# Making Claims

## Knowledge Design, Capture, and Sharing in HCI

# Synthesis Lectures on Human-Centered Informatics

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# Making Claims

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*SYNTHESIS LECTURES ON HUMAN-CENTERED INFORMATICS #15*

## ABSTRACT

Human-centered informatics (HCI) is a young discipline that is still defining its core components, with approaches rooted in engineering, science, and creative design. In the spirit of this book series, this book explores HCI as an intersection point for different perspectives of computing and information technology, seeking to understand how groups of designers can communicate with an increasingly diverse set of colleagues on a broadening set of problems. In so doing, this book traces the evolution of claims as a way to capture and share knowledge, particularly in comparison to other approaches like patterns and issues. Claims can be a centrally important aspect in HCI design efforts, either consciously by targeted design techniques or through ingrained habits of experienced designers. An examination of claims, their uses in design, and the possibilities for explicit use in future collaborative design endeavors seeks to inspire their further development use in HCI design.

## KEYWORDS

claims, patterns, issues, IBIS, knowledge capture, usability engineering, creative design, design rationale, reuse

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# Preface

This book is about making claims: the development of knowledge in collaborative situations by groups of people with differing skills and opinions. Claims appeal to me because they are simple in many ways, but they hide a rich complexity that can be leveraged to drive design from the perspectives of engineering, science, or creativity. I try to reflect the simplicity of claims early in the book, then reveal the complexities (and the possibilities) for claims as a knowledge capture and sharing mechanism as the book evolves. Claims are not the only knowledge capture method for HCI: I set out to bring together three core methods—claims, issues, and patterns—to trace their evolution and to consider how they can contribute to the design of interactive systems.

This book is a monograph, part of a series on Human Centered Informatics (HCI), a young field still seeking to define itself. The primary audience is people in academia—those interested in the evolution of the ideas related to knowledge capture in HCI. That said, I feel that Chapters 1 and 5 are both highly accessible for any audience. Chapters 2 and 3 provide a high-level view of early advances in knowledge capture that helped define the way we know things in HCI. Chapter 4 provides an in-depth view of how claims have been used in some research and development projects in academia and industry; this chapter may be of interest to those who want to view the methods in action. Finally, in the spirit of this book, Appendix A positions a series of 20 claims about claims (and patterns and issues) in a timeline view that is easily browsable.

Given the flux in the field of HCI, it may seem like an odd time to write a book that talks about the ways to capture something so dynamic. My thought is that there is no perfect time to write a book, but there is no bad time either. This book represents my current view on things, but even (perhaps especially) in the course of writing this book my views have changed. I welcome comments about omissions, corrections, and new directions—it will go into one of the next things I write! (And I hope you will help me with it.)

Parts of this book have been based on material from prior papers that I had a hand in authoring, in particular Chapter 4. All of these papers include co-authors who often had a greater role than I in writing the papers—I'm very grateful for the chance to work with such an inspirational and hard-working group of people. Specifically, the opening of Chapter 4 draws from a 2004 ACM SIGCSE paper on teaching HCI with engineering, science, and design methods [McCrickard et al., 2004]. The cases throughout the rest of Chapter 4 are adapted from the following papers: Section 4.1.1 from a DIS paper [Chewar et al., 2004b]; Section 4.1.2 from an Agile paper [Lee et al., 2008] and a CHI case study [Lee et al., 2011]; Section 4.2.1 from a CHI note [Bhatia and McCrickard, 2006]; Section 4.2.2 from an ACHI paper [Karam et al., 2009]; and Section 4.3.2 from a paper in the

Human Technology Journal [McCrickard et al., 2011], which built on a series of papers at IFIP Interact, DIS, and CHI [Wahid et al., 2009, 2010, 2011].

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Finally, I appreciate the support from my wife, Lisa Wenner McCrickard, and our three children, Gordon, Grady, and Gwen. May the adventures continue!

D. Scott McCrickard
May 2012

# Figure Credits

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