Preface

This work started when I first met my adviser, Renata Wassermann, during my under-graduation and it finishes now 7 years later. In the first years of work I had the privilege of meeting professor Grigoris Antoniou who presented me the work of his student Giorgos Flouris. Me and Renata were already working with belief revision in Description Logics and Flouris had just presented their results on AGM compliance. Although extremely interesting, their results were negative. They showed essentially how AGM theory was not applicable to several interesting Description Logics such as the ones behind OWL.

We decided then to investigate how to adapt AGM theory to make it applicable to these and other logics. First, we investigated contraction in belief sets and then revision both in belief bases and belief sets. In 2010, I finished my Ph.D. thesis which was elected the best thesis in Computer Science of that year by the Brasilian Society of Computer Science. This is why it was published.

To make it look like a book the thesis suffered some modifications. Some classical results were proved to make it more self-contained. Some results were removed because they were less related with the subject.

I would like to acknowledge many people, but I will mention just some. First and most important I would like to thank Renata. In many ways this can be considered our joint work.

For funding this work I want to thank CNPq (Conselho Nacional de Desenvolvimento Científico e Tecnológico) and FAPESP (Fundação de Amparo a Pesquisa do Estado de São Paulo)

I would like to thank people from LIAMF, especially professor Marcelo Finger, professor Leliane Nunes, and professor Fabio Cozman who is not officially from LIAMF, but is always present. Some of the works that I started in LIAMF are being continued by some students who are doing a great job. I would like to mention Filipe Resina who is implementing the algorithms presented in this book and Renato Lundberg who is investigating the relation between kernel and remainder set.

I am in debt with everyone who hosted me in Europe, especially professor Griogoris Antoniou, Giorgos Flouris, and professor Andreas Herzig. I would also
like to thank the people from my current work in CLE (Centro de Lógica Epistemologia e Historia da Ciência), especially my current adviser professor Marcelo Coniglio.

Finally, I would like to mention everyone who supported me all these years, my friends in Vinhedo, my friends in São Paulo, my colleagues from my undergraduate course, my family, and my beloved Bianca.
Belief Revision in Non-Classical Logics
Ribeiro, M.M.
2013, XI, 120 p. 5 illus., Softcover