

Transcendence: Finite or Infinite?

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Each generation must rediscover history's innovations anew, along with whatever novelties it manages to come up with. This is true in philosophy no less than in any other human endeavor. And for our times Neoplatonism has returned yet again in the figure of Alain Badiou. As voluminous as Plotinus and subtle as Cusanus, Badiou tells us Plato's tale that your awareness of yourself as a finite existence is a kind of illusion, and that mathematics is the way to find out what's really real and what you actually are. Like Plato and Paul (if not Jesus himself), and like most of the thinkers since them until Nietzsche, Badiou wants us to believe that we are infinite.

Having fled as an undergraduate from a mathematics department in despair at the utter lack of thinking, excited to find the real thing going on in a department called philosophy, I naturally balk at the claim that mathematics has much to do with thinking at all. But I'll come back to that. First I want to make clear what has been at stake in the opposition between finitists and infinitists in metaphysics, from Parmenides' and Plato's first staging of the debate in ancient Greece, up to Heidegger's and Badiou's latest production.

There comes a time in the life of all children when the realization dawns, more or less gradually, of their own mortality. Humans are born into the congenital chauvinism of the child, for whom the world seems inevitably to be centered on themselves. They are fully and utterly immersed in their own world, blissfully oblivious of the whole of which they are nevertheless still a part. Life seems an inexhaustible infinitude: aging is unknown, and every day seems to go on for ever. But this infinitude of immanence only appears to be infinite: sooner or later, the cold hard truth of the inescapability of mortality is apprehended, and a moment of transcendence takes place in the individual as they realize: "I am going to die one day". This is the moment when they first see themselves as a whole.

Then, as we say, the child grows up. It begins to see that not only is it itself a whole but that it is also part of a nested set of wholes: a whole family in a whole community in a whole country, and so on. This "and so on" is also the root of the religious impulse – that the whole of humanity is part not just of life on Earth, but that life itself and humanity in particular are an important part of the absolute

whole, which we call “God”. There are two ways to interpret this religious impulse.

On the one hand, we can understand it as an emotional response to the realization of finitude based upon a widespread inability to cope with the fundamental fact of mortality. Unable to handle the thought of an inevitable death, subjectivity denies that death ever really occurs, and believes instead that death is only apparent.

The other way is to argue instead that the realization of mortality in the child is only the first phase of a two-step procedure of transcendence. Certainly the child learns that they are fragile and mortal. But then the adolescent learns the extent to which their actions have consequences, thereby entering adulthood. Now according to some religious traditions (or, perhaps I should say, certain interpretations of all religious traditions), it is the realization that actions have infinite consequences which constitutes the completion of the transcendence which the religion exists to protect and to indicate. The initial transcendence into finitude is thus completed with a second transcendence back into infinitude, which thus is typically described as a rebirth or return to a child-like state.

This latter option can again be developed in one of two directions, the subjectivistic and the non-subjectivistic. The subjectivist understands the re-transcendence into infinitude as something that happens *to* the self. For the subjectivist, it is I myself who transcend upon conversion or enlightenment, a partial achievement eventually completed eternally upon bodily death, when it is this actual individual person who “goes to heaven or hell”, or “escapes the treadmill of rebirths and goes to nirvana”. But the non-subjectivist thinks that it is the self *itself* which is transcended: it is only the consequences of my actions which go on for ever, not my consciousness or what I now think of as me. This is the essence of non-subjectivist religious teaching. As the consequences of your actions are infinite, while your consciousness itself is only finite, enlightenment/salvation depends upon realizing that it is much truer to say that we *are* the consequences of our actions, rather than identifying ourselves with our consciousness.

I have been careful to avoid simply equating subjectivism with Christianity and non-subjectivism with Buddhism (let alone trying to bring other religions such as Islam and Judaism in either their differences or their similarities into the picture), because although it is true that Christian orthodoxy is subjectivistic while Buddhism is usually non-subjectivistic, it is no more difficult to find non-subjectivistic Christians than it is to find subjectivistic Buddhists. And speaking metaphysically,

the distinction between subjectivism and non-subjectivism is much more significant than the political and cultural differences between Christians and Buddhists, mostly a matter of sociology, not metaphysics.

The distinction between subjectivism and non-subjectivism even runs through those who would not consider themselves religious at all, dividing the “left” and “right” in politics, for example, in so far as the distinction can still be said to remain clear. For the left, society itself is the proper concern of politics, and the politician is properly the guardian and physician of society as a whole, especially including society's future. Anathema to all unjust privilege (Latin: *privi-legum*, law made for the specific benefit of a private individual or group), the socialist interprets the infinite consequence of the individual's actions in a material manner: it is the consequences for society that are the main political consideration, and the responsible political adult transcends their subjective interests and takes responsibility for all consequences of their actions upon society. Society itself is nothing other than the consequences of innumerable political actions (witting or unwitting). Political maturity is thus achieved by transcending subjective interests and adopting the non-subjective perspective of society as a whole, and all political action is to be assessed by the merits of its social consequences.

The political right, on the other hand, understand politics as a transcendence of individual subjects themselves into positions of greater power, which is a wholly subjectivistic concept of transcendence. The corporate world is premised upon making personal power as great as possible for as small a number of individuals as possible. This transcendence into the stratospheres of power most certainly takes the self along, premised not on an idealism aiming to improve society impartially, but an individualism enshrining the Darwinian notion of survival of the fittest. As such it taps the deepest well-springs of instinct in the dominance of the alpha-individuals who have organized, oriented and exploited the herds of betas, gammas and deltas since time immemorial. In fact the super-rich CEOs transcend only into luxury and not yet immortality, but they have their doctors working on it. The dream is obviously that some unholy alliance of genetic engineers, pharmacists and computer-scientists will come through with the ultimate medical discovery of a cure for aging.

So to recap: Platonists and neoPlatonists have agreed with most Christians and some Buddhists that the transcendence/immanence opposition is the same thing as the finitude/infinity difference. Here we are in this life of immanence, which is finite, and variously interpreted as a trial, prison, punishment or exile of some kind. This finite immanence is interpreted as the tip of an iceberg of the

infinitude of our soul, whether this is interpreted subjectivistically or otherwise. For infinitely long before we are born and infinitely long after we die this transcendent entity of which our immanence is a kind of mask plays out its cosmic drama of fall, judgment, and salvation or damnation.

Now what Feuerbach, Nietzsche, Heidegger and many others each in their own way have been at pains to point out is that this is not the only way to interpret the metaphysical meaning of our own existence. If immanence and infinitude are instead aligned, and transcendence defined instead in terms of finitude, then the understanding of our situation as promulgated by Plato, most Christianity, and at least some Buddhism is perniciously misleading. Rather than as a forlorn eternal soul lost in temporality, we need (says the finitist) to understand that we are actually lost without temporality, and that being (temporarily) in the world is the achievement of our highest possibility. This decision over how we interpret what our existence symbolizes is of huge historical significance. A people who see themselves as temporarily camped in a disposable world will have less respect for that world itself, while a people thinking that this life in this world is all there is will naturally take what happens to this world much more seriously. This is why the philosophies of Feuerbach, of Nietzsche and of Heidegger each can lead in different ways into the concerns of deep ecology.

Of course infinitists like Spinoza or Hegel can also lead in that direction, and deep ecology is not my concern here. My aim has been only to situate Badiou against this background, and to show how his thought raises the perennial decision again. Badiou teaches that we are infinite. Not in a religious way, but it is rather mathematics that tells us about reality as it really is. In his own terms, mathematics is ontology. This is a direct challenge to all existentialists, who define ontology as hermeneutic phenomenology – i.e. who think that what is real depends upon how you interpret what you experience. In mathematics, experience is shunned as a distraction. Only the beginner has to count on their fingers and do arithmetic by imagining groups of objects being regrouped in various ways. The breakthrough into real mathematical thinking happens when your mind can follow the rule without this detour through experience. The child who just *knows* five and three are eight has begun upon the royal road of abstraction that will remain forever closed to the child who cannot work it out without counting their fingers.

Now the thing about abstraction is that it can develop beyond any possible experience at all. The abstraction that lets me figure out that 1234 plus 56789 is 58023 didn't depend upon my getting thousands of objects (even in imagination) and counting them up. Yet it still describes a possible

experience, which, with enough patience, I could conceivably have. But the square root of negative one, say, although a perfectly well defined abstract function in mathematics, does not correspond to any possible experience. Mathematics reveals its truly abstract nature here, which may not be apparent when it overlaps with possible experience, just as it does when it demonstrates that there are more numbers in the set of the real numbers than there are in the set of the integers, although, again, no possible experience attaches to this conclusion.

Thus for Badiou, reality is ultimately abstract whereas for Heidegger it is the concrete which is the most real. For all existentialists, philosophy means living life thoughtfully, for one's concrete existence is the ultimate meaning of one's life, and not just the criteria on which it will be judged. Philosophy is the name of the way to make one's existence thoughtful. It is about living an existence able to reveal a realistic understanding of its own significance to itself and to others for a finite time. This is not to deny that our actions have infinite effects as they ramify out through the infinite plenum of immanence in their consequences, foreseen or not, for other's lives.

Of course to many it is quite an appealing idea that we are in fact infinite and only seem finite. The very existence of religion attests to the fact that people like to be told that, even empowering metaphysical experts willing to assure and reassure them regularly that this is definitely so (i.e. priests). What the finitist points out is that no matter how psychologically satisfying this belief is, it is in fact a delusion based on a careless use of the function of negation (*not/in-/un-/non- etc*). If someone asks “what color is your jacket?” and you answer “Well, it's not green”, it sounds suspiciously like you are bluffing, and that you don't actually know (or for some reason don't want to say) what color it is. And if a metaphysician tells me, when I ask them what I am: “well, you're not finite...” it sounds no less suspicious to a finitist like me.

More On Finite Transcendence – reflections on Jon's response.

David Rathbone

Jon's considerate response calls for reflections on various points. One is the connection of set theory with ontology, another is whether infinity is an experience, an idea, or a thing.

In his essay “The Concept of a Set” (actually, an excerpt from his book *From Mathematics to Philosophy* pp.181-223; as reprinted in the second edition of Benacerraf and Putnam's anthology *Philosophy of Mathematics: Selected Readings* pp.530-570), Hao Wang states the standard concept of a set - “a collection of previously given objects”. The metaphysical point to notice is that the elements are *previously given*. A canary, a banana and a sunflower might be in the set “yellow things in my room”. But these three elements are thereby connected only abstractly, not concretely. I can let the canary out of the window, and the banana and the sunflower remain unaltered. They are independent of their abstract connection in my mind, as based on similarities in their relation to me and my perceptual capacities. In other words, the canary, the banana and the sunflower are connected only conceptually, not ontologically.

Of course the elements of some sets *are* ontologically interconnected: say, the set made up of a projector, a movie film, a screen, and the moving image on that screen as projected by the projector. The moving image is ontologically dependent upon the other three elements of the set, and if I remove any one of the other three elements, the image disappears also. Since the relations between elements of a set can be either concrete (ontological) or abstract (merely conceptual), the characteristic of mutual ontological dependence or independence of elements, although significant, cannot be said to define what a set itself is.

This is important, because one of the few non-superstitious accounts of how we get the concept of infinity is that we get it from the concept of a set, together with the notion of indeterminacy. The set of “all chairs” is infinite because it is indeterminate – not any particular set of chairs in any one place or time, but any and all chairs everywhere, past present and future, a set at least potentially infinite, (depending on how you look at the world). In thinking of a chair *in general*, there is at least one sense in which we are thinking of infinitely many chairs at once.

This remarkable achievement is possible because it is abstract, not concrete. I don't have to claim to have had, or even to be able to have, actual experience of all of a set's members in order to be justified in claiming to have understood the concept of that set. That is because this is not a question of ontology. "Chair" is a reification of the verb "sitting", part of the equipment needed to have that experience in the context of the phenomenon of gravity. The set of chairs is the set of things I would recognize as this sort of equipment in this sort of context. In this sense, chairs aren't ultimately real: wood, plastic, metal; these things are (relatively) real. Experience: this too is a reality, along with the human concerns which have shaped the relatively real matter, whether into a finely-wrought work of carpentry, a machine-made mass product, or a rough-and-ready rock or upturned box. The concept "chair" is an abstraction, a shorthand we use so that we can get on with our practical ontological concerns.

The danger as I see it of confusing set theory with ontology is that the infinite thus gets smuggled in along with actual things, and passed off as ontological realities based on positive experience, supplanting other *actually* positive experiences and thereby preventing them from occurring. An abstract infinity is not based in a concrete experience, but in an intellectual abstraction achieved by following a rule. Negation, however, is a concrete experience, an experience so concrete, in fact, that we can easily universalize it. Of *any* given set of chairs, we can say "no, that's not *all* the chairs". We realize that this could go on for ever, that the concept "chair" is literally in-finite. The endlessness of the concrete thereby gives us an abstract concept of the infinite, but it is not a concrete concept of the infinite, not an ontological concept that we can tie to a positive experience. It is rather the very fact that we *can't* do this that makes us reach for the negation in the first place – in-finite: *can't finish*. This kind of abstraction is an example of what is one of our most important cognitive powers, the same power which enables mathematics to dispense with representation ("counting on fingers") and achieve its great insights into the infinite realm of abstract truths. But this is a different power to the power of intuition – the power to experience the reality of sensations – the principle that we can get information about being from our senses, which is the raw material that the abstractions of understanding go to work on. The sensation is concrete, the understanding abstract. The abstract depends upon the concrete, not vice-versa. Mathematics depends on ontology, but ontology does not depend on mathematics.

The thought which Nietzsche adopted from Feuerbach and bequeathed to Heidegger is this: that in telling us that the self of which we are conscious is only a finite tip of an infinite iceberg, most

religions and many philosophies are making a metaphysical mistake which is not at all an innocent matter of existential indifference. The most famous statement of such a principle of indifference is Pascal's wager. Blaise Pascal argued that we should live as Christians, because if God exists, then we'll get into heaven, and if he doesn't, we haven't lost anything. What Pascal assumes is that existence is not valuable in and of itself unless it is infinite. This life of immanent existence is only a means to an end (eternal salvation or damnation), and is not thought of as an end in itself. This is because it is finite: it began when we were born and shall come to an end the day we die, and then is no longer.

But if immanence is thought of as infinite, and transcendence finite, then Pascal's wager appears in quite a different light. If this existence is the whole story, then it represents our one and only opportunity of achieving any sort of transcendence at all. Transcendence is not "natural": it does not inevitably occur. For instance, one of our first achievements of transcendence – the acquisition of language – is certainly a feat so remarkable that some hardwiring must be admitted to be involved in the rapid absorption of both vocabulary and grammar. Nevertheless, it cannot be denied that without intensive coaching, or at least immersion, this acquisition does not occur. A baby raised in silent silence will never spontaneously start speaking, and will remain trapped in an immanence we can hardly imagine (when later asked, for example, what it was like before he learned language at the age of 30, Kasper Hauser could only answer that it wasn't like anything).

But for anyone reading this, it must be agreed that we have, at least temporarily, achieved transcendence of that sheer immanence of the newborn infant. It is a fragile achievement, for brain damage or insanity can destroy it, and plunge an adult back into mute infancy. It is an achievement which largely masks the immanence on which it is based. But the practice of meditation, for example is premised upon the fact that the transcendence language achieves in us can be suspended, and the sheer immanence of a-subjective unknowing be discovered intact behind our subjective identities and revisited at will. This act has the beneficial effect of reminding transcendence that it is neither independent nor infinite. The superstructure can ignore its foundation, but if the foundation is destroyed, the superstructure must fall. A car crash victim or drug abuse casualty may indeed return to an infantile state, but a person without a body (whether organic or artificial) is nothing but the groundless superstition of the ghost (which in any case is usually thought of as having some sort of ethereal and translucent but nevertheless substantial presence). But the case for immanence is even stronger than the case for the body: even if a material body is thought away altogether, an "inside" is still thought to this disembodied consciousness, an immanence constituting the core of its experience.

So: optional and fragile transcendence achieved on an indispensable (but often ignored) basis of immanence. This first achievement of the juvenile's transcendence of the infant then grounds a series of transcendence-achievements, from the juvenile to the adolescent, then from the adolescent to the adult. Each of these nested acts of transcendence is fragile and temporary in its own way, and we are all surrounded by instances of people who have never achieved one or other of these feats, or achieved them only partially, or lost their grip on previous achievements. Although a great oversimplification of a multi-dimensional, non-linear situation, those who care for the aged do notice a remarkable reversal of these achievements, from adulthood back through a kind of adolescent phase into a second childhood and eventually a senile dementia coincident with infancy.

Now the real weight of the existentialist's objection to Pascal's wager is not just that a life devoted to an illusion is a life wasted. That in itself still assumes that wasting a life *matters* in some metaphysical sense. But the finitist has quite a different sense of what "mattering" is. The infinitist says that what really matters is the eternal fate of your infinite soul. The finitist says that what matters is the degree of transcendence achieved, temporarily, by the finite individual, not just because this makes that individual's experience that much richer for themselves, but also because transcendence has its pioneers. Languages grew and were forged by actual individuals gradually achieving greater degrees of transcendence which we rapidly recapitulate in our own existence. We stand on the shoulders of our ancestors in this sense, and you could not have transcended infancy into juvenile English (or whatever language you first learnt before English) in a mere five years, had they not spent five *million* years transcending the immanence of our simian predecessors. The concrete transcendence we actually achieve has the potential to stabilize into a platform for future ventures of others.

Writing is clearly a transcendence within language. It transcends the limitations of the spoken voice, without, it must be noted, destroying them. Even as you read now, although you probably aren't reading out loud, you are necessarily "pronouncing" each word in your mind. Writing does not usually reflect on this fact any more than the non-meditating speaking subject reflects upon the state of infantile immanence. But speech is as inseparable from writing as infantile immanence is from speech itself. Each new layer of transcendence carries all previous ones along within it as its own condition of possibility, although such conditions are usually ignored and masked by the transcendence effect. The existentialist's question is thus never "how do I save my infinite soul?", but always "how do I transcend the limits of my situation?" Answering this question with the thought of a higher finitude is quite

different to answering it with the thought of an infinitude.

A transcendence from finitude into finitude is open-ended, but always limited, just as although a wheel's travel is open-ended, it never gets away from friction. Actually, it wouldn't even work without it. But that doesn't make friction a positive thing, something that can be taken in isolation from the actual wheel and the actual road. The friction is ontologically dependent upon the wheel (and the weight upon it and the force turning it), and the road. No wheel, no road, no friction. Likewise, no finite self in a finite situation, no infinity - and no mathematics; in fact, no abstraction at all. Infinity is an ontologically dependent abstract concept inseparable from the concept of negation. This is why Cantor actually used the term "transfinite" rather than "infinite" - because the arithmetic of transfinite ordinals he developed was not the opposite of the limited arithmetic of finite numbers, but rather a way to construct a new kind of finite theory from the transfinite perspective upon number in general. This theory transcended the limitations of classical mathematics only by imposing its own different limitations, defining addition, multiplication and so on for transfinite numbers as well as finite ones. The "is" of the axiom of infinity ("A.I. = there is an infinite set" - Hao Wang p.535) is not the strong "is" of concrete being, but the weak "is" of conceptual being. Thus Cantor's definition is negative: "Aggregates with finite cardinal numbers are called *finite aggregates*, all others we will call *transfinite aggregates* and their cardinal numbers *transfinite cardinal numbers*" (p.103 of Dover edition of Cantor's *Contributions to the Founding of the Theory of Transfinite Numbers*).

I began by saying that I wanted to clarify the connection of set theory with ontology, and whether infinity is an experience, an idea, or a thing. Infinity is an abstract idea which may orient actions in concrete reality, but is itself neither a concrete thing nor a positive experience. The relation of ontology with set theory is thus like your relation with your shadow. You exist as a concrete entity whether or not you are casting a shadow. Ontologically, the shadow depends entirely upon you, whereas you do not depend at all upon it. The shadow is an abstract thing, a negation (the absence of light), and could even be infinite in certain situations (the shadow cast by Jupiter stretches billions of kilometers into space, for example). But it is not alive. Certainly, your shadow can influence, orient or even obsess you. But the finitude of the individual remains inescapable – insofar as "it is still the age of the individual" (Nietzsche, *Wanderer and His Shadow* #350). But Badiou would I think say that that age is over and today and tomorrow belong to the individual. Being is multiple and not One, as Jon cites Badiou saying.

But this still does not dissolve ontology into the set theoretic abstractions of mathematics. Yes, being is plural, a seething mix of regions of relative stability and relative flux, each gauged only relatively to the others. But this does not vitiate the thought of being's entirety, only complicate it. Seeing the whole is the fundamental act of finite transcendence which is a "counting as one". To say that set theory does not presuppose this abstract identification is to say that set theory does not depend upon the concept of a set, isn't it? "Counting as one" and "taking as a set" are synonyms naming the power of our minds to abstract. But this is not ontology, for ontology must be concrete. It must be tied to conditions of possible experience – at least indirectly – as the source of information which makes of experience something other than hallucination: my sensation of being. This is existential, not intellectual. Thus it is finite, limited, subjective. I know it's only my take on being. But I know that it is being nevertheless. It's not abstract, and set theory can say nothing about it at all. It's the immediate, concrete, spontaneous, real event of being, and it just keeps on happening whether we understand our finite place in it or not. The existentialist's question to Pascal remains: what have the misunderstandings prevented? Or do we just have to accept that we don't know who we are? For we have no way of knowing our infinite consequences, remediable or not, anymore than we can know who else we could have been.