

Disaster Semiotics: An Alternative 'Global Semiotics'?

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Paper presented at the International Semiotics Institute, Seminar 2: Global Semiotics

Imatra, Finland

11-19 June 2005

In an international seminar devoted to the theme of global semiotics, it seems only appropriate to pay homage to the founder. This paper is no exception. When the late Thomas A. Sebeok used the phrase 'global semiotics' in 1994 to lavish his plenary lecture at the IASS Berkeley Congress with gusto, he was presumably aware of the linguistic sign's reiterability and interpretability, not only within the boundaries of life, but often beyond them. To begin with, Sebeok evokes two never-really-alive master tricksters in Shakespeare: Prospero and Hamlet. Whilst Prospero plays on the double denotation of our planet and the South Bank Theatre called The Globe, Hamlet likens his own skull to the 'distracted' globe, thus rehearsing the trite Elizabethan themes of micro-macrocosmic identification, and dialectics of illusion and reality as well as that of life and death. These histrionics serve to usher in, firstly, Sebeok's short list of connotations: 'all-encompassing', 'comprehensive', 'international', 'limitless', 'pandemic', 'unbounded', 'universal', 'cosmic'; and secondly, his inventory of nations from A to Y, viz. from Argentina to Yugoslavia, short, however, of Zimbabwe and, short, alas! of the geopolitical foresight for the collapse of Yugoslavia. The author characteristically rambles amongst disciplines, from disciplines to the meta level of interdisciplinary method, and finally arriving at his darling bud of biosemiotics, where the master trope of geo-bio-semiosphere allows

him to draw a full circle of his global semiotic circumnavigation.

‘What forgetfulness’, then, is left ‘after such knowledge?’ to paraphrase another procrastinating anti-hero Alfred J. Prufrock created by the poet T. S. Eliot. It seems little can be said of global semiotics except sequels in piecemeal added here and there to the alphabet of nations on a distracted world atlas. Today the word *globe* is so loaded that it has lost its *sensus communis*, i.e., ‘global’ sense. Compare, for instance, Sebeok’s list of redundancies above and a left-wing social critic like Antony Giddens’ (1998) condemning sense of the word (Wisner 2003), and you will know the heterogeneity rather than homogeneity underlying the usages.¹ Nevertheless, because of its over-use, one is under the quotidian bombardment of ‘global warming’ as if it were global warring; one struts and frets in a ‘global e-village’ as if in a virtual Disneyland; and one takes for granted the now too familiarised but still estranged bedfellow called, grotesquely, ‘glocalisation’ (Swyngedouw, 1997).

Echoing, unwittingly, Sebeok’s ‘pandemic’, I have worked towards a semiotics of parasitism, which touches upon a global epidemic when the SARS outbreaks claimed hundreds of lives in Southeast and East Asia (Chang 2003). It was only after I had the paper published in *Sign Systems Studies* 31.2 was I able to see Sebeok’s book, to find therein a curious book jacket displaying the computerised Creator’s hand, apparently lampooning Michaelangelo, indicating a sketched parasite instead of Adam. In the same line of parodied argument for life-claiming semiosis (rather than the life-generating semiosis dear to Sebeok), I shall address myself on the semiotic implications of a recent global event, in fact a disaster, that has affected not only where it happened (topia or heterotopia?) but where it didn’t (here or there?), namely, the earthquake and tsunamis in South Asia that claimed nearly a quarter million of lives, many of whom were from this remote Nordic part of the disoriented world.

What are disasters? How are they encoded as they are decoded? Why haven’t

we semioticians paid sufficient attention to it, save perhaps René Thom from a probabilistic-topological perspective (1972, 1983) and Maurice Blanchot from a hermeneutic-rhetorical point of view (1986), whereas secondary literature in risk and hazard studies, from the perspectives of geoscience and human sciences, such as economics, have been well-documented?² Given Umberto Eco's observation that 'Any natural event can be a sign' (1984,15), why hasn't there been a semiotics of disaster?³ For all our zeal in globalisation, why hasn't there been a semiotics of global disasters? Surely Sebeok's semiotics of life is not to blame.

The catastrophe last Christmas has forced us to reflect upon the semiosis of a network of systems, both natural and cultural. The polysystem of that magnanimous earthquake and its subsequent killer sea surges is so intricate that it merits in-depth semiotic analysis. It is a network consisting of multiple scientific and folkloric interpretations of series of transformations amongst iconic, indexical and symbolic signs, one interpretation giving rise to another; reported animal and human responses to semiotic actions and reactions, where humanity is segregated into national, ethnic and social groups, some of which, like those minorities in the Andaman archipelagos, have been hitherto shrouded in mystery (Greenway 2005). The results are sound geophysical readings plus myriads of *petits récits*, eyewitness narratives of various points of views, a lot of which are semantically overcoded by religion and superstition, such as animals saving human lives, etc. Tourism, media, charitable organisations, disaster-relief groups, debris, bodies – all these had a role to play in forming this miserable medley of cosmic scale.

Whilst Eco would suggest that all these coded texts fall into the category of encyclopedic semiotic practice, one envisages a semiotics of disasters in both the restricted and non-restricted senses. In one of his many illustrations of the triad, Peirce describes how a person, in his dreamy state of existence (as a First), is hit by a

brutal force from without, e.g., ‘a loud and prolonged steam whistle’ (Second) (Peirce, 1998, 2: 4). Such a bodily shock forces him to interpret the phenomenon as, for example, an earthquake or otherwise through the functioning of interpretant (Third), e.g., after looking, as people in Taiwan are wont to do, for other indexical signs (swinging ceiling lamps, turbulent water surface in the flush toilet bowl). Whereas a seismologist could tell us that the magnitude nine quake off west Sumatra was only an indexical sign in the wake of, and pointing to, the spasmodic slide of two tectonic plates underneath; and the tsunamis, in turn, are indexical to, and in the wake of, the quake, and all these could be graphically (i.e., as iconic signs) represented through computerised imaging, the actual disaster that claimed a quarter million lives calls for a semiotic study of both nature (including animal cognition and behaviour that would appeal to zoosemioticians) and culture, in particular, the impact of inter-continental tourist mobility, especially those seeking brighter and warmer sun, and the global reactions to the event.

This paper will, therefore, attempt to explore into a semiotics of disasters, incorporating the theories of Peirce, his predecessors and critics, in particular, a relatively slighted semiotician of our times, David S. Clarke, Jr., as well as human geographers and hazard researchers like Kenneth Hewitt (1983, 1997) and David Etkin (1999), and drawing on textual materials from literature (e.g., the Rousseau-Voltaire debate on Lisbon comes immediately to mind), media, and subculture, such as the Hollywood film *Day after Tomorrow*. The product will be, finally, a tribute paid to Sebeok for his sustained interest in pre-human geo- (i.e. ‘global’) semiotics.

Those of us who are familiar with Sebeok’s writings on the history of semiosis will surely recall his account of the prehistoric stage of semiosis. But this part of history is global only in the narrow physical sense of the word, descriptive of a world yet unsullied by human traces. Despite that even such a pre-human world is not a

transparent fact, but always already a construct of human geophysical knowledge, a *gaia hypothesis*, if you like, its semiosis is far from being global in the sense of human geography. Ask any fellow semiotician, and you will find the role humanity plays in global semiotics, let alone disaster semiotics. Isn't, one may ask, Sebeok's 'global semiotics' based on nationality a concept of human geography?

The immediate task for us in formulating a disaster semiotics is to define disasters rather than semiotics. Traditionally, as the word's etymology of malevolent star suggests, a disaster is understood as a celestial and, by inference, natural phenomenon. In one of his outbursts into lyricism, Blanchot says, 'If disaster means being separated from the star (if it means the decline which characterizes disorientation when the link with fortune from on high is cut), then it indicates a fall beneath disastrous necessity.' (1986, 2) But a natural phenomenon can be interpreted as disastrous and its extent gauged only in relation to its impact on human beings -- or, for that matter, other living organisms; the old dichotomy of nature versus culture was already undermined in the very beginning when the expression was used. The editor of a recent volume on disasters, Mark Pelling (2003), succinctly defines 'natural disaster' as 'shorthand for humanitarian disaster with a natural trigger.' (p. 4). He continues, 'Whilst physical phenomena are necessary for the production of natural hazard, their translation into risk and potential for disaster is contingent upon human exposure and a lack of capacity to cope with the negative impacts that exposure might bring to individuals or human systems' (Ibid.). . . .

Then one needs to outline the domains of natural hazards. Interestingly, as if echoing Vladimir Venadsky, risk researchers have classified natural hazards according to the traditional division of the planetary environment into spheres; they include atmosphere, hydrosphere, lithosphere and biosphere -- short, though capable, of anticipating the Lotmanian semiosphere (Hewitt, 1997, 63). Into these four categories

fall such hazards as the atmospheric heatwaves and typhoons, the hydrological floods and droughts, the geological movements, like earthquakes and volcanic eruptions, and the biological influenza and parasitism. Fortunately, hitherto, there have not been semiospheric hazards, and we certainly hope that such apocalyptic visions will be deferred. To parody Jacques Derrida, 'No Apocalypse, Not Now.' (1984) There is no doubt that some disasters are of mixed origin. For instance, the tsunami is construed as 'simultaneously a geological (by origin) and hydrological (regarding its consequences) phenomenon.' (Kondratyev, et alii, 2002, 22).

All these accounts date back to the discussions of natural signs in the early history or pre-history of semiotics. The identification of *semeion* with *tekmerion*, or sign and evidence, clearly indicates how a natural event observed *in praesentia*, like the tectonic slide, can stand, by inference, for a future event *in absentia*, in this case, tsunami waves (Clarke 1987, 12); or it can stand for a message of the divine (Manetti, 1993, 15). In ancient Greece, one type of divination, *mantike technike*, refers to the analysis of perceptible signs produced in the external environment, such as lightning or eclipses, in relation to the larger cosmic order (Manetti, 19-20). Many narratives of the tsunami disaster under discussion are very much of this folkloric nature; these include animistic belief in the rage of sea god (Goodnough, 2005), ghosts haunting Phuket after the disaster (Burdett 2005), and animals' sixth sense saving their lives (Reuters 30 Dec 2004).⁴ How to cope with such folk wisdom becomes increasingly international relief groups' major problem (Greenway 2005). From a semiotic point of view, these disaster narratives qualify what Eco terms as encyclopedic semiotic practices (1983).

These small narratives (*petits récits*), often first-person narratives, are seen joining forces with such grand narratives (*grands récits*) as catastrophism, which, thanks to the disaster, is staging a grand comeback.⁵ A proponent of popularised

catastrophism in our days, Antony Milne, being apparently very excited about this development, went so far as to predict that ‘The Indian Ocean disaster could well lead to catastrophism moving to center stage in future conferences about the fate of the world.’ (*IHT*, 20th January 2005, p. 7). In the wake of the said disaster, I had searched online for a cheaper copy of Milne’s *Doomsday: The Science of Catastrophic Events* without success. All these constitute another dimension of disaster discourse, belonging to a different semiotic order. For now, let’s return to the initial stage of disasters.

In his fourth Harvard lecture delivered on 16th April 1903 (*MS 309*), Peirce discusses how Thirdness operates in Nature. He begins by talking about the fall of a stone. ‘I know that this stone will fall if it is let go, because experience has convinced me that objects of this kind always do fall.’ Here Peirce has coupled a natural phenomenon and experience as well as the habit or law, engendered from experience, which eventually serves as interpretant. The famous example of one’s waking up to a sound does contain a tripartite structure in causal and temporal order, but one is legitimate in questioning the availability of interpretant in the initial stage. Regarding the archetype of fall, Blanchot would say there is no law in celestial disasters: ‘Would law be the disaster? The supreme or extreme law, that is: the excessiveness of uncodifiable law – that to which we are destined without being party to it.’ (1986,2) Given his interest in human disasters, Blanchot’s statement is deliberately ambiguous. To counter Peirce’s assertion of law as interpretant that governs our interpretation of signs, David S. Clarke, Jr.’s alludes to the immediate perception propounded by the eighteenth-century Scottish empiricist Thomas Reid (1863 {reprint 1994}, 2:195).⁶

It would be anachronism to reinstate the argument of an empiricist after the linguistic turn in the early twentieth century. Given the fact that Nature is always a

semiotic construct embedded in socio-historical context, there cannot be a transparent Firstness, nor can the facile dichotomy of nature/culture be maintained. However, for all the primacy granted to the interpretant, the Peircian mapping of evidential inference in terms of indexical sign could be construed as a way of naturalising natural events, as if they were independent of language mediation. Take for example the tsunami disaster, the tribal elders in the Andaman sea region noticed the incoming tide and alerted his people to flee and seek higher shelters. His alert is indeed linguistic or possibly paralingual, given the urgency of the moment. Here the interpretant is no doubt the Peircian 'habit', but habit is already linguistically mediated or, at any rate, when the message was communicated, the natural signs have to be translated to linguistic signs. Clarke argues that before the experience is communicated, the immediate perception of natural disorder can be free from language mediation. Unconvinced by Peirce, he proposes the distinction between natural sign and logically more primitive 'natsign', the latter being a 'short-range' sign, which is produced not for communication and can be interpreted without inference (Clarke 50).

As Clarke sees it, natsign precedes comsign -- sign for communication, and lansign -- the higher order of human linguistic sign, and is therefore a more primitive sign in both the logical and evolutionary sense. Clarke alludes to Thomas Reid's classification of natural signs: 'What we commonly call natural *causes* might, with more propriety, be called natural *signs*, and what we call *effects*, the things signified.' (Reid, 1863[1994]), 1: 122. This amounts, in fact, to only the first class of natural signs, where the thing signified is 'established by nature, but discovered only by experience.' (Ibid., 121) Reid gives examples of mechanics, astronomy, and optics, which are 'but connections established by nature, and discovered by experience or observation, and consequences deduced from them.' (Ibid.) One may, no doubt, add

seismology to the list.

This definition may serve as the point of departure for our investigation into natural disaster as sign. Whether it's an earthquake or a tsunami, a natural disaster involves at least three phases: (1) a natural happening; (2) the interpretations of it; (3) after effects of the happening. It must be remembered that the word 'natural' is used provisionally. According to Clarke, whilst in classical evidential signs or Peircian indexical signs, the cause and effect can be remote, 'the referent occasion of a natsign as an object of dynamic interpretation is spatially contiguous or temporally proximate to the sign.' (1987, 67). One type of natsign would be 'an environmental event discriminated from a background, with a significate occurrence being an environmental event recognized at a referent occasion.' (64). A brief explanation of the two terms coined by Clarke is necessary. A *significate occurrence* refers to 'the occurrence of what is signified by a given sign token', and the sign's *referent occasion* refers to 'the spatial-temporal occasion at which we recognize a significate occurrence or non-occurrence.' (61). Because of its lack of subject-predicate structure characteristic of language, its lack of intention for communication, and its lack of rules of interpretation, the natsign appears ubiquitously in lower animals and indeed all the organisms.

How can one be sure that a natsign will give rise to *significate occurrence* rather than *non-occurrence*? Clarke says, 'If there is an occurrence *y* of *Y* as the type expected, then there is recognition of a significate-occurrence . . . Repeated recognition of non-occurrences has the effect of changing the significance of a sign of type *X* for the interpreter or replacing it with another sign *X'* with the same significance.' (61). The example he gives is the non-occurrence of thunder after heat lightning, which violates the popular inferential logic that thunder follows lightning. After the Boxing Day earthquake, there have been a couple of big ones,

but, contrary to general expectation, they failed to effect tsunamis.

The distinction between significant occurrence and non-occurrence can be a serious matter, in fact, a matter of life and death if the occurrence proves to be a disaster. Look at the following eyewitness report on the tsunami. On the beaches, people saw two subsequent occurrences: first, wave surge receding, and second, fish being exposed and stranded. The distinction between natural sign and natsign aside, these two occurrences are contiguous in space, proximate in time, and causal in relationship. Though being natsigns, and thus free from intention of communication, they did send signals. And how signals (or signs, if you like) were interpreted made all the difference. There were, in fact, two opposing interpretations that led to different actions and consequences. One interpretation survived its interpreters and through the mouth of others: some took the fish to be gifts from Nature and went down to catch the fish, not knowing that a third significant occurrence, a major one, and disastrous one at that, was impending. Others, better informed, i.e., decoding the first two occurrences rightly with a different interpretant coupled with experience and habit, managed to escape and thus survived their hapless fellow interpreters. What makes the difference? One can no longer explain away such a matter of life and death by suggesting a conflict in interpretation. Among other things, a major difference is that the second group of interpreters took the first two occurrences not at their face value, but as referent occasion for another significant occurrence, as Clarke would say, or, in Peircian parlance, as an indexical sign to still another sign.

Blanchot has a paradoxical but powerful argument on disaster's 'imminence'.

When the disaster comes upon us, it does not come. The disaster is its imminence, but since the future, as we conceive of it in the order of lived time, belongs to the disaster, the disaster has always already withdrawn or dissuaded it; there is no future for the disaster, just as there is no time or

space for its accomplishment. (1986, 1-2)

As the above example of fish suggests, a disaster occurrence never comes isolated but enters into a chain of causality. What's more important, whilst natural disasters seem to be *bona fide* natural signs, they are such only in terms of their impact on human beings. Disaster researchers Dore and Etkin observe, 'Natural disasters occur when an event such as an earthquake or storm reveals social vulnerability, and consequent damage to the physical and social fabric exceeds the ability of the affected community to recover without assistance.' (2003, 75). Here, 'social vulnerability' and 'recovery' amount to what Pelling describes above as the 'translation' of natural hazard into social risk and human reaction to cope with it. From the perspective of semiotics, the process involves system mutations (e.g., from natural to social) or transcoding of signs and entails social pragmatics. Such pragmatics, according to Etkin, consists of the following procedures: (1) 'response and recovery', (2) 'mitigation', and (3) 'preparedness'. 'These activities alter future vulnerability (and therefore the construction of future disasters), reducing risk if they are done wisely, or not if they are done otherwise.' (Etkin 1999, 69). The three overlapping activities form a 'disaster adaptation cycle' (Ibid., 70), as shown in Figure 1 prepared by Etkin (1999, 70).

A semiotics of disasters will have to articulate the complicated network of transformations among numerous natural and social systems that are only global in scale. This returns us to the question of global semiotics. Why the global community today is paying more attention to disasters? Apart from the noble cause of humanity that no man is an island, the answer lies in the dynamic process shown in Figure 1 above: increased social vulnerability and hazard mitigation, manifesting, for example, in international reliefs and cost-sharing; risk transference, from more frequent, low-impact events to unpredictable high-impact future disasters (Hewitt

1997); and the rupture or discontinuity between probability prediction and actual distribution of damage. Blanchot has warned us, disaster writing is an impossibility, for when it does occur, writing ceases to be, so does semiosis.

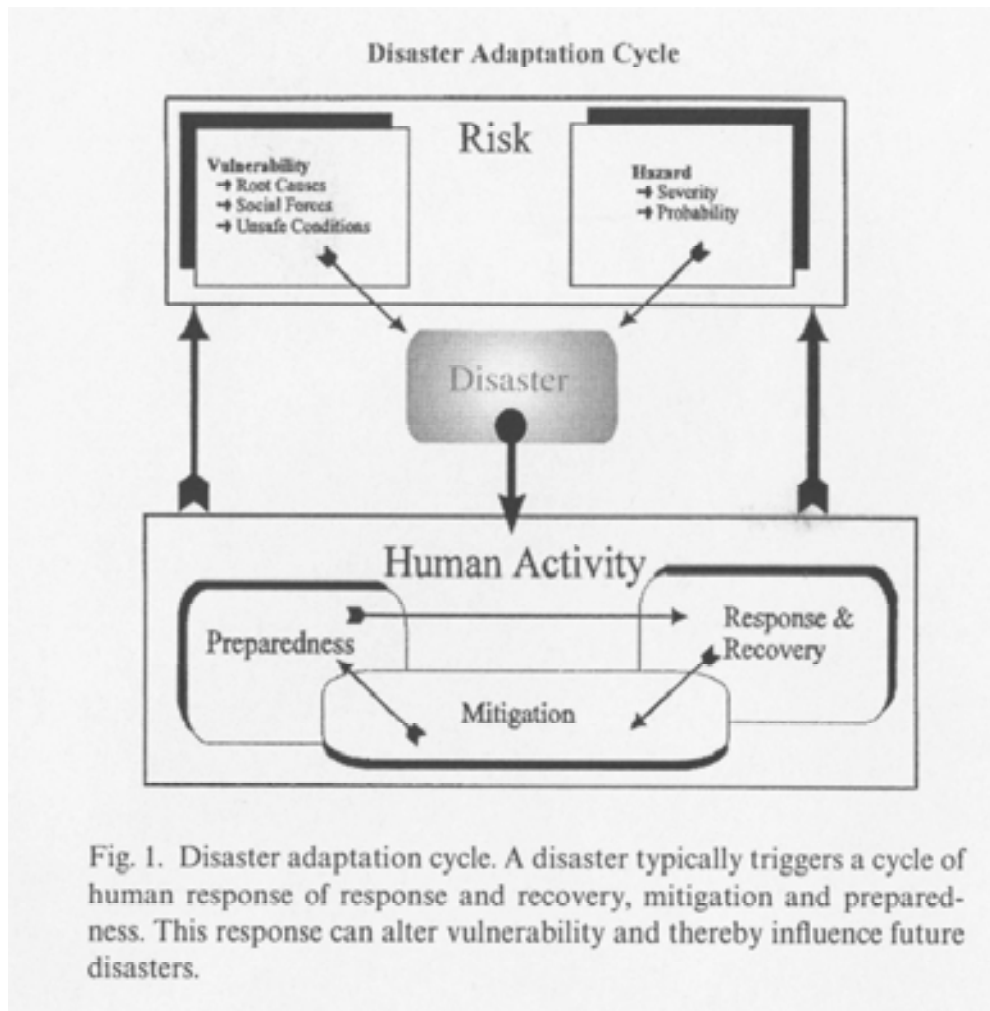


Fig. 1. Disaster adaptation cycle. A disaster typically triggers a cycle of human response of response and recovery, mitigation and preparedness. This response can alter vulnerability and thereby influence future disasters.

NOTES

¹ Pelling (2003), following Giddens (1998), notes that ‘most aspects of globalization are disputed’. One consequence of such globalization processes as capital transfer, e-culture, and labour migration is the change of ‘geography of risk and disaster’. (5-6). He could have added another process in relation to the topic under discussion: tourist mobility. Incidentally, Sebeok uses ‘global’ in the metaphorical sense of ‘holistic’ (2001, 27) in his description of animal groupings as ‘global semiotic systems’ without the awareness that the literal sense of ‘global’ (of the biospheric globe) has stolen in. The example is not self-defeating, but shows that global is a both natural and cultural construct.

² There is, however, a substantial literature on hazards or risk research in human geography and political ecology. See El-Sabh and Murty eds. 1988, Hewitt, 1983, 1997, Beck 1992, Etkin, 1999, Dore and Etkin 2003, Klein et al., 2003, Kondratyev, et al., 2002, Pelling ed. 2003. Etkin 1999, with its model of risk assessment, planning and transference, is particularly relevant to semiotics.

³ Eco says, ‘The process of recognition of natural events which generates sign-proposition takes place in the same manner [i.e., as inference]. Perception is always interrogative and conditional and is invariably based (even if we do not realize it) on a bet. If certain perceptual data are present, then (there is) perhaps smoke, as long as other contextual elements authorize me to think that the perceptual interpretation is appropriate. Peirce was aware of the fact that perception is always presumptive evidence, a source of potential semiosis.’ (1984, 35).

⁴ Suffice it to quote from two news clips. On 14th January 2005, the *International Herald Tribune* features John Burdett’s article, ‘The ghosts of Phuket’. The author intrudes in the course of his story by alluding to the religious background:

[W]hen Theravada Buddhism came to dominance here in the 13th century, it

had to accommodate Hinduism and native animism. Detachment is all well and good, but spirits must be appeased, the dead cannot be left to roam aimlessly – and something must be done to feed that ravenous sea god who expressed his rage by eating 5,300 people.

This is followed by a brief conversation between the narrator and a Thai barmaid.

‘How do Thai people like you feel about it now, two weeks later?’ I asked Pui ...

‘The ghosts are a problem,’ she replies without hesitation.

‘Thai npeople hate ghosts and now Phuket is full of them. I won’t go down there again.’

On 24th January 2005, *The New York Times* reports the minority tribe the Moken who survived the disaster. One survivor named Salama said ‘his people believed that tsunamis came because the sea was angry.’ The report continues:

Another group of Moken, who lived on a different island and are now at a refugee camp in Takua Pa, about 110 kilometers north of Phuket, on the Thai coast, said they, too, thought that the wave was punishment from the spirits. They said some dolphins they saw appeared to be agitated shortly before the tide receded that morning, a sign that something was coming. (Quoted from *IHT*, p. 4).

⁵ In his discussing of nineteenth-century debate between two schools of geology, the uniformitrarians and the catastrophists, in particular Charles Darwin (1809-82) and his mentor Charles Lyell (1797-1875), Rudwick (1992) points out the catastrophists’ theoretical difficulty and discursive solution, in his words, ‘a style of theorising’:

Most of the best earth scientists of the early nineteenth century felt that the evidence available to them obliged them to be in some sense catastrophists.

They felt that in trying to explain *some* phenomena they had no option but to invoke causal agencies far greater in intensity than those we can now see at work in the world around us, or even those of which we have reliable human records. But they also felt compelled by the evidence to infer that some of these geological ‘causes’ had acted with such intensity only on very rare occasions in Earth history. Such events, they concluded, fully deserved to be termed ‘catastrophes’, and they themselves were content to be known as ‘catastrophists’. (Rudwick, 1992, 81).

For its twentieth-century development in geology, see, for example, Ager 1993. For the relationship between catastrophe and evolution theories, see Zeeman 1992.

⁶It is curious to reinstate the argument of an eighteenth-century empiricist after the epistemological divide effected by linguistic turn in the early twentieth century. Thomas Reid asserts that there is a close correspondence between ‘original’ perception and natural language. ‘The signs in original perception are sensations, of which Nature hath given us a great variety, suited to the variety of the things signified by them. Nature hath established a real connection between the signs and the things signified; and Nature hath also taught us the interpretation of the signs—so that, previous to experience, the sign suggests the thing signified, and create the belief of it.’ (1863 [1994], 2: 195).

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