A Strong version of a Universal Programmatic Intent Principle

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A short essay implying our Universe is constructed or simulated in a manner to focus conscious observers on the realm or experience of the all-important present experience of the "now." Physical and ontological boundaries of the Heisenberg Uncertainty Principle, preventing us from an all-encompassing understanding of the micro-world, and the cosmological Dark Energy accelerating expansion, limiting what we may ever see or encounter in deep space. Quantum Computers and A.I. may encounter additional walls of how many "*nows*" might be employable in quantum entangled-qubits and if an A.I. can actually have a fundamental *experience of a now.* Similarities with Zen Buddhist and Eastern religion focus on the now is also discussed.

"Life exists in the present, or nowhere at all, and if you cannot grasp that you are simply living a fantasy."
-- Tim Lott

Joys and sorrows pass, each by each,
failure at one moment, happy success the next.
But for me. I have chosen freedom
from the world's cares. I chose simplicity.
-- Hsieh Ling-Yun, Visiting Pai-an Pavilion

"The light that burns twice as bright burns for half as long – and you have burned so very, very brightly, Roy. Look at you: you're the Prodigal Son; you're quite a prize! Revel in your time!"
-- Dr. Eldon Tyrell, Blade Runner

If you want to learn the nature of the world,
don't study fine bound books.
The True Jewel's in a coarse bag.
Buddha-nature stops at huts.
The whole heard of folks who clutch at looks of things
never seem to make the connection.
-- Shih Te, 8th Century

"For a Weaver, to think was to think aesthetically. To act - to Weave - was to bring about more pleasing patterns.... they seemed to subsist on the appreciation of beauty.... The crawling infinity of colours, the chaos of textures that went into each strand of that eternally complex tapestry... Every intention, interaction, motivation, every colour, every body, every action and reaction, every piece of physical reality and the thoughts that it engendered, every connection made, every nuanced moment of history and potentiality, every toothache and flagstone, every emotion and birth and banknote, every possible thing ever is woven into that limitless, sprawling web....It is without beginning or end. It is complex to a degree that humbles the mind. It is a work of such beauty that my soul wept....I have danced with the spider. I have cut a caper with the dancing mad god."
-- China Miéville -- Perdido Street Station

Aspects of our reality hint at a single underlying rule where every system exist with an apparent "intent to preserve structure." We can describe this as a programmatic intent again echoing Neil Bostrom's Simulation Hypothesis where are Universe is a simulation. As noted by even Elon Musk, "If you assume any rate of improvement at all, games will eventually be indistinguishable from reality... we're most likely in a simulation." If we venture to assume an intent behind our reality, then perhaps there is an even greater theoretical leap that we can label, echoing the labelling of the Strong Anthropic Principle, a Strong Programmatic Intent Principle.

Consider three areas where perhaps human bias prevents us from understanding the true nature of our reality:

1) Human's bias against the "majesty of complexity". Human consciousness (in a brain) is still the most complex thing ever found - and took forever to make, about 13.8 billion years! As the United States National Institute of Health notes, "the brain is the last and grandest biological frontier, the most complex thing we have yet discovered in our universe. It contains hundreds of billions of cells interlinked through trillions of connections." The bias here is that humans assume that "big" is important. It is not. A big star or galaxy is "simple" - just *a lot* of simple. These entities can be described however in simple equations. The largest individual items in our Universe, super-massive black holes, can be described, like any black hole, by only three variables. This already is a hint to "look inward" or toward complexity as the real miracle of our reality and not entities that are big, small, old, hot, or fast.

2) Note how ideas from Zeno' Paradox, Zermelo-Fraenkel numberline, etc... imply a paradox of a Universe that is infinite *at its seams*. Yet it is consciousness that can perform a real computational miracle. Consciousness breaks the infinite regression or infinite need to calculate to perform any movement. A conscious mind can escape the famous halting problem. Rather than getting stuck "counting forever," minds can halt, hop up to a higher realm of awareness, and proceed avoiding an eternal loop. We make a ***now*** and then we make the next, mental *now*. We humans all too often ignore this "majesty of the now" and get caught up seeking the truth of reality from attributes of size, big or small.

3) About that size distraction, consider that, as we get smaller and smaller, we hit the Quantum Mechanical Heisenberg Uncertainty Principle. Reality at this micro-level becomes *fuzzy* and fundamental concepts like uniqueness, location, and even time become indeterminate. Scientists consider this a boundary and an ontological gap to be solved. Let us, however, flip this idea. Perhaps the "majesty of reality," instead, *is the experience*. As neuroscientists might say, the phi, of the *now*. When we go deep (small) the fuzziness we find could be interpreted akin to a programmatic intent "signpost" saying *wrong direction – go back up*. And, perhaps, go and live life. Modern science however continues with the approach, per past successful efforts, that fundamental answers lie deeper and smaller (reductionism incarnate learned from the trek from molecules to atoms to quarks etc... a la a Matryoshka doll reality). Then, when we go big (cosmology), and we have found our Universe *accelerating away from us*! Again, we encounter an ephemeral *signpost* saying *wrong direction* - stop looking *out* and go look back *in*. As if a programmatic or simulated Universe keeps *intentionally* removing away from our view these other realms of spacetime to prevent us from seeing them (Dark Energy accelerating expansion) and perhaps force conscious observers to make a change in our *area of focus.*

Now let us assume that the Schrodinger Wave function supposes a single infinity. Perhaps the Schrodinger equation literally is an infinity of universes (each universe in an infinite multiverse is thus a solution of this one and only continuous function as a true Universal wave function). Thus, again our consciousness reigns supreme and collapses (decoheres, realizes, or instantiates) a given Universe and likely, thus, every *now*.   In a David Deutsch style multi-verse construction, where all universes exist simultaneously or where every conscious decision or observation leads to our unique vector through this matrix-like forest of universes, where every *now* we experience may be an event in a singularly unique universe. In fact, every individual conscious being my exist in a vector (akin to there own "diagonal" universe) that travels between the multitudes of similar or "nearby" universes amongst the entire assembly of all of them in the Multiverse.

Thus, a new *strong* programmatic intent principle is that the construction of a Universe is full of *built-in signposts* as walls intended to pivot conscious observers so that they focus on the *now*. Perhaps the realms of pure math and philosophy are the only tools needed (a nod to Frank Herbert's spacing guild approach in Dune) to prove consciousness as the root of all reality. Perhaps *experience* and the Zen sounding *living in the now* is the root of all the majesty in life and reality.

Now we can understand why Quantum Computers and A.I. (artificial intelligence) get more attention than telescopes, microscopes, and gravity wave interferometers. The Quantum Computer thus becomes an attempt to calculate or optimize (perhaps maximize) all possible *NOWs* (arguably to prove the literal existence of, or maximum number of instances of, a *now*) and A.I. becomes an attempt to reverse-engineer not just intelligence, e.g., Artificial General Intelligence, as an algorithmic tool, but consciousness in the sense of

making an independent, complex, self-referential entity that can halt (observing or calculating) and experience (create) a *now*. Note how, under this context, it could be impossible for an artificial intelligence to become conscious or perhaps even impossible to prove it is conscious or not.

One cannot escape the structural comparison in this outline to overt themes from Zen Buddhism, but the origins of this paper are unique, even if the end state is very close to the same. Regardless, we are driven further, than even Quantum Mechanical similarities, to consider and contrast our studies of the Nature of Reality to historical Eastern culture's focus on *the self* and *the now.*