Propositions

accompanying the dissertation

Domain-Specific Languages for Digital Printing Sytems

by

Jasper Denkers

1. The use of a constraint-based DSL is superior to a GPL when it comes to modeling the configuration space exploration of digital printing systems. (This dissertation, Chapter 2)

2. The adoption of a constraint-based DSL is hindered by its declarative programming paradigm. (This dissertation, Chapter 3)

3. Using a language workbench for developing DSLs increases productivity especially if editor services are desired. (This dissertation, Chapter 4)

4. Academic contributions to language workbenches should be deployed in tooling with good non-functional characteristics to understand their impact in practice.

5. The ideal language workbench enables language engineers to focus on inherent domain complexity, on finding a proper language design, and on designing the user experience.

6. A side effect of designing a DSL is that the owner of the DSL obtains a better understanding of the DSL's domain compared to using a general-purpose language.

7. Using DSLs provides opportunities to shorten feedback cycles, e.g., by having IDEs that provide interactive feedback based on domain-specific validation.

8. Doing weekly retrospectives (looking back at what went well and what could be improved) and outlooks (what is the most important next step you can take) in both your personal and professional life increases effectiveness.

9. Making time to work on side projects has a positive return on investment in terms of productivity gains.

10. Computers do not make mistakes, (meta-)programmers do.

These propositions are regarded as opposable and defendable, and have been approved as such by the promotors prof.dr. A.E. Zaidman and prof.dr. J.J. Vinju.