



The Implicate Order

Creating a Global Community

Wayne D. Trantow
Omnigarten.org

February 2020

Abstract

To achieve an enduring global cooperation model a broad and radical change in the world-view of people across all nations and cultures must occur. Such change is possible from the bottom-up. When people find a reason and a reasonable way to dissolve inherited parochial beliefs and adopt a truly universal worldview, then a global cooperation and problem-solving model will flourish organically. So, the core challenge here is to evolve humanities' thinking modality.

Humanity's thinking and culture-building process is an unbroken chain of observation and cause-effect deduction that goes far back in time. Thought, language and community have evolved together over many generations; there is a tight feedback loop between them. We find ourselves now at a point where language structure defines our sense of self and our relation to the world. Object-dominant language has fostered a thinking modality that has created a widespread perception of ourselves as disparate individuals living amongst disparate things within disparate societies. This perception is blocking the mosaic of localized human cultures from functioning harmoniously as a global community. I argue that we can overcome this by fostering qualitative literacy in the language of three-dimensional Geometry in everyone.

The Implicate Order

In his book '*Wholeness and the Implicate Order*' (Bohm 1980), physicist *David Bohm* begins with the consideration of fragmentation and wholeness:

“for fragmentation is now very widespread, not only through society, but also in each individual; and this is leading to a kind of general confusion of the mind, which creates an endless series of problems and interferes with our clarity of perception so seriously as to prevent us from being able to solve most of them”.

The central theme of Bohm's thought is the characterization of reality as:

“the unbroken wholeness of the totality of existence as an undivided movement without borders”.

On the significance of the role of language, Bohm writes:

“... our enquiry will have to begin by emphasizing the role of language in shaping our overall world views as well as in expressing them more precisely in the form of general philosophical ideas. These world views and their general expressions (which contain tacit conclusions about everything, including nature, society, ourselves, our language, etc.) are now playing a key role in helping to originate and sustain fragmentation in every aspect of life.” ... “to invent a whole new language implying a radically different structure of thought is, however, clearly not practicable. What can be done is provisionally and experimentally to introduce a new mode of language.”

The new mode Bohm proposes is one where:

“movement is to be taken as primary in our thinking and in which this notion will be incorporated into the language structure by allowing the verb rather than the noun to play a primary role. ...For the sake of convenience, we shall give this mode a name, i.e., the ‘rheomode’ (‘rheo’ is from a Greek verb, meaning ‘to flow’).” (p38-39)

The essence of Bohm’s argument is that our common use of language, where the object (noun) is predominant and action (verb) occurs to objects, enforces a thinking that is ‘object-oriented’ and is infused with the concept of time ordering. Let’s call this thinking modality ‘**particle-mode**’, a state of cognition where all things of the world are understood as static objects that can be decomposed and classified into ever smaller static parts, and then “*reconstructed according to our observations into manageable scenarios*” (Bohm 1980).

We cannot dispute the usefulness of this thinking modality, after all, we have survived by it for thousands of years, but for all intents and purposes, it is the only modality we operate with in a now highly integrated, highly interactive, populous world. Our problems seem to be outpacing our thinking. In this context, we starkly find that our thinking capability is incomplete, and humanity must mature, not by eliminating our object-dominant/decomposing thinking modality – we need it – but by complementing it with another modality that comprehends the unity of disparate appearing things, comprehends how the universal is enfolded in the physical. In short, humanity must become ‘**bi-modal**’.

These two thinking modalities correspond to existing domains of human knowledge-seeking: Science and Religion/Philosophy. However, I believe it will be difficult for any of these deeply rooted domains to lead humanity to the character of thinking it needs to coalesce into a well-functioning global community in a reasonable timeframe.

Religion and Philosophy have always sought to make the Universal Soul tangible, but the conveyance of religious and philosophical concepts is inherently based on common language constructs with time-based scenarios that, in effect, usher our cognition into particle-

mode. Religion and Philosophy, in practice, have not made an understandable connection between unity and multiplicity. If the Universal is sensed as '*an undivided movement without borders*' then these domains will remain a practice of 'faith' perpetually waiting for this sensing.

Science, as a method and body of knowledge, is built on the very premise of understanding things by decomposing them into parts, sub-parts, and on-and-on into ever smaller parts. This too funnels our cognition into particle-mode and ultimately produces the fragmented world view that Bohm mentions. Though extremely useful to understand constrained aspects of reality, science is likely incapable of relating wholeness to a vast multiplicity of physical parts.

In sum, I argue that the particle-mode perspective is incapable of comprehending how the 'physical things' we perceive with our senses are states of a single '*undivided movement without borders*' operating in the present moment. In this regard, these domains of thought are like 'flies in a bottle'.

Bohm's argument correlates the effect of a '*fragmented world view*', to the cause, '*we tend to think only in terms that our language structure allows*' and proposes a path forward, '*alter the use language to make the verb predominant*'.

The preeminence of 'movement' that Bohm emphasizes ("*movement is to be taken as primary*") suggests that reality (totality) is operating as some sort of pump of coherent intelligence (life force) from its unity state to its individuated physical state (manifestation). Bohm reasons that, by making the verb predominant in the structure of our language, that would, in effect, remove the concept of time from our communication and thinking, resulting in a perspective that is able to comprehend the presence of the universal intelligence flowing in the moment. And, in this way, humanity attains a new modality of thought.

If we go down this path, given that we are social creatures that communicate frequently, we would be exercising this tweak of language on a regular basis. In time, this could indeed nudge our consciousness toward an awareness of wholeness at work in our day-to-day lives. It is reasonable to think that, when everyone communicates in this way and acquires this new perception, it would lead to a world of people operating more harmoniously with a common worldview. Although Bohm's proposal offers an actionable path forward, it is, I believe, a path that would be extremely difficult to implement in a reasonable time frame or even at all. It would likely take many generations to become practiced widely enough to have effect. We need another way forward.

If we accept the argument that '*we tend to think only in terms that our language structure allows*' then it follows that it is very important to understand the nature of language. Let's posit that written language is basically two-dimensional geometric pattern (i.e., symbols), and that spoken language corresponds to the structure of the written patterns, and that humans are innately very good at pattern recognition. Communicating by language, then, is the act of grouping together geometric patterns (i.e., the letters/symbols of an alphabet) in a certain order and according to common rules of syntax and grammar. A given series of symbols, received

through the eyes, creates mental images and feelings that impart a meaning to the receiver. Meaning is processed according to memory and any new thinking, potentially resulting in a new meaning that is encoded as another set of symbols and transmitted back out via speech or writing. So, communication, in this very simplistic model, is the process of exchanging meaning via symbols, i.e., geometric patterns. Carried further, shared meaning is the foundation of community and the development of culture with its attendant worldview.

Inherent to object-dominant language structure and symbol-processing is the concept of time, one that is based on planetary movement, e.g., day and night, minutes, hours, years, seasons, etc. Language structure has syntax with time tenses that allows objects to operate in terms of past, present and future. A verb-dominant language would not have this same notion of time, and this is Bohm's essential argument; That by making the verb dominant we bring our awareness into the presence of the universal flow happening in the moment, rather than tangled up in abstractions of time-order. In this we sense another order which he calls the 'Implicate Order', "*the notion that in some sense each region contains a total structure 'enfolded' within*" (Bohm 1980).

Bohm would ideally like a completely new language system to convey a sense of this implicate order of the Universal but deems this route '*clearly not practicable*' and instead aims to evolve awareness by changing the usage of existing language. I propose, however, that there does exist a new language structure that is practicable, and that the way to evolve humanity's thinking is by raising humanity's literacy of the universal language of 3D Geometry.

3D Geometry is everyone's native language. One that, I argue, we are innately capable of understanding directly, unlike common language that require years of learning. This was the great insight of the creator of Kindergarten, Friedrich Froebel. It was central to his teaching method. Ironically, most people are not fluent in this language of pattern, or even think that it can be a language. I argue that it can:

I do not propose a quantitative, mathematical study of Geometry as currently taught in schools throughout the world, for that is thoroughly steeped in particle-mode thinking. I propose a '**qualitative**' approach where important patterning principles of nature are observed and understood through simple 3D model building. Here, knowledge comes from first-hand observation and cognition, not second-hand symbolic language. This is the same basis of enquiry that the classical Greek philosophers used to gain insight into the intelligence at play behind Nature's manifest physical form. Their approach centered on the study of fundamental Geometric form (e.g., the regular Platonic solids), for we can intuit, as they probably did, that this is where the realm of the physical (manifest) and the realm of the metaphysical (universal) are close. And indeed, Plato reached for metaphysical meaning in associating these base forms to aspects of the physical world, e.g., fire, earth, air, water and the ether. While we no longer make these associations in scientific enquiry, we still employ the same overall method of understanding of the world. That is, the classical philosophers understood fundamental Geometric form by quantifying it, i.e., they characterized form by counting faces, edges, vertices and angles, etc. Fundamental form was classified and understood by counts and measures. Essentially, they viewed form as static object, and in doing so, the classical philosophers conferred great power to the particle-mode modality of comprehending the

physical. Through this modality the physical world been studied and quantified to great benefit, but it must also be recognized that the classical philosophers dug a deeper ‘viewer-object’ chasm into our thinking, one that continues today to maintain a world of fundamentally disconnected people.

It is with this understanding that we make a shift to a qualitative approach to 3D Geometric form study. We start where the classical philosophers started but take a different route. We don’t count or measure, we simply observe how Geometric models grow in progressive build-out. We observe ‘movement of pattern’, not static objects, and what we find, quite vividly, is that, spatial coherence and elegance of symmetry exists all along a progression of patterning. In qualitative form study, we see patterns (e.g., Tetrahedral, Octahedral, Icosahedral forms, etc..) and patterning principles (i.e., notions of how it grows) that Nature employs to maintain spatial coherence across vast variation in physical form. For example, in the notion of ‘**Duality**’ lies Nature’s power to fill space necessarily with two complementing patterns: Triangle and Square. The notion of ‘**Self Similarity**’ teaches how a simple pattern repeats at different levels of manifest growth, a tangible emblem of the old phrase, “As Above, So Below”. In the notion of ‘**Enfolding**’, we witness a patterning intelligence that creates the sphere-like cages of Icosahedral form, a growth pattern that is fundamentally distinct from the planar growth of Lattices (i.e., minerals, crystals). In sum, by modeling fundamental form we not only see patterns of Nature, we also get a sense of how Nature makes patterns (its bag of tricks). We get a sense of the patterning mechanism of the implicate (enfolding) order.

When one discovers a sufficient vocabulary of Nature’s ‘patterning notions’ it creates a conceptual fabric that is tangible enough for our analytic reasoning to work with. Let’s consider ‘patterning notions’ the symbols of the language of Geometry, let’s call them ‘meta-symbols’. In 3D modeling, patterning notions are sensed only in the movement of model build-out, so meta-symbols are not static patterns, they are like the meta-data of patterning movement, the tricks Nature uses to grow and vary. In the same way that we use letters of an alphabet as symbols to construct words then sentences to convey meaning, we can make a leap here, and realize that we can also put together a series of 3D Geometry meta-symbols to similarly create a meaning.

What follows is a hypothetical narrative (*italicized*) of how we might we use the patterning notions (meta-symbols) of **Duality**, **Self-Similarity** and **Enfolding*** to craft a line of reasoning that results in a comprehension of the Implicate Order, a sense of how an ‘unbroken wholeness’ can pattern itself into a multitude of physical forms.

(*These notions are introduced in the essay “Patterns and Notions: The Joy of Qualitative Geometry Study” found on <http://omnigarten.org>.)

[Narrative Start]

*The concept of an ‘unbroken wholeness ... an undivided movement without borders’, i.e., a single Universal Life Force, is a concept that I think most people accept. This is an ineffable entity but let’s visualize it as an extremely fine ‘atmosphere’. Within this context we use the notion of **Self-Similarity** as an inductive tool to infer that the notions of **Duality** and **Enfolding** are at work even here in the finest of the fine atmosphere of pure geometrized dimension. The progression toward becoming physical begins with pure dimension*

*(Unity) somehow enfolding itself to create two different states of itself, i.e., certain portions of the atmosphere differentiate by way of the **enfolding** principle. The enfolding ‘action’ creates denser portions of the atmosphere, portions with a center and a spin, and forces of attraction and repulsion, in other words, distinct parts, or particles. Its ‘dual’ is the non-enfolding, non-spinning atmosphere that is comparatively less dense. Consider this ‘Dimensional Intelligence’ within which the denser ‘Enfolded Intelligence’ (**the first Duality**) gets patterned like we observed in our geometric modeling, but with infinite possibility for variation. In this conceptual framework we get a gist of how pure Life Force can enfold into particles and form long continuums of inter-woven patterns that ultimately result in the diverse physical forms we sense in the world around us.*

[Narrative Pause]

From the above narrative we get a ‘**qualitative**’ sense (a subtle gist) of how the Universal, as an ‘*undivided movement without borders*’, could manifest as a ‘continuum of patterning’. There is no ‘time-order’ here, just the notion of an ‘implicate-order’. We have broken the bond of language structure

[Narrative Continue]

*When imagining this continuum, we probably visualize a horizontal ordering of distinct items from a side-view, like items plotted on a Cartesian X axis. The challenge is to **not** do this. What we want to do is to sense, in a glance, an enfolded succession of patterning metamorphosing from fine to dense as an interwoven chain of dualities. In this glance, all aspects of a single wholeness are enmeshed and comprehended simultaneously. So, let’s begin by imagining this continuum as a side-view spectrum of patterns (for example, we might visualize distinct aspects of physical systems as a band of elements, then a band of molecules, then molecular chains, then cells, then tissue, then organs, then a complete animate body) but imagine this side-view is encased in a **large transparent glass rod**. Now, instead of looking at this rod from the side where distinction is prominent, imagine its diameter is large enough such that we can walk up to it and peer into its end. From this viewpoint, we not only see dense physicalized form in the fore but behind it we also recognize a continuum of pre-physical patterning notions (principles) enmeshed and operating in the form – all present as a single wholeness.*

[Narrative End]

Let’s call this the ‘**notional mode**’ perspective. In bi-modal thinking, this is the complement of the ‘particle mode’ perspective. Notional mode is a way of looking at world where we sense the patterning notions enmeshed with physical form simultaneously, seamlessly, wholesomely. In the broadest possible sensing of the physical world (*very abstract*) everything is simply pure Dimension that has spun (enfolded) itself into manifest patterns. In the narrowest possible sensing (*very concrete*) it is simply a collage of disparate physical objects. In a practical sensing, i.e., notional mode, we see distinct physical objects composed of and related by recurring familial patterning notions. This kind of sensing is an act of deep remembrance. We see a world that is whole and connected. The viewer-object chasm disappears.

Considering, once again, Bohm’s connection between language and thinking (i.e., ‘*we tend to think only in terms that our language structure allows*’), we now have a new language structure,

3D geometric patterns and patterning notions, that give us a tangible thought platform to ‘re-see’ the manifest world. In this viewing we can see universal patterning notions, as non-physical archetypes, enmeshed in physical form.

If we make the entire world qualitatively literate in Universal 3D Geometry we will have created a truly connected global community; a world of bi-modal people who think in particle-mode when appropriate to retain and evolve their particular culture, local traditions and flavors of thought, and, who also think in timeless notional-mode to tap into the language of the Universal. In this mode, a common worldview prevails and invites contribution, at the grass-roots level, to a well-functioning world. We will have filled the void.

There is a practical path to achieve global Geometry literacy; Model-building classes, created with intent to witness Nature’s patterning operation, incorporated into existing school programs across the globe. Qualitative Geometry study is relatively inexpensive to support: Modeling tools are inexpensive. Modelling requires no specialized classrooms - it can be done in the home, libraries or other public places. There are modest training needs for facilitators/teachers, or it could be self-guided with appropriate books. Modeling is intuitive, easy and fun, and at any age, even the old and the very young (think Kindergarten).

"If you want to teach people a new way of thinking, don't bother trying to teach them. Instead, give them a tool, the use of which will lead to new ways of thinking." -**Buckminster Fuller**

Importantly, form study does not step on cultural toes, it is instinctive and universal to all people, no one culture owns it. It does not offend either Religion or Science. In sum, the barrier to adoption is low.