A COMMENTARY ON THE TENSIONS BETWEEN SECOND-ORDER CYBERNETICS AND TRADITIONAL ACADEMIC CONFERENCES.

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Upshot: Richards' long history and commitment to cybernetics provides a well-rounded view of the dichotomy between the traditional conference and one aspiring for second-order cybernetic attributes. We examine why traditional conferences have proved so resilient, despite their shortcomings, and discuss some issues which underlie the dynamics of the participation of academics in non-traditional conferences.

1. In his paper, Larry Richards (§4), asks us to consider if second-order cybernetics can has aspects which can inform the design of conferences which aim at more than the mere advancement of a participant's celebrity and career. He proceeds to provide an experiential basis for several principles for designing second-order cybernetics conferences. Richards' long history and commitment to cybernetics provides a well-rounded view of the dichotomy between the traditional conference and one aspiring for second-order cybernetic attributes. The paper focuses on the practical aspects of tackling the problems faced in designing conferences informed by second-order cybernetics. We agree with Richards' implicit affirmative answer to the question which he asks, and find his proposals to be useful. In this commentary we offer our reflections on the resilience of some aspects of the traditional conference. We also explore the unstable dynamics of participation in academic conferences informed by second-order cybernetics, and comment on the factors which can help maintain the coherence of these conferences.

2. Richards' unenthusiastic comments about traditional conferences strike a chord with us, as they may well do with many readers of this journal. Nevertheless, it should be recognised that the traditional form of the conference can answer the needs of a community of researchers who have broad agreement on a discrete object of study, on the acceptable methods of investigating it, and on the accumulation of results. Members of such communities can attend traditional conferences in the hope of obtaining new information, which will enable their work to be relevant to emerging lines of investigation, and to reaffirm their membership of a community of inquiry. However, this justification of the form of the traditional conference is at odds with the epistemological critique made by radical constructivism, which Ernst von Glasersfeld describes as "a theory of knowledge in which knowledge does not reflect an 'objective'

ontological reality, but exclusively an ordering and organization of a world constituted by our experience". From this perspective, it is unreasonable to accept the existence of objects of study which stand beyond the community of inquiry, or of methods which provide absolute knowledge of the world. Similarly many cyberneticians reject the division of the world into discrete objects of study. As Gordon Pask states:

> Cybernetics… like applied mathematics cuts across the entrenched departments of natural science; the sky, the earth, the animals and plants. Its interdisciplinary character emerges when it considers economy not as an economist, biology not as a biologist, engines not as an engineer. In each case its theme remains the same, namely, how systems regulate themselves, reproduce themselves, evolve and learn. Its high spot is the question of how they organize themselves. (Pask 1961: 11)

3. Richards (§16) lists six relevant features of second-order cybernetics. In keeping with the circularity which characterises second-order cybernetics, a fascinating and productive event could be organised where the content of the conference consisted exclusively of a shared examination of these features in the lived experience of the participants during the event. However, this event would have more in common with a T-Group than something which would be recognisable as an academic conference. T-Groups built on the writing of Kurt Lewin (Lewin, 1948)—a participant at the seminal Macy conferences on cybernetics— were events where "only here-and-now interactions were discussed and explained with reference to universal laws of group behaviour" (Engestrom et al. 1996: 5). An alternative approach to a focus on here-and-now interactions is to follow Varela's path from cybernetics to Buddhism, as explored by Varela and Poerksen (2006). Nevertheless, conferences on second-order cybernetics which retain many of the features of traditional conferences continue to be organised and attended, including ones with traditional paper presentations. There is thus a tension between a focus on lived experience, informed by second-order cybernetics, and the continuation of academic conferences in a recognisable form. We believe that this tension manifests itself both in the design and experience of non-traditional conferences.

4. For -traditional conference elements to have survived, they must be of some value to participants. Richards correctly points out the deeply entrenched economic forces which sustain the traditional conference format, even in conferences which seek to take an alternative approach. It is true that some participants cannot obtain the funding they need in order to attend a conference unless there are paper presentations and the possibility of an accredited journal publication. These requirements are the symptoms of pervasive economic and social processes which include the monetisation of knowledge, the creation of supposedly objective methods of assigning merit to publications, and the creation of hierarchy in academic activity and networking. Moreover, these economically informed values, if they are to be effective in their own terms, must be perceived as permanent and absolute, in stark opposition to the features of second-order cybernetics proposed by Richards. The organisation of a conference which undermines these economically informed values therefore has social and political implications, which should be recognised by conference designers, both in order to prepare for the resistance which will be experienced, and in order to achieve impact beyond the activities of the conference itself.

5. We, however, do not believe that economically related factors are the only ones at work in maintaining the features of traditional conferences within the constructivist and cybernetic communities. We propose two additional factors. Firstly, there have been a number of strands within the broad cybernetic tradition which have established clearly defined objects of study, and which have proceeded primarily through conventional academic methods, for example, the work carried out in family therapy and in perceptual control theory. Indeed, one of the present authors has vivid memories of attending a fascinating three day event which consisted primarily of a traditional extended lecture by Humberto Maturana on the theory of autopoiesis. Secondly, to the degree that cybernetics, as Pask states above, is interdisciplinary, then to that extent it depends on the existence of disciplines. Cyberneticians may well have an interest in attending formal presentations of research which provides the raw material for a study of how systems organise themselves, even if they do not accept the epistemology which informed the investigations.

6. These observations lead us to believe that in organising conferences informed by second-order cybernetics, there is a tension between two conflicting desiderata: on the one hand an examination of the processes of communication which give rise to the discourse of cybernetics, both within and beyond the conference, and, on the other hand, to provide an opportunity for interdisciplinary activity, and the exchange of methods for carrying out interdisciplinary inquiry.

7. As Richards rightly points out, it is not possible or desirable to design the ideal cybernetically informed conference. The tension we have described, in combination with the mix of organisers and attendees leads to unpredictable outcomes, which need to be handled anew each time. Richards exemplifies the many different experiments implemented over the years particularly by the ASC conference organisers and how they fared. In the case of the ASC conferences of 2010, 2011 and 2013 mentioned by Richards, we ascribe much of the success of the events to two factors. Firstly, their chair, Ranulph Glanville, who had great insight into the participants during the design stage, allied with perceptiveness and *chutzpah*, which enabled the event to be steered as it took place. Secondly, possibly an underplayed aspect in Richards' paper, is the responsibility that the conferees themselves have in their role of working towards the goal of a second-order cybernetic conference experience. The challenge of bringing together this diversity into a single forum including a challenging conference style without the "violence" as Richards refers to, may be too large a burden for only the conference organisers. Partnering with the conferees themselves can expand the responsibility umbrella in a mutualistic method. Many of the participants at the ASC conferences were experienced in making agile shifts of focus between, on the one hand, reflection on the processes taking place at the conferences and their own participation within them, and, on the other hand, the more traditional discussion of discipline based research and inter-disciplinary methods. These experienced participants can take on much of the task for guiding the conference.

8. Richards expresses the need to inform the participants of the conference style prior to commencing the conference, and indeed newcomers considering attending the ASC

conferences in question (2010, 2011, 2013) were prepared for the event by explicit statements that the three conferences would be conversational in nature, and would not conform to the norms of a traditional conference. However, even with explicit explanations of the conference structure (or lack thereof) and the various other cybernetic based aspects, conference organisers may still face challenges with participants who do not take part in the way these organisers envisaged. In our experience the stalwarts of the ASC community are keen to spread the ideas of cybernetics, and are welcoming and generous with their time in inducting new participants. Indeed, without making space for new participants, who come with assumptions of the traditional structure of a conference, it is hard to see how cybernetics can grow as a field of enquiry.

9. One factor which Richards does not discuss is the degree to which electronic media may have changed the function of conferences. These have met with mixed success. Attempts to build online resources and forums around the ASC conference website have achieved sufficient response for the effort to be sustained, but have not taken a leading role in the conferences. On the other hand many of the long-standing attendees are members of the online Cybernetics Discussion Group, which sends messages around the -worldwide cybernetics community on a daily basis. Our participation in this mailing list suggests that the features of second-order cybernetics which Richards sets out would be generally accepted by its members. From a personal perspective, one of the present authors was prepared for his first participation in an ASC conference by having previously participated in the Cybernetics Discussion Group. This gave him a good impression of the kinds of discussions which would take place, and gave him a point of contact with people that he subsequently met at the conference. Similarly, the personal contacts established at the conference give impetus to the discussions on the mailing list. It is unclear what influence this communication channel between a substantial number of conference participants has on the dynamics of the conference, nor if electronic media could replace any aspects of the face-to-face conferences, which Richards proposes, but these are questions which are well worth asking.

Richards recognises that even a traditional conference can be justified in the light of second-order cybernetics, “if all participants are aware of the desires implicitly built into the design and take responsibility for the resulting consequences (for science, education and society)” (Richards 2015: §18). This proviso, might lead the reader to doubt the value of Richards' recommendations, as it suggests that any structure can be justified, but this is not our view. We understand Richards to be proposing structures which can nurture certain types of conversation, and as such we see his perspective as being primarily pedagogic. In making a pedagogic intervention we would argue that the contextualisation of the activities, and the discourse which constitutes and surrounds them, has a greater role than the list of activities offered. From this perspective Richards' proviso seems reasonable. His proposals offer practical help in designing conferences. However, in the lived experience of the conference, it is in the social and cultural traditions of the participants, their generosity and willingness to share, and the steering of conference activities, which determine the success of the event.

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