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Conceptual Knowledge Representation in Psychoanalytic Process Research

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The purpose of this paper is to demonstrate an application of Conceptual Knowledge Representation in the field of psychoanalytic process research. Conceptual Knowledge Representation is based on Formal Concept Analysis introduced by R. Wille (1982). For a short introduction the reader is referred to Wolff (1994) and Wille (1997), for the mathematical foundations to Ganter, Wille (1999). As an example in psychoanalytic process research we use data of anorectic young women investigated by Spangenberg (1990). A central problem in the formal representation of processes is the determination of a suitable frame. Generalizing the usual film representation of a kinematic process we describe a psychoanalytic process by introducing a conceptual frame into which the given data can be embedded in a suitable granularity. This conceptual frame describes the language of a psychotherapist about those attributes which were used by the patient for the description of her family members. Combining the pairs (family member, time) as objects with the attributes of the psychotherapist we get a formal context whose concept lattice yields a visualization of the psychoanalytic process of the patient. This method was used by Wolff also for the description of industrial processes.

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