Foreword by Dr. Stéphane Ducasse

Working with real and large object-oriented applications made me and my coauthors (O. Nierstrasz and S. Demeyer) think about object-oriented reengineering patterns. Our idea was to record good approaches to handle these systems at the design level but also with a bit of process. This is how Object-Oriented Reengineering Patterns (http://scg.unibe.ch/download/oorp/) came to life after 3 years of intensive work. In the same period I reviewed the book "Refactoring: Improving the Design of Existing Code" by Martin Fowler because we were working on language-independent refactorings. To me, books like these are milestones. They create a foundation for our engineering science.

When as JOT associate editor, I saw the authors' article describing the work presented in this book, I became an immediate supporter. I immediately asked if they would write a book and if I could be a reviewer. Why? Because a good book on Smells was still missing. And we daily face code smells. "Refactoring for Software Design Smells" is an excellent book. It is another milestone that professionals will use. It captures the deep knowledge experts have when facing real code. It puts in shape and word the complex knowledge that experts acquire after years of experience. I daily program either Pharo runtime and libraries or the Moose software and data analysis platform, and there is not a single day where I'm not challenged by design. Why? Because design, real design, is not simple. Even with a lot of practice and experience design is challenging. This is why having good abstractions to play with is important. Patterns and smells are really effective ways to capture such experience and reflection about the field.

I like the idea that I have access to excellent books that I can suggest to my students, colleagues, and friends. I like books that fill you up and make you think about your own practices. There are few of such ones and they are like gems. And "Refactoring for Software Design Smells" is one of those.

It is the book I would have loved to write (but I probably would not have been able to) as a complement to the Fowler's refactoring book, and my Object-Oriented Reengineering Patterns book. I'm sure that you will learn a lot from it and that you will enjoy it. I want to thank Girish, Ganesh, and Tushar (the authors of this book) to have spent their time to write it. I know that the process is long and tedious but this is an important part of our culture and knowledge that they capture and offer to you. I also want to thank them for their invitation to write this foreword.

Stéphane Ducasse

(Dr. Stéphane Ducasse is an expert in and fond of object design, language design, and reflective programming. He has contributed to Traits which got introduced in Pharo, Perl-6, PHP 5.4, and Squeak and influenced Fortress and Scala. He is one of the lead developers of Pharo (http://www.pharo.project.org/), an open-source live programming language, IDE and platform. He is an expert in software analysis and reengineering. He is one of the developers of the Moose analysis platform http://www.moosetechnology.org and he recently cocreated http://www.synectique.eu, a company delivering advanced tools adapted to client problems.)