



laetus in praesens

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Sustaining the Quest for Sustainable Answers on COVID-19

Beyond the divisive preoccupation with unquestionable assertions and unanswered questions

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Introduction

The early months of 2020 have seen no lack of questions and answers with respect to the coronavirus pandemic. Especially problematic is the process whereby discourse in this regard has been characterized by misinformation of every kind -- and from every authority. This has been recognized to a degree by the UN Secretary-General (*Hatred going viral in 'dangerous epidemic of misinformation' during COVID-19 pandemics*, *UN News*, 14 April 2020; *U.N. Chief Targets 'Dangerous Epidemic Of Misinformation' On Coronavirus*, *NPR*, 14 April 2020).

However it remains unclear what information from which official source has contributed to this condition. An investigation into the role of the World Health Organization is underway (*WHO launches independent inquiry into global response to pandemic*, *Financial Times*, 10 July 2020; *WHO approves call for inquiry into global coronavirus response*, *CNN*, 19 May 19, 2020; *Helen Clark: WHO coronavirus inquiry aims to 'stop the world being blindsided again'*, *The Guardian*, 10 July 2020).

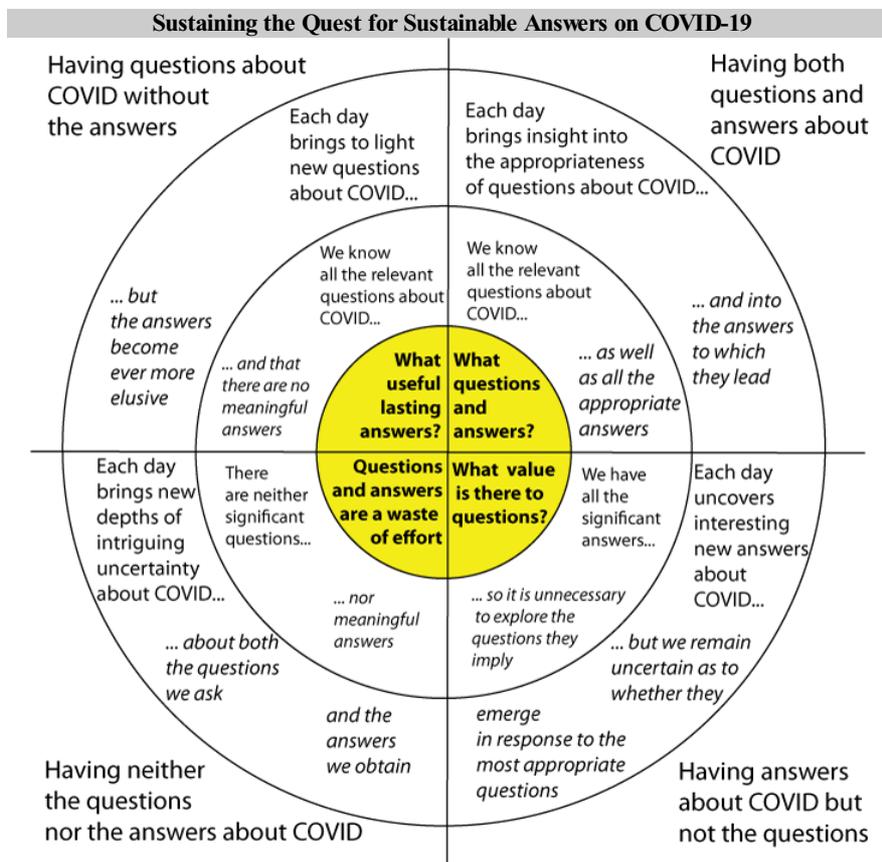
The dynamics are especially evident in discourse at the regional and national levels -- with many expressed concerns regarding the confusion. The situation has been further compounded by the right assumed by certain authorities to assert that some answers are unquestionably "true" and others "false". The latter may well be subject to various forms of censorship in order to focus attention on what is held to be "true". Those propagating information held to be "false" may be indicted and subject to prosecution. Those asking questions, which undermine what is held to be a consensus, may be subject to pressures which oblige them to be silent. This process contrasts curiously with that relating to climate change over recent years.

Especially problematic is the extent to which it is no longer feasible to frame any set of unanswered questions or to question those answers which are deemed unquestionable. There is no authority which is empowered to receive or process any such checklist -- since all questions and answers are subject to the dynamics described. Such checklists become the victims of a process about which there is little perspective. It is in this sense that the pandemic can be fruitfully explored in memetic terms, as previously suggested (*COVID-19 as a Memetic Disease -- an epidemic of panic: learning from terrorism, communism, fascism, and evil, as pandemics of the past*, 2020). Indeed, although the strategic response has been widely framed in terms of warfare, it could be said that the process merits recognition as an example of memetic warfare.

The following argument in relation to COVID-19 therefore avoids asking questions in the conventional manner (or noting those which have been asked) or presenting answers (or noting those which have been presented). The approach taken is to revisit and adapt an earlier exercise of some relevance (*Sustaining the Quest for Sustainable Answers*, 2003). This took the form of a diagram which has been modified below.

Framing the requisite meta-discourse?





The above diagram endeavours to interrelate different ways of understanding questions and answers.

The **four quadrants** in the diagram are devoted respectively to:

- Having the questions without the answers: a situation typical of those on a quest in search of a solution for a problem they have defined. "Gurus" of various kinds may respond to them -- but possibly by encouraging them to shift to some new zone, without necessarily providing answers.
- Having the answers but not the questions: a situation typical of those committed to particular forms of action as an answer to a question that seems no longer to call for reflection. This may be highly desirable in emergency situations.
- Having both the questions and the answers: a situation typical of the learned and experienced who are no longer challenged to reflect upon their certainties. This may be the expectation placed upon educators.
- Having neither the questions nor the answers: a situation typical of those unchallenged by their environment or their relationship to it. On the other hand it may also be typical of the challenge of a highly turbulent environment in which questions and answers have to be formulated in the moment -- so that not having anticipated them may well be an advantage.

The **three concentric rings** in the diagram are devoted respectively to:

- Outer ring: the appreciation of questions and answers as encountered in daily life
- Middle ring: the framing of the conclusion regarding the encounter with questions and answers in daily life (in the outer ring)
- Inner ring: the existential understanding of the insights of the outer and middle rings.

The diagram as a whole can be viewed as a kind of attitudinal "gearbox" through which to navigate the world of experience. One may shift from one zone to another according to circumstances. It is unclear that the question-answer mix of any particular zone or ring is preferable in any absolute sense. There may however be circumstances in which one or another is more appropriate.

The diagram raises the question as to whether there is a need to move beyond the preoccupation with questions-and-answers. But should that question be answered? The theme of "unanswered questions" has been usefully evoked in contrasting contexts:

- [Unanswered Questions and Unquestioned Answers](#). 911Truth.org
- [The Unanswered Questions of the Christian Faith](#)
- [Unanswered Questions](#) are given particular significance in Buddhism -- as a set of common philosophical questions that Buddha refused to answer

Relevance of the framework articulated by a US Secretary of Defense?

However it may be questioned, the strategic response to the coronavirus has been framed by many authorities as tantamount to "war", as discussed separately -- citing the manner in which that assertion has been questioned as misleading ([Cowering for One's Country in the War against Coronavirus](#), 2020).

However, as a war, it is appropriate to explore the relevance of the widely-cited insight of [Donald Rumsfeld](#) as US Secretary of Defense during the Iraq War -- in a declaration at the Pentagon (12 February 2002). This was articulated in following manner:

Reports that say that something hasn't happened are always interesting to me, because as we know, there are **known knowns**; there are things we know we know. We also know there are **known unknowns**; that is to say we know there are some things we do not know. But there are also **unknown unknowns** -- the ones we don't know we don't know. And if one looks throughout the history of our country and other free countries, it is the latter category that tend to be the difficult ones [*emphasis added*]

Rumsfeld deemed the pattern so fundamental that he titled his subsequent memoir in those terms *Known and Unknown: A Memoir* (2011). The framing was used as the title of a documentary about his policy-making (*The Unknown Known*, 2013).

The psychoanalytic philosopher [Slavoj Žižek](#) has argued that beyond Rumsfeld's three categories there is a fourth, the **unknown knowns**, that which we intentionally refuse to acknowledge that we know -- as highlighted by Rumsfeld himself:

If Rumsfeld thinks that the main dangers in the confrontation with Iraq were the 'unknown unknowns', that is, the threats from Saddam whose nature we cannot even suspect, then the [Abu Ghraib scandal](#) shows that the main dangers lie in the "unknown knowns" -- the disavowed beliefs, suppositions and obscene practices we pretend not to know about, even though they form the background of our public values (*What Rumsfeld doesn't know that he knows about Abu Ghraib*, *In These Times*, 21 May 2004).

The validity of Žižek's comment is highlighted by a later comment in relation to knowing about the occurrence of torture at Guantanamo Bay, about which firmly declared:

We know that torture is not occurring there. We know that for a fact. We have enormously responsible people who are managing that situation. (*Secretary Rumsfeld Radio Interview with the Jerry Agar Show*, U.S. Department of Defense, 2 March 2006)

As noted in commentary on that articulation and its earlier origins (*There are known knowns*), the terms "known unknowns" and "unknown unknowns" are often used in project management and strategic planning circles. Clearly it is to be expected that the 3-fold pattern (if not the 4-fold variant) should be explored in relation to the engagement with COVID-19, especially now that the number of COVID-related deaths in the USA has far exceeded the number of US fatalities in Iraq.

Studies in these terms include:

- Ray Pawson, Ana Manzano and Geoff Wong: *The Coronavirus Response: Known Knowns, Known Unknowns, Unknown Unknowns* (March 2020)
- John Kain: *Known Knowns, Known Unknowns, Unknown Unknowns: Economic Impact of COVID* (22 May 2020)
- Richard Javad Heydari: *These Are The 'Known Knowns' About Coronavirus' Impact The coronavirus pandemic is unleashing an even more contentious and polarizing geopolitical environment.* (*The National Interest*, 28 March 2020)
- Frank Batavick: *Get to know the 'known knowns' of COVID-19* (*The Baltimore Sun*, 24 July 2020)
- Rana Foroohar: *Known and unknown unknowns* (*Financial Times*, 30 March 2020)
- Harvey Schachter: *Words to avoid and the 'unknown knowns': Four leadership lessons we've learned from COVID-19* (*The Globe and Mail*, 13 June 2020)
- Andrew P. Ambrosy, Jesse K. Fitzpatrick and Marat Fudim: *Hospitalizations for heart failure during the COVID -19 pandemic: making sense of the known knowns, known unknowns, and unknown unknowns* (*European Journal of Heart Failure*, 2 July 2020)
- Sophie Heading: *Managing disruption in different scenarios: the 'known knowns', the 'known unknowns', and the 'unknown unknowns'* (*KPMG*, 6 March 2020)

Challenging cognitive nature of a fourfold strategic framework

Self-reflexivity: Curiously it is seemingly only the last two of the commentaries cited above which have sought to apply a 4-fold framework to the framing of questions and answers in relation to the coronavirus challenge. Faced with the uncertainty which any such framework seeks to encompass cognitively, there is a degree of deceptive ease to admitting a 3-fold pattern, as did Donald Rumsfeld. In his case, as with many inspired by his framing, these were: known knowns, known unknowns, and unknown unknowns. Appropriately Žižek argues for recognition of a fourth, the invidious unknown knowns, namely "the disavowed beliefs, suppositions and obscene practices we pretend not to know about, even though they form the background of our public values".

The 3-fold set is less challenging (and "safer") in that it distracts from the extremely uncomfortable self-reflexivity associated with the "unknown knowns". The latter is far more of a challenge to "business-as-usual" than the other three -- precisely because of the discomfort associated with self-reflexivity, especially in a collective strategic context ([Hilary Lawson](#), *Reflexivity: The Post-Modern Predicament*, 1985). It touches upon the collective engagement with the unconscious ([John Ralston Saul](#), *The Unconscious Civilization*, 1997).

Johari window: With respect to Rumsfeld's 3-fold articulation, *Wikipedia* notes (*There are known knowns*):

Rumsfeld's statement brought much fame and public attention to the concepts of known knowns, known unknowns, and unknown unknowns, but national security and intelligence professionals have long used an analysis technique referred to as the [Johari window](#). The idea of unknown unknowns was created in 1955 by two American [psychologists](#), Joseph Luft (1916–2014) and Harrington Ingham (1916–1995) in their development of the Johari window. They used it as a technique to help people

better understand their relationship with themselves as well as others.

Adaptation of Johari Window (presented with right and central columns switched)			
		Answer known?	
		No	Yes
		Not known to self ("us")	Known to self ("us")
Right question asked?	Yes	<p>Unknown knowns (<i>Blindspot</i>): Descriptors not selected by subjects, but only by their peers go here. These represent what others perceive but the subject does not. Things we are aware of but do not understand <i>Unquestioned questions</i></p> <p>Risk management (<i>complex, emergent</i>): Situations are in crisis mode due to hazards and risks that were censored and biased. There is a sense of surprise, the need to invoke "black swans". "User" need to activate probabilistic scenarios to probe, Risk assessment senses, and generates a roadmap to respond.</p>	<p>Known knowns (<i>Arena</i>): Descriptors that both the subject and peers select. These are traits that subject and peers perceive. Things we are aware of and (believe we) understand. <i>Answered questions</i></p> <p>Risk management (<i>obvious, best practice</i>): Situation under control, risks are well controlled and controllable with reasonable uncertainties. Risk assessment senses, prioritizes hence categorizes, and generates a roadmap to respond.</p>
	No	<p>Unknown unknowns: Descriptors that neither subject nor peers selected. They represent subject's behaviours or motives that no one participating recognizes -- either because they do not apply or because of collective ignorance of these traits. Things we are neither aware of nor understand. <i>Unquestioned questions.</i></p> <p>Risk management (<i>chaotic, novel</i>): New sudden risks emerge that were beyond the understanding of the latest risk register updates. Action is required for those new risks, with rational response. Similarly, the soundness of the risk assessment practice will limit the number of the novel risks and the surprise to a minimum simplifying the "sense" function. Panic and limbic reactions reduce to a minimum allowing to respond sensibly.</p>	<p>Known unknowns (<i>Facade</i>): Descriptors selected by the subject, but not by any of their peers. These are things the peers are either unaware of, or that are untrue but for the subject's claim. Things we understand but are not aware of. <i>Unquestioned answers</i></p> <p>Risk management (<i>complicated, good practice</i>): Situation may slide in a crisis because events are complicated by lack of transparency, poor internal and external communication. Typical case for the mining industry, but by far not the only one. Risk assessment senses, helps analyzing various potential outcomes, and generates a roadmap to respond.</p>

The articulation of each quadrant above is augmented by elements from the following, but especially from the first:

- [Cynefin framework and Johari window synergy with Risk Management](#) (*Riskope*, 28 February 2020)
- Matt Cosgriff (*The Risk of Not Knowing What You Don't Know: personal finance*, *Lifewise*, 11 April 2017)
- Chris Mark: *What Coronavirus can Teach us about CyberSecurity* (*Global Security, Privacy and Risk Management*, 28 February 2020)
- Baron Aleks: *The Johari Window of Knowledge* (*Alignment Charts Community*, July 2020)
- Scott Guthrie: *How firms are building influencer marketing skills internally* (*Influencer Marketing*, 20 March 2018)

Application to coronavirus? Under the circumstances, it could have been expected that the relevance of the Johari Window to communication regarding the coronavirus might have been usefully explored. This does not appear to have been the case, with a degree of exception in the case of:

- Michelle Bentley: *Known Unknowns: Covid-19 and Biological Warfare* (*E-International Relations*, 8 August 2020)
- Vaneet Kaur: *Knowledge-Based Dynamic Capabilities: addressing the knowns and unknowns of corona chaos* (*California Management Review*, May 2020) offering:
 - known knowns: calling for resolution through ordinary capabilities (of "zero-order")
 - known unknowns: calling for resilience through knowledge capabilities ("first-order")
 - unknown knowns: calling reinvention through knowledge capabilities (of "higher-order")
 - unknown unknowns: calling for reform through knowledge-based dynamic capabilities (a "synergistic toolkit")
- Stephen Wunker: *Business Strategy Through Four Phases of the Coronavirus Crisis* (*Forbes*, 23 March 2020) offering an uncertainty matrix of "thought starters: for understanding a business through the crisis.

The 4-fold pattern bears an elusive degree of correspondence to the [AQAL grid](#) of Ken Wilber's [integral theory](#). Seemingly however the main application of that theory to the coronavirus challenge makes no mention of AQAL, despite the number of comments (Joseph Dillard, *Toward an Integral Response to Coronavirus*, *Integral World: Exploring Theories of Everything*, 7 May 2020).

Given that the engagement with COVID-19 has been defined in terms of warfare, and that Rumsfeld was challenged to articulate his framework by the Iraq War, potentially more relevant is an adaptation of the AQAL framework to that war (Ray Harris, *Integral Analysis of the Iraq War*, *Integral World: Exploring Theories of Everything*, April 2003). However, despite being relatively critical, it is unclear how that adaptation might be made. Given the terror COVID has evoked, a similar conclusion is evoked by a related commentary (Mark Edwards, *Regarding an Integrally Informed Analysis of Terror*, *Integral World: Exploring Theories of Everything*, August 2005).

Cybernetic orders of feedback: The references cited tend to frame a possibility of responding to the "unknown" but readily focus attention on the conventions of strategic thinking so characteristic of business-as-usual. In that sense it can be asked what is missing -- typically how to engage with the unexpected. Arguably the pandemic has triggered the institutional responses characterized by "emergency preparedness". Clearly most authorities have been unprepared for the unexpected nature of the pandemic -- or any other crisis with such "under the cognitive radar" characteristics. This is "black swan" condition articulated by Nassim Nicholas Taleb (*The Black Swan: The Impact of the Highly Improbable*, 2007) -- although Taleb's use of "improbable" distracts from the challenge of the "inconceivable".

Taleb however claims to be "irritated" by efforts to frame the pandemic as a "black swan" when there were extensive indications of its predictability (Bernard Avishai, *The Pandemic Isn't a Black Swan but a Portent of a More Fragile Global System*, *The New Yorker*, 21 April 2020).

The challenge is presented in a more focused manner by Taleb through a later study which addresses the nature of the involvement of those faced with any crisis (*Skin in the Game: Hidden Asymmetries in Daily Life*, 2018). His earlier study bears witness to the ongoing phenomenon of the authorities benefitting variously from the coronavirus (*Antifragile: Things That Gain from Disorder* 2012).

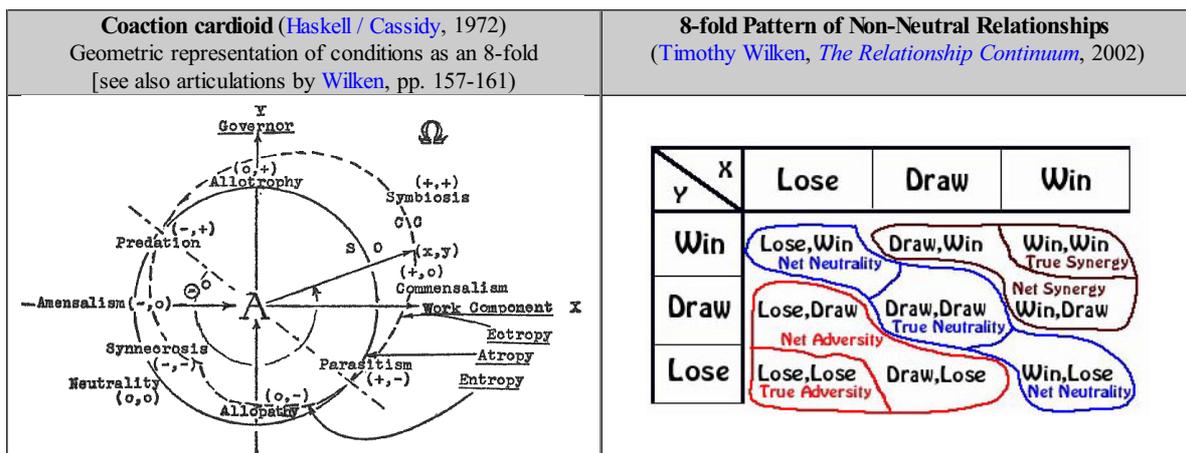
Taleb's reference to "skin in the game" could be understood as a metaphorical framing of the concern of fundamental physics and philosophy with the involvement of any observer -- and the challenge of self-reflexivity and the nature and quality of the questioning that implies. This contrasts with superficial references to "new thinking" and the need for "reform". With respect to the latter, it is appropriate to recall that formal recognition of the need for "reform of the United Nations" has been on the table for decades, with little consequence. Recognition of the "fragility of the global system" could be said to reflect an outdated mode of thinking inadequate to the nature of the challenge.

Any sense of degrees of self-reflexivity is however better articulated through subsequent insights from cybernetics concerning higher orders of feedback (Maurice Yolles, *Knowledge Cybernetics: a new metaphor for social collectives*, *Journal of Organisational Transformation and Social Change*, 3, 2006). The arguments of Maurice Yolles and Gerhard Fink point to the potential role of system comprehension in terms of third-, fourth- and fifth-order cybernetics (*Generic Agency Theory, Cybernetic Orders and New Paradigms*, 2014), as summarized separately (*Cybernetic orders of self-referential feedback*, 2016; *Self-reflexive discourse as catalyst for change*, 2015).

Recognizing a 9-fold information ecosystem of questions and answers

Given the complex dynamics of the challenging situation evoked by the coronavirus pandemic, and the responses to it, there is a case for setting the analysis offered by a 4-fold framework within one that could offer other insights. Of value in this respect is the framework developed by Edward Haskell (*Full Circle: The Moral Force of Unified Science*, 1972). This takes account of generalization of relations between any "governor" and any "work component", most notably between species in the natural environment, but potentially extended to social relations, with respect to information dynamics between those with some form of power (however understood) and those subject to that power (however they are to be recognized).

Haskell's approach was summarized in a single diagram reproduced below left. This has been extensively explained and presented with respect to the dynamics of social relations by Timothy Wilken (*UnCommon Science*, *Synearth*, 2001; *The Relationship Continuum*, *Synearth*, 2002).

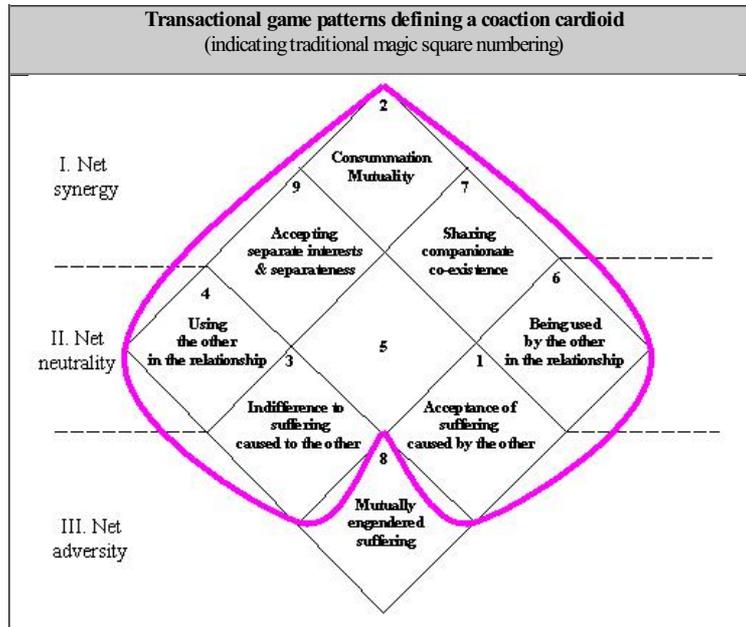


Further clarification is offered of the transition between a 4-fold and a 9-fold pattern through several diagrams, as discussed separately (*Cardioid Attractor Fundamental to Sustainability: 8 transactional games forming the heart of sustainable relationship*, 2005).

Possible 8-fold Positive-Negative Hybrid Conditions				
		Y = "Control component"		
		Negative	Neutral	Positive
X = "Work component"	Positive	<i>predation</i> (positive negativity)	<i>allotrophy</i> (positive neutrality)	<i>symbiosis</i> (positive positivity)
	Neutral	<i>amensalism</i> (neutral negativity)	O (neutral neutrality)	<i>commensalism</i> (neutral positivity)

	Negative	<i>synnecrosis</i> (negative negativity)	<i>allopathy</i> (negative neutrality)	<i>parasitism</i> (negative positivity)
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The presentation as a cardioid may well function as a kind of value attractor (cf *Human Values as Strange Attractors: Coevolution of classes of governance principles*, 1993). In this sense it is perhaps more fruitful to look further at the way in which the different "games" as transactional patterns, define the contextual cardioid pattern -- namely the sense in which all the games need to be evoked in order for sustainability to hold.



The question is whether the framework indicated by such diagrams can be fruitfully adapted to the pattern of known/unknown and question/answer.

Tentative adaptation of 8-fold positive-negative hybrid to question-answer information dynamics (on the basis of the table above clarifying the coaction cardioid)				
		Authority (as "Control component")		
		Unknown (as negative, evoking defensive reactions)	Uncertainty (as neutral, but evoking questions)	Known (believed to be positive)
Population (as "Work component")	Known (believed to be positive)	<i>predation</i> (positive negativity) Question/Answer dynamic as exploitative of population	<i>allotrophy</i> (positive neutrality) Question/Answer dynamic as a mutually supportive context	<i>sybiosis</i> (positive positivity) Question/Answer dynamic as mutually fruitful
	Uncertainty (as neutral, but evoking questions)	<i>amensalism</i> (neutral negativity) Erosion of mutual trust by Question/Answer dynamic	0 (neutral neutrality) Mutual indifference to Question/Answer dynamic ("uncertainty fatigue"?)	<i>commensalism</i> (neutral positivity) Question/Answer dynamic as mutually ineffectual, but undamaging
	Unknown (experienced as negative)	<i>synnecrosis</i> (negative negativity) Question/Answer dynamic as mutually destructive	<i>allopathy</i> (negative neutrality) Erosion of mutual trust by Question/Answer dynamic	<i>parasitism</i> (negative positivity) Question/Answer dynamic as exploitative of authority

The proposed adaptation invites further refinement, especially better to distinguish amensalism from allopathy.

Of particular interest in this adaptation is the sense in which an "answer" can have a controlling function, as can a "question" -- irrespective of whether the formulator is an authority or subject to authority. This is especially evident in Q and A sessions with journalists on the occasion of a press conference by an authority figure, or the use of authoritative press releases providing answers for which challenges are deprecated.

Framing a pattern of challenging questions and answers

The following checklist of questions is used as a means of distinguishing how answers might be framed in the light of different degrees of uncertainty and erosion of trust. There is a curious conflict between the acclaimed right to freedom of opinion and the sense in which those who have the power to lie have no capacity to prove anything they assert to be true. Whilst the columns of answers (from right to left) could be understood in terms of increasing degrees of uncertainty, they also merit exploration in terms of denial and self-deception.

Questions	Answers			
	as a known known	as a known unknown	as an unknown unknown	as an unknown known
Would the situation be less	No. Fatalities are	The resulting level of	It is necessarily uncertain	It could evoke unknown

disastrous if fatalities from this "war" were "acceptable", as is otherwise the case in war?	completely "unacceptable" Yes: Collateral damage is unavoidable	fear of death generating paranoia and uncontrollable panic is unknown	what dynamics could emerge -- and dangerously so, especially since for some it is the "time of their lives"	levels of courage and risk-taking operative only in conditions of extreme threat and survivalism
Will vaccines prove to be the silver bullet which will restore normality?	Of course, this must be the case since medical science will develop what is required.	There will necessarily be some level of inadequacy to a vaccination strategy and the degree of uptake	It is uncertain whether vaccines will do what is claimed -- or rather have disastrous side effects	Vaccination is an invasive challenge to personal integrity and may indeed evoke irrational responses
Which authorities are to be considered trustworthy, whether in terms of expertise or data collection?	Those most highly acclaimed, such as WHO and the national counterparts	Authorities are subject to unspecified political pressures which erode their right to be fully trusted	It is completely unclear the degree to which authorities are complicit in the most dubious secret agendas	Power corrupts, and absolute power corrupts absolutely -- but to an unknown degree in each instance and time
How sustainable is the "normality" to which people hope to return?	"Business as usual" is unquestionable	"Business as usual" is unsustainable	It is impossible to recover a former equilibrium; chaos ensues	The normality to which people consciously aspire may not be the normality they unconsciously desire
Is there adequate evidence for the protective efficacy of masking?	Yes: If this were not the case, their use would not have been recommended	No: There is no consensus; and it is unclear what purported evidence is subject to manipulation and to what degree	To whatever degree it is effective, it remains unclear whether masking is imposed as a distraction from other agendas	The adoption of masking in an overcrowded society is a reflection of an unconscious need for psychological privacy and protection of identity
Is there adequate evidence for the protective efficacy of social distancing?	Yes: If this were not the case, it would not have been recommended; it is self-evident that proximity to potentially infected people promotes cross-infection.	Other factors, like personal age, hygiene, co-morbidities, immune system health, fresh air and exercise, are much more important considerations than physical distancing.	Social distancing treats the other as undesirable, a potential "enemy", thereby modifying social norms of community and conviviality.	Proxemics suggests that there is a felt need for unacknowledged levels of greater separation and personal space -- seemingly in contradiction with acclaimed merits of togetherness
Should far greater significance be associated with overcrowding?	No: This is a distraction from implementation of the recommended public health strategy Yes: Overcrowding is the fundamental underlying cause of person-to-person infection	According attention to overcrowding is impracticable in an overcrowded society -- and with unknown implications.	It is unclear that "overcrowding" is the root cause of current social crisis. There is every possibility of more fundamental factors	(As above) Also, cultural evolution has adjusted each new generation to greater levels of population density, eg urbanism, high-rise. Who then claims there are "too many"; that we are "overcrowded"?
Has "social distancing" been promoted as a politically acceptable means of engaging with overcrowding?	No: These are different domains.	This may be the case -- and difficult to prove it is not	(As above) Also, no politician has successfully engaged with demographic control except by coercion - and who wants that?	(As above) Also, this is an existential threat - "if there are too many, am I one?"
Have some authorities avoided indulging in misinformation and "back-passing"?	No: They are above reproach and suspicion.	Clearly every authority is subject to the temptation of doing so in order to advance its own agenda. This may be determined by future inquiries	It is unclear how such dynamics can be fruitfully transcended given the advantages it offers to those engaging in it	On being able to claim any form of authority, subtle behaviours to maintain that authority are inevitable and to be expected.
Are there fundamental similarities to the dubious past engagement by authorities with "evil"?	Identifying any parallels with the action of witchdoctors, the Inquisition or McArthyism (etc.) are completely misleading	A degree of propensity of authorities to respond as in the past is to be expected. There are systemic parallels	It is unclear what symbolic significance such a pattern of response will have for the future. "Evil" will be perceived as "asymptomatic"	There is seemingly an unacknowledged need to evoke the inexplicability of "evil" to handle personal complicity with any such dynamic
Is obliging populations to "cower for their country" profoundly damaging to the collective spirit?	No: The question is inappropriately framed given that it is the safety of others which is primary	It is unclear whether there is any feasible alternative under the circumstances	The damage to the notion and practice of democracy, already eroding, could be profound.	The requirement to cower may dubiously appeal to an unconscious lack of courage and passivity
How should those who fail to "cower" according to the rules be treated by authorities -- or by their peers?	Those who fail to obey the rules imposed by authority should be appropriately punished -- even severely	It is unclear what proportion of the population deprecates the requirement to cower -- and accept the need for courage	(As below) Also, resistant, minority positions may most accurately reflect imminent societal collapse.	After any crisis, those recognized as having failed to cower may be treated like the collaborators in occupied territories of the past

Are "masking", "distancing", and "lockdown" to be understood as surrogates for imposition of unrecognized cognitive processes?	Their value as remedial responses is most appropriately appreciated in terms of their face value in protecting public health	They may indeed have [enduring] psychosocial implications but these are for the future to determine	It is clearly not known whether they are having side effects, and whether these have been deliberately enabled "under cover" of a confected emergency	It is highly significant to ask why this obvious possibility is not more widely recognized, given credence and discussed
Who is to be honoured in this "war" as exemplifying human courage in taking risks?	The people on the "front-line" are the courageous health workers and public officials making difficult decisions.	Unrecognized levels of courage are exhibited by those who question while complying with the imposition of arbitrary rules -- although their failure to "stand up" courageously is questionable	It is unclear what long-term problematic effects the deprecation of individual courage has on a culture -- as an erosion of qualities of the human spirit: "then there was no one to stand up for me".	After any crisis, society extols the merits of those who resist the imposition of seemingly arbitrary rules -- as being an exemplification of the highest human values
Why does society have such a problematic response to the inevitability of death -- especially when death of others is orchestrated by authorities -- acceptably?	Life should be preserved as long as possible, whatever the circumstances	People faced with death tend to reframe their anticipation of it in unexpected ways	It is far from clear how people and society would respond to threat of death if it was not considered absolutely unacceptable	There is every possibility that people would welcome death rather than face any suffering associated with its postponement
Reviewed and further developed by Nadia McLaren				

Questioning assumptions about questions and the nature of answers

There is a case for recognizing that the worldwide acceptance of "masking", "distancing" and "lockdown" is a collective adaptation to crisis whereby society effectively becomes its own metaphor, as clarified by [Gregory Bateson](#) (1972). Thus:

- people are decreasingly able to "face each other" in public -- with all that that has long implied in terms of a sense of shame?
- there is now an obligation to maintain a "safe distance" from each other -- with all that that may now imply in terms of memetic infection?
- the recourse to lockdown as the principal remedial response -- to be understood as a precursor of "cognitive lockdown", a strategic device to impose consensus, readily recalling reference to lockstep in fascist regimes?
- the focus on "sanitising" suggests an unconscious collective recognition that people are potentially "unhygienic" -- in terms of attitude and behaviour -- to a far higher degree than the emphasis otherwise placed on bodily hygiene by the advertising industry

Missing from the conceptually hygienic focus on "unknown" and "uncertainty" is the sense in which this distracts from recognition of the far more charged sense of "ignorance" and self-deception (especially in the case of "known unknowns"). The question is how this may have been cultivated by various social processes -- including "dumbing down" as a deliberate strategy.

There is little collective enthusiasm for acknowledging that of which human civilization is ignorant, and possibly dangerously so, as suggested by arguments of [Nicholas Rescher](#) (*Ignorance: on the wider implications of deficient knowledge*, 2009; *Unknowability*, 2009; *Finitude: a study of cognitive limits and limitations*, 2010). Given the classic critique of [learned ignorance](#), is there need for a context in which the paradoxes can be explored, as argued separately (*University of Ignorance: engaging with nothing, the unknown, the incomprehensible, and the unsaid*, 2013)?

A framework such as that above could well be recognized as naive, simplistic or irrelevant by the future -- and by some cultures, or by hypothetical extraterrestrials. It assumes a degree of conventional rigidity both to notions of "known" and "unknown" and to "question" and "answer". Given their fundamental importance to religion, as noted above, it is appropriate to recall a mode of discourse that has been cultivated by theology, namely [apophasis](#). Only statements of what God is **not** are then considered meaningful, as variously described:

- Michael Sells: *Mystical Languages of Unsayings* (1994).
- Robert M. Gimello: *Apophatic and Kataphatic Discourse in Mahayana: a Chinese view* (*Philosophy East and West*, 26, 2, Apr., 1976),
- David Henderson: *Carl Jung and Thomas Merton Apophatic and Kataphatic Traditions in the 20th Century* (*Studies in Spirituality*, 13, 2003)
- Jeremy Henzell-Thomas: *Spirituality Colloquium: difference between cataphatic and apophatic theology as a framework* (*The American Muslim*, 26 April 2005)
- Janet Williams: *Judging Judgement: an apophatic approach* (*Theology Today*, January 2002)
- Jonah Winters: *Saying Nothing about No-Thing: apophatic theology in the classical world*.

It could however be only too readily assumed that this modality would be favoured by an authority anxious to avoid any challenge.

There are various indications of the possibility of alternatives to the question/answer dynamic that merit exploration:

- [Wendy Lehnert](#): *The Process of Question Answering* (1978)
- D. Magary: *Answering Questions, Questioning Answers: the rhetoric of interrogatives in the speeches of Job and his friends* (2005)
- Jamie McKenzie: *The Question is the Answer. creating research programs for an Age of Information* (*The Question Mark*, 7, 1997, 2)
- [Mark Rudman](#): *Questions about Questions* (*Diverse Voices*, 1992)

- [World Question Center](#) (of the [Edge Foundation](#)) asking the eminent each year a single question, including *What Questions Have Disappeared?* (2001)
- *Questions to which Many deserve Answers !* (2000)
- *Am I Question or Answer? Problem or (re)solution?* (2006)
- *In quest of the most deadly question* (2013)
- *Question Avoidance, Evasion, Aversion and Phobia: why we are unable to escape from traps* (2006)
- *Challenging Questions of Global Significance from the Young: can satisfactory answers be found for savvy kids?* (2016)
- *911+ Questions in Seeking UnCommon Ground and protecting the Middle Way from Binary Thinking* (2011)
- *Strategic Appropriateness: questionable answers* (1995)
- *Strategically Relevant Evocative Questions?* (1993)
- *Strategic Implications of 12 Unasked Questions in Response to Disaster* (2013)

Questions and answers might be more appropriately appreciated as verbs to be enacted rather than as things to be variously had or possessed. This would follow from related arguments with respect to [process logic](#) and values (*Freedom, Democracy, Justice: Isolated Nouns or Interwoven Verbs? Illusory quest for qualities and principles dynamically disguised*, 2011).

Both questions and answers can be experienced and described through the wave metaphor (*Facing a wave of questions on swine flu*, *The Philadelphia Inquirer*, 3 May 2009; *A Wave of Questions*, *The Seattle Times*, 28 December 2004; *A Wave of Questions*, *CounterPunch*, 29 December 2004; Colin Dwyer, *U.S. Plane Goes Down In Afghanistan, Prompting Wave Of Questions*, *Contradictions*, *WFDD*, 27 January 2020). There is little difficulty in recognizing that COVID-19 has evoked a "wave of questions", especially on social media. Obvious related examples are "wave of enthusiasm" and "wave of public opinion" (Brooke Masters, *Ride the Wave of Public Opinion with Care*, *Financial Times*, 27 June 2015; *Democrats see wave of enthusiasm but still face an identity crisis*, *The Washington Post*, 8 March 2018)).

This suggests that insights from the ongoing quantum-related paradigm shift might usefully frame questions and answers as wave forms in cognitive terms ([Alexander Wendt](#), *Quantum Mind and Social Science: unifying physical and social ontology*, 2015). Whether individually or collectively, engagement with them as potentially disruptive "otherness", may then come to be more fruitfully framed in such terms (*Encountering Otherness as a Waveform*, 2013; *Being a Waveform of Potential as an Experiential Choice: emergent dynamic qualities of identity and integrity*, 2013)

As a wave dynamic, should the coronavirus pandemic be recognized as a challenging strategic "question" to human civilization -- or perhaps as an "answer" to the questions the problematic behaviours and attitudes that civilization has engendered?

Challenging disconnect between knowing, feeling and doing

There is increasing recourse in public discourse to the "incomprehensibility" of events and the strategies in response to them. This is associated with an **inability to integrate current events into existing analytical frameworks**. Assertions of "incomprehensibility" are a continuing feature of the crises across the Middle East. They would also seem to have characterized the financial crisis of 2008 and its economic consequences.

Inappropriate responses to the supposedly unknown are recognized as reinforcing uncontrolled vicious cycles. The question is what is the learning context that would enable such cycles to be "broken" (*Dysfunctional Cycles and Spirals: web resources on "breaking the cycle"*, 2002)?

Missing from neat analytical frameworks is consideration of the disconnect between knowing, doing and feeling. Rumsfeld's poem can therefore be usefully adapted to highlight this, especially in the the light of the absence of feeling or compassion associated with "humanitarian interventions" at that time and subsequently. As discussed separately the adaptations can be usefully presented in parallel with the original, as below (*Unknown Undoing challenge of incomprehensibility of systemic neglect*, 2008).

<i>The Unknown</i>	<i>The Undoing</i>	<i>The Unfeeling</i>
As we know, There are known knowns. There are things we know we know. We also know There are known unknowns. That is to say We know there are some things We do not know. But there are also unknown unknowns, The ones we don't know We don't know.	It is to our undoing that, There are things unfortunately done. These are things we knowingly do. We also leave undone Things that ought to be done. That is to say We do some things unknowingly Without knowing what we don't do. But there are also things unknowingly undone, The ones we don't know We are undoing.	We do indeed feel That we do some things with feeling. These we feel we feel. We also do things without feeling That we know we should feel. We do other things unfeelingly Without knowing they are unfeeling. But there are also things unfeelingly done, The ones we don't know and don't feel Are unfeelingly done.

In the earlier exploration, these considerations were used to enrich Rumsfeld's original framework although they are evidently absent from subsequent references to it. An annex at the time offered an indication of several [strategic patterns in terms of knowing, feeling and action](#).

Psychic numbing and the need to reframe the "DEFCON" scale

Psychic numbing? Curiously, no matter the sophistication of the articulation, there is a strange inability to engage with it appropriately in

respect of strategic issues of governance. Emergencies tend to offer case studies in "emergency unpreparedness". Collective intelligence is not enabled as might otherwise be assumed, however vigorous the claims to the contrary (*Enabling Collective Intelligence in Response to Emergencies: illustrated by the case of deep oil spill containment*, 2010).

The matter has notably been variously addressed by:

- Karen A. Cerulo: *Never Saw It Coming: cultural challenges to envisioning the worst* (2006)
- Jared M. Diamond: *Collapse: how societies choose to fail or succeed* (2005)
- Michael S. Wogalter (Ed.): *Handbook of Warnings* (2006)
- R. Meyer and H. Kunreuther: *The Ostrich Paradox: why we underprepare for disasters* (2017).

It is in this sense that the main dangers lie in the "unknown knowns" noted above by Slavoj Žižek as being "*the disavowed beliefs, suppositions and obscene practices we pretend not to know about, even though they form the background of our public values*". But this clarification necessarily falls into the class of realities with which conventional thinking is unable meaningfully to engage.

Following Taleb, it is then useful to ask of change agents -- such as Taleb and Žižek -- to what extent they themselves have "skin in the game". More generally it could be asserted that **if one does not understand how one is complicit in engendering the crisis, it is not possible to understand the nature of the solution required**.

For most however, if not all, the confrontation with crisis is associated with a form of "cognitive numbing" -- studied to a degree in terms of "**psychic numbing**". This is formally defined as the tendency for individuals or societies to withdraw attention from past experiences that were traumatic, or from future threats that are perceived to have massive consequences but low probability. Recognizing that it manifests itself collectively, the originator of the term, Robert Jay Lifton, held it to mean that a society or a culture adapts this withdrawn attention outlook and collectively applies it to current issues (*Beyond Psychic Numbing: a call to awareness, American Journal of Orthopsychiatry*. 52, 1982, 4). -- Lockdown could be recognized as reinforcing "conceptual lockdown" of some form, as suggested above.

The phenomenon has been variously recognized, notably in terms of compassion fatigue, in relation to the COVID-19 pandemic:

- Andrew Dorn: *Here's why people care less as more people die and how that impacts the COVID-19 pandemic* (KGW, 11 August 2020)
- Andrew Quist: *Psychic Numbing and the Coronavirus* (*The Arithmetic of Compassion*, 3 April 2020)
- Angela Volkov: *Covid and Compassion Fatigue* (*Medium*, 15 April 2020)
- Rob Long: *Desensitization, Statistics and the Psychic Numbing of Numerics* (*SafetyRisk*, 11 April 2020)
- Howard Kunreuther and Paul Slovic: *Learning from the COVID-19 Pandemic to Address Climate Change* (29 May 2020)
- *What makes people stop caring?* (BBC, 30 June 2020)

There is little difficulty in recognizing this phenomenon with respect to a wide variety of tragic issues: massive inequality, widespread malnutrition, inadequacy of facilities, violence (domestic, urban, regional), massive extinction of species, and environmental pollution. It is obvious with regard to natural disasters (elsewhere) and to climate change. The comfortable rationality of sophisticated articulations (as above) in no way engages with this phenomenon.

DEFCON as DEFying CONventional possibilities of response? An earlier effort to **distinguish the variety of forms of terror** -- and the degrees of terror -- sought to extend thinking beyond simplistic notions of "terrorism" (*Varieties of Terrorism: extended to the experience of the terrorized*, 2004).

The case for doing so is well-made by the experience of many exposed directly to the threat of COVID-19:

- Steven Erlanger: *The Coronavirus Inflicts Its Own Kind of Terror* (*The New York Times*, 6 April 2020)
- Bridget Judd: *Our fear of coronavirus could be 'far more contagious than the disease itself'* (ABC, 7 March 2020)
- Eva Holland: *How Fear Can Spread Like a Virus* (*Time*, 17 March 2020)
- *The fear of coronavirus is changing our psychology* (BBC, 1 April 2020)
- *'Sheer fear': mental health impacts of Covid-19 come to fore* (*The Guardian*, 14 August 2020)

Such fear is far less evident in the case of climate change -- except for those experiencing the associated natural disasters for themselves. As with misinformation, the challenge fear poses is aggravated by fear-mongering (Peter Andrews, *Exposing the fear mongering, propaganda and outright lies that are plaguing the world*, RT, 18 August 2020; Jack Kelly, *Despite The Fear Mongering, We Will Overcome The Coronavirus*, *Forbes*, 2 March 2020).

The earlier exercise noted the security preoccupation with distinct levels of threat as framed by the US DEFense CONdition (defense readiness) typology. In the event of a national emergency there, a series of seven different alert Conditions (**LERTCONs**) can be called. The 7 LERTCONs are broken down into 5 Defense Conditions (**DEFCONs**) and 2 Emergency Conditions (**EMERGCONs**). Defense readiness conditions (DEFCONs) describe progressive alert postures primarily for use between the Joint Chiefs of Staff and the commanders of unified commands and are graduated to match situations of varying military severity. They are phased increases in combat readiness:

- DEFCON 5: Normal peacetime readiness
- DEFCON 4: Normal, increased intelligence and strengthened security measures
- DEFCON 3: Increase in force readiness above normal readiness
- DEFCON 2: Further Increase in force readiness, but less than maximum readiness
- DEFCON 1: Maximum force readiness

Some clarity is available on the relevance to the pandemic (*Esper Details Defense Readiness in Face of Pandemic*, *DOD News*, 4 May

2020). The UK however makes use of a corresponding alert system in that regard (*What are the five levels of coronavirus alert in the UK?* *The Telegraph*, 25 June 2020). Given the threat to national security of NATO countries, it is however unclear whether the readiness capacity in response to the threat of Russia has been successfully adapted to the threat of the coronavirus.

The fundamental question previously raised is why no corresponding threat level scale exists for the kinds of terrifying situation experienced by many independently of any threat of terrorism (narrowly defined), and of which a pandemic is but one example? Others include:

- In measures of quality of life, what kind of scale would be appropriate to distinguish the level of fear (or terror) associated with a privileged environment in contrast with one of extreme poverty, notably in inner city urban slum environments? How are degrees of existential fear to be distinguished -- notably those characteristic of some mental disorders?
- How is it that, in areas vulnerable to bush fires, risk level indicators are in widespread use as a warning to adjust behaviour appropriately? Would it not be appropriate to position such indicators in urban environments to indicate the fear/threat level? A precedent for such an approach is the [Doomsday Clock](#) indicator maintained by the *Bulletin of Atomic Scientists* from 1947 (and standing at 7 minutes to midnight since 2003).
- How is it that with respect to species of plant and animal (and irrespective of any possible terror the species might be assumed to experience under the circumstances), an IUCN scale of different levels of threat to their possible extinction is widely used?
- How is it that the movie industry is under pressure to develop somewhat analogous scales to distinguish movies suitable for kids from those (more terrifying) requiring adult guidance, or designed only for adults in more extreme cases?
- Would it not be appropriate to adapt the statistical conclusions of the UN *Human Development Report*, which seeks to distinguish conditions of quality of life, in order to correlate them with levels of fear and terror? Is the failure to acknowledge the "quality of fear" under some circumstances tantamount to a cynical indulgence in political correctness that uses "quality of life" to put a euphemistic gloss on lives undermined by such fear?

These examples do however help to make a more fundamental point. The presentation of indicators of how problematic a condition is, and of the degree of fear it engenders, is clearly inadequate -- as is perhaps ironically indicated by the Doomsday Clock. The same may be said of many other efforts to highlight degrees of crisis -- including coronavirus.

In failing to address the capacity to remedy such situations, these could be understood as institutionalised forms of "psychic numbing". There is little trace of any focus on remedial capacity, as can be variously argued (*Indicators of Political Will, Remedial and Coping Capacity?* 2019; *Recognizing the Psychosocial Boundaries of Remedial Action*, 2009; *Remedial Capacity Indicators Versus Performance Indicators*, 1981).

Imagining the configuration of a strategic "gateless gate"

The confusion of questions and answers, as variously configured above, suggests a need to configure the pattern otherwise. As a complex "mish-mash" of possibilities and inferences, it is clearly a challenge for global civilization and any the future coherence of any remedial response to crises like the coronavirus pandemic.

Gateless gate of koans: A potential clue to the existential nature of the challenge is offered by recognition of a set of questions understood otherwise. A seeming requirement is that any possible answer is necessarily not of the same order as the questions -- or the manner of their formulation (*Engaging with the Inexplicable, the Incomprehensible and the Unexpected*, 2010). Arguably, as currently experienced, the key strategic questions -- and especially the confusion about them -- could be compared to the individual's encounter with the *koans* of Zen tradition. At first sight these appear to take the form of a question of conventional form -- but that is not how they need to be appreciated in order to frame an answer, especially when the question embodies a paradox. Clearly any answer has then to be framed and understood otherwise.

Of interest in the Zen case is that that tradition assembled a set of 48 koans. The collection is known in Mandarin as *Wiménguan* and in Japanese as *Mumonkan*. It is commonly translated in English as *The Gateless Gate*, although the implications of this are contested -- as evident in the translation by [Robert Aitken](#) (*The Gateless Barrier*, 1991). A 49th *koan*, which appeared in a classic edition, has also been considered part of the set.

The title of the collection, and the ambiguity it evokes, could be considered an appropriate contrast to the modern tendency to present checklists of principles in the form of declarations. These are effectively answers to questions which are only implied -- with the answers thereby presented themselves considered unquestionable. This modality precludes the forms of reflection associated with questions, and especially those which frame a dilemma (if not a trilemma or a quadrilemma) calling for creativity.

Riddles, aphorisms and unsolved problems: The argument could be presented otherwise if the questions were to be understood in the traditional form of a *riddle* -- as a challenge to governance. It is easily argued that viable global governance at this time could be understood as constituting a riddle (*Global Governance as a Riddle: But is a solution the answer to the question?* 2018). Comparisons have indeed been made with the legendary *Gordian Knot*. Missing from this argument is the sense in which it constitutes a set of riddles - - perhaps only inappropriately framed as the *wicked problems* of the policy sciences.

The set of 48 koans could indeed be understood as a set of riddles. Can it be said that the set of riddles with which global governance is faced has been fruitfully recognized? Where is it to be found? It is indeed the case that there are checklists of key "problems" and "challenges", although their formulation tends to design out the quandaries and dilemmas they imply -- precluding a degree of creative

response.

By contrast, mathematics and physics are notable for formulating sets of fundamental problems as yet to be solved, as with the [unsolved problems](#) lists of *Wikipedia* ([List of unsolved problems in mathematics](#); [List of unsolved problems in physics](#)). It is notable that the extension of that approach to the social sciences does not include the "unsolved problems of governance" ([List of unsolved problems in economics](#); [List of unsolved problems in philosophy](#)). Given the challenges of misinformation and fake news, it is far from evident that the [List of unsolved problems in medicine](#) encompasses the challenges of responding to COVID-19.

However it is not a single koan taken in isolation which could be considered comparable to the strategic dilemmas by which society is faced. As the pattern of questions above indicates, there is a complex of dilemmas or questions which call for consideration. Those proposed above are just examples of a larger pattern which calls for refinement. Other exercises include:

- [64 Questions for the Environmental Conservationists of the World -- raising the question as to why they are not effectively addressed](#) (2017)
- [30 Questions for the Counter-terrorism Experts of the World -- raising the question as to why they are not effectively addressed](#) (2017)
- [12 Strategic Questions for Europe Regarding Forced Immigration from Africa](#) (2015)

A particular merit of the set of koans is the comprehensibility of the language in which they are formulated -- readily recalling the tradition of teaching stories ([Fabulous traditions of managing psychosocial change](#), 2019). The insight for which they call is only implied by the simplicity of the metaphors and humour by which they may be characterized.

A related modality is the use of [aphorisms](#) typically assembled in collections, much appreciated in different traditional cultures -- but subject to the same limitation as declarations of principles, namely as being beyond question, however wittily they may be formulated (V. S. M. de Guinzbourg (Ed.). *Wit and Wisdom of the United Nations: proverbs and apothegms on diplomacy*. Paroemiological Society, 1961; Andrew Hui, *A Theory of the Aphorism: From Confucius to Twitter*, 2019).

Configuration of "higher order"? A clue to moving beyond the constraints noted lies in the paradoxical title of the Zen collection -- as a "gateless gate" or a "gateless barrier". How is the "barrier" to meaningful global governance to be understood, especially if it is paradoxically framed as "gateless"? How might the riddles faced by governance be more usefully ordered -- beyond the enthusiasm for checklists, seemingly of less value than they are upheld to be?

The possibility of configuring insights in the light of a pattern of "higher order" is one which a number of disciplines could fruitfully address. The riches of many cultures merit consideration from that perspective as a means of framing the "gateless gate" (Susantha Goonatilake, *Toward a Global Science: mining civilizational knowledge*, 1999). The possibility was speculatively explored in the case of the set of koans, exploring how the configuration of the "gate" might be mapped ([Configuring a Set of Zen Koan as a Wisdom Container: formatting the Gateless Gate for Twitter](#), 2012).

The unstructured exercise above gave rise to a set of 16 "questions" with a matching set of 64 "answers". This could be considered an invitation both to refining the articulation of that set and to developing its scope. Coincidentally a set of 16 "answers" can be recognized as the core pattern of the set of United Nations [Sustainable Development Goals](#) (16 plus 1). This has been a focus for previous configurative exercises, given the remarkable lack of recognized systemic linkages and feedback loops between them ([Memorability of 17 Sustainable Development Goals with 169 tasks](#), 2020). The same might be said of the "questions" highlighted above -- and of the potential answers.

Any configuration exercise could be informed by the mysterious interplay between "question" and "answer", especially when the answers can take contrasting forms in the light of the interplay between "known" and "unknown". The interplay could be further informed by recognition of an oppositional relation within those pairs in each case. Curiously, in the case of any set of 16, this recognition could benefit from studies of oppositional logic and the 16 binary connectives in Boolean logic, as discussed separately ([Oppositional Logic and its Requisite Polyhedral Geometry](#), 2019; [Oppositional Logic as Comprehensible Key to Sustainable Democracy: configuring patterns of anti-otherness](#), 2018). As implied by the latter, question and answer could be understood as in an "otherness relation" to each other.

Such exercises in configurative mapping specifically recognize the need for representation in four dimensions, rather than three, or two (as conventional checklists). This could be seen as a recognition of the paradoxes of governance in this period and a need for the representation of cognitive dilemmas otherwise ([World Introversion through Paracycling: global potential for living sustainably "outside-inside"](#), 2013).

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