Part III
Technology and Humanity: Co-developing a Hybrid Reality

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Hybrid reality elaborates on the close interconnection of technology and people, addressing their behaviours individually or as parts of groups or organisations. From a cybernetic perspective, this theme is addressing the convergence and integration of subject, digital and physical realities. It offers a debate about the amplification of individual capabilities, through organisation and technology, and the attenuation of different digital representations and constructions of the world, actively affecting our lives. Hybrid reality refers to the dynamics of people's life worlds in increasingly 'smart environments', constructing these worlds as new technologies keep emerging.

This theme offers contributions beyond the state of the art of technological research and its applications through new tools, focusing especially on their implications for people, organisations, societies and the environment. It opens discussions on computing in design and architecture, as well as on smart devices and environments (personal and organisational). In particular, it opens a debate about big data analytics and sharing, artificial intelligence, situation centres for development, energy and transport-related issues, cybersecurity, health, block-chains and the convergence of technologies. The reasoning on technological feasibility should be advanced with implications for society and the environment: economic justifications, accordance to the law, the ethical perspective, effects on the environment and paths for identifying not yet recognised consequences.

People are adapting to huge changes in their surroundings. They are invited to share their experiences and thereby contribute to producing group knowledge and responses to the social abuse of tools, such as Facebook, Goggle and Twitter. These reflections should become the next meta-level of group consciousness. In the age of human–machine interdependence, the boundaries between individual and group intelligence are redefined, putting technology in everything we do and experience. Reasoning on group consciousness and clarification of these boundaries pose a special challenge.

This theme wants to give special attention to the design of hybrid reality elements. In addition to being subject-supportive, proactive, secure and providing value-added, the seamless supplementing of the natural and artificial in hybrid reality adds to the desired positive user experience.

We post that it is important to use CyberSystemic thinking to manage the complexity of interactions in our hybrid reality to maximise its synergetic potential on individuals and organisations, avoid misuse and mitigate undesired consequences.