Living with Incomprehension and Uncertainty

Re-cognizing the varieties of non-comprehension and misunderstanding

--- / ---

Introduction
---

Omnipresence of non-comprehension and ignorance
Nature of incomprehension
Incomprehension versus Misunderstanding
Incomprehension in personal experience
Incomprehension in relation to governance
Incomprehension and ignorance within systems of belief
Incomprehensible constraints on comprehensive capacity
Experiencing incomprehension personally
Incomprehension in the face of information overload
Incomprehensible inadequacy of collective response
Being misunderstood and incomprehension of the other
Re-cognition, epistemology and metaphysics
Towards the systematic reframing of incomprehension through metaphor (Annex A)
Towards the dynamic art of partial comprehension (Annex B)
Conclusion
References

Produced in a period when sustained incomprehension may well enable World War III, whilst, incomprehensibly, over 13 million face starvation in the Sahel region

Introduction

This follows from explorations of the experience of nothingness and pointlessness in daily life -- especially as a consequence of the current pattern of global strategies (Configuring the Varieties of Experiential Nothingness, 2012; Way Round Cognitive Ground Zero and Pointlessness? 2012). The experience may well be intimately related to a sense of incomprehension at the paradoxes and absurdities of life, irrespective of how well-informed an individual may be. Unconventional adaptations may be evoked to survive such experiences and thrive despite (Living as an Imaginal Bridge between Worlds: global implications of "betwixt and between" and liminality, 2011).

Such experience gives rise to a profound sense of uncertainty on which many have remarked. This is recognized at the collective level with respect to decision-making and governance. This condition of the times has been variously articulated by a number of authors (Michael Foley, The Age of Absurdity: why modern life makes it hard to be happy, 2011; Jonathan Fields, Uncertainty: Turning Fear and Doubt into Fuel for Brilliance, 2011; Dennis Merritt Jones, The Art of Uncertainty: how to live in the mystery of life and love it, 2011), most notably by Charles Handy (The Age of Unreason, 1989; Beyond Certainty, 1995; The Age of Paradox, 1995).

Mention of the profound implications of the inexplicable, the incomprehensible and potential surprises is readily avoided in silence -- a form of omertà, of which the style of debate of the international community offers one model (Global Strategic Implications of the Unsaid: from myth-making towards a wisdom society, 2003; Institutionalized Shunning of Overpopulation Challenge: incommunicability of fundamentally inconvenient truth, 2008; Lipoproblems: Developing a Strategy Omitting a Key Problem, 2009). The curious situation engendered is exemplified by the "irony-free zone" in which official press briefings take place, as described by Tim Shipman (The Gulf of Incomprehension, The Spectator, 29 March 2003).

It is appropriate to ask whether the pretence that incomprehension can be ignored fails to honour the nature of the experience with which many are obliged to live on a daily basis -- as a consequence of that pretence.

As with the "inexplicable", the question here is whether it is possible to engage fruitfully with the experience of...
incomprehension, rather than denying it or avoiding it (Engaging with the Inexplicable, the Incomprehensible and the Unexpected, 2010). Can it be usefully "faced" and "tasted" -- as an inspiration to new forms of action?

Curiously, in a period of multiple quests for integrative insights -- as originally profiled by the Integrative Knowledge Project -- incomprehension may be recognized as the "inverse" of the Holy Grail of any all-encompassing "Theory of Everything", understood as the ultimate quest of science for "comprehensive" comprehension.

In a critical period, characterized by forms of incomprehension regarding both the strategic intentions of Iran in relation to development of nuclear weapons, and their possible imminent use by Israel, the situation is exacerbated by the policy of deliberate ambiguity practiced by both. The world is now obliged to live with the incomprehension and uncertainty that nuclear war may be triggered with the complicity of the USA, despite a degree of awareness of the possible consequences. It could be held to be incomprehensible that this situation has been brought about by three essentially "theocratic" nations, representing the three Abrahamic religions -- as yet unable to resolve their differences creatively, after centuries of violent interaction, with each incomprehensible to the other and committed to its negation.

**Omnipresence of non-comprehension and ignorance**

**Knowledge-based society?** There is a curious ambiguity to the sense in which a global knowledge-based society undermines any possibility of incomprehension, whilst at the same time making evident the degree of incomprehension worldwide -- significantly due, in part, to the explosion of information, necessarily only partially comprehended. Obvious concerns of course remain regarding levels of illiteracy and innumeracy, as well as those relating to competence in languages enabling global communication.

Associated with the explosion of knowledge comes a degree of incomprehension, even on the part of the well-informed, regarding the implications, problematic consequences, and interference effects between the facets of emerging knowledge.

There is a case for recognizing the extent to which global society should be considered "knowledge-based" or "ignorance-based" (Garrison Sposito, Does a generalized Heisenberg Principle operate in the social sciences ? Inquiry, 1969).

**Comprehension "meteorology"**: Arguably new metaphors are required to frame the interplay of degrees of knowledge and ignorance worldwide. The global weather maps with which many are familiar suggest the possibility of borrowing common processes from nature to enable a more insightful overview. A number of such phenomena have already been borrowed in this way, most notably "fog", as used in a "fog of incomprehension". Widespread use of the "vision" metaphor to articulate individual and collective strategies for the future, suggests that not only is this impeded by "fog" but that associated phenomena can be called into play to refine understanding. Thus "cloud" may well be used as an indication of a constraint on the clarity of vision, especially when heavily "overcast", ensuring a degree of "darkness". Use has long been made of "darkness" as a descriptor of ignorance. Parts of the world are even held to be in a condition of permanent darkness, rather as is the case in the higher latitudes for periods of the year.

Within such a metaphor, it is easy to recognize that incomprehension may be variously present to different degrees for everyone. The "news" then offers a daily facility to clear the clouds of incomprehension -- or at least some of them and for those who have access to such facilities. Use of the metaphor in this way calls for recognition of bias in the accessible media and how this distorts the "news", potentially increasing incomprehension -- in the eyes of some. (Richard J. Brennan, Fox News leaves viewers ignorant, TheStar.com, 22 November 2011; Fox News Continues to Lead Way to America's International Ignorance, Veterans Today, 7 March 2011).

**Variable "weather" for all**: Associating incomprehension with "bad weather" needs also to be challenged as simplistic, given the manner in which "clouds" may signal and ensure "rain" vital to growth. Similarly the "cloud free skies" of unconstrained "vision" may be associated with emergence of problematic "aridity". The interplay of comprehension and incomprehension therefore calls for greater appreciation of their complexity and the roles they may play.

Understood in this light, both incomprehension and comprehension are variously present for all. Who then can claim not to suffer from a degree of incomprehension, whatever the degree of comprehension they believe they enjoy? Exploiting the weather metaphor, are there idyllic tropical islands where the "weather" is always "sunny"? To what extent does that image ignore the extent to which such islands may suffer periodically from "hurricanes" -- as with that of the recent global financial crisis? Does the metaphor suggest that "zones of confusion" shift around the global system -- possibly propelled by the so-called "winds of change"?

Then how to distinguish a zone of incomprehension from a zone of comprehension? More challenging is the sense in which the comprehension favoured by some exemplifies a condition of ignorance and incomprehension for others. Atheist scientists may well be understood as living under a "cloud of darkness" by the religious -- and vice versa. Even more problematic is the sense in which comprehension may simply signal potential incomprehension, as yet to become evident.

**Mapping incomprehension**: The relativity of the situation is succinctly illustrated by a map of incomprehension in the light of a generic development of the metaphors used in different languages to indicate incomprehension -- as with the use in English of the phrase "it's Greek to me" (Frank Jacobs, Greek To Me: mapping mutual incomprehension, 2009). The approach suggests the possibility of such a mapping for a range of other "languages" and jargons, such as those of the various disciplines. Thus a practitioner of a natural science discipline could readily make use of the phrase "it's theology to me". The point was clearly made by C. P. Snow (The Two Cultures and the Scientific Revolution, 1959):

> Literary intellectuals at one pole -- at the other scientists, and as the most representative, the physical scientists. Between the two a gulf of mutual incomprehension -- sometimes (particularly among the young) hostility and dislike, but most of all lack of understanding. (pp. 3-4)
Nature of incomprehension

Insights from language acquisition: As noted below, various disciplines -- including theology -- offer special degrees of insight into the nature of incomprehension. One valuable example is that offered by the challenge of second-language acquisition (SLA) as presented by Tsuyoshi Kida (Does Gesture Aid Discourse, 2008) with valuable references to the relevant literature:

In fact, the notion of (non-)comprehension has been controversial for a long time....

To gain clarification of non-comprehension as part of SLA, there have been several attempts at classification..., which consist of distinguishing "misunderstanding," "total incomprehension," and "partial incomprehension". Misunderstanding presupposes understanding, but involves an interpretation of the message in a direction other than that intended by the speaker. Partial incomprehension arises, theoretically, when the source of a communication problem is identified, whereas total incomprehension occurs where the interlocutor does not locate the source of the problem. In practice, however, it is difficult to reveal all types of non-comprehension.

For analysts, partial incomprehension might be easier to identify since the source is often indicated. Nevertheless, partial incomprehension cannot be treated as such, because often the incomprehension seems total in the contexts of social interaction, even if certain understanding is present in the inner language of the interlocutor pretends not to have understood. Moreover, total incomprehension can be linked to other factors than just communication difficulties. The declaration of non-comprehension depends on psychological factors such as self-confidence, personality, and strategic knowledge of the speaking subject. Therefore, real non-comprehension can be different from the message of non-comprehension as interactional practice...

One of the critical difficulties in analyzing discourse understanding on the part of non-native speakers is that partial incomprehension and misunderstanding are not clearly distinguishable in non-native speakers' reactions... (p. 133)

The irony of any such articulation, despite its apparent clarity, is that it is itself relatively incomprehensible outside the context of that discipline. The challenge for any such articulation has been well formulated in the works of Magoroh Maruyama with respect to contrasting "mindscape" determining preferences for presentation and comprehension of information (Mindscape, social patterns and future development of scientific theory types. Cybernetica, 1980, 23, 1, pp. 5-25). The potential for mutual incomprehension and disagreement has been fruitfully indicated by other authors through a variety of frameworks (Systems of Categories Distinguishing Cultural Biases, 1993). Most notable amongst these is the work on axes of bias by W. T. Jones (The Romantic Syndrome: toward a new method in cultural anthropology and the history of ideas, 1961).

Incomprehension versus Misunderstanding

In the effort to identify sources dealing with "incomprehension", it became evident that there is a greater focus on "misunderstanding", with the two being readily conflated. Some of those insights are of relevance to this argument. However a fruitful distinction between them here lies in the experiential quality of incomprehension indicative of a total -- typically astonished -- lack of any "understanding". In that sense, "misunderstanding" is indicative of the presence of a form of understanding which is (later) acknowledged or criticized as being inappropriate.

Lack of understanding: Incomprehension is then a more serious cognitive condition than understanding in a manner that may, possibly or arguably, at some stage be demonstrated to be mistaken. This implies that "incomprehension" is then the experience of a lack of any "understanding" (or explanatory framework) felt to be appropriate to the circumstances. Whilst "misunderstanding" may invite remedial explanation, or be potentially open to it, any explanation may be felt to be totally inappropriate to the condition of "incomprehension" -- even insulting to the radical nature of the experience.

Partial understanding: There is then a sense in which "misunderstanding" derives from a level of understanding which is essential partial, where alternatives may be proffered even though they themselves may not be comprehensive. "Incomprehension" is then associated with a "global" experience, possibly engaging all the senses and cognitive modalities, in ways that frameworks of "understanding" may variously ignore or deprecate. These may include emotional and spiritual dimensions of the total experience if they are felt to be relevant -- irrespective of the explanations on offer. The latter are then to be understood as forms of subunderstanding (Magoroh Maruyama who distinguishes between "polyocular vision" and "subunderstanding" (Polyocular Vision or Subunderstanding. Organization Studies, 25, 2004, 3, pp. 467-480).

Misunderstanding incomprehension: A situation giving rise to incomprehension may therefore also engender a sense of panic. This may be less readily alleviated by an explanation -- in contrast to a situation arising from a misunderstanding. Attempts may however be made to reframe "incomprehension" as a matter of "misunderstanding", with the latter term effectively used as a euphemism to diminish or "rationalize" the experience associated with the former. In a sense, "incomprehension" can only be "misunderstood" -- through partial comprehension, which is necessarily not "comprehensive" with respect to the experience as a whole.

Rather than the polarization reinforced by this argument, a different approach to the distinction and the complementarity has been developed separately (Fundamental learning distinction: Understanding vs Comprehending? 2007).

Insights from intercultural communication: Especially helpful with respect to misunderstanding is the summary offered by Volker Hinnenkamp (The Notion of Misunderstanding in Intercultural Communication. Journal of Intercultural Communication, 1999). He argues:

Rarely do we come across studies on misunderstandings as a (pragma-)linguistic phenomenon in its own right. Even rarer are
Incomprehension in personal experience

Rather than explore the possibility of inherently abstract (and potentially incomprehensible) frameworks of explanation regarding incomprehension, there is a case for highlighting the various forms and contexts of actual experience of it. Although these forms may enable and encourage "intolerance", the concern here is with the incomprehension which may be a prelude to intolerance, especially since the latter may well be engendered by a problematic sense of comprehension rather than of incomprehension -- of which all have had a "taste".

**Suffering:** Incomprehension is most evident in relation to suffering, as detailed separately below (*Experiencing incomprehension personally*).

**Strange places:** The sense of the strangeness of places is intimately related to lack of comprehension of them. This is most immediately evident when visiting an unfamiliar area, another neighbourhood or a different town. In it there is the possibility of being "lost"-- of losing any comprehension of location and orientation. This is even more evident in visiting other countries, where the sense of strangeness may be augmented by the style of architecture or even the topography.

The sense of strangeness may of course be explored for pleasure and curiosity through tourism. The process of becoming familiar, and attenuating the sense of incomprehension, may then be valued in contrast to what is conventionally understood.

---

**Insights from relevant prefixes:** "Incomprehension" can be usefully explored, in relation to "comprehension", in the light of the prefixes affixed to "prehension", following earlier considerations (*Exploration of Prefixes of Global Discourse: implications for sustainable confidelity, 2011; New Paradigms via a Renewed Set of Prefixes: dependence of international policy-making on an array of operational terms, 2003*).

Prehension is indicative of the sense in which a form of cognitive "grasping" is involved, as implied by comprehension and apprehension, with the latter indicative of a degree anticipation, potentially non-cognitive and even fearful. By contrast "reprehension" is indicative of criticism, censure or condemnation.

In the sense in which "comprehension" implies a degree of integration of disparate elements, this can be contrasted with "comprehensive" as implying a more extensive (if not total) integration of them. Then both "incomprehensive" and "noncomprehensive" suggest inadequacy in that respect.

**Miscomprehension engendered by inaccuracy of perception:** The fields of psychology, sociology, and communications variously recognize what is termed "pluralistic ignorance". This describes a situation where a majority of group members privately reject a norm, but assume (incorrectly) that most others accept it. It gives to a condition in which no one believes, but everyone thinks that everyone believes. It relates to the condition in which members of a group who believe themselves to be in the minority are actually in the majority (Gregor Daschmann, *Pluralistic Ignorance, The International Encyclopedia of Communication*).

The phenomenon has been cited:

- for the perception (among American whites) that grossly exaggerated the support of other American whites for segregation in the 1960s
- as a reason for the illusionary popular support that kept the communist regime in the Soviet Union, as many opposed the regime but assumed that others were supporters of it.
- in relation to witch hunts in the past and during the Cold War
- with respect to assaults on homosexuals
Strange technology: Exposure to new technology is characteristic of rapidly developing societies and their impact on other societies. This may necessarily give rise to a sense of incomprehension, confusion and anxiety -- most obviously with the exposure to escalators and elevators of people from rural areas. The experience is also evident with exposure to new generations of electronic and other devices requiring insight into the manner by which they may be used, controlled, repaired and upgraded. The experience may engender confusion, if not panic, as exemplified by the interaction of older generations with ATM devices, ticketing machines, and online payment systems. The sense of incomprehension may be exacerbated by the complexity of the device (as with remote control devices) and issues of aptitude and preference (notably for those who prefer face-to-face contact).

Again new technology may be a focus of fascination and appreciation, most especially for the young, as widely remarked. Curiosity then readily triumphs over confusion.

Strange language: People are increasingly exposed to languages other than their own, possibly provoking a sense of incomprehension and uncertainty in situations where adequate comprehension may appear vital. The notion of "language" may extend to dialects or jargons, evoking incomprehension in situations in which it might be supposed they are familiar. This can be especially problematic when such variants are associated with cultural or class differences -- namely where other challenges underlie the lack of comprehension. The situation is further complicated in the case of exposure to a more "global" language with which familiarity is lacking. Conversely, incomprehension takes another form in the encounter by the speaker of a "global" language with a "local" language, especially where this may evoke a degree of resentment on either side -- or where incomprehension may be denied and comprehension mistakenly assumed (as noted above).

As with strange places, the encounter with languages experienced as strange may be appreciated as a contrast to modes of communication where comprehension is readily assumed. It may enrich the experience of tourism or the quality of life in a multilingual society.

Strange people and behaviour: Multicultural societies increasingly ensure encounters with people with behaviours readily experienced as strange and incomprehensible. However, with the development of alternative lifestyles and cultures within a society, such strangeness may also be experienced in the encounter between those of different generations, ideologies, or modes of life -- and most notably those of "sects". The behaviour may be readily experienced as inexplicable. Such reactions can easily lead to xenophobia.

Again, the experience of strange people and behaviour may be a valued feature of tourism, framed as broadening horizons and learning "how others live".

Strange belief system: Irrespective of the strangeness of people, some seemingly "ordinary people" may be experienced as having incomprehensible beliefs -- again notably those in sects or associated with "other" religions. Such incomprehension may be experienced with respect to those holding alternative political views. For those of intellectual persuasion, the worldviews of others with whom they disagree may be considered incomprehensibly gullible or misguided -- or "just plain wrong".

Strange administrative procedures: The required procedures for interaction with officialdom for administrative purposes (licences, taxation, etc) may well be experienced as incomprehensible -- especially as they increase in complexity and become intertwined, through rationalization, with advances in technology. They may be especially challenging for the elderly or those variously handicapped when special provisions are not envisaged.

Injustice: A deep sense of incomprehension is readily experienced as a consequence of exposure to some forms of injustice and unfairness, especially when no remedial action is evident or even considered -- and when the guilty are either not convicted or merely receive derisory punishment. This may well undermine any faith in the system of governance, the police, and the judiciary -- and even possibly in fellow human beings.

Inter-gender perplexity: The incomprehension associated with the experience of those of one sex for those of another has long been the subject of humour and commentary, exemplified by the arguments of John Gray (Men are from Mars, Women are from Venus, 1992). It may engender misogyny, misandry, other aberrations (Edward Ross Dickinson, "A Dark, Impenetrable Wall of Complete Incomprehension": the Impossibility of Heterosexual Love in Imperial Germany, Central European History, 40, 3, 2007, pp. 467-497). Incomprehension may extend to homosexual relationships, which may in turn engender homophobia and discriminatory practices (United Nations Human Rights Council, Discriminatory laws and practices and acts of violence against individuals based on their sexual orientation and gender identity; Homophobia, stigma and incomprehension, Melbourne Age, 9 January 2012).

Incomprehension in relation to governance

There are many references to "lack of comprehension" and "misunderstanding" in international affairs, notably embedded in preoccupations with the need for tolerance, dialogue and "mutual understanding" (cf International Year of Youth 2010-2011: Youth Fostering Dialogue and Mutual Understanding, UN Inter-Agency Network on Youth Development, 2010). Arguably such a "positive" framing obscures the nature of the cognitive and experiential challenge which merits attention and its "re-cognition".

The following indicate explicit recognition of incomprehension in the ongoing reality of international discourse -- an incomprehension which may well trigger World War III, as argued by various commentators (Luiza Ch. Savage, World War III? Macleans, 25 July 2006; Millions of Evangelical Christians Want to Start World War III -- to Speed Up the Second Coming, Global Research, 18 February 2012; Michel Chossudovsky and Finian Cunningham, The Globalization of War: The "Military Roadmap" to World War III, Global Research, December 2011).

In relation to Islam, and notably reciprocated:

- Mutual Incomprehension, Mutual Outrage (The Economist, 10 February 2006) as indicated by global protests over cartoons of
Clashing Civilizations: misunderstanding the present

Remaking of World Order

Misunderstanding the present:
With respect to governance

General

In relation to Europe

Foreign policies which presuppose an eventual global consensus on liberal values will be ineffectual. This is an incisive criticism kept them stable during the postwar period. (p. 154)

applies in economic life applies no less in politics. It is far from being the case that the removal of their Cold War rival has the models of a market economy can win. All are mutating in the anarchic and volatile environment of the world market. What

It is a fundamental misunderstanding of the present to think of this new rivalry of capitalisms as one that any of the established

concern. A particular example is offered with respect to the Vatican (Tom Heneghan, 2011)

Democracy

Ignorant Voters,

the electorate

U. Thant (2009)

Gustav Ichheiser (2009)

Vincent Kiernan (2007)

Alan Bock (Seven Years of Incomprehension, AntiWar.com, 16 September 2008)

In relation to Europe:

Adriano Farano (Eyewitness Israel: Gaza, war and the wall of incomprehension between Europe, Espatica.Survey, 22 January 2009)


The European Union citizens have been subjected to cold radiators amidst chilly winters for a number of years, with the most serious gas shortages having erupted in January last year. Russian gas monopoly Gazprom is behind this; it cuts off the European gas supplies without a warning, while the EU appears to be incapable of dealing with its unreliable neighbour.

How can contemporary international relations theory account for this paradox of two mutually dependent countries cooperating in such political pandemonium?

General examples of international incomprehension, ignorance and misunderstanding include:

Carlo Galli (Life and Society: a sea of incomprehension, ResetDoc, 9 January 2008)

Vincent Kieran (Survey plumbs depths of international ignorance, New Scientist, 29 April 1995)

Dan Kubitke (Ignorance of international affairs: It's a major problem for America, World Journalism, 15 February 2012)

Gustav Ichheiser (Misunderstandings in International Relations, American Sociological Review, 16, 3, 1951, pp. 311-316)

Ralph K. White ("Socialism" and "Capitalism": An International Misunderstanding, Foreign Affairs, 44, 1966, 2, pp. 216-228)

David Singer (International Ignorance Incites Injustice, Resolving the Arab - Jewish conflict, July 2004)

U. Thant (Education and International Misunderstanding, Teachers College Record, 63, 1, 1961, pp. 1-7)

With respect to governance, there is a degree of recognition of the (complementary) instances of incomprehension on the part of:

the electorate regarding the challenges of governance, possibly reinforcing political apathy (cf Michael Schudson , America's Ignorant Voters, Wilson Quarterly, 24, Spring 2000, 2; Ken Adachi, Voter Non-comprehension and America's Continuing Descension, Educate-Yourself, 3 November 2010; Ilya Somin, When Ignorance Isn't Bliss: How Political Ignorance Threatens Democracy, Political Analysis, CATO Institute, 22 September 2004; Jonah Lehrer, The Ignorance of Voters, Wired, 27 April 2011)

the governors regarding the concerns of the electorate, typically framed in terms of "out of touch" or "failure to listen" -- most evident in the acknowledged reluctance of European governments to arrange referenda on controversial issues of national concern. A particular example is offered with respect to the Vatican (Tom Heneghan, Pope-victims gap is tip of iceberg of incomprehension in Catholic Church, FaithWorld, 21 March 2010).

Misunderstanding the present: Especially interesting is the response to Samuel Huntington (The Clash of Civilizations and the Remaking of World Order, Francis Fukuyama (The End of History and the Last Man, 1992) by John N. Gray (Global Utopias and Clashing Civilizations: misunderstanding the present, International Affairs, 1998):

It is a fundamental misunderstanding of the present to think of this new rivalry of capitalisms as one that any of the established models of a market economy can win. All are mutating in the anarchic and volatile environment of the world market. What applies in economic life applies no less in politics. It is far from being the case that the removal of their Cold War rival has the overall effect of strengthening Western liberal democracies. On the contrary, it has removed one of the principal props that had kept them stable during the postwar period. (p. 154)

Foreign policies which presuppose an eventual global consensus on liberal values will be ineffectual. This is an incisive criticism
of Fukuyama's neo-Wilsonian certainty that Western values are universal; but in arguing that fault-lines between civilizations are the source of war Huntington misunderstands the present as grievously as Fukuyama does. As a result he gives a mistaken diagnosis of both the potential for tragedy and the opportunities for cooperation that our present circumstances contain. (p. 156)

For Zenonas Tziarras (The Misunderstanding of Geopolitics, Global Politics for the Next Generation of Policy-makers, 2011):

Geopolitics is often misunderstood and perceived as a monolithic methodological tool for international relations analysis that suggests an unchanged geographical structure within the international system. This means that geographical changes along with geopolitical changes create an unstable and fluid international system which cannot be locked within the normative framework of traditional and outdated geopolitical explanations.


The over-abundance of the critique of ideology, other forms of 'ideological demystification' and anti-essentialist theorizing have resulted in the failure of the human sciences to adequately understand the emergence of contemporary Islamic and Islamist fervour and its relationship to modernity. In contrast to much, but not all, of the literature on Islam and modernity, the article develops a reconstructed dialogical theory, which draws upon both Gadamerian hermeneutics and interreligious dialogue, as a means to take more seriously the truth-claims of the Islamic Other. By drawing upon notions of 'suspicion' and 'silence' from interreligious dialogue, a reconstructed dialogical model can overcome the absence of critique, a charge often levelled against hermeneutic dialogue, without resorting to the Enlightenment mode of critique. Although a reconstructed dialogical framework is not without its own problems, for instance how to overcome the gap between a foundationalist Islamic worldview and an increasingly post-foundationalist secular one, it provides a better prospect for understanding the Other.

Incomprehension and ignorance in relation to systems of belief

There would seem to be different facets of this theme – a focus of considerable controversy, and readily conflated in various ways in the literature. Distinctions that can be made include:

1. Incomprehension as a psychosocial phenomenon meriting attention in its own right: As the least controversial, this is characterized by the perception from a particular worldview of the regrettable ignorance to which many are subject. Typically recognition gives rise to programmes of education, as with respect to the illiteracy and innumeracy promoted by UNESCO. Although relatively "innocent" of any "hidden agenda", implicit in the promotion of such programmes may be the enabling of subsequent access to particular modes of understanding, as with the missionary activity of many religions.

2. Incomprehension by wider publics of a mode of knowledge favoured by a particular group as the key to truth: This is characteristic of the explicit identification of a programme of education to ensure knowledge of that modality. In the case of religion, this necessarily takes the form of religious education in support of a particular faith, possibly framed in terms of the priority of "saving souls" (Heidi Rolland Unruh and Ronalk J. Sider, Saving souls, Serving Society: understanding the faith factor in church-based social ministry. 2005). As with the Great Commission of Christianity and its metaphorical framing as a "crusade", this is a characteristic of many religions committed to their own rapid growth, a role in the corridors of power, and fulfillment of divine purpose. As a driving commitment it bears comparison with the Aleinu as the fundamental expression of duty in Judaism and with the commitment of Islam to extending Sharia through Jihad.

A corresponding pattern is evident in concerns about ignorance of science, or of a particular scientific discipline, and the desirability of science education as a key to socioeconomic survival. The concern is articulated in terms of "public understanding of science" in response to incomprehension of the insights it has to offer and the problematic manner in which the methodology of science is misunderstood. As articulated by C. P. Snow (The Two Cultures and the Scientific Revolution, 1959):

But I believe the pole of total incomprehension of science radiates its influence on all the rest. That total incomprehension gives, much more pervasively than we realise, living in it, an unscientific flavour to the whole "traditional" culture, and that unscientific flavour is often, much more than we admit, on the point of turning anti-scientific. (pp. 10-11)

More recently:

- Michael Smithson (Ignorance and Science: dilemmas, perspectives, and prospects, Science Communication, 15, December 1993, 2, pp. 133-156)
- A. B. Pipparda (The invincible ignorance of science, Contemporary Physics, 29, 1988, 4, pp. 393-405)
- Jill Turner and Mike Michael (What do we know about "don't knows"? Or, contexts of "ignorance", Social Science Information, 35, March 1996, 1, pp. 15-37)
- Richard R. Hake (The General Population's Ignorance of Science-Related Societal Issues: A Challenge for the University)
- Joseph F. Coates (Disastrous Consequences of Scientific and Technological Illiteracy, From On The Horizon, 11.1, 2003,
3. Concern from the perspective of any preferred mode of knowledge of its incomprehension by alternative modes of knowledge: This pattern is only too evident in the case of different religions, effectively in "competition" with other religions, each failing to recognize and honour the particular claims of others as a unique source of knowledge. Typically this results in a form of defensive demonization of the other -- readily justifying conflict towards its annihilation.

This pattern is evident amongst academic disciplines, each anxious to "protect its turf" and an "orthodox" approach to truth, readily characterizing other disciplines as misguided or purveyors of "nonsense" -- and as such meriting the severest condemnation (cf. Henry H. Bauer, Science or Pseudoscience: magnetic healing, psychic phenomena, and other heterodoxies, 2001; Alan Sokal and Jean Bricmont, Fashionable Nonsense: postmodern intellectuals' abuse of science, 1999). In the literature this pattern is recognized as the "science wars", of which notable triggers have been the Sokal Affair and the Bogdanov Affair.

4. Concern by other modes of knowledge at the incomprehension characteristic of a dominant mode of knowledge: This pattern is evident in the schismatic tendencies of various religions and the recognition of the inadequacies of a dominant form (typically characterized in terms of arrogance), as with criticism of Catholic perspectives by Protestant groups. Criticism may also recognize a marked degree of exclusivism and an inability to appreciate the insights offered by the alternative modes from which the criticism is formulated. This pattern is part of a dynamic with that identified above.

This pattern is evident in criticism of particularly dominant academic disciplines by others -- in the light of limitations and incomprehension (partly arising from that dominance) of the insights offered by other perspectives. Again this pattern, as in the "science" wars, is part of the dynamic identified above.

5. Incomprehension engendered and sustained by a set of disciplines as a consequence of failing to "set their house in order": Whether the set of religions or the set of academic disciplines, it is evident that there is a collective inability to apply the insights of either modality to ensure a healthier dynamic than that appropriately described by phrases such as "religious wars" or "science wars".

In each case the pattern is equivalent to that of "quarrelsome tribes" characteristic of the patterns of governance in many tribal societies.

6. Incomprehension from, a more general perspective, at the problematic dynamics between competing modes of knowledge: This is evident in the relation between "religion" and "science" as distinct modes of knowing -- variously characterized by promotion of "anti-science" or "anti-religion" perspectives. There is a tendency for each to condemn and demonize the other as a source of ignorance and incomprehension -- exacerbating incomprehension of the truth by which it is uniquely characterized. Typically neither is capable of using its insights to articulate the relationship in a more fruitful manner. This failure is echoed by the inability to address conflictual issues with which governance is confronted, exacerbated by either faith-driven or science-driven decision-making, or by both.

As an example with respect to science, a compilation by Ullica Segerstråle (Beyond the Science Wars: the missing discourse about science and society, 2000) includes a discussion by Henry Bauer of the "incomprehension of science":

The "strong programme" and its ilk are fundamentally and irretrievably wrongheaded, if the purpose is to understand science. So is its primary "principle", that scientific activity should be investigated "neutrally", without prior judgment about the correctness or incorrectness of the science being studied. As so happens so often, something that sounds reasonable in the abstract becomes ridiculous when applied to any real case. So far as science is concerned -- that is substantive knowledge about Nature -- it matters crucially whether data or theories fit or do not fit, are operationally right or wrong... A common way in which some science studies scholars foster incomprehension of science is to focus on one aspect of it to the exclusion of all else: describing science as "business in disguise", say, or "deconstructing" a celebration of X-ray crystallography as a "succession rite"... That sort of one-dimensional, externalist commentary requires no technical knowledge of science itself. This raises the question, How much or little does an interpreter need to know to be able to speak validly and significantly? (pp. 46-47) [emphasis added]

Nothing is said of "incomprehension by science". In the light of Bauer's question with respect to "validly and significantly" -- and given that both are natural scientists -- what credibility can be attached to his views or those of Alan Sokal (Beyond the Hoax: Science, Philosophy and Culture, 2010)? On the other hand, how is the question to be reconciled with the recognition in corporate research and development that creativity breakthroughs come when people venture beyond their area of expertise, as documented by Jonah Lehrer (Imagine: How Creativity Works, 2012; Proust Was a Neuroscientist, 2007)? Should the issue of reflexivity not be on the table, as argued by Hilary Lawson (Reflexivity: the post-modern predicament, 1985) and by Douglas Hofstadter (Gödel, Escher, Bach: an Eternal Golden Braid, 1979)?

The dynamics are evident in the extensively articulated arguments for a faith-based perspective (as notably developed by Christian

Similar concerns are evident with respect to culture and the arts.

- Lewis Thomas (On Science and Uncertainty: philosophy and religion, Discover, October 1980)
- E Peter Volpe (The Shame of Science Education, American Zoologist, 24, 1984, 2, pp. 433-441)
Incomprehensible constraints on comprehensive capacity

As a psychosocial phenomenon, the above pattern merits review in the light of the variety of "disciplines" or "modes of knowledge". These might well have included the conventionally deprecated traditional/indigenous modes of knowledge as articulated in the compilation by Darrell Posey (Cultural and Spiritual Values of Biodiversity, United Nations Environmental Programme, 1999).

Philosophy: Arguably philosophers have engaged in noble efforts to clarify the context within which all-encompassing theories emerge and decline (Nicholas Rescher, The Strife of Systems: an essay on the grounds and implications of philosophical diversity, 1985). It is very challenging to engage cognitively with that context and the process, especially given the commitment to the next emerging theory and the exciting claims made for it. The process has been partially addressed in the debate over the contrasting perspectives of T. S. Kuhn (The Structure of Scientific Revolutions, 1962) and Karl Popper (Conjectures and Refutations: the growth of scientific knowledge, 1963). Rescher (1985) concludes his study of such distinctly unintegrative conflict with the comment:

For centuries, most philosophers who have reflected on the matter have been intimidated by the strife of systems. But the time has come to put this behind us -- not the strife, that is, which is ineliminable, but the felt need to somehow end it rather than simply accept it and take it in stride. To reemphasize the salient point: it would be bizarre to think that philosophy is not of value because philosophical positions are bound to reflect the particular values we hold.

It could be considered incomprehensible that philosophy has proven to be significantly inadequate to addressing incomprehension between philosophies -- and especially irresponsible in its failure to recognize the issue (with the notable exception of Rescher), other than to deplore how "misguided" or "wrong" are the philosophies promoted by others. "Metaphysics" and "metaphilosophy" have become synonymous with irrelevance.

Religion and theology: Christianity offers an especially dramatic instance of incomprehension through the question of Jesus on the Cross: Eloi, Eloi, lema sabachthani?, meaning My God, my God, why have you forsaken me? (Mark 15:34) -- the subject of many sermons (cf. Human Incomprehension: the Cross, OnePlace)

Curiously, useful insights into the nature (and value) of incomprehension are offered in a particular debate central to Christian theology, as indicated by the following:

- F. J. Matera (The Incomprehension of the Disciples and Peter's Confession (Mark 6, 14 - 8, 30), Biblica, 70, 1989, 2, pp. 153-172)

For a global civilization on the brink of World War III as a consequence of faith-driven governance, the self-righteous complicity of the Abrahamic religions regarding the nature and quality of their relationship can only be described as incomprehensibly shocking. As self-proclaimed vehicles of "global" comprehension and the highest values of humanity, they effectively epitomize the capacity to engender fatal incomprehension -- and seemingly take pride in doing so. The many efforts at "inter-faith dialogue" then appear to be incomprehensible exercises in tokenism -- despite the riches and experience on which religion is able to draw, especially in the light of the fatal conflicts between their own schismatic groups.

Disciplines: How, asks Russell Ackoff (Systems, organizations, and interdisciplinary research, General Systems Yearbook, 1960), is a practitioner of any one discipline to know in a particular case whether another discipline is better equipped to handle the problem than is his? It would be rare indeed if a representative of one of the many disciplines in some way related to the problem in question did not feel that his particular approach to that problem would be very fruitful, if not the most fruitful. This tendency is also institutionalized, as noted by Hasan Ozbekhan (1969):
This almost subconsciously motivated attempt, that of a sector to expand over the whole space of the system in its own particular terms and in accordance with its own particular outlooks and traditions, compounds the problem by further fragmenting the wholeness of the system. For sectors cannot become systems, they can only dominate them; and when they do they warp them.

On the same point, Ackoff notes (1960):

...few of the problems that arise can adequately be handled within any one discipline. Such systems are not fundamentally mechanical, chemical, biological, psychological, social, economic, political, or ethical. These are merely different ways of looking at such systems. Complete understanding of such systems requires an integration of these perspectives. By integration I do not mean a synthesis of results obtained by independently conducted undisciplinary studies, but rather results obtained from studies in the process of which disciplinary perspectives have been synthesized. The integration must come during, not after, the performance of the research.

As with philosophy in particular, it is curious that disciplines in general have been content to ignore the mutual incomprehensibility of modes of knowing alternative to that which they individually advocate. The various forms of interdisciplinarity and transdisciplinarity have proved to be of little significance to the experience of incomprehension of those obliged to wander the streets between the ivory towers and information silos of the disciplines, as separately discussed (¿ Higher Education ≠ Meta-education ? Transforming cognitive enabling processes increasingly unfit for purpose 2011).

Unexplored wealth of insight: It is especially to be regretted that the emerging complex insights of fundamental physics and cosmology -- informed by relativity theory and paradox -- have not been explored as a source of patterns of thinking more capable of interrelating the diversity of perspectives that emerge in the psychosocial processes above. It is perhaps characteristically tragic that a physicist such as Alan Sokal should acquire his fame by using the language of physics to frame the perspectives of those whose worldview he deprecates as "nonsense" (Fashionable Nonsense: postmodern intellectuals' abuse of science, 1999). Ironically such misuse of physics might well be understood as exemplifying the "abuse of science" he condemns. More paradoxical however, at a time when physics is attributing ever-increasing significance to "nothing", is the possibility that so-called "nonsense" may come to have far greater significance -- in the light of the emerging capacity of physics to offer new ways of thinking, as discussed separately (Evolutionary influence of the absent, 2011; Fundamental integrative role of nothing -- the ultimate remainder?, 2011) in the light of special issues of the New Scientist on the topic (Nothing: the intangible idea that rules the cosmos, 19-23 November 2011; Something from Nothing, 18 February 2012; The Nature of Nothingness, The Grand Delusion: why nothing is at it seems).

Whether science or religion, it would seem that those most convinced of the inherent superiority of their particular mode of knowing are incapable of effectively and meaningfully addressing the dynamics of the psychosocial system in which they are immersed. This phenomenon merits consideration in its own right. In particular, despite the fact that religion and science attach a high value to quite distinct forms of critical self-reflexivity, the associated insights offer little of relevance to their capacity to reflect on the place of their particular mode of knowing within any larger context. This is especially ironical in the case of physics, given the significance it attaches to relativity theory and its ability to handle frames of reference moving in relation to one another -- in contrast to its total deprecation of any "relativism" allowing of other modes of knowing. This pattern it also shares with religion.

It is then understandable that any observer of this "incomprehensible" dynamic might simply conclude "a plague on both your houses", as argued with regard to the debate between creationists and evolutionists by Mary Midgley (A Plague On Both Their Houses, Philosophy Now, January/February 2012; The Myths We Live By, 2003; Science As Salvation: a modern myth and its meaning, 1992; Evolution as a Religion: strange hopes and stranger fears, 1985).

Experiencing incomprehension personally

The experience of incomprehension is most evident in relation to suffering, whether or not occasioned on a larger scale by disaster or deliberate policies -- as with those of a "just war", state-sponsored "targeted killing" or torture. Whilst the causative factor may be "incomprehensible", and "explicable", the nature of the experience is quite otherwise. Efforts to "explain" it then demean it and merit systematic challenge.

Incomprehension occasioned by illness: The experience of illness and ill-health, especially when severe, chronic or life-threatening, may well evoke a degree of incomprehension -- whether as victim, or in the case of another, especially a close relative. The focus for the incomprehension may be "why?" -- notably when no particular explanation felt to be meaningful.

Incomprehension occasioned by accident or (imminent) disaster: As with illness, exposure to an accident -- even one reported by the media -- this may well evoke a sense of shocked incomprehension, possibly augmented by the number of victims or the inability to provide assistance. For example, as reported by Paula Hancocks (Pain, incomprehension for tsunami survivors, CNN, 1 November 2010):

The first thing you notice is their eyes. Dark misery and utter incomprehension at the horror they have been through. It's the same intense stare that questions why they survived and others didn't that I saw in the eyes of Sri Lankans after the 2004 tsunami that killed at least 225,000 people.

Incomprehension occasioned by pain and dismemberment: Whether associated with accident, illness or military action, it is the sense
of pain and the associated disbelief in the condition experienced which may characterize the quality of incomprehension. This is dramatically evident with the wounded in battle -- exposed to their legs having been blown off, or the guts of another torn out. Such incomprehension has been highlighted worldwide, at the time of writing, by the alleged murder of 16 Afghan women and children by Robert Bales, a soldier of the US who had seen the legs of a friend blown off the previous day. The effect may be deliberately induced through torture. Chronic pain may be associated with illness.

**Incomprehension occasioned by disability or progressive diminishment of capacities:** Again, as with illness, the condition necessarily evokes the question "why?" or "why me?". Acknowledgement of the tragic condition, however incomprehensible, may evoke a traumatic reframing of identity -- or incomprehension of what this may imply. The existential challenge is attenuated, to a degree, when it manifests progressively rather than as the immediate consequence of some form of accident. Variants include:

- physical disability, whether from birth, accident, or aging
- mental disability, whether from birth, accident, or aging (dementia, Alzheimer, etc)
- disconnection from memories (as notably claimed by Robert Bales)
- evidence of aging and loss of youth

Where the process, progressively undermines any sense of identity and self-worth, the incomprehension may be exacerbated by the legal and other restrictions on assisted suicide.

**Incomprehension in the face of death:** This may be most evident in the case of those about to be executed, as notably explored by Arthur Koestler (*Dialogue with Death*, 1942). It is the experience of being on "death row" for a period, especially for those who are innocent or ignorant of the nature of the crime for which they have been convicted. It includes that of those facing death at their own hands. The situation was traditionally given a ritual framing by Roman gladiators: *Nos Morituri Te Salutamus*, or the Japanese ritual of *seppuku*. The incomprehension may be especially evident in the case of observers unable to understand how such acts could be perpetrated.

The more common variant is necessarily that of those in a terminal health condition, knowing that they face imminent death. The anxiety and incomprehension associated with that condition have been extensively explored, whether or not any explanation or belief has been offered or accepted. A corresponding experience is that of those faced with the death of another, most notably a loved one -- and possibly as a consequence of suicide.

As variously foreseen, and frequently explored in movie dramatizations, there is the prospect of exposure to warnings of imminent disaster, whether a tsunami, a colliding asteroid or an epidemic. With what incomprehension can collective imminent destruction be fruitfully met? How does this relate to subtler warnings of disaster emerging over a longer term -- shortage of resources, including water and food -- whose significance can be all too readily negated for the moment?

**Incomprehension occasioned by discrimination and intimidation:** Exposure to victimization and discrimination is the subject of extensive commentary, as exemplified by that against: ethnic groups, women, the elderly, the young, other classes or castes, those of other sexual orientation, etc. As with bullying, any such commentary can only faintly echo the nature of the experience and the mystery of "why me?".

**Incomprehension occasioned by the behaviour of police and prison authorities:** Those who engage in democratic protest, or are directly exposed to police action of any kind (possibly leading to incarceration), frequently characterize the behaviour of such authorities as incomprehensible. This extends to the behaviour that such authorities tolerate in prison at the hand of other prisoners, to which authorities may well "turn a blind eye".

**Incomprehension occasioned by ignorance and incompetence:** Whilst ignorance and incompetence may not be a focus of concern when so recognized by others only, it is the sense of incomprehension associated with the inability to read, write, or calculate which is especially disempowering. There is of course an extensive literature on illiteracy and innumeracy. It is however the experience of incomprehension which merits attention, as with regard to any other form of incompetence inhibiting more fruitful engagement with life (cooking, sewing, driving, etc). The incomprehension with regard to collective incompetence is discussed further below (*Incomprehensible inadequacy of collective response*). That relating to the experience of administrative procedural absurdities may merely be associated with their unfamiliarity (as indicated above), but may well extend to include variants of the classical *Catch-22* situation and those resembling it (double bind etc).

**Incomprehension occasioned by betrayal of trust and false accusations:** The experience of incomprehension is especially evident in the case of betrayal of trust and abuse of faith (*Abuse of Faith in Governance*, 2009). Examples include: adultery (especially involving friends), breach of promise, breach of confidence, treason, false accusations by those trusted, abuse by trusted authorities (sexual abuse by clergy, etc). Especially tragic, for those who know themselves to be innocent, is the incomprehension consequent on miscarriage of justice resulting in their incarceration and the possibility of eventual execution.

**Incomprehension occasioned by quarrels and disagreements:** Family, neighbourhood and community life may be characterized by occasional or continuing disagreements and unpleasantness which defy fruitful explanation. This is particularly evident in the processes whereby the magic evaporates from partnership relationships, typically leading to divorce in the case of magic.

**Incomprehension elicited by the mass media:** At a time of shocked incomprehension at school shootings and serial killings, together with media dramatizations of the "incomprehensible" experiences above, it is incomprehensible for some that there is no evidence that the daily diet of entertainment containing ever greater levels of violence facilitates such patterns -- other than simply habituating people to them.

It has been readily argued that the mass media are to varying degrees engaged in a process of "dumbing down" the content disseminated (*Noam Chomsky and Edward S. Herman, Manufacturing Consent: the political economy of the mass media*, Pantheon Books, 1988).
This may be understood as ensuring limited, simplistic comprehension of issues calling for more complex insights -- effectively restructuring the domain of comprehension, thereby ensuring that it is not "comprehensive". In a commercial marketing context, this may be understood as deliberately "bamboozling" potential clients or those "locked into" the product or service provided.

**Induced incomprehension:** Of particular relevance is the development of techniques to induce disorientation, given the vulnerability it engenders through incomprehension -- a vulnerability which may then be exploited. This is most evident in mind control techniques (also known as brainwashing, coercive persuasion, mind abuse or thought control), notably as associated with "re-education" and possibly as a means of avoiding the need for physical torture. The techniques have notably been deployed by the USSR, China and the USA, most recently with respect to those detained on suspicion of terrorist activity. New "psychotronic" weapons are under development to induce disorientation on the battlefield and presumably in response to democratic protest (Mojmir Babacek, Electromagnetic and Informational Weapons: the remote manipulation of the human brain, Global Research, 6 August 2004; Timothy L. Thomas, The Mind Has No Firewall, Parameters, Spring 1998, pp. 84-92).

### Incomprehension in the face of information overload

**Human limitations:** As noted above, the explosion of available information necessarily constrains the capacity to engage effectively with it in any conventional sense. This contrasts with the conclusions of a study of the Club of Rome (James W Botkin, et. al, No Limits to Learning: bridging the human gap, 1979). This has been separately criticized (Societal Learning and the Erosion of Collective Memory, 1980), notably in the light of a recognition of the nature of such "limits" (Limits to Human Potential, 1976). Also of relevance is the argument of Thomas Homer-Dixon (The Ingenuity Gap, 2000) and that relating to the nature of a hypothesized memetic "event horizon" (Emerging Memetic Singularity in the Global Knowledge Society, 2009).

Issues meriting consideration include:

- memory capacity and retention capacity
- capacity to span more than a limited number of domains to a fruitful degree
- attention capacity in the face of an ever-increasing barrage of information implying urgency
- time available to absorb new knowledge to any useful degree
- absorption fatigue -- notably in relation to hyperlinks leading ever onward and elsewhere
- limitations to the availability of information, whether in physical or electronic form
- constraints on access to information, whether due to its cost, confidentiality or complexity
- deterioration of information "vehicles", whether hardcopy, electronic, backwards compatibility, or "link rot"
- elusive nature of any adequate or meaningful synthesis
- languages and preferences for meaningful communication

The issue of "memory" and "retention" is especially relevant at a time when the US "rogue" soldier responsible for the deaths of 16 Afghan civilians is likely to be found relatively blameless following his claim that he "cannot remember anything" (Robert Bales, Suspect In Afghanistan Shooting Rampage, Recalls Little, Huffington Post, 20 March 2012). Of relevance, with respect to collective memory, are the alleged efforts made to delete references to the perpetrator (Robert Bales Deleted From Internet? Huffington Post, 22 March 2012). On a larger scale this might be said of "incidents of history" such as Fallujah and My Lai (Robert Bales, Afghanistan Shootings Suspect, Not Likely To Face Death Penalty, Huffington Post, 22 March 2012):

> Of the long list of alleged U.S. atrocities -- from prison massacres in World War II to the slaughter of civilians at My Lai in Vietnam -- relatively few high-profile war crimes believed to involve Americans in the past century have resulted in convictions, let alone the death penalty.... And when a punishment is imposed, it can range anywhere from life in prison all the way down to house arrest.

The erosion of collective memory on a planetary scale is tragically highlighted by the fictional account of Doris Lessing regarding a pattern of encounters of a "galactic development agent" with the head of a "developing planet" (as discussed in Fragmentation and erosion of collective memory, 1980):

> To say that he understood what went on was true. To say that he did not understand -- was true. I would sit and explain, over and over again. He listened, his eyes fixed on my face, his lips moving as he repeated to himself what I was saying. He would nod: yes, he had grasped it. But a few minutes later, when I might be saying something of the same kind, he was uncomfortable, threatened. Why was I saying that? and that? his troubled eyes asked of my face: What did I mean? His questions at such moments were as if I had never taught him anything at all. He was like a few minutes later, when I might be saying something of the same kind, he was uncomfortable, threatened. Why was I saying that? and that? his troubled eyes asked of my face: What did I mean? His questions at such moments were as if I had never taught him anything at all. He was like one drugged or in shock. Yet it seemed that he did absorb information for sometimes he would talk as if from a basis of shared knowledge: it was as if a part of him knew and remembered all I told him, but other parts had not heard a word. I have never before or since had so strongly that experience of being with a person and knowing that all the time there was certainly a part of that person in contact with you, something real and alive and listening -- and yet most of the time what one said did not reach that silent and invisible being, and what he said was not often said by the real part of him. It was as if someone stood there bound and gagged while an inferior impersonator spoke for him. (Re: Colonised Planet 5 - Shikasta, 1979, pp. 56-57).

The dilemma of collective memory in a global knowledge society is highlighted by the recognition of the emergence of a "blip culture" by Alvin Toffler (The Third Wave, 1980), now remarkably evident in the uptake of Twitter -- which may yet enable the emergence of new forms of coherence to counterbalance the tendency to cognitive cocooning and gated communities (Re-Emergence of the Language of the Birds through Twitter?, 2010; Dynamically Gated Conceptual Communities: emergent patterns of isolation within knowledge society, 2004). Of concern is however the preference for "positive thinking", as noted by Barbara Ehrenreich (Bright-sided: how the relentless
Recent examples reviewed have included the apparent inability to learn from similar events in the past and even to abuse any faith in the capacity of authorities. Incomprehension is frequently evoked by the inability of “authorities”, “government” or the “international community” to respond effectively to problematic situations -- whether to anticipate them, to manage any crisis response, or to deal with the aftermath. This Incomprehensible inadequacy of collective response

Intelligence analysis: Probably the most potentially valuable source of insight into “incomprehension” with respect to information is that associated with the extensive work on intelligence analysis and intelligence analysis management, well-indicated by Wikipedia, with related entries on failure in the intelligence cycle, analysis of competing hypotheses and cognitive bias.

The key focus in that arena is however on “interpretation” rather than “incomprehension”. This suggests that, as with the discussion above regarding “misunderstanding”, it is “misinterpretation” which is the concern. As with “misunderstanding”, analysis can readily give rise to “interpretation” -- avoiding acknowledgement of “incomprehension”. Of particular relevance, given the unprecedented resources currently deployed by security agencies, is the manner whereby a large number of analysts (spread across many agencies), integrate their insights without being entrapped by inappropriate biases and groupthink. A further concern is that whilst ever larger volumes of data are collected and subject to computer analysis, the vulnerabilities of this mode are increasingly difficult to check by human interpreters for which there may be inadequate resources and training.

These concerns have been brought into very sharp focus by the intelligence failure relating to 9/11 and Iraq from which learnings are variously sought (Josh Kerbel, Thinking Straight: cognitive bias in the US Debate about China -- Rethinking Thinking, CIA Center for the Study of Intelligence, Studies in Intelligence, 48, 3, 2004 : Kevin Fenton, Disconnecting the Dots, 2011). A recent summary is offered by Kjetil Anders Hatlebrenke and M. L.R. Smith (Towards a New Theory of Intelligence Failure? The Impact of Cognitive Closure and Discourse Failure, Intelligence and National Security, 2010) who focus on the human factor in intelligence production, and its relationship to discourse failure seen as increasing because of a flaw in the epistemic process among intelligence operators and consumers. For them:

Intelligence literature after 9/11 has focused on the causes and nature of intelligence failure, though few inquests have conceived intelligence as a deeply cognitive, and therefore mental and moral landscape that needs to be explored in all its complexity. Intelligence operators, like art spectators, perceive reality filtered through all sorts of implicit and explicit assumptions or social orthodoxies, manifest themselves as cognitive closure, and shape the discourse in intelligence organizations, as well as between these organizations and society at large.

An especially telling account is offered by W. Patrick Lang ("Bureaucrats Versus Artists") regarding the marginalization of "intelligence" in favour of "management" in intelligence agencies -- with all that implies in terms of avoidance of any challenge to groupthink or personal career advancement. The elusive improbability of wise interpretation highlights the dangers of disaster consequent on intelligence failure -- as with that of 9/11.

A related issue with regard to collective memory is the volume of information rendered inaccessible by being "classified", "redacted" or shredded.

Knowing naught: With respect to the "comprehension" of knowledge -- and any emergent "wisdom" -- the reflection of Omar Khayyám, the Persian polymath and famed author of the Rubáiyát of Omar Khayyám, merits consideration as an indication of the nature of "incomprehension":

Of knowledge naught remained I did not know,
Of secrets, scarcely any, high or low;
All day and night for three score and twelve years,
I pondered, just to learn that naught I know.

This from a culture about to be subject to a form of annihilation by another proud of its capacity to know everything through "total information awareness" -- but currently challenged by lack of expertise to interpret it and faced with the consequences of the unforeseen murder of 16 defenceless Afghan women and children by its own military agent who "cracked".

Incomprehensible inadequacy of collective response

Incomprehension is frequently evoked by the inability of "authorities", "government" or the "international community" to respond effectively to problematic situations -- whether to anticipate them, to manage any crisis response, or to deal with the aftermath. This includes the apparent inability to learn from similar events in the past and even to abuse any faith in the capacity of authorities.

Recent examples reviewed have included:

- disastrous flooding consequent on construction in flood plains (Disastrous Floods as Indicators of Systemic Risk Neglect, 2011)
- mutually reinforcing crises (Anticipating Future Strategic Triple Whammies: In the light of earthquake-tsunami-nuclear misconceptions, 2011)
- eliciting collective insight (Enabling Collective Intelligence in Response to Emergencies, 2010)
- abuse of faith in governance (Abuse of Faith in Governance: Mystery of the Unasked Question, 2009)
The situation is highlighted by blinkered advocacy of purportedly remedial technologies. The "blinking" is then an indication of incomprehension -- reframed in terms of irrelevant externalities (Geo-engineering Oversight Agency for Thermal Stabilization (GOATS), 2008; Reintegration of a Remaindered World: Cognitive recycling of objects of systemic neglect, 2011).

The problematic situation of society appears all the more incomprehensible for those articulating remedial proposals in the light of collective indifference to them and the lack of uptake -- if they are not deprecated as problematic in their own right, or considered meaningless and irrelevant. Many of the thousands of strategies advocated by international constituencies, as profiled in the Global Strategies Project, could be seen in this light. An "awful" implication of the experience of major libraries, as mentioned above, is that they hold the proposals of many who experienced incomprehension at the lack of their collective appreciation -- as with the "wise" whose insights have been ignored. Efforts to clarify this "incomprehensible" pattern include:

- Mapping Paralysis and Tokenism in the Face of Potential Global Disaster (2011)
- Map of Systemic Interdependencies None Dares Name: 12-fold challenge of global life and death (2011)
- Mapping the Global Underground (2010)
- Engaging with the Inexplicable, the Incomprehensible and the Unexpected (2010)
- Lipoproblems: Developing a Strategy Omitting a Key Problem (2009)
- Framing the Interplay of Leadership and Misleadership (2007)

There is seemingly no adequate approach to such incomprehension or to the manner in which faith in authority is eroded by the tokenism in which it so frequently indulges. The situation is exacerbated by the injunctions, game-playing, denial of responsibility and finger-pointing by those who claim to "know" (Monkeying with Global Governance: emergent dynamics of three wise monkeys, 2011). The challenge has been partly articulated by Donald Michael (Leadership's shadow: the dilemma of denial, Futures 26, 10, Dec 1994) as separately discussed (The Future of Leadership: reframing the unknown, 1994).

**Being misunderstood and incomprehension of the other**

**Being misunderstood:** Insight into the nature of incomprehension readily emerges from the process of "being misunderstood". Curiously there are extensive references to this experience which is explored in over 50 Songs about being misunderstood -- which is not the case with "incomprehension".

The condition of "being misunderstood" is also the subject of many quotations with ambiguous implications, as with the following from Brainy Quote

- I have suffered from being misunderstood, but I would have suffered a hell of a lot more if I had been understood. (Clarence Darrow)
- It is impossible to speak in such a way that you cannot be misunderstood. (Karl Popper)
- More has been screwed up on the battlefield and misunderstood in the Pentagon because of a lack of understanding of the English language than any other single factor. (John W. Vessey, Jr.)
- No event in American history is more misunderstood than the Vietnam War. It was misrepresented then, and it is misremembered now. (Richard M. Nixon)
- No one would talk much in society if they knew how often they misunderstood others. (Johann Wolfgang von Goethe)
- The worst tragedy for a poet is to be admired through being misunderstood. (Jean Cocteau)
- There is in every madman a misunderstood genius whose idea, shining in his head, frightened people, and for whom delirium was the only solution to the strangleup that life had prepared for him. (Antonin Artaud)
- To be great is to be misunderstood. (Ralph Waldo Emerson)
- I am but too conscious of the fact that we are born in an age when only the dull are treated seriously, and I live in terror of not being misunderstood. (Oscar Wilde)

The condition has been the subject of a number of studies, including:

- Lisa DeSherlia (Being Misunderstood, Autism and Empathy:Dispelling Myths and Breaking Stereotypes, 2 January 2012)
- Jeffrey C. Alexander (Rethinking Durkheim's Intellectual Development: On 'Marxism' and the Anxiety of Being Misunderstood, International Sociology, 1, March 1986, 1, pp. 91-107)

  Mental health patients describe "being understood" as an experience that evokes feelings of importance, worthiness, and empowerment. However, the experience of "being misunderstood" is more prevalent in patients' relationships with health care providers. Negative consequences such as vulnerability, dehumanization, and frustration reveal that being misunderstood has the potential to damage or destroy therapeutic relationships.

**Incomprehension of the other:** Generically, the obvious converse to "being misunderstood" is the "incomprehension of the other". In that respect valuable insights are offered by Hélène Cixous as a radical aesthetic non-conformist in contemporary literature and literary
To return to the eventual shock with the other, the violence of the other: there is one that happens daily, that is up to us to manage. We are always in a relation with negative incomprehension; not even an incomprehension, but very often a non-comprehension. Simply put: there is no openness. And this spreads out infinitely, in all our relations. But there is also a positive incomprehension. It is perhaps what we discover in love; or in friendship-love: the fact that the other is so very much other. Is so very much not-me. (p. 16)

Aspects of the experience are expressed in poetic form by Jennifer Strauss (The Seasons of Incomprehension, 1975):

The face I wear you do not choose to see... The face I wear you do not wish to see... The face I wear you do not dare to see... The face I wear is not for you to see... You preach of peaceful rest but I rot there, Where only death decides what face I wear.

Re-cognition, epistemology and metaphysics

Incomprehension as inspiration: Incomprehension and ignorance have long been a source of preoccupation, even an inspiration, for philosophy in its various manifestations. This is also the case with the arts. In reviewing The Flame Alphabet by Ben Marcus, Kevin L. Nenstiel (Ben Marcus and the Disease of Incomprehension, 9 March 2012) reframes incomprehension as follows:

Many people unschooled in literary theory use the word "postmodern" as a synonym for "incomprehensible." That's not unfair, since postmodernism regards comprehension as an accident of form. But in publishing a book, presumably author and publisher think an audience exists. Presumably. If comprehension is optional, maybe the book is its own justification.

For Abraham Burickson (The Ecstasy of Incomprehension of Numerous Readings of George Oppen, New Orleans Review, 1 December 2009):

My friend Adam says the most honest conversations he's had were in a language he didn't speak. He says they were the only conversations he can recall where every word felt essential, inflamed with meaning.

Bewilderment: Incomprehension can be experienced as a challenge to curiosity, research, exploration and invention. It can also be valued in its own right as in the following comments on "bewilderment":

- Clever people seem not to feel the natural pleasure of bewilderment, and are always answering questions when the chief relish of a life is to go on asking them. (Frank Moore Colby)
- It is characteristic of all deep human problems that they are not to be approached without some humor and some bewilderment. (Freeman Dyson)
- Love is the strange bewilderment that overtakes one person on account of another person. (James Thurber)
- Much unhappiness has come into the world because of bewilderment and things left unsaid. (Fyodor Dostoevsky)
- Time has been transformed, and we have changed; it has advanced and set us in motion; it has unveiled its face, inspiring us with bewilderment and exhilaration. (Khalil Gibran)

Spiritual implications: For the religious, ignorance may be deplored, as in the Islamic understanding of Jahiliyyah ("ignorance of divine guidance"), or in Christian understanding of ignorance of the Scriptures as constituting ignorance of Jesus Christ. It may however be more ambiguously appreciated as a particular manifestation of a more fundamental illusion, as in Hindu and Buddhist understandings of Maya.

Any assumptions that inability to articulate certain forms of "comprehension" is to be recognized as "incomprehension" is challenged by arguments made for apophasis, negative theology, and "unsaying", as separately discussed (Being What You Want: problematic kataphatic identity vs. potential of apophatic identity, 2008).

Wisdom: When distinguished from "knowledge", notions of "ignorance/incomprehension" may then be seen as intimately related to "wisdom", as implied by various quatrains in the Rubaiyat of Omar Khayyam (cited above). There is a sense in which a form of "incomprehension/ignorance" can fruitfully cultivated, as a capacity for surprise, as argued by Ashok Gollerkeri (The Wisdom of Incomprehension):

Can we be uncomprehending, looking at the world like a young child, curious, with a freshness, free of accumulated notions?

Can we look at everything anew every moment, free from conditioning by notions, by received instruction and the past? Can we allow the impressions in our mind to evaporate so that we see every situation and person afresh, without the barrier of the past?

Can we be completely free of the screen of conditioning? Can we be childlike again? Can we be enriched by the wisdom of incomprehension?

Actually, we know too much. What we know are our own accumulated notions, memories, fears and experiences. This makes us unable to see reality, as it is, from moment to moment, an ever changing, dynamic flux, creation forever in the making. We have labels of good and bad, we have labels of right and wrong, we have labels of great and small. We have labels for everything. We see through the lens of our own experience, of our own likes and dislikes, our pride and prejudice, our egoism and vanity, our fears and hopes. Through this distorting medium, we see and observe. This distortion is called our world and ourselves. It is
fragmented, polarized and in conflict. Is the conflict in the world merely an unfortunate state of affairs or is it directly the reflection of the conflict within ourselves, within our own minds?

This is consistent to some degree with an argument previously made (Requisite Childlike Cognition for Integration of “Heaven”? 2012).

**Mirroring of outer and inner space:** The possibility of clarifying comprehension/incomprehension through use of an astrophysical metaphor, as explored above (Incomprehension systematically reframed), can be fruitfully related to the challenging use of that metaphor by Joseph Campbell (The Inner Reaches of Outer Space: metaphor as myth and as religion, 1986). The metaphor was also used by the Renaissance philosopher Marsilio Ficino as described by Thomas Moore (The Planets Within: the astrological psychology of Marsilio Ficino, 1990), as separately discussed (Composing the Present Moment: celebrating the insights of Marsilio Ficino interpreted by Thomas Moore, 2001).

The implications of such paradoxical mirroring of "outer" and "inner", highlighted by Douglas Hofstadter (I Am a Strange Loop, 2007), is discussed separately (Sustaining a Community of Strange Loops: comprehension and engagement through aesthetic ring transformation, 2010; Stepping into, or through, the Mirror: embodying alternative scenario patterns, 2008).

Yet to be fully explored is the manner in which the projection of identity into the furthest reaches of "cyberspace" is effectively borrowing from, and reframing, both the "outer" and "inner" cognitive implications of that astrophysical metaphor -- as a context for (in)comprehension. Relevant references to "dimensions" of this have been variously explored (Nicholas G. Carr, The Shallows: What the Internet Is Doing to Our Brains, 2010; William Powers, Hamlet's Blackberry: a practical philosophy for building a good life in the Digital Age, 2010; Erik Davis, Technogenesis: myth, magic and mysticism in the age of information, 1998; Robert D. Romanyshyn, Technology as Symptom and Dream, 1989; R. Kanai, et al. Online social network size is reflected in human brain structure, Proceedings of the Royal Society, October 2011). Especially noteworthy is the work of Sherry Turkle (Life on the Screen: identity in the Age of the Internet, 1997; Evocative Objects: things we think with, 2007; Falling for Science: objects in mind, 2008).

**Cognitive migration into cyberspace:** In many respects a significant proportion of the global population has already "abandoned" the planet Earth -- or is aspiring to do so -- for the creatively imagined worlds of cyberspace and the ever-increasingly enhanced capacity to travel between them. In ways yet to be understood they are individually and collectively weaving new multidimensional realities. These are establishing a form of "global" or "universal" connectivity where there was none before, a curious cognitive echo of the "string" metaphor of string theory (Transforming Static Websites into Mobile "Wizdomes": enabling change through intertwining dynamic and configurative metaphors, 2007; Interweaving Thematic Threads and Learning Pathways, 2010).

**Science vs. Religion?** A helpful clarification, regarding the classic case of the Galileo Affair, is offered by George Sim Johnston (The Galileo Affair, Catholic Educator's Resource Center):

While Galileo's eventual condemnation was certainly unjust a close look at the facts puts to rout almost every aspect of the reigning Galileo legend. Until Galileo forced the issue into the realm of theology, the Church had been a willing ombudsman for the new astronomy. It had, for example, encouraged the work of both Copernicus and sheltered Kepler against the persecutions of Calvinists. Despite the fact that there was no clear proof for heliocentrism at the time, Galileo was intent on ramming Copernicus down the throat of Christendom. Eventually Cardinal Robert Bellarmine challenged Galileo to prove his theory or stop pestering the Church. In spite of the warning, Galileo persisted in promoting the theory as fact. Nevertheless, his crusade would not have ended in the offices of the Inquisition had he possessed a modicum of discretion, not to say charity. Galileo used exaggerated caricature, insult, and ridicule to make those still holding to the Ptolemaic system look ridiculous. His run-in with the Church involved a "tragic mutual incomprehension" in which both sides were at fault. It was a conflict that ought never to have occurred, because faith and science, properly understood, can never be at odds. In fact, as Stanley Jaki and others have argued, it was the metaphysical framework of medieval Catholicism which made modern science possible in the first place.

[emphasis added]

**Towards the systematic reframing of incomprehension through metaphor**

It is curious the manner in which "incomprehension" is effectively excluded as a factor in considering the challenges of society and its future governance. It is even more curious that instances of incomprehension are naively treated as the fault of the other.

There is a case for recognizing a global system characterized by zones of relative comprehension and incomprehension. Using a meteorological metaphor, as indicated above -- whether "temperature" and/or "pressure" is used as a template -- this offers a way of recognizing the potential variety of comprehension conditions within a global knowledge society. Such a mapping avoids the easy assumptions of those who claim to "know" and "comprehend" -- however incomprehensible (and violent) their disagreements with others sharing similar assumptions regarding the respective "truths" they each so adequately comprehend. The mapping also gives space to those who are variously obliged to recognize that there is much they themselves do not comprehend -- especially to the extent that they have to deal with this experience of incomprehension on a daily basis.

This possibility is explored in Annex A in the light of an astrophysical metaphor and a biological metaphor.

**Towards the dynamic art of partial comprehension**

**Shared binary commitment:** Curiously, and as illustrated by Catholic commentary on the Galileo Affair (above), science and religion share a profound commitment to binary logic. This takes the form of truth/falsehood, right/wrong, correct/incorrect, believer/nonbeliever, etc -- as variously interpreted. Shades of gray are condemned. This commitment is evident in the military operations
they variously reinforce -- in the distinction between friend/enemy, or victory/defeat, and the very nature of launching missiles against targets. As profit/loss, the latter pattern permeates commercial marketing and foreign policy, as previously discussed (Us and Them: Relating to Challenging Others, 2009; Enhancing Sustainable Development Strategies through Avoidance of Military Metaphors, 1998;).

**Aesthetic subtlety:** Equally curious is the manner in which each of these values aesthetic dimensions, somehow distinct from the binary preoccupations. Religions reinforce the significance of their insight through artistic expression, whether in painting, architecture or music. Beauty and elegance are variously celebrated by the sciences, notably the natural sciences. The military celebrate their values through music, pomp and ceremony. Strategies may be valued as elegant. In the case of the military, a curious insight into (in)comprehension is achieved by Chris Hedges (War Is a Force That Gives Us Meaning, 2002), most recently in the aesthetic coherence of the attitudes of combat soldiers on the ground in Afghanistan -- in relation to the killing of 16 Afghan women and children by a US soldier who "cracked" (Murder Is Not an Anomaly in War, TruthDig.com, 19 March 2012).

It is in this light that the "art" of partial comprehension is explored in Annex B in the following sections:

- Shadows, shades of gray and wabi sabi
- (In)comprehension as impermanence and mindlessness
- Probabilistic worldview
- Partial (in)comprehension
- Imperfect comprehension
- Requisite incomprehension
- Comprehensive patterning of (in)comprehension and (im)perfection

**Conclusion**

The case for greater attention to the nature and extent of the "incomprehension", with which individuals and global society are required to live, can be usefully highlighted by comparison with the situation of those associated with the R.M.S Titanic on the occasion of its sinking on 15 April 1912 -- and the current commemoration of its centennial (Catherine Bennett, Can we just please sink the Titanic once and for all? The Observer, 25 March 2012). It was the largest vessel on the high seas, had some of the wealthiest people in the world as passengers (as well as many of the poorest), offered the highest levels of comfort and luxury, and was provided with a full array of safety features (watertight doors, lifeboats, sophisticated communication equipment, etc). By comparison, much has been made of failures to attend to warnings regarding the resource-constrained conditions of a planet challenged by various potential crises -- warnings deprecated as scare mongering.

In the light of the "incomprehension" of those associated with R.M.S. Titanic, how are the varieties of current "incomprehension" to be compared with those of:

- the captain: overly confident in his command of the vessel, whilst he dined with the passengers
  - perhaps to be understood as the "international community"
- the builder: overly confident with the construction of the vessel, whilst he dined with the passengers
  - perhaps to be understood as the CEOs of "multinational corporations"
- the chief engineer: overly proud of his technical competence
  - perhaps to be compared with the scientific and technological community
- catering staff: preoccupied with ensuring the quality of the table layout, service and food
  - perhaps to be compared with the fashion setters and the service industry
- deck staff: preoccupied with rearranging the deck chairs in an orderly manner
  - perhaps to be compared with the priorities of government support services everywhere
- upper-class passengers: priding themselves on the reinforcement of their status
  - appropriately to be compared with the "1 percent"
- lower-class passengers: suffering their confined circumstances in anticipation of their promised future
  - appropriately to be compared to the "99 percent"
- awaiting public: anticipating the historic arrival at its destination of the "unsinkable vessel"
  - appropriately to be compared with those who buy into the public relations rhetoric associated with technocratic and faith-based governance at this time

Perhaps more intriguing is the contrast between the "incomprehension" variously attributed to them before the collision (with a century of hindsight) and their own "incomprehension" during the process of the disastrous sinking and thereafter.

It is perhaps fruitful to set the above metaphor against the context of a presentation by John N. Gray (Global Utopias and Clashing Civilizations: misunderstanding the present, International Affairs 74, 1998, 1, pp. 149-164):

Viewing the world today through the lens of apocalyptic beliefs about the end of history and "the West versus the rest" conceals these universal and perennial conflicts. It encourages the hope that the difficult choices and unpleasant trade-offs that have always been necessary in the relations of states will someday be redundant. For that hope there is no rational warrant. (p. 163)

A more reasonable aspiration is that by understanding that some conflicts of values are intractable we will be better able to cope with them. There is much that is new in our present circumstances. What they do not contain is relief from the task of thinking our way through difficulties -- conflicts of interests and ideals, incompatibilities among the values we hold most dear -- that have always beset relations among states. For some, perhaps, this will seem a rather depressing result. Certainly there is nothing in it
that is especially novel, or original; and it contains little that will gratify the commendable need for moral hope. But perhaps these
are not quite the defects we commonly imagine them to be. The greatest liberal thinker of our time was fond of quoting an
observation by the American philosopher, C.I. Lewis: "There is no a priori reason for supposing that the truth, when it is
discovered, will necessarily prove interesting. Nor, I would add, for thinking that it will be particularly comforting.

References

Jens Allwood and Yanhia Abelar. Lack of Understanding, Misunderstanding and Language Acquisition. In: Proceedings of the AILA-

Doris Bachmann-Medick. Cultural Misunderstanding in Translation: Multicultural Coexistence and Multicultural Conceptions of World

H. H. Bauer. Science or Pseudoscience: Magnetic Healing, Psychic Phenomena, and Other Heterodoxies. University of Illinois Press,
2001


James W. Botkin, Mahdi Elmandjra and Mircea Malitza. No Limits to Learning; bridging the human gap. Pergamon, 1979 ("A Report to
the Club of Rome")

Marilee J. Bresciani. Exploring Misunderstanding in Collaborative Research Between a World Power and a Developing Country. Research
and Practice in Assessment, 2, 1 January 2008 [text]


Joseph Campbell.(The Inner Reaches of Outer Space: metaphor as myth and as religion. New World Library, 1986 [summary]


Roberto Casati. Shadows: Unlocking Their Secrets, from Plato to Our Time. Vintage, 2004

Roberto Casati and Achille C. Varzi. Holes and Other Superficialities. MIT Press, 1994

[summary]


1985, pp. 441-459.

Ronald Duncan and Miranda Weston-Smith (Eds.). The Encyclopedia of Ignorance: everything you ever wanted to know about the
unknown. Pocket Books, 1978

Barbara Ehrenreich:

- Bright-sided: how the relentless promotion of positive thinking has undermined America. Metropolitan Books, 2009
- Smile Or Die: how positive thinking fooled America and the world. Granita Books, 2010 [summary]


John N. Gray:

- Global Utopias and Clashing Civilizations: misunderstanding the present. International Affairs, 74, 1998, 1, pp. 149-164 [text]
- False Dawn: The Delusions of Global Capitalism. 1998 [summary]
- Black Mass: Apocalyptic Religion and the Death of Utopia. 2007 [summary]

Kjetil Anders Hatlebrekke and M. L.R. Smith. Towards a New Theory of Intelligence Failure? The Impact of Cognitive Closure and
Discourse Failure. Intelligence and National Security, 25, 2010, 2, pp. 147-182 [abstract]

Charles Handy:

Beyond Certainty. Arrow Books, 1995

Stephen Hawking (Ed.). The Dreams That Stuff Is Made Of: the most astounding papers of quantum physics -- and how they shook the scientific world. Running Press, 2011


Volker Hinnenkamp. The Notion of Misunderstanding in Intercultural Communication. Journal of Intercultural Communication, 1, 1999 [text]

Douglas Hofstadter:

Thomas Homer-Dixon. The Ingenuity Gap: how can we solve the problems of the future? Knopf. 2000. [summary]

Juliane House, Gabriele Kasper and Steven Ross (Eds.). Misunderstanding in Social Life: discourse approaches to problematic talk. Pearson Education, 2003

Claire Humphrey-Jones. An Investigation of the Types and Structure of Misunderstandings. Dissertation, University of Newcastle Upon Thyne, 1986

Samuel P. Huntington. The Clash of Civilizations and the Remaking of World Order. Simon and Schuster, 1996

Susan J. Jeffers. Embracing Uncertainty: breakthrough methods for achieving peace of mind when facing the unknown. St. Martin's Griffin, 2004


Dennis Merritt Jones. The Art of Uncertainty: how to live in the mystery of life and love it. Tarcher, 2011

Sherman Kent. Strategic Intelligence for Americans World Policy. Princeton University Press, 1949


W. Patrick Lang. "Bureaucrats Versus Artists"[text]


Jonah Lehrer:

John Lennox:
- God’s Undertaker: Has Science Buried God? Lion, 2009

Lingua Franca (Eds.). The Sokal Hoax: the sham that shook the Academy. Bison Books, 2000

E. Magnusson. Incomprehension and Miscomprehension of Statistical Evidence: an Experimental Study. 1993 [text]


Alister McGrath and Joanna Collicutt McGrath. The Dawkins Delusion? Society for Promoting Christian Knowledge (SPCK), 2007 [summary]

James McMullan and Lillian Mak. Developing. Focused Non-Comprehension Strategies To Improve Communication.


Mary Midgley:
- The Myths We Live By. Routledge, 2003
- Evolution as a Religion: Strange Hopes and Stranger Fears. Routledge, 1985


Massimo Pigliucci. Nonsense on Stilts: how to tell science from bunk. University of Chicago Press, 2010


Karl Popper. Conjectures and Refutations: the growth of scientific knowledge. Routledge, 1963


Gary J. Schmitt and Abram N. Shulsky. Leo Strauss and the World of Intelligence (By Which We Do Not Mean Nous). 1998 [text]

Ullica Segerstrale (Ed.). Beyond the Science Wars: the missing discourse about science and society. SUNY Press, 2000


Mark D. Säljander. A Deadly Misunderstanding: a Congressman's Quest to Bridge the Muslim-Christian Divide. HarperOne, 2008 [extract]

Alan Sokal:
- Intellectual Impostures. Profile, 2003

Alan Sokal and Jean Bricmont. Fashionable Nonsense: postmodern Intellectuals' abuse of science. Picador, 1999 [summary]


Mehdi Yousfi-Monod and Violaine Prince. Using Misunderstanding and Discussion in Dialog as a Knowledge Acquisition or Enhancement Process. IGI Global, 2009, ch. 5 [text]