

The Frame of Reference for the Impressionist Theory of Everything

1. Introduction - describing what is not describable

The Russell paradox is the statement in the formalism of language that fundamentally encompasses the logical imperatives for the nature of paradox. The Russell set is *the set of all sets that are not members of themselves*.¹ A common space of property is defined, yet when the membership of this set to itself is considered, a nonreducible dualism arises. There is no way to resolve whether the Russell set should be placed inside or outside of the common space defined by its own property.

The arguments presented in the Impressionist Theory of Everything (IToE) are applications of the frame of reference found in the Russell paradox. These include the paradoxical structures found in EPR-type experiments, Cantor's diagonal slash argument, Gödel's Incompleteness Theorem, the mathematical/geometric model of (IToE), and finally the terminology developed for the description of IToE.

Under IToE, the Russell set is defined as a space called R . In conditions that R is unrestrained for the process of cycle (change) in physical space, R is the mechanism that causes the development, or accumulation, of complexity. This process of development begins at the subclassical level and subsequently crosses a dimensional boundary to a space that displays classical characteristics. At the subclassical level, the properties of this space are superposed, and at the classical level, these same properties, acquire a dimensionally complex structure that permits observable extension. The Russell set object, R , dictates both the pressure under which this space develops and its angularity (shape). Outside influence is prohibited under the logical imperative attached to the meaning of R , and cycles are successively superposed because the paradox of R is not resolvable.

¹ Penrose, 1991: p. 100-101.

2. The development of complexity

The geometric model for the Impressionist Theory of Everything (IToE) is a description to the limit of two dimensions for the manner in which dimensional complexity develops. Under IToE, each location in the universe is a site for the development of this complexity, and, as stated, there are two stages to this development - subclassical and classical.

This format, for the description of space, is radically different from a rational representation. On the one hand, rational descriptions rely on fixed structures of relationship, and on the other hand, IToE describes the growth of space as it develops both direction and shape. Direction and shape become subsumed in a single domain. A fixed set of rational relationships and identities cannot apply in such a structure. This format of development, under IToE, is cross-dimensional.

Thus, under IToE, there two complementary bases for understanding the universe. The first of these, rationalism, has taken us far beyond the boundaries of pure experience; however, rationalism fails when applied to fundamental structures. Fundamental dualisms arises at such boundaries, and they are not controllable. It is beyond this point that the Impressionist perspective is essential at fundamental boundaries (large and small).

2. The mechanism of fundamental dualism is the reversal of property in complementary structures

In Impressionist Theory of Everything (IToE), a first principle for the authentic nature of paradox is constructed. The goal remains the same as for any argument based in rationalism, i.e. to discover new symmetries. The difference is that the symmetry discovered is of a dualism, the parts of which are complementary but nontransformable across their identities and relationships.

The key mechanism of complementary, absolute dualisms is the reversal of property for identity and relationship. The result is that a common domain is defined, yet two fundamental

forms of structure exist within it.

3. Cycle across paradoxical locations

The Russell set object, R , which is not a member of itself, takes on physical significance in IToE. The Russell set object, R , is excluded from its own domain. However, when R is excluded, it meets the criteria that it should be placed within itself. Even though the property of R is clearly defined, it is not possible to limit the location of R , and the very attribute that is used to assign location to the set prevents clear placement of it. Two well-defined locations for R , exist, and each is absolute. The locations are mutually paradoxical for inclusion in a common domain.

The best that can be accomplished for placement of R is that it cycles between what are essentially half-phases of a complete format for closure of the domain. Each half-phase is nonreal, or imaginary, to the other half because there is no common frame of reference by which to combine them, even though each is a logical imperative of the property of the set. In IToE, the boundary across the relationship of these parts is defined as dimensional.

4. Cycle - the dynamic interpretation of R

In the simplest of terms, anything that is not rational (i.e. nonreal) in the manner of R is not observable in a rational universe. This is because rationalism relies on the process of observation and the drawing of conclusion. If conclusion is impossible, then it is reasonable to expect that observation is also not possible, and consequently, R will be imaginary (invisible) to observation.

Since there is no directly observable analog to R in physical structure, we must deduce the effect of R in the universe purely in theoretic terms. Under IToE, R causes the accumulation of physical domain through a process of half-cycles that become superposed and subsumed in the domain of R . The concept of IToE take this process to the point that classical location emerges. The interpretation that R can dimensionally accumulate by cycle is an entirely new concept for the

meaning of the Russell set.

12. Conclusion

Some essential elements and inferences for IToE are:

1. An Impressionist perspective is required if paradox is to be recognized and interpreted for its natural and legitimate place as a mechanism in the universe. The mechanism of paradox is responsible for the existence of fundamental dualism that has a nonrational format of property and relationship.

2. Observation is shown to be an active mechanism when the relationship between fundamental singular and dualistic structures is examined. Observation in its simplest format must account for two elements of structure: a singularism and a dualism. The observation of objects is only possible when they have local, or classical, identity, but this is not the dimensionally simplest format under which objects can be described as members of a common domain.

3. The singular pursuit of rationalism is not a sufficient tool to define structure that is fundamentally and absolutely paradoxical. If indeed the universe is composed as a fundamental dualism, there is no other way to proceed with the development of meaning for it than through an Impressionist perspective.

4. The process of cross-dimensional development of a space invokes evolution across complementary components of quantum mechanical and classical structure. Each is superposed on the other in this construction. This evolution is self-directed in a manner similar to a bootstrap process. The properties of complex organization found outside of the developing domain excluded from effecting the inside structure of the domain by the mechanism of paradox.

5. This theory provides a new interpretation for the meaning of the phenomenon of decoherence as it applies in current theories such as the Hidden Variable and the Many Worlds Interpretations. The bootstrap mechanism replaces the hidden variable of Bohm's interpretation of quantum mechanics. The subclassical structure replaces the Many Worlds Interpretation of Everett.²

6. The Impressionist algorithm for understanding the mechanism of paradox is an extension of Einstein's concept of relativism. However, it takes the concept in a new direction that is across dimensional levels. Complexity develops across dimensional levels in a dynamic process of accumulation.

7. A principle of conservation applies that the ortho structure of subclassical space is dimensionally simpler than is necessary for the process of observation. If the dimensional characteristic of classical space (that it is observable) is to be conserved, then the objects and relationships of subclassical space must be hidden.

Elsewhere on this web site you will find proof by example that demonstrates the existence of a generic and systemic presence of paradox in the universe. In each example the principle of paradox is commonly expressed but unique in its form. For each structure, the reader should look for the manner in which identity and property is reverse across a dualism that is contained in a common domain.

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REFERENCES

1. Herbert, Nick. 1985. Quantum Reality, New York: Doubleday.
2. Penrose, Roger. 1991. The Emperor's New Mind, New York: Penguin Books [1989].

² See Herbert, 1994: Chapter 9.