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Possibility, Novelty, and Creativity¹

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The Problem

Genuine novelty is the introduction and creation of new things, relations, and affections in the world. Human experience constantly confronts us with novelty, in surprising, intimate ways (spotting new freckles, a great cup of hot chocolate, budding flowers), and in more time-extended, sweeping ways (invention of the automobile, the Little Ice Age, the development of *homo sapiens*). And yet things are the same. The novel always contains what has already been as a component, but with some modification.

Generically, all novelty is the outcome of some creative act, and all creative acts beget some novelty. Apart from this, the concept of novelty is not homogenous. There can be novel *items* – individual and unique things. There can be novel *kinds*: new sorts of things or states of affairs, new types of events. There can be novel problems and questions and concepts. All novelty involves a *measure* of unpredictability and a *measure* of breaking from the status quo. And novelty is a pervasive element of human experience.

I want to take this aspect of human experience seriously when doing metaphysics; I do not want to make the world of human experience secondary to some ineffable realm. Because our experience is an aspect of the real world, an account of novelty must acknowledge that the novel things that emerge in the course of events are “genuine.” That is, they are metaphysically significant and ontologically real. I want to construct a metaphysic that accommodates pervasive change and novelty, one that accommodates *radical novelty*.

This is, however, a drastic change from much contemporary metaphysical work.² Often, the way change is dealt with metaphysically renders our most intimate interactions and feelings an unimportant component of reality (if it is a component at all). Thus the reworking of many fundamental notions is required in order to make

sense of the ideas of ‘change’ and ‘novelty.’ One of these notions is ‘possibility.’ Commonly held notions of possibility, such as an existence-less form (a “possible object” – a plaid apple, for example), or possibility as a rearrangement of the elements of actuality (taking what actually exists and putting it in new combinations – horse + horn = unicorn), drain all significance from the notion of novelty. In this paper, I attempt to revise our notion of possibility using Bergson and Whitehead by creating a picture that does not entail “possible objects,” but allows for a creative actuality and radical novelty. This modified view of possibility will provide a basis for understanding higher and more complex and coordinated forms of novelty.

Possible as Less than the Actual

A common view of possibility takes the possible to be less than the actual. That is, the possible has the same detailed form as the actual, but is lacking a crucial element of concreteness – existence. These existence-less forms are *possibilia*, or possible objects.³ For example, if it is possible for me to get my hair cut a certain way, that possible haircut remains in its peculiar state of ideal being until I do in fact get my hair cut that way. Then the possibility becomes an actuality. There is a passage from the possible to the actual; everything actual was preceded by possibility. Existence sweeps forward and fills in forms. Because possibility is less than actuality, it is thus in some sense prior to actuality, and thus there exists the capability, in principle, to know and examine possibilities long before they become actualities. Because novel features of new events are, in principle, knowable beforehand, the features are not novel-in-themselves.

If this is the case, what is novelty? Novelty in actuality could only be the actualization itself. For if the form precedes its realization, what is novel about the realization other than the fact that it is now actual? Now, nothing is wrong with including the newness of existence as an aspect of novelty, but merely adding existence to a form does not capture the idea of ‘genuine’ novelty. If the strange stick figure I drew this morning is novel solely in virtue of its existence, it is novel in exactly the same way everything in the world is novel. Both my drawing and the invention of the digital camera would, on this view, be novel in the same way: they both now exist, and the fact of existence is the only fact of novelty. If all novel things are novel in the same way, there is nothing really novel about them; the novelty of uniqueness immediately grows stale. Novelty becomes a stand-in for existence, and thus meaningless. Thus if possibility is really less than the actual and simply filled in with ‘existence’, novelty is a sterile concept.

Something more is meant, though, by novelty. The novelty of something is more than its *mere* existence; it is also fresh. There is the air of ‘nothing has been quite like this’ – it is the novelty of *vibrancy*.⁴ Bare existence does not capture this. The concreteness of *this particular occurrence (existence) in the world* must be appealed to. But to get there, this notion of possibility must be rejected.

The Combinatorial View of Possibility

Combinatorialism is a theory of possibility that views the possible as less than the actual, but does not think possibilities are ideally preexistent. It takes what is possible to be rearrangements of what is actual.⁵ If what is actual (real) in the world can be combined or recombined in some way – any way – that recombination is a possibility. There can be novel combinations, combinations that have not ever had an instantiation. Novel combinations add more than mere existence; through the newness of arrangement they add ‘nothing is quite like this.’ In fact, every moment and alteration of objects and events heralds a novel combination. A particular handbag is the first and only handbag that is that particular combination of elements which is just like it is. A particular atom that loses an electron but gains another is the first and only atom just like it is. Novel combinations abound in the world. Thus a combinatorial view of possibility seems to give us a doctrine of *pervasive genuine novelty*, or radical novelty; new (unique) things and new vibrancies are widespread.

Though it seems to be leaning towards explaining radical novelty, there are some shortfalls of combinatorialism. Because possibility is defined in terms of actuality, it is not possible for there to be new actuality. Indeed, on this view, actuality takes on many of the characteristics of Parmenidean *being*: what is actual now is what was actual before and what will be actual later. Only arrangement changes. This denies full actuality to things-in-combination, like desks and apples, which constitute the entirety of our experienced lives. Thus possibility is still less than actuality, and the critiques of ideally preexistent possibility (predictability, immediate staleness, etc.) will apply here as well, though perhaps in slightly modified forms. In addition, an aspect of a strong doctrine of metaphysical novelty (radical novelty) is that new actualities come into existence; ontology itself changes. Combinatorial possibility holds there is some ontological level that does not change, but merely shifts, and this level takes on the name Actuality. The denizens of this level are exempt from novelty. Novelty only appears at the levels in which the elements of actuality are rearranged. Combinatorial possibility gives us a notion of novelty for experience, but at the expense of the reality of our experienced world, and this makes novelty superficial. For a deep radical novelty we must find a different model of possibility, keeping in mind the insights of the combinatorial view.

Possible as More than the Actual

If possibility were to have ideal form preceding reality, the possible would have been there from all time, awaiting its realization, allowing itself to be foreseen, and thus extinguishing any life from the notion of novelty. Henri Bergson believes that speaking of possibility in this way, as a form without concrete existence, involves a fundamental conflation of two distinct senses of ‘possibility.’ In one sense, possibility is less than and precedes actuality only in the sense that some event is ‘not impossible.’⁶

Something is not impossible if there is no contradiction in it occurring.⁷ This is a negative statement and attributes no definite form to what is possible, but merely gives a condition for realization. Though it falls short of accommodating novelty, the combinatorial theory of possibility gives an insightful image of what we can conceptualize as ‘non-impossibilities.’

Possibility as an ideal form, on the other hand, actually presupposes actuality and adds to it; it is actuality in its every detail plus the mental act recognizing it. As such, it cannot come prior to actuality. By conflating possibility as ‘not impossible’ and possibility as ‘ideal form or possibilia’, one can arrive at the conclusion that possibilia have all the descriptive characteristics of actuality *and* can be predicted or known before occurring.

Think for a moment about *Hamlet*. For that *exact* play to be possible, Shakespeare himself is needed in the exact circumstances under which the play was indeed written. The details are of supreme importance. For *Hamlet* to have taken on the character it did, anyone writing it must have thought, felt, and experienced what Shakespeare did, that is, Shakespeare and his society are necessary, as are the conditions for that society, and so on. Every bit of the actuality of *Hamlet* and the actuality it presupposes must be contained within the ideal form of *Hamlet*. Thus the possibility of *Hamlet*, taken as an ideal possibility, requires the existence of *Hamlet*.⁸ To characterize *Hamlet* in all its detail would be to invent it. If such a characterization existed prior to Shakespeare’s writing *Hamlet*, Shakespeare did not really invent *Hamlet*. The novelty of *Hamlet* is lost, as is Shakespeare’s creative genius. Taken as an ‘ideal’ characterization, possibility implies the corresponding actuality and, in addition, the mental act which exposes this particular actuality as having been possible throughout the past.

Thus to preserve novelty, we must hold that the possible precedes the actual only if possible is taken to mean ‘not impossible.’ Possibility as an ideal form occurs retroactively to actuality. This reworking of the idea of possibility has created space for an account of novelty. The novel still has conditions, however. The first is that what is novel is, at the time of its actualization, not impossible; that is, the actuality of what does exist cannot conspire against the coming into being of the novel thing. So it is necessary for novelty that it be not impossible, but is it sufficient? At first blush, I think not. But in a deeper sense, it is. More must be extracted from the notion of ‘not impossible.’

Conditions of Novelty

The notion of radical novelty, if true, entails that novelty is continuously produced throughout the universe; every new moment of existence is radically novel – an extension of the past, mixed with new and unforeseen flavors. But there is an order underlying the pulse of the universe, though it is an incomplete order. If what is

radically new is, prior to its actualization, something simply ‘not impossible’, what carries forward the recognizable order into the future? That is, if every moment of existence contains a radically new element and there are no conditions on this element other than its non-impossibility, what keeps the undeniable pattern of events from swerving wildly and completely? Something being ‘not impossible’ assures a limited accord with the past. On the face of it (that is, taking into account only contemporaneous occasions of actuality), the sudden and rapid degeneration of a hunk of gold into powder doesn’t seem impossible – there are no physical impediments, and so on. But this fails to take into account the propagation of modes of order throughout successive occasions of existence. The weight of the past bears on the possibility (non-impossibility) of the future. For this to be the case, there is required a definite transmission of affective force from present existence to future existence⁹; the basic character of the future is the character given by the present, and thus the past. The modifications to this character are a result of the introduction of radically novel elements. But the modifications must not be excluded by the current characteristics dominant in actuality, including modifications dominant for a stretch of actuality.

An objection can be raised: you have committed yourself to saying that novelty issues from nothingness (*ex nihilo*), and this is absurd, even if it is correct that the weight of actuality provides ‘exclusion’ conditions on novelty. Novelty obviously cannot come from ‘the weight of actuality’; novelty is supposed to introduce elements foreign to actuality into it, and actuality cannot provide what it does not have. Novelty also cannot derive from a ‘formed’ possibility, as it exists only after and in virtue of the fullness of actuality. But if what is actual cannot beget what is novel, and if possibility in any ‘strong’ or ‘ideal’ sense is a consequent, not an antecedent, of actuality, then novelty must come from nothing. It does not matter if actuality places limits or conditions on what can emerge as novel – something is coming from nothing. And if it were coming from nothing, the effectiveness of actuality in providing limits would seem to be dubious at best. But then there would be nothing stopping the novel elements from overturning any order at any time, and we simply do not observe this. If you want to hold a strong sense of novelty, it seems like it cannot come from “nothing.” But to avoid this, recourse to some ‘ideally pre-existent’ possibility is needed. But this, by your own admission, destroys novelty.

The heart of the objection, it seems to me, is this: novelty, or what is called novelty, seems to require some measure of conformity to the past. But how can actuality place limits on *nothing*? Even if something could come from nothing, there is no reason why limits or conditions could be placed on such a something – it is generated completely external to actuality and its influence. Thus novelty *ex nihilo* would have no regard for any order, and this is clearly not something that can be said of everything, possibly anything, ‘radical novelty’ is intended to apply to.

This objection may seem intractable, but it turns on muddled notion of ‘nothing’. By clarifying the notion of ‘nothing’, the seeming impossibility of the emergence of novelty ex nihilo and the influence of actuality on such ‘nothingness’ will vanish.

Nothing as Everything

Similar to the confusion between two distinct senses of ‘possibility’, there is a confusion between two distinct senses of ‘nothing.’ The first, and most basic, way of using nothing signifies it as the absence of what we are seeking.¹⁰ The other sense of ‘nothing’ means, roughly, absolute emptiness. But we do not experience absolute emptiness. There are always limitations and contours. Emptiness, as we experience it, is a substitution of one thing for another (a ‘ring’ for ‘some air’), with the suppression of one end of the substitution. This is the only way we mean emptiness. Absolute emptiness is a universal substitution and suppression of all the elements of our experience. As Henri Bergson put it:

In other words, this so-called representation of absolute emptiness is, in reality, that of universal fullness in a mind which leaps indefinitely from part to part, with the fixed resolution never to consider anything but the emptiness of its dissatisfaction instead of the fullness of things. All of which amounts to saying that the idea of Nothing, when it is not that of a single word, implies as much matter as the idea of All, with, in addition, an operation of thought.¹¹

When considering emptiness, we seek nothing and are satisfied by nothing, turning a blind eye to everything. We think we know what absolute emptiness could be, but ignore that simply through considering we consider *something*, thus ignoring the “fullness of things” which confronts us.¹² Thus, like the notion of possibility, the notion of nothingness itself contains the whole of actuality with the addition of a particular mode of thought.

These considerations wholly alter the criticism leveled against creation ex nihilo. Creation ex nihilo is really creation ex omnibus; it is creation from *everything*. The entire universe is conspiring, in its way, to the creation of every fact of existence. But phrasing it ‘creation ex nihilo’ still bears a purpose. The most salient feature of creation which is captured by ‘nothing’ is its indeterminacy, its impenetrability to perfect foresight or complete characterization. ‘Nothing’ also captures the reach beyond actuality better than ‘everything.’ That which is indeterminate must lie beyond established fact. Thus the reach is beyond actuality. Novelty is an issue of the universe’s creative process, from which it pulls into determination new affective elements. But one cannot ‘see’ or determine precisely from whence novelty springs. Novelty is an issue from the infinitude of everything, overwhelming and yet indeterminate, so as to yield it the name *Nothing*.

One could leave it here, saying that novelty is the result of the universe's mutual determination of some indeterminacy. This would leave a vital question unanswered. Namely: What is *everything* such that it leaps beyond actuality into indeterminacy? By affirming indeterminacy as an aspect of *everything*, it is something, not *nothing* (which seems merely to indicate the ineffable character of the indeterminate). Leaving a description of the indeterminate as *simply* 'that which is not impossible' seems like premature mysticism.

But the indeterminate *is* 'that which is not impossible', provided it is understood the right way. There is only so far one can probe the character of the genuinely indeterminate, 'that which is not impossible.' As a preliminary step, Alfred North Whitehead's doctrine of Eternal Objects can be viewed as a positive partial rendering of creation ex nihilo. Such a rendering, though complex, will yield insights into novelty and possibility.

The Indeterminate: Eternal Objects

To best describe how eternal objects can be viewed as the indeterminate source of novelty, a better idea is needed of what an (eternal) object is. Reference to objects involves "reference to a realm of entities which transcend that immediate occasion in that they have analogous or different connections with other occasions of experience."¹³ Thus an object is that which can recur in separate occasions of experience. What defines an object and gives it its character is the affective tone¹⁴ that it contributes to the overall occasion of experience. The more abstract one gets in isolating these contributions of affective tone, the broader the perceived potential connection with other occasions of experience. 'Rug' is more abstract and thus more broadly applicable than 'green rug next to the desk'. This realm of abstracted objects capable of broad ingression into occasions of experience can be termed the realm of 'eternal objects', or 'ideal entities'. This realm can also be characterized as potentialities for actuality. The realm of ideal entities is infinitely large – there is nowhere actuality cannot go, that creativity cannot reach. This infinitude is the indeterminacy. It is the indeterminateness of specific realizations of these ideal entities that keep these possibilities from being 'ideally pre-existent' – that is, no specific arrangement of eternal objects exists prior to actualization. When something happens, it is new. How the indeterminacy accomplishes this and how the realm of ideal entities is indeterminate will soon become clearer.

First, ideal entities are indeterminate due to their necessary reference beyond themselves. They are possibilities for actuality, so they necessarily refer to definite actualities. Also, they do not ingress into actuality singly; ideal entities are related to all other ideal entities based on potentiality of joined realization. The relations an ideal entity bears to other ideal entities and to occasions of actuality are parts of its essence. But so is the peculiar character of that ideal entity. The way 'red' stands in regard to

other ideal entities and to realizations of actuality are part of its essence, as is the affective tone peculiar to it.¹⁵ Because ideal entities are infinite, one could not give an exhaustive account of the essence of ‘red.’

Into a new occasion of actuality there is always the ingression of some (hierarchical) *set* of ideal entities. The sets, and thus the hierarchies, are undetermined prior to ingression, that is, unformed. Formation occurs during actualization. So the realm of ideal entities is indeterminate as to what complex affective tone ingresses into occasions of experience. When Whitehead calls the realm of ideal entities “numberless”¹⁶, he both means its membership is infinite, and also that it is indeterminate and thus uncountable and thus referable to only as a whole. That is, the realm of ideal entities is both a multiplicity and a unity. If the analogy helps, the realm of ideal entities could be thought of as a membrane with knots of affective energy. There is no definite structure to (regions of) the membrane prior to actualization. In actualization, the ideal entities are graded¹⁷ in respect to their relevance and contribution to that occasion, forming the hierarchical structure of the set of ideal entities. Thus the realm of ideal entities is a ‘something’ in *everything*, but is *nothing* until its ingression into actuality.

So possibility, in the form of ideal entities, has genuine ‘universal fullness’ while retaining indeterminacy prior to actualization.¹⁸ And it is in the creation of definiteness out of infinitude – in the process of actualization – where novelty can be found.

Novelty: The Issue of Infinitude

During the process of actualization, the weight of the past and its transmission of affective character determines what is ‘not impossible’ for the new occasion. This is an initial limitation on what set of ideal entities can ingress into that occasion; there must be some conformity with the prevailing affective tone. The definite set that ingresses into the new actuality is novel; it is a novel complex affective tone, one that did not exist prior to its ingression. This novel tone interacts with the old tone, generating a third, and novel, tone at the perishing of that occasion of existence. Thus what is novel is a new affective tone of experience. From this it follows that every occasion of existence is novel: they are created in the process whereby new sets of ideal entities merge with the old; radical novelty is every moment of existence. From the infinitude of ideal entities (of possibilities), novelty is produced due to a generation of finitude from the infinite. From what exists in infinitude, a novel finite determination is created. Actuality is this finitude; its definiteness generates the individuality requisite for the agglomeration of affective experience.

It has been shown that the notion of possibility, properly construed, can cohere with the doctrine of perpetual radical novelty. The above sketch of possibility may seem strange, but taking the breadth of potential novelties into account is no simple task.

Regardless, the creative advance of nature does not need to be relegated to a lesser order of reality, and this is important for any attempt at a comprehensive and meaningful metaphysic.

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¹ This paper is a fusion of my philosophical concerns and my readings of Alfred North Whitehead and Henri Bergson. Consequently, much of the paper is indebted directly and indirectly to the work of these two men. As will be noticed, some of my terminology is borrowed from these two, particularly Whitehead, and I try to give adequate definitions when appropriate.

² I’m thinking roughly of the last fifty or sixty years in the analytic tradition, including philosophers such as W.V.O. Quine, Saul Kripke, Hillary Putnam, Roderick Chisholm, Jaegwon Kim, David Lewis, and so on, though issues concerning novelty and change have been around for much longer.

³ This characterization of possibility applies to talk about *possible worlds*. Possible worlds and the possibilia inhabiting them are just existence-less forms. Even David Lewis’s extreme realism about possible worlds fits in rather well here; in this case “exists” would simply be short for “exists in the actual world”. It would be worth discussing Lewis’s case in more detail, but that discussion is tangential to my main issue: novelty.

⁴ Nicholas Rescher, *Process Metaphysics: An Introduction to Process Philosophy* (New York: State University of New York Press, 1996): 75

⁵ For an example of such a view of possibility, see:

D.M. Armstrong, *A Combinatorial Theory of Possibility*, (Cambridge: Cambridge University Press, 1989).

⁶ Henri Bergson, "The Possible and the Real," in *Key Writings: Henri Bergson*, ed. Kieth Ansell Pearson and John Mullarkey, 223-232 (New York: Continuum, 2002): 230.

⁷ There are different levels of 'contradiction', such as logical contradiction, physical contradiction, etc. These levels give a basis for determining probabilities of non-impossibilities.

⁸ Bergson, "The Possible and the Real": 230 (including the *Hamlet* example).

⁹ The affective forces of an occasion of existence are those elements, if I may be circular for a moment, which are felt by consequent occasions of existence. The parts of an existence that are transmitted from past to future are literally the dominant features of the 'experience' of that existence. An experience is comprised of elements that have some effect, or alter the character of, the experiencer. Strictly speaking, it is components of the experience that are transferred, not the experience itself; it is the power of an element in experience that is transferred. An occasion of existence that is affected by an affective force is different than it would have been otherwise.

For example, the color red can be a component of experience and it carries a certain power – a power to affect certain other occasions of experience, like when one feels oppressed or anxious when in a red room for too long. Once a moment of time has passed – once one has moved to a new moment of existence – the power of the red room is still vivid. This is one example of affective force. Or consider a glass resting on a table; throughout successive moments it continues to sit on the table because the table contributes – very literally – a force to what that glass experiences, and so it does not move downward though there are other affective forces also altering its character and behavior (gravity, for example). Basically, an affective force is something that has some effect on other actualities. It is these effects that are transmitted into the future. And it is these effects that alter and contribute to the changing and novel character of experience.

The idea of affective forces is taken up more directly later in the paper.

¹⁰ "Did you find it?", "No.", "Did you look in your room?", "Yeah, there was nothing." But obviously there was *something* in the room, just not what you sought.

¹¹ Bergson, "The Possible and the Real": 229-30

¹² c.f. Malebranche: "To think of nothing and not to think at all, to perceive nothing and not to perceive at all, are the same thing."

Nicholas Malebranche, *Dialogue between a Christian Philosopher and a Chinese Philosopher on the Existence and Nature of God*, trans. Dominick A. Iorio (Washington, D.C.: University Press of America, 1980): 67

¹³ Alfred North Whitehead, *Science and the Modern World* (New York: The Macmillan Company, 1925): 227

¹⁴ An affective tone is similar to an affective force, described earlier. The affective tone of an object or an occasion of experience is the set of affective forces it contributes to other occasions of experience. It is the method through which an object interacts with occasions of experience. An object may prevent or

incite an occasion of experience to behave in a certain way, like a brownie incites one to ingest it, or a rock prevents water from flowing directly downhill. This ‘inciting’ and ‘preventing’ would all be examples of affective forces, which can sit within the affective tone of some particular object.

¹⁵ These two aspects would seem to be co-determined.

¹⁶ Alfred North Whitehead, *Modes of Thought* (New York: The Free Press, 1968): 167

¹⁷ Gradation of ideal entities refers to the hierarchical ordering of ideal entities based on the contribution they make to the character of an occasion of experience. The more an ideal entity contributes of its character, the higher it sits in the hierarchy. This captures the idea that some ideal entities are a more salient fact in some occasions of experience than in others; some experiences are much more ‘red’ (or ‘bright’, or ‘joyous’, ...) than others.

¹⁸ When one says that something is possible, such as, “I could move my cup two inches to the right,” one is not giving a definite or determined possibility. One is still giving an account, albeit a more specific account, of what is not impossible. To give a genuine definite possibility (one ‘ideally pre-existent’), one would need to give an exhaustive account of the new set of affective tones and its effects. But this is impossible without a new definite set of ideal entities forming, and this only occurs during actualization. When one says, “I could move my cup two inches to the right,” one is giving a limited segment – a subset – of graded ideal entities. This subset is incomplete on its own, but may be in any number of definite sets. That is to say, one not giving a definite possibility, but rather giving a potential component of a possibility – a non-impossibility.