

Article

Conscious Life Beyond Death (Part I)

Wolfgang NMN Baer*

Nascent Systems Inc. & Naval Postgraduate School, Monterey, CA

Abstract

In this five-part article, known scientific principles are used to prove that conscious systems maintain a permanent physical soul beyond the existence of a material body. We will demonstrate that the fundamental material form which conscious physical structures are built occupy their own space and change in their own time according to their own laws of behavior. These changes are controlled by forces within each soul but also are a result of interaction forces connected with external events. It has become customary to treat the behavior of our bodies as the sum of behavior attributed to dead material and the sum attributed to the desires of our soul as evidence of living material.^[1] Because we assume the soul occupies its own space and time, the property of life as exhibited by a body lasts as long as the communications channels supplying the interactions between body and soul are maintained. Temporary interruptions of communication are associated with a loss of consciousness. A permanent break is recognized as death.

Mainstream science has failed to identify the material basis of consciousness in living organisms let alone dead matter^[2] while most religious traditions assume consciousness as a fundamental postulate that relies upon faith without the need for scientific evidence. Both approaches are incomplete. Recent developments in physics addressing the necessity of including the conscious observer in any complete theory of our own existence have emerged. Progress has been achieved, not by advancing ontological interpretations or refinements of quantum theory, but by eliminating the assumption that we live in an objective world independent of our own existence. In Conscious Action Theory^[3] (CAT), we recognize that our objective world is a phase of a self-measurement, explanatory activity that includes both our conscious experience and the physical material producing the experience. We adopt the assumption that **elementary events**, not elementary particles, are the building blocks of both ourselves and the universe we believe that we live in.

Such a change to the foundations of physics allows us to conceive of ourselves as interacting lifetimes instead of the cosmologies found in classic or quantum physics. Life and death are then conceived as the difference between interacting and isolated events. Living bodies are evidence of interaction while non-interacting lifetimes, like non-interacting atoms, cannot be seen. You and I are events containing each other's bodies as memories of our interactions. Consciousness has always been part of existence, both before our bodies are grown and after they are abandoned. This article will show that CAT is a viable theory of physics that contains consciousness in cyclic events. These events grow, maintain, and abandon material bodies along

*Correspondence: c/o Steven Mitchell. Email: smitc1@brockport.edu Note: This article was written by Prof. Wolfgang NMN Baer and is published posthumously. Wolfgang NMN Baer, Ph.D. (in Physics) was an Associate Professor of Information Sciences (Ret), Naval Postgraduate School, Monterey, CA, USA, & Research Director, Nascent Systems Inc., Carmel Valley, CA, USA.

their own evolutionary trajectories. Evidence of human consciousness beyond an individual body's life is generally available when a belief system such as CAT is adopted that includes the subjective element and gives us a logical explanation for the available evidence.

Keywords: Conscious life, beyond death, material body, physical soul, consciousness, quantum physics, existence, conscious action.

Part I of this Article contains the following Sections:

Prolog

1. Introduction to the Multiverse of Conscious Beings
 - 1.1. Development of Event-Oriented Physics
 - 1.2. The Action-Flow Diagram of a Conscious Being
 - 1.3. The Multiverse Cosmology of Conscious Systems

Prolog

Lying on a balmy beach in Mexico last winter, I looked up to see the moon and stars glittering in the dark sky above. As my head rested on the warm sand, I wondered, as I often did as a kid, how far away are the stars? I remembered hitchhiking a ride from the University of Michigan to Detroit, listening to an old man in a pickup truck who assured me that stars were many miles up in the sky. “They are as big as houses,” I recall him saying. “They only look small because they are so far away.” I remember chuckling at this sweet old man’s colossal ignorance and did not want to embarrass him with a correction.

I studied physics at University of Michigan to learn what the world and my life in it was all about. In my youth, the moon and stars were clearly out there. Way out there. Alpha Centauri is four light years away, the other stars and galaxies thousands of light years beyond that. In my youth, the night sky stretched out before me whenever I looked up. *It was obvious*. The vastness of outer space was where we all lived and where I wanted to go. Exploring this world was my dream, and eventually I got a job as mission analyst, planning and flying satellites at Goddard Space Flight Center. *It was obvious*. Up there is space, in it are stars; some of them have planets that could sustain life, and all we needed to do was to develop the technology to get there.

Today things look different. I’m no longer so sure of my world. The old man’s colossal ignorance may have more truth than my own arrogant calculations. I recognize the difference between the mental sensations I experience and the ‘reality’, which I believed caused those sensations to happen. Certainly the mental sensations of Alpha Centauri are not four light years away. But where are they? If I shut my eyes the sensations disappear altogether. So, what is it that is four light years away? Where do my momentary experiences of the raw sensations, termed ‘qualia’ by some psychologists, happen? Are those qualia inside or outside of me? Where do the ‘qualia’ of my raw sensations, as some psychologists call the spots and streaks of brightness in front of my nose that balmy night, happen? How far away are they? And what is it that I believed I lived in when I pursued my studies and career to explore and eventually colonize this universe?

Still resting on the beach, I closed my eyes and imagined myself lying on the ball of the earth with my back pressed against its surface. In a split second the images of the moon, sun and planets flashed upward. The long distance beyond the solar system passed in my mind’s eye as I imagined a ‘star’ of burning gasses in front of me. It was a familiar image; one I had often imagined in my youth. When I opened my eyes, this ‘star’ vision immediately registered with a point of light in the Centauries constellation. But where was reality amongst all my feelings? While repeating this exercise, of concentrating on the ‘qualia’ and imagining their causes, something new became obvious. I could feel the processing from qualia-sensations to their explanatory cause. It is something I do every day, all day long. I live work and play in the registered and fused experience of a world I create. Both the raw sensations and the explanations of their cause are processed so quickly that they appear to represent reality. Neither of these sensations is the real star we call Alpha Centauri, and today as I look around at the palm trees and listen to the guests eating dinner behind me, I realize that everything I experience in front of my nose, including that nose, is created inside a larger mechanism I now call my real ‘Self’.

If someone had told me when I was younger that I live in a world of my own creation, I would have classified them as a lost nut case. Now I understand that someone espousing that

perspective believed their mental experiences to be foundational, while I believed the properties of the material that I see in front of my nose is the ultimate explanation for everything, and neither of us had the complete story. I cannot deny the feeling of creating the operational reality I use to guide my life, neither can I deny the reality of the rock in the sand I can kick, because it kicks back.^[4] Both idealists and materialists are right and wrong. We create the operational world we live in, and once we have found a world that works, we run our lives with it until that world fails us. Secular science is the most successful theory we have, and the objective world it allows us to build dominates our culture. However, it cannot account for the conscious living experience, even in principle, and fails completely at the point of death.^[2] Science vigorously defends its failure by insisting that nothing can be experienced beyond the life of the body. It has developed both a vocabulary in colloquial and mathematical languages that makes the expression of any alternative to this nihilistic conclusion difficult if not impossible to communicate.

The topic we are about to embark on involves the construction of a scientifically verifiable system that includes the subjective and objective aspect of our existence within a physically real framework. The framework will be used to identify the location of subjective conscious experiences at places beyond the living material body. To efficiently discuss this topic, we must describe its ideas and concepts in the English language, with some notation adoption. As shown in the previous seaside anecdote, the word ‘star’ when used in conventional conversation collapses several meanings of nouns. This collapse hides the critical changes that implement the conscious experience and the life in which it resides. We will not be able to clearly describe the processes involved in our conscious existence unless we use terminology that separates the functions that we use to build the reality in which we live.

To expand our terminology, I have defined a noun code (CAT-code in Appendix A1), which I will use to identify the phases in the process that create the objects we see and feel in front of our noses. In my experience on a balmy beach, I used the word ‘star’ to refer to the unidentified external sensation display and the word ‘**Star**’ to refer to our internally explanatory observable, which are registered with each other to produce the explained observable objects we see every day.

Examples	Description
You, I, Star, U	– First letter capitalized: references an event-in-itself, replaces Kant’s thing itself, the name of action structures, the entity that exists. Such words are operational symbols defined by their use not their referential meaning.
you, i, star, u	– First letter lowercase: references a directly observable experience, the entities that are experienced—sensations, thoughts, pains, etc. directly felt, a qualia.
You, I, Star, U	– First letter capitalized and boldface: references the causes of directly observable experiences. These are the working symbols that make up our Model of Reality (MoR), i.e., the physical memory that explains one’s observable experience.

you, i, Star, u – First letter lowercase and boldface: references a vector of observable experiences that visualize the semantic meaning of the physical memory defined by **You, I, Apple**; names explanatory experiences projected onto sensations.

In the main text we will use standard English interpretation, unless we place coded nouns in single quotations only when referring to Conscious Action Theory symbols. For example, applying this CAT-code to pronouns separates ‘You’ – the real reader of this essay – from ‘you’ the 1st-person sensations of yourself, from ‘you’ the explanatory 3rd-person visualization of what you believe you really are, from ‘You’ the physical model of yourself built into ‘You’ from infancy. Thus, the three terms ‘you, you, and You’ refer to internal physical components in the larger system that ‘You’ really are. You are a Kantian-unknowable to yourself because any physical mechanism is what it is, and nothing can get outside itself to experience a god’s eye view of itself.

The main hindrance to adopting an integrated self-regenerating subject-objective view of our existence is the absence of a viable and practical scientific theory that includes both. What you are about to read eliminates this difficulty and gives us the scientific basis for answering the conscious life-after-bodily- death question.

1. Introduction to the Multiverse of Conscious Beings

Whether looking through one’s biological eye, a large optical telescope, or something as sophisticated as a tunneling electron microscope, the first time we look, we see pure sensations: colors, sounds, dots and streaks without any understanding of what they are. Whether we are a baby or a Nobel Laureate, a learning process ensues that produces a theory involving a continuous feed-forward loop that in turn produces predictions that when compared with pure sensations generate an error signal. The number of iterations required to reduce the error to “small enough” can be very large, but once established, the feed-forward process executes automatically, and the meaning of the symbols is registered with the (now equivalent) pure and predicted sensations to produce the actionable reality we see in front of our noses every day.

The model of reality we are introducing is somewhat analogous to a little man or woman in the control room of a large machine that neither he nor she can get outside of. The reader must take this “cannot get out” very seriously. It is of no use for you – the reader – to imagine seeing, touching, or smelling the machine from the outside because you, dear reader, are one of the little men or women who cannot get out of your own machine. What you can do, however, is build a model of what you believe is outside based upon the information presented on your control-room display screen. What you build might look something like a dynamic multi-team chess game that executes automatically unless you intervene by modifying a move one of your colored pieces makes. The difference between this version and the standard game is that capturing an opponent’s piece does not eliminate the piece but absorbs it into one’s own team. The game board is registered like a touch screen over the pure sensation layer to provide both an explanation but also a control layer for you to direct your team.

The applicability of this analogy to the life of a human being can be made clearer by referring to the night sky experience of a primitive man without any instruments. As he looks up, he sees light and streaks. He might first imagine gods and goddesses and project their images into the firmament. His belief might be so strong that he pays for his funeral fire, which he believes will carry his soul in the smoke to become a permanent star. The bigger the fire, the higher and brighter the star. It makes perfect sense to take a few loved ones along. The “good enough” feed-forward loop explanation began to crumple with the invention of the telescope. But the processing architecture has not changed. Only the beliefs being processed have been modernized. The pure sensations are still processed into an internal mental display, and their explanation is still the registered meaning overlay of the symbols implemented in the remainder of your machine.

With the continued invention of sensing equipment, the size and age of the universe we believe we see has grown. But the experience is still physically presented on the display screen that still happens inside our machine, and both what is really outside the machine and what the machine really is are still as unknowable as they were millennia ago. Our belief is that raw sensations simply happen, and our theoretical explanations are constantly being updated. The machine that you and I are is more like an activity being executed than an object being seen from the outside. An activity by this machine can be described as a physical flow action behaving like an incompressible fluid that makes its own space and proceeds at its own rate. An isolated action-flow cycle in the ‘Nothing’ surrounding our machine is a self-regeneration activity that can only be experienced by our machine if an interaction occurs. We are not simply objective bodies that live between birth and death but rather we are these larger event cycles that execute an endless existence activity within its own material and in its own space and time. The structure of this event is governed by the dual desires to:

- 1) maximize material growth in forms; and
- 2) minimize internal stress and strain of unbalanced forces.

The cosmology of this theory is that of a multiverse of beings in the ‘Nothingness’ of beings that may or may not be interacting with each other. Some of these beings are so convinced that their reality belief is reality itself; they are living in a universe that we know now is of their own making, but they do not know it. Therefore, they falsely believe that their own and other people’s bodies must live and die. The remainder of this essay will produce evidence that the multiverse of ‘Conscious Beings’ forms the next revolutionary improvement in our knowledge of ‘Reality’. It is the only scientifically testable theory that addresses the consciousness question with something other than denial.

1.1 Development of Event-Oriented Physics

Whether conscious life after death is scientifically provable depends upon what science we believe most closely describes the reality in which our bodies live and die. The foundations of our mainstream Natural Science and in particular the Laws of Physics effectively limit acceptable evidence for the survival of human consciousness to signals emanating from one’s body. This version of science teaches that the world of objects we see in front of our noses is the one and only true reality, and it will exist as a world of objects whether we are alive or not. If

true, then this version of science rightly claims conscious life after death is impossible. One can hardly expect to receive signals from a mechanism whose signal-production capacity has, by definition, been irreversibly destroyed.

However, our mainstream science is only a partial and incomplete description of what is actually happening. How the undeniable existence of the conscious experience can emerge from material that is subject to the current physical laws of science has never been explained and is logically impossible^[1]. Thus, developing a more complete science that includes the subjective experience and accurately describes the bigger life-and-death picture is a prerequisite before we can answer the consciousness-after-death question. In search of such completeness, the foundations of Natural Science have been examined to determine where the Laws of Physics are deficient and thereby impose limits on human knowledge that prevent us from understanding the larger reality in which we are embedded. Such investigations have led to the development of a line of theoretical physics starting with Schrödinger, Madelung, DeBroglie, Bohm, Everett, Penrose, Stapp, Vitiello, Rovelli, Tegmark, and most recently, the works called Conscious Action Theory (CAT) by the author of this essay.^[2]

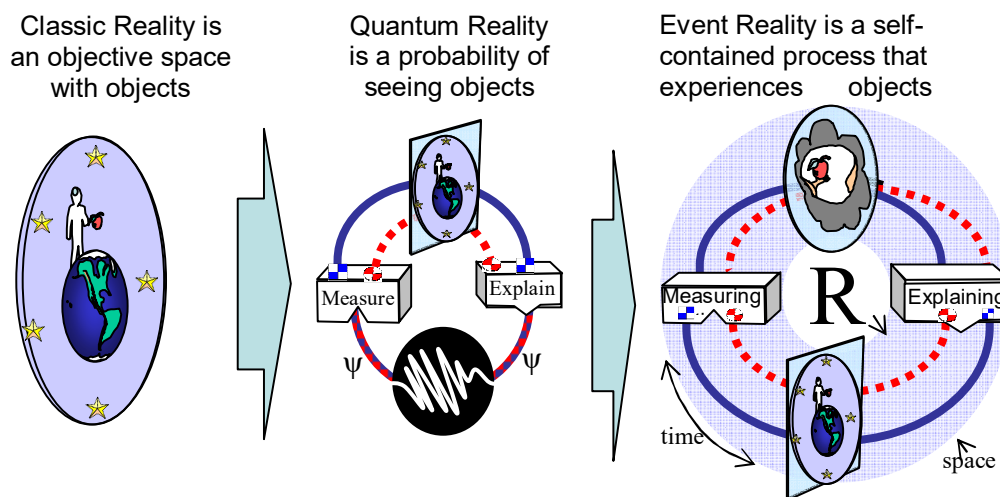


Fig. 1.1 Paradigm shift from objective, quantum, and cyclic event reality (Ref. CAT Fig-1.1-3).

Figure 1 summarizes this development by depicting a series of icons that are cartoon versions of more detailed visualizations of the meaning the symbols that model 'Reality' in each of the scientific theories considered in this essay. The objective world view on the left treats 'Reality' as an a priori empty space and time containing objects that move each other by forces. By including the man holding an apple on the Earth we include an icon of one's own material body, which according to the classic version of science, eats material from the rest of the universe and grows, lives, and dies, thereby returning its material back to the rest of the universe.

That this dust-to-dust scenario is either wrong or at best incomplete has been proven by the success of quantum theory. This theory introduces the important distinction between what one believes 'Reality' to be and what one perceives it to be. In the quantum version of science, what

we perceive is the directly seen in measurement reports, and what is believed is a probability amplitude of getting a specific result from a measurement operation on what quantum physicists believe is a sort of wave-based ‘Reality’. If the human sensory apparatus is treated as the measurement instrument, then any report is displayed as the multimedia display we experience every day. The logical conclusion that the quantum wave, identified as “pilot waves” by De Broglie and Bohm, represents an individual’s thoughts was unfortunately rejected by the mainstream science community because it is holding onto the wrong assumptions. As D’Espagnat wrote in *Scientific America*^[3]:

The doctrine that the world is made up of objects whose existence is independent of human consciousness turns out to be in conflict with quantum mechanics and with facts established by experiment.

Eliminating this doctrine and accepting the probabilistic wave picture of quantum theory leads to the explanatory-measurement event of Conscious Action Theory (CAT). This theory represented by the right panel in the figure above does the following:

- 1) It expands the quantum concept of reality with an icon representing a snapshot of our material body and the Universe as it might exist in a Now instant in the lower phase of a self-regenerating activity and,
- 2) It replaces what was objective reality with an icon that represents what it consciously feels like to be that material in its symmetric mental upper phase.

The small upper icon, which we have identified as the 1st-person perspective, shows an apple, an arm holding it, and the nose of the observer in his/her optical field of view superimposed over the phenomenological dark space surrounding us when we close our eyes^[4]. Event reality is not represented by any particular icon shown in Figure 1. Rather, reality is the entire content in each panel. For our purposes, what we really *are* is an action flow through our own time that closes on itself and thereby exists forever. A fusion of the measured result shown in the upper icon and its explanation in the lower icon, which we have identified as the 3rd-person perspective, provides a permanent self-updating conscious experience. These icons are cross sections of the action flow. The drawings of the man holding an apple are first, his phenomenological view of himself and second, his explanation of what he actually is. Views and explanations of reality are realities in themselves but not equal to the realities they are portraying. In other words, nothing shown in the action cycle depicting the event reality shown in Figure 1.1 has the properties of what the secular population would identify as our material body.

In order to show what our material body actually is and how it relates to the cyclic action flow shown here as the core activity of a conscious being, we will first present a more detailed description of a conscious being.

1.2. The Action-Flow Diagram of a Conscious Being

The diagram of a simple action network from a Reader's perspective, looking down on the Model of an interacting Conscious Being^[1], is shown in Figure 1.1 as a simple action-flow cycle. Here the 1st- and 3rd-person perspectives, representing what a human might experience in its here and now, are connected by action flows labeled 'Measuring' and 'eXplaining'. Important features of a system that grows living beings have been deliberately hidden. Under the 3rd-person perspective lies the 'Model of Reality' (MoR) this being has built to explain and control the raw sensations that are experienced.

The 1st-person perspective shows a merging of external and internal sensations whose independent production must be explained in detail. Lastly, the entire model is held together in a black background signifying nothing. An artist's drawing of such an expanded model of a conscious being is shown in Figure 1.2. This division exposes the Model of Reality and three overlaid spatial cross sections of sensations observable in the 1st-person's here and now.

The action types flowing through these spaces – labeled 'a_x', 'a' or 'a_i', and 'a' throughout this essay – are graphically placed top to bottom in the action flows implementing a conscious observer in Figure 1.2a. The internal 'a_i' and external 'a_x' flows interact with each other to generate their difference. This encodes the model-of-reality updates signal back into the Model or Reality update branch as well as adds commands as desired into the external actuator branch. When these two perspectives differ by small enough amounts of energy flowing through every space point in the 'a_x' and 'a_i' observable cross sections, the conscious being feels the comfort of feeling its MoR is accurate enough to be trusted. Above Figure 1.2b on the top bar, the merging of interaction between the two action flows produces a merged experience of an everyday human,.

We now recognize this icon as a merging of qualia color blobs and the outline of objects imposed by the pattern recognition of our objective theory of reality. In other words, the explanatory 3rd-person perspective of the man standing on the earth holding an apple is an accurate enough representation of reality to act as the conscious being's actionable reality, a kind of generalized keyboard.

Also shown in Figure 1.2a are classic physics symbols that operate in the conscious system's Model of Reality. The mathematical physics of a conscious system is presented in Appendix A1. Here we only show the top level parameters. The momentum (**P**) and quantity vectors (**Q**) of classic physics are transformed into the next Time (**T'**) and quantity (**Q'**) values by the time function (**Z**). The action flow can also be experienced by the 1st-person perspective parameters Energy (**E**) and Time (**T**) shown on the output side of the MoR. The energy field at a time point 'T', location 'Q', are the correlates of consciousness in that they determine what an individual thinks he sees. NOTE: $dQ/dT = Vc$ the velocity of consciousness. Figure 1.2a correctly summarizes the actual activity executed by a living conscious being who is aware of his reality projection and understands that his MoR is an evolutionary work in progress that in its current objective formulation seems to function quite well. The parameters introduced in this paragraph are fundamental and pertain to all scales.

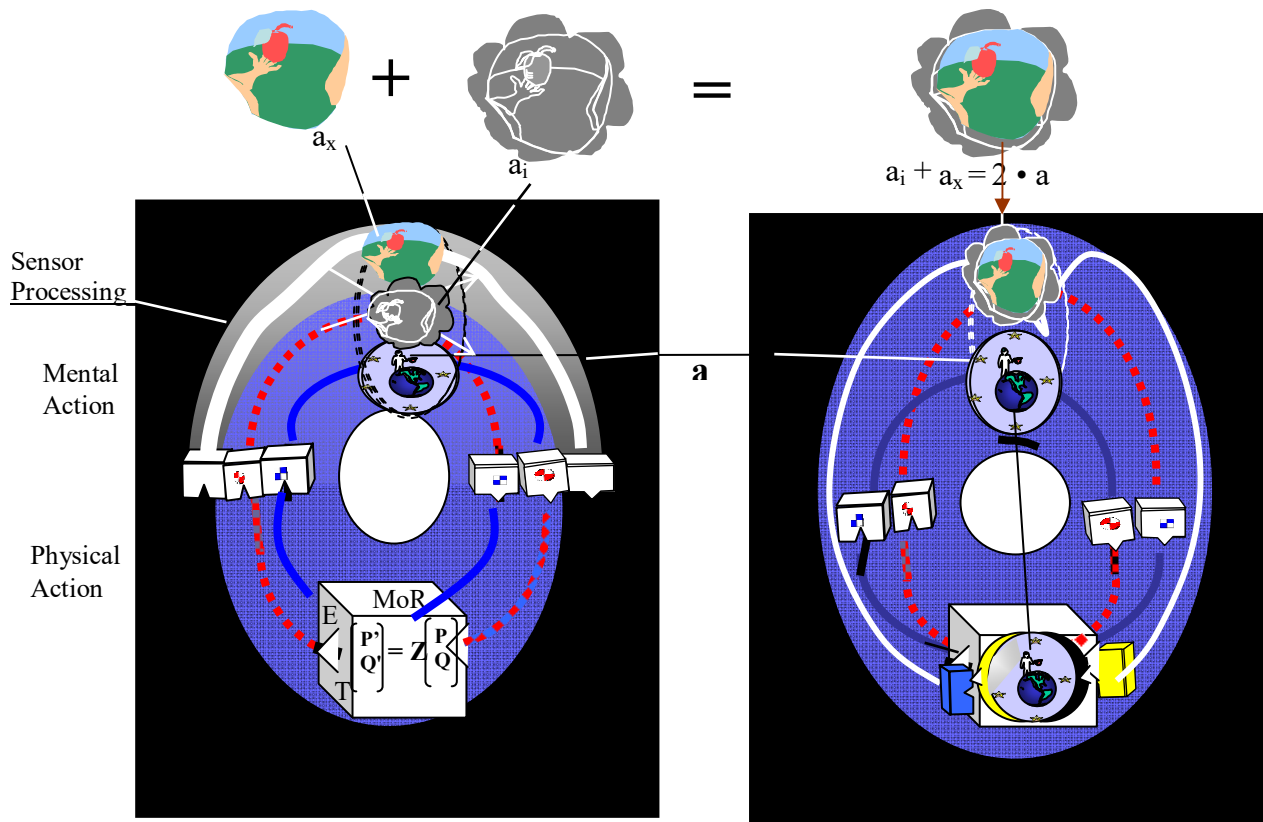


Fig. 1.2 Symbolic god's eye view of the basic model of an interacting and an isolated Conscious Being. Note, the display 'a-type' meaning symbols are a trusted actionable display. This allows a self-stimulating action loop that never ends.

In the body of the text, we are examining the situation centered on the human scale. The entire color medium rotates through the cross sections or function boxes. Action is the material of change, and in the text, we will use incompressible fluids as an analogy for visualizing action flows. Consider the circular water rides in parks that carry one around a circuit of the park. You float along with the current, laughing with your friends. Pretty soon you float into a tunnel. A single light accompanies your group as you move along. You lose reference, and your group, possibly others nearby, and including the water itself, form our stationary here and now. The tunnel opens up. You realize the channel curves back on itself, closing a flow cycle of change. You float through the tunnel, around in your here-and-now bubble, and pass the open section in which you are reminded of the bigger world, before you pass through the tunnel again.

Being curious, you leave your friends behind and decide to find the control room where a bored park operations monitor happily answers your questions about the design of the park. He even gives you a diagram of the water-flow mechanism. Not surprisingly, it looks a lot like Figure 1.2a. Like a clock pointer stationary against a rotating clock face, the here and now in which your friends are enjoying themselves remains stationary at 12 o'clock in the park's version of Figure 1.2a. You remember thinking what it felt like to forget about the bigger world outside

while you were riding along. Looking ahead at 9 o'clock from the unknowable input '□', body sensors, action flows in. You remember the warmth of new water coming in. Like action is absorbed into the permanent momentum of the circulating water. If the water were action, it would be processed to appear as blobs of meaningless warmth 'a_x' type sensation in the conscious being's here and now. At this juncture the action flow is mixed with the internally generated expected sensations and our friends quickly feel comfortable that the warm blobs of sensations are actually warm water.

Stepping outside the metaphor, observables are implemented by action flowing in the mental phase of the processing cycles. The inner red dotted line is the mental side of the charge whose cross section is primarily responsible for displaying predictions. This, along with the external sensor processing path, is now brought inside the periwinkle action volume. The chance of 'You' being the man with the red apple is minuscule. To be pertinent, you need to find and register a pair of 3rd-and 1st-person sensations of the type encountered in your own everyday experience. Once this has been accomplished, the interactions with objects of interest can be verified in Reader's here and now. When measurement and prediction coincide, there is a very good chance that the theory behind the prediction is correct. As we become more complex we grow a more comprehensive network, more proficient in its use, and the dependence of well-established truths becomes obvious and expedient. In the extreme case, the conscious being is in such a deep conviction of the truth expressed by its 'a'-type sensations that it is no longer connected to the outside world. Figure 1.2b represents a flow diagram of a conscious action model of a self-contained action flow in nothing.

1.3 The Multiverse Cosmology of Conscious Systems

Figures 1.2a and 1.2b properly use the objective world view as a mechanism for understanding and running a trusted MoR but leaves the question of 'Reality' unanswered. The unknowable blackness is again unknowable and thereby freed from a priori objective reality assumptions. This allows us to ask anew, "What could this Unknowable be?" To answer this question, we must first recognize that our working MoR based upon classic terminology has been upgraded to quantum theory during the last 100 years and therefore our objective world view no longer correctly reflects what well proven quantum models would suggest.

Unfortunately, the ontological interpretation of quantum terminology is far from settled and no clear picture of what Reality we are now dealing with has emerged.^[1] That an action model of conscious beings can provide a context for the quantum model, suggests that an explanatory-measurement activity into which alternative Models of Reality can be inserted and operated is more fundamental than any MoR it may contain. Therefore, it seems reasonable to suggest that whatever is out there beyond our external sensors is not represented by any MoR we can come up with, but rather is an interacting action structure that exists for the same reasons and is guided by the same principles as ours.

The simplest example of what the Unknowable could be is a duplicate of what we think we are. Figure 1.3 shows two symmetric copies of two conscious systems imbedded in the Unknowable nothing. They have been given the reality names 'I' for the conscious being modeled by this

action flow and ‘U’ for the rest of Reality. Together ‘U’ and ‘I’ then make up the whole of ‘Reality’. Of course, it is ludicrous to think that both ‘I’ and ‘U’ would come to model reality with the same 1st-person image, especially one that shows an exaggeratedly large man holding an apple. But a man holding an apple is just a pedagogical example to show how interacting conscious systems function. What is important to remember is that the MoR is designed to model reality as a ‘Whole’ but built with material belonging to each part.

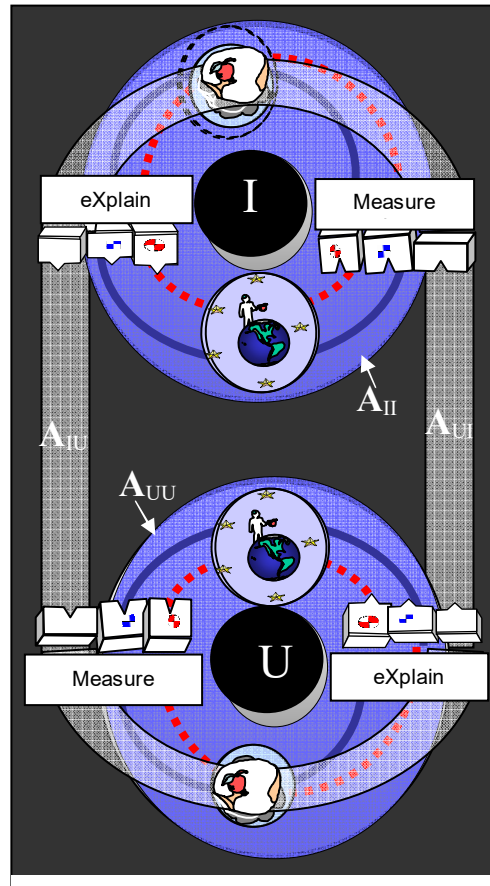


Fig. 1.3 Action flow of Reality with two parts explicitly shown

In the past, theories of physics modeled a single objective universe. Since there was only one real reality, all legitimate physical theories should describe one and the same thing. The requirement that all theories should have the same form when formulated by two observers is called the principle of covariance. It is much like asking two people to draw a picture of an object as it is, not as it is seen. Then also asking both parties to draw what one of them perceives from their point of view. We would end up with two separate drawings on two separate pieces of paper filled with two separate patterns of ink. If both parties have an accurate concept of the object in question and the person looking at it, then they should get the same drawing on two pieces of paper.

This is what we have drawn in Figure 1.3.^[2] The object in question is reality as a ‘Whole’, which includes ‘U’ and ‘I’. If their theory of the ‘Whole’ is correct, they will have the same model mechanisms in both their MoRs, and the same 1st-person experience will be calculated for ‘I’ by both parties. The difference between Conscious Action Theory and our old classic objective concept is that here we are looking at a reality whose independent parts are events not objects. Objects are created within each part as interpretations of sensory stimulation.

The action sent out by ‘U’ is labeled ‘ A_{UI} ’ and if ‘I’s’ model is accurate, it will generate an exact prediction of the 1st-person observable so ‘ a_x ’ equals ‘ a_i ’ and ‘I’s’ output signal will be equal to the action flow ‘ A_{IU} ’ from ‘U’ to ‘I’. If ‘U’s’ model is also accurate, it will predict its 1st-person observable, and both systems will conclude they know what the Unknowable is and act on that knowledge. By first defining ‘I’ and then ‘U’ as whatever is not ‘I’, we have logically defined the ‘Whole’ of ‘Reality’ as ‘U’ plus ‘I’. This means that Figure 1.3 depicts the ‘Whole’. We simply drew a more detailed breakout of the action flow in the ‘Whole’ in order to apply CAT to the problem at hand.

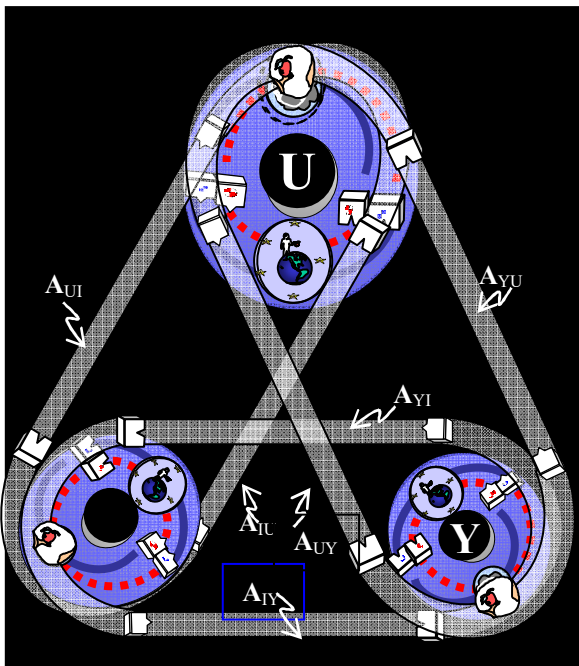


Fig. 1.4 Three part ‘Whole’ of our observable Universe, here separated by Nothing. Most contemporary physicists assume that if they cannot interact with events they do not exist. However, if we expand definition of ‘U’ as the context-dependent ‘Rest of Reality’ or the ‘Rest of the Universe’, whichever fits one’s world view, then it is the failure to acknowledge the inner subjective aspect of the material from which we are built that has limited our current science

The problem at hand is the question of conscious life beyond death. An action labeled ‘ A_{IU} ’ in the form of this essay is sending a message to ‘You’. The message claims that ‘You’ and ‘I’ are self-contained cycles of change that can be modeled by an action stream that flows through our individual here and now. Your personal experience right now is explained in the objective model by the fact that your body is on the Earth reading this essay. In the CAT-model, ‘You’ along with all your interactions have been identified within the rest of the Unknowable to show a three-part reality in Figure 1.4.

This means ‘We’ are connected by a half-duplex communication channel. For some time now I have been building a model of ‘You’ in my memories, and it makes sense that ‘You’ have built one of me, so on your end as well, but only in this instance, do the two become aware of each

other and, at least in principle, could connect. For however long it lasts, the each of our memories are being updated for the purpose of exchanging actions between our own structures in forms that minimize our own stress and strain.

Describing what is happening this instant from physical first principles starts with Figure 1.4 interactions: A_{IU} 'I' sends essay to 'U', A_{UY} essay sent to 'You', A_{YU} evaluation returned to 'U', A_{UI} result of contest returned to 'I'. We are now in a state of updated memories with no direct interaction but a rather large infusion of inferred information that is stored in each of our internal action rings.

Can those action rings interact with each other? What if you found them truthful and more practical than what you now believe? Then would You adopt this cosmology? For me there are limits. I cannot believe that when You read these words in your here and now, and I read these words in my here and now, a transfer of meaning by some direct book-to-book communication ray of knowledge is happening. No, the direct communication between some book in my world and a similar one in yours is not possible. There are more ways to communicate – perhaps more like a lens transforms a signal. or like a resonant antenna pulls in ideas from noise.

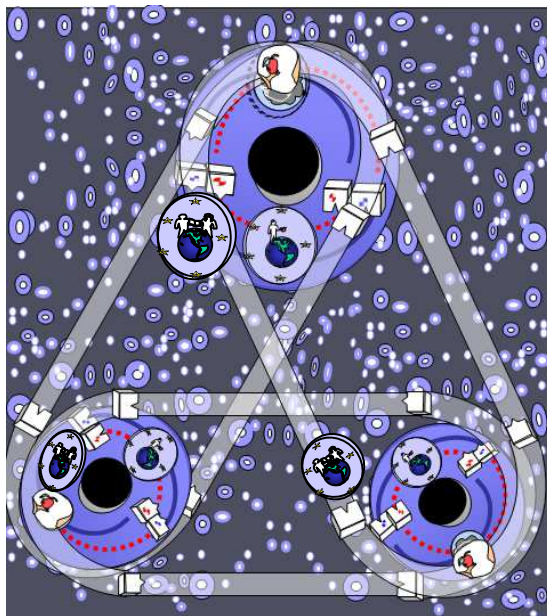


Fig. 1.5 Three-part interacting I, Y, and the rest of the Universe as a cluster of observable interacting systems placed in a multiverse of unobservable events

It is because we have an innate desire to grow in comfortable forms that we bother to maintain our interaction links in the first place. However, a three-part 'Whole' is too simplistic for all but the most intimate interactions between individuals. For further practical applications, the interaction diagrams or, alternatively, the details of the interaction matrix must be expanded.

Without showing interaction details among ourselves and all the relationships that might have grown and faded in our lifetimes, Figure 1.5 shows a background of action cycles. All of these action forms can be separated from the 'U' thus distributing the interactions in a network of interconnections. These permeate through the Nothing like a spidery tapestry of fibers that flow themselves through invisible channels. The instant snapshot shown here begins to move as the

‘We’ turn around on our individual axes. The connecting interactions, like drive belts on a cosmic engine, keep the entire configuration of parts in synchronization so that each of souls continue to experience their lifetimes. We are not objects with a single material body but self-regenerating activities that evolve models of themselves and their environment. The internal activity that maintains each part, may or may not find any one interacting appendage too costly to hold. The interaction stops, and a part will disappear in isolation.

That concludes our introduction to the Multiverse of Conscious Beings. By now you should understand that flow diagrams can formulate detailed physical models in which human conscious experiences are produced. Further details of the machinery of a conscious being is provided in the Appendices. Appendix A1 provides a detailed map of functions that are carried out by a typical conscious being in order to be conscious. The further appendices provide connections between action-diagram features and standard quantum and classic physics. Returning to the problem at hand, we focus on the basic two states in which such systems can exist. They are either interacting or they are isolated.

(Continued in Part II)