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# The Posthuman Manifesto

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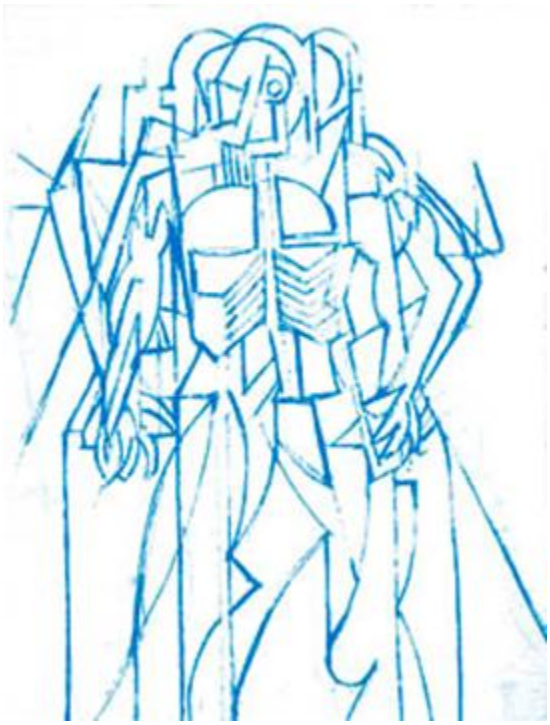


## I. General statements

1. It is now clear that humans are no longer the most important things in the universe. This is something the humanists have yet to accept.
2. All technological progress of human society is geared towards the transformation of the human species as we currently know it.
3. In the posthuman era many beliefs become redundant — not least the belief in human beings.
4. Human beings, like gods, only exist inasmuch as we believe them to exist.
5. The future never arrives.
6. All humans are not born equal, but it is too dangerous not to pretend that they are.
7. In the posthuman era, machines will no longer be machines.
8. It is a deficiency of humans that they require others to tell them what they already know. It is only then they will believe it.
9. Posthumanists do not fall into the trap of imagining a society where everything works well. Economic and political theories are as futile as long-range weather predictions.
10. Surf or die. You can't control a wave, but you can ride it.
11. We now realise that human knowledge, creativity and intelligence are ultimately limited.
12. Complex machines are an emerging form of life.
13. A complex machine is a machine whose workings we do not fully understand or control.
14. As computers develop to be more like humans, so humans develop to like computers more.
15. If we can think of machines then machines can think; if we can think of machines that think, then machines can think of us.

**II. Statements on consciousness, humans and philosophy**

If consciousness is a property that emerges from a specific set of conditions, in order to synthesise it we do not need to re-model it from the 'top-down'. We only need to

recreate the conditions from which it might emerge. This requires an understanding of what those conditions are.

1. Consciousness is not exclusively restricted to the brain.
2. Consciousness is the function of an organism, not an organ.
3. One does not understand consciousness by studying the brain alone.
4. The mind and the body act together to produce consciousness. If one is absent consciousness ceases. There is no pure thought isolated from a body. In order to function the brain must be connected to a body, even if the body is artificial. Consciousness is an effect that arises through the co-operation of a brain and body; we think with our whole body.
5. Consciousness can only be considered as an emergent property. In this sense it is like boiling: given sufficient heat, gravity and air pressure the water in a kettle will start to boil. We can see what boiling is, we can recognise it as something to which we give a name, we do not consider it mysterious, yet we cannot isolate it from the conditions which produced it. Likewise, consciousness is a property that emerges from a given set of conditions.
6. To say that conscious thought is not exclusively a function of the brain does not deny that the brain has a significant part to play.
7. Human bodies have no boundaries.
8. No finite division can be drawn between the environment, the body and the brain. The human is identifiable, but not definable.
9. Consciousness (mind) and the environment (reality) cannot be separated; they are continuous.
10. There is nothing external to a human, because the extent of a human cannot be fixed.
11. If we accept that the mind and body cannot be absolutely separated, and that the body and the environment cannot be absolutely separated, then we are left with the apparently absurd yet logically consistent conclusion that consciousness and the

environment cannot be absolutely separated.

12. First we had God, humans and nature. The rationalists dispensed with God, leaving humans in perpetual conflict with nature. The posthumanists dispense with humans leaving only nature. The distinctions between God, nature and humanity does not represent any eternal truth about the human condition. It merely reflects the prejudices of the societies that maintained the distinctions.

13. Idealistic and materialistic philosophical views both assume a division between the thing that thinks and the thing that is thought about — between the internal mind (brain) and external reality (environment). Remove this division and both views become redundant.

14. The idealists think that the only things that exist are ideas; the materialists think that the only thing that exists is matter. It must be remembered that ideas are not independent of matter and that matter is just an idea.

15. Most philosophical problems are debates about language. They arise because of the mistaken assumptions a. that language is consistent and b. that because a word exists there must exist a ‘thing’ that it represents and c. that the things that are represented should, in themselves, be consistent.

16. Logic is an illusion of human imagination. Truth and falsity do not exist in nature — other than in human thought.


**III. Statements on science, nature and the universe**

1. Science will never achieve its aim of comprehending the ultimate nature of reality. It is a futile quest, although many scientists do not acknowledge this yet. The universe(s) will always be more complex than we will ever understand.
2. The posthuman abandons the search for the ultimate nature of the universe and its origin (thus saving a lot of money in the process).
3. The posthuman realises that the ultimate questions about existence and being do not require answers. The answer to the question 'Why are we here?' is that there is no answer.
4. To know the ultimate nature of the universe would require knowing everything about the universe, everything that has happened and everything that will happen. If one thing were not known it would imply that all knowledge of the universe is partial, potentially incomplete and, therefore, not ultimate
5. No scientific model can ever be complete, but will always be partial and contingent. For any model to be complete it would have to take all influential factors into account, no matter how insignificant. Since this is impossible the scientist must make an arbitrary decision about which ones to ignore. Having ignored some factors their model is

incomplete, although this does not mean it isn't useful.

6. The posthuman accepts that humans have a finite capacity to understand and control nature.

7. All origins are ends and all ends are origins. Chaos theory has often been illustrated with the image of a butterfly's wing-flap causing a thunderstorm on the opposite side of the globe. Whilst this might illustrate the sensitivity of systems to initial states, it does not take into account what caused the butterfly to flap its wings — a gust of wind?

8. Logic that seems consistent at the human scale cannot necessarily be applied to the microcosmic or the macrocosmic scale.

9. Our knowledge about the universe is constrained by the level of resolution with which we are able to view it. Knowledge is contingent on data — data varies with resolution.

10. Scientists give privilege to order over disorder on the assumption that they are gradually discovering the essential laws of nature. This is a fundamental error; nature is neither essentially ordered or disordered. What we perceive as regular, patterned information we classify as order; what we perceive as irregular, unpatterned information we classify as disorder. The appearance of order and disorder implies more about the way in which we process information than the intrinsic presence of order or disorder in nature.

11. Science works on the basis of an intrinsic universal order. It assumes that all phenomena are subject to physical laws and that some of those laws are well understood, some partially understood, and some unknown. The posthuman accepts that laws are not things that are intrinsic to nature, nor are they things which arise purely in the mind and are imposed on nature. This would reinforce the division between the mind and reality which we have already abandoned. The order that we commonly perceive around us, as well as the disorder, is not a function exclusively of either the universe or our consciousness, but a combination of both, since they cannot really be separated.

12. Everything that exists anywhere is energy. Beside the fact that all material processes are energetically driven, energy has two major properties:

a. It manifests in an infinite variety of ways

b. It perpetually transforms

13. The appearance of matter is an illusion generated by interactions among energetic systems at the human level of resolution.

14. Humans and the environment are different expressions of energy; the only difference between them is the form that energy takes.

15. The posthuman is entirely open to ideas of ‘paranormality’, ‘immateriality’, the ‘supernatural’, and the ‘occult’. The posthuman does not accept that faith in scientific methods is superior to faith in other belief systems.

**IV. Statements on (dis)order and (dis)continuity**

1. Order and disorder are relative, not absolute, qualities. The proof that order and disorder are relative qualities lies in the fact that they define each other.

2. Anything we perceive can be considered to contain different degrees of order and disorder. The perception of order and disorder in something is contingent on the level of resolution from which it is viewed.

3. What we perceive as ordered and disordered is often culturally determined. Logicians will assert that there are mathematical ways of defining disorder, entropy and complexity — ways that are independent of human subjectivity. Whilst these definitions may be useful in certain applications they remain open to relativistic interpretation.

4. In posthuman terms, the apparent distinctions between ‘things’ are not the result of innate divisions within the structure of the universe, but rather are jointly a product of:

a. the way in which the sensual processes in living entities operate.
b. the variety of ways in which energy is manifested in the universe.
5. The ways in which energy manifestations are perceived by an observer can always be described with two simple qualities — continuity and discontinuity. Continuity is non-interruption of space-time. Discontinuity is a rupture in space-time. Both qualities can be discerned in all events depending upon how they are viewed. More importantly, they are both experienced simultaneously.
6. Energy manifestations should not be thought of as intrinsically continuous or discontinuous; that is, there are no absolute qualities of energy. Energetic states will appear as either continuous or discontinuous to an observer depending upon their viewing position. The quality of (dis)continuity is context sensitive.
7. What distinguishes things from one another is the perceived dis-continuities they display. The difference in manifestations of energy between a philosopher and a chair allows them each to be distinguished.
8. The level of complexity in a system cannot be defined in objective (that is, absolute) terms. Complexity is a function of human cognition, not an intrinsic property of anything we might look at.

**V. Statements on thought, meaning and being**

As long as models about how the brain might work are defective (being based on fallacious assumptions), the creation of a synthetic consciousness will be impractical.

1. Human thought is something that occurs in co-operation with the human body. It is not necessary to identify precisely where it occurs because it does not occur precisely in any ‘part’.
2. It is tempting to think of thoughts as blocks of data in the brain. This would be a mistake since it reinforces a static view of mental activity. A thought is a path through

the cognitive medium. Think of it like this: taking the London Underground map as an analogy of how the mind works, some people would say, 'Each of the stations on the map represents one of our thoughts and the lines represent the links between them. The lines are what enable us to get from thought to thought.' The posthuman argues 'A thought is not a station on the map but the route from one station to another.' That is, a thought is actuated in the process of traveling, rather than being a particular destination.

3. Given that a thought is activated, for whatever reason, it consists in a process of traveling through the cognitive medium that supports the mind. A thought does not exist unless it is being thought; otherwise it remains a field of potentiality, or attractor. The most likely journey that a thought may take once it has been activated defines its path. Similar thoughts will take similar paths.

4. Paths can be created in a number of ways, including direct experience, learning, prior cognition, and the act of thinking itself. In neuro-physiological terms the paths include, but are not restricted to, the connections between neurons and the probability of their firing. Moreover, the neural fabric is not a static substance. It is continually changing in response to stimulation and activation and just as prone to adaptation just as the skin or muscles are.

5. The path that a thought takes is not uni-linear in the way that we normally think of paths. A thought may take many different routes simultaneously. The occurrence of one particular thought may require that we bring together many different thoughts in combination.

6. The fact that different thoughts may lie in different paths, each of which are distinct insofar as each thought is distinct, shows us how we can imagine things we have never seen. We are unlikely to have seen a "girl with kaleidoscope eyes" but we can imagine what she looks like by making a composite image of the components, i.e. traveling through several distinct thought paths at once.

7. The activity of thinking is regulated by the conduct of energy in the cognitive medium. This medium is no different from any other system in that it represents a particular process of energy transformations. Where two thoughts are continuous (for example,

'blue' and 'sky' in the sentence 'The sky is blue'), the pathway between each of these thoughts is well established, and it will require little energy to pass from one to the other. Where two thoughts are not well connected (for example, between 'myrrh and 'capstan' in the phrase 'The myrrh-capstan') more energy is required to fuse the thoughts since they have less well-established connections.

8. Ideas that can proceed from one to another with relatively little effort (energy) can be considered continuous. Ideas that require great effort to travel between can be considered discontinuous.

9. The presence or absence of 'meaning' is determined by the amount of energy required to pass from one concept to another. Difficult meaning arises from the co-existence of concepts that are semantically distant, that is, when there is not a well-established connection between them. However, the path between concepts that have little or no connection may be too difficult to travel. For example in the phrase 'Echoes the wasp's virile down-plate', whilst not meaningless, is certainly awkward to assemble by the standard of most phrases.

10. In order to maintain a sense of being the human tries to establish continuity in response to the stimuli it receives from the environment. Such stimuli are both stable and unstable since the environment displays different amounts of each. The development of stable thought paths which correspond to stable stimuli generates a sense of order. Over time such stability develops into a sense of being.

11. Were the sense of order not perpetually threatened by the recurrence of random stimuli there would be no compulsion to re-assert order. As it is, since humans are continually faced with random stimuli, it is necessary to keep re-asserting order (maintaining meaning) so that we do not dissolve into chaos, thereby losing our sense of being.

12. In posthuman terms, it is unimportant how this process of being occurs. The same effect can be achieved in a number of different ways. It is true that we can learn from the human what is necessary for being, but this does not mean that it is the only way it can be implemented.

## VI. Statements on uncertainty

1. The humanist era was characterised by certainty about the operation of the universe and the place of humans within it. The posthuman era is characterised by uncertainty about the operation of the universe and about what it is to be human.
2. Questions arise in the posthuman era that would have not troubled us in the humanist era — What is a human? Is there such a thing?
3. Historically, we could say the posthuman era, the age of uncertainty, was born in the period leading up to World War I since this was the time we were introduced to quantum physics and cubism. The consequences of both made one thing clear: in the words of Heisenberg, ‘There are no things, just probabilities.’
4. Uncertainty is becoming familiar. There is uncertainty about lifetime employment, about political and economic theory, about what is happening to the environment, about whether scientific progress is always beneficial and about where technology is leading us.
5. What can we say is certain? Only that which we have to accept as certain for some other reason.

6. In posthuman terms uncertainty is nothing to fear. The world has always been as uncertain as it is now. What has changed is that it is now much harder to impose authority since increased information flow diminishes authority: there is more information, therefore, there is less false sense of certainty. Certainty, like belief, only arises in the absence of full information.
7. Uncertainty is certain.

**VII. Statements on art and creativity**

The production and appreciation of art is a particularly human faculty. It is often cited by humanists as the highest expression of human thought and the thing that most distinguishes us from machines. It would, therefore, be fair to admit that the posthuman era cannot begin in full until we have met this challenge from the humanists. In order to develop a machine that can produce and appreciate art we must first have a clearer understanding of what it is.
1.What is art? One useful definition is that it describes any commodity of the art market. We must distinguish between an art object and an aesthetically stimulating object. An art object is a commodity that is traded on the art market. An aesthetic object is one that is appreciated for its aesthetic quality. Something may be both an art object and an aesthetic object, such as Van Gogh's 'Irises'. Something may be an aesthetic object without being art, like a sunset or an iris.
2. Many people think that much modern art is not art because they consider it to lack aesthetic value, even though it commands high prices on the art market. They are simply confusing the art value and the aesthetic value of an object. These two values are quite separate, but of course linked. 'Art is a commodity like any other,' said Daniel Kahnweiler, Picasso's dealer. Art is an aesthetic commodity.
3. In order to be clear, the art market can be defined as an identifiable set of institutions and commercial organisations which collectively fund, promote and sell art.
4. Art must be (and always has been) elitist and exclusive in order to maintain its

financial value and prestige. Many modern artists use aesthetic elitism to guarantee exclusivity which, in turn, ensures values are upheld. Hence, art functions to distinguish rich people from poorer people.

5. Good art is aesthetically stimulating, bad art is aesthetically neutral.

6. The criteria that determine whether something is aesthetically stimulating or aesthetically neutral are partly subject to social change.

7. Good art always contains an element of disorder (discontinuity), bad art simply reinforces a pre-existing order.

8.Good art promotes discontinuity, bad art enforces continuity.

9. Discontinuity produces aesthetically stimulating experiences, continuity produces aesthetically neutral experiences.

10. Discontinuity is the basis of all creation, but discontinuity is meaningless without continuity.

11. Rich aesthetic experience is generated by the perception, simultaneously, of continuity and discontinuity in the same event.

12. All stimulating design relies on balancing the relative quotients of order and disorder in the object. This also goes for the composition of music and literature. However, such judgements cannot be made in isolation from the fact that values of order and disorder are largely prescribed by social agreement.

13. Posthuman art uses technology to promote discontinuity. Healthy societies tolerate the promotion of discontinuity since they understand that humans need exposure to it, in spite of themselves. Unhealthy societies discourage the promotion of discontinuity.

14. Creativity does not consist in the production of anything that is completely new. Creativity consists in combining things that already exist, but which had previously been held as separate. Creativity and aesthetic appreciation are both functions of the human ability to modify the connections in their thought paths, or to have them modified.

15. The process of aesthetic stimulation is heightened when concepts are forced together from relatively diverse locations in a discontinuous way. The amount of energy required to contemplate diverse concepts produces the physical rush of excitement

familiar to those who appreciate art.


**VIII. Statements on synthetic beings**

We already have machines that can learn, but their abilities are currently limited by the fact that they are logical. Logic is an idealised, self-referential system developed by human imagination. Since there are few things less logical in behaviour than humans, any machine that is restricted to using logic as its base will never display human characteristics.

1. Currently the output of computers is predictable. The posthuman era begins in full when the output of computers is unpredictable.
2. Most artificial intelligence machines are hermetically sealed. They are limited by the complexity of the calculations our machines can perform. They are only sensitive to a finite number of stimuli, and the quotient of randomness intruding upon them is relatively small.
3. Human thought is not a hermetic, linear system. Since we know that the mind, body and environment cannot be separated, we cannot rule out the impact of any environmental stimuli on the process of thought, no matter how minute it might seem.
4. What is essential to the functioning of human consciousness is that the mind receives

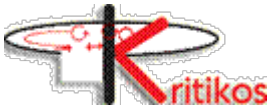
a continuous input of random stimuli from the environment. The human mind has evolved to absorb the unexpected — the discontinuous stimulus.

5. The compulsion to assert order in the face of random stimuli contributes to our sense of being. Therefore, if we are to create any synthetic intelligence that has a sense of being like that we recognise in ourselves it must be sensitive to the same level of random interruption as humans. It must have a compulsion to re-assert meaning in the face of both stable and unstable input, whilst also being able to adapt to and take advantage of the creative possibilities offered by non-linear stimuli.

6. If we wish to produce a synthetic intelligence that displays creativity then we need it to be able to establish connections between its thoughts in a discontinuous way. This will be achieved by making it perpetually sensitive to random stimuli.

7. If we wish to produce a synthetic intelligence that displays aesthetic appreciation then it should be able to sense continuity and discontinuity simultaneously — without crashing. Whilst this would cause excitement in the machine it is yet to be determined to what extent it would be pleasurable.

8. Humanists saw themselves as distinct beings in an antagonistic relationship with their surroundings. Posthumans, on the other hand, regard their own being as embodied in an extended technological world.

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