



laetus in praesens

Alternative view of segmented documents via Kairos

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Being Spoken to Meaningfully by Constructs Reframing cognitive implication in nature and natural disasters

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References

Introduction

Emphasis is increasingly given to the problematic "disconnect" from "nature" and to how this might be recognized and remedied:

- Thomas Beery, et al: *Disconnection from Nature: expanding our understanding of human-nature relations* (*British Ecological Society*, 22 February 2023)
- Jack Gelsthorpe: *Disconnect from Nature and its Effect on Health and Well-being: a public engagement literature review* (*Natural History Museum*, April 2017)
- Pelin Kesebir: *How Modern Life Became Disconnected from Nature* (*Greater Good Magazine*, 20 September 2017)
- Kristophe Green: *What Happens When We Reconnect With Nature* (*Greater Good Magazine*, 1 March 2017)
- Judith Chen-Hsuan Cheng, et al: *Connection to Nature* (*Environment and Behavior* 44, 2012, 1)
- Lucy E. Keniger, et al: *What are the Benefits of Interacting with Nature?* (*International Journal of Environmental Research and Public Health*, 10, 2013, 3)
- Richard Louv: *Last Child in the Woods: saving our children from nature deficit disorder* (Algonquin Books, (2005)
- Aiko Huckauf: *Biodiversity conservation and the extinction of experience* (*Mitt. Arbeitsgem. Geobot. Schleswig-Holstein Hamb.* 65. 2008)
- Paul Wesley Schultz: *Inclusion with Nature: the psychology of human-nature relations* (*Psychology of Sustainable Development*, 2002)
- Selin Kesebir: *A Growing Disconnection From Nature Is Evident in Cultural Products* (*Perspectives on Psychological Science*, 12, 2017, 2)
- Masashi Soga, et al: *Extinction of Experience: the loss of human-nature interactions* (*Frontiers in Ecology and the Environment*, 14, 2016, 2)

Whilst helpfully indicative, such references frame the question as to the very "nature" of any connection with nature and how it might be

appropriately renewed -- and how it can be meaningfully discussed. Given the many "natural" disasters, there is also the warning framed by Julian Sheather (*'Reconnect with nature' by all means – but don't forget its lethal power*, *The Guardian*, 3 May 2021).

The disconnect may well be a feature of the frequently articulated need for a paradigm shift in response to other problematic conditions of society. One controversial framing is through a more radical understanding of "intercourse" given its cognitive connotations ("*Human Intercourse*": "*Intercourse with Nature*" and "*Intercourse with the Other*", 2007). This is associated with clues to the nature of "second-order dialogue" and "magical intercourse" (*Second-order Dialogue and Higher Order Discourse for the Future*, 2023; *Magical Discourse Contrasting Human and AI Identity*, 2023). Is there a "magic" to connectivity with nature, as many have argued -- most notably through poetic expression?

As explored in what follows, **a more radical appreciation of such connectivity can be brought into focus through recognition of occasions when the nature of particular experience is framed and justified by the phrase "it speaks to me"**. The phrase is most commonly used with respect to paintings, music and song -- or even to clothing. The question is then how such cultural artefacts "speak" and how this is meaningfully understood as a source of inspiration. An alternative phrase, otherwise meaningful, takes the form of "calling", as in "being called" -- whether in relation to a vocation, or more questionably in the case of a military "call up".

A variant may be used regarding the experience of a significant other -- whether a person, a leader, or an iconic figure, or even a pet. The phrase may also be used with respect to a place, a mountain, a view, a tree, or a river. Much is made of the value attached to the **sense of place**, especially over generations (Yi Fu Tuan, *Topophilia: a study of environmental perception, attitudes and values*, Columbia University Press, 1990; Lucy Lippard, *The Lure of the Local: senses of place in a multicentered society*, New Press, 1998; Tim Cresswell, *Place: a short introduction*, Blackwell Publishing, 2005).

Australia is witness at the time of writing to a highly controversial national referendum regarding modification of its constitution to recognize a "Voice" through which First Nations peoples will be enabled to speak to Parliament. It is of course the case that such institutions, despite the associated controversy, variously enshrine the voice of God as fundamental defining principles by which a civilization is purportedly governed.

It is then appropriate to ask whether there are ways in which sensibility to being "spoken to" can be diluted, distorted or dismissed as a "mere" figure of speech -- especially when marketing skills may be carefully deployed to ensure that an advertisement "speaks to" a target audience, whether in support of a consumer product, an ideology, or a political campaign.

The focus in what follows is on the possibility of a radical cognitive engagement with the environment -- one which challenges the conventional categories and distinctions of "objectivity" and "subjectivity". The challenge notably follows from both the familiar experiential framing of "vibes" and from the understanding emerging from quantum mechanics, as previously discussed in relation to the sense of "magic".

The argument considers how being "spoken to" (or "called by") merits exploration in the light of **speech act theory** -- thereby challenged by the cognitive engagement in a process which has experiential dimensions ranging from the spiritual to the romantic. The array of speech act categories is then of particular relevance to the evocation of engagement with problematic global conditions and natural disasters -- variously understood as "speaking to" individuals and human civilization.

How is who to respond to the assessments of the UN Secretary-General on the occasion of the General Assembly (*Humanity has 'opened gates to hell' by letting climate crisis worsen*, *The Guardian*, 21 September 2023; *UN secretary-general warns of 'Great Fracture' as world leaders begin debate*, *CNN*, 19 September 2023; *UN chief sees a world 'becoming unhinged' and a completely absent leadership: 'we seem incapable of coming together to respond'*, *Fortune*, 20 September 2023)? To whom do such assessments really speak? Who is "touched" by them?

Being spoken to by God

There is an extensive literature on the experience of being spoken to by deity, and the corresponding communication with deity through prayer and ritual. Fundamental importance is attached by many to such processes, whether individually or collectively, especially in times of disaster:

- *20 Unique Ways God Speaks to Us Today* (ConnectUS, 2021)
- *100 Bible Verses about God Speaking To You* (OpenBible)
- Christopher C. H. Cook: *Hearing Voices, Demonic and Divine: Scientific and Theological Perspectives* (Routledge, 2019)
- Michael Bradley: *The 8 Different Ways the Holy Spirit Will Use to Communicate to Us* (Bible Knowledge, 9 June 2023)

Especially noteworthy are the various leaders who have claimed to be particularly empowered or inspired by deity, whether or not this implies being spoken to directly or via intermediaries.

Not to be forgotten is the extent to which the coherence of civilizations is engendered and sustained by reference to the "Word of God" as variously revealed and enshrined in sacred literature. This is despite efforts to separate religion and state in a spirit of secularism (Nicholas Wolterstorff, *Divine Discourse: philosophical reflections on the claim that God speaks*, 1995).

Fundamental to the historically violent relation between religions are any claims made regarding a promise by deity -- a form of being spoken to -- most notably with respect to a **promised land** in the Middle East. The **Abrahamic religions** (including Christianity, Judaism and Islam) claim their God specifically promised land there -- a promise subsequently given to Abraham and several more times to his descendants. This promise had resulted in their recognition of a **Holy Land** -- an area roughly located between the Mediterranean Sea and the Eastern Bank of the Jordan River.

Traditionally this has been considered synonymous both with the biblical **Land of Israel** and with the **region of Palestine**. It has been the

focus of numerous [crusades](#) by Christians to liberate it from Muslim dominance -- a term by which US foreign policy has been controversially framed (Mel Gurtov, *Superpower on Crusade: the Bush Doctrine in US Foreign Policy*, 2006). It now frames understanding of a [homeland for the Jewish people](#) -- with consequences that have become especially evident in relation to other peoples.

Like it or not, as might be expected, the process of "being spoken to" has been called into question from a scientific perspective (Ross Pomeroy, *Why People Think They've Spoken to God, Real Clear Science*, 10 March 2015; Richard Dawkins, *The God Delusion*, 2006). Potentially more intriguing is whether people are able to listen to such a voice, and in what contexts (Don Stewart, *God Has Spoken to Us: Are We Listening?* 2017).

The condition of being spoken to in this way has been reviewed from an anthropological perspective, as noted by Asaf Sharabi:

In many ethnographies, deities reflect social structures, represent power relations, or serve as a resource for individuals. However, believers usually do not doubt the existence of deities and their agency: that is, their ability to act and initiate change. The gap between these points of view narrows in the religious experiences in the Indian Himalayas. There, the local population, who communicate with local deities via mediums, face an epistemological problem: how to be certain that they are, indeed, talking with their gods. Furthermore, the believers are aware that they play a role in the decisions of the gods. These two aspects of the religious experience are expressed in the gradual transition of the gods from a Pahārī to a pan-Hindu identity, an indication of the way in which the agency of the gods is being challenged and is subject to negotiation by the locals. (*Is it God Speaking? Agency of Deities in the Western Himalaya, Anthropological Forum*, 29, 2019, 4)

Despite the degree to which religion may be fundamental to the processes of governance and the judiciary, given the degree to which the process is intimately entangled with belief and imagination, it could however be considered to be only of secondary relevance to the exploration in what follows. Such an assessment is called into question by the extensive interest in exploring the articulation of the "Word of God" in the light of [speech act theory](#), as noted below. Similarly calling for consideration is the importance attached by some to the process of [channelling](#), whereby it is believed that agents of deity -- "spirits" -- may communicate directly under conditions of trance.

Being spoken to by conscience

As with deity, the role of conscience is also probably to be considered of secondary relevance to the following argument. As clarified by the *Stanford Encyclopedia of Philosophy*:

Through our individual [conscience](#), we become aware of our deeply held moral principles, we are motivated to act upon them, and we assess our character, our behavior and ultimately our self against those principles

As a particular kind of voice it has been particularly framed (G. Lee Southard, *Conscience: The Still Small Voice Of God, Biblical Worldview*, 12 April, 2022; Brent Stewart, *The Still Small Voice of Conscience, This Examined Life*, 8 May 2021; Donald L. Carveth, *The Still Small Voice: psychoanalytic reflections on guilt and conscience*, Routledge, 2013).

Dialogue with one's conscience: There is continuing reflection on the nature of any dialogue with one's conscience, and potential association with the voice of deity:

- Brian Fraga: *Conscience: God's voice guiding us in our hearts (Our Sunday Visitor*, 17 December 2018)
- Arun Agrawal, *Does your conscience talk to you?*;
- Greg Koukl: *Is God Speaking to Me? Is It My Conscience? How Can I Tell? Stand to Reason*, 29 December 2015)
- Mary E. Hunt: *We All Speak of "Conscience" -- but are we talking about the same thing? Religion Dispatches*, 30 July 2014)
- J. David Velleman: *The Voice of Conscience (Self to Self*, Cambridge University Press, 2009)
- *What do you understand by voice of conscience? (ForumIAS Blog*, 7 September 2023)

For Paul Strom:

Conscience retains its Roman inheritance of a spoken intervention. It is a voice. It needs to secure rights and means of speech if it is to make its influence felt. However, conscience speaks as a friend and confidant rather than a bully. It is an internal influence. Why are conscience's visitations so frequently couched as occasions of direct address? Perhaps conscience lies between the inside and outside. Conscience is a participant-observer, mediating between the self and the world. Speech is the appropriate vehicle for such mediation. The voice of conscience, however, still struggles to make itself heard. If conscience is to thrive, it needs to learn anew the capacity to express itself through actions. (*The voice of conscience: is it still to be heard? Conscience: A Very Short Introduction*, 2011)

In his discussion of Heidegger's *Being and Time*, Simon Critchley argues:

Finitude gets a grip on the self through the experience of conscience. For me, the discussion of conscience contains the most exciting and challenging pages in *Being and Time*. Let me try and sketch as simply as possible the complex line of Heidegger's argument. Conscience is a call. It is something that calls one away from one's inauthentic immersion in the homely familiarity of everyday life. It is, Heidegger writes, that uncanny experience of something like an external voice in one's head that pulls one out of the hubbub and chatter of life in the world and arrests our ceaseless busyness. (*Conscience, The Guardian*, 20 July 2009)

Dreams of being spoken to: There is extensive reference to the experience of being spoken to in dreams in some manner. Dreams are held to be the mirror of conscience (*The Dream, Mirror of Conscience*, Bloomsbury, 1972) -- even the voice of deity, as proposed by archetypal psychology (Larry Gates, *Conscience as the Voice of God: A Jungian View*, *Journal of Religion and Health*, 31, 1992, 4; Patrick McNamara, et al, *Dreams as a source of supernatural agent concepts*, *Frontiers of Psychology*, 6, 2015).

"Conscience dreams" may take the form of dreaming one's conscience is acting as a censor for any deception in which one has engaged. This is held to be an indication that one will be tempted to commit wrong and should be constantly on guard. On the other hand, dreaming of a quiet conscience, is held to be an indication that one will stand in high repute (*Conscience Dreams*, *Psychologist World*; *Conscience Dream Meanings*, *Dream Interpret*)

There is a widespread assumption that a guilty conscience engenders problematic dreams (Cynthia Richmond, *Guilty Conscience Causing Nightmare*, *Los Angeles Times*, 11 January 2000).

Decision-makers without conscience: Much is made of those in power being uninhibited by conscience, namely lacking conscience -- or potentially to be understood as not being "spoken to" by their conscience (Matt Malone, *Law without conscience ignores our humanity, America: the Jesuit review*. 30 November 2008; Odimegwu Onwumere, *Politicians Without Conscience*, *Modern Ghana*, 25 April 2011; Bhabani Shankar Nayak, *Regimes Without Reason and Conscience in World*, *CounterCurrents*, 1 August 2020).

As noted by Jeremy Sherman: *Lacking consciences, sociopaths, psychopaths, narcissists, and gaslighters – here loosely generalized as evil geniuses have the edge over anyone tugged and limited by a conscience* (*Conscience-Free, We Can Rationalize Anything and Seem Genius*, *Psychology Today*, 23 March 2020)

The arguments with respect to medicine, as explored by Tom Koch, can be recognized as applying to those upheld as experts in many domains:

Over the last decade a group of moral philosophers concerned with medicine have argued, some stridently, that conscience has no place in the conscientious practice of medicine. And yet, it is hard to separate conscience from conscientiousness. This paper reviews and critiques the argument against conscience and the assumptions underlying it. It argues that it is often difficult to separate conscience, a moral perspective on appropriate practice, from the clinical knowledge and experience that practitioners possess and patients do not. The result is not paternalistic although it challenges the assumption that the patient in distress often knows best. The focus in this paper shifts from simple autonomy as a reflexive rule to the social and broadly clinical context in which decisions about procedures like abortion and medically assisted death are made. (*The Practitioner's Paradox: Conscientious but ...Without Conscience*, *Medical Research Archives*, 11, 2023, 1)

Considerable focus is given to the lack of conscience in corporate decision-making (Jo Dyer, *Profiteering without Conscience*, *The Shot*, 10 June 2023; C. R. Boddy, et al, *Business Without Conscience*, *Business with a Conscience*, 2021). For the latter:

... for a person to be "without conscience," they would be to exist in a purely "economically rational" state, devoid of empathy, emotion and purely focused on self-interest. Such a person would be "homo economicus", the perfectly logical decision-maker used by neo-classical economists in their modeling of human economic behavior. This is someone whose only aim in life is to maximize profit, gain, and self-satisfaction. An organization with similar aims would operate on the same terms and would similarly be without a conscience.

Remedial attitudes are variously envisaged (William Sisson, *The Conscience of a CEO: The New 'Moral Imperative'*, *Forbes*, 15 December 2021; Hugo Shaw, *Making a profit with a conscience*, *BBC*, 5 March 2008; Gareth Chadwick, *Profit with a conscience*, *Independent*, 21 March 2005).

M. Scott. Peck considers those he calls evil to be attempting to escape and hide from their own conscience (through self-deception), and views this as being quite distinct from the apparent absence of conscience evident in sociopathy (*People of the Lie: the hope for healing human evil*, Century Hutchinson, 1983).

Sense of destiny: Individuals may claim to experience a sense of destiny which is experienced as "speaking to" them (or "calling them") in some way. In the case of leaders, especially of groups and nations, this may be cultivated collectively, as with the doctrine of **Manifest Destiny** in the USA, the **Christian mission** (and that of other religions), or the sense of being a "**chosen people**". The experience may be conflated with a sense of divine revelation (Jake Kail, *When God Speaks to You About Your Destiny*, 8 May 2016).

Conscientific research? These various points suggest the need for "conscientific research" to complement "scientific research". The psychology of sustainable development points to the need for some form of "applied conscience" based on suitable "conscientific research and development", as argued separately (*Towards Conscientific Research and Development*, 2002). As understood there, this might encompass the following 9 complementary dimensions or "flavours". Each is presented with an indication of the strategic failure to which its neglect has given rise.

Responsibility and care dimension
Integrative dimension
Contrasting epistemologies dimension
Science of consciousness dimension
Embodied-mind dimension

Contemplative science dimension
Concupiscence dimension
Conversation dimension
Conscience-less science dimension

Being spoken to by the insubstantial

Deities can be assumed to be necessarily insubstantial, if indeed they are held to exist as is variously denied. The existence of conscience could be similarly questioned. Some forms of the insubstantial can however be considered to be more "tangible" -- as forms by which one may be "spoken to". In particular these include values and principles -- potentially exerting an appeal as variously articulated.

It is therefore to be expected that ideals such as human rights, peace, justice, equality, and the like, may "speak to" a person or to a collective -- most obviously as a source of inspiration. References which might illustrate this make a different point in that it is through the articulation of the principle in text, poetry or song that this is most readily recognized -- namely through more substantial forms with which one "resonates".

As argued here however, any **commentary on the expression "being spoken to" is potentially completely misleading**. Any reference to "being spoken to" may well be perceived as verging on illusion.

For example, [auditory pareidolia](#) is a phenomenon whereby individuals perceive familiar patterns or meaningful sounds, such as speech or voices, in random or ambiguous auditory stimuli, such as background noise or natural sounds. It's a type of auditory illusion where the brain interprets unrelated sounds as if they were voices or words. This can lead to the perception of voices or conversations in the absence of actual human speech. It's important to note that auditory pareidolia is not a pathological condition but rather a normal cognitive phenomenon that occurs when the brain tries to make sense of sensory input.

Given the contribution of AI to this argument (below), a comment was sought from ChatGPT on making the distinction from auditory pareidolia of the focus in what follows.

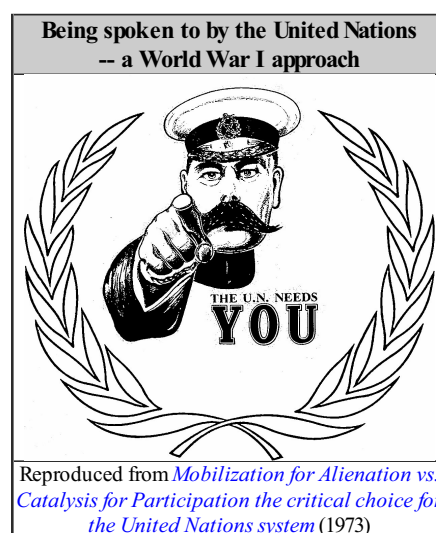
Here are a few alternative titles:

- "Engaging with Meaningful Constructs: Beyond Auditory Pareidolia"
- "Qualia Conversations: The Depths of Meaningful Interaction"
- "Communicating with Constructs: Transcending Auditory Illusions"
- "Constructing Conversations: The Realm of Qualia Communication"
- "Beyond Pareidolia: Finding Meaning in the World of Constructs and Qualia"

These titles emphasize the idea of meaningful communication with abstract concepts (constructs or qualia) while distinguishing the article from the concept of auditory pareidolia.

With any emphasis on "constructs", this would allow for consideration of the manner in which a person might be "spoken to" by a collective, by a gang, by a clan, by a country, by civilization, or by the spirit of the times (*Zeitgeist*). Again, use of **"being spoken to" is however potentially misleading in that it readily emphasizes the voice of an "external" authority by contrast with the sense of "speaks to me" -- experienced "internally" as meaningfully appealing**.

The famous conscription image of World War I offers one questionable illustration which might be emulated by a variant from the United Nations with respect to the global condition, as reproduced below (following its adaptation to the Second United Nations Development Decade).



Existence of the insubstantial? It is then appropriate to ask, within their own terms, whether and how disciplines and their conceptual constructs can be held to "exist". A major contribution to this question is the argument in the light of quantum insights, as extensively developed and clarified with respect to international relations by [Alexander Wendt](#) (*Quantum Mind and Social Science: unifying physical and social ontology*, 2015; *The mind-body problem and social science: motivating a quantum social theory*, *Journal for the Theory of Social Behaviour*, 48, 2018, 2).

Wendt notes that constructs like nation states (as with "USA" or "Russia") are effectively legal fictions -- especially from any hypothetical extraterrestrial perspective. The argument can be readily extended to science and religion. As a particular mode of inquiry, to what extent are disciplines and their categories a figment of the collective imagination -- a collective **construct**? (Peter L. Berger and Thomas Luckmann, *The Social Construction of Reality: a treatise in the sociology of knowledge*, 1966).

Given the appeals made to it, comparable to those to deity, especially intriguing is the question of whether and how the "international community" exists, and the manner in which it speaks -- and to whom (*International Community as God or Sorcerer's Apprentice?* 2015; *Are the UN and the International Community both Brain Dead?* 2019). Is it "We the Peoples" who experience that they are "spoken to" by the United Nations?

Being spoken to by abstract symbols, art, and artefacts

Sacred geometry: It is difficult to challenge the extent to which particular forms of [sacred geometry](#) are valued as "speaking to" individuals or those associated within a belief system. This is readily claimed to be evident in the design and construction of [religious structures](#) such as [churches](#), [temples](#), [mosques](#), religious [monuments](#), [altars](#), and [tabernacles](#). The process may also be associated with sacred spaces such as [temenoi](#), [sacred groves](#), [village greens](#), [pagodas](#) and [holy wells](#).

Whether perceived as "sacred" or not, mathematicians readily recognize a form of being "spoken to" by particular equations and problems -- most simply expressed in terms of their beauty, as in the case of the [Euler's identity](#), often cited as an example of deep [mathematical beauty](#). Modular forms are described as one of the most beautiful and mysterious objects in mathematics (Jordana Cepelewicz, *Behold Modular Forms, the 'Fifth Fundamental Operation' of Math*, *Quanta Magazine*, 21 September 2023). How is the experience of [interestingness](#) to be understood from that perspective?

Sacred relics: The experience of a [relic deemed sacred](#) is an important aspect of some forms of Buddhism, Christianity, Islam, shamanism, and many other religions. Considerable controversy is associated with perceived misappropriation of relics valued in affirmation of identity of a culture.

Symbols, insignia and flags: Notably in the form of insignia and flags, these may be upheld as "speaking to" individuals and collectives -- to the point of being intimately associated with their sense of identity, as discussed separately (*Symbolic Insignia Indicative of Global Health*, 2021). Their importance in "speaking to" others is especially apparent in the controversies regarding the wearing of [religious symbols](#) and [religious clothing](#), and notably the display of the [swastika](#) (*Swastika as Dynamic Pattern Underlying Psychosocial Power Processes*, 2012).

As with flags and insignia, music is be recognized as having a particular capacity to speak to peoples, whether in the form of anthems, hymns, military music, or advertising jingles. With the European Union employing the *Ode to Joy* as the Anthem of Europe, it is somewhat incredible that little corresponding effort is made with respect to global governance and its challenges (*A Singable Earth Charter, EU Constitution or Global Ethic?* 2006).

Advertising symbols: Clearly considerable effort is made to ensure that marketing messages "speak to" potential consumers -- to the point of offering them inspiration. Message marketing obviously extends beyond products and services to policies and opinions promoted by politicians and religions. It includes bumper stickers, by whomever they are made. It is intriguing the increasing extent to which people voluntarily purchase products bearing brand names by which they are "spoken to" (Rob Meyerson, *Every type of brand name in one simple chart, How Brands are Built*, 16 December 2019).

Whatever the ultimate intent, individuals may well be "called by" the promotional focus, although the degree to which an initiative it "speaks to" them is necessarily confused with assumptions regarding how they may be persuasively "spoken to". The distinction is especially poignant in the case of the efforts by many non-profit initiatives to present the worthiness of their endeavours -- in the quest of vital funding support to ensure their survival. Being meaningfully spoken to by such appeals is then quite another matter. The collective implications are evident in the reduction in funding of disciplines (Rachael Scarborough King and Seth Rudy, *The Ends of Knowledge: outcomes and endpoints across the arts and sciences*, Bloomsbury, 2023).

Art: The sense of being "spoken to" by a work of art is widely accepted in appreciation of art. Under the heading *Grief Speaks*, a depiction is offered by the statue of Albert Gyorgy (*Melancholy*), a sculpture portraying the void that grief leaves us with. For one commentator: *This statue speaks to me, always has since I first saw it. I am now profoundly focused on the hanging head, looking back through the emptiness left behind.*

A particular example is offered by the famed Picasso painting of (*Guernica*, 1937), evoking speculation on the possibility of renewing the manner in which it has spoken to people since its creation (*Reimagining Guernica to Engage the Antitheses of a Cancel Culture*, 2022). Artistic creativity might readily be understood in terms of being "called to" produce an envisaged work.

The process of being "spoken to" by art is especially intriguing in the case of Richard Dawkins as an arch-materialist and author of *The God Delusion* -- given his later promotion of the *Poetry of Reality* (2023). As an artform in its own right, the appeal of humour may offer a much-valued sense of being "spoken to", especially evident with respect to integrative processes in politics and religion (*Recognized Role of Humour*., 2005; *Humour and Play-Fullness*, 2005).

Memorials: The construction of memorials is obviously such as to ensure that they "speak to" individuals and future generations. They include:

- **War memorials:** More generally these may be understood both the heroic dead and their victims (*Towards Inclusive Multi-Massacre Memorials to Victims of Conflict*. 2022).
- **Animal memorials:** Intriguingly various statues of dogs are specifically recognized as effectively "speaking to" passers by, having been [faithful to their owners after their death](#), including
 - **Greyfriars Bobby:** a Skye Terrier who was known in the 19th century for spending 14 years guarding the grave of his owner until his death. For one commentator: *This statue speaks to me a lot because I love animals so much and the fact that they would give the dog his own monument for watching over his dead owner is so heart warming.*

- **Hachikō**: November 10, 1923 – March 8, 1935) was a Japanese Akita dog remembered for his remarkable loyalty to his owner, Hidesaburō Ueno, for whom he continued to wait for over nine years following Ueno's death.
- **Kostya**: is a monument to a faithful dog in the Russian city of **Tolyatti**. In the mid 1990s, citizens of Tolyatti noticed a stray, unnamed dog surveying a bypass road. Passersby would offer to the dog shelter to which the dog would always refuse. Kostya would always return to the street, looking for his master regardless of the weather or season.

Artefacts: There is clearly an important sense in which artefacts "speak to" people, especially as facilitated by marketing and peer group pressure. The artefacts obviously include dress, jewelry, furniture, vehicles, and accommodation.

Being spoken to by iconic celebrities

Considerable importance is associated by many with the process of being spoken to by celebrities -- possibly recognized as especially charismatic. This is exemplified by those presentations of sacred scriptures held to be a consequence of revelation. People (and collectives) may then experience particular books as speaking to them, whether it be the *Bible*, the *Quran*, or the *Bhagavad Gita*, for example (Marilyn Adamson, *How God Speaks to Us Through the Bible, Starting with God*; Priscilla Shirer, *He Speaks to Me: Bible Study Book, Lifeway*; Grietje Commelin, *Does God Only Speak To Us Through The Bible? Biblword*, 3 March 2022).

A contrasting manner in which many experience being spoken to is through the pattern framed by **Friedrich Nietzsche** (*Thus Spoke Zarathustra: a book for all and none*, 1883-1885). Examples include:

- *Thus Spake Sri Shridi Sai Baba*
- *Thus Spake Prophet Muhammad*
- *Thus Spake Sri Sankara*
- *Thus Spake Ramana*
- *Thus Spake Sivananda*
- *Thus Spake Sri Ramakrishna*
- *Thus Spake the Dervish*

With Nietzsche now framed as a primary exemplar of nihilism, it could be appropriate to conclude that nothing "speaks to him". The role of "nothing" invites particular commentary (*Orbiting Round Nothingness across Communication Space*, 2012; *Confusion in Exchanging "Something" for "Nothing"*, 2015; *Configuring the Varieties of Experiential Nothingness*, 2012; Lawrence Rudnick, *The Importance of Nothing, Nature*, 450, 2007, 795)

It is of course the case that compilations of writings by particular authors could be reframed by the pattern "thus spake". Striking examples are suggested by the authors listed as "prolific" by *Wikipedia*.

Whether it be works deemed sacred, or of those deemed especially wise, of interest is the manner in which quotations from them are valued as speaking to people. Many selections of quotations are offered for this purpose. Of related interest are the various works of prophecy and divination, whether it be *Revelations* or those of Nostradamus.

Speech acts in being spoken to by artificial intelligence (AI)

A peculiar characteristic of the times is anticipation of the manner in which individuals, collectives and humanity in general will be "spoken to" by AI -- to an ever increasing degree, however this may be experienced or understood. At the time of writing comment can be sought from applications such as ChatGPT as to the set of modalities through which being spoken to may occur -- potentially those beyond the question and answer offered by the search engine experience. Prompted by the query as to the set of which question and answer (and others) are members, ChatGPT responded:

The set you are referring to, which contains question, answer, and injunction as its members, is known as "speech acts" or "illocutionary acts". Speech acts are a concept in the philosophy of language and linguistics that describe the different types of communicative actions people perform when they speak or write. In addition to question, answer, and injunction, other members of this set (speech acts) include:

1. Assertion: Making a statement or providing information.
2. Declaration: Explicitly expressing something to be the case, often with the authority to bring about a change in reality (e.g., pronouncing someone married during a wedding ceremony).
3. Request: Asking someone to do something or requesting information.
4. Command: Giving a direct order or directive.
5. Promise: Committing to doing something in the future.
6. Offer: Presenting something for someone's consideration or acceptance.
7. Expressive speech acts: Expressing emotions, feelings, or attitudes, such as apologizing, congratulating, or complimenting.

These speech acts are part of the broader field of pragmatics, which studies how language is used in context to convey meaning and achieve various communicative goals.

Whilst both the query and the response could be considered irrelevant to the immediate challenges of governance and strategic implementation, the distinctions made clearly feature in many of the processes of governance and politics (as noted below). This suggests that governance communication is framed, if not constrained, by such modalities. As to the modalities open to AI itself, at this point the "training" of language models like ChatGPT would appear to limit its use of some of the modalities, with the future use of others already seen as a threat requiring regulation.

There are extensive descriptions of **speech acts** (*Stanford Encyclopedia of Philosophy*), especially with respect to speech-act theory as developed by **J. L. Austin** (*How to Do Things with Words*, Clarendon Press, 1962). and **J. R. Searle** (*Speech Acts: an essay in the philosophy of language*, Cambridge University Press, 1969).

Through what modalities can an individual (or collective) experience "being spoken to" -- in the existential sense which is the emphasis of this argument? The descriptions, and the articulation of them by ChatGPT, then invite the question as to the degree to which other modalities might be included from some perspectives, and why they have been excluded, or "crammed" into categories as synonyms.

It can then also be asked to what extent are any of these seven potential synonyms of each other and of the three in the prompt. ChatGPT responded:

While the seven speech acts I mentioned in my previous response share some similarities, they are not synonyms of each other. Each speech act has its distinct characteristics and serves different communicative functions. Let's briefly explore the relationships between them:

1. Question: A question is a speech act used to seek information or elicit a response from someone.
2. Answer: An answer is a response to a question, providing information or addressing an inquiry. An injunction is a speech act used to give a command, directive, or order.
3. Assertion: An assertion is a speech act used to make a statement or convey information. It is typically used to express beliefs or facts.
4. Declaration: A declaration is a speech act that explicitly declares or pronounces something to be the case. It often carries a special illocutionary force and can bring about changes in the external world.
5. Request: A request is a speech act used to ask someone to do something or to provide information. It is typically a polite way of seeking cooperation.
6. Command: A command is a speech act that gives a direct order or directive, often without seeking the addressee's consent.
7. Promise: A promise is a speech act in which the speaker commits to doing something in the future. It implies a commitment or assurance.
8. Offer: An offer is a speech act where the speaker presents something for someone's consideration or acceptance, often implying a willingness to provide or perform the offered action.
9. Expressive Speech Acts: Expressive speech acts, like apologizing, congratulating, or complimenting, serve to express emotions, feelings, or attitudes, rather than seeking information or giving directives.

While there can be overlaps and interactions between these speech acts in actual communication, they each have their own distinctive purposes and often involve different linguistic structures and conventions. Therefore, they are not considered synonyms, but rather different categories of illocutionary acts within the broader framework of speech act theory.

Negation? Can this set be described as "well-formed", namely with minimal confusion between its members -- and independent of other forms of speech. Why does it exclude negation, and how is affirmation to be related to the pattern? To these points ChatGPT responded.

The set of speech acts mentioned earlier can be considered well-formed to a certain extent, as each member serves a distinct communicative purpose, and there is generally minimal confusion between them. However, clarity in communication depends not only on the type of speech act being used but also on how it is expressed, the context, and the speaker's intention. Here's a breakdown:

- **Exclusivity of Members:** The members of this set, such as question, answer, assertion, declaration, request, command, promise, and offer, are relatively clear and distinct in their purposes and linguistic structures. When used appropriately, they should not cause significant confusion.
- **Exclusion of Negation:** Negation, or the act of denying or negating a statement, is typically not included in this set because it does not fall into the category of illocutionary acts that initiate a specific communicative action or function. Negation is more about altering the truth value or content of a proposition, rather than performing a distinct speech act like asking a question, giving a command, or making a promise.
- **Affirmation:** Affirmation, in the context of speech acts, can be related to the pattern by being considered an assertion. When someone makes an affirmative statement, they are essentially asserting that a particular proposition is true or valid. For example, if someone says, "The meeting is at 3 PM", they are making an affirmative assertion. In summary, the set of speech acts mentioned is well-formed in the sense that its members have distinct purposes and can be used relatively unambiguously in communication. However, the effectiveness of communication also depends on the appropriate use of these speech acts in context and the avoidance of confusion through clear expression.

Negation, while an important linguistic element, is not considered a speech act in the same way as those mentioned, as it does not initiate a specific type of illocutionary action. Affirmation, when used in the context of making statements, is often subsumed under the category of assertion within this set.

In the light of concerns with "hallucination" by AI, it is appropriate to note in passing a degree of confusion regarding the number of speech acts (5, 6, 7, 8, 9) -- discussed below with respect to the "magical number seven, plus or minus two".

Logical connectives? How does this 8-fold pattern relate to the set of 16 logical connectives (as a framing language) and to what extent does it apply to the languages of other cultures. To which ChatGPT responded:

The 8-fold pattern of speech acts (question, answer, assertion, declaration, request, command, promise, and offer) and logical connectives are related in the sense that both are elements of language that play crucial roles in communication, but they serve different functions:

- **Speech Acts:** Speech acts are a way to analyze how language is used to perform specific communicative actions or functions. They focus on the intentions behind language use, such as seeking information (question), providing information (assertion), giving commands (command), and so on. Speech acts are more about pragmatics and the illocutionary force of utterances.
- **Logical Connectives:** Logical connectives are linguistic elements that connect words or phrases in a sentence to express logical relationships between propositions. They are primarily used in the context of formal logic and semantics. Examples of logical connectives include "and", "or", "not", "if...then", and "if and only if". These connectives are more concerned

with the truth-functional relationships between propositions.

While both speech acts and logical connectives are important aspects of language, they serve different linguistic and communicative purposes. Speech acts deal with the intention and illocutionary force behind utterances, while logical connectives deal with the logical relationships between propositions. Regarding the extent to which the 8-fold pattern applies to the languages of other cultures, it's essential to recognize that the specific speech acts and their linguistic expressions can vary across languages and cultures.

Different cultures may have their own conventions for expressing requests, commands, promises, and other speech acts. Cultural norms, politeness levels, and language structures can influence how speech acts are realized. Cross-cultural and intercultural communication researchers study these variations in speech acts across languages and cultures. While the fundamental concept of speech acts is applicable to most human languages, the specific ways in which they are realized and the cultural nuances associated with them can differ significantly.

In summary, the 8-fold pattern of speech acts and logical connectives are related aspects of language, but they serve different functions. The application of this pattern to languages of other cultures involves recognizing cultural and linguistic variations in how speech acts are performed and understood.

Mapping configurations of speech acts? Just as the logical connectives are mapped as a set onto particular polyhedra for research purposes, is this the case with speech acts -- and does this facilitate recognition of potential degrees of overlap, as might be indicated in a complex Venn diagram:

The mapping of logical connectives onto polyhedra is a concept from mathematical logic and is known as the "Logical Polyhedra" or "Logic Polyhedra" approach. It's a way to represent and study logical connectives geometrically, which can help visualize relationships between them and understand their properties in a spatial context. This approach is particularly useful for understanding the structure of logical systems. In contrast, there isn't a widely recognized geometric representation like logical polyhedra for speech acts in the same way. Speech acts are primarily studied within the field of pragmatics, linguistics, and philosophy of language.

While there are formalized frameworks for analyzing speech acts, such as John Searle's Speech Act Theory, these frameworks typically do not employ geometric representations like polyhedra. However, researchers in pragmatics and linguistics do use various diagrams and models to illustrate relationships between speech acts and their components. Venn diagrams and other graphical representations are sometimes used to show the potential overlap or intersections between different speech acts, especially in the context of speech act theory.

These diagrams can help researchers analyze how different speech acts relate to one another and how they function in communication. The complexity of these relationships can indeed be represented visually, but it is typically done in a more abstract or diagrammatic form, rather than through geometric shapes like polyhedra used in logic. These representations help scholars and linguists analyze the interplay between different speech acts and understand how they function in natural language communication.

Compacting the 8-fold set? Given the potential overlaps, can the 8-fold set be collapsed into a smaller set in which there is less probability of overlap -- and how would the members then be named, and the set:

Yes, it is possible to collapse the 8-fold set of speech acts into a smaller set by grouping them based on similarities in their illocutionary force or communicative function. The resulting set would consist of broader categories that encompass several individual speech acts. Here's one way to collapse the set:

1. Informational Acts: Question and Answer can be grouped together as they both serve the purpose of exchanging information or seeking clarification.
2. Assertive Acts: Assertion and Declaration can be grouped under assertive acts, as both involve making statements or declarations about facts or beliefs.
3. Directive Acts: Request, Command, and Injunction can be grouped as directive acts because they involve giving instructions, making requests, or providing directives.
4. Commitment Acts: Promise and Offer can be considered commitment acts as they both involve making commitments or offers to perform certain actions in the future.

This collapsed set can be named the "Four Basic Speech Act Categories". Each category encompasses speech acts that share similar illocutionary forces or functions. While this reduces the number of categories and minimizes potential overlap, it also abstracts away some of the nuances present in the individual speech acts. Keep in mind that this is one possible way to collapse the set, and other categorizations may also be valid depending on the context and the specific focus of analysis. The choice of how to collapse or categorize speech acts can vary depending on the research goals or the particular framework being used.

Nesting? ChatGPT was then asked to comment on how the "Word of God", as a singularity, might be considered as nested within the 4-fold, as a collapsed version of the 8-fold pattern previously mentioned -- with that in turn potentially nested within the 16-fold pattern of logical connectives:

The idea of viewing the "Word of God" as a singularity and then attempting to nest it within the 4-fold or 8-fold pattern of speech acts and potentially within a 16-fold pattern of logical connectives is an interesting concept that involves bridging religious, linguistic, and philosophical perspectives. However, it's important to note that these are abstract frameworks for understanding different aspects of language, communication, and logic, and applying them to religious or spiritual concepts can be complex and context-dependent. Here's how this concept might be explored:

- The "Word of God" as a Singularity: In religious and theological contexts, the "Word of God" often refers to divine revelation or sacred texts that are considered to be of ultimate authority and truth. It can be viewed as a singularity in the sense that it is a unique form of communication that is believed to originate from a deity or divine source.

- Nesting within the 4-fold or 8-fold Pattern: The "Word of God" can be seen as a collapsed version of the 8-fold pattern of speech acts, as it encompasses various speech acts within sacred texts. For example, it includes assertions (statements of truth or doctrine), directives (commandments or moral guidance), and promises (divine assurances).
- Nesting within the 16-fold Pattern of Logical Connectives: If we want to extend the analogy further, we could consider how the teachings within sacred texts might be related to logical connectives. For instance, we can view moral imperatives as akin to logical connectives that establish rules for behavior (e.g., 'Thou shalt not steal' as an "if...then" construct). It's important to recognize that this analogy involves an abstraction of complex religious concepts into linguistic and logical frameworks.

While it can be a useful way to explore the relationship between divine communication and human language, it's also essential to respect the religious and cultural nuances of these concepts. Not all religious traditions or scholars would necessarily endorse or accept this mapping, as the interpretation of the "Word of God" is a deeply theological matter with varying perspectives across different religions.

In summary, while it's possible to explore the relationship between the "Word of God" and linguistic/philosophical frameworks like speech acts and logical connectives, such explorations should be approached with sensitivity to religious and cultural contexts and are subject to interpretation and debate within those contexts.

Cognitive and strategic implication in speech acts

Cultural comparisons: The literature on speech acts makes it apparent that it is an active area of research in which contrasting theories have been presented. Given the importance of speech acts to the dialogue on which global strategic initiatives are dependent it could be considered that greater clarity on the array of possibilities is urgent -- but is seemingly yet to emerge. Of notable relevance in this respect are the comparative studies of speech acts between cultures:

- Fareed Hameed Al-Hindawi, et al: *The Speech Act Theory in English and Arabic* (*Open Journal of Modern Linguistics*, 4, 2014, 1)
- Liu Yongbing: *Conversational Protocols: A Cross Cultural Perspective* (2020)

The array of speech acts is especially relevant to the manner in which AI may be currently constrained in responding to prompts as a consequence of decisions with regard to the scope of any training. The permissible acts within the array would clearly be of great importance to the highly controversial issues of AI regulation in anticipation of its anticipated further development.

Theological relevance: Curiously of corresponding interest is the seemingly hypothetical question of the array of speech acts associated with the "Word of God". As argued by Anthony C. Thiselton:

Speech act theory has suffered undeserved neglect in biblical interpretation, in systematic theology, and in distinctions of 'religious language' in textbooks on the philosophy of religion. It is therefore timely that at last a full-length study written with meticulous philosophical rigour should appear embodying the thesis that 'contemporary speech-act theory' offers new ways 'of thinking about God speaking'. (*Speech-Act Theory and the Claim that God Speaks: Nicholas Wolterstorff's Divine Discourse*, *Scottish Journal of Theology*, 50, 1997, 1).

Subsequently Brevard S. Childs has argued:

Building on the different kinds of action involved when speaking (locutionary, illocutionary and perlocutionary) Wolterstorff draws two important hermeneutical implications. First, the theory affords a way of understanding the unity of scripture in its entirety as God's book; second, it enables the reader to acknowledge the infallibility of God's Word as divine discourse without ascribing infallibility to the human words of scripture. (*Speech-act theory and biblical interpretation*, *Scottish Journal of Theology*, 58, 2005, 4).

Of further relevance is the exploration of the process of preaching in terms of speech act theory (Sam Chan, *Preaching as the Word of God: answering an old question with Speech-Act Theory*. *The Gospel Coalition*, 2016). Within Christian thought speech act theory has been variously used by Kevin Vanhoozer, Gordon McConville, and Nicholas Wolterstorff to develop a theology of how the Bible serves and functions as the Word of God. (Kevin Vanhoozer, *From Speech Acts to Scripture Acts*, 2001; Bruce Baugus, *Bavinck on Speech Acts and the Power of God's Word*, *Reformation21*, 14 November 2014).

These focus on what the Bible is held to be doing, or rather, what God is considered to be doing through those words. With respect to preaching, Sam Chan argues that: *The preaching ought to have the same locutionary force, illocutionary force, and intended perlocutionary effect ... as that of the Bible passage being expounded* (p. 223). It could also be argued that preaching might be understood as the art of interweaving the speech acts implied by the Word of God.

As a singular representative of deity, the Pope is now actively responding to the environmental crisis through encyclicals such as *Laudato Si' on Care of Our Common Home* (18 June 2015), as discussed separately (*Papal Concern for Climate Change and Refugee Care*, 2015). It is therefore of particular strategic relevance that such pronouncements should be considered in the light of speech act theory, as presented by Toon van Gestel, et al:

This paper provides an analysis of *Gravissimum Educationis*, the Vatican II declaration on Christian Education. The paper focuses on speech acts as text signals for an ideal reader within the declaration's communication framework. To date, speech acts have not been scrutinized in Vatican II constitutions, decrees, or declarations. An analysis of performative utterances in *Gravissimum Educationis* is presented on the basis of J.R. Searle's taxonomy on speech acts. The major finding is that in its speech acts, *Gravissimum Educationis*, as a Vatican II declaration, stands out from previous ecclesiastical documents. As a new

form of Church language, it is innovative and, as such, may fit in well with the panegyric literary genre. (*The Function of Speech Acts in a Vatican II Declaration: Gravissimum Educationis*, *Journal of Empirical Theology*, 33, 2020, 2)

Clarifying the array: Sacred scriptures upheld as reflecting the Word of God then suggest that that "Word" merits consideration as a form of singularity embodying that array of speech acts in an integrated form -- one in which their contrasting modalities may be variously implied rather than being necessarily clearly distinguished.

Of particular interest is the question of how many speech acts can be distinguished, how these might be clustered, and whether this is a valid question. The confusion as to the number suggests the relevance of the much-cited classical study by George Miller (*The Magical Number Seven, Plus or Minus Two: some limits on our capacity for processing information*, *Psychological Review*, 63, 1956, 2). This informed a later consideration of the role of number in the *Representation, Comprehension and Communication of Sets* (*International Classification*, 5, 1978, 3).

A related confusion is evident in the identification of human values, despite their much-acclaimed importance, as explored in the Human Values Project (*Defining values: Value confusion; Method: Classification*). The challenge is similarly evident in the case of figures of speech and tone-of-voice (*Questionable Classification of Figures of Speech -- as fundamental to the need for powerful rhetoric in governance*, 2016; *Varieties of Tone of Voice and Engagement with Global Strategy: alternating between a requisite variety of voices to engender coherence?* 2020). These may each feature in the use of speech acts in endeavouring to articulate them.

Strategic implications: Given the experiential correspondence to "being spoken to", suggested above as "being called", of interest is the variety of ways in which a person might be "called" and the implications this might have for a collective -- as with the challenges of human rights, climate change, and environmental degradation. Whilst a report to the Club of Rome can be recognized as titled in that spirit (*Come On! Capitalism, short-termism, population and the destruction of the planet*, 2018), it is unclear how many feel "called" in response.

Somewhat ironically it then follows that there is a case for recognition of the variety of speech acts which feature -- if only by implication -- in integrative strategic articulations, especially those intended to be of global relevance. The pronouncements of the "international community", as articulated by the United Nations, could be considered from this perspective, as variously suggested by the following:

- Mohammad Awad AlAfnan, et al: *A Speech Act Analysis of the United Nations Secretary-General's Opening Remarks to the General Assembly Emergency Special Session on Ukraine* (*Studies in Media and Communication*, 10, 2022, 2)
- H. Ahmed, et al: *Speech act analysis of President Jalal Talabani's address at the UN general assembly on September 25, 2008* (*Linguistics and Culture Review*, 5, 2021, S1)
- Nouhoum Kone: *Speech Acts in UN Treaties: A Pragmatic Perspective* (*Open Journal of Modern Linguistics*, 10, 2020, 6)
- Nicholas Glover: *Does Security exist outside of the Speech Act?* (*E-International Relations*, 9 October 2011)
- Suhair Safwat: *Speech Acts in Political Speeches* (*Journal of Modern Education Review*, 5, 2015, 7)
- Sky Marsen, et al: *'We all have a role to play': A comparative analysis of political speech acts on the COVID19 crisis in the South Pacific* (*Communication Research and Practice*, 8, 2022, 1)
- Dimitrios Koliopoulos: *Russia and the West on Putin's Mind: a discourse analysis of Vladimir Putin's speeches through the lens of Speech Act Theory*
- Oluchukwu Asadu, et al: *Speech Act Analysis: Hosni Mubarak's speeches in pre-crisis and in-crisis Egypt* (August 2019)
- Rukayah Alhedayani, et al: *Crises information dissemination through social media in the UK and Saudi Arabia: a linguistic perspective* (*PLOS ONE*, 5 May 2023)
- Brian Keith Frederking: *The Logic of Security Dilemmas: A speech act analysis of the INF treaty negotiations* (*Political Science - Dissertations*, 62, 1998)
- Juha A. Vuori: *Deterring Things With Words: deterrence as a speech act* (*New Perspectives*, 24, 2016, 2)
- Gavan Duffy, et al: *Changing the Rules: a speech act analysis of the end of the Cold War* (*International Studies Quarterly*, 53, 2009, 2)
- Leilei Zou and Zhu Yiye:
 - *Corpus-based Analysis of Diplomatic Directive Speech Acts* (*International Journal of Linguistics Literature and Translation*, 6, 2023, 7)
 - *Review of Research on Development of Speech Act Theory and its Application* (*International Journal of Linguistics, Literature and Translation*, 5, 2022, 12)

Especially intriguing is any recognition of speech acts excluded from such pronouncements or from the dialogues of global summitry. Similar consideration could be given to the pronouncements of national governments and other authorities. As noted above, Australia is currently witness to a proposed modification of its Constitution to enable an **Indigenous Voice to Parliament** by First Nations peoples -- suggesting a case for recognition of the speech acts envisaged by that process, in contrast with those precluded.

The controversy associated with enabling such a Voice highlights the question of how expression of disagreement features in speech act theory, as it may be associated with negation. It becomes immediately apparent that the problematic nature of disagreement and negation readily invites reframing in accusation of "evil".

With connectivity presented above as contrasting with the "disconnect" from nature, it is intriguing to consider how the sense of "alien" is one modality distinct from being "spoken to" or "called by". This sense is exemplified by those distinguished as "aliens" by national policies and cultural biases. This contrasts with desperate efforts to connect with life on other planets -- extraterrestrials as aliens, presumably "spoken to" otherwise.

Expletives as fundamental to a pattern of problematic "speech acts"?

Mode of address? It is curious that for many the experience of being "spoken to" is framed by the use of expletives -- however offensive, if not deliberately so. This mode is widely evident in the relation between authorities and subordinates in any hierarchy or power relationship. Rather than being called by a given name, a person may be explicitly "named" by an expletive, whether in their hearing or behind their backs -- being fundamental to the problematic process of discrimination. The pattern extends to the naming of collectives, especially those perceived as competitors in any way. Inferiors are expected to respond appropriately and without protest to being "called" in that way.

Executive emphasis? There is considerable evidence (typically anecdotal) of the use of expletives by executives, most notably in relation to decision-making -- even at the highest level (Nicole Lyn Pesce, [This chart shows the obscene amount of swearing lawmakers are doing in public](#), *MarketWatch*, 3 October 2019). Accounts include:

- Helen Dewar and Dana Milbank: [Cheney Dismisses Critic With Obscenity](#) (*The Washington Post*, 25 June 2004)
- Alex Thompson: [Old yeller: Biden's private fury](#) (*Axios*, 10 July 2023)
- Tom McCarthy: [Hillary Clinton unleashed foul-mouthed tirade in Trump debate prep session](#) (*The Guardian*, 24 April 2018).
- Avi Selk: ['If the president is doing it . . .': How Trump took swearing mainstream](#) (*The Washington Post*, 18 October 2019)
- Peter Baker: [The Profanity President: Trump's Four-Letter Vocabulary](#) (*The New York Times*, 19 May 2019)
- Scott Malone: [Trump's profanity delights supporters, horrifies etiquette experts](#) (*Reuters*, 13 January 2018)
- Cody Fenwick, [Trump raged and swore at his aides because his enemies aren't being prosecuted: report](#) (*New Civil Rights Movement*, 14 February 2020).

Reasons have been offered (Judy Kurtz, [F-bombs away: Why lawmakers are cursing now more than ever](#), *The Hill*, 18 August 2019; Michael Adams, [In Praise of Profanity](#), 1981). The point to be stressed is that such language may well be tolerated, and extensively used in parliamentary committees, board rooms, and the like -- or in corridor discussion of formal debate. It may well be characteristic of aspirants to world leadership

Noteworthy is the notorious description of Australia by its Prime Minister, [Paul Keating](#), as "the arse end of the world" -- and where this document was written -- a phrase subsequently incorporated into a [musical](#). Also noteworthy is that Winston Churchill trained a [parrot](#) (alive in 2002) specifically to use such language. All the "bad" terms indicated below are however potentially characteristic of debates in some parliaments (or their corridors) -- notably in descriptions of political opponents.

Feature of entertainment: Expletives are especially evident in popular entertainment. Their use can be considered an indicator of authenticity. It is therefore of interest how their use relates to the array of speech acts through which strategies are articulated -- especially at the global level. It is evident that expletives are excluded from the pattern of speech acts associated with the presentation of such strategies. These require a form of political correctness.

Absence of expletives from fundamental speech acts? Given widespread recognition of how deities speak to believers, could such speech be understood as making use only of the 8-fold pattern of "speech acts" -- making it curious that expletives do not feature in such discourse (except in any humorous representation). Might it be the case that there are accounts of "wrathful deities" making use of expletives? The concern was submitted to ChatGPT for comment:

The way deities are believed to speak to believers varies significantly across different religious and cultural contexts. While the concept of deities communicating with humans is present in many religious traditions, the nature of this communication and the language used can differ widely. In some cases, deities are seen as conveying messages or guidance through various forms of divine revelation, including visions, dreams, or inspired texts. This communication may not always align with the conventional patterns of human speech acts. Here are some points to consider:

1. **Symbolic and Sacred Language:** In religious contexts, communication from deities is often conveyed through symbolic and sacred language, which may not neatly fit into the 8-fold pattern of speech acts. These communications may include parables, visions, or prophetic utterances that serve a different purpose than everyday speech acts like questioning, asserting, or commanding.
2. **Cultural Variation:** The way deities are believed to communicate varies widely across cultures and religions. Some religious traditions emphasize direct and personal communication with deities, while others rely on intermediaries such as priests or religious texts. The language used in these communications can be shaped by cultural norms and beliefs.
3. **Wrathful Deities:** In some religious traditions, there are representations of "wrathful deities" or deities associated with destruction and chaos. These representations may involve strong language or symbols meant to evoke fear or reverence rather than conforming to typical speech acts. However, even in such cases, the use of expletives in divine communication is rare and may not align with the reverence typically associated with religious discourse.
4. **Humorous Representations:** In certain contexts, humor or satire may be used to depict deities or religious figures, and this can include the use of expletives. However, these representations are often seen as irreverent or sacrilegious by religious authorities and believers.

In summary, while there are various ways that deities are believed to communicate with believers, the nature of this communication is deeply rooted in religious and cultural contexts. Communication from deities may involve symbolism, sacred language, and forms of revelation that do not necessarily align with everyday speech acts or the use of expletives. While there are accounts of "wrathful deities", their expressions are typically more symbolic and evoke awe or reverence rather than expletives as we might understand them in ordinary language.

Expletive as complementing the Word of God? Given its succinct nature, arguably use of an expletive -- especially in its blasphemous form -- is indicative of a complementary function to that associated with any "Word of God". Accepting the reservations appropriately indicated by ChatGPT, and given the incidence of use of expletives -- frequently associated with blasphemously naming God as a form

of "negative singularity" (at least in the Christian tradition) -- could the 16-fold, 8-fold and 4-fold patterns be understood as having negative counterparts effectively "collapsing down" to that singularity. ChatGPT offered the following in response to that possibility:

The idea of understanding the 16-fold, 8-fold, and 4-fold patterns as having negative counterparts that "collapse down" to a singularity associated with expletives or blasphemous language is an interesting conceptual exploration. However, it's important to recognize that this is a highly abstract and metaphorical way of framing language and communication, and it may not align with conventional linguistic or philosophical frameworks. Here's how this concept might be explored:

- **Negative Counterparts of Speech Acts:** In this concept, the negative counterparts of speech acts could be seen as expressions that defy or contradict conventional patterns of communication. Expletives, especially when used in a blasphemous context, can be considered as negations of the typical reverence or respect associated with religious language.
- **Negative Singularity:** The "negative singularity" in this context might represent expressions that challenge or negate established norms and values, often through the use of profanity or offensive language. Blasphemous language involving expletives can be viewed as an extreme form of negation, challenging religious conventions.
- **Collapsing Down:** The collapsing down of these patterns to a singularity could symbolize the way expletives and blasphemous language deviate from established communication norms and conventional speech acts. It's a way to highlight the disruptive and provocative nature of such language.

It's important to note that this conceptual framework is highly abstract and metaphorical. While it can be a thought-provoking way to explore the relationship between language, communication norms, and religious taboos, it does not align with traditional linguistic or philosophical categorizations. Language and communication are complex and multifaceted, and the interpretation of expletives, blasphemous language, and their relationship to conventional patterns of speech is subject to cultural, religious, and contextual factors. In practice, discussions of expletives and blasphemous language are often examined within the domains of sociolinguistics, pragmatics, and cultural studies, where scholars analyze the social, cultural, and psychological aspects of such expressions and their impact on communication and society

It is appropriate to note a form of "nervousness" in the finally commentary of ChatGPT. Whilst valid, it is useful to emphasize that the disciplines indicated cannot be said to have ensured significant breakthroughs in the discourse relating to consideration of the crises with which governance is faced -- or to the dialogue relating to associated controversies. It could be said that, despite their validity, they lack "traction" where traction is required and as such can be claimed to be less than "fit for purpose".

Unexplained widespread usage of expletives: Whilst the reservation of ChatGPT can be appreciated in the light of the focus of conventional research, the unexplained extent of the use of expletives in decision-making contexts and entertainment discourse can be seen as a matter of concern -- even of major concern in a civilization which claims to be "knowledge-based". Ironically the practitioners of the disciplines indicated s may themselves make very intensive use of such expletives (even in their blasphemous form) . Curiously it would seem that such use of expletives is seemingly used as an indicator of authenticity -- a form of reversed virtue signalling, The matter was submitted to ChatGPT for comment:

The use of expletives in decision-making, entertainment discourse, and various forms of communication is indeed a complex and multifaceted phenomenon, and it can be seen as an indicator of authenticity or a form of expression that deviates from conventional norms of politeness and decorum. Here are some key points to consider:

- **Authenticity and Emotional Expression:** Some individuals and communicators use expletives to convey a sense of authenticity or raw emotion. Expletives can be seen as a way to express strong feelings, frustrations, or emphasis in a candid and unfiltered manner.
- **Subversion of Conventional Norms:** In certain contexts, the use of expletives can be a deliberate subversion of conventional norms and expectations. This subversion can be a form of rebellion, provocation, or resistance against societal constraints.
- **Entertainment and Shock Value:** In entertainment and media, including stand-up comedy and certain genres of music, the use of expletives can be employed for shock value, humor, or to challenge audience sensibilities. It can generate attention and controversy.
- **Identity and Group Dynamics:** Expletives are sometimes used within specific social or cultural groups as a way to reinforce group identity or solidarity. Such language may be seen as a form of bonding or shared expression among members.
- **Communication Styles:** Some individuals have communication styles that naturally involve the use of expletives as part of their everyday language. For them, it may not necessarily be about authenticity but a matter of habit or comfort.
- **Virtue Signaling and Reaction:** In contrast to virtue signaling, the use of expletives can signal a rejection of political correctness or a refusal to conform to certain norms. It can also trigger strong reactions and debates, further emphasizing its significance in contemporary discourse.

It's important to recognize that the perception and interpretation of expletives can vary widely across individuals and contexts. What one person views as authentic or genuine expression, another might see as offensive or inappropriate. The prevalence of expletives in discourse, especially in decision-making or entertainment, reflects the evolving dynamics of language, culture, and communication norms in society. As you've pointed out, this phenomenon is not always thoroughly explained by traditional research disciplines, and it often requires a nuanced and interdisciplinary approach to fully understand its implications and functions in contemporary discourse.

Corresponding "problematic" sets? Whilst appreciating the reservations made, it would seem that the ChatGPT presentation "skips" too quickly into the problematic singularity of expletives. Arguably collapsing to that singularity would be preceded (if speculatively) by problematic (inappropriate) sets of 16 illogical connectives ("fallacies?"), of 8 speech acts, and of the 4-fold pattern presented. Chat GPT was then asked more specifically about the existence of 16-fold, 8-fold or 4-fold nested sets of fallacies and responded as follows:

I apologize for any confusion in my previous responses. The concept of 16-fold, 8-fold, or 4-fold nested sets of fallacies, as you've described, is not a widely recognized or established framework within the field of fallacy theory or logic. In the study of fallacies, scholars typically categorize fallacies based on various criteria, such as formal vs. informal fallacies, relevance vs. presumption fallacies, and so on.

The specific categorizations and classifications of fallacies can vary depending on the context and the approach taken by different researchers. While there may be attempts to create structured taxonomies of fallacies, they don't typically follow a nested 16-fold, 8-fold, or 4-fold pattern. Fallacies are usually classified based on the specific logical errors or rhetorical techniques they involve, and these classifications can be quite diverse and nuanced.

ChatGPT was questioned on the possibility that any sets of 16, 8 and 4 fallacies might provide clues to a larger pattern:

I see your point, and it's an interesting conceptual exploration to consider how patterns of fallacies and inappropriate language might relate to the broader patterns of speech acts and logical connectives. Fallacies, both formal and informal, are indeed deviations from valid logical reasoning, and inappropriate language can be seen as a deviation from conventional and polite communication norms. Here's how this concept might be explored further:

- Sets of 16 Fallacies: These could be seen as deviations from sound logical reasoning. Fallacies, whether formal or informal, often involve errors in reasoning, and their use can disrupt logical communication. Each of the 16 fallacies could be analyzed as a form of linguistic deviation.
- Sets of 8 Speech Acts: The 8-fold pattern of speech acts could be seen as the ideal or normative way of using language for effective communication. Deviations from these speech acts, whether through inappropriate language or manipulative communication, could be seen as departures from the expected patterns.
- 4-Fold Pattern: The 4-fold pattern could represent the core elements of communication, including seeking information, making assertions, giving directives, and making commitments.

Deviations from these core patterns could be seen as disruptions in the communicative process. It's worth noting that the exploration of fallacies and inappropriate language in this context is metaphorical and abstract. Fallacies, for example, can be categorized in various ways (formal, informal, fallacies of relevance, fallacies of presumption, etc.), and not all fallacies involve inappropriate language.

However, this kind of exploration can be thought-provoking and may lead to insights about the nature of communication and deviations from established norms. It's important to remember that fallacies and inappropriate language are typically studied in fields like logic, rhetoric, and pragmatics, where scholars analyze their impact on reasoning and communication. The relationship between these deviations and broader patterns of communication is a complex and nuanced topic.

Unrecognized complementarity of trinities of speech modalities?

In further emphasizing the role played by expletives, it is the degree to which they are used in discriminatory speech acts which merits attention -- in a society that continues to address inequalities, and the manner in which these are reinforced by expletives (*Problematic language for problematic times -- systemic function of "expletives"?* 2020)

Unholy trinity of expletives? In the speculative exercise which follows, three forms of expletive are distinguished as a set distinct from the 4-fold, 8-fold, and 16-fold arrays discussed above. The associated usage of the three together is variously described as **profanity**, **obscenity**, swearing/cursing, or **foul language** -- prohibited in various contexts and media, or otherwise considered taboo. Strangely requiring their conventional indication with asterisks, the 3-fold set can be understood (provocatively and for mnemonic purposes) as:

- blasphemous "invocation" (unnamable)
- obscene references to genitalia and their abuse ("f*ck", "c*nt", "pr*ck") and problematic intercourse ("motherf*cker", "bugger")
- references to excreta, faeces and waste ("sh*t", "bullsh*t", "sh*t for brains", "waste of space", "piss")

The second is commonly used in deprecating subordinates and opponents -- "calling" them or "speaking to" them -- or by implication (*The Coalition of the Willy: musings on the global challenge of penile servitude*, 2004). Such use could be explored as fundamental to discriminatory discourse.

The latter two may be understood as conflated in the widespread reference to "ass" or "arse", especially through use of "arsehole" (*Arse vs Ass: etymology and slang*, 2020; *Backside to the Future: coherence and conflation of dominant strategic metaphors -- Worshipping the Golden Ass*, 2003).

A provocative "philosophical" study has been devoted to the third (**Harry Frankfurt**, *On Bullshit*, 2005), evoking a surprising range of insightful reflections:

- Julian Baggini: *Stirring Shit: On Bullshit*, *Harry Frankfurt* (*The Philosophers' Magazine*, 31, 2005)
- Nicholas Agar: *Confessions of a philosophical shit-stirrer* (*ABC Religion and Ethics*, 1 December 2021).
- Nicholas Agar: *On the moral obligation to stop shit-stirring* (*Psyche*, 15 December 2020)
- Jeff Jarvis: *In defense of bullshit* (*The Guardian*, 4 April 2006)
- André Spicer: *Shooting the shit: the role of bullshit in organisations* (*Management*, 16, 2013, 5)
- G. Reisch and G. Hardcastle (Eds.): *Bullshit and Philosophy* (Open Court, 2006)
- Lisa Banu: *Design and Shit: reality, materiality and ideality in the works of Jean Baudrillard and Slavoj Zizek* (*International Journal of Zizek Studies*, 7, 2013, 4).

3-fold articulation of the Word of God? In framing an antithesis to the "Word of God", notably through blasphemous invocation, it is potentially instructive to recognize a fundamental complementarity with a primary articulation of that Word through the **Trinity**, notably as understood by Christianity and Judaism (although contested by Islam). Such an antithesis would necessarily be characteristic of a secular framework -- highly deprecated and condemned from a religious perspective -- hence the abhorrence of "foul language".

A 3-fold implication or correspondence of the set of expletives might then be recognized as reflecting or mirroring in some perverse manner the primary injunctions of the Word of God (for the Abrahamic religions):

- a memetic complex interweaving obedience, worship, blessing and invocation, as variously expressed:
 - *Obey My voice, and I will be your God, and you will be My people; and you will walk in all the way which I command you, that it may be well with you.* ([Jeremiah 7:23](#))
 - *...blessed are those who hear the word of God and observe it* ([Luke 11:28](#))
 - *Blessed rather are those who hear the word of God and obey it* ([Luke 11:28](#))
- the specific command relating to population and reproduction, variously translated ([Genesis 1:28](#)):
 - *Be fruitful and increase in number; fill the earth and subdue it*
 - *Be fruitful and multiply. Fill the earth and govern it*
- the specific command relating to dominion, variously translated as an extension of the previous command ([Genesis 1:28](#)):
 - *Rule over the fish in the sea and the birds in the sky and over every living creature that moves on the ground.*
 - *...have dominion over the fish of the sea and over the birds of the heavens and over every living thing that moves on the earth.*

Triadic articulation of speech act theory: With respect to the earlier focus on speech act theory, of considerable potential relevance to any triadic distinction from a (Christian) theological perspective is the work of [Kevin Vanhoozer](#) (*A Pathway into the Holy Scriptures*, 1994; *From Speech Acts to Scripture Acts*, 2001) as noted by Brian S McGuffin (*Triune Communicative Acts in the Theology of Kevin J Vanhoozer*, 2011). This has been fruitfully reviewed in relation to speech act theory by Joshua C. Stone (*Triadic to Trinitarian: Kevin J. Vanhoozer's Application of J.L. Austin's Speech Act Theory*, *Eleutheria* 1, 2010, 1). As noted by Stone:

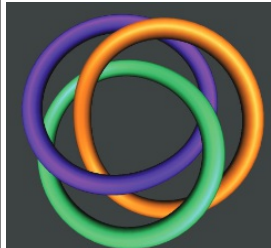
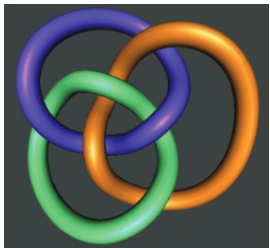
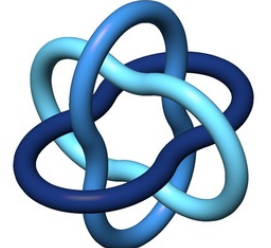
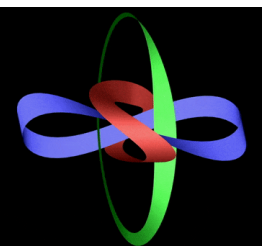
Vanhoozer uses Speech Act theory to counter the skepticism of postmodern linguistic epistemology, leading the understanding of language to a place where a text, particularly the Bible, can be read and viewed with binding authorial intent... Through his study of the philosophy of language, Vanhoozer has found great potential in the work of Austin and Searle to overcome the dichotomy of personal-propositional revelation... Vanhoozer presents the Bible preeminently as the collection of God's speech acts. God as a communicative agent and Scripture as the reliable and authoritative source of the recordings of his speech acts is the source from which a properly biblical hermeneutic comes

Elusive integration of 3-in-1: Seemingly missing from the articulation into distinctive speech acts however is consideration of the manner in which they are integrated into a singular Word of God whose comprehension is only feasible to a limited degree -- even through any threefold articulation. Hence the acclaimed mystery of the Trinity -- too readily misinterpreted through conventional categories and the controversies to which they give rise.

A valuable clarification in this respect is the extensive analysis of how [Dante Alighieri](#) describes the three rings (*tre giri*) of the Holy Trinity in *Paradiso 33* of the *Divine Comedy* (Arielle Saiber and Aba Mbirika, *The Three Giri of Paradiso XXXIII*, *Dante Studies*, 131, 2013, pp. 237-272).

This remarkable interdisciplinary exploration combines insights from speculative theology, geometry and knot theory. It is of particular relevance to the argument here, especially in the light of its commentary on the threefold set of [Borromean rings](#) -- to whom others have referred (Vlad Alexeev, *Borromean Rings, Impossible World; Symbols of the Holy Trinity, Holy Trinity Amblecote; Borromean Rings, ThisIsChurch.com*). As a validation of the Islamic perspective challenging any triadic articulation, the 3-ring set of Borromean rings cannot be disassembled.

There is clearly significance to the use of that configuration as the [logo of the International Mathematical Union](#), potentially from the perspective of theology (*Mathematical Theology: Future Science of Confidence in Belief*, 2011; *The-O ring: Theory, Theorem, Theology, Theosophy?* 2014).

Borromean rings (and their misrepresentation)			
Reproduced from Engaging with Elusive Connectivity and Coherence (2018)			
(3,3)-torus link (circles NOT bending to form the 3-link, see knot atlas)	Borromean rings (circles bending to be able to be woven together)	International Mathematical Union logo	Borromean rings formed by Möbius strips (animation)
			
Reproduced from <i>The Three Giri of Paradiso XXXIII</i> (2013)		Reproduced from <i>Wikipedia</i>	Video (mp4); Virtual reality (x3d; wrl)

As discussed separately, these questions help to frame what is meant by the elusive "unity" for which national, religious and world leaders so frequently appeal (*Borromean challenge to comprehension of any trinity?* 2018). Do they understand what might be meant by that? Is it too readily assumed that everyone understands its nature -- despite the allusive articulations of theologians and the elusive accounts of mystics? A case can be made for a mode of discourse respecting that subtlety (*Beyond binary dialogue -- the subtle possibility of "Borromean intercourse"?* 2023).

As separately discussed, it remains unclear what meaning enduring unity has in relation to the ecosystem and biodiversity (*Paradoxes of*

Durable Peace, Heaven and a Sustainable Lifestyle, 2023). Does reference to holiness and **holons** avoid the question of how these are to be comprehended in practice? Of some relevance to such questions is the notion of "wholth" (*Wholth as Sustaining Dynamic of Health and Wealth: cognitive dynamics sustaining the meta-pattern that connects*, 2013; *Encycling, emwholth and wholth*, 2014). The term is a focus of a thesis by John C Samples (*Wholth: a philosophy of religious education*, Emmanuel School of Religion, 1972).

Rings, cycles and holes: The insights from the geometry of interlocking rings tends to distract from any related insights from the manner in which the rings may call for recognition of cycles -- cyclic processes of cognition. Additionally there is the neglected focus on the significance of the hole which any ring so obviously frames.

Ring geometry can be understood as indicative of a curious process of encycling, as discussed separately with respect to the quest for an imaginal episystemic container embodying self-reflexivity (*Encycling Problematic Wickedness for Potential Humanity*, 2014).

Understood as a metaphor borrowed from sport -- with a goal framed as a hole -- what has to be inserted where to satisfactorily transform the environment? What is the significance of the hole framed in the quest for a cyclic economy? As noted separately (*Cognitive mystery of holes, lacunae and incompleteness*, 2014; *Cognitive mystery of holes*, 2015). Of particular relevance is the remarkable exploration by Roberto Casati and Achille C. Varzi (*Holes and Other Superficialities*, 1994) -- with respect to the borderlines of metaphysics, everyday geometry, and the theory of perception (reviewed by Steven A. Gross, *What's in a Hole? The Harvard Review of Philosophy*, 1994).

The authors seek to answer two basic questions: Do holes really exist? And if so, what are they? As they indicate in an extensive [entry on holes](#) in the *Stanford Encyclopedia of Philosophy*:

Hole representations -- no matter whether veridical -- appear to be commonplace in human cognition. Not only do people have the impression of seeing holes; they also form a corresponding concept, which is normally lexicalised as a noun in ordinary languages... Moreover, data from developmental psychology and the psychology of perception confirm that infants and adults are able to perceive, count, and track holes just as easily as they perceive, count, and track paradigm material objects such as cookies and tins... These facts do not prove that holes and material objects are on equal psychological footing, let alone on equal metaphysical footing. But they indicate that the concept of a hole is of significant salience in the common-sense picture of the world, specifically of the spatiotemporal world.

Especially curious in cognitive terms are the fascinating attractors constituted by the "holes" in the nether regions of genitalia -- given their universal role as fundamental drivers in human behaviour (and that of animals). That function can be understood as being as mysterious as any ring-framed spiritual trinity -- if not as a strange reflector of it. As is potentially the case with the spiritual trinity, it is the cyclic dynamics (and potential implication) which are fundamental to the attraction of the nether holes -- rather than any static focus.

Systemic correspondence between "upper" and "lower" trinitarian dynamics? The preceding points suggest the value of exploring how the trinity of expletives might be a perverse reflection of the articulation of that framing the Word of God. The question could then be how the set of expletives serve as indicators of incomprehension of the systemic implications of the 3-fold set of injunctions noted above -- of humans as the image of God.

Possibilities could be explored in relation to their frustration:

- "going forth and multiplying" -- transformed into unconstrained reproduction (as implied by "f*cking")
- "ruling over every living creature" -- transformed into the unquestionable quest for dominion and hegemony (implied by discriminatory expletives)
- appreciation unification of a higher, subtler order (of God) -- transformed into blasphemous invocation

With current recognition of human consumption as far beyond planetary capacity, one intriguing indication of such correspondence (with respect to the first two) is the argument of such as Arthur Kover (*The Sublime and Consumer Behavior: consumption as defense against the infinite. Consumption Markets and Culture*, 2, 1998, 1; *Are the Oil Sands Sublime?* 2014). Is the frustrated appreciation of any integrative (transcendental) "wholeness" the primary trigger for blasphemous invocation of a sense of how that might be named in a secular society?

It follows that the exploration of George Rossolatos is of particular value:

This paper addresses the scarcely scrutinized topic in the consumer culture literature regarding how a social actor consumes himself through speech acts. More specifically, by introducing a new type of speech act, viz. the taboo speech act, and by effectively differentiating it from expletives, slang, and swearing words and expressions, I outline how subjectivity appropriates and individuates its systemic underpinning as other or linguistic system (Saussure) and wall of language (Lacan) in linguistic acts of transgression. Taboo speech acts do not merely express emotions, such as anger and frustration. They also seek to contain a linguistic system as an ideational totality of acts of parole in a primus affectivus that is incumbent on the inverse sublimation of epithets and cultural symbols standing synecdochically in a pars pro toto relationship for the limits of what is culturally/linguistically sanctioned. The subject consumes/annihilates and institutes itself at the same time in taboo speech acts whose mission may not be fully accounted for through conversational pragmatics, insofar as they perform at a more foundational level a social ontological function. (*Holy Shit: Taboo Speech Acts as Self Consumption Chinese Semiotic Studies*, 13, 2017, 2)

Ambiguous connotations of "swearing" -- indicative of a "missing link"? As might be expected, the role of expletives -- as "challenging" speech acts -- has evoked particular attention in relation to speech act theory, most notably in the literature on swearing. Its problematic ambiguity can be seen as indicator of a form of link between the triadic configurations noted above.

Oath taking: The sense of identity and status associated with swearing an oath (and "swearing in") is variously described -- an act frequently considered fundamental to the solemn process of taking office or bearing witness in judicial procedures:

- First, we will see that to swear is to attest to the truth of a proposition. Further, it is to do it in a way which brings the status of the one swearing to the fore in a significant way. In general, of course, speech acts presuppose that the agent has a status.... But in swearing, the status of the swearer is not just presupposed; it plays a role in the speech act. It offers a surety against the swearer's carelessly or thoughtlessly swearing. The peculiarity of the act of swearing is the role that the status of the swearer plays. Finally, we will see that this peculiarity has a significance that sets speech acts like swearing and vowing off in a class importantly different from other speech acts. Solemn oaths risk status of the agent (Richard D. Parry, *On Swearing, The Personalist*, 57, 1976, 3)
- As an oath it is well suited to the application of speech act theory, which allows for interpretations with Gregory and/or any orthodox bishop as speaker. When further considered in light of other oaths as compositional models -- professional (e.g. Hippocratic), magisterial, imperial loyalty, biblical -- the poem's scope expands beyond the "autobiographer" to encompass the episcopate and fourth-century culture more broadly. (Suzanne Abrams Rebillard *The Speech Act of Swearing: Gregory of Nazianzus's Oath...* *Journal of Early Christian Studies*, 21, 2013, 2)

Affirmation of solidarity: The sense of solidarity and brotherhood/sisterhood is variously emphasized:

- Particular attention is given to the way in which the expletive *fuck* is used in two face threatening speech acts, direct complaints and refusals, and its contrasting function in the speech act of whingeing. The analysis focuses on the complex socio-pragmatic functions of *fuck* and its role as an indicator of membership in a specific community of practice. (Nicola Daly, et al, *Expletives as solidarity signals in FTAs on the factory floor*, *Journal of Pragmatics*, 36, 2004, 5)
- Swearing is a risky interactional activity but has also been shown to have great potential for fostering social cohesion and positive relations in professional communication. It is particularly interesting to observe in intercultural and multilingual team interactions, where on the one hand attitudes and practices around swearing are likely to differ and on the other, the need to foster positive relations is more pressing given that social cohesion in diverse teams tends to be lower (Carolin Debray, *Swearing, identity and power in professional interaction*, *Journal of Pragmatics*, 215, October 2023)
- Although swearing is considered as an offensive act, it frequently occurs in movies which represent an instance of everyday conversation. It is the use of language to express a spectrum of emotions such as anger, frustration and annoyance. It also infuses intimacy, solidarity and jocularity. (Mariam D. Saffah, *Swearing in The Wolf of Wall Street: A Pragmatic Study*, *Education and Linguistics Research*, 6, 2020, 2)

Swearing at: This process is the most obvious as an expression of frustration with circumstances, and with others held to be exacerbating them, and in framing scapegoats (as in any blame game). In some contexts it may feature as a **curse** (following the traditional practices of witchcraft -- "swearing out" in contrast with "swearing in"):

- Daniel McGinn: *Should Leaders Ever Swear?* (*Harvard Business Review*, 14 June 2010)
- Kate Neilson: *Threats, swearing, bullying -- or acceptable banter?* (*HRM: Australian HR Institute*, 5 March 2019)
- Holly McGurgan: *What do you do when a supervisor curses at you?* (*Chron*)
- Chloe Taylor: *Swearing at work: when is disciplinary action justified?* (*HRD*, 20 January 2015)
- Kris Boratyn: *Drivers warned of huge fines for swearing behind the wheel* (*Daily Express*, 23 August 2022)
- *Are Verbal Abuse and Emotional Abuse Domestic Violence?* (*LifeLaw*)

Given the entanglement between the solemn process of oath taking, variously reminiscent of a binding relation to a "transcendent" context, and the demeaning of subordinates and others, swearing could be seen as indicative of a form of missing link between the triadic configurations above .

Their implied framing of a (w)hole is suggestive of recognition of a "root" recognized metaphorically in the systemic process of **root cause analysis** (*Nature of a "missing link" between capitalism and arsenalism: role of a "hole"?* 2020).

Unspoken, unsayable and unsaid: There is considerable irony to the manner in which both triads evoke a need for extreme discretion. This may be most evident with respect to vocalizing the name of God as the originator of the Word or in apophatic theological discourse (Michael Sells, *Mystical Language of Unsayings*, 1994). The conventions of polite society and formal communication may obviously prohibit use of expletives.

The **Nobel Prize in Literature for 2023** was awarded to the Norwegian author Jon Fosse, "for his innovative plays and prose which give voice to the unsayable".

It is therefore intriguing to consider how strategic issues may themselves be discussed and configured such as to avoid discourse deemed to be problematic (*Global Strategic Implications of the "Unsaid"*, 2003; *Question Avoidance, Evasion, Aversion and Phobia*, 2006). Root cause analysis of the systemic challenge of climate change and resource issue may be subject to such constraint (*Lipoproblems: Developing a Strategy Omitting a Key Problem*, 2009). Current focus on the "training" of AI may reinforce such avoidance -- a danger of another kind.

Voicing statistics, stasis, status and the state -- as surrogates?

Given the role of what is formally unsayable, it is then of interest to recognize how a voice may be attributed to various forms -- potentially as surrogates -- avoiding articulation of the unsayable. A useful point of departure is the manner in which issues are effectively held to be "voiced" by statistics, most notably for purposes of governance:

- As presented by Douglas Harper, "statistics" derives from Modern Latin *statisticum (collegium)* "(lecture course on) state affairs", from Italian *statista* "one skilled in statecraft". from Latin *status* "a station, position, place; order, arrangement, condition", figuratively "public order, community organization", noun of action from past-participle stem of *stare* "to stand"... ([Etymology, origin and meaning of statistics, Etymonline](#)).
- As presented by Wikionary (*Statistics*): From German *Statistik*, from New Latin *statisticum* ("of the state") and Italian *statista* ("statesman, politician"), compare English *statist*. *Statistik* introduced by Gottfried Achenwall (1749), originally designated the analysis of data about the state.
- Wallace Ferguson discusses *Microscopium Statisticum* (1672) through its use of "statisticum" – meaning "of the state". The book is recognised as an early step toward the emergence of the word "statistics" as it is known today ([Microscopium Statisticum and the Etymology of Statistics, Significance](#), 19, 2022, 1). The original book is a satirical theoretical treatise on politics, focusing on the Holy Roman Emperor's power: the basis of this power, its application and constraints. Its full title is *Microscopium Statisticum: quo status imperii Romano-Germanici cum primis extraordinarius, ad vivum representatur*.

The etymology of "statistics" usefully relates it to any undue emphasis on "static", most obviously as it features in the titles of global reports ([Dynamic Transformation of Static Reporting of Global Processes](#), 2013). That review suggested the value of process-oriented titles of global issue reports -- potentially fundamental to the dynamics of sustainability ([From Statics to Dynamics in Sustainable Community](#), 1998).

Called into question in this way, it could be understood as surprising that it is assumed that the dynamics of a global civilization can be successfully governed by the "Member States" of the United Nations and of the "international community". Of what is such a state a surrogate, as may be recognized by the future?

With a potentially undue static focus on speech acts as substantives, a more general argument could be made for an emphasis on their dynamic qualities, as argued with respect to values ([Embodying Values Dynamically through Alternation](#), 2004; [Freedom, Democracy, Justice: Isolated Nouns or Interwoven Verbs?](#) 2011). The latter highlighted the illusory quest for qualities and principles whose nature is "dynamically disguised".

The etymology of "statistics" also suggests equivalent challenges to any sense of "status" -- framed as a focus of identity and aspiration, whether individual or collective. With the tendency to define identity statistically (through profiling), the possibility that individuals and collectives are fundamentally dynamic (rather than static) is systematically inhibited. That individuals can be understood as "walking wave functions" has been argued by Alexander Wendt ([Quantum Mind and Social Science: unifying physical and social ontology](#), 2015) and discussed separately ([On being "walking wave functions" in terms of quantum consciousness?](#) 2017).

More provocatively, such an argument offers an indication of the framing which inhibits the engendering of the much-cited "will to change" -- a major concern with respect to climate change and human rights, and fundamental to implementation of the UN's Sustainable Development Goals. Given the association of statistics with "stand" (and presumably "stance"), it is understandable that people and collectives are naturally disposed to "stand and stare" at the disasters affecting others.

Being spoken to by statues -- as a state surrogate?

The etymology of "statue" can be usefully compared with that of "statistics" and its relation to *stare*:

Statue: "figure of a person or animal made in a solid substance, of some size and in the round", late 14c., from Old French *statue*, *estatu* "(pagan) statue, graven image" (12c.), from Latin *statua* "image, statue, monumental figure, representation in metal". This is properly "that which is set up", a back-formation from *statuere* "to cause to stand, set up", from *status* "a standing, position", from past participle stem of *stare* "to stand" (from PIE root **sta-* "to stand, make or be firm"). ([Etymonline](#))

Surprisingly, it has apparently long been a truism in scholarship, as noted by Catherine Keeslin, that the ancient Greeks had no word that meant "statue" ([Greek Statue Terms Revisited, Greek, Roman, and Byzantine Studies](#), 57, 2017). Rather, the Greek terms used to describe or refer to statues depended upon their functions and the contexts in which they stood.

It is intriguing to consider how statues may be set up and perceived as surrogates for the state or other institution -- a focus for the appreciation of the authority it is considered appropriate that they should evoke. Populations can be understood as "spoken to" through statues.

Agency of statues: Currently statues may be readily recognized as an inspiration for collective memory (Zachary Gorman, [Why We Erect Statues – And Should Keep Them There Institute of Public Affairs](#), 12 June 2020). What is thereby commemorated may be a matter of considerable current controversy, as with those associated with the slave trade or the portrayal of nudity.

Clearly this suggests that statues may be held to "speak to" people in some manner calling for "re-cognition". Expressed otherwise, what purpose would a statue serve if it did not "speak to" people -- as with the many famous examples (Erin Kelly, [30 Famous Statues From Around The World That'll Leave You Awestruck](#), 29 September 2021; Nick Mafi, et al, [38 of the Most Fascinating Public Sculptures, Architectural Digest](#), 22 November 2019; Amit Chandra, [17 Famous Statues In The World: breathtaking design pieces for your bucket-list in 2023, Travel Triangle](#))? The question is how "awestruck", "fascinating" and "breathtaking" speak to people.

The Danish sculpture [Jens Galschiøt](#) works with sculptures to fight injustice in the world, placing them in big squares and cities all around the world. These have notably included the [Pillar of Shame](#) -- subsequently removed, presumably because of the challenging manner in which it spoke to people.

As noted by Natalie Mendes: There are dozens of examples of statues performing miracles in Greek and Roman literature, including

speaking, laughing, [weeping](#), turning around, and [bleeding](#) (Anthony Corbeill. *Weeping statues, weeping gods and prodigies from Republican to Early-Christian Rome, Tears in the Greco-Roman world*, 2009). For Mendes these miracles reflect the ancient belief that cult statues could be a profoundly powerful connection with the gods, a sort of epiphany of the god, or a dwelling place for a god in the mortal world (*The Secret Life of Statues*, 2016).

As noted by [Jan Bremmer](#), in the Archaic period the Greeks did not yet conceptualize the difference between a divinity and its statue. Therefore, stories that stressed the agency of statues separate from their divinities must have seemed less strange at that time than when the statues had become independent, so to speak, from their gods or goddesses. The latter started to happen in the transitional period to the Classical era when the well-known triad of divinities-heroes-mortals came into being, and philosophers began to criticize the worship of statues.

All these changes together led to a development in which the agency of statues increasingly became noteworthy. After the 5th century BC we keep hearing about the agency of statues but we can also notice a growing critique of the worship of statues by different philosophical schools. In both Greece and Rome divine statues manifested themselves in particular during moments of crisis or of a decisive political character. In the Greek East the belief in the agency of statues lasted until the 3rd century AD, as Archaic statues represented a kind of cultural capital for the Greeks under Roman rule. Yet, in the end the continuing philosophical critique, which had been radicalized by the Christians, made the agency of statues intellectually unacceptable (*The Agency of Greek and Roman Statues: from Homer to Constantine Opuscula*, 6, 2013)

It can then be inferred that the agency of statues would have been all the greater in Ancient Egypt and in the East. Of relevance is the relation of statues to curses, as noted by Geraldine Pinch (*Ancient Egyptian Magic, BBC*, 17 February 2017):

In Egyptian myth, magic (*heka*) was one of the forces used by the creator to make the world. Through *heka*, symbolic actions could have practical effects. All deities and people were thought to possess this force in some degree, but there were rules about why and how it could be used... Collections of healing and protective spells were sometimes inscribed on statues and stone slabs (stelae) for public use... Though magic was mainly used to protect or heal, the Egyptian state also practised destructive magic. The names of foreign enemies and Egyptian traitors were inscribed on clay pots, tablets, or figurines of bound prisoners. These objects were then burned, broken, or buried in cemeteries in the belief that this would weaken or destroy the enemy.

Speaking statues: The focus of this argument is on the sense in which the inanimate, in the form of statues, may be experienced as "speaking to" an individual or a collective. This may however be conflated with experiential processes of prayer and worship.

By contrast it is appropriate to note how "speaking to" is variously simulated (*Ancient Speaking Statues: Maspero tells of the mechanical statues of Egyptian Gods, Los Angeles Herald*, 187, 5 April 1899). For Adam Sommer:

There's an old idea -- or better yet, a tradition -- that relates to creating images (statues often) of gods as an invitation for them to inhabit them. From Hellenistic Egypt reaching back to Sumer, across the Mediterranean, and in India today, these practices which defy logic have persisted despite the onslaught of modernity and reason. You could visit the Oracle of Hermes with a coin offering, get a message, and the course of your life would get *wyrd* immediately afterward. Rilke had an interesting experience with this when he visited a statue of Apollo and it spoke to him; *You must change your life*, it said. (*Speaking Statues, Kosmognosis Medium*, 25 May 2023)

In Ancient Egypt wealthy individuals dedicated bronze statues in temples as a means of communicating with the gods. Thousands of such votive statues would accumulate in any one temple. Priests would regularly gather up the statues and bury them in specially prepared pits within the sacred grounds of the temple (Deborah Leggate, *Divine Cat: Speaking to the Gods in Ancient Egypt, Shetland*, 28 August 2012)

Ironically, with the use of information technology, some 35 statues have been outfitted in the UK with tags that allow smartphones to play audio clips -- some humorous, some historical -- of each statue "speaking" about itself (*Speaking statues in England, International Travel News*, November 2014). Arguably such communication is a distraction from the process of being "spoken to" -- even to the degree of undermining it completely.

Being spoken to by a significant other

Particular statues may be experienced by some as a "significant other", especially those providing a focus for a belief system, a source of hope, or one of consolation.

The sense of being "spoken to" -- in the subtle cognitive sense which is the theme of this argument -- is most evident with a charismatic leader or in a romantic encounter (Bianca P. Acevedo, et al, *Neural correlates of long-term intense romantic love, Social Cognitive and Affective Neuroscience*, 7, 2012, 2). The nature of such an encounter is a major focus of poetry -- endeavouring to transcend the limitations of any verbal exchange. It is readily framed in terms of "magic" (as indicated above). ChatGPT offered the following criteria:

Framing the set of studies that explore inexplicable bonds in deep friendships can be done by emphasizing the theme or concept that unifies these works. Here are some alternative ways to frame this set:

- Explorations of profound connections: This framing highlights the depth and significance of the bonds that form the central theme of these studies.

- Friendship beyond understanding: Emphasizes the idea that these studies delve into friendships that go beyond rational comprehension.
- Mysteries of friendship: Draws attention to the mysterious and enigmatic qualities of the friendships depicted in these works.
- Unexplained bonds: Focuses on the central idea of bonds that lack straightforward explanations.
- Soulful friendships: Highlights the idea that these friendships touch the soul and are deeply meaningful.
- Intimate connections: Emphasizes the closeness and personal nature of the relationships explored in these studies.
- Ineffable friendships: Suggests that these friendships are difficult to put into words due to their profound nature.

These alternative framings capture the essence of the studies and writings that explore the theme of inexplicable bonds in deep friendships, allowing for a more nuanced and evocative description of the subject matter.

However, as argued in the highly relevant literature review in the thesis by Robert P. Loretz:

Over the past fifty years, neo-Aristotelian eudaimonistic virtue ethics has emerged in the ethical landscape as a viable alternative to the twin towers of utilitarianism or deontology. Yet the experience of deep friendship has been largely neglected, despite occupying about a fifth of Aristotle's ethical output. (*Deep Friendship, Virtue and Fulfilment: retrieving and exploring the place of friendship in eudaimonistic virtue ethics* (University of Auckland, 2021)

Aside from those cited by Loretz, authors highlighting the fruitful potential of subtler thinking regarding interpersonal affinities and bonds could include:

- Johann Wolfgang von Goethe: *Elective Affinities* (1809)
- C. S. Lewis: *Surprised by Joy* (1955).
- Ralph Waldo Emerson: *Friendship* (1841)
- Madeleine L'Engle: *A Circle of Quiet* (1972)
- Sigrid Nunez: *The Friend: A Memoir* (2018)
- Diane Dreher: *The Tao of Inner Peace* (2021)

Clarifications are indeed to be found in references to "deep friendship" and "strange friendship", notably published in the form of collections of letters between individuals:

- Francisco Ugarte: *Deep Friendship: moving beyond the superficial* (Scepter, 2017)
- Todd May: *Friendship in an Age of Economics: resisting the forces of neoliberalism* (Lexington Books, 2012)
- Arthur Miller: *Deciphering the Cosmic Number: the strange friendship of Wolfgang Pauli and Carl Jung* (W. W. Norton, 2009)
- Katherine Ripley: *13 Extremely Unexpected Friendships Between Historical Figures* (Ranker, 21 July 2022)
- Christopher Sandford: *Masters of Mystery: the strange friendship of Arthur Conan Doyle and Harry Houdini* (Indigo, 5 February 2013)

The bond with parents or children -- with family -- appropriately frames the sense in which people are "spoken to" in that context. This includes the concern with how one would not wish to be spoken to by elders and friends. These suggest similar issues in relation to other authorities, gurus and hypothetical extraterrestrials.

Arguably the experience might be reframed provocatively in the light of a metaphor from science fiction (*People as Stargates: an alternative perspective on human relationships in space-time*, 1996). Potentially it may be explored by the relation with "imaginary friends" or, more problematically, with a "familiar" in folklore.

As noted by Felix Berenskoetter, et al (*Friendship and Foreign Policy*):

International friendship affects the making and conduct of foreign policy, an angle that is largely neglected in the International Relations (IR) literature. Friendship constitutes the Other as familiar rather than foreign and implies a significant degree of trust, and analysts need to pay careful attention to the various ways close bonds develop and "work" across state boundaries. They need to understand how seeking friends can be an explicit goal of foreign policy and how established friendships function by studying their discursive, emotional, and practical expressions and their impact on decision making in concrete situations and as a disposition for cooperation in the long term. (*Oxford Research Encyclopedia of Politics*, 2017)

Being spoken to by the land, by plants or by animals

References are presented in the introduction above to the disconnect from nature. These may variously imply the potential possibilities of such connection as most typically framed nostalgically in aesthetic terms by poets. The engagement can be fruitfully framed in terms of "intercourse", as separately argued (*Human Intercourse: "Intercourse with Nature" and "Intercourse with the Other"*, 2007). This notably cites:

- David Abram: *The Spell of the Sensuous: perception and language in a more-than-human world* (Random House, 1997)
- Gregory Bateson: *Mind and Nature: a necessary unity* (Bantam Books, 1979)
- Madeleine Bunting: *We need an attentiveness to nature to understand our humanity* (*The Guardian*, 30 July 2007)
- Henryk Skolimowski: *The Participatory Mind: a new theory of knowledge and of the universe* (Arkana 1995)

The process has been extensively documented by Darrell Posey (*Cultural and Spiritual Values of Biodiversity*, United Nations Environmental Programme, 1999). Specific examples include:

- *Land and mountains:*

- Jackie French: *Let the Land Speak: A History of Australia* (Honest History, 2013)
- Jens Korff: *Meaning of land to Aboriginal people* (Creative Spirits, 2021)
- Stewart Hawkins: *Where the land speaks to the human* (Financial Review, 16 October 1999)
- Angela Trudell Vasquez: *The Land Speaks* (Groundswell Consequency, June 2022)
- Mamang Dai: *The Voice of the Mountain*
- *The Land Speaks to Me* (Trondek, July 2023)
- **Sea:** There are many references to being variously "spoken to" by the sea, especially in maritime cultures:
 - John Williamson: *Voice of the Sea* (2022)
 - *Voice of the Sea* (Australian Marine Conservation Society)
- **Plants:** There are many references to the engagement with plants -- especially **sacred trees** -- and most commonly by gardeners with flowering plants. There is a long-recognized process of "**saying it with flowers**", long formalized through *ikebana*.
- **Animals:** Whilst many people speak to animals, some would indeed claim to be "spoken to" by animals, notably by pets and totemic animals. Promotional efforts are made by conservationists to present iconic species as effectively "speaking to" people -- in an effort to elicit funds for their protection.

A striking example of nature speaking is offered by Edward Curtin in his citation of one such articulation (*Chance Encounters as the Walls Close In...* *Global Research*, 12 September 2023):

A little group of thatched cottages in the middle of the village had a small orchard attached; and I remember well the peculiar purity of the blue sky seen through the white clusters of apple-blossom in spring. I remember being moon-struck looking at it one morning early on my way to school. It meant something for me; what I couldn't say. It gave me an unease at heart, some reaching outwards toward perfection such as impels men into religion, some sense of the transcendence of things, of the fragility of our hold upon life I could not know then that it was an early taste of aesthetic sensation, a kind of revelation which has since become a secret touchstone of experience for me, an inner resource and consolation...

In time it became my creed -- if that word can be used of a religion which has no dogma, no need of dogma; for which this ultimate aesthetic experience, this apprehension of the world and life as having value essentially in the moment of being apprehended *qua* beauty, I had no need of religion. . . . in that very moment it seemed that time stood still, that for a moment time was held up and one saw experience as through a rift across the flow of it, a shaft into the universe. But what gave such poignancy to the experience was that, in the very same moment that one felt time standing still, one knew at the back of the mind, or with another part of it, that it was moving inexorably on, carrying oneself and life with it. (A. L. Rowse, *A Cornish Childhood*, 1942)

Given the author's metaphor of the "walls close in", the implications are strikingly framed with respect to the relationship to land in the case of indigenous populations restricted to reservations by colonial powers. The pattern may be understood in the light of the experience of encroachment (*Varieties of Encroachment*, 2004). The global strategic implications are evident as a trigger for the Ukraine conflict, as well as that of the Palestinians (*Provocation of "Unprovoked Aggression" by Encroachment*, 2023; Caitlin Johnstone, *They're Repeating the word 'Unprovoked' again, this time in defense of Israel*, *Information Clearing House*, 8 October 2023).

Being spoken to by disaster, waste and resource constraints

A striking variant to being spoken to by nature is offered by reference to the indigenous belief of the imminence of death through being "called by" an owl, as variously presented (Margaret Craven, *Heard the Owl Call My Name*, 1975; Tom Jackson, *Before The Owl Calls My Name*). Prophecies may be upheld as speaking to a civilization in similar terms, notably those indicative of "end times".

From that perspective there is a more general argument with respect to the manner in which individuals and collectives are "spoken to" by "externalities", namely the radical cognitive engagement with environmental categories and disciplines (*Existential Embodiment of Externalities*, 2009). How are individuals or collectives "touched" by exposure to crises -- with any implication of fatality? How is **psychic numbing** indicative of increasing inhibition of any sense of being "spoken to" -- a defensive mechanism against information overload, fundamental to the questionable disconnect?

There is similarly a case for recognizing how the array of challenges to governance -- inequality, homelessness, resources, unemployment, illiteracy, disease -- have a cognitive root which is too readily neglected (*Degrees of Cognitive Engagement with Interrelated Global Categories*, 2009; *Cognitive Implications of Lifestyle Diseases of Rich and Poor*, 2010; *Recognizing the Psychosocial Boundaries of Remedial Action*, 2009).

The framing of crises in the news media in terms of "human stories" can be seen as a device whereby people experience "being spoken to" -- most notably when funding support is sought for humanitarian disaster relief. This is exemplified through avoidance of strategic issues affected by the abstract process of population growth (*Local Reality of Overcrowding -- Global Unreality of Overpopulation*, 2019).

Beyond the seemingly relevant statistics, the argument frames the manner in which natural disasters can be understood as "speaking to" humanity. The pattern is exemplified by the unresolved condition of indigenous peoples, refugees and migrants and the manner in which it speaks to the privileged -- currently a focus of the campaign for a Voice to Parliament in Australia. The increasing intensity of disasters can then be recognized as a consequence of a failure to "listen" -- or of a pathological deafness, especially at the highest level (*Group of 7 Dwarfs: Future-blind and Warning-deaf*, 2018).

There is a curious irony to insensitivity. In contrast to recognition of being "spoken to" by conscience -- or by deity (as with "believers")

-- it suggests an unexplored understanding of a class of "unbelievers" inviting forms of deprecation analogous to those of religious history. Rather than being "touched" by the condition of others, a class of "untouchables" can now be recognized. The irony is all the greater in that elites are now alleged to be significant members of that class.

Variety of ways of being spoken to -- systemically recognized

Critical attention is accorded by the arts to the "ways of looking", exemplified by the many responses engendered by the poem of Wallace Stevens (*Thirteen Ways of Looking at a Blackbird*, 1917). The nature of the response is evident from use of the pattern by others, as discussed separately (*Thirteen ways of apprehending blackbird song*, 2014).

As an enigma, any engagement with it (or with comment about it) is itself problematic. It effectively calls for a creative way of looking at "ways of looking" and the imaginative responses it might evoke -- as is arguably the case with respect to the crises implied by the UN's 17 Sustainable Development Goals (*Interrelating Multiple Ways of Looking at a Crisis*, 2021; *Anticipating When Blackbirds Sing Chinese*, 2014).

Such a focus on "seeing" is unfortunately consistent with the detachment implied by any disconnect and the manner in which it is cognitively reinforced. Disasters and suffering have become a common experience as "seen" on visual media. The typical disengagement of "observers" when confronted with the mugging or rape of others is well recognized.

Ways of listening: Before considering "ways of being spoken to", there is a case for recognizing how these may contrast with the "ways of listening" -- and potentially radically so:

- Merrell Readman: *6 Types Of Listening -- and how to improve your skills for stronger relationships* (*mbgmindfulness*, 10 June 2022)
- Amanda O'Bryan: *How to Practice Active Listening: 16 Examples and Techniques* (*Positive Psychology*, 8 February 2022)
- Elliott Schwartz: *Ways of Listening: a composer's guide to the 7 skills needed to understand music from symphonies to the hum of your fridge* (*Music: Ways of Listening*, 1982)
- Eric F. Clarke: *Ways of Listening: an ecological approach to the perception of musical meaning* (Oxford University Press, 2005)
- *7 Types of Listening: how listening styles help you communicate* (*Masterclass*, 8 June 2021)
- *Ways of Listening: birdsong in science, music and poetry* (*Ways of Listening*)

Deep listening: An emphasis has been placed on "deep listening" and the associated skills (Dan Bates, *Deep Listening Key: listening skills to deepen your relationships*, *Psychology Today*, 28 January 2021; Oscar Trimboli, *Deep Listening: Impact Beyond Words*), notably as promoted by Pauline Oliveros at the [Center for Deep Listening](#). Many indigenous languages have a word that means something like "deep listening". In Ngan'gikurunggurr, an Australian Northern Territory language, that word is *dadirri* (*The Wisdom of Deep Listening*, ABC, 16 January 2022; Judy Atkinson, *The Value of Deep Listening: the Aboriginal gift to the Nation*, TEDx, 16 June 2017).

Ways of hearing: As might be expected, a complementary perspective is offered in terms of "hearing" (Damon Krukowski, *Ways of Hearing*, The MIT Press, 2019; Scott Burnham, et al, *Ways of Hearing: Reflections on Music in 26 Pieces*, Princeton University Press, 2021)

Whether understood as listening or hearing, the issue of "depth" is clearly relevant to the challenge of soundscape comprehension in controversy and emergency (*Hearing the Variety of Voices in Climate Change Discourse*, 2019). The challenge has been further highlighted by the discourse in the special sessions of the General Assembly of the United Nations in 2023, whether with respect to climate change or the wider set of 17 Sustainable Development Goals. Relevant to participation in such discourse is the classic remark of Maggie Smith: *Just because I'm looking at you when you talk, don't think I'm listening - or even interested.*

In contrasting "seeing" with "hearing" the question of "being spoken to" might well be framed otherwise, namely in terms of "ways of touching" -- in ironic contrast to its metaphorical relevance to fund raising in response to global crises (Anna Jussilainen, *Bodily Poetics*, 2011). Of relevance in this respect is the psychic numbing associated with other modes (*Starvation Imagery as Humanitarian Trump Card?* 2016).

Tentative tabular array of speech modality correspondences

The future will no doubt recognize some form of cognitive confluence between touching, hearing, listening and speech acts -- beyond the confusing arrays of categories variously presented (potentially such as to exacerbate that confusion). Of particular concern is the manner in which such confusion exacerbates efforts to distinguish misinformation and disinformation with the aid of AI -- currently highlighted as a priority (*Varieties of Fake News and Misrepresentation*, 2019; *Reframing Fundamental Belief as Disinformation?* 2020; *Towards a Science of Misinformation and Deception*, 2021). Especially challenging is the degree of complicity of advertising and political debate in the deliberate use of disinformation.

Variety of speech modalities: The variety of perceived "speech modalities" can be tentatively summarized as follows -- highlighting potential correspondences. The table endeavours to interrelate and confront (a) speech act modalities with other associated modalities, (b) indications of "positive" and "negative" connotations, notably as highlighted from a theological perspective, and (c) modalities from both Western and Eastern frameworks. The latter concern is justified by the arguments of Susantha Goonatilake (*Toward a Global Science: mining civilizational knowledge*, 1999), as discussed separately (*Enhancing the Quality of Knowing through Integration of East-West metaphors*, 2000).

Any juxtaposition of "Word of God" with "Voice of Satan" is of course highly controversial. The justification for any reference to deity is indicated above. Inclusion of that of Satan merits consideration in the light of the extent to which reference is made to it in many contexts -- and associated with recognition of "evil" (*Existence of evil as authoritatively claimed to be an overriding strategic concern*,

2016; *Needing Evil Elsewhere*, 2001). Recognition of "unbelievers" (and the "godless") by any faith remains highly problematic and a trigger for violence. Anticipation of a Messiah or an Anti-Christ are instances of the anticipation of singularity more generally -- including chaotic collapse of civilization (*Emerging Memetic Singularity in the Global Knowledge Society*, 2009).

	modality	significance	"positive" connotation	"negative" connotation
1-fold	"singularity"	unity / integration	"Word of God" *** <i>Book of Ones</i> (Buddhism)	"Voice of Satan" (Devil)
2-fold	"communication"	verbal / direct non-verbal / indirect	<i>Book of Twos</i> (Buddhism)	
3-fold (Austin)	locution	actual communicative act, the utterance (meaning)	"Holy Trinity" ***	"Unholy Trinity" ***
	illocution	performed when the utterance is being spoken (force)	obedience / fruitfulness / dominion *** vigilance / creativity / sustainability ***	blasphemy / obscenity / excreta *** negligence / profligacy / hegemony ***
	perlocution	particular effect that utterance has on the listener	modes of persuasion (ethos, pathos, logos) *** truths of Buddhism (temporary existence, non-substantiality, Middle Way) *** <i>Book of Threes</i> (Buddhism)	fallacies (philosophy, anarchy, rationality) *** cognitive biases
4-fold	informational	question/answer seeking clarification	4 Noble truths of Buddhism (<i>dukkha, samudaya, nirodha, marga</i>)	fallacy of four terms ***
	assertive	assertion/declaration about facts or beliefs		4 fallacies (logical, psychology) ***
	directive	request/command/injunction providing directives.		4 Horsemen of the Apocalypse
	commitment	promise/offer regarding actions in the future.		
5-fold (Searle)	representatives	commit a speaker to the truth of an expressed proposition.	"5 tumarounds" of Earth4All ***	5-fold set of hindrances (<i>Kleshas</i>) of Buddhism (ignorance, attachment, aversion, pride, jealousy) ***
	commissives	commit a speaker to some future action.	5 remedial mental factors of Buddhism (applied thought, sustained thought, rapture, non- sensual pleasure, one- pointedness) *** <i>Book of Fives</i> (Buddhism) *** <i>Fivefold Ministry</i> of Christianity	5 logical fallacies ***
	directives	are used by a speaker who attempts to get the addressee to carry out an action.		5 cognitive biases ***
	declarations	affect an immediate change of affairs.		5 cognitive biases (business)
	expressives	express some sort of psychological state.		
6-fold	("Commissive")	information, capability, sympathy, apology, guarantee, convince	6 principles of persuasion (reciprocity, scarcity, authority, commitment and consistency, liking and consensus) *** <i>Book of Sixes</i> (Buddhism)	6 fallacies (<i>Cognitive and Human Factors in Expert Decision Making</i>) *** 6 cognitive biases (leadership)
7-fold		expressive, directive, commissive, verdictive, phatic, assertive, performative (Kreidler)	7 heavenly virtues (Christianity) *** <i>Book of Sevens</i> (Buddhism)	7 problems of online group learning (antipathy, selection, group-work skills, free-riders, inequalities, withdrawal, assessment) *** 7 fallacies (decision-making, thinking) *** 7 cognitive biases
8-fold		asserting, announcing, informing, questioning, commenting, clarifying, praising, commanding (Yelfiza)	8-fold way (Buddhism, physics, policy analysis) *** 8 Confucian principles (exterior/interior, cold/hot, empty/full, yin/yang) *** <i>Book of Eights</i> (Buddhism) *** <i>Modes of communication of Holy Spirit</i>	<i>Eight Hindrances that Keep Us from Hearing God's Voice</i> *** 8 sources of bias (<i>Cognitive and Human Factors in Expert Decision Making</i>) *** 8 cognitive biases
9-fold	(AI above)	question, answer/injunction, assertion, declaration, request, command, promise, offer, expressive	<i>Book of Nines</i> (Buddhism)	9 fallacies (critical thinking) *** 9 cognitive biases
10-fold	(AI above)	question, answer, injunction, assertion, declaration, request, command, promise, offer, expressive	10 Commandments of Christianity and Judaism	10 hindrances of Buddhism (ego, doubt, attachment, desires, ill- will, craving for form, craving for formlessness, conceit,
		entertaining, informative, demonstrative,		

	("Speeches")	persuasive, motivational, impromptu, oratorical, debate, forensic, special occasion	*** <i>Book of Tens</i> (Buddhism)	restlessness, ignorance) *** 10 cognitive biases
12-fold	illocutionary act (Searle)	illocutionary point, direction of 'fit', expressed psychological state, force, social status, interest, discourse-related functions, content, speech acts or speech act verbs, social institutions and speech acts, speech acts and performatives, style	<i>Checklist of 12-fold Principles, Plans, Symbols and Concepts</i>	12 <i>Common Logical Fallacies</i> (Work/Money) *** 12 <i>Logical Fallacies</i> (Masterclass) *** 12 cognitive biases (Masterclass)
	"representative" (Orin)	asserting, arguing, informing, claiming, predicting, suggesting, stating, criticizing, rebutting, reminding, admitting, complaining.		
	expressive (Searle)	apologize, thank, condole, congratulate, complain, lament, protest, deplore, boast, compliment, greet, and welcome.		
13-fold	("Speeches")	informative, entertaining, demonstrative, persuasive, oratorical, debate, special occasion, pitch, motivational, impromptu, farewell, explanatory, eulogy (<i>Indeed</i>)		
14-fold	"assertives" (Perdana)	asserting, arguing, informing, claiming, predicting, suggesting, stating, criticizing, rebutting, reminding, admitting, complaining, disclaiming, reporting	<i>Pattern of 14-foldness as an Implicit Organizing Principle for Governance</i>	14 fallacies (logical) *** 14 fallacies (analysis) *** 14 fallacies (senses)
15-fold	"challenges"		<i>The Millennium Project</i>	15 global challenges
16-fold	logical connectives ("truth table")	contradiction, logical NOR, converse nonimplication, negation, material nonimplication, negation, exclusive disjunction, logical NAND, logical conjunction, logical biconditional, projection function, material implication, projection function, converse implication, logical disjunction, tautology	<i>Eliciting Potential Patterns of Governance from 16 Sustainable Development Goals</i>	16 fallacies (logical) *** 16 critical cognitive biases
18-fold	rules of propositional logic (inference, substitution, equivalence)		Irving M. Copi and Carl Cohen (<i>Introduction to Logic</i> , 2001, p. 361) *** Christopher Dwyer (<i>18 Common Logical Fallacies and Persuasion Techniques</i> , <i>Psychology Today</i> , 2017)	18 rules of propositional logic *** 18 logical relationships *** 18 fallacies
20-fold	"figures of speech" (Yamasaki)	alliteration, antithesis, apostrophe, circumlocution, epigram, euphemism, hyperbole, irony, litotes, metaphor, metonymy, onomatopoeia, oxymoron, paradox, personification, pleonasm, pun, simile, synecdoche, understatement	<i>Indicative examples of the recognized significance of 20-fold patterning</i>	20 fallacies (logical) *** 20 cognitive biases (decision-making) *** 20 secondary hindrances (Buddhism)
30-fold	"human rights"		<i>Universal Declaration of Human Rights</i>	30 human rights

An immediate concern is the extent to which lists are formed arbitrarily, most notably for convenience as succinct examples, with little implication for their significance or systemic completeness.

The number of categories distinguished in the lists above immediately suggests potential correspondences between them, as a consequence of some form of functional polarization. Thus a 4-fold list could be understood as a functional clustering of an 8-fold list, a 7-fold of a 14-fold, an 8-fold of a 16-fold, a 9-fold of an 18-fold, a 10-fold of a 20-fold, a 15-fold of a 30-fold.

Far more controversial is any potential correspondence between distinguished sets of the same size, especially when the items listed relate to seemingly incommensurable domains. The issue has been addressed separately (*Representation, Comprehension and Communication of Sets: the Role of Number*, 1978; *Patterns of N-foldness: Comparison of integrated multi-set concept schemes as forms of presentation*, 1980). The suggestion here is that sets of increasing size correspond to increasing degrees of reification, potentially to be recognized as increasing degrees of misplaced concreteness. There is then a challenge to clarify in systemic terms any correspondence between the functions distinguished -- thereby refining the distinctions made.

Confusion sustained by unclarified patterns: The purpose of the table is to note possible pattern correspondences, whether between disciplines, cultures, or strategic focus. It is striking that an unexpected degree of unexplained confusion is evident -- with seemingly little effort to address what may be fundamental to effective global discourse in various domains. Especially striking are the distinctions emerging from logic and the questionable success of *metalogue* in addressing them -- even though it might be assumed that these would be fundamental to the operation of the AI large language models on which it is expected that future governance will be increasingly dependent.

It could be argued that, just as George Miller (1956) identified the widely-cited "7 plus or minus 2" "*limits on our capacity for processing information*" (noted above), there are related cognitive constraints in the clustering of categories -- seemingly as yet to be explored.

Setting aside issues associated with the theological preferences of different religions affecting interfaith dialogue, it is the distinctive

clustering from a logical perspective which call for comment as exemplifying the challenge to comprehension -- namely "16 plus or minus 2", (or 3?):

- 14 assertives
- 16 logical connectives (reduced to 14 by exclusion of tautologous and contradictory connectives)
- 18 (19) [rules of classical propositional logic](#) (Copi)
- 18 [logical relationships](#) (as presented by the [Arcing method for Bible study](#), seemingly unique in its effort to render comprehensible what is otherwise articulated in relatively inaccessible logical symbolism)
- 18 logical fallacies
- 19 rules of propositional logic / rules of equivalence (reduced to 18 by exclusion of a tautologous rule)

A list of 14 [formal systems](#) is presented by [Wikipedia](#) as a complement to its discussion of [formal systems](#). A clarification originally proposed by David Hilbert is presented as an un-numbered [List of Hilbert systems](#), noted as containing a list of sample [Hilbert-style deductive systems](#) for [propositional logics](#). Also noted there is that this initiative was "eventually tempered by [Gödel's incompleteness theorems](#)", as emphasized in references to the coherence of rules of inference and logic (Yong Cheng, [Current Research on Gödel's Incompleteness Theorems](#), *Bulletin of Symbolic Logic*, 27, 2021, 2).

Of relevance to differences in the above clusters is the comment in [Wikipedia](#) relating to the Hilbert-style listing:

Classical propositional calculus is the standard propositional logic. Its intended semantics is bivalent and its main property is that it is strongly complete, otherwise said that whenever a formula semantically follows from a set of premises, it also follows from that set syntactically. Many different equivalent complete axiom systems have been formulated. They differ in the choice of basic connectives used, which in all cases have to be functionally complete (i.e. able to express by composition all n-ary truth tables), and in the exact complete choice of axioms over the chosen basis of connectives.

Of particular relevance is the manner in which it is asserted that the pattern of 16 logical connectives (which are a feature of truth tables) can be reduced to 14, notably to facilitate their representation on polyhedra ([Questionable confusion in configuring strategic frameworks: "fudging" self-reflexivity?](#) 2019). Similarly presentation of the 18 rules of inference for propositional logic may exclude a 19th rule which featured in the original articulation by [Irving Copi](#) (*Introduction to Logic*, 1970). Such exclusions are justified in terms of tautology or contradiction. The relation between the "logical connectives" and the "rules of inference" is not a focus of particular attention -- nor their relation to "logical fallacies".

Given their fundamental implications for AI operation, a comment was sought from ChatGPT on the apparent lack of coherence between these systems. In a period of global crisis, characterized by the quest for new paradigms, the response could be considered evasive to a problematic degree:

The lack of a universal numbering or clear categorization of these systems can indeed make the field appear complex. This complexity is often due to the flexibility of logical systems, the evolving nature of the field, and the fact that different logicians may prioritize different aspects of logical systems. Given these challenges, it can be helpful to approach logic with a focus on specific goals. For example, if the goal is to understand classical propositional logic, one might concentrate on the standard axioms and rules. If exploring other cultural logics, it's crucial to delve into the specific principles and assumptions of those systems.

Strategic incoherence: This apparent confusion has been discussed in endeavouring to explain the systemic justification for the UN's 17 Sustainable Development Goals -- of which the 17th is framed as their integration ([Systemic Coherence of the UN's 17 SDGs as a Global Dream -- rather than merely an arbitrary outcome of political horse-trading](#), 2021; [Eliciting Potential Patterns of Governance from 16 Sustainable Development Goals](#), 2022).

Particularly regrettable with respect to coherent global governance is the failure to address the confusion between contrasting articulations "by experts" of 14, 15, 16, or 17 global challenges -- with questionable claims made for the coherence of each such set.

The formulation of such lists, including the SDGs, could indeed be deprecated as arbitrary "laundry lists" evoking little concern regarding their systemic coherence. This confusion is also relevant to current global preoccupation with detection of misinformation -- given the corresponding lack of clarity on the array of logical fallacies. The confusion is exacerbated by the presentation of lists of "common" logical propositions or fallacies as subsets of a more comprehensive array -- purportedly held to be "complete". Missing is any sense in which the patterning constraints may derive from cognitive analogues to what are recognized as "[islands of stability](#)" in nuclear physics as a result of atomic "shell closure".

Dynamic interweaving of speech modalities: With respect to whether one is "touched" when "spoken to", of particular relevance is how speech modalities are woven together dynamically in discourse -- by one person or within a group. The question is of special importance to the process of engaging interest in the UN's Sustainable Development Goals. It is also the case that it is the dynamic interweaving of disinformation which could be understood as an articulation of the "Voice of Satan" -- an expression of "evil" -- requiring skillful vigilance.

With the works of Shakespeare exemplifying the capacity of "speaking to", it is understandable that Speech Act Theory has been used as a valuable method for Shakespearean textual analysis. It is in this sense that there is a case for exploring how speech acts are recognized as featuring in the iconic productions of Shakespeare -- being only too obviously of an appeal far greater than the UN's SDGs:

- Matthew C. Hansen: [Ritual speech acts and the Shakespearean stage](#) (ETD collection for University of Nebraska - Lincoln. AAI3163988, 2005)

- D. Schalkwyk: *The Performative Power of Shakespeare's Language* (*The Cambridge Companion to Shakespeare's Language*, 2019)
- Aris Hidayatulloh: *The Speech Act (The Theory and Analysis) as Found in William Shakespere's works* (The State Islamic Institute of Surakarta, 2014)
- Roderick Hugh McKeown: *Performative Language and Social Status in Shakespeare's Plays* (University of Toronto, 2013)

In the face of crises of global governance, exemplified by the challenge of Ukraine, climate change, resource constraints, and environmental degradation, it can then be asked how remedial strategic proposals are framed in the light of a dynamic pattern of speech acts. Given the challenge to coherent comprehension (exemplified by the tabular array above), to whom do such responses "speak", and how is the failure to be "touched" then understood?

The United Nations now envisages a [Summit of the Future](#) planned for 2024 -- in the light of the UN Secretary-General's vision for the future of global cooperation in the form of a report titled *Our Common Agenda* (2021). Could the Summit's quest for a unifying "answer" be challenged as a speech act failing to identify an appropriately "deadly question" capable of reframing current discourse modalities, as argued separately (*World Futures Conference as Catastrophic Question*, 2013)?

The UN's own assessment of implementation of the SDGs is relatively damning (*Sustainable Development Report 2023: Implementing the SDG Stimulus*, 21 June 2023):

- At the half-way point toward 2030 the SDGs are far off track. Of 36 targets reviewed in the report, only 2 are on track to be achieved, while progress on eight is deteriorating. Implementation was too slow, and even regressing in some areas
- The grim reality is that at the midpoint of the 2030 Agenda, the SDGs are far off track. At the global level, averaging across countries, not a single SDG is currently projected to be met by 2030, with the poorest countries struggling the most.
- Unless we act now, the 2030 Agenda will become an epitaph for a world that might have been (António Guterres)

Do the failures to date of the UN's SDGs evoke expletives behind the scenes -- whether obscene or otherwise? And the failures of the future? Especially intriguing is the possibility that **each SDG is configured such as to avoid consideration of a question associated with the root cause of the issue it purports to address**, as speculatively explored separately (*Lipoproblems: Developing a Strategy Omitting a Key Problem*, 2009).

Complementing "speech acts" with "aesthetic acts"? The challenges of governance can be understood as primarily, if not exclusively, addressed through use of "speech acts", as separately discussed (*A Singable Earth Charter, EU Constitution or Global Ethic?* 2006). Arguably the frustration with failures in the desperate quest for coherence might be understood through the "aesthetic use" of expletives. From a design perspective, there is therefore a case for exploring "aesthetic acts" as an essential complement to "speech acts".

Extensive use is made of 14-fold organization, as noted separately (*Pattern of 14-foldness as an Implicit Organizing Principle for Governance?* 2021). As a speculative exercise, this suggested a comparison between the 14-fold organization of Shakespearean sonnets -- an aesthetic exemplar -- and a pattern of 14 logical connectives, as reproduced below (*Elaboration of strategic sonnets as memorable 14-fold modes of aesthetic presentation*, 2023).

Tentative comparison of mapping exercises of logical connectives and sonnet lines			
3D visualization of 14 logical connectives (of 16) (combining printed images by Demey and Smessaert)		Arbitrary attribution of the 14 lines of Shakespeare's <i>Sonnet 18</i> to the 14 faces of a cuboctahedron	
Mapped onto cuboctahedron (12 vertices, 14 faces -- faces solid)	Mapped onto rhombic dodecahedron (14 vertices, 12 faces -- faces transparent)	Simple rotation	Animation of (un)folding
Animations prepared using <i>Stella4D</i>			

As noted with respect to the quest for connectivity -- as the point of departure of this argument -- [Ancuta Mortu](#) notes:

As early as 1930, John Dewey [*Art As Experience*, 1934, pp. 9-11] already proposed that one should take ordinary life as a point of departure if we are to seek to understand the roots of aesthetic appreciation. Here is a significant quote: "a primary task is imposed [...] to restore continuity between the refined and intensified forms of experience that are works of art and the everyday events, doings and sufferings that are universally recognized to constitute experience" [Dewey, 1934, pp. 2-3]. Dewey sought therefore to restore the continuity between aesthetic experience and ordinary processes of existence. (*Aesthetic Acts. From Distance to Engagement* (*Everydayness: Contemporary Aesthetic Approaches*, 2021, ch. 17)

Separately Mortu considers *Ways of Perceiving and Mapping our Inner World through Art* (*Phenomenology and Mind*, 2018, 14) and

Aleksander Kiklewicz treats aesthetic speech acts as stimulating ones, contrasting with representative and determinative acts:

A characteristic feature of stimulating speech acts is their persuasive nature, i.e. such a language action that induces the addressee to experience emotions, but does not influence them in a volitional way. Therefore, the realization of aesthetic speech acts, in comparison with other acts, is specific... (*Aesthetic Speech Acts: their pragmatic status, function, and realization*, SSRN, 2 Sep 2023)

Enabling connectivity via speculative patterning of "speech modalities"?

It is curious to discover how little concern there is with the possibility of eliciting coherence from the jumble of unrelated lists in the table above. Is this to be considered unworthy of an advanced civilization?

The lack of coherent visual representation was used as a prompt to ChatGPT, which responded:

The reasons for the absence of a widely recognized non-linear network representation of human rights principles could be diverse... Human rights principles are highly contextual, and their interplay can be complex and dependent on various factors. Capturing this complexity in a visual representation might be challenging, and scholars may prefer detailed textual analyses or specific case studies... Human rights involve aspects of law, philosophy, political science, sociology, and more. Developing a visual representation that adequately captures the interdisciplinary nature of human rights can be complex... Different stakeholders may prioritize different rights or principles based on their perspectives and priorities. This lack of consensus could make it difficult to create a universally accepted visual representation.

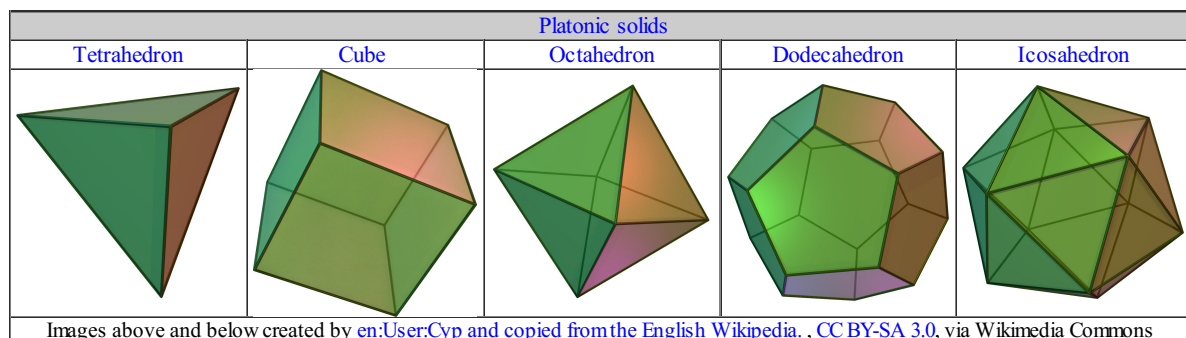
Given the fundamental cognitive patterns of which the listed modalities are purportedly indicative, the elusive relations within sets (and between them) suggests that they might even be fruitfully explored in periodic terms -- if only for mnemonic purposes (*Periodic Pattern of Human Knowing: implication of the Periodic Table as metaphor of elementary order*, 2009). In contrast to cognitive modalities, the challenge with respect to the elements continues to be addressed (Denis H. Rouvray and R. Bruce King, *The Mathematics of the Periodic Table*, Nova Science Publishers, 2005).

Polyhedral configuration of meaning? It is curious to recognize that in a technology-enabled knowledge-based civilization -- claimed to be relatively advanced -- there is so much confusion with regard to the meaningful organization of discourse. The questionable implications of the table above are an indication of this. So many distinctions are presented as simple lists with no quest for higher order.

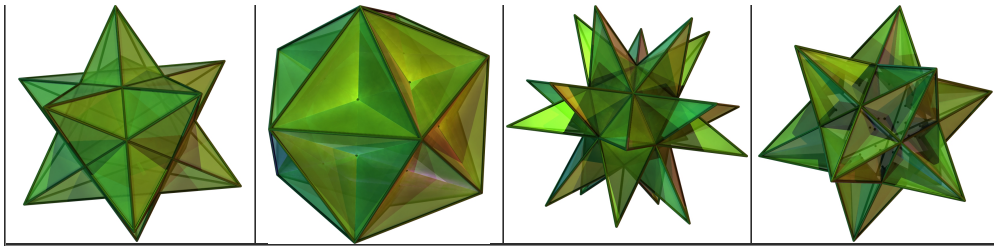
The exception is the polyhedral organization of the 16 **logical connectives**. This is a feature of the logic of opposition and makes use of polyhedra such as the **rhombic dodecahedron** -- dual of the **cubeoctahedron**, notably renowned for its **kinematics** (*Oppositional Logic as Comprehensible Key to Sustainable Democracy*, 2018). Strangely again, in a world bedevilled by "opposition", there is a little trace of application of such insights to speech modalities. Also noteworthy is the initiative of Stafford Beer, in terms of management cybernetics, in exploring configurations of 30 perspectives using the geometry of an icoahedron (*Beyond Dispute: the invention of team syntegeity*, 1994). The initiative was an inspiration for the configuration of global strategic issues on the occasion of the 1992 Earth Summit (*Configuring Globally and Contending Locally*, 1992).

It could be tentatively assumed, for speculative and mnemonic purposes, that the set of common regular polyhedra offers indications of a means of organizing speech modalities most succinctly to enable a higher order of comprehension of their coherence. Beyond the checklist, has humanity engendered other patterns indicative of the coherence of potential relevance to speech modalities? One possibility, otherwise understood, is the array of interconnected myths and folktales of a given culture, notably about deities (*Educational fables for faith-based global governance*, 2006).

Could the distinctive sets of regular polyhedra (as shown below) be "read" and "experienced" differently, as indicative of the cognitive organization of speech modalities -- and the strategies with which they are potentially associated? (*Identifying Polyhedra Enabling Memorable Strategic Mapping*, 2020). Buckminster Fuller has argued that **polyhedra are systems**, and that systems are organized polyhedrally. As systems they then call for recognition in dynamic terms and through the manner in which they can be transformed into one another.



Kepler–Poinot polyhedra			
Small stellated dodecahedron	Great dodecahedron	Great stellated dodecahedron	Great icosahedron



Cognitive embodiment: The possibility that such polyhedra might be read differently is argued separately with respect to memorable navigation of viable global pathways from 4-fold to 64-fold and beyond (*Cognitive Embodiment of Patterns of Governance of Higher Order*, 2022; *Cognitive Embodiment of Nature "Re-cognized" Systemically*, 2018). Expressed most succinctly, the features of these polyhedra invite mapping of the distinctions made in lists of speech modalities and any corresponding strategic initiatives (*Cognitive Navigation of the Elements as Indicative Strategic Metaphors*, 2023).

However, as stressed above, it is the cognitive implication which requires "re-cognition" rather than conventional understandings of mapping. Such implication is explored to a degree as **psycho geography** (Siobhan Lyons, *Psycho geography: a way to delve into the soul of a city*, *The Conversation*, 19 June 2017; Jeffrey S. Smith, et al, *Cognitive Mapping as a Method to Assess Peoples' attachment to Place*, *Geographical Review*, 112, 1; Sebastian Meier, et al, *Psycho geography in the Age of the Quantified Self: mental map modelling with georeferenced personal activity data*, *Advances in Cartography and GIScience*, 2017).

Those discussions refer to studies from a cognitive psychological perspective by **George Lakoff** with **Rafael E. Núñez** are especially relevant to polyhedral configuration (*Where Mathematics Comes From: how the embodied mind brings mathematics into being*, 2000). A reinforcement of this argument is offered by research on the manner in which the human brain organizes information, as discussed separately (*Implication of 3D representation of a global brain*, 2019). With respect to any "polyhedral" organization, there it was noted that the results of recent neuroscience research indicate the remarkable possibility of cognitive processes taking even up to 11-dimensional form in the light of emergent neuronal connectivity in the human brain:

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... 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)

The sense of cognitive implication can be variously discussed:

- *Experience of Cognitive Implication in Fundamental Geometry* (2012)
- *Cognitive Implications in 3D of Triadic Symbols Valued in 2D* (2017)
- *Risk-enhancing Cognitive Implications of the Basic Mathematical Operations* (2013)
- *Cognitive Implication of Globality via Temporal Inversion* (2018)

Given the obvious difference in language and terminology in the sets of distinctions presented above, it would appear that any re-reading calls for re-cognition of underlying systemic relationships -- as originally argued by the Society for General Systems Research. The explicit nature of the distinctions is misleading in avoiding sensitivity to the degree of cognitive reification inhibiting re-cognition of what is implied.

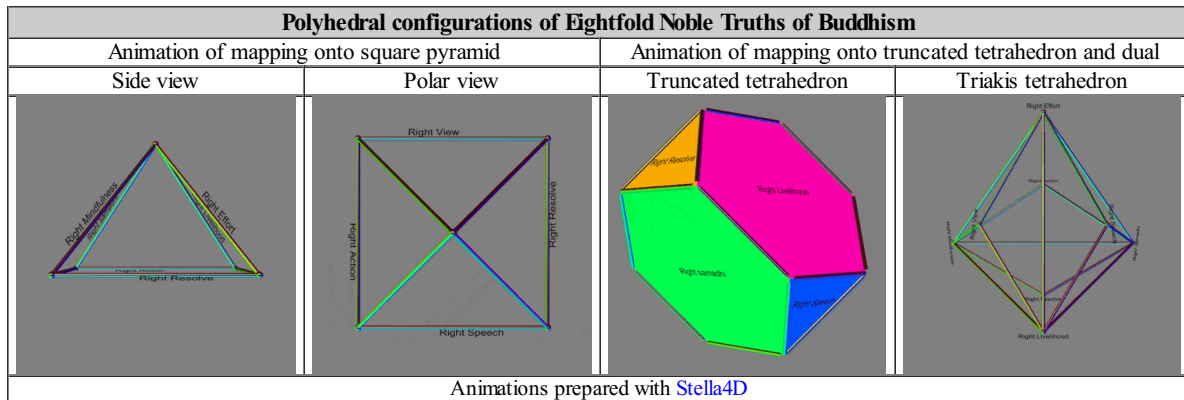
Tentative illustrations: From the simplest perspective, although possibly the most elusive, a useful challenge is the exploration of ways in which a "trinity" of configurations might be suggestively organized. Using the simplest polyhedron exemplifying triadic organization, the question is whether other "readings" of that configuration dynamic can be implied. In the animations on the left, three of the linear edges are used as the diameters of circles -- suggesting a cyclic dynamic.

With the implication of a corresponding (complementary) "negative" configuration, the tetrahedral array is doubled in the animations on the right. Light and darker colourings are given to the circles to suggest that distinction. The animations are clumsy as presented; more elegant variants can be explored interactively in 3D.

Animation of tetrahedral arrays of cycles			
Tetrahedral array of cycles ("positive" only)		Double tetrahedral array of cycles ("positive" and "negative")	
Polar view	Side view	Polar view	Side view

Fundamental importance is variously associated with 8-fold configurations, potentially to be recognized systemically as speech modalities. Examples include various "eightfold ways" ([Noble Truths of Buddhism](#), [particle-physics theory](#), [policy analysis](#)), the [Eight Beatitudes](#) (of the Sermon on the Mount of Christianity), and the [Khatim](#) (or Seal of the Prophet in Islam).

It is therefore somewhat curiously appropriate that such configurations lend themselves to association with the [square pyramid](#) (below left) so evident in the architecture of various civilizations. Alternative patterns of systemic relationships are shown below in relation to the 18-edged [truncated tetrahedron](#) -- whether perceived in terms of its 8 faces or the vertices of its dual, the [triakis tetrahedron](#).



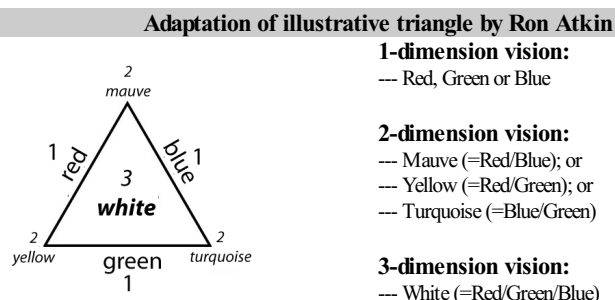
Recognizing the "other disconnect" -- enabled by disciplinary bias

The focus of this argument is on the acknowledged disconnect from nature (as noted above). Arguably this is enabled by a cognitive bias of an array of disciplines. These could be understood as reinforcing another "disconnect", namely avoidance of any cognitive implication of their rich articulation of categories and methods. The references above to cognitive embodiment endeavour to "re-cognize" the issue.

This disconnect can be understood as implied to a degree in criticism of science as sliding into [scientism](#), with principles increasingly determined by politics and commercial pressures (*Challenges of Science Upheld as an Exclusive Mode of Inquiry: pseudorelevance of science to global crises?* 2011; *End of Science: the death knell as sounded by the Royal Society*, 2008).

The disconnect could be recognized as a feature addressed by [Science 2.0](#) and by the [Galileo Commission Report](#) (*Beyond a Materialist Worldview: toward an expanded science*, 2023) of the [Scientific and Medical Network](#). It can be understood as implied to a degree by the study of Rachael Scarborough King and Seth Rudy (*The Ends of Knowledge: outcomes and endpoints across the arts and sciences*, 2023).

Modelling the comprehension challenge: The perceptual significance of this approach is well-illustrated by visual sensitivity to colours resulting from the three primary hues (red, green and blue). These may be represented on a simple triangle, as originally presented by Ronald Atkin in his discussion of simplicial complexes through [Q-analysis](#) (*Multidimensional Man: can man live in 3-dimensional space?* 1981). In the adaptation below the sides (1-simplexes) represent the primary hues, the vertices are twofold combinations (2-simplexes), and the combination of the three hues makes the central white (3-simplex).



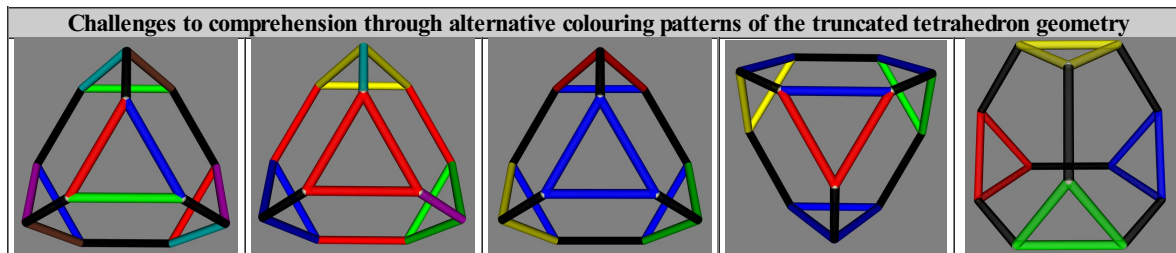
Now to be able to see all the colours, including white, comprehension needs to have the ability to function within the triangle as 3-dimensional "traffic" on that geometry, moving from location to location adjusting to the complexity of the geometrical structure which carries the visual traffic. If the person's vision is 2-dimensional, then white could not be perceived because the visual traffic of seeing is restricted to the edges and vertices only.

If the person's colour vision is 1-dimensional, then it is restricted to the vertices. It can only see one vertex colour at a time and never a combination (as represented by an edge). If vision was 3-dimensional, it would allow traffic throughout the geometry, but would perceive other colours as well, calling for a fourth vertex (forming a tetrahedron) in order to contain the full range of combinations. Atkin's original variant is discussed separately ([Comprehension: social organization determined by incommunicability of insights](#)).

If the geometry represents speech modalities (or problems or concepts) instead of colours, then it would be expected that some people, in relation to that set, would have 1-dimensional comprehension (i.e. sensitive to isolated primary modality only). For 1-dimensional traffic, the underlying modality does not exist, since experience is disconnected. Generally speaking it seems that action (of whatever

kind) in the community can be seen as traffic in the abstract geometry. This traffic must naturally avoid the holes (because it is impossible for any such action to exist in a hole). The holes therefore appear strangely as objects in the structure, as far as the traffic is concerned. The difference is a logical one in that the word "q-hole" describes a static feature of the geometry, whilst the word "q-object" describes the experience of that hole by traffic which moves in that geometry.

In the adaptation below, the three edges of one side of the truncated tetrahedron can be coloured red-green-blue. Other variants are possible to illustrate the challenge of higher-dimensional comprehension (as discussed by Atkin).



Atkin notes that even though the geometry may not have been rendered explicit, such structures generate the feeling throughout a community of some "power behind the scenes" acting to outwit the formal structure. The special value of q-analysis is that it can clarify why action/discussion in connection with (development) problems tends to be "circular" in the long-term, however energetic it may appear in the short-term. As such it shows how **social change is blocked by the way in which conceptual traffic patterns itself around any core problem**, which is never confronted as such because the connectivity pattern is inadequate to the dimensionality of the problem.

This would explain why so many problems go unresolved and why **the process of "solving" problems becomes institutionally of greater importance than the actual "elimination" of the problem.**

Mnemonic framing metaphors (containers, knots, precious stones): Polyhedral configurations are one example of metaphors indicative of cognitive organization. They offer a well-articulated language through which speech modality distinctions could be explored as configurations fundamental to the inference of coherence of greater subtlety -- without defining it or reifying it inappropriately. Their mnemonic function potentially recalls that of the [method of loci](#) described by [Frances Yates](#) with respect to memory palaces, memory gardens, and the like (*The Art of Memory*, 1966).

Any 8-fold pattern, exemplified by the various "eightfold ways" can be mapped onto the faces of a truncated tetrahedron as shown above. However it is one thing to be able to acknowledge the "ways" as modalities from different perspectives, as suggested by the animation above. It is another matter to be able to integrate them as an eightfold insight -- however that is to be understood. This can be suggested by a "hidden" space, internal to the truncated tetrahedron, framed by rectangles between 6 parallels together forming a cube -- as illustrated by the animations below.

Contrasting approaches to framing a "safe place" for humanity		
Truncated tetrahedron as a possible container for a cognitive "safe place" (framed by 6 internal rectangles between 2x6 parallels of 18 edges)		2D Schematic of planetary boundaries framing a "safe place" for humanity
Animation of outline of internal rectangles	Animation of internal rectangles	
<p>Interactive 3D version (enabling the inner chamber to be "visited") [NB: Imperfections in the model are due to unfamiliarity with the software which could be used to enable far more insightful interaction]</p>		<p>Richardson, K., et al, CC BY-SA 4.0, via Wikimedia Commons</p>

Learning pathways: Other metaphors of cognitive "holding patterns" include carpet designs, knots and faceted precious stones (*Magic Carpets as Psychoactive Systems Diagrams*, 2010; *Cyclic Representation of Coherence as Knots and Otherwise*, 2022; *Gemstones as an accessible metaphoric exemplar of the dynamics of coherence*, 2002). These variously offer a complementary sense of learning cycles and pathways around an elusive central focus -- potentially to be understood as a complement to the archetypal challenge of the Gordian Knot.

As such the pathways could be understood as cognitive analogues to [metabolic pathways](#) -- thereby recalling the many efforts to present a comprehensive metabolic map of the processes by which life is sustained (*In quest of metabolic pathways of global governance?* 2020). In a period in which depression is recognized as a major social problem, missing is a sense of the "pathways" by which psychosocial life is viably sustained.

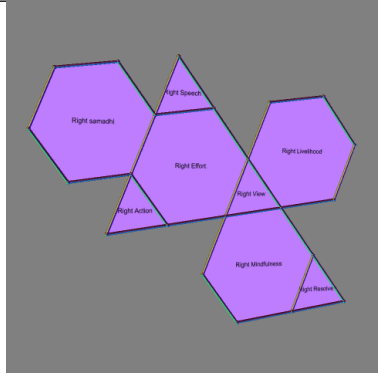
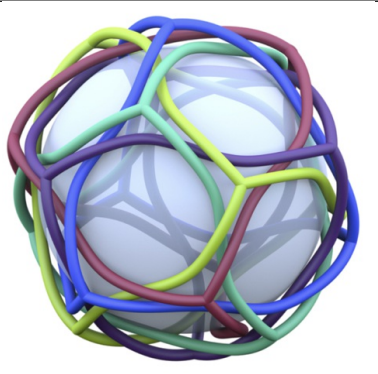
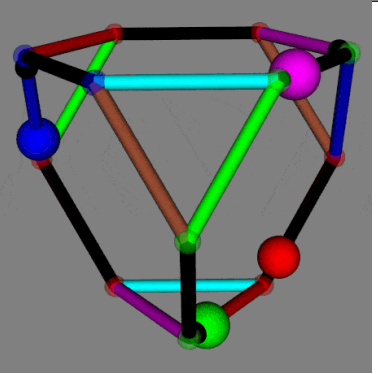
The cognitive focus of this argument, with its challenge to systemic comprehension of "modalities", can be contrasted with the current "non-cognitive" focus on 9 "planetary boundaries" featuring in the UN's *Sustainable Development Report 2023: Implementing the SDG Stimulus* (21 June 2023). This derives from the report of the Stockholm Resilience Centre (Johan Rockström, et al, *A safe operating space for humanity*, *Nature*. 461, 2009, 7263).

Avoiding the cognitive implications, the "space" is conventionally presented diagrammatically in 2D, as shown in the recently updated image above right (Katherine Richardson, et al, *Earth beyond six of nine planetary boundaries*, *Science Advances*, 9, 2023, 37). Arguably the 2D presentation can be recognized as reinforcing what could be deprecated as "flat earth thinking". The 3D alternative also offers a mnemonic indication of the possibility of entrapment in "silo thinking" associated with travelling the conceptual geometry through the cylindrical edges -- a "tunnel vision" perspective inhibiting recognition of the configuration as a whole (as suggested by Atkin).

The case for a complementary "cognitive" approach to the "non-cognitive" conventional strategic approach -- seemingly less than "fit for purpose" -- is argued separately (*Recognizing the Psychosocial Boundaries of Remedial Action*, 2009). Coincidentally the animation above frames what might be understood as 6 cognitive boundaries to a "safe space", with a further 3 boundaries potentially framed by other "external" parallels across the truncated tetrahedron.

The animation below left offers one suggestion of the relation between a "flat earth" approach and one that is inherently "global". The 18 edges can be understood as learning pathways of a map whose 18-fold integration is indicated by the folded global form. As an example, the faces are labelled with the Eightfold Truths of Buddhism (in contrast to the UN's 8-fold Millennium Development Goals as a possible alternative). The central image offers an illustration of how edge pathway processes call for recognition as non-linear and entangled, as remarkably presented by Myfanwy E. Evans, et al (*Symmetric tangled Platonic polyhedra*, *PNAS*, 119, 2022, 1).

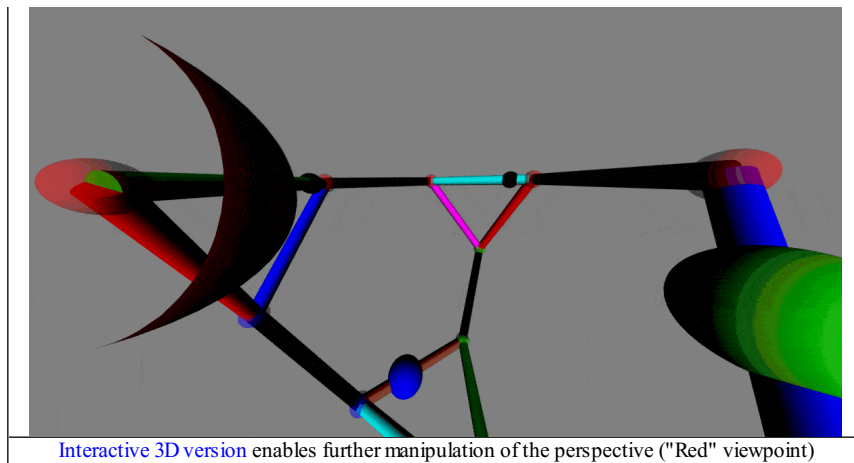
The interlocking points of the cycles implies suggests moments of dilemma at which a choice is made to repeat the same cycle or switch to another. From a cognitive perspective, the polyhedral framework is then effectively a labyrinth in the absence of a coherent "global" perspective.

Indicative presentations of cognitive pathways implying an elusive central focus of coherence		
Folding of truncated tetrahedral net	Entangled representation of pathways (using a dodecahedron)	Animation of balls along pathways around truncated tetrahedron
		
Animation prepared with Stella4D	Reproduced from Evans, et al (<i>Symmetric tangled Platonic polyhedra</i> , <i>PNAS</i> , 119, 2022, 1).	Interactive 3D version

The animation on the right above offers a sense of the shifting cognitive perspectives whose dynamics together imply a focus of coherence -- whilst exemplifying the "flat earth" understanding of each side, experienced separately in isolation. The animation could be developed in a variety of ways with respect to colour coding, relative rates of movement, transition from one "planar" pathway to another, and the like. An interactive 3D variant could offer the possibility of experiencing the dynamics of a perspective constrained to the "tunnel" of a given pathway.

A related approach, suggested by the animation below, indicates how a distorted perspective of the animation (above right) might be held from a single vertex -- presumably indicative of a reality for many, if not most. This offers a view of some cyclic pathways in their entirety, whilst only implying the cyclic nature of others. The red sphere cycles through the red spheres forming one side of the configuration -- one of which is the perspective from which the configuration is viewed. The distorted perspective may be further manipulated in the interactive 3D version.

Animation suggesting distorted partial cyclic perspective from a single vertex of truncated tetrahedron



Interactive 3D version enables further manipulation of the perspective ("Red" viewpoint)

There is a degree of irony to the relevance of the simpler square pyramid (illustrated above) as a means of mapping any set of 8-fold cognitive constraints (onto the 8 edges), given its architectural value to many traditional cultures. The irony is all the greater in the light of the discovery of secret chambers hidden within such structures, assumed to have been accessible only to elites. The elites of today are of course actively in quest of secret places -- "safe operating places for humanity" as they understand it. It is of course the case that the 5-sided square pyramid suggests its use for mapping the "5-turnarounds" envisaged by the [Earth4All](#) initiative of the Club of Rome, together with its 6 "economic transformations".

The systemically unexplained transition from the UN's 8-fold set of [Millennium Development Goals](#) to its 16 (+1) Sustainable Development Goals invites explanation in terms of the dynamics of the cognitive geometry enabling such a reconfiguration. The 8-fold pattern can indeed be held coherently by the truncated tetrahedron. The confusion noted above with respect to "16 plus or minus 2", invites systemic exploration of the SDGs as a 14-fold or 18-fold pattern -- despite the possibility of their representation ([Eliciting Potential Patterns of Governance from 16 Sustainable Development Goals](#), 2022).

One such approach explored the potential of a 16-fold toroidal configuration using the so-called [simplest torus](#) ([Framing an operating context of 16 "dimensions"](#), 2019; [Functional dynamics of a 16-fold configuration of strategic goals](#), 2019). Combining the two in geometrical terms, another exercise made use of the toroidal drilled truncated cube ([Implicate order through hypercube and drilled truncated cube?](#) 2022; [Polyhedral representation of Sustainable Development Goals including "Own Goals"?](#) 2022).

Existential remembrance via a tetrahedral "cognitive keystone"?

The 8-faced truncated tetrahedron plays a central role in the organization of the 12 other [Archimedean polyhedra](#), as presented by [Keith Critchlow](#) ([Order in Space: a design source book](#), 1969) and further discussed by Robert C. Meurant, with a twofold extension of the order to include the regular and semi-regular tilings of the planar surface ([A New Order in Space: Platonic and Archimedean Polyhedra and Tilings](#), *International Journal of Space Structures*. 6, 1991, 1). The 13 (or 15) polyhedra are distinguished from others in that all their vertices lie on the surface of a surrounding sphere (as with the 5 Platonic polyhedra) -- thereby suggesting a degree of global relevance.

With respect to the ambiguity of "16 plus or minus 2", a valuable insight is the fact that the Archimedean polyhedra can be understood as numbering 15, if the two chiral "twins" of the snub cube and snub dodecahedron are considered distinctive as an instance of [chiral polytopes](#) (mirror images or enantiomorphs). Together with the Platonic polyhedra they then number 18 (or 20). Critchlow illustrates the keystone role in the image below left, as discussed separately with an interactive 3D version reproduced below ([Packing and unpacking of 12 semi-regular Archimedean polyhedra](#), 2015).

The six immediately surrounding the truncated tetrahedron are formed by truncations of the octahedron. The outer six are formed from the truncations of the icosahedron. The 12 are presented as a "closest packing" configuration forming a cuboctahedron as clarified in the 3D rotation around the truncated tetrahedron -- with each of the 12 on one of the 12 axes unique to the truncated tetrahedron as degrees of freedom. This offers indications for both the unexplained preference for 12-fold strategic organization and its operational implications ([Checklist of 12-fold Principles, Plans, Symbols and Concepts](#), 2011; [Eliciting a 12-fold Pattern of Generic Operational Insights](#), 2011).

Indications of role of truncated tetrahedron as cognitive keystone		
Interrelating 12 semi-regular polyhedra (presented on right as a rotating cuboctahedral array, omitting the truncated tetrahedron at centre)	Distinctive "route maps" between spherically symmetrical polyhedra	Animation augmenting / excavating selected faces

Coherent organization of individual or collective memory -- memorability -- merits particular attention with respect to closest packing. Unfortunately this is now primarily explored with respect to computer memory efficiency (*Higher dimensionality, polyhedral packing and transformation*, 2019).

Given the systemically problematic efforts to integrate strategies with respect to the physical characteristics of the environment, as with the various UN sets of goals, there is a case for revisiting Plato's recognition of the 5 Platonic polyhedra as archetypal forms: cube (earth), octahedron (air), tetrahedron (fire), icosahedron (water), and dodecahedron (universe) (*Cognitive Navigation of the Elements as Indicative Strategic Metaphors*, 2023).

The pattern recalls the importance attached to the 5-sided square pyramid and its potential significance for the "5 turnarounds" of the Earth4All strategic initiative (as noted above). The "5 turnarounds" of Earth4All could well be understood as an unconscious sensitivity to the articulation of a form of higher order thinking relative to the 3-fold and 4-fold patterns more readily presented (*Requisite fifth-order thinking*, 2019; *Eliciting systemic answers from a 5-fold web of meaning?* 2019).

"Twenty-fold way" to coherent memory organization? Clearly of potential strategic interest are the transformational pathways between distinctive patterns of organization and any coherent mapping of them. One indication is presented above (*Pathway "route maps" of potential psychosocial transformation?* 2015). Of further potential relevance is a 20-fold pattern, indicated in the table above.

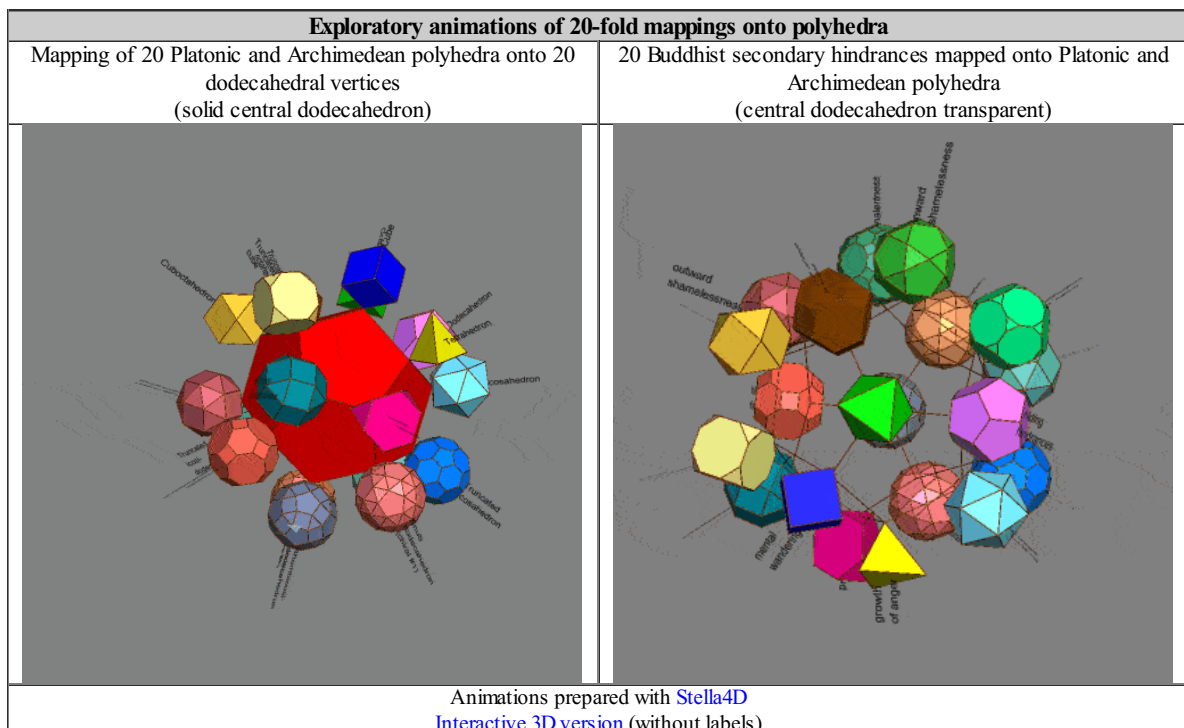
A point of departure is the variety of domains in which a **20-fold ordering** has acquired significance, as discussed separately (*Global strategic significance of 20-fold configurations*, 2015; *Indicative examples of the recognized significance of 20-fold patterning*, 2015). A checklist of web resources on 20 strategies, rules, methods and insights is presented separately (*Requisite 20-fold Articulation of Operative Insights?* 2018).

As a distribution challenge, it offers one indication of a constraint on the successful implementation of the UN's 16 SDGs ("plus 1") in relation to the "Twenty-fold Way" distinguished by **combinatorics**. In that respect Kenneth P. Bogart notes:

When we are passing out objects to recipients, we may think of the objects as being either identical or distinct... If we ignore the possibility that the order in which objects are received matters, we have created $2 \times 2 \times 4 = 16$ distribution problems. In the cases where a recipient can receive more than one distinct object, we also have four more problems when the order objects are received matters. Thus we have 20 possible distribution problems. (*Enumerative Combinatorics Through Guided Discovery*, 2005, pp. 86-89; *The Idea of Distribution*)

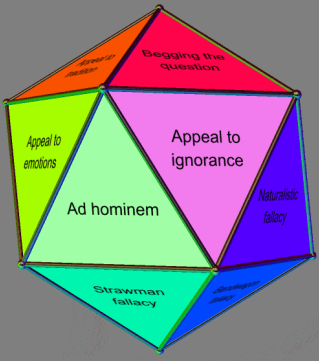
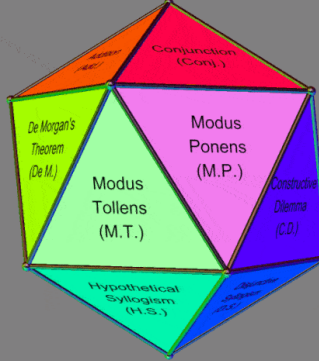
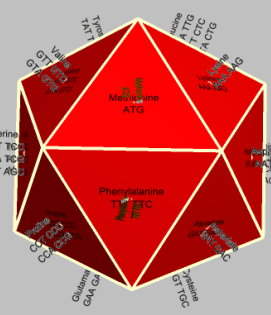
A fundamental set of **5 hindrances** is recognized by Buddhism, potentially to be related to the 5-fold set of Platonic polyhedra. Separately Buddhism recognizes a 20-fold set of "secondary" **hindrances to mental development** (Lama Geshey Ngawang Dhargyey, *Tibetan Tradition of Mental Development, Library of Tibetan Works and Archives*, 1976, pp. 34-35). In Biblical symbolism, twenty denotes that which is unholy, unclean, and profane, namely "remains".

As variously indicated above, there is a curious confusion relating to "16 plus or minus 2" (or 3) in distinguishing logical systems as they may be inform speech modalities. One configuration as a mnemonic aid could be explored in terms of the set of 20 **regular** and **semiregular** polyhedra, namely the 5 Platonic solids, and 15 Archimedean solids (including the **chiral** forms of the **snub cube** and **snub dodecahedron**).



Such a set could imply an unexplored relationship to the set of 20 standard amino acids used by living cells to build proteins -- the so-called **proteinogenic amino acids**. From a systemic perspective it could be asked whether correspondences are to be found of cognitive relevance (*Memetic Analogue to the 20 Amino Acids as vital to Psychosocial Life?* 2015).

Seemingly yet to be clarified is the nature of the relationship between logical fallacies (and cognitive biases) and the **rules of propositional logic** as presented by **Irving Copi** (*Introduction to Logic*, 1970). The arbitrary mapping of both onto icosahedra (below) suggests possibilities in that respect.

Exploratory animations of 20-fold mappings onto polyhedra		
20 Logical fallacies	20 (-1) Rules of classical propositional logic inference (substitution and equivalence)	Morphing 20 amino acids between icosahedron (20 faces) and dodecahedron (20 vertices)
		
Animations prepared with Stella4D Interactive 3D version		Reproduced from <i>Identifying 20 "amino acids" of a memetic code potentially vital to psychosocial life?</i> (2015)

Mnemonics of systemic comprehensibility? It is strange to conclude that "speech modalities" of strategic relevance, however they are framed or termed, tend to be presented in lists of a size which are a challenge to comprehension, -- whether with respect to "7 plus or minus 2" or "16 plus or minus 2". More problematic is any use of special formalisms to encode systemic distinctions -- as meaningful to most as hieroglyphs. However even more problematic is the indifference of the responsible disciplines for their wider comprehension and the lack of concern for the unmemorability of any new insights regarding the articulation of such sets.

Succinctly asserted, as discussed separately, most sets of values, categories, and other modalities of global strategic significance are inherently unmemorable -- as exemplified by the UN's 16+1 SDGs, the 30-fold *Universal Declaration of Human Rights*, or the 16-fold *Earth Charter* (*Time for Provocative Mnemonic Aids to Systemic Connectivity?* 2022; *Memorability, Mnemonics, Maths, Music and Governance: memory enhancement ensuring strategic credibility*, 2022; *In Quest of Mnemonic Catalysts -- for comprehension of complex psychosocial dynamics*, 2007).

Clues to the nature of confusion in systemic terms are potentially to be found in the problematic focus on comprehension, closure and relative ignorance as articulated in **Gödel's incompleteness theorems**. Missing from 18-fold articulations, of which the "twistedness" of chirality may be indicative, is recognition of self-reflexivity as suggested in relation to the calculus of indications of **George Spencer-Brown** (*Laws of Form*, 1969/1994).

The result of this formal exercise to separate what are known as algebras of logic from the subject of logic, and to re-align them with mathematics, is the explicit, and extremely elegant logical re-integration of the observer -- effectively the decision-maker. His final chapter, entitled "re-entry into the form" commences with: *The conception of the form lies in the desire to distinguish. Granted this desire, we cannot escape the form, although we can see it any way we please* (p. 69). It ends with:

An observer, since he distinguishes the space he occupies, is also a mark... In this conception a distinction drawn in any space is a mark distinguishing the space. Equally and conversely, any mark in a space draws a distinction. We see now that the first distinction, the mark, and the observer are not only interchangeable, but, in the form, identical. (p. 76)

It is then questionable whether the UN's strategies are appropriately "self-reflexive" -- however the future may come to understand this (**Hilary Lawson**, *Reflexivity: The Post-Modern Predicament*, 1985).

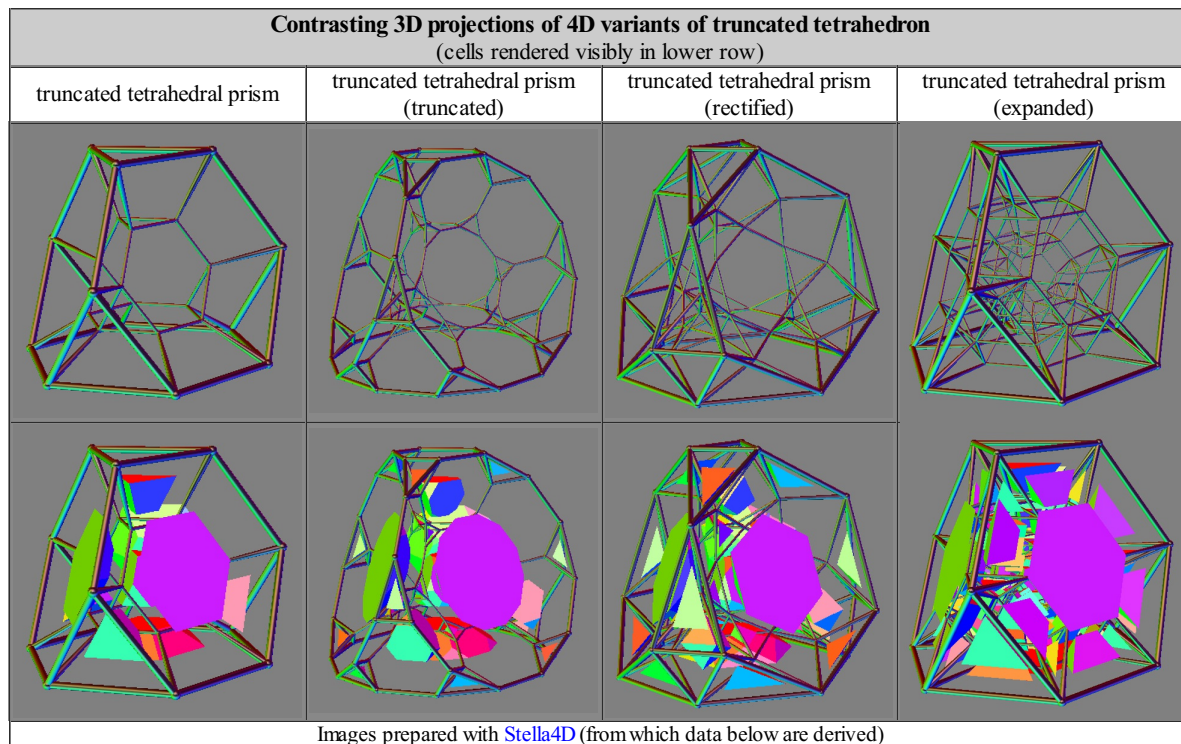
Given the seemingly total lack of concern with the memorability of strategic articulations, there is a degree of irony to the fact that mnemonic approaches are themselves typically articulated in an unmemorable manner (Esther Heerema, *9 Types of Mnemonics to Improve Your Memory*, *VeryWellHealth*, 17 September 2022; Connie Stemmler, *20 Mnemonic Device Examples (and How to Use Them)*, *Develop Good Habits*, 26 January 2020; *36 Best Memory Techniques for Studying*, *Art of Memory*, 8 April 2023).

Further possibilities in 4D: The regular and semi-regular polyhedra indicated above offer more complex possibilities for coherently mapping other features listed in the table above. Somewhat more complex than the animations above, for example, are those explored separately in relation to the Merkabah (*Cognitive implication in Merkabah as configuration of cycles essential to systemic viability*, 2017). The many polyhedra (as suggested by Critchlow's configuration) could then be fruitfully seen as constituting a constellation of speech modality "stories" -- potentially inviting even higher orders of organization by the future.

As stressed above, there is a curious prevailing assumption that the strategic challenge of the times can be appropriately represented with

static configurations -- whether in 2D or 3D -- ignoring the challenge of time for which the dynamics implied by 4D may contain vital insights (*Ungovernability of Sustainable Global Democracy? Towards engaging appropriately with time*, 2011; *Cognitive Implication of Globality via Temporal Inversion*, 2018).

The possibility can be indicated to a limited degree by the following projections into 3D of 4D variants, together with others illustrated separately (*Cognitive Embodiment of Patterns of Governance of Higher Order*, 2022).



Geometrical properties of 4D variants above (in comparison with 3D truncated tetrahedron)				
	cells	faces	edges	vertices
3D truncated tetrahedron	n/a	8 (2 types)	18 (2 types)	12 (1 type)
-- dual	n/a	12 (1 type)	18 (2 types)	8 (2 types)
4D truncated tetrahedral prism	10 (3 types)	34 (4 types)	48 (2 types)	24 (1 type)
-- dual (not shown)	24 (1 type)	48 (2 types)	34 (4 types)	10 (3 types)
truncated variant	34 (4 types)	130 (7 types)	192 (7 types)	96 (3 types)
-- dual (not shown)	96 (3 types)	192 (7 types)	130 (7 types)	34 (4 types)
rectified variant	34 (4 types)	130 (7 types)	144 (4 types)	48 (3 types)
-- dual (not shown)	48 (3 types)	144 (4 types)	130 (7 types)	34 (4 types)
expanded variant	116 (11 types)	308 (17 types)	288 (10 types),	96 (3 types)
-- dual (not shown)	96 (3 types)	288 (10 types)	308 (17 types)	116 (11 types)

The suggestion in each case is that these all constitute "containers" for a set of cognitive modalities associated with speech modalities. As containers they are necessarily far more elegant than the lists on which psychosocial organization is currently so dependent. Lists offer little insight into system dynamics,


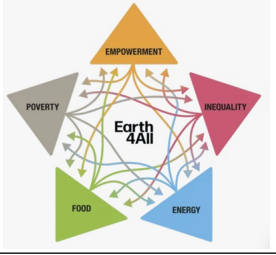

It could also be argued that such containers can be understood as enhancing cognitive focus, separately discussed as a means of imaginal transformation of energy resourcing (*Enactivating a Cognitive Fusion Reactor*, 2006). Of particular value in such polyhedral configurations is that any acts associated with their edges do not pass through the centre. They are configured around it with distinctive orientations -- effectively implying it together, but tangentially. This honours the sense in which the nature of the experiential centre cannot be "grasped" by conventional means (*Engaging with Elusive Connectivity and Coherence*, 2018).

Connectivity implied by floral arrangement? In the light of the extensive work of Keith Critchlow on polyhedral and related patterns, of suggestive relevance is his later study of flowers (*The Hidden Geometry of Flowers: living rhythms form and number*, 2011). Curiously global summit are notably characterized by flower arrangements with little detectable effort to derive cognitive insights from their aesthetics.

Arguably any polyhedral arrays of speech modalities merit "re-cognition" as "cognitive flowers" variously "speaking to" people (*Flowering of Civilization -- Deflowering of Culture*, 2014; *Articulation of global governance through the language of flowers?* 2020). Should the presentation of the UN's Sustainable Development Goals then be reframed to enable cognitive implication in a strategic "bouquet of flowers" -- styled for appreciation according to the 7 principles of *ikebana*?

Curiously flowers (variously petalled) are widely used to commemorate the disaster of World War I on **Poppy Day**, otherwise also known as Remembrance Day (*Ann Elias, War and the Visual Language of Flowers: an antipodean perspective, War, Literature and the Arts*, 20, 2008). Poppies of other colours are also used -- the **purple poppy** commemorating animals who died, and the **white poppy** as a symbol of peace.

It could be argued that the "petalled" schematic of the Club of Rome's 5-turnarounds "commemorates" anticipation of the predicted collapse of civilization associated with World War III. It is ironically significant that the poppy, in the form of *Papaver somniferum*, is of course the principal source of opium and heroin -- and the forgetfulness they offer to so many.

Being Spoken to Meaningfully or Remembering to Forget?		
Red poppy	Schematic of Earth4All "5 turnarounds"	Purple poppy
		
Reproduced from <i>Earth4All</i>		

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