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# RESEARCH STATEMENT FOLLOWING THE 2018 CONFERENCE "CREATING UNCERTAINTY: BENEFITS FOR INDIVIDUALS, TEAMS, AND ORGANIZATIONS"

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## BACKGROUND

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On July 1-5, 2018, a group of scholars from a wide range of psychological and management research traditions met at the ETH Zürich Centro Stefano Franscini in Ascona, Switzerland, to discuss theories and empirical research on the meaning and effects of uncertainty in individual, team and organizational processes. The conference participants explored a new perspective on the generative role of uncertainty for individual actors and organizations, where uncertainty is not merely adapted to but deliberately introduced to propel learning and innovative action. The conference participants agreed on the following "Ascona Statement on Uncertainty" as a summary of the insights gained and as a starting point for future research.

## ASCONA STATEMENT ON UNCERTAINTY

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### DEFINITION OF UNCERTAINTY

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Uncertainty, as it is relevant for organizational actors, is defined as the experience of having less knowledge than desired in order to fulfil relevant tasks and attain valued goals. This perceived lack of knowledge follows from exogenous uncertainty stemming from the fundamental unpredictability of complex systems and specific actions of other actors. There can also be endogenous uncertainty generated through the actors' agentic behavior, such as proactive initiatives aimed at exploring new goals and ways to achieve them.

### EFFECTS OF UNCERTAINTY

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Effects of uncertainty are conditional on the assessment of uncertainty as threat or opportunity. Effects can be positive and/or negative at different levels of analysis. The assessment of uncertainty will be influenced by individual dispositions and available resources for managing the uncertainty. The framing and assessment of uncertainty is assumed to be more malleable at the collective than at the individual level. At the individual psychological level, uncertainty impacts cognition, motivation, emotion and behavior, with presumably analogous processes at collective levels. Uncertainty can be a cause of these processes or a contingency factor that moderates the effects of other causes.

## FRAMEWORK FOR UNCERTAINTY RESEARCH

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These considerations have substantial implications for both psychological and organizational research because they lead to **two fundamental expansions of the currently dominant view on uncertainty**: 1) **Inclusion of both exogenous and endogenous sources of uncertainty**; 2) **Inclusion of both positive and negative effects of uncertainty**. Furthermore, dynamic and possibly non-linear processes within and across individual and collective levels of analysis need to be considered. For instance, uncertainty at the individual level can promote identification with a group, which reduces individual uncertainty, while also enabling uncertainty creation at the team level.

## SOME RECOMMENDATIONS FOR FUTURE RESEARCH ON UNCERTAINTY

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- Develop a taxonomy of uncertainty that defines attributes and distinguishes uncertainty from other constructs, including consideration of temporal aspects such as uncertainty about what is versus what will be;
- Introduce standard ways of measuring uncertainty at different levels of analysis (e.g., through gambles as in judgment and decision making research at the individual level);
- Consider compositional (individual-level characteristics aggregated to isomorphic characteristics at group level) and compilational (group-level configurations of individual characteristics) measures of uncertainty assessment and management;
- Consider compositional and compilational moderators of the effects of uncertainty at collective levels of analysis;
- Conduct longitudinal analyses of the effects of different forms of uncertainty management to test the assumption that individuals, teams, and organizations with higher capability to create uncertainty do better in the long run (although perhaps worse in the short run).

## CONSIDERATIONS FOR PRACTICAL IMPACT

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Considering possible benefits of uncertainty and the uncertainty-generating effects of agentic behavior has immediate practical implications. Research on overconfidence, innovation, group decision making, strategic planning, high-reliability organizing and other topics all converge on the idea that certainty can be a trap when the world is uncertain and changing rapidly. Entrepreneurs, for instance, have to be able to imagine alternative worlds and destructive innovations. Individuals, teams, and organizations require capabilities for managing uncertainty rather than ignoring it, and for actively creating uncertainty to counteract the natural human tendency to prefer certainty. Training both the awareness for positive consequences of uncertainty-creating behavior such as voice or shared leadership and the self-efficacy for using these behaviors effectively is one important route for augmenting uncertainty management.