## **NATURALLY WE**

#### A PHILOSOPHICAL STUDY OF COLLECTIVE INTENTIONALITY

Submitted by Mattia Luca Gallotti to the University of Exeter

As a Thesis for the Degree of

Doctor of Philosophy in Philosophy

In September 2010

This thesis is available for Library use on the understanding that it is copyright material and that no quotation from the thesis may be published without proper acknowledgement.

I certify that all material in this thesis which is not my own work has been identified and that no material has previously been submitted and approved for the award of a degree by this or any other University.

.....

#### **Abstract**

According to many philosophers and scientists, human sociality is explained by our unique capacity to 'share' the mental states of others and to form collective intentional states. Collective intentionality has been widely debated in the past two decades, focusing especially on the issue of its reducibility to individual intentionality and the place of collective intentions in the natural realm. It is not clear, however, to what extent these two issues are related, and what methodologies of investigation are appropriate in each case.

In this thesis I set out a theory of the naturalization of collective intentionality that draws a line between naturalizability arguments and theories of collective intentionality naturalized. The former provide reasons for believing in the naturalness of collective intentional states based on our commonsense understanding of them; the latter offer responses to the ontological question about the existence and identity of collective as distinct from individual intentionality. This model is naturalistic because it holds that the only way to establish the place of mental entities in the order of things is through the theory and practice of science. After reviewing naturalizability arguments in philosophy, I consider an influential research program in the cognitive sciences. On the account that I present, the irreducibility of collective intentionality can be derived from a theory of human development in scientific psychology dealing with phenomena of sociality like communication, recently refined by Michael Tomasello.

## **List of Contents**

List of 1	Figures	8
Preface	and Acknowledgements	9
One	Introduction	15
	1.1 The Naturalization Route	19
	1.2 Summary of the Chapters	22
Two	Naturalizing Collective Intentionality	27
	2.1 Introduction	27
	<ul><li>2.2 The Rise of Collective Intentionality Theory</li><li>2.2.1 The Early History</li></ul>	29 34
	2.2.2 The Irreducibility Thesis	39
	2.3 A Priori Knowledge and Conceptual Analysis	43
	2.3.1 Sharing Intentions	46
	2.4 Scientific Reduction and Conceptual Irreducibility	49
	2.4.1 Fitness	52
	2.5 Prospects of Naturalization	54
	2.6 Concluding Remarks	59
Three	The Sense of Collective Intentionality	61
	3.1 Introduction	61
	3.2 Kinds of Intentionality	63

	3.2.1 Collective Intentionality as a Primitive	67
	3.3 Collective Intentionality without Collectivity	72
	3.3.1 Brains in Vats Thinking Collectively	74
	3.4 The Background	79
	3.4.1 The Sense of the Other	81
	3.5 Conceptual Analysis and Scientific Reduction	84
	3.5.1 Deconstructing Biological Naturalism	87
	3.5.2 Ontological Reduction without Epistemological Reduction	90
	3.6 Concluding Remarks	93
Four	The Construction of Collective Intentionality	97
	4.1 Introduction	97
	4.2 The Collective Acceptance Model	99
	4.3 Verbal Behaviourism	102
	4.3.1 Rule-Following	105
	4.3.2 Social Constructivism	109
	4.4 Naturalistic Constructivism	112
	4.5 Concluding Remarks	117
Five	Collective Intentionality Naturalized	119
	5.1 Introduction	119
	5.2 Collective Intentionality Outside Philosophy	121
	5.2.1 Intentionalism in the Cognitive Sciences	124
	5.2.2 Collective Intentionality in Experimental Psychology	128
	5.3 The Ontogeny of Intentionality	131

	5.3.1 Joint Attention	135
	5.3.2 Joint Attention as Shared Intentionality	139
	5.4 The Shared Intentionality Hypothesis	144
	5.5 Concluding Remarks	148
Six	Mental Attunement	151
	6.1 Introduction	151
	6.2 Joint Attention, Reference and Shared Intentionality	153
	6.3 Does Semantic Externalism Tell the Full Story about the Shared Intentionality Hypothesis?	161
	6.4 The Pragmatist Roots of the Shared Intentionality Hypothesis	165
	6.5 Irreducible Collective Intentionality	169
	6.6 Concluding Remarks	173
Seven	Conclusions	175
Bibliography		

# **List of Figures**

Figure 1	The Hi-Low Game	122
Figure 2	The Stag Hunt	145
Figure 3	The Prisoner's Dilemma	146

#### **Preface and Acknowledgements**

Several years have passed by since I first realized that society is the most astonishing construction of the human mind, but it is only when I was writing my master dissertation at the LSE in 2006 that I came across John Searle's *The Construction of Social Reality*. Before long I was captured by the lucidity of the ideas in *The Construction*. It is by trying to penetrate the depths of Searle's thinking, and despite the apparent ease of his writings, that I came to philosophy. I have since felt the urge to find my own way to the meaning of philosophy by observing, learning from, and sympathizing with Searle philosophizing. I hope these few words testify to the profound intellectual debt and to the importance of his influence on me.

The research presented here is the product of times and places, of which I would like first to convey some insights. After a slow and confused start, I became persuaded that the sense of a Ph.D. is not just a matter of how valuable it is as a professional training, so to speak, but of how far one can go in turning it into a *life* experience. Soon I have begun to confront the highs and lows of doctoral condition in more existential fashion, which helped me gain awareness of my potentialities as a writer and of my imperfections as a person, as well as strengthen my conviction in the virtues of willpower. For sure, I could never navigate through this alone, or without the mentorship of Francesco Guala.

Since the first time I met Francesco as a fresh graduate in economics in September 2004, before planning to embark on a Ph.D. in philosophy, I have been increasingly drawn to his moral and intellectual authority in ways that go much beyond mere academic supervision. With patience and persuasion, Francesco has succeeded in instilling in my mind the idea that the only way to find out what I think, is to write. And how effective he was in prompting me to think harder and write simpler has become all the more apparent after he left Exeter for good in 2008. The wording of this preface cannot express all my gratitude for teaching me how to do philosophy almost from scratch, and for having supervised me with intact enthusiasm and devotion in the past two years. His reassuring presence and inspirational figure are the

*sine qua non* of my work. Without doubt, I could not think of my best philosophical thoughts but in his possession – this thesis is dedicated to Francesco.

When it occurs to me how fortunate I have been to be 'raised', philosophically speaking, under the influence of John Searle and Francesco Guala, I always think of two lessons. One is that, to steal Colin McGinn's words (2002), the best way to avoid ideological bias, meaning the denial of obvious facts, is always a good deal of common sense. The other is that it is indeed possible to try to enliven the Analytic paradigm of logical rigour and conceptual clarity with some sort of 'grand-theory' Continental-style touch.

Nigel Pleasants took on a primary tutoring role after Francesco's departure from Exeter. With his gentle and subtle understanding of what it feels like to go through the write-up stage, Nigel has turned our supervisory meetings in thoughtful and enjoyable conversations. Above all, I have learned a lot from his insights on how to develop my own intimate relationship with writing. I am also extremely grateful to Paul Griffiths, who acted as my second supervisor during his yearly research stays in Exeter during fall. Paul's comments on some parts of my thesis not only largely improved their overall quality, but gave me a clue of his superb argumentative style. Inside and outside Exeter, I want to express my thanks to Alexander Powell, Mauro Rossi and Deborah Tollefsen for helpful discussions.

This research project has led a travelled life in progress, and I am grateful to the many people who contributed to enrich it over the years. The thesis started life *seriously* during my first semester as a visiting scholar at the University of California at Berkeley in 2008. I cannot fully convey the importance of those six months, which changed me philosophically, or my taste of 'Berkeley spirit' - a mixture of intellectual thrill and passion, and loneliness, which pervaded me during such a momentous phase of American politics. I owe a great debt to Jennifer Hudin, for making me always feel an important part of the growing 'family' of the *Berkeley Social Ontology Group*, which she manages with grace and verve. Her generosity and friendship brought me back to Berkeley again in fall 2009. Many of the ideas of this

thesis incubated in discussions with Jennifer and with Klaus Strelau, and probably took shape in Berkeley at the *Brewed Awakening*. Among my Berkeley friends who gave aid and advice are Sophia Krzys Acord, Camilla Bernardi, Frederick Eberhardt, Joe Landon and Jonas Schneider.

In spring 2009 I had the opportunity to visit Michael Tomasello's social cognition lab at the Max Planck Institute for Evolutionary Anthropology in Leipzig. During the stay I worked on the structure of the second part of this thesis, and I developed a strong interest in the philosophy of psychology. I am especially grateful to Mike for bringing the experimental research program on collective intentionality to my awareness, and to Henriette Zeidler for assistance throughout the stay. Having daily conversations with scientists with different background and expertise was a challenge for me to try to get more 'real' and sound less philosophical. I thank, in particular, Malinda Carpenter, Felix Warneken, Hannes Rakoczy and Federico Rossano for sharing their thoughts with me.

I'd like to thank two persons whose support was vital throughout the Ph.D. I still remember when I first came into contact with Franco Donzelli, and his precious advice when I started to figure out how to fund graduate studies in philosophy, rather than in economics. Working as the research assistant to Enrico Giovannini at the Organization for Economic Cooperation and Development (OECD) in Paris, in the summer of 2007, has significantly widened the scope of my studies and career prospects, and given me the unforgettable feel of what it means to turn ideas into action. I owe to Enrico and Franco another important lesson – drive for change is mostly a matter of self-motivation and intellectual honesty.

With a number of people I not only discussed but, most importantly, enjoyed the fact that sociality is such a *natural* ingredient of our lives. To be sure my journey would have been less sparkling without: my Morley-Road-fellows Daniele Carrieri, Samuel Jones and Pierre-Olivier Méthot, who made the gestation period of writing-up less burdensome; Khalid Almezaini, Valeria Cinaglia, Cara George, Ana León Mejía, Michiru Nagatsu and Andrea Rota.

The support of my family is something I simply cannot, and don't want to, confine to letters. If there is one way to try to express my gratitude to zia Angela, zio Pietro and zia AnnaMaria, Jimmy and Nicoletta, it is by recognizing that my thesis is partly theirs, and that without their presence I could not make it through. Above all, my deepest debt is to my parents - 'forever' Kiko and Katy – whose dedication has no equal in the language of love, and is the key to my inner self.

To Francesco Guala

Mentor and Friend