



RUC

# Examples of Research Methods in the Study of Environmental Uncertainty

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# 3 messages today

- There is not one single way to define and measure environmental uncertainty.
- Aim for construct clarity – what does “uncertainty” mean in your study?
- Align your method and measurement instrument to your definition of construct.





## Objectivism vs Subjectivism

Poor correlation between these two constructs, but comparing objectively derived probability estimates with an individual manager's perceptions of probabilities may be nonsensical.

## “Objective” environmental uncertainty

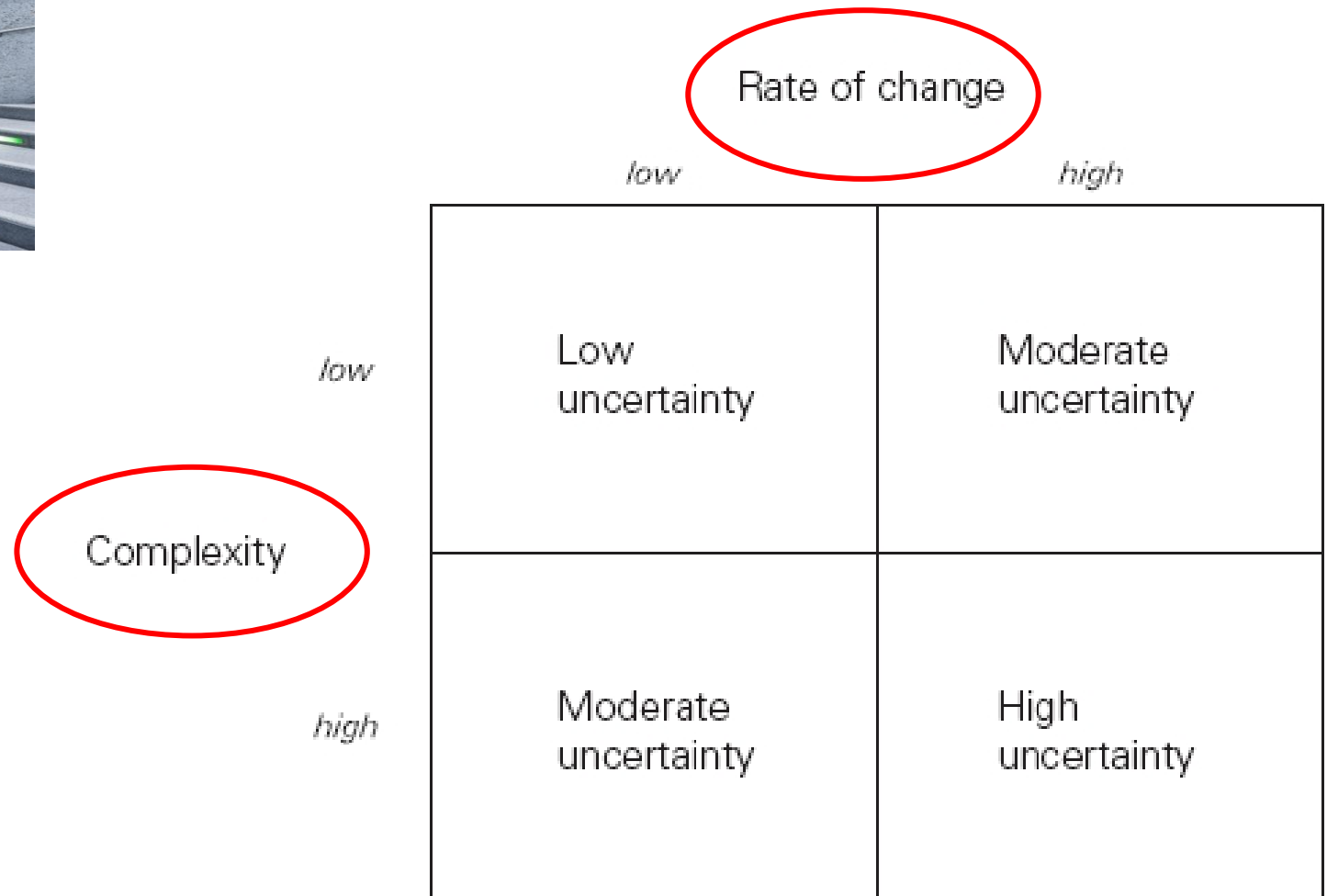
(“objective”, “true”, “exogenous”)

VS

## Perceived “subjective” environmental uncertainty

(“subjective”, “perceived”, “endogenous”)

# Objective Environmental Uncertainty Dimensions



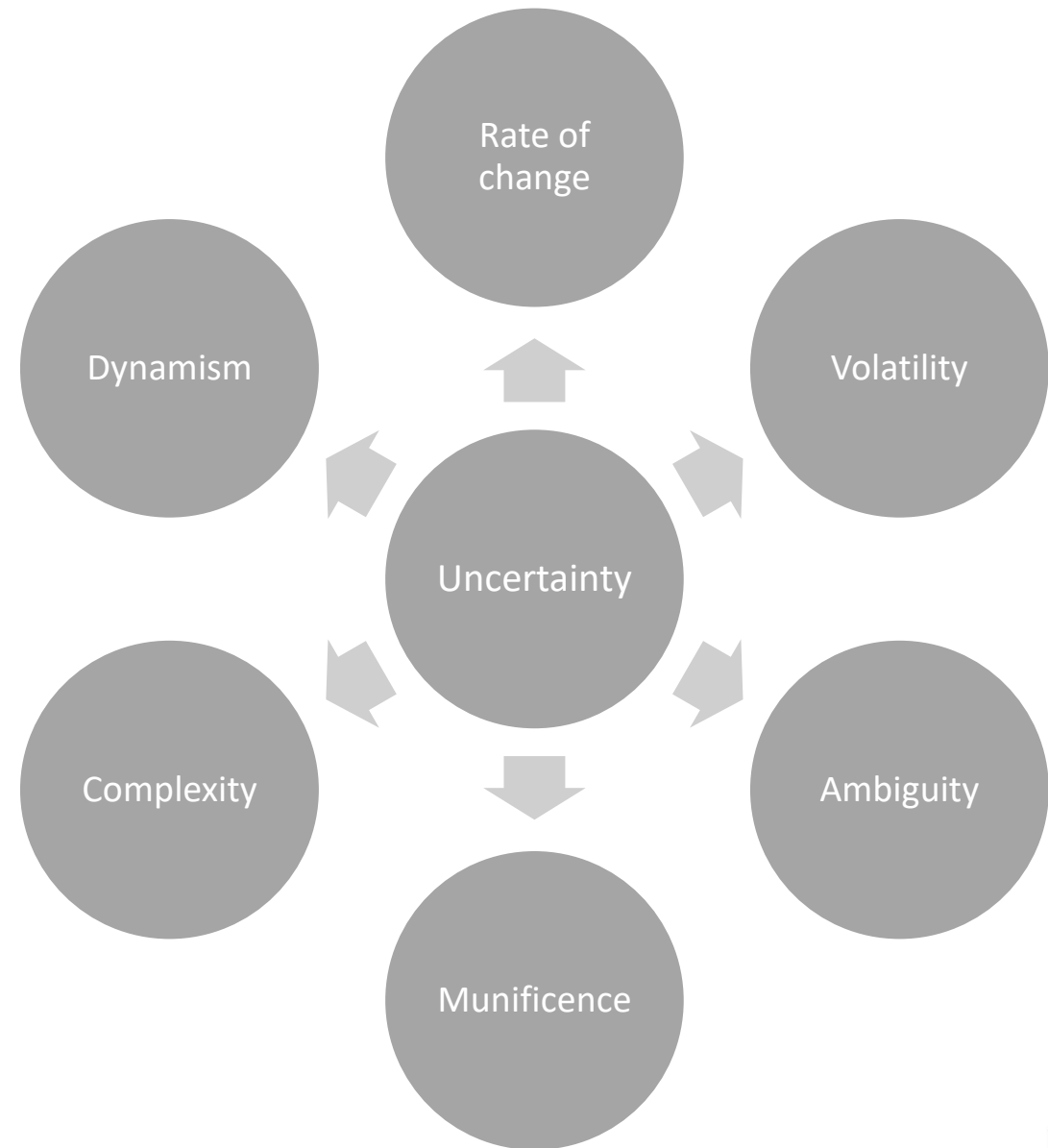
Just an example – yet this simple matrix is still the gold standard in organization theory textbooks.

Based on Duncan 1972



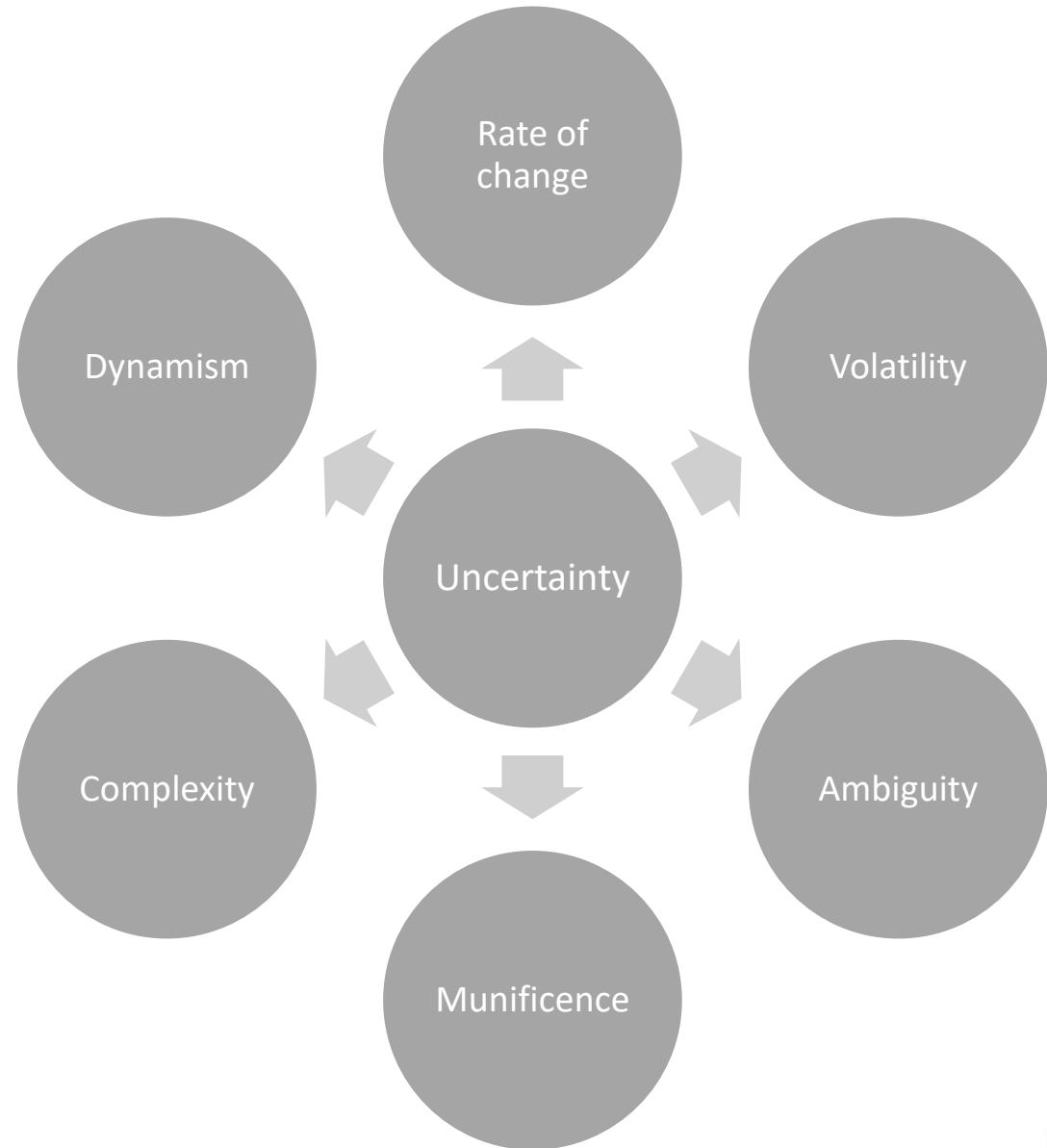
## Environmental uncertainty Construct validity?

Uncertainty and associated constructs are often used interchangeably and without clarification by strategy scholars in their work. Sometimes they are lumped together – e.g., VUCA.



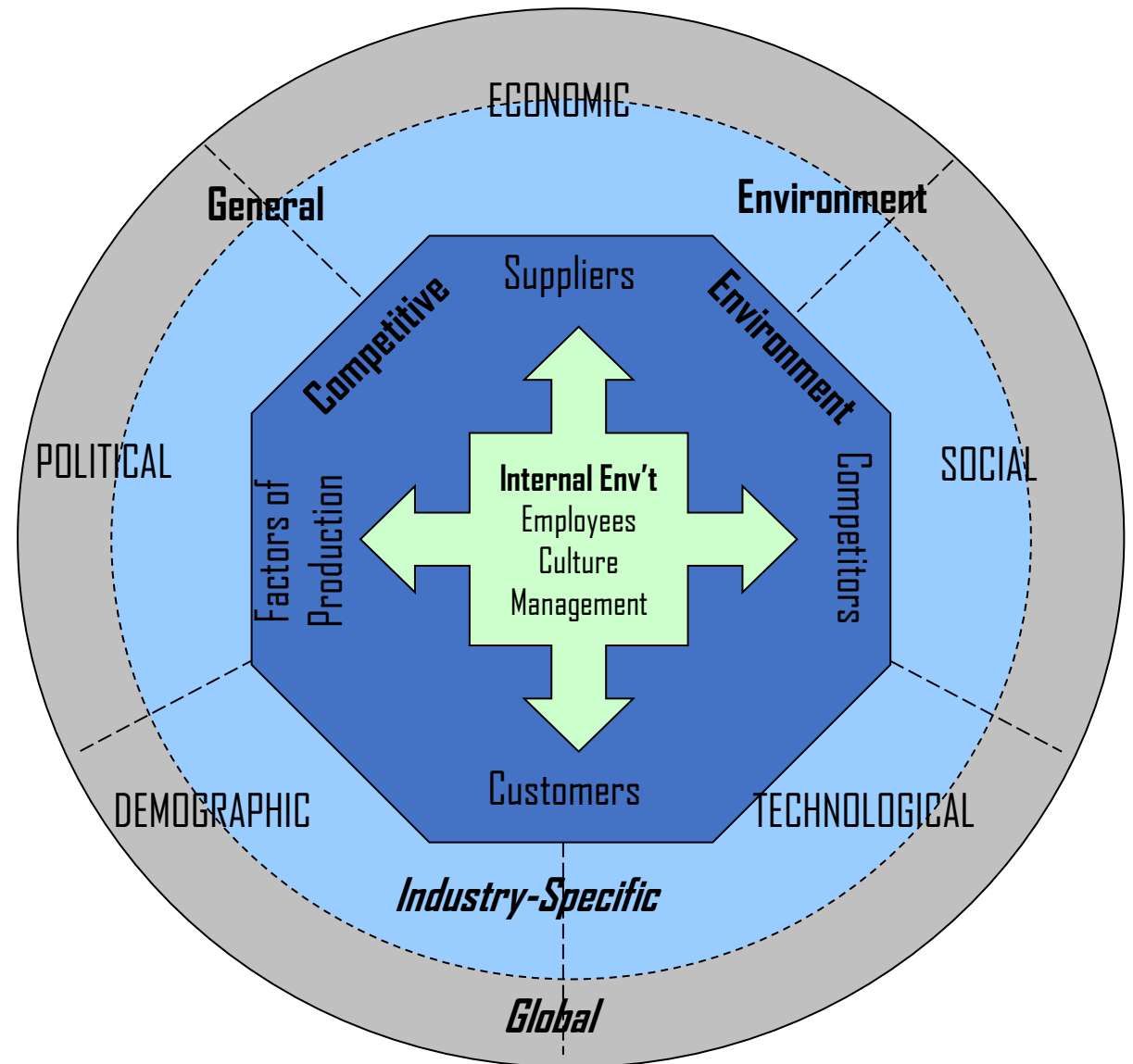
## Antecedents / proxies

In practice, we could maybe think of these as antecedents or proxies, that can help us capture the underlying construct of uncertainty.





Uncertainty could be measured for different parts of the environment (e.g., Bourgeois 1985)





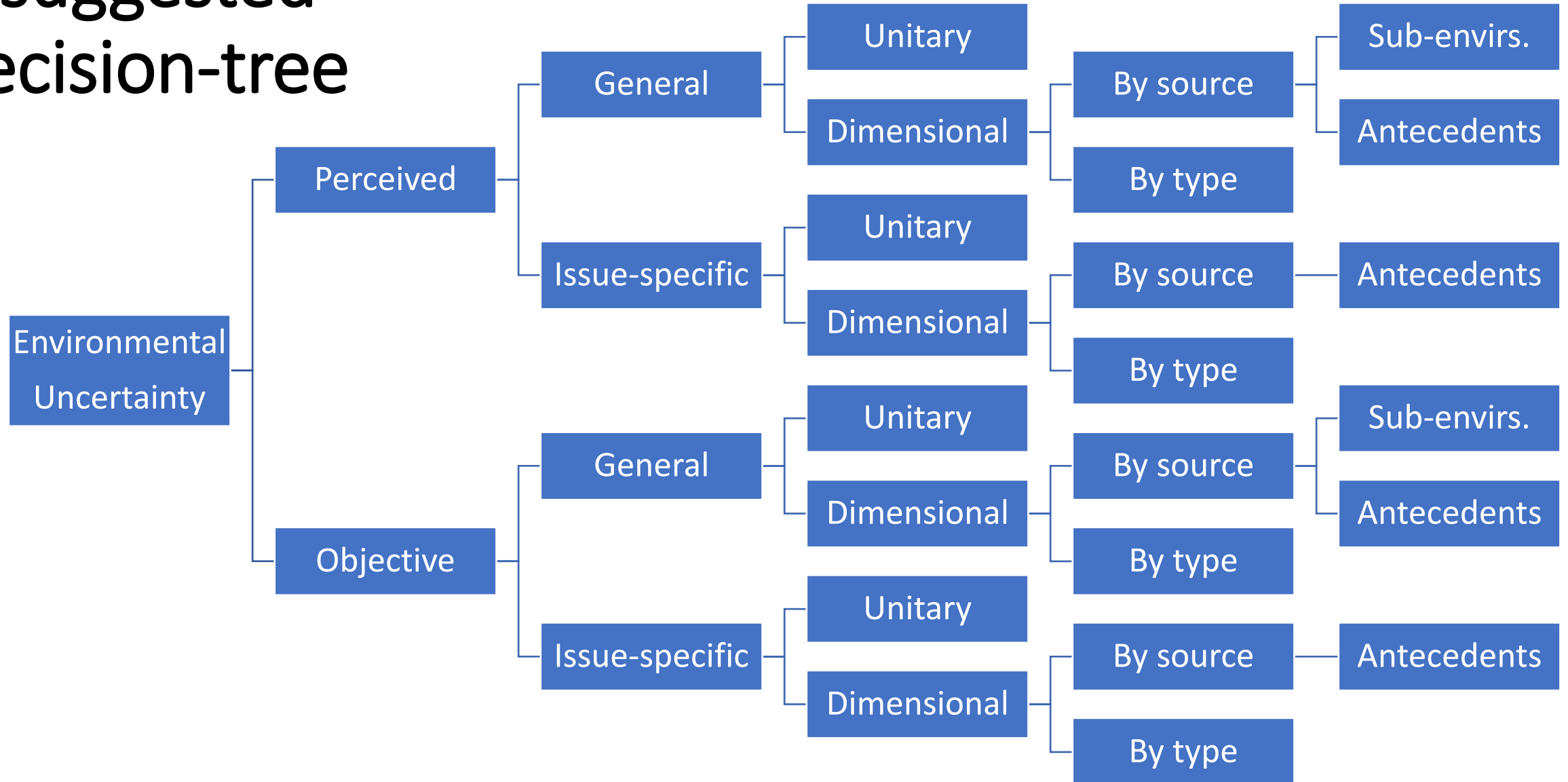
# Environmental uncertainty

- General Uncertainty
  - Linked to perceptions of the general state of the environment
  - Linked to decisions regarding strategic goals, organizational design, exploration vs exploitation etc.
- Issue-Specific Uncertainty
  - Linked to specific environmental changes
  - E.g., three types described by Milliken – state, effect, & response uncertainty

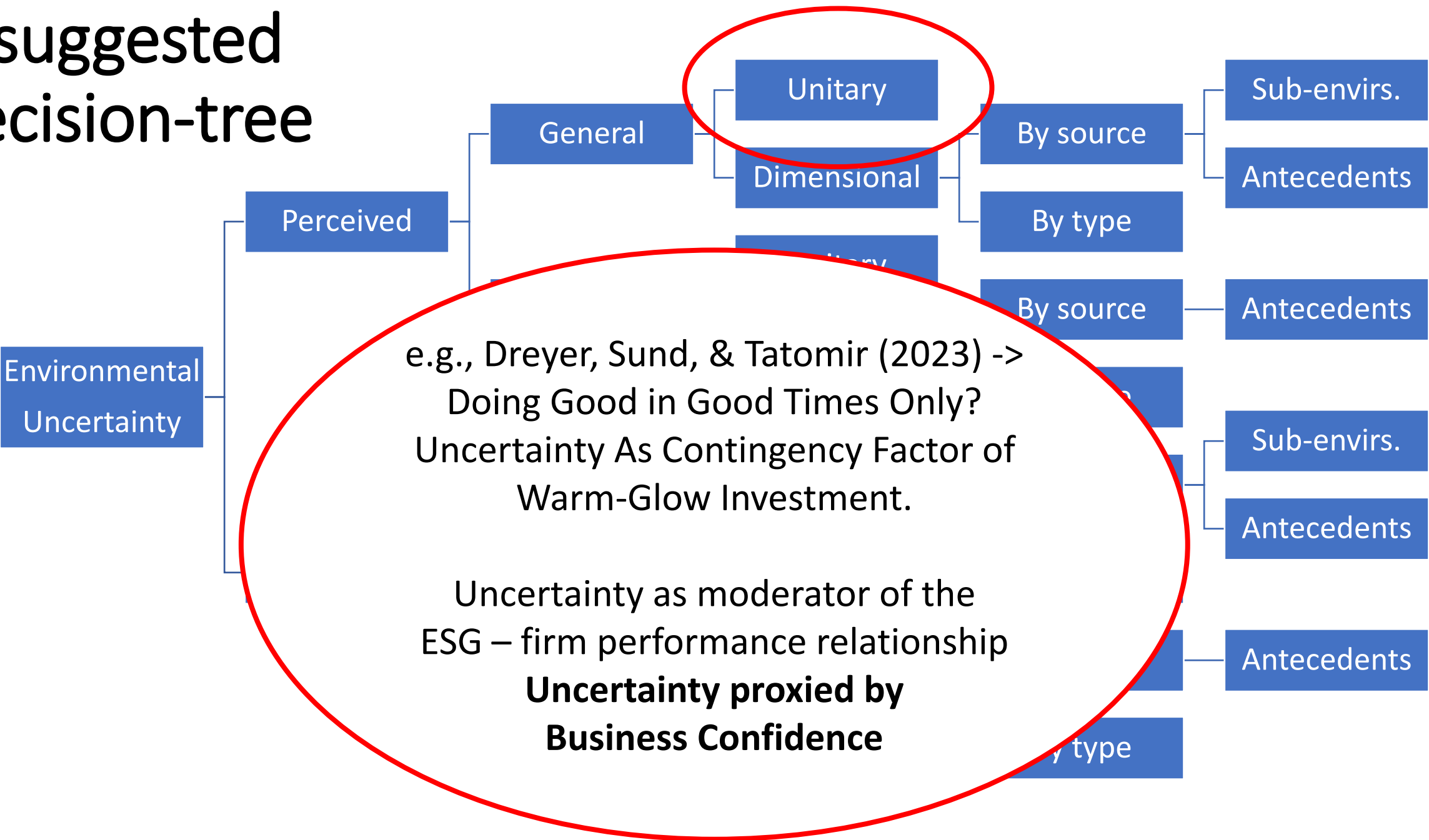
Based on Milliken 1990; Sund 2015



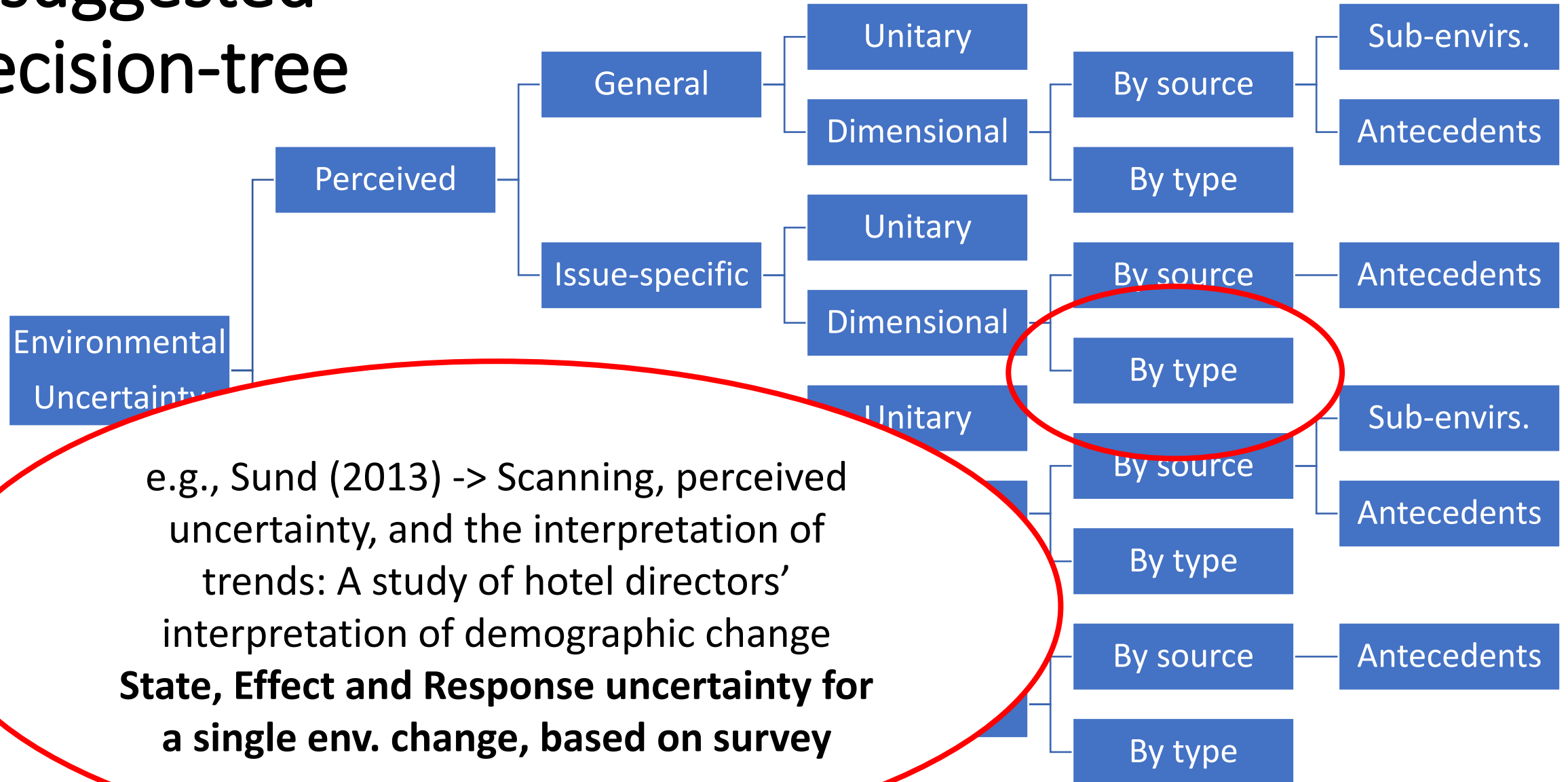
# A suggested decision-tree



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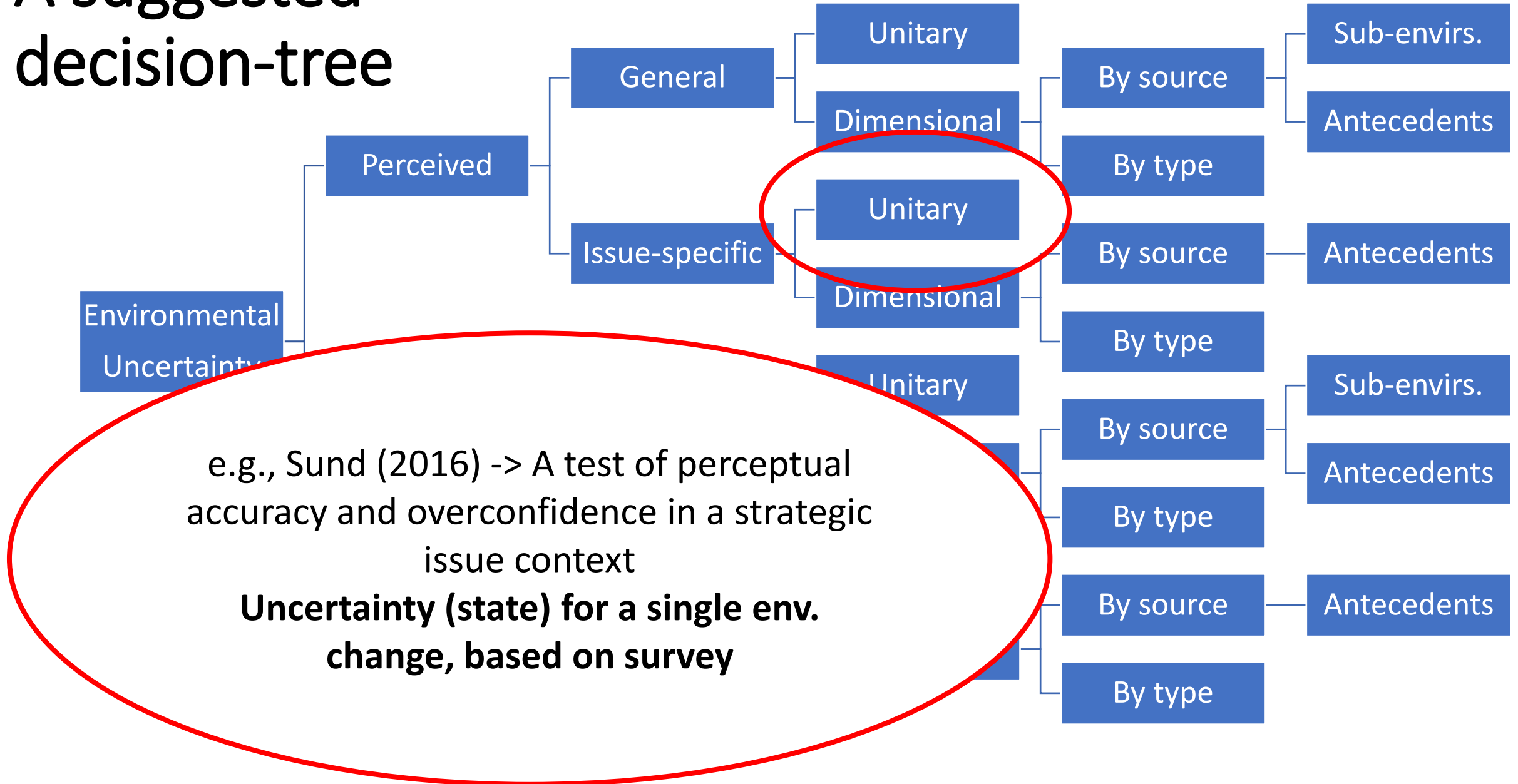


# A suggested decision-tree

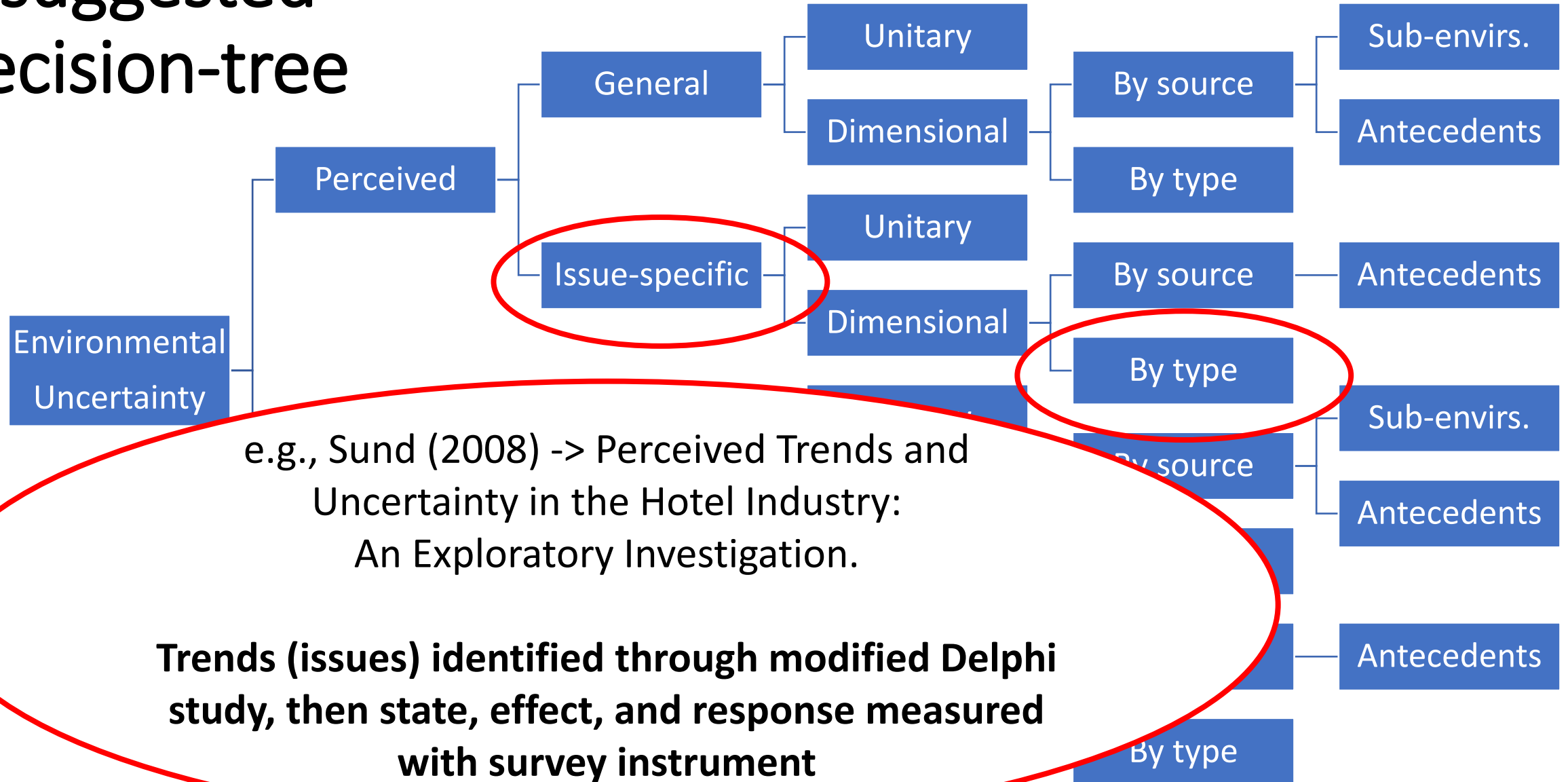




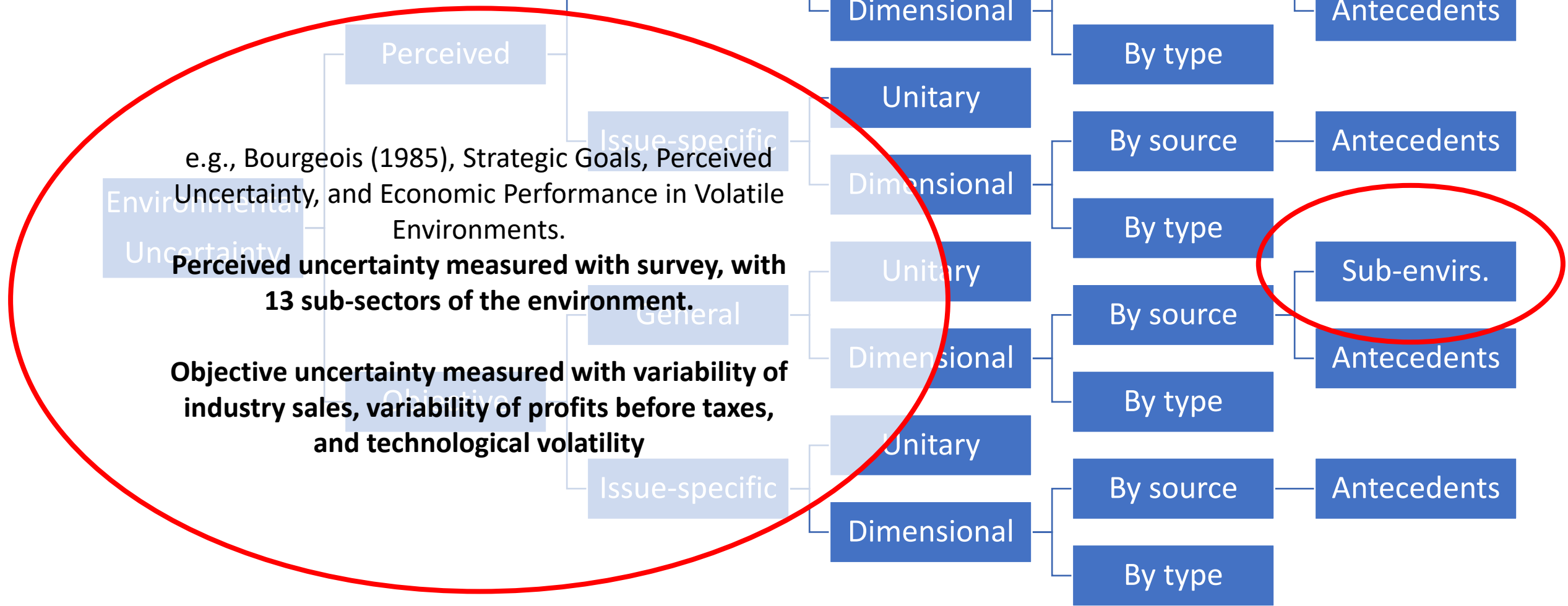
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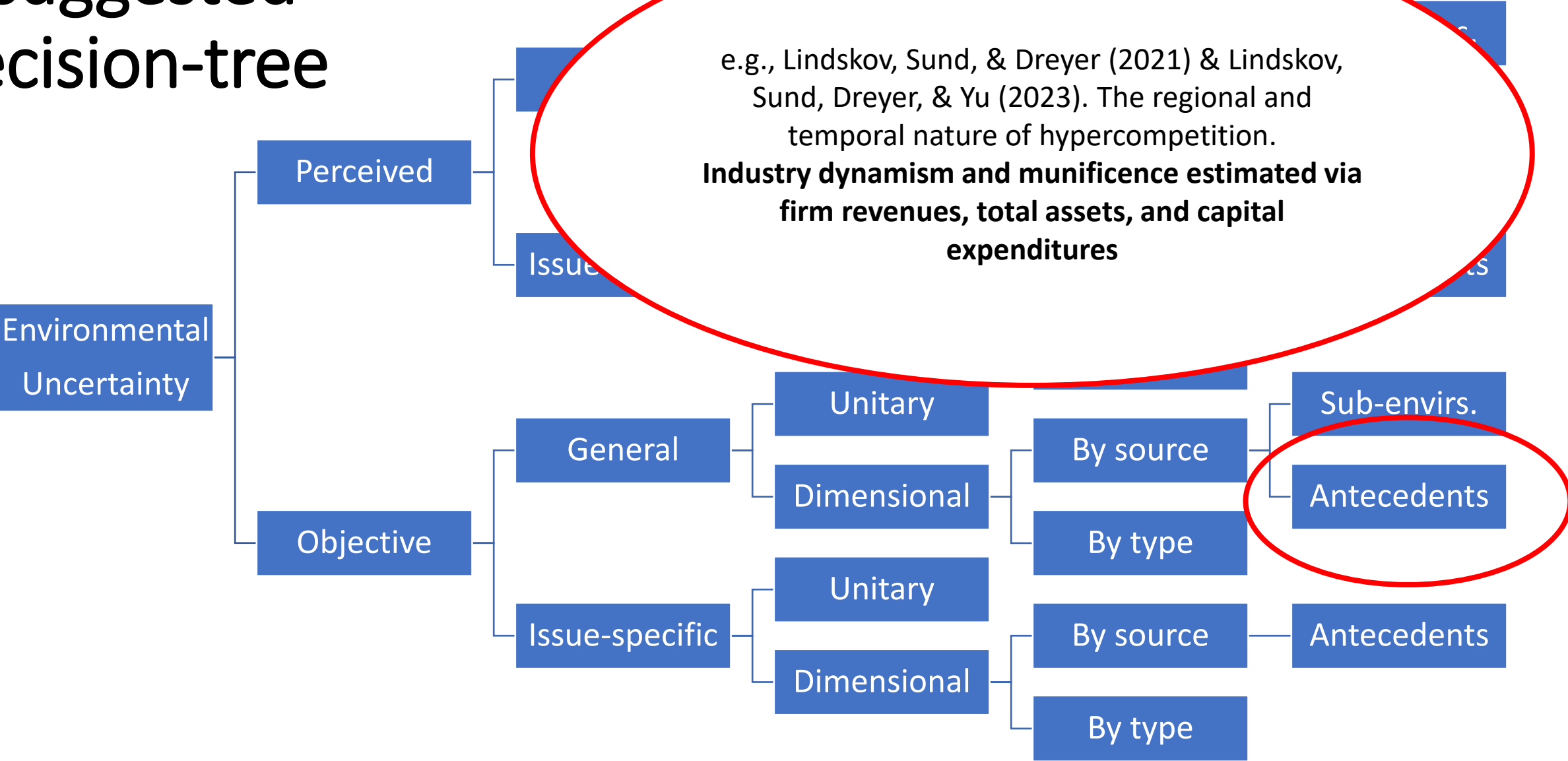



# A suggested decision-tree





# A suggested decision-tree





Check out  
these two

**Huff, A. S., Milliken, F. J., Hodgkinson, G. P., Galavan, R. J., & Sund, K. J. (2016). A conversation on uncertainty in managerial and organizational cognition. In *Uncertainty and strategic decision making* (pp. 1-31). Emerald Group Publishing Limited.**

**Sund, K. J., Galavan, R., & Huff, A. (2022). Uncertainty in Strategy Research. In *The Oxford Handbook of Uncertainty Management in Work Organizations* (p. C3). Oxford University Press.**





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Thank you –  
and keep  
exploring  
uncertainty

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