**A New paradigm**

ANDREW LOHREY

*freelance researcher*

*e-mails:* *andrew.lohrey@gmail.com*

The Galileo Commission Report, ‘Beyond a Materialist Worldview’ argues strongly that a set of background assumptions are inescapable to the way in which science is thought about, discussed and practiced. In the Foreword to this Report Iain McGilchrist writes about the assumptions that make up a scientific paradigm as a ‘lens through which we apprehend reality, the problem being that, while such paradigms are indispensable, we tend to be oblivious to the inevitably distorting effect of the lens.’

This is so true in relation to the current lens through which mainstream mechanical science apprehends reality, which is the lens of materialism. Harold Walach, the author of the Report, has written an excellent exposition of the current distortions that have erased consciousness from mainstream science. I would respectfully suggest, however, that the paradigm of scientific materialism does not only erase consciousness, it also erases, ignores or forgets about language, meaning and mind.

These erasures constitute important aspects of the background assumptions of materialism. In addition, they are not random items that somehow accidentally fell off the lab table, rather they are a set of important exclusions entirely necessary to maintain a narrow and closed view of reality. Language, meaning, mind and consciousness also have the distinction of being contexts. A context is a problematic category for a worldview based upon the general exclusion of contexts, and of these four contexts in particular.

**Language crimes**

When each of these contexts is closely examined we find a series of hidden features that lead to distortions within the paradigm of materialism. I want to look at each of these contexts while also moving towards an outline of a more inclusive paradigm. I begin with the context of language and focus on what is known amongst some applied linguists as language crimes. *Language Crimes* (1993) is the title of a book by Roger Shuy who was the leading linguistic expert on criminal cases in the US in the 1990s and he argued for the importance of linguistic analysis in helping to resolve legal cases in which language is the major, if not the only evidence offered by the prosecution.

During this period I became interested in Shuy’s book as I was working as an applied linguist in Sydney with a small band of criminologists and legal academics on a series of cases that involved miscarriages of justice. This work culminated in the book, *Travesty: Miscarriages of Justice* (1991). I would sometimes contact Professor Shuy at Georgetown University seeking his help and clarification on particular problems. The phrase, ‘language crimes’ does not refer to ‘bad’ grammar but to linguistic problems that can arise within the interpretation of evidence in situations such as law and science, where truth and accuracy are crucial.

Most people think of crime in terms of physical acts such as robbery or assault. Yet every crime has to be reported to police as well as aired in court and these reports come in the form of discourses that have to be constructed and then interpreted. Problems begin with the language of evidence when it is considered to be a mirror-like medium that can have a one-to-one relationship to what has occurred in physical events. This is simply not the case as any analysis of eyewitness testimony can verify.

Evidence from a witness always involve the witness’ past perceptions, memories, predispositions and attitudes towards the medium of language itself. To fall into the trap of assuming that language has an innocent mirror-like quality that will accurately reflect a set of physical events is to commit the sin of a language crime. For scientists this is not an unusual sin. For example, the language used in the famous paper known as the EPR paradox stated that when interpreting quantum mechanics: ‘*every element of the physical reality must have a counterpart in the physical theory’*. This paper was published in the *Physical Review*, May 1935 and the authors were: A. Einstein, B. Podolsky and N. Rosen. It was titled, ‘Can Quantum-Mechanical Description of Physical Reality Be Considered Complete?’

Here is a language crime at the heart of one of the most famous arguments in science; an argument about the completeness or otherwise of the Copenhagen interpretation of quantum mechanics (QM). Hence, language crimes are not only relevant to criminal cases; they occur within any domain where, in the pursuit of truth, the interpretation of language is an essential ingredient. In general, a language crime occurs in two overlapping linguistic cases:

1. when the maps of language are treated as if they are the actual territory referred to; and
2. when the background context of a discourse or statement is erased, ignored, devalued or changed.

Both these operations produce objectifications, that is, they tend to create objects or entities (nouns) in place of dynamic relationships (verbs). Such objects and entities are superficial in nature and they also appear to be separate and independent from the author and removed from the language that constructed them.

In relation to the first case, where a language map becomes the actual territory, this happens when there is a psychological identification or fusion of these two orders (map and territory). This is a process that welds these two vertical levels of a communication together so as to produce one single and closed meaning. Within the paradigm of materialism this kind of closed, single meaning is common for it establishes a certain truth-effect, that is, the sense that there really is an independent world of physical objects or static entities. This most common crime in science happens when language is treated as it was in the EPR paper, as an innocent mirror, or simply when words such as, ‘the physical world’ or ‘a particle’ are accepted as an unquestioned independent material reality.

When this language crime becomes part of the culture of science it functions as a worldview and is often called ‘realism’. Realism is the metaphysical paradigm of materialism and it tells us that the physical world is an independent reality, separate from the subjectivity of scientists. The realism of this view also constructs the conviction that material reality is the only reality while also establishing a dualism that involves the separation of subjectivity and objectivity, often called subject and object, or mind and matter.

The other term often attached to ‘realism’ is ‘local’, as in ‘local realism’. The local means that the material objects of an independent world mechanically interact within their immediate spatial and temporal environment to the extent that no object can travel faster than the speed of light. The paradigm of local realism is largely based upon mechanical physical connections and complemented by discourses that appear to have single meanings. The mechanical discourses of single meaning establish the gap common to the dualism of subject and object, or mind and matter while at the same time producing the fiction of an objective viewpoint. An objective viewpoint suggests the possibility of having a viewpoint that is independent of the person who espouses it. These are the language crimes of materialism and they are created and maintained through a series of linguistic processes that produce patterns of psychological identification by fusing together a range of distinctions.

**Language Structure**

The second case of a language crime (the erasure of context) occurs when the surrounding assumptions that contextualise the ostensible messages of a discourse are ignored, erased, de-valued or changed. This kind of language crime is prevalent within science and technology. The contexts so erased are language, mind, consciousness and meaning. Each of these does not stand alone but is embedded within each other so that language is encased within mind, mind is enfolded within consciousness and the content of consciousness is always meaning (Lohrey 2018).

The context of language will always involve the linguistic history of the current discourses and the particular socio-cultural milieu that gave rise to them: for example, the scientific and social context of the EPR debates. Then there is the dialectic of language itself. This concerns the two dynamic movements that takes place within every discourse. These movements are: i) implicit meanings that are concealing, and they come in the form of the implications and generalities of the message. Then there are: ii) those explicit meanings that reveal the details contained in the ostensible message. Hence, the dialectical movement of language involves a series of transformation of implicit and explicit meanings that occur during the construction of every discourse.

The kind of emphasis we give to each of these movements when we construct a discourse will determine the truth-effect or otherwise of a mechanical or holistic reality. When implicit contextual meaning is erased, ignored or devalued the discourses so constructed will tend to emphasise mechanical connections that have reduced or single meanings. These are the attempts at producing a photographic likeness with language. This restricted view of language was the impulse behind Claude A. Shannon’s information theory in 1948 and it appears to be the impulse behind all information technology today. Alternatively, when an emphasis is given to the actual dialectical structure of language itself the resultant discourses will have a balance between these two natural but contradictory implicit and explicit movements of language. Such a balance produces a set of interconnecting relationships that have multiple meanings and discourses that allow for implications and contexts. In these situations meaning rather than information is emphasised.

When we create discourses that reflect the internal dialectic structure of language we find it is impossible to express a complete, concise, clear and certain statement about anything without some ambiguity or uncertainty. The inherent uncertainty of language itself tells us that every scientific theory or interpretation, as well as every religious scripture, is never closed or complete, but rather they will always be open to further interpretation, modification and investigation. Lawyers have an answer for these kinds of inherent uncertainties with the phrase that guilt should be ‘beyond reasonable doubt’. This means that while innocence may always be in doubt, guilt should be beyond any doubt that could be reasonably accepted in the circumstances.

The context of language is itself embedded within the context of mind. This means that every discourse is created and refined by a human mind. In turn, the context of the individual human mind is surrounded and underpinned by the context of cosmic consciousness. Such a comment is controversial for those who embrace local realism so I will return to this point shortly. In the meantime, we can say that the individual human mind represents the ultimate context in which any and all scientific practices, theories and interpretations arise and are exchanged. While this context of mind is absolutely essential for the expression of any scientific practice or theory it is almost always ignored, erased or reduced in the practices of science, and the effects of these erasures are significant in terms of loss of meaning and misunderstanding.

When scientists confine their discourses or experimental practices to the paradigm of local realism, they will be looking for certainty and control over reality and they will be guided by such criteria as precise conceptual analysis and what is often called ‘proper attention to logical structure’. As a consequence, their focus will tend to be on those explicit, revealing aspects of language that seem to offer the promise of certainty and control. These features, referred to above, are those that involve mechanical or instrumental discourses that proffer single meaning. Through such linguistic choices’ scientists attempt to discount, erase, delete or change those features of language in which uncertain inheres. These are the implication of messages along with the implicit contexts of language, mind, consciousness and meaning.

These tendencies of mechanical science have been around since Newton’s time and were poetically inscribed by the English poet and engraver William Blake (1757 – 1827). Blake referred to single meaning in his famous verse, (‘To Thomas Butts’, 1802) of which the last two lines are:

*May God us keep From single vision and Newton’s sleep.*

One of the main cultural supports for the language crimes of science has been Aristotelian dualistic logic, which was taken up by René Descartes in his Cartesian dualism and which is currently a feature of the dualism of local realism. As defined by the philosopher Bertrand Russell, Aristotelian logic has three laws: *the law of identity, the law of contradiction, and the law of the excluded middle*. This logic could well be recast as the logic of single meaning as it is unable to deal with contradictions, notwithstanding that in terms of meaning, contradictions suggests evidence of more than one meaning.

Aristotelian logic begins with the law of identity: A = A. This is the logic of the sleep of the single vision to which Blake referred. With the law of identity, we are told that the first ‘A’ has the same value/meaning as the second. Empirically this is impossible as they are different in time and space. Yet Aristotelian logicians conveniently erase this key distinction with the conviction that here is a single value/meaning called an identity. An identity represents a single and closed unit of meaning and in this sense it is similar to the construction of a material object, which also tends to be a closed unit of meaning.

What is missing from Aristotelian logic, as well as from all forms of dualism, is the mitigating influence of the contexts of language, mind and meaning, contexts that represent the actual agency that initiates these discourses on the laws of logic. As a result of these contextual erasures the common dualistic discourses employed by scientists when adhering to the dictates of local realism come with an amnesia related to the language crimes they are committing. Yet ignorance of the law is no defence, and so it is that having a linguistic illiteracy does not prevent scientists from exchanging communications, rather such a situation simply helps to manufacture a series of fictions about the nature of reality.

The sleep of the single vision should not, however, be confused with what one of the founding fathers of quantum mechanics Erwin Schrödinger said about the dualism of subject and object. Schrödinger argued that this dualism was fallacious, and that subject and object are one. He went on to say: ‘The material world has only been constructed at the price of taking the self, that is, mind, out of it’ (Schrödinger, 1993, 119). He then went further by suggesting that mind has erected the physical outside world out of its own mental stuff (Schrödinger, 1993, 121).

For Schrödinger to say that object and subject are one is not to commit a language crime by reducing them to a single meaning. In saying that these two are one he did not identify them as having the same value, which is what happens when two features are fused together in a process of identification (as in the law of identity). Rather, Schrödinger located these two distinct features within the single context of mind. His comments, therefore, direct us away from the kind of single meaning dualism inherent within local realism and towards a more holistic and quantum view where multiple meanings come into play.

**Mind**

The kind of human mind that is represented in the metaphysics of local realism is devalued in importance in contrast to the ‘real’ value of the physical world. Within this approach the mind becomes simply ‘the observer’ or the subjective element in the dual pair: subjectivity and objectivity. In addition, this materialist view of the human mind does not comprehend the observer as a context. Rather, the individual’s mind becomes a detail among a wide variety of other details, a constituent with no special status, or an abstract point within a mathematical calculation, or it is hollowed out by an abstract mechanical vocabulary. Yet the human mind is an implicit context, that is, it is the field in which science takes place. As a context, the status of the observer begins to become more obvious when we take seriously the evidence that the only way we are able to know the physical world is by observation and conceptualisation, and both of these processes operate within the mind of the observer.

We can find an example of the individual’s mind being washed out of the picture in Albert Einstein’s *Relativity: The Special and General Theory* (1962). In his third chapter, Einstein deals with the mechanics of space and time and relates a story of him travelling in a railway carriage and then dropping a stone on the embankment below. “I see the stone descend in a straight line. A pedestrian who observes the misdeed from the footpath notices that the stone falls to earth in a parabolic curve’. (Einstein, 1962, 9). The question he asks about the ‘reality’ of the stone’s path is: does the stone travel in a straight line or in a parabolic curve?

In this story Einstein begins with his personal experience of dropping a stone and the perception of the pedestrian on the ground, plus his rational reflections that raise the question. These are human mind references. However, the question asked about the reality of the stone’s path is not a mind question but implies the possibility of a real path within an independent external world. The answer Einstein provides represents a simple example of relativity. Yet this is not the relativity that comes from different perceptions of different people, the place where he began the story. Rather, his discourse on relativity turns into the relativity of external events in an independent world. Hence, we are told that the stone travels in a straight line relative to a ‘system of co-ordinates attached to the carriage’ but in a parabolic curve ‘relative to a system of co-ordinates rigidly attached to the ground’.

We see here that his vocabulary has changed from ‘I see the stone’ and a ‘pedestrian who observes’ to the language of: ‘a system of co-ordinates’. The abstract phrase, ‘a system of co-ordinates’ may be useful for mathematical calculations but it also represents a substitute for the equally abstract phrase, ‘a body of reference’. These phrases, which Einstein relies upon to imbue his discourse with a sufficiently ‘mechanical’ flavour, achieve that end by eliminating from the picture the mind of the scientist who asked the question, along with the perceptions of the people who observed the falling stone. Through the alchemy of this kind of abstract mechanical language, reference to the human mind has been transformed into an objective and relative reality that is independent of mind.

Yet where are the semantic roots for the phrase ‘a body of reference’? Surely this term only has legitimacy when we already know that behind its abstractness lies the ground state of a human mind with normal perception. In other words, the insentient object of a railway carriage or an embankment on their own cannot be ‘a body of reference’. Such a proposition is preposterous. Rather, the phrase a body of reference’ is simply a linguistic ‘shell’ now emptied of meaning that had previously been bestowed on it by virtue of its link to the ground context of human perception. Through the mechanical abstractions of this science, that ground context has been surgically removed so what is left is an empty linguistic shell that narrows our focus by erasing the context of mind, and all that that implies about meaning and context. Here is an example of a language crime that changes the context of mind into the mechanical, abstraction called an independent physical world.

**A New Paradigm**

The framework of local realism has tended to predispose scientists to commit a range of language crimes that lead them into the cul-de-sacs of materialism. It is undoubtedly time for a new paradigm; a new lens through which to see an expanded reality. Where to begin? Some writers are beginning to look to quantum physics for a new approach. For example, Vasileios Basios suggests that we should look to quantum mechanics and the contradictory process of complementarity as a guide to a new logic. ‘Complementarity’, he states, ‘leads us to the strange logic of quantum physics’ (Dunn & Jahn, 2017, 262). Complementarity usually means, ‘opposites are complementary’, that is, they are complementary within a larger system. Within the dualism of Aristotelian logic and local realism there are no related larger contextual systems hence, opposites are never complementary.

Another commentator has suggested the quantum model as a way to understand linguistics. Alexander Wendt writes: ‘My discussion draws on the work of physicists who have begun applying quantum theory to concepts and linguistic meaning’. He further suggests that, ‘there is a “quite strong” analogy between quantum theory and language, such that the “exact same” modelling operations can be used in both’ (Wendt, 2015, 215). I understand that the modelling operations that Wendt refers are to do with contextualisation. Both quantum physics and meaning are essentially contextual and that means they rely upon the contexts of meaning, language, mind and consciousness for their exposition.

Without going into the details of Wendt’s view of meaning, which in my view is too instrumental, he is right to suggest that meaning is contextual. However, we need to go beyond saying that to an appreciation of the structure and function of meaning, along with its contextual status or role, in order to come to an understanding of the possibilities of a new nondual paradigm. Meaning is a context that comes first in all human endeavours. It comes first because intelligibility comes first, and meaning is the content of intelligence. The mystic Sufi poet, Kabir said it well:

‘*Behold but One in all things; it is the second that leads you astray*’ (Huxley, 1970, 10).

Meaning is the One in all things. It is never the second. Meaning gives life to language and agency to intelligence, and it represents the content of the individual’s conscious mind as well as the content of cosmic consciousness (Lohrey 2018). In short, meaning comes prior to numbers, mathematics, the science of quantum physics, and the sciences of mainstream mechanics. It comes prior to everything else for there is nothing beyond or outside of Meaning.

Because of its primary status the context of Meaning can provide us with the outline for a new nondual paradigm. In addition, this new paradigm should be applicable to every human situation whether in science, the humanities, or religious thought and practice. This should be the case because the role of Meaning is always primary. In other words, I would argue that we should not be looking for a new inclusive paradigm within mathematics, cosmology or the practices of quantum physics with all their accompanying scientific conventions, because these are always secondary practices that cannot be relied upon to form a set of background assumptions.

A new inclusive paradigm, born from the womb of Meaning, will reflect its two poles of attraction. These are, i) the pole of implicit meaning; and ii) the pole of explicit meaning. Explicit meaning comes in the forms of distinctions, differences, contrasts and marks. These are the relationships of non-symmetry and asymmetry. Implicit meaning produces links, connections, unities and wholes and is the hidden content of every context in every area of endeavour. These are the essential relationships of symmetry and similarity. Both these poles have the further attributes that are found within classic physics and quantum systems, which are: locality and nonlocality.

The pole of explicit meaning always has locality and is concerned with local action involving those distinctions within a particular perceptual space that mark out the details of an orientation to a specific environment and which are also evident in the present moment: now. In contrast, the pole of implicitness or implicit meaning has a nonlocal, infinite and boundless character and hence functions as a field of entangled relations across the distinctions of time and distance, and that includes the minds of other people. Hence, implicit meaning is beyond direct physical connections. Such is the nature of intuition, insight, extra-sensory perception or remote viewing. The other feature of these two poles of implicit and explicit meaning is they cannot be separated from each other and they do not form a binary pair but, rather, are woven into a contradictory holistic gestalt that provides the local structure of a conscious and explicit mind that is embedded within an implicit foundational field of cosmic consciousness.

Within this paradigm of meaning the individual’s mind represents the opening of the master context for every-thing; every relationship, detail, discourse and difference within every situation, whether that situation is scientific, spiritual or communal. The significance of the context of the individual human mind is that its nonlocal features give the observer an infinitely extended capacity beyond the body, always open to non-local intuitive meaning, while at the same time the observer’s mind contains the foreground details of local and explicit perceptions and conceptions. Hence, the mind of the observer simultaneously contains deep implicit meanings yet also surface, explicit features. It is simultaneously nonlocal and local, implicit and explicit.

A new inclusive paradigm based on Meaning would reflect these contradictory conditions where the nonlocal and local are integrated. For want of a better title, a new paradigm based upon the structure and function of Meaning could be called *nonlocal realism*. Its two features: nonlocal implicit and local explicit meaning have an asymmetrical relationship to each other. This is a relationship where nonlocal implicitness is foundational and local explicit meaning arises from that foundation to be accorded a secondary or derivative status. *Nonlocal realism* represents an integrated gestalt that cannot be separated without doing damage to the paradigm’s interconnected, holistic and nondualist nature.

The inclusive realism of this paradigm stands in contrast to local realism, a framework that generally excludes the meaning of implicit contexts and their nonlocal character. It is realist in its reliance on local, explicit distinctions and in its conviction that these local details are always embedded within implicit contexts that are nonlocal. Here is the reality of an integrated implicit and explicit set of implications on which all scientific theory and practice are actually based and should now be recognised as such.

This is a paradigm that relates well to quantum physics and there are several quantum features such as complementarity and entanglement that are directly reflected in the functions and structures of *nonlocal realism*. For example, complementarity is the relationship between implicit and explicit meaning while entanglement is a description of the infinite nature of implicit meaning. For these reasons, *nonlocal realism* is a more appropriate framework to interpret QM than local realism, which in the last hundred years has resulted in at least fifteen major interpretations.

*Nonlocal realism* is a paradigm in which relationships and processes rather than objects or entities are critical. It also finds support from the large body of Indian Advaita Vedanta philosophy that has argued over several thousand years for a unified, non-local dynamic consciousness. In addition, a non-local, unitary consciousness in which each individual mind represents a local part finds validation in the growing body of Western research found in Goswami, 1995; Radin, 2006; Jahn & Dunn 2011; Dossey, 3013; and Lohrey, 2018. This holistic paradigm is also more suited to a general understanding of an individual’s mental health and wellbeing.

**References & Notes**:

Dossey, L. (2013) *One Mind: How Our Individual Mind is Part of a Greater Consciousness and Why it Matters*, New York: Hay House.

Carrington, K., Dever, M., Hogg, R., Bargen, J., Lohrey, A. (1991) *Travesty! Miscarriages of Justice*, Law School, Macquarie University: Academics for Justice.

Einstein, A. (1962) *Relativity: The Special and General Theory*, Trans., R. W. Lawson, London: Methuen.

Goswami, A. (1995) *The Self-aware Universe: How Consciousness Creates the Material World*, New York: Putnam.

Huxley, A. (1970) *The Perennial Philosophy*, New York: Harper and Row.

Jahn, R.G. & Dunne, B.J. (2011) *Consciousness and the Source of Reality: The PEAR Odyssey,* Princeton, New Jersey: ICRL Press, ebook.

Jahn, R.G. & Dunne, B.J. (2017) *Being and Biology: Is Consciousness the Life Force?,* Princeton, New Jersey: ICRL Press.

Lohrey, A. (2018) *The Evolution of Consciousness: A New Science*, Princeton: ICRL Press.

Radin, D. (2006) *Entangled Minds: Extrasensory Experiences in a Quantum Reality*, New York: Paraview.

Schrödinger, E. (1993) *What is Life*, Cambridge UK: Cambridge University Press.

Shuy, R. W. (1993) *Language Crimes: The Uses and Abuses of Language Evidence in the Courtroom*, Oxford: Blackwell.

Wendt, A. (2015) *Quantum Mind and Social Science: Unifying Physical and Social Ontology*, Cambridge University Press. Kindle Edition.