

**Smets, Philippe**

**The transferable belief model for quantified belief representation.** (English) [Zbl 0939.68112](#)  
Gabbay, Dov M. (ed.) et al., Handbook of defeasible reasoning and uncertainty management systems. Vol. 1: Quantified representation of uncertainty and imprecision. Dordrecht: Kluwer Academic Publishers. 267-301 (1998).

This survey presents a model for the representation of quantified beliefs. The term “belief” is used in a broad sense and could be replaced by credibility, subjective support, strength of opinion etc. These beliefs are supposed to be held by an idealized agent who can be a human, but also a robot or a computer program. Time plays a crucial role as static beliefs held at a given time must be representable, but also within the dynamic of these beliefs with new information being taken into consideration. Since decisions are the observable outcomes of beliefs, decision making must be explained. According to the author, the paper can be interpreted as a self-contained complement to *G. Shafer’s Theory of Evidence* (Princeton University Press (1976; [Zbl 0359.62002](#))).

For the entire collection see [[Zbl 0908.90001](#)].

Reviewer: [M.Salles \(Caen\)](#)

**MSC:**

[68T30](#) Knowledge representation

Cited in **46** Documents

**Keywords:**

[survey](#); [representation of quantified beliefs](#); [decisions](#)