, but only in the sense that "satisfaction would ultimately be found if the inquiry were pushed to its ultimate and indefeasible issue."64 However, to James, to say that a theory or idea is true is to say that it helps us establish satisfactory relationships with other parts of our actual experience. For James, this is true for all of our ideas, from the most basic, such as common-sense notions of space and time, which help us deal with everyday objects and with other people, to the most scientifically elaborated, e.g., square root, or mitosis, or any other idea which helps us in scientific research. And this is exactly what Peirce rejects, for the reasons already expounded. Given his ideal of inquiry, Peirce did not approve of James's proposal that true conceptions have a purchase value, a cash value; that is, they can be exchanged in experience for effective practical consequences. Peirce would not deny that true conceptions allow us to deal with facts in certain ways, putting them into context and inserting them in a fluid experiential continuity, the "stream of experience," as James states; 65 but, he nonetheless never yielded to the widening James utilized to make the pragmatic principle account for how every word, conception, or belief of ours is put to work in the experience. In sum, Peirce would never do as James does and call his own theory a sort of instrumentalism: "[pragmatism] is less as a solution, then, than as a program for more work, and more particularly as an indication of the ways in which existing realities may be changed. Theories thus become instruments, not answers to enigmas, in which we can rest."66

CRITICISM OF FORMAL DEFINITIONS OF TRUTH

According to James, the only meaning that can be given to a statement or belief being true is that it fits our experience. In this way, pragmatism also leads to some sort of criterion of coherence, but not mere syntactic coherence within an abstract and conventional formulaic language. In effect, James rejects the philosopher or scientist isolated in an ivory tower, always

emphasizing living agents instead of detached spectators, as seen. Inquirers are situated in the midst of a world of experience; their true ideas are those that lead to successful action.

One can grasp a notion of coherence emerging from James's pragmatism as the act of constructing an abstract puzzle. Instead of looking back and trying to put together the pieces of a puzzle that portrays something already existing (such as those you buy in stores), one must think from the standpoint of a painter of an image that concomitantly paints it and arranges its puzzle—the puzzle will be a true picture because the picture itself is made together with the experience of getting to know it. Then, the pieces of the puzzle must be adapted as it is still being manufactured, because the painting is not ready-made; thereby building the image that will be shown when the puzzle is finally mounted and ready. In the end, we shall not see the image of something previously existent—a photo of a familiar landscape, of a building, etc.—but we will have built an image of something that we have come to know as we painted it and fit the puzzle pieces together. In other words, the puzzle work evolves without the requirement to represent something known, but comes to gradually represent its object in the very process of coming to being definite—each piece is a little piece of truth, fixed together with the others and opening up other possibilities to fit other pieces.

This comparison indicates our entrenchment in the world of our experiences, so much so that certain opinions invariably lead us to the desired results—an inescapable dimension of reality is the incalculable amount of intersections and connections, forming "small worlds" within a pluralistic universe—a "multiverse"—that can be anything but absolute, as James himself states, but can be synechistic nonetheless, just as Peirce preconized. Nor does the empirical fixity advocated by James indicate that there is only one way in which our ideas can copy reality. Now, if correspondence or agreement with reality means that our beliefs "fit," there cannot be a single true form of adjustment; fitness is a priori indeterminate, although determinable in the stream of experience. Multiple, completely different beliefs can also fit together, since the universe itself remains always in process, unfinished and malleable. As

James explains: "Our interpretation of truth is an interpretation of plural truths, of directing processes, performed in rebus, which have only this quality in common, that they pay themselves." 68

TRUTH AND VERIFIABILITY

Truth, then, is not only a matter of semantic agreement or just syntactic coherence, but also and primarily something functional: an idea is true if it works in practice, that is, if it serves as a guide to lead us in the stream of experience, exploring the multiverses we inhabit (if one makes experience flow, let me add). Therefore, truth is something plastic, always changeable. It can even be a copy—like a drawing that copies an object, for example—but neither the only one nor the beneficial or immediately useful one. For truth is all a matter of consequences, but not the consequences we hope for or expect. The value of truth must be verified in an experience that is also plastic and changeable.

I venture to say, for James beliefs that agree with reality—thus being true—are the ones that lead us towards a still open future in which we are active players with a limited field to play in—we cannot fit any puzzle piece with any other. We thus arrive at another fundamental idea of James's account of truth, and a more positive one: truth is its own verification process. As already seen, this is the originality of pragmatism: truth is understood as a creative process of producing novelty, so a verification process is not a formalizable process of quantifying instances, rather it is an act of creating a new and true idea: "New truth is always a go-between, a smoother-over of transitions."

Insisting on a thorough empiricist and experimentalist conception of our beliefs, James vehemently argues that a belief is true only if it is made true. This is what he means by checking a belief: verified—and not simply verifiable—beliefs are made true in the flow of experience. The functionality of our beliefs comes from this, because, even if we don't know whether certain beliefs are true or false, it is their connection with facts that will make them one or the other. We can believe there are jaguars—onças pintadas—in the Atlantic Forest—Mata Atlântica—without bothering to verify it for

ourselves, but this will only become existentially true if someone actually verifies it; that is, if this statement is made true for living beings. Rather than trying to make sense of this idea in a Peircean fashion, one should understand, here, that James is refusing the quest for absolute first foundations for our knowledge, rather pointing to its processual character, knowledge and experience making up a whole free of ultimate elementary parts that could serve as foundational warrants of absolute certitude.

This seems to be the most fundamental issue of James's rebuttal of Clifford's account of beliefs: no one should ever be required to rationally justify every single belief one holds, either because that would make machines out of humans or just because it is plainly impossible. Experience is ground enough for our beliefs, a vague, rough, mundane, dirty, pragmatic, instrumental, and goal-oriented ground. It is the only ground we have. ⁷⁰

QUASI-TRUTHS FOR QUASI-MATHEMATICIANS

So, James's pragmatic truth seems to be a bad candidate for a mathematical treatment, contrary to Peirce's convergence theory of truth. The main point, for James, is to develop a theory compatible with our everyday realism, rejecting, of course, the ideal of truth as the consensus of rational experts as the truth, as Peirce's theory seems to make of it. Nonetheless, James does not dismiss epistemic considerations at all; he rather tries to integrate the epistemic approach to his own, as seen in his identification of truth with its process of verification or production. But this raises at least one question. If, on the one hand, James's pragmatism makes irrelevant the objection that there are true but unverified beliefs, on the other hand, it raises another problem; namely, what do we do with mathematical propositions? Or propositions from quantum mechanics? The literary vagueness of James's language—praised by Professor Newton da Costa—might as well accommodate the answer that if p were tested, p could eventually be verified.

If the puzzle comparison is helpful, then we can imagine the capitalized Truth as a growing self-organizing system, an organic whole to which partial truths come together once they become

verified, more or less in a Peircean fashion. But if the mere possibility of verification makes a belief true, then all these partial truths must already be true prior to their actual verification. In other words, a belief is and is not verified—true or useful—at the same time. So, is James's pragmatic truth a kind of paradoxical truth or a paraconsistent truth? If a truth is and is not true, is it a quasi-truth? If we take James's own words, such questions seem less troubling:

Truth is essentially a relationship between two things, an idea on the one hand, and a reality outside the idea on the other. This relationship, like all relationships, has its *fundamentum*, namely, the matrix of experimental, psychological and also physical circumstance, in which the correlated terms are inserted. (... What *constitutes the relationship* known as truth, I say now, is only the *existence in the empirical world of this* fundamentum *of circumstance that surrounds object and idea* and is ready to be either short-circuited or crossed entirely. As long as it exists and a satisfactory passage between the object and the idea is possible, the idea *will* simultaneously *be* true and *will have been* true about that object, whether the fully developed verification has taken place or not. ⁷¹

This leads us to bracket the idea that truth, according to James, is something that is done with experience, since, as Haack states, if truth always starts to consist of the same truths, in the end it does not grow. According to Haack, James holds two inconsistent views on truth. First, truth is discovered in experience, so what is true was always true; second, truth is made by us, so what is not true now can be made true in the future. And if this is so, then the thesis that truth grows would make James's pragmatist theory inconsistent with Tarski's material adequacy or "accuracy" condition for theories of truth, which form the basis for da Costa's quasi-truth. Can inconsistency be cleared away or should we consider it as unavoidable, and maybe as a good quality of James's account of truth?

Just to be clear, let us go back to some basics. Tarski's requirement is that a definition of truth, to be minimally acceptable, must imply all cases of

(T) 'S' is true if p

where S names p.

Haack argues that it does indeed seem impossible to make James's theory agree with the semantic conception of truth, since it is not a question of deducing all cases of (T) from a formula. However, if the condition exposed in conventional T is softened, that is, if we understand it normatively in a pragmatist sense, as a rule of intentionality—in the sense that what we think must be understood in terms of what we are prepared to do—in the end, there is no ultimate inconsistency. In other words, by weakening the position that a definition of truth, to be acceptable, must be consistent with the truth of all cases of (T), then Tarski's requirement can be used to interpret informal definitions of truth, like James's.

Of course, we cannot, in this case, claim that the requirement of material adequacy prevents one from considering as fully valid some preposterous theories of truth—such as, for example, one that identifies "truth" with "everything written in the Bible." A skeptic might even accept such an argument in favor of this kind of nonsense, arguing that if it makes sense for a person to believe the Bible, then we must accept that belief as true—but would that skeptic remain skeptical? Yes, it is true that, for James—and for Peirce, as well—"our non-intellectual nature does influence our convictions" before we can even be able to rationally decide on any conviction. 73 But would the skeptic comply with the fundamental pragmatic point that all of our ideas that are to be considered valid and true need to go through a process of verification and validation in their consequences? This makes verifiability a virtual process of making true, much more like a multivalent theory of truth, as it admits indeterminacy as an intrinsic value of truth. And what the T convention does seem to exclude are monovalent theories, or those

that are not bivalent, that is, those that compare truth to a fixed and pre-ordered model, incapable of satisfying virtual conditions of meaning.

This is exactly the point with da Costa's quasi-truth: as a formal definition, it captures the meaning of pragmatist theories of truth which are irreducible to the traditional correspondence theory of truth. For that reason, quasi-truth is a generalization of Tarski's semantic conception of truth, accounting for situations the latter was not supposed to account for, namely, paraconsistent situations. ⁷⁴ So, loosely expressed, a "pragmatically true" statement is paraconsistent because it cannot be accommodated within the traditional notions of true and false, mainly because all interpretations we can provide of a sentence are necessarily partial—there is no absolute interpretation—and all our established repertoire of sentences can be relativized. In sum, a sentence is pragmatically true, or quasi-true, if it 'saves appearances,' serving as a useful instrument for the continuation of inquiry—or of experience, as James would rather say. ⁷⁵

The notion of quasi-truth is proposed by da Costa as a generalization of Tarski's theory to include partial structures beyond total structures for the interpretation of a formal language. In Tarski's system, languages are interpreted in structures wherein we can decide whether all objects of a universe A are related by a relation R. According to da Costa, the introduction of the notions of partial relation and partial structure are due to accommodate the incompleteness of our knowledge regarding whether the objects of a specific scientific context are related by R. In sum, the fact we do not know whether all objects of a domain D are related by R does not block the way of inquiry. Incomplete and partial information about the domain can be satisfactory and we can go on formulating truth.

Now, Haack's proposal seems to partially converge with Da Costa's quasi-truth account. For Haack, the correct interpretation of James's theory of truth would be inconsistent with Tarski's *T* convention only if the impossibility of verification is identified with lack of meaning. But this was not James's idea. Rather than pointing

to the groundlessness of our practices, James points out that our personal truths, the ones which we deal with daily, may be false, so only the true ones will end up assimilated, validated, corroborated, and verified.⁷⁷ If, on the one hand, some propositions are practically and immediately impossible to verify or falsify, this does not at all mean that they can never be tested in the future and will then be confirmed or refuted. We must cope with an inherent incompleteness of information in our state of knowledge, provided we do not exclude the possibility of further determination. Haack's example is quantum physics, but da Costa also recalls classical mechanics, which was surmounted by relativistic mechanics, nonetheless without losing its instrumentality. Some propositions in astronomy in the time of Galileo Galilei were impossible to verify, some others were falsified with the continuation of inquiry, so "we may conclude, as a lesson of the history of science, that experience, in the wide acceptance of the word, will sooner or later refute any theory as an absolutely true picture of reality."⁷⁸ And this is itself a verifiable fact, which would lead to the conclusion that it would be proper to admit that "it is possible to maintain that such sentences are nevertheless verifiable or falsifiable, on the grounds that if they were to be tested, they would be verified or falsified."⁷⁹ In summary, Haack's argument is that James's theory is consistent with the idea that the right side—the definiens—of the biconditional expresses a necessary and sufficient condition for the truth of S in a trivial and non-informative way, since, according to her, it would be possible to maintain that certain propositions, more than neither true nor false, are neither verifiable nor falsifiable. Da Costa's philosophical interpretation of pragmatic truth asserts the very same point: "for some contingent propositions, which we will call basic or decidable, truth and pragmatic truth do coincide. In addition, a basic statement must be such that its truth or falsehood can, at least in principle, be settled."80

END GAME?

Let me finish with an incitement. One thing that strikes us when reading those philosophers is the contrast of language. One can

claim that Peirce never sought to be prosaic and vernacular, while James is intentionally not specific in some of his formulations. And mastering da Costa's mathematics is also not an easy task. Philosophers are often difficult to understand. James's literary language, for instance, undeniably conveys the impression of lack of precision and even clarity at times. But all this is coherent with the idea that truth cannot be defined passively, as if we, readers, were static spectators of a distant scene where actors, the writers, are unaware of our presence. Actually, those texts imply our presence, requiring our involvement in creating the circumstances that make our interpretations possible and that allow us to do what we need to do to answer our questions.

The kind of involvement referred to can be grasped, in my opinion, through some examples taken from art. For instance, Banksy. Banksy's art puns Life with Lie – LI(F)E – revealing something that bothers us: gather ye lies as you can, a legend the dictionary might relate to us. 81 The dictionary is the father of all dunces, as we say in Brazil, for revealing supposedly true meanings. Robert Herrick's verse—gather ye rosebuds while ye may—was to advise us of our fugacious predicament in life and incite us to make the most of it. Nature is beautiful; the world, full of opportunities; love, sublime. Live your life, do not complicate it. What do Banksy's puns reveal? What is love to us? Should we adhere to any form of superficial hedonistic individualism of sorts? Have we all become too cynical? When were we not?

Well, maybe we are just cynical in a world that never was Herrick's world. Let me recall another one of Banksy's works. A rat holds a poster to us: —You lie. That is a fact. Psychologists, neuroscientists, and even entrepreneurs tirelessly tell us: we all lie, to others, to ourselves. It is true, we lie. But then why we do not like to hear such truths?

Now, if these instigations let us transition to professional philosophy and still retain some provocative purpose, I shall be satisfied. According to Da Costa, truth is an almost truth, a quasitruth, it is a formulation we devise to accommodate our needs, both in our scientific and mundane practices. For Peirce, truth, reality,

and scientific method are closely related—inquiry may never end, but, as we pursue it, we retain the faint, fallible, and inescapable hope of attaining some truth. Truth is on the brink, and James agrees with that: we must make it ours; we need to build our lives so we can have something to believe in—and it is better it be true than not. Peirce would emphasize the hope for truth; James might be content to warn us we have to cope with the unfinished state of our present knowledge.

According to a considerable number of philosophers, the philosophical importance of pragmatism comes from its emphasis on the interpenetration of truth with practical utility, but not in a naive and superficial way, as more popular forms of utilitarianism do. 82 Of the classical pragmatists, James argued truth is nothing more than a function of beliefs, in the sense that it is what we must believe, verify, confirm, and sustain; at the same time, truth is not reducible to any of this. James calls this idea the cash value of truth. Bertrand Russell deplored it, arguing pragmatism ultimately leads to the worst forms of authoritarianism. 83 In addition to Russell's criticisms, Horkheimer's criticisms of pragmatism are also well known. For the pioneer of critical theory, pragmatism, especially in James and Dewey's versions—Horkheimer is curiously silent about Peirce, I suspected, out of ignorance—is a bourgeois philosophical mixture of positivism and Darwinism. It does not aim at transforming social reality, but preaches tolerance of exploitation and conformation to the social status quo, rejecting speculative thinking and dialectics in the name of logical-instrumental methods of rational control of natural and social reality.⁸⁴ These criticisms, though rebutted numerous times, remain relevant and are still commonly repeated today.

Whether those criticisms are fair is up to my readers to decide. My intention is to briefly present some of Peirce's and James's ideas regarding truth. Both for Peirce and James, reasoning and experience form a vicious circle from which it is impossible to escape, and it is this fundamental intuition that, I think, they conveyed to Newton da Costa. We cannot help inventing our concepts and we can never imagine being outside the world of

experience we try describing, even if, strictly speaking, we will never fully understand what we are doing. The postmodernist Banksy is not so far from that, in this peculiar comparison I am forcing. Common features uniting them are the defense of truth, the hardness of the real, and the idea that truth has the power to generate practical consequences of a public nature. Truth is doubly powerful: it is potential, it points to the future, and because of this very reason it has the power to guide our present conduct here and now, even if we do not want to recognize it, even if we like or dislike it in its mostly improbable and vague guises. Truth insists in not being neglected. Truth is fixed by popular wisdom: "lies have short legs"— and nobody likes to have one's lies destroyed by truth. Truth has the power to discover or to create its vehicles, thus making them capable of transforming the surface of the earth, the minds we attribute to ourselves. And for this reason, truth is the human face of reality, a reality that contumaciously refuses to bend to our will, strenuously forcing our minds to represent it as it demands to be represented. Banksy's sarcasm bluntly reveals the reality of our own hypocrisy, our own small will to recognize the truth of our absurdities in life. Peirce himself claims nothing is truer than true poetry.

The verses of the Brazilian composer Cartola acquire a much more tragic dimension if we read them in this key: each petty little dream of ours will be reduced to dust by the mill of the world. 85 Whether we want it or not, truth is truth, the world is what it is. It is therefore unavoidable to set firm foot on the ground. We may have diverging and antagonistic opinions, but reality will continue to be what it is even if we die and other inquirers continue on. Inquiry is endless. We are after all just one of nature's unfinished projects, and, as such, it is up to us to make truth our aim, our inescapable limit. As nothing warrants any sort of parousia of truth, we must work for it and not against it. Truth is a task of ours, we either accomplish it or we will be forever avoiding ourselves.

BIBLIOGRAPHY

- Abe, Jair Minoro. "Verdade Pragmática." *Estudos Avançados* 5, no. 12 (1991): 161–71.
- Abelard, Peter. Peter Abaelards Philosophische Schriften. I. Die Logica Ingredientibus. 1. Die Glossen Zu Porphyrius. Edited by Bernhard Geyer. Münster: Verlag der Aschendorffschen Verlagsbuchhandlung, 1919.
- Akehurst, Thomas L. *The Cultural Politics of Analytic Philosophy: Britishness and the Spectre of Europe*. London and New York: Continuum, 2010.
- Bueno, Otávio and Edélcio G. de Souza. "The Concept of Quasi-Truth." *Logique et Analyse* 39, nos. 153/154 (1996): 183–99.
- Calcaterra, Rosa M. "Constructing on Contingency: William James from Biology to Ethics and Politics." *Cognitio: Revista de Filosofia* 16, no. 2 (2015): 219–32. https://revistas.pucsp.br/index.php/cognitiofilosofia/article/vie w/27761/19591" \h.
- Costa, Newton C.A. da. "Logic and Pragmatic Truth." *Studies in Logic and the Foundations of Mathematics* 126, C (1989). https://doi.org/10.1016/S0049-237X(08)70049-1.
- Costa, Newton C.A. da, Otávio Bueno, and Steven French. "A Coherence Theory of Truth." *Manuscrito: Revista Internacional de Filosofia* 28, no. 2 (2016): 263–90. https://periodicos.sbu.unicamp.br/ojs/index.php/manuscrito/article/view/8643794
- Costa, Newton C.A. da, Otávio Bueno, and Steven French. "The Logic of Pragmatic Truth." *Journal of Philosophical Logic* 27, no. 6 (1998): 603–20. https://doi.org/10.1023/A:1004304228785.
- Delaney, Cornelius. "Peirce on Science and Metaphysics: Overview of a Synoptic Vision." *Cognitio: Revista de Filosofia* 3 (January 2002): 11–21.
- D'Ottaviano, Italo M. Loffredo, and Carlos Hifume. "Peircean Pragmatic Truth and da Costa's Quasi-Truth." In *Model-Based* Reasoning in Science, Technology, and Medicine, edited by

- Janusz Kacprzyk, Lorenzo Magnani, and Ping Li, 282–398. Berlin: Springer-Verlag, 2007.
- Haack, Susan. "The Pragmatist Theory of Truth." *British Journal for the Philosophy of Science* 27, no. 3 (1976): 231–49. https://doi.org/10.1093/bjps/27.3.231.
- ——. "Can James's Theory of Truth Be Made More Satisfactory?" *Transactions of the Charles S. Peirce Society* 20, no. 3 (1984): 269–78. http://www.jstor.org/stable/40320052.
- Hookway, Christopher. "The Pragmatic Maxim and the Proof of Pragmatism: Habits and Interpretants." *Cognitio: Revista de Filosofia* 12, no 1 (2011): 89-104. https://revistas.pucsp.br/index.php/cognitiofilosofia/article/view/13415.
- Hume, David. *Treatise of Human Nature*. 2nd ed. Edited by Sir Lewis Amherst Selby-Bigge. New York: Oxford University Press, 1978.
- Hynes, Catalina. "El Problema de La Unidad de La Noción Peirceana de Verdad." In *Charles S. Peirce Ciencia, Filosofia y Verdad*. Edited by Catalina Hynes and Jaime Nubiola, 1st ed., 83–93. San Miguel de Tucumán: La Monteagudo, 2016.
- ——. "Verdad y Fin de La Investigación: ¿Aciertan El Blanco Las Críticas de Quine a Peirce?" In *Charles S. Peirce Ciencia, Filosofía y Verdad*, 1st ed., 71–82. San Miguel de Tucumán: La Monteagudo, 2016.
- James, William. *The Writings of William James: A Comprehensive Edition*. Edited by John J. McDermott. Chicago: The University of Chicago Press, 1977.
- Krause, Décio. "Newton Da Costa e a Filosofia de Quase-Verdade." *Principia: An International Journal of Epistemology* 13, no. 2 (2009): 105–28.
 - https://doi.org/10.5007/1808-1711.2009v13n2p105.
- Lapoujade, David. "William James: Empiricism and Pragmatism." London: Durham, 2020.
- Legg, Catherine. "Charles Peirce's Limit Concept of Truth." *Philosophy Compass* 9, no. 3 (2014): 204–13.

- https://doi.org/https://doi.org/10.1111/phc3.12114.
- Mikenberg, Irene, Newton C.A. da Costa, and Rolando Chuaqui. "Pragmatic Truth and Approximation to Truth." *Journal of Symbolic Logic* 51, no. 1 (1986): 201–21. https://doi.org/10.2307/2273956.
- Peirce, Charles Sanders. *Collected Papers of Charles Sanders Peirce*. 8 vols. Cambridge, MA: Harvard University Press, 1932–1958.
- ——. The Essential Peirce: Selected Philosophical Writings, Vol. I (1867–1893). Edited by N. Houser and C. Kloesel. Bloomington: Indiana University Press, 1992.
- ——. The Essential Peirce: Selected Philosophical Writings, Vol. II (1893–1913). Edited by N. Houser and C. Kloesel. Bloomington: Indiana University Press, 1998.
- ——. Writings of Charles S. Peirce: A Chronological Edition. 5 vols. Bloomington: Indiana University Press, 1982–1993.
- Peruzzo Jr, Léo. "Wittgenstein e a Dívida a James: A Atmosfera Filosófica Da Práxis Na Constituição Do Cognitivismo Moral Pragmático." *Cognitio: Revista de Filosofia* 16, no. 2 (2015): 305–20.
 - https://revistas.pucsp.br/index.php/cognitiofilosofia/article/view/27768.
- Renato Salatiel, José. "O Que Peirce Quer Dizer Por Violação Das Leis Da Natureza Pelo Acaso? What Does Peirce Mean by Violation of the Laws of Nature by Chance?" Vol. 10. n.d.
- Rodrigues, Cassiano Terra. "The Method of Scientific Discovery in Peirce's Philosophy: Deduction, Induction, and Abduction." *Logica Universalis* 5, no. 1 (2011): 127–64. https://doi.org/10.1007/s11787-011-0026-5.
 - Rosenthal, Sandra. "Classical American Pragmatism: A Systematic Overview." *Cognito: Revista de Filosofia* 3 (2011): 83–96.
 - https://revistas.pucsp.br/index.php/cognitiofilosofia/article/view/13253.

Russell, Bertrand. "Pragmatism." In *Logical and Philosophical Papers 1909-1913*. Edited by John G. Slater with the assistance of Bernd Frohmann, 257–84. London and New York: Routledge, 1992.

- Salatiel, J. R. "Pragmatismo e Acaso. Parte 1: O Problema das Fontes Gregas do Tiquismo." *Cognitio-Estudos* 6, no. 2 (2009): 131–38.
- Waal, Cornelis de. *Introducing Pragmatism: A Tool for Rethinking Philosophy*. Abingdon-on-Thames: Routledge, 2022.

NOTES

- ¹ The notion was first introduced in Mikenberg, da Costa, and Chuaqui, "Pragmatic Truth." It is impossible to give a full list of references to the notion of pragmatic truth by N. da Costa. See Krause "Filosofia de Quase-Verdade." On Peirce's importance, see da Costa "Logic and Pragmatic Truth," 247–48.
 - ² da Costa, Bueno, and French, "Logic of Pragmatic Truth," 604.
 - ³ da Costa, Bueno, and French, "Coherence Theory," 261.
- ⁴ This has already been noted by different authors; see Abe, "Verdade Pragmática" 163 f.; Bueno and de Souza, "Logic of Pragmatic Truth," D'Ottaviano and Hifume, "Pragmatic Truth"; Krause, "Filosofia de Quase-Verdade," 116.
- ⁵ This was filmed, but the film is not available to the public up to now. Among others, at least one of da Costa's former students, Professor Edélcio G. de Souza, was in the audience.
- ⁶ I follow the suggestion of Abe, "Verdade Pragmática," 165, and, in the end, rely on Haack, "Pragmatist Theory of Truth," and "James's Theory of Truth," as will be clear. To my knowledge, James's account of truth was never formalized.
 - ⁷ da Costa, "Logic and Pragmatic Truth," 248.
 - ⁸ James, Writings, 347.
 - ⁹ Peirce, Writings, Vol. 3, 259.
 - ¹⁰ Peirce, 260.

- ¹¹ Peirce, 266.
- ¹² Peirce, 266.
- ¹³ Peirce, Essential Peirce, Vol. 2, 346.
- ¹⁴ Peirce, 402.
- ¹⁵ Peirce, 226ff.
- ¹⁶ James, Writings, 348.
- ¹⁷ James, 348.
- ¹⁸ Peirce, Essential Peirce, Vol. 2, 334.
- ¹⁹ Peirce, 380.
- ²⁰ For example, Peirce, Collected Papers, Vol. 5, 566.
- ²¹ See Salatiel, "Problema das Fontes Gregas" on these metaphysical issues.
 - ²² Peirce, Essential Peirce, Vol. 2, 335.
 - ²³ Peirce, 401.
 - ²⁴ Hume, *Treatise*, 86.
 - ²⁵ Peirce, Essential Peirce, Vol. 2, 399.
 - ²⁶ Peirce, Writings, Vol. 3, 263.
- ²⁷ Peirce, *Essential Peirce*, Vol. 2, 326; see also Hookway, "The Pragmatic Maxim and the Proof of Pragmatism," 97; Hynes y Nubiola, "El Problema de La Unidad," 92.
- ²⁸ I have treated the subject in detail in Rodrigues, "The Method of Scientific Discovery in Peirce's Philosophy."
 - ²⁹ Peirce, Essential Peirce, Vol. 2, 444.
- ³⁰ This idea can be found *passim* in Peirce's writings, especially after 1898; see, for instance, *Reasoning and the Logic of Things*, 112.
 - ³¹ Peirce, Collected Papers, Vol. 7, 54.
 - ³² Peirce, Writings, Vol. 3, 206.
- ³³ Peirce, *Essential Peirce*, Vol. 2, 419; see also Peirce, *Essential Peirce*, Vol. 2, 380.
 - ³⁴ Peirce, Writings, Vol. 3, 273.
 - ³⁵ Peirce, Essential Peirce, Vol. 2, 87.
 - ³⁶ Peirce, Writings, Vol. 6, 206.

³⁷ For example, Peirce, *Writings*, Vol. 2, 217; Peirce, *Essential Peirce*, Vol. 2, 443.

- ³⁸ See Hynes, "El Problema de La Unidad," 84–87.
- ³⁹ There are whole libraries written on the subject. I take the idea of the different senses of the expression "convergence to truth" from Legg, "Charles Peirce's Limit Concept of Truth," but with some important qualifications from Hynes, "El Problema de La Unidad."

⁴⁰ See Delaney, "Peirce on Science and Metaphysics."

- ⁴¹ The poem is called "Tecendo a manhã," or "Weaving the morning." Without any sort of poetic presumption, I can only offer an attempt at translating the poem: "No single rooster weaves a morning:/ he will always need other roosters./ One to catch this cry that he/ and toss it to another; and another rooster/ to catch this cry from a previous rooster/ and toss it to another; and other roosters/ that with many roosters more crisscrossing/ sun threads of their rooster cries,/so the morning from a slender web/ by this weaving arises from among all the roosters."
 - ⁴² Peirce, Collected Papers, Vol. 7, 87.
 - ⁴³ Peirce, Essential Papers, Vol. 2, 25.
 - ⁴⁴ Peirce, Writings, Vol. 3, 273.
 - ⁴⁵ Peirce, Collected Papers, Vol. 6, 100.
 - ⁴⁶ Peirce, Essential Peirce, Vol. 2, 457–58.
 - ⁴⁷ Peirce, 349.
 - ⁴⁸ Peirce, Writings, Vol. 2, 239.
- ⁴⁹ This movement was first made by Abelard, as known; see Abelard, *Philosophische Schriften* I:16: "Nunc autem ostensis rationibus quibus neque res singillatim neque collectim acceptae universales dici possunt in eo quod de pluribus praedicantur, *restat ut huiusmodi universalitatem solis vocibus adscribamus*." I beg the reader's pardon for quoting in Latin and mainly for the crude translation I offer, but I was not able to find any English translation of Abelard's work: "Now that the very reasons have been presented concerning why neither things taken singly nor things taken collectively can be called universals, for universals are predicated of

many things, it remains that we are to ascribe universality of this kind to words alone." My emphasis.

- ⁵⁰ Peirce, Essential Peirce, Vol. 2, 468.
- ⁵¹ James, *Principles of Psychology*, 23.
- 52 Tiercelin, The Pragmatists and the Human Logic of Truth, chap. 3.
 - ⁵³ James, Writings, 387.
 - ⁵⁴ James, 688–89.
 - ⁵⁵ James, 688–89.
- ⁵⁶ See, for instance, Russell, "Pragmatism," who seems to have been the first to make this claim in a direct manner.
 - ⁵⁷ James, *Writings*, 348 (added emphasis).
 - ⁵⁸ James, 349 (added emphasis).
- ⁵⁹ See Peruzzo Jr, "Wittgenstein e a Dívida a James," for a discussion of Wittgenstein and his debt to James.
 - ⁶⁰ James, Writings, 697.
- ⁶¹ Lapoujade, "William James," (English trans), 3. In what follows, I rely mainly on Lapoujade's interpretation, combining it with Rosenthal's *Speculative Pragmatism*; see also Rosenthal, "Classical American Pragmatism," for a succinct presentation of her main points.
- ⁶² Rosenthal, "Classical American Pragmatism," 85; Lapoujade, "William James," 4.
- ⁶³ Calcaterra, "Constructing on Contingency," proposes the label "radical humanism" to James's philosophical stance on naturalism and individualism.
 - ⁶⁴ Peirce, Essential Peirce, Vol. 2, 449–50.
 - ⁶⁵ James, Writings, 690.
 - ⁶⁶ James, 690.
- ⁶⁷ James, 1390, 745, 905. I cannot deepen such bold ideas here, but see de Waal, *Introducing Pragmatism*, 32; and Lapoujade, "*William James*," 39: "It is impossible to say whether we are dealing with a *universe* (absolute unity) or with a *multiverse* (absolute multiplicity), which is how we arrive at a *pluriverse*."

- ⁶⁸ James, Writings, 436.
- ⁶⁹ James, 695.
- ⁷⁰ Of course, James would agree with Peirce that if complete justification is impossible, a specific one is always possible and most of times sufficient to make our claims acceptable. On James and Clifford, see de Waal, *Introducing Pragmatism*, 32.
 - ⁷¹ James, *Meaning of Truth*, 909–10.
- ⁷² In the following, I just summarize Haack's account from Haack, "Pragmatist Theory of Truth," and "James's Theory of Truth;" for Tarski and da Costa, see Bueno and de Souza, "The Concept of Quasi-Truth."
 - ⁷³ James, *Writings*, 1263.
 - ⁷⁴ Bueno and de Souza, "The Concept of Quasi-Truth."
- ⁷⁵ Mikenberg, da Costa, and Chuaqui, "Pragmatic Truth," 204; da Costa, "Logic and Pragmatic Truth," 249; Abe, "Verdade Pragmática," 167.
 - ⁷⁶ da Costa, "Logic and Pragmatic Truth," 249–50.
 - ⁷⁷ James, Writings, 346.
 - ⁷⁸ da Costa, "Logic and Pragmatic Truth," 249.
 - ⁷⁹ Haack, "The Pragmatist Theory of Truth," 241.
 - ⁸⁰ da Costa, "Logic and Pragmatic Truth," 247.
- ⁸¹ Banksy's art mentioned here can be easily found by a basic Internet search. The reader is invited to try to search for "enjoy your lie" and "you lie."
 - 82 Putnam's *Pragmatism* clearly exposes this naiveté.
- ⁸³ See Russell, "Pragmatism," and especially, *Power*, 210 f.; *History of Western Philosophy*, chap. 29, p. 728. See also Akehurst, *Cultural Politics of Analytic Philosophy*, 36–37.
- ⁸⁴ See Horkheimer, *Between Philosophy and Social Science*, and *Dialectic of Enlightenment*. See also Oliveira, "Aestheticization of Reality;" Tong, "'Critique' immanent in 'practice'"; Schmidt "The eclipse of reason and the end of the Frankfurt school in America."

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⁸⁵ In the song "O mundo é um moinho," which can be seen played by Cartola himself here: https://www.youtube.com/watch?v=L8U1Y9PBfig.