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5.4. Theory of belief functions: conventional approaches  
5.5. General approach to combination: any sets and logics; 5.6. Conflict management; 5.7. Back to Zadeh's paradox; Chapter 6. Data Modeling; 6.1. Characterization of signals; 6.2. Probabilities: immediate taking into account; 6.3. Belief functions: an open-ended and overarching framework; 6.3.1. Integration of data into the fusion process; 6.3.2. Generic problem: modeling of  $C_{ij}$  values; 6.3.3. Modeling measurements with stochastic learning; 6.3.4. Modeling measurements with fuzzy learning; 6.3.5. Overview of models for belief functions  
6.4. Possibilities: a similar approach  
6.5. Application to a didactic example of classification; Chapter 7. Classification: Decision-Making And Exploitation of the Diversity of Information Sources; 7.1. Decision-making: choice of the most likely hypothesis; 7.2. Decision-making: determination of the most likely set of hypotheses; 7.3. Behavior of the decision operator: some practical examples; 7.4. Exploitation of the diversity of information sources: integration of binary comparisons  
7.5. Exploitation of the diversity of information sources: classification on the basis of distinct but overlapping sets

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#### Sommario/riassunto

Addressing recent challenges and developments in this growing field, Multisensor Data Fusion Uncertainty Theory first discusses basic questions such as: Why and when is multiple sensor fusion necessary? How can the available measurements be characterized in such a case? What is the purpose and the specificity of information fusion processing in multiple sensor systems? Considering the different uncertainty formalisms, a set of coherent operators corresponding to the different steps of a complete fusion process is then developed, in order to meet the requirements identified in the first

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