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## **Constraint-based analysis of business process models**

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## Propositions

accompanying the thesis

# Constraint-Based Analysis of Business Process Models

Behnaz Changizi

1. The constraint-based nature of our approach allows simultaneous coexistence of several semantics in a simple fashion. [Chapter 1]
2. By using ATL we benefit from the power of separation of concerns and focus only on the required mapping rules, rather than matching patterns on the source models and execution of the rules. [Chapter 5]
3. Our framework eliminates the result of expressiveness gap among Reo formal semantics by incorporating more than one semantics in deriving the behavior of a Reo connector. [Chapter 6]
4. Rather than implementing the highly time- and memory-demanding custom-made algorithms to generate Reo formal semantics, we use the efficient SAT-solvers and computer algebra systems to solve constraints whose solutions are equivalent to these models. [Chapter 6]
5. When an end with innate priority connects to another end that has no priority, the new end will obtain acquired priority. [Chapter 7]
6. Each of these formal semantics can be viewed as a means to constrain the range of possible behaviors that is expressed in terms of I/O operations through the nodes to those of allowed by the semantics. [Chapter 8]
7. The beauty of mathematics only shows itself to more patient followers.
8. Every culture has something to be ashamed of, but every culture also has the right to change, to challenge negative traditions, and to create new ones.
9. I find that through the study of women, you get to the heart - the truth - of the culture.
10. The idea of cultural relativism is nothing but an excuse to violate human rights.