# Enabling local people and groups to support global organisational development

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## Abstract

The World Organisation of Systems and Cybernetics (WOSC) aims to contribute to the future of humanity. For this purpose, it is currently organising in Moscow, in collaboration with the Russian Academy of Sciences, WOSC 2020, from the 16th to the 18th of September, 2020. Our aim in this Congress is to bring CyberSystemic scientists together with politicians, practitioners and students to debate at all levels, from local communities to global societies, pressing economic, social and ecological problems of humanity. In this contribution I want to advance, in one aspect of the Congress, that of organisational development. WOSC 2020 will provide space for discussions of philosophical and methodological aspects of systems and cybernetics, highlighting the cybernetics of democracy and governance, the cybernetics of weaving people and technology, and the relevance of transdisciplinary knowledge. It is in this context that I make the following contribution to the IASCYS meeting to be held in Beijing, from the 10th to the 12th of May of this year.

Our organisations emerge from networks of autonomous people engaged in interaction processes ([Espejo & Foss, 2018](#_ENREF_4)). People, in collectives, use their skills, resources and capabilities to create and produce whatever outcomes they may wish to achieve. Collaboration in these interactions, to a significant degree, depend on processes of self-organization. In general there is no one with authority to tell all of them what to do and how to interact; they just interact. Often these interaction are inadequate and it is only through learning processes, which depends on cues and signals, that they proceed towards desirable outcomes. To a degree this is the dynamics of organisational development to respond to environmental, social, and economic pressures. Self-organising processes are at the core of their interactions. In today’s world technologies, digital and others, are transforming these interaction processes. New forms of communication and relationships are emerging between people and their environments; these are processes towards the constitution of effective organisational systems ([Beer, 1979](#_ENREF_2), [1985](#_ENREF_3)), ([Espejo & Reyes, 2011](#_ENREF_5)). However, these systems are more than the outcome of bottom-up self-organisation; they are also, the outcome of guided self-organisation, which, through policies clarify purposes and help to speed up learning processes by enabling relating fragmented resources. Organisational development and problem solving require of both; bottom-up and top-down interactions. The challenge is working out which interaction strategies are necessary to increase response capacity to make sense of an often overwhelmingly complex surrounding. These are aspects related to Ross Ashby´s law of requisite variety ([Ashby, 1964](#_ENREF_1)). We learn to manage these interactions often at a high cost to people and organisation; hierarchical structures tend to concentrate responses to environmental challenges at the top of the organisation. On the other hand heterarchical organisations try to distribute response capacity and self-organisation throughout the collective, but often their local response capacity is limited by resources. However, current information and communications technologies are increasing the chances of making this distribution effective and the purpose of this contribution is to discuss how to move from top-down structures, which restrict learning at the top, to heterarchical structures which increase learning capabilities throughout the structure. It is through self-organisation, functional specialisation and coordination, supported by current technologies, that people locally and at all structural levels, learn to correct complexity imbalances among them and between them an environmental agents.

## References

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Professor Dr. Raul Espejo Short CV

is President of the World Organization of Systems and Cybernetics (WOSC) and Director of Syncho Research, UK. He is academician of the International Academy for Systems and Cybernetic Sciences (IASCYS) and Past Professor of Systems and Cybernetics at the University of Lincoln, UK. His research is in organisational cybernetics and systems. His most recent book is “Organizational Systems: Managing Complexity with the Viable System Model” (2011 in English and 2016 in Spanish (both with A. Reyes)). Additionally, has co-published five books and edited 7 special issues of journals, most recently in 2018, of Futures (“Futures of Society: the interactions revolution”). Has published over a 100 papers in journal and books. Has organised two of WOSC’s most recent world congresses in 2014 (Colombia) and in 2017 (Italy). From 1971 to 1973 he was operations director of the CYBERSYN project - the project of the Chilean Government for the management of the industrial economy, under the scientific direction of Professor Stafford Beer.

1. Abstract prepared in response to the kind invitation by Professor Stuart Umpleby (President) and Professor Jifa Gu (Vice President) to the Meeting of the International Academy for Systems and Cybernetic Sciences (IASCYS) to be held in Beijing from the 10th to the 12th of May of 2019 . The Chinese host of this meeting is the Academy of Mathematics and Systems Science, Chinese Academy of Sciences. [↑](#footnote-ref-1)