Prefix "Re-cognition" as Prelude to Fixing Sustainability -- "Pro" vs "Con"?

Speculative review of missing emphases potentially vital for psychosocial balance

Introduction

The contrasting roles of "pro" and "con" in the English discourse so characteristic of the current global civilization call for particular attention. One justification is the ambiguity of the association of "pro" with "positive" (and supportive, as in "for") in contrast with "con" as "negative" (and resistant, as in "against"). Also puzzling, as a contrast in its own right, is the association of "con" with a variety of processes implying consensus and gathering together, as with configuration and conference.

More puzzling is the questionable expectation that there should be some balance between such associations governed by the contrasting prefixes. Is it to be expected that there should be a sense of "pro" for every function in which there is an active sense of "con" -- or a sense of "con" for every sense of "pro"? If not, why not? The question is especially pertinent in those cases where discourse attaches considerable significance to a term prefixed by "con", but seemingly none to the "pro" variant -- whilst possibly stressing the need for progress and concern about problems. The point is illustrated in the previous sentence by the term "considerable" -- in the absence of any sense of "prosiderable". Is some psychosocial functionality neglected or missing? Is this of any significance to any dynamic balance expected in the quest for sustainability?

Of relevance to this review is the existence of the California-based ProCon website -- presented as the leading source for pros and cons of controversial issues. A somewhat similar approach has been used in profiling potentially questionable presentations of problems and strategies by international constituencies in the online Encyclopedia of World Problems and Human Potential. Such controversy acquires a particular focus in foreign policy framed by a binary "us or them" logic. There is the expectation that either countries are "for" (understood as "pro") a particular strategic agenda or "against" it (framed in terms of "con"), as previously discussed (Us and Them: relating to challenging others, 2009).

This inquiry follows an interest in the role of "con" in its association with the confluence and consensus sought through conferences in anticipation of an integrative resolution of the crises of the times (Considerable Conglomeration of "Cons" of Global Concern: eightfold constraint on constructive conflict control? 2010; Exploration of Prefixes of Global Discourse: implications for sustainable fidelity, 2011). This had derived from an earlier assumption that any requisite paradigm shift might be associated with a new set of prefixes (New Paradigms via a Renewed Set of Prefixes? Dependence of international policy-making on an array of operational terms, 2003). The inquiry was taken further in exploring the cognitive role of "con" with respect to the configuration implied by a consensual mandala beyond the focus on conviction and conquest (Checklist of words prefixed by "con" with frequency of usage, 2016) -- notably with respect to the fundamental role of confidence as the basis for any future global currency (Primary Global Reserve Currency: the Con?, 2011).

As developed further here, the argument was originally inspired by the Committee on Conceptual and Terminological Analysis (COCTA) -- as a research committee of the International Political Science Association, and later of the International Sociological Association. Central to the early activity of that committee was the role of Fred W. Riggs (Concepts, Words, and Terminology, 1971; Proceedings of the Conference on Conceptual and Terminological Analysis in the Social Sciences, 1982). Riggs had notably highlighted the apparent absence of any term that could signal any form of reconciliation between extremes -- such as "pro" vs "con" in this instance. This is otherwise understood in terms of an "excluded middle".

A related interest was the possibility that the implications might be otherwise in languages other than English, notably in the contrast...
between positive and negative descriptors, as with the controversy associated with "nongovernmental" (Conceptual Distortions from Negative Descriptors: the possibility that "non-governmental" may be comprehended as "anti-governmental" in some languages, 1974). Such alternative insights have since been highlighted in various compilations (Howard Rheingold, They Have a Word for It: a lighthearted lexicon of untranslatable words and phrases, 2000; Guy Deutscher, Through the Language Glass: why the world looks different in other languages, 2010; Adam Jacot de Boinod, The Meaning of Tingo: and other extraordinary words from around the world, 2007). These possibilities were associated with an earlier concern at the absence of any ordered inventory of concepts, irrespective of their linguistic formulation (Toward a Concept Inventory, 1971). The concern inspired an inquiry through the Human Values Project into "value polarities" as an approach to more fruitful understanding of antithetical values.

The following review endeavours to highlight polar complementarities which may be interesting, recognizing that a proportion may indeed be trivial, merely an irrelevant consequence of diverse etymological derivations, or for which other terms are typically preferred. Some without conventional significance may indeed be exploited as commercial trademarks because of an implied significance that they carry. However the question is whether some senses that are missing are potentially highly significant. For example, given that "pro" normally has a positive connotation, when is it negative (as in problem). Conversely, given the negative connotation of "con", why is it considered to be so fundamental to so many positive aspirations (such as congress, conciliation, and contemplation) and the transcendence of the constraints of binary thinking? Irrespective of any excluded middle, are there inappropriately neglected antonyms?

Ironically there is also the question as to whether the comprehension of any ultimate desirable ("heavenly") unity or solidarity ("singing from the same hymn sheet") is the fundamental implication of "con", or whether this assumption also merits challenge as a fundamental form of confidence trickery -- a "con" (The Consensus Delusion: mysterious attractor undermining global civilization as currently imagined, 2011). How is unity in diversity to be better understood in a multipolar society?

The review concludes with the suggestion that the current confusion in discourse derives from a conflation of three dimensions – each of which has binary extremes associated with contrasting interpretations of "pro" and "con". Discourse effectively dances backwards and forwards along these three dimensions -- between the six extremes. These distinctive modalities are consistent with the variously articulated arguments of Edward de Bono (Six Frames For Thinking About Information, 2008). However, by configuring these dimensions as mutually orthogonal, the argument suggests that global discourse is unfortunately confined to a "cognitive cage" whose recognition potentially enables its constraints to be transcended.

Appropriate recognition of both "pro" and "con" implications?

- **Profession vs Confession**: Both terms are of major significance but in quite different contexts. They exemplify some of the issues raised by this argument and therefore merit more extensive discussion. Especially relevant is the extent to which governance, whether global or otherwise, is primarily influenced by those who would profess to know what strategy is appropriate. Few would choose to confess to ignorance -- with its implication of incompetence in a field in which they are esteemed for their knowledge and their qualifications in that respect. Arguably the currently disastrous condition of society can then be understood as having been enabled by professionals and their mode of interaction.

  Profession is clearly valued with respect to any discipline and the training required and assumed. The associated expertise is valued in many arenas, and typically recognized in statutory functions in many cases -- as with regard to the statutory professions. Confession has been valued in religious contexts, and may continue to be so, but is of considerable significance with respect to criminal proceedings. The qualifications for a professional are typically well defined, those for making a confession are limited to a signature or swearing an oath in a court of law -- although its validity may be subject to confirmation by (enhanced) interrogation. The confession of one person to another with regard to wrong-doing (or otherwise) offers another sense. Use is of course made of "confessions" to distinguish different professions of faith -- possibly acknowledged through subscribing to a credo.

Especially intriguing is the considerable importance attached to the role of a professor, namely a person exercising a profession, but to a higher degree than many -- given the depth of knowledge professed. This is notably acknowledged by acquisition of a PhD (pronounced pee-h-d). This is vital to employment and career advancement in many contexts -- as well as to appreciation of the knowledgeable insights offered as a consequence of that qualification. The status of a confessor is quite different. In a religious context it may be acquired through training to the priesthood -- or some equivalent in other spiritual traditions. In a secular context it may be recognized, but not as such, in the role exercised by various therapeutic professions. However even in its most advanced forms, there is no process of acquiring a "ChD" (perhaps to be pronounced see-h-d).

There are of course curious implications in that a professional may effectively invite a form of confession from any client -- as in the case of a lawyer or a physician. With different emphasis, a confessor (to the extent that anyone assumes that role) may seek to act professionally, and be seen to do so -- as with a priest or a psychoanalyst. There would appear to be no qualifications sought or acquired for the confessional process -- in contrast with that required for the professional process. There is a sense in which a confession, to be acceptable in legal proceedings, needs to be made professionally -- possibly with professional guidance (as by a professional interrogator). There is of course a curious sense in which a professional may make a "profession of faith", exemplified by the Hippocratic Oath.

There is a further curiosity through the "therapeutic" context implied by PhD as a "doctor of philosophy". This has its origins in a period when "doctor" was far more intimately associated with the theological dimension and the saving of souls. A confessor, as in some spiritual traditions, is readily understood as a "doctor of the soul" -- as would be one self-framing of some in the therapeutic professions. In such professions however, the professional quality would be proudly declared through a PhD...
The Christian tradition has preserved the architectural sense of a confessional. However this usage is not evident in the case of professions where confessions may be received (as with a lawyer). Arguably any facility dedicated to the acquisition of confessions could now be recognized as a confessional. There is no professional -- at best use is made of "cabinet" which (otherwise understood) may be curiously reminiscent of the design of a confessional.

Another aspect is evident in the abbreviation of professional in the appreciative expression "a real pro". The dubious counterpart is more evident in French through the very common descriptor of a person as a "con". A sense of this counterpart is evident in the use of "dupe" in English with an implication of stupidity shared with the French expression. Curiously both are inspired by an understanding of confidence -- narrowly appreciated through "pro", and called into question through the more general gullibility associated with "con", most notably as susceptibility to any confidence trick.

- **Progress vs Congress**: Considerable significance is associated with both terms, the former possibly to a greater degree than the latter. Most political discourse places emphasis on progress. Curiously however, in some countries these may be made in a congress. The latter term is of course extensively used with reference to the context of an international congress -- a term that may be synonymous with use of conference -- in both of which progress is a primary theme. Some use may be made of both as a verb, as in to progress a project, or to congress (through gathering together). Whether or not it is used as a verb, a congress (or its equivalent) may be understood as the primary context within which collective progress is enabled.

The implications of the terms part company through progression -- for which congression is a a non-existent equivalent. Congress is of far greater significance in its sexual connotations -- where it bears some powerful associations to progress, to the degree that there is a confluence or conflation. Sexual intercourse may be felt to be the essence of progress. Understood more generally, it is the intercourse enabled in collective gatherings -- in a congress -- which is of corresponding significance.

- **Product vs Conduct**: Again considerable significance is associated with both terms (and their derivatives). However it is clearly the sense of product and production which is framed as vital to any economy -- the capacity to produce. An economic value can be readily placed on both product and production.

Conduct is essentially more subtle, especially in that it is not as tangible as product. This is even more so in the case of the moral and ethical dimensions which may or may not constitute the context in which production occurs -- or by which it is enabled. Clearly there is a recognized role for any producer of goods, although seemingly little for a conductor -- except in the sense of an enducer or inducer.

The matter is complicated by the particular importance attached to conductor -- especially in connection with any form of leadership. No use is seemingly made of productor -- presumably absorbed into the sense of producer. A distinction is fruitfully made in music and the arts, where distinctive roles are attributed to conductor and producer. Of related interest is the distinctive significance necessarily attached to production vs conduction.

- **Prostitution vs Constitution**: There is obvious irony to the confrontation of the significance of these two terms via the prefixes of "stitution". Whilst constitution is obviously of considerable significance to the rule of law by which governance is enabled, prostitution plays a widely recognized role at every level of society -- however much this may be formally deplored. It could well be said that many are more familiar with the dynamics of prostitution. Relatively few are particularly aware of the enabling role of any constitution, nor do they have the possibility of engaging with that role.

There is a particular irony to the sense in which both constitution and prostitution perform distinctive kinds of enabling function. More challenging is the manner in which prostitution is embodied in the role (or profession) of a prostitute -- with all the implications of solicitation on the part of those involved. Strangely there is no corresponding embodiment in the role of a constitute. As verbs, there are distinctive senses in "to prostitute" in contrast with "to constitute".

Curiously constitutional provisions may enable legislation for the prohibition of prostitution, or the imposition of penalties on the parties to it. It might however be argued that it is the strictures of such legislative measures which render the contrasting dynamics of prostitution attractive.

- **Protestant vs Contestant**: The two terms are associated through a process of challenge. A protestant challenges another agenda, typically one associated with a dominant party as in its primary Christian religious significance. Hence the distinctive role of a protester in demonstrations with political or other implications. The determination of dominance is clearly associated with a contest in which a contestant may engage. There is seemingly no sense of a contestor.

The contrast would seem to lie in the permanence of protest against a dominant agenda, whereas a contest is more specific as a situation in which the differences may be resolved -- typically through the transition to a new pattern of dominance rather than a new association between parties with different agendas.
• **Protract vs Contract:** The significance of *contract* is clearly fundamental to the permanence many economic and social relationships, as with the role of a *contractor*

Curiously there is no corresponding sense accorded to *protract* which is used primarily with respect to delay -- as in the protracted negotiations which may result in a contract (or prevent its signature). Similarly any sense of the role of *protractor* is recognized through other terms.

• **Province vs Convince:** Both terms are of course used but seemingly in quite distinct ways. Efforts are made to *convinces* others of a particular belief or agenda, or the acceptance of dominion by a more powerful party. Curiously this may result in their *conviction* of the merits of the argument. Their failure to accept prescribed norms may however result in their *conviction* by some legal process -- to the degree that they may be incarcerated as a *convict*.

The most common sense of *province* as a separate, if not distant domain, implies a degree of subservience to a larger framework -- evident in a degree of depreciation in the use of *provincial* by those who have been convinced that their interests are best served in that manner. No use is however made of *proviction* or *provict*. No is there any use of *convincial*.

• **Other possibilities for consideration:**
  - Profusion vs Confusion
  - Pronuptial vs Connuptial

**Appropriate implications of "con" variant?**

Here the issue is the degree of importance conventionally attached to the functions associated with the "pro" prefix, compared to the obscurity or non-existence of any function associated with the variant having the "con" prefix

• **Project vs Conject:** Very extensive use is made of *project* and its derivatives (projection, projector). It is questionable whether any complementary sense of *conject* is recognized, with the possible exception of some usage of *conjection* and *conjecture*.

However there is no corresponding sense of *projecture*. The implications are separately explored (Explanation as interplay of projection and "conjunction"? 2017; Surrogates of "conjunction" as an unrecognized cognitive process? 2017).

• **Program vs Congram:** Again very extensive use is made of *program* and its derivatives (programming, programmer), but with seemingly no use of *congram*. The interest of the latter might lie in the sense of eliciting a process from a collective, rather than imposing a process on a collective in terms of a particular perspective or agenda.

• **Proficiency vs Conficiency:** Notably as the expected characteristic of a professional, considerable significance is associated with *proficiency*. No use is made of *conficiency*, whether or not it might be held to imply inefficiency. However the term does invoke reflection on the collective competence of a community uninformed by the expertise of a professional -- possibly as suggested by crowd-sourcing and open source processes.

• **Prognosis vs Congnosis:** Great significance is clearly associated with prognosis in relation to any problematic condition, most notably of human health. It is understood as reflecting the confident insight of a professional. Again it might be inferred that congnosis would reflect the emergent insight of a collective, evoking the confidence of that collective.

• **Prolife vs Conlife:** The term *prolife* has come to be used as a slogan for the agenda of those opposed to the termination of life, more typically in the case of abortion, but extended to include capital punishment and euthanasia. It is consequently also associated to some degree with the use of contraception. No complementary use is made of *conlife* (except as a trademark). Should those advocating a prolife agenda frame those opposed as favouring a conlife agenda?

• **Progeny vs Congeny:** Without necessarily using the term *progeny*, there is clearly a major focus on what is implied and the issue of progeniture. No such use is made of *congeny* or congeniture. It could be argued that the term would be useful with respect to those engendered (metaphorically) by a collective in contrast to those primarily engendered conventionally by parents.

• **Prominent vs Conmiment:** Great significance is by definition associated with the *prominent* and the aspiration to *prominence* in any context. It is intimately associated to the sense and appreciation of leadership -- most notably by followers. No corresponding significance is attached to *conmiment* which might be understood as holding the sense of the collective appreciation of any community independently of its relative status with respect to other communities -- of greater or lesser prominence.

• **Protagonist vs Contagonist:** Clearly the pursuit of any controversial agenda implies some form of contest between the protagonists in favour of contrasting approaches. The implication is that this will give rise to a "winner" and the elimination of those esteemed to be "losers". No use is made of *contagonist* which could imply a distinctive understanding of contrasting agendas and how their interrelation might evolve.

• **Procrastination vs Concrastination:** Use is commonly made of procrastination to describe processes of (deliberate) delay in any negotiation. No use is seemingly made of *concrastination* as complement to delaying tactics.
- **Problem vs Conblem**: Clearly immense significance is associated with understanding of a problem. No use is made of conblem, although presumably it would be a concern in a problem-free society, as achievement of sustainability might be understood. The reverse is the case with respect to concern, as a form of nascent problem, which does not have procern as a complement.

- **Prohibition vs Conhibition**: As a common strategy in response to socially unacceptable behaviours, prohibition has considerable credibility. With respect to alcohol, it has been suggested that conhibition could be understood as the consumption of alcohol (and presumably other substances), and the opposition to those opposing that. Consequently it has been suggested that the period directly following prohibition could be considered the conhibition era.

- **Profile vs Confile**: Considerable importance is attached to profile, whether with respect to those soliciting employment, in search of employees, or in targeting potential consumers. It may be vital to those seeking election to public office or requiring media appreciation. In addition to its importance to marketing, the term has acquired further importance through the profiling by security services. No complementary function is associated with confile or confiling. Again this suggests a collective appreciation rather than one built up by a particular agency for a particular purpose.

- **Other possibilities for consideration**:
  - Prostration vs Constration
  - Provision vs Convision
  - Pronunciation vs Communication
  - Proprioception vs Conprioception
  - Prostruction
  - Conception vs Proception

**Appropriate implications of "pro" variant?**

Here the issue is the degree of importance conventionally attached to the functions associated with the "con" prefix, compared to the obscurity or non-existence of any function associated with the variant having the "pro" prefix

- **Conference vs Proference**: Extensively use is obviously made of conference and the associated understanding of confer -- all with the implication of mutual consultation and the implication of bringing issues and stakeholders together. Clearly some significant use is made of profer, whether in the case of a solution or condolences. No use is seemingly made of proference although it could imply a collective presentation of condolences or some form of respect to an embodied singularity.

- **Congratulation vs Progratulation**: There is widespread recognition of the process of congratulation, but none of progratulation.

- **Condemn vs Prodemn**: Clearly the process of condemnation is a major feature of social processes. There is no sense of what profesn might then signify. This recalls the contrast made above between the importance of problem in the absence of any meaning to conblem.

- **Construct vs Prostruct**: Extensive use is made of construct, construction, and constructor, but seemingly little meaning is associated with prostruct or prostruction. Construct clearly implies some kind of assembly of diverse parts to form a larger whole. Prostruct features in some trademarks.

- **Confiscate vs Profiscate**: Considerable importance is attached to the process of confiscation by authority, but seemingly none to any process of profiscation.

- **Convention vs Prevention**: Use of convention is fundamental to the norms and organization of society, Use of prevention would seem to be limited to trademarks playing on the relation with prevention.

- **Conciliation vs Prociliation**: Considerable significance is associated with the process of conciliation, notably in the reconciliation of parties in conflict. No significance is associated with prociliation -- perhaps to be recognized as an otherwise named feature of conflict.

- **Conception vs Proception**: Whether in biology or intellectual activity, conception is clearly a process of fundamental significance. As the outcome of intellectual activity, concept is especially significant. A claim has been made for the significance of proception as the process of the development of a person's experience by the interaction of behaviour and the environment. It has also been suggested as the sexual behaviour leading to conception. Such understandings are clearly related to widespread use of contraceptive, although the corresponding use is limited to proceptive. Obviously there is no prodom to match the use of condom.

- **Consult vs Prosult**: Obvious use is made of consult, consultation and consultancy, but the use of prosult would seem to be restricted to a play on consultation in trademarks.

- **Conform vs Proform**: The process of conforming and ensuring conformity to a prescribed pattern does not seem to be matched by concern with a corresponding process of proforming -- except in the common use of pro forma.
• **Content vs Protent:** Considerable significance is attached to content, notably as framed or held by a container. Related significance is associated with contention. No use is seemingly made of protent, protention, or protainer.

• **Context vs Protext:** As with content, particular significance is associated with the recognition of context -- but none with protext, except as a trademark.

• **Other possibilities for consideration:**
  - Contemplation vs Protemplation
  - Contemporary vs Protemporary
  - Concentration vs Procentration
  - Conclusion vs Proclusion
  - Concrete vs Procrete
  - Convenience vs Provenience
  - Condition vs Prodition
  - Contrition vs Protrition
  - Confraternity vs Profraternity
  - Conflation vs Proflation
  - Control vs Protral controller vs protroller
  - Connection vs Pronection
  - Conquest vs Proquest
  - Connoisseur vs Pronoisseur
  - Confidence vs Profidence
  - Conversation vs Proversation
  - Conversion vs Proversion
  - Condominium vs Prodominium
  - Controversy vs Protroversy
  - Conservation vs Proservation
  - Conjoin vs Projoin -- Conjugal vs Projual
  - Consortium vs Prosortium
  - Conscience vs Proscience
  - Consciousness vs Prosciousness
  - Congruence vs Progruence

**Unidimensional contrast vs Higher dimensional confluence: Kon vs Con?**

The presentation above emphasizes the confusing mix of extremes conventionally associated with use of the prefixes "pro" and "con". This is clearly a binary framework along a single dimension. Some of the commentary suggests that the opposition is not "mechanical" and may imply various degrees of subtlety which merit attention. In a multipolar global society, in which there are "pros" and "cons" to every strategic proposal, the need for such subtlety is obvious. As indicated, it may be vital to recognition of the elusive nature of the condition of sustainability.

**Poetry:** The unidimensional binary framework could be most readily challenged by juxtaposition of the terms in a poetic context to elicit suggestively other dimensions respectful of the complexity of psychosocial systems. The point has been succinctly made by the biologist/anthropologist Gregory Bateson, in explaining why "we are our own metaphor", in pointing out the effects of conscious purpose on human adaptation:

> One reason why poetry is important for finding out about the world is because in poetry a set of relationships get mapped onto a level of diversity in us that we don't ordinarily have access to. We bring it out in poetry. We can give to each other in poetry the access to a set of relationships in the other person and in the world that we are not usually conscious of in ourselves. So we need poetry as knowledge about the world and about ourselves, because of this mapping from complexity to complexity. (Cited by Mary Catherine Bateson, *Our Own Metaphor: a personal account of a conference on the effects of conscious purpose on human adaptation*, 1972. pp. 288-9)

One provocative approach to any such reframing is through the appreciation that all the terms prefixed by "Con" are pronounced in English as though they were spelt with "Kon" (as is the practice for the equivalents of many of them in German).

**Strategic thinking confined to a "cognitive cage"?** The degree of confusion apparent in the above review calls for clarification. Especially problematic is the unidimensionality evident in the various binary articulations of "pro" vs "con". Arguably there is a case for recognition of 3 "orthogonal" dimensions to reduce the confusion of the pro-con relationship and to clarify the cage as a fundamentally dynamic form. Succinctly, the dimensions might distinguish:

- positive vs negative
- pro-change vs anti-change
- exclusive (professional) vs inclusive (consensual)

Each of these implies a particular contrast between "pro" and "con", as variously understood. These can be fruitfully distinguished and presented in the following images. Especially intriguing is the manner in which the binary dynamics along any singular dimension...
lead to reframing the other extreme as "negative" or problematic -- whilst appreciating the perceiving extreme to be variously conducive to the "positive". This calls into question any simple understanding of such a dimension -- with a positive reframing being given to the supposedly negative (by those associated with that extreme) and a negative framing to what might readily framed as positive (from the opposing perspective). The polar extremes across the octahedron in the images therefore merit consideration in this light -- with its centre being especially elusive to definition.

Octahedral configuration of 3 mutually orthogonal pro-con dimensions
(characteristic extremes across the centre are coloured either white or black)

The question is whether the above configuration defines a dynamic "cognitive cage" which effectively frames and constrains much discourse relating to governance. Arguably discourse shifts backwards and forwards along any of the 3 dimensions across that framework -- understood as a cognitive "cavity" in the above sense. Sustainability can then be understood as the elusive condition framed as the centre of that cavity understood dynamically.

As noted above, these distinctive modalities are consistent with the variously articulated arguments of Edward de Bono (Six Frames For Thinking About Information, 2008). The mutually orthogonal configuration of the three dimensions enables discussion about the nature of the "cognitive cage" to be taken further -- with the implication that it might be transcended. Curiously the cage, and its dynamics, recall the Kekulé benzene molecule which is so fundamental to organic life. Especially suggestive is the recognition of the benzene molecule as a resonance hybrid which derives its improbable stability from its inherent dynamic. Is there a case for recognizing that the subtle complexities of viable discourse and psychosocial organization might be similarly structured, as may be variously argued (Configuration of alternatives as a resonance hybrid, 2008; Morphic resonance hybrid of complementary metaphors, 2011; Psychosocial coherence as a resonance hybrid?, 2014)?

Neuroscience: The question is whether such factors play any part in the higher dimensional connotations of Pro and Kon in which there is greater congruence with the transcendence of the more constrained binary significance -- seemingly overly simplistic in a complex society. This may offer new insight into the nature of "unity" and the challenge to its comprehension. Whether with respect to the relatively limited knowledge of the brain, of cognitive processes, or of the capacity for fruitful collective governance of a global society, unusual possibilities clearly remain to be explored.

From a purely scientific perspective, recent research has indicated the remarkable possibility of cognitive processes taking up even up to 11-dimensional form in the light of emergent neuronal connectivity in the human brain. As summarized:

Using mathematics in a novel way in neuroscience, the Blue Brain Project shows that the brain operates on many dimensions, not just the three dimensions that we are accustomed to. For most people, it is a stretch of the imagination to understand the world in four dimensions but a new study has discovered structures in the brain with up to eleven dimensions - ground-breaking work that is beginning to reveal the brain's deepest architectural secrets..... these structures arise when a group of neurons forms a clique: each neuron connects to every other neuron in the group in a very specific way that generates a precise geometric object. The more neurons there are in a clique, the higher the dimension of the geometric object. ...

The appearance of high-dimensional cavities when the brain is processing information means that the neurons in the network react to stimuli in an extremely organized manner. It is as if the brain reacts to a stimulus by building then razing a tower of multi-dimensional blocks, starting with rods (1D), then planks (2D), then cubes (3D), and then more complex geometries with 4D, 5D, etc. The progression of activity through the brain resembles a multi-dimensional sandcastle that materializes out of the sand and then disintegrates. (Blue Brain Team Discovers a Multi-Dimensional Universe in Brain Networks Frontiers Communications in Neuroscience 12 June 2017)

In their published paper the researchers suggest that these cavities open the way to new understanding between structure and function (Michael W. Reimann, et al, Cliques of Neurons Bound into Cavities Provide a Missing Link between Structure and Function, Frontiers in Computational Neuroscience, 12 June 2017).

Reframing the cognitive cage: As suggested by the insights from neuroscience, the elusive cognitive "cavity" framed by the dynamics of the cage lends itself to further exploration through the geometry and the distinctive memetic insights this can carry. Whilst the argument from neuroscience indicates a bridge between structure and function, the octahedral framework of the cage-like depiction above offers a means of associating it with an even more cage-like frame, namely the cube. The cube is the geometrical dual of the octahedron. However it is the transformative interplay between cube and octahedron which is especially intriguing in clarifying the
A particular advantage of this *BaGua* encoding is the manner in which it has been embodied into poetic form to enable wider comprehension of its subtle complexity. Within that cultural context a further advantage is the sense in which the 3 dimensions are understood in terms of 6 "directions" -- appropriate to the alienation each direction experiences with respect to its opposite.

The geometrical argument is developed separately (to follow). The depiction of a triadic pattern may well prove to be usefully associated with the arguments of various authors (*Francesco Belfiore* (*The Triadic Structure of the Mind: outlines of a philosophical system*, 2016; *Paris Arnopoulos*, *Triadic Paradigm: dialectics-politics-cybernetics -- the sociophysics of complex systems*, *Cybernetica*, 36, 1993, 4). It is widely recognized that Hegel's arguments are highly dependent on triadic patterns.

The concern here is not with triadic patterning alone, but rather with how the triads are configured together and to what framework of a higher order that may give rise, as previously discussed to a more limited degree (*Triangulation of Incommensurable Concepts for Global Configuration*, 2011). Tentatively, for purposes of discussion, the octahedral images above then suggest 8 triadic discourse "modalities" as follows -- with each clustering proximate extremes between the orthogonal dimensions. The apparent viability of any cluster as a "superficial" discourse modality derives from its exclusion of any opposite extreme (across the octahedron).

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<th>Modality</th>
<th>Progress / &quot;For&quot; change</th>
<th>Professional / Exclusive / Bounded</th>
<th><em>Negative</em> / &quot;Con&quot; / Critical / Disagree / Questioning</th>
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<td>&quot;Positive&quot; / &quot;Pro&quot; / Supportive / &quot;Like&quot; / Agree</td>
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<tr>
<td>7</td>
<td></td>
<td>Consensual / Inclusive / Open / Many / Diversity</td>
<td>&quot;Positive&quot; / &quot;Pro&quot; / Supportive / &quot;Like&quot; / Agree</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Consensual / Inclusive / Open / Many / Diversity</td>
<td>&quot;Negative&quot; / &quot;Con&quot; / Critical / Disagree / Questioning</td>
</tr>
</tbody>
</table>

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