## Introduction to the Special Issue on Designing Innovation:

## Designing the designs: Designing innovations in human affairs

Vilfredo Pareto, the famed Italian engineer turned economist-sociologist, had during his early careers a desire to frame general laws on social designing. His investigations led him to believe that only certain minimal normative conditions could be set. Designing human affairs has always proved both enticing and formidable. A rather long tradition in European thought including that by the utopians has shaped issues around designing of human affairs, known often as the artificials. Contemporary thinkers on artificials including Herbert Simon (1988) have carried forward the dimensions of artificials into the social organizational and cognitive designs. Willful human interventions in human affairs while raising questions on ethics and intentionality have opened up several possibilities. These possibilities in designing human affairs have recognized the importance of human weaknesses of will and credulity, human greed for power and for certainty in future outcome, and the dependence of human reasoning on information. Modernity or rather post-modernity has known thus that cognitive affairs and human institutions can be deeply implicated together (Weick, 1995). It follows; designing involves local cultures, peculiarities and path-dependencies. No wonder, search of a cognitive foundation to the universal sciences of designs has proved elusive.

Designing requires pre-meditation. The presence of a conscious actor is absolutely necessary (Suh, 1990). Gombrich's meditations on hobby horse allowed playful fancies but designs of human institutions and organizations, Kenneth Arrow (1974) remarked, could neither be allowed a free play of fantasies nor a strict determination. Scholars and thinkers looked around for principles underlying the evolutions of rules and norms, of expectations and of the sense of fulfillment. The future remains predictably unknown not because there are human deliberations but because there are human speculations or human weaknesses of will (Simon, 1961; Kahneman & Tversky, 1979), the Aristotelian akrasia. Pre-meditation on designs and even pre-reconciliations on coordination thus would always fail at the tragic moment, defined by Kenneth Burke (1969). Moreover, human affairs are linguistic and designs on such affairs must be arrived at through political discourses. It has been often pointed out that politics is nothing but design. However, political oversight and constraints of contingency have much limited the claims constitutional rules making made and human digressions and foibles have often rendered such rules into a mere dump heap.

Designing an artifact seems to be comparatively easier (Pahl & Beitz, 1988). Often there would be only one person acting upon such an artifact. The modern age has, however, thrown open this barrier and evolved prosthetic especially cognitive-prosthetic devices that demands actions undertaken by several individuals. Personalized artifacts could have idiosyncratic nuances. Group artifacts had to be thought of very differently. Herd behaviors were known. Habits of thought, often going by the name of traditions, too were known. The fact that habits and convenience made an individual overlook or gloss over reasoning, as Tversky et al had shown, too came to be understood. Group devices including ways of living or modes of believing proved amenable to cunning of another more dexterous groups. Dimensions of ethics naturally stood up

against that but more importantly challenges were thrown open by the post-moderns who could argue reason, the central claim of modernity, was susceptible to this credulity and habits especially of the believed arrogation that an individual has her languages right.

Languages could be made wrong. This most ingenuous institution, the Saussurenian would argue, is susceptible too to the cunning and malicious designs or ambitions on the part of the other. Moreover, language some others argue is the most respectable group artifact. Achieving anything is possible through dexterous engineering of language. Any human institution stands upon this bedrock and power over this most plastic medium of language achieves all conceivable deserts. Late twentieth century and possibly this twenty-first century would thus face more intimately the awesome power of linguistic manipulations of human desires and happiness's.

All human institutions from a family through organizations to clans, castes or races are implicated in this linguistic order (Sacks, 1992). Interventions on these institutions are most direct and are most potent when carried through languages and its discourses (Whitehead, 1929). Linguistic research and research into human cognition have recognized information – its generation and its orders, as the medium. Oral transmissions are only one form of this vast linguistic and mental realm. Information is the residuum. Manipulations on information are easily affordable. Contemporary information and communications technologies have opened up large space where information plays with this order of human volition and passion.

Designing an artifact was direct. Parameters of such designs often were preset, premeditated and pre-reconciled. Designing a language cannot follow this passage. Languages are conversationally or interactively implicated in a manner such that co-evolution in lieu of directed evolution takes place. Informational interventions in designing of human institutions happen co-evolutionally. Informational interventions must necessarily then follow rules or parameters and such evolutions could not possibly be described or 'planned' as premeditated, preset and pre-reconciled. An institution is coordination, however, while based on linguistic or informational media such coordination's cannot be pre-specified as such regarding the exact shape that the future would assume. Such coordination's are shaped up as following certain injunctions or following certain rules.

There remains then certain inherent ambiguity and possibility. Future might appear in several manifolds. Speculations would remain rife. The evolution would remain in disequilibria forever (Wilson, 1989). As conversation never ends so would such informational and linguistic designing of human institutions would ever remain unfulfilled. There are instances and events where such inherent ignorance of future and of the minds of others take us to slippery grounds – such are the cases with issues on bioethics, human or genomic engineering. Most importantly, these interventions are irreversible. An organization or a discourse or a genome changed once, as it must in situations of dynamics, can never get back to the original. Habits based on ex-post thinking or inferences based on the past data prove inadequate to overcome this ignorance. Interventions might follow certain guides at best. Designs fail to be pre-specified because the inherent disequilibria overturn the applecart.

We could not then describe this as designing an innovation on human affairs; possibly we should name it as designing of designs. In conversation we cannot keep to a track that is pre-designed. There is, however, a conversational implicature. We adhere to certain minimal guideposts. So we do in our innovations in human affairs. Our linguistic informational embeddedness warrant that we design not an outcome but a possible set of rules and parameters, which while acting as injunctions or minimal guideposts, designs the designing of our human institutional affairs or their outcomes.

All the five papers in this issue refer to these guideposts. Jeanne-Marie Col refers to post conflict emergent situations where management of and management by large groups lead to outcomes that would have been impossible otherwise to arrive at. Vikas Nath and my own paper present opening up of possibilities where human ingenuities would usher their own social organizations into possibilities of better governance. Glen Milne looks into the prospect of using design science for better governance and surer governments for Canada. Kathryn Barker refers to electronic learning records of an individual that must conversationally as it were engage in the recognition of and in the development of skills and knowledge's with the anonymous market or the society. These papers refer to the linguistic and data-type information. All the papers refer to possible outcomes and attempt to locate general yet minimal guideposts. Contributors did not attempt pre-specifying outcomes or the designs as such. Innovations in human affairs are possibly thus designs on designing.

We are presented with a great variety in this small set of five papers. Barker and Milne refer to a developed world. Col refers to impoverished post-conflict societies who have nearly lost all where withal's. Nath's and my own papers refer to countries that are developing and that are experimenting with their democratic institutions. The last two papers refer to public domain information technology based innovations. Barker refers more to private domain use of such technologies, which however, requires public accreditation. Milne refers to public domain again. He points out limits to managerialism and he argues for a greater role of politics and the political representatives in designing government. Col refers to oral and conversational linguistic co-management of a facilitator and large groups of humanity. Col refers to country experiences of several countries. Barker and Nath too refer to several countries although Barker suggests policies for Canada while Nath suggests in general for the developing democratic countries. Milne too refers to Scandinavian experiences while retaining attention on better designs for Canadian environment. My paper refers to both a general schema and a specific Indian experiment in rural governance. All the papers identify human agencies in individual and in groups. Col's emphases are on large groups and so is Nath's. Barker's emphases are on individual linked to the market for knowledge. My emphasis is on individual and groups. Milne's emphasis is on role of political representative. Several possible guideposts emerge and a minimal landscape of designs on designing appears as suggested.

Editor of this journal, Eleanor Glor, hosted last February a Workshop at Ottawa. Excepting Vikas Nath we three could present our papers there. Glor took the initiative and with the support of several referees who have remained anonymous, and with the additional contribution from Nath, this issue is now appearing. I must assert that without Eleanor Glor's active engagement with this issue it would have never appeared.

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