Foreword by Andrei Alexandrescu

occurred about the perfect, most spartan choice of words in one paragraph or another.) This polished clarity will, I'm sure, shine through to any reader.

That Extra Oomph

"The only kind of writing is rewriting," goes the famous quote. That is doubly true for technical books. The strength of a textbook stands in the willingness of its authors to redo their work and in the depth and breadth of its review team feeding the revision process. And rewriting is not easy! Have you ever written some code and then resisted reviews because you fell in love with it? Multiply that by 1024 and you'll know how book authors feel about rewriting passages they've already poured their souls into. You really need to be committed to quality to keep heart during such a trial.

The authors' insistence on quality brings to mind what I like most about this book, which is also the most difficult to explain. I call it *the extra oomph.*

I noticed something about great work — be it in engineering, art, sports, or any other challenging human endeavor. Almost always, great work is the result of talented people making an extra effort that goes beyond what one might consider reasonable. In appreciating such work, we implicitly acknowledge great capability combined with commensurately great effort in realizing it. Good work can be done glibly; great work cannot.

Through an odd turn of events I ended up getting quite involved with this book — first, for one review. And then another, and another, for a total of four thorough passes through the entire book. The quest for perfection is as contagious as the resignation to sloppiness and incomparably more fun. ("Destroy!" John Lakos pithily emailed me along with each new revision. My often caustic reviews motivated him like nothing else.) Other reviewers — C++ Standards Committee denizens, industry C++ experts, C++03 experts with no prior exposure to C++1x, software-architecture experts, multithreading experts, process experts, even LaTeX experts — have done the same, with the net result that each sentence you'll read has been critically considered dozens of times and probably rewritten a few. For my part, I got so enthused with the project and with the authors' uncompromising take on quality, that I ended up writing a full feature for the book. (Any mistake in Section 2.1. "Variadic Templates" is my fault.) This book project has been a lot of work, more than I might have reasonably expected, which is everything I'd hoped for. I thought I've gotten too old to still pull all-nighters; apparently I was wrong.

Having been thusly involved, I can tell: This book does have that extra oomph baked into it. The talk is being walked, there's no fluff, and the code examples are precise and eloquent. I think *Embracing Modern C++ Safely* is Great Work. Aside from learning from this book, I hope you derive from it inspiration to add more oomph into your own work. I know I did.

— Andrei Alexandrescu
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