



## SYMPOSIUM INTRODUCTION

# Precis of *The Objects of Credence*

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*The Objects of Credence* grew from a simple insight, which is that credence claims are opaque (or ‘hyperintensional’). This central idea can be illustrated using the following example:

- (1) Tom has a high credence that George Orwell is a writer.
- (2) Tom has a low credence that Eric Blair is a writer.

In fact, ‘George Orwell’ and ‘Eric Blair’ name the same individual, but if Tom does not know that then both (1) and (2) may be true. Hence credence claims are opaque in the following sense: when specifying the object of credence, the designators used matter. We might say that Tom’s attitude is not towards George Orwell the person as such, but rather towards George Orwell under a designator, or perhaps under a particular mode of presentation of that person. To many philosophers of language this will feel like a familiar move, for a parallel point is often made about belief: Tom might believe that George Orwell is a writer, without believing that Eric Blair is a writer. This is a well-known – albeit controversial – claim about belief, and it seems natural enough to extend the same point to credence.

This central point – that credence claims are opaque – is the ‘tenet’ of the book, and (after a few chapters of exposition) I spend Chapter 4 explaining and defending it. I offer three reasons to accept the tenet: firstly, reasons relating to betting and/or choice behaviour; secondly, reasons relating to omniscience; and finally, reasons relating to the principle of conditionalization. I also discuss a potential rival view inspired by Guise Russellianism. Those who accept Guise Russellianism claim that belief claims are not opaque: thus, if Tom believes that George Orwell is a writer, then Tom also thereby believes that Eric Blair is a writer. This is a well-respected view, and many philosophers find it persuasive. In this chapter I consider whether we might adapt this view to apply to credence rather than belief, and I explore a range of possible routes, but I argue that each adaptation either entails the tenet or faces serious problems – and so ultimately that the tenet holds.

From the tenet, many surprising and wide-ranging implications follow. The credence framework is used by scientists and social scientists in almost all disciplines, including economics and political theory, and it underpins policy choice in numerous areas. Whenever we face uncertainty, we reach for probabilities, and – unless we are dealing with the objective probabilities that play a role in physics and metaphysics – we will in all likelihood be working with subjective probabilities, or credences. Thus, the reach of the credence framework is vast, and it has been developed, extended and applied in numerous areas far removed from analytic philosophy. For this reason, the simple insight at the heart of this book has been largely overlooked, and research has progressed without heeding it. This book begins the task of tracing the implications of the tenet across this vast landscape, with two chapters (5 and 6) focusing on examples of principles that need to be altered, puzzles that can be resolved, and debates that need to be re-thought.

Chapter 5 traces some of the implications of the tenet (that credence claims are opaque) for principles of rationality. The focus is on principles of deference, including the Reflection Principle and the Principal Principle. For many principles of deference, the assumption is that one agent might defer to another, or to herself at a future time. But the tenet disrupts this natural assumption, for given that credence claims are opaque, claims about deference are similarly opaque: Tom might defer to George Orwell, but not to Eric Blair. Thus, deference can be seen not as a relation between agents (or agents-at-a-time), but rather between one agent and another agent *under a particular designator*. I use this insight to resolve a range of puzzles and problems connected with the Reflection Principle. In the second half of the chapter I turn to the Principal Principle, which states that a rational agent defers to the objective chances. Here I argue that chance claims are not opaque in the same way as credence claims: chance claims are ‘intensional’ but not ‘hyperintensional’. The deep differences between chance claims and credence claims lie behind recent problems raised against the Principal Principle – namely the problem of the contingent a priori. Accordingly, I motivate and defend a revised version of the Principal Principle.

Chapter 6 is focused on practical rationality, beginning with decision theory. I argue that within a decision table, the states, outcomes and actions all appear in an opaque context. I then apply this point to a simple version of the two-envelope paradox, and argue for a general restriction on acceptable decision-tables. The second half of the chapter concerns welfare economics – a branch of decision theory concerned with decisions that affect the wellbeing of multiple people. The *ex ante* Pareto Principle plays a major role in this literature: roughly, the principle states that a decision maker ought to choose a policy  $P_1$  rather than a policy  $P_2$ , if the prospects under  $P_1$  are at least as good for everyone, and better for at least one person, than the prospects under  $P_2$ . Given the tenet, I argue that claims about prospects are themselves opaque: the prospects assigned to an agent may depend on how that agent is designated. Given this, I show that the *ex ante* Pareto Principle is incoherent as it stands, and I suggest a revision inspired by supervaluationism. Revising the principle in this way has wide-reaching implications for various debates in welfare economics.

In the final part of the book, I turn to foundations. Can we interpret the credence framework in a way that accommodates the tenet? A natural way to interpret the

framework is to take ‘states’ to be metaphysically possible worlds, and we can then see the objects of credence as sets of these metaphysically possible worlds. But this seems problematic, for on a standard account the set of metaphysically possible worlds where George Orwell is a writer is the same as the set of metaphysically possible worlds where Eric Blair is a writer – and yet the tenet states that Tom can have a high credence in one such claim and a low credence in the other. There are – very broadly – two possible sorts of solution to this problem. The first sort of solution is to retain the assumption that states are metaphysically possible worlds, and find a way to reconcile this assumption with the tenet. I explore this approach in Chapter 7, considering Russell’s descriptivist account of names, Stalnaker’s account of belief attribution, and Chalmers’ two-dimensionalism. The second sort of solution is to drop the assumption that states are metaphysically possible worlds, and give an alternative account of states. I explore this approach in Chapter 8, engaging with the literature on impossible worlds. All the approaches that I explore in Chapters 7 and 8 face difficulties, and whichever is adopted there will be extensive repercussions for users of the credence framework.

The aim of this book has been to bring a simple and deep insight from the philosophy of language to the attention of users of the credence framework, and to trace some of its implications. I first thought of this project soon after I came to the LSE: I was in the serendipitous position of arriving primarily as a philosopher of language into a department where the credence framework was assumed or discussed at almost every seminar – and so to me the connection was clear. Tracing the implications has been a fascinating project, but one that is far from complete. This book sets out my progress so far.

In writing the book, I benefited enormously from all the advice and feedback that I gathered from around the world, and from the wonderful group of faculty and students in the LSE department. I’m so grateful to them all. And here I would particularly like to thank the generous and inspiring philosophers who are so kindly responding to the book in this volume.

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