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# OBJECTIVITY

A Very Short Introduction

OXFORD  
UNIVERSITY PRESS

OXFORD  
UNIVERSITY PRESS

Great Clarendon Street, Oxford ox2 6DP

Oxford University Press is a department of the University of Oxford.  
It furthers the University's objective of excellence in research, scholarship,  
and education by publishing worldwide in

Oxford New York

Auckland Cape Town Dar es Salaam Hong Kong Karachi  
Kuala Lumpur Madrid Melbourne Mexico City Nairobi  
New Delhi Shanghai Taipei Toronto

With offices in

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Published in the United States  
by Oxford University Press Inc., New York

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First published 2012

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British Library Cataloguing in Publication Data  
Data available

Library of Congress Cataloging in Publication Data  
Data available

Typeset by SPI Publisher Services, Pondicherry, India  
Printed in Great Britain  
on acid-free paper by  
Ashford Colour Press Ltd, Gosport, Hampshire

ISBN 978-0-19-960669-6

3 5 7 9 10 8 6 4

## Contents

- 1 Introduction: the varieties of objectivity 1
  - 2 Is objectivity a form of honesty? 13
  - 3 Doesn't science show there is no objectivity? 26
  - 4 Isn't all perception and understanding relative? 33
  - 5 What about our conceptual structuring of the world? 40
  - 6 Is it possible to represent things objectively? 55
  - 7 Objectivity in numbers? 68
  - 8 Can the study of human behaviour be objective? 79
  - 9 Can there be objectivity in ethics? 90
  - 10 Can there be objectivity in taste? 97
- Conclusion 103
- References 105
- Further reading 109
- Index 111

## Chapter 1

# Introduction: the varieties of objectivity

Objectivity is a distinctively human trait, as only human beings have the capacity for objectivity. Over the centuries, in debates about what it is that marks out humans from animals, consideration has been given to rationality, consciousness, self-consciousness, free will, and morality. All have been challenged. Indeed, recent studies of non-human primates suggest that such qualities are not exclusive to humans. But objectivity involves the ability to shift perspective, and no one has ever attributed this to animals. Objectivity requires us to stand back from our perceptions, our beliefs and opinions, to reflect on them, and subject them to a particular kind of scrutiny and judgement. Above all, it requires a degree of indifference in judging that may conflict with our needs and desires. Yet objectivity has assumed an unassailable status. Values that have come to be associated with objectivity, such as impartiality and freedom from prejudice, now not only guide scientific enquiry, but have also been imported into the moral and political realms. They are now regarded as underpinning notions of fairness and equality. In other words, objectivity is not only distinctive of human reasoning and behaviour, it has been built into distinctively human goals and aspirations. In the modern era, it has become sought for its own sake, a value in its own right: something regularly contrasted with religious beliefs, for example.

This development dates from no earlier than the start of the 19th century, when the West's conception of its superiority shifted from its religion – Christianity – to its science. At issue here was not so much technological achievements, since the bulk of these were still to come, but an emerging package of values placing special emphasis on such ideals as meritocracy and freedom from prejudice. Objectivity lay at the core of this package, and science was seen to embody objectivity in its purest form. The historical context is important here. It is not difficult to see how objectivity is a matter of concern for those working in disciplines such as history and law, where something is needed to guide our interpretations of texts or events, or science, where we might need something to guide our experiments and our interpretation of results. But how can objectivity have become a matter of general concern, and above all, how could it be relevant to everyday moral, aesthetic, religious, or political decisions? What has happened is that something that was distinctive only of certain technical forms of enquiry has been transformed into a general constraint on all deliberations. The values that have come to be associated with objectivity, such as impartiality and lack of bias, have not only been seen as guiding scientific enquiry, but have been extrapolated into the social and political realms, underpinning notions of fairness and equality.

Here we face a important problem in our own culture's aspirations to objectivity. Its pre-eminence as a goal has resulted in other values masquerading as it, despite their having no relation to it and, in fact, serving to usurp genuinely objective judgements. What is often referred to as 'number-crunching' – the reduction of decision-making to quantification and measurement, and the exclusion of anything that cannot be treated in these terms – is a prime culprit here. Appeals to objectivity have been used to vindicate a culture of management in which targets are set so that standardized results can be generated, statistically analysed, and compared. Such practices are not necessarily subjected either to reasoned judgement or to the empirical evaluation of particular

cases, but typically bypass any form of independent or objective reasoning at all. The idea that decision-making can be mechanized trades on a fundamental misunderstanding of objectivity, namely that it consists in removing, as far as possible, all elements of judgement from the interpretation of data. This supposedly eliminates individual prejudices and biases from interpretation and decision-making, offering something untouched by human brains, as it were. This is a widespread misunderstanding and a dangerous one. A recent example is the rejection, in government circles, of thinking about what universities should be teaching in favour of a model of consumer (student) choice. Competition theory suggests that consumer demand will produce judgement-free results, without reflection on the aims of pedagogy and education in our culture, and their role in fostering the values of our civilization. A methodology that bypasses the assumptions, values, and beliefs that inevitably accompany the exercise of judgement thereby makes claims to neutrality and objectivity. Standardized decision-making procedures stand in for reflection on the nature of the problem for which the decision is sought in the first place. Wholly misconstruing the nature of objectivity, they employ pseudo-scientific means of bypassing understanding and evaluation in favour of something that is deemed to transcend bias and prejudice.

## What is objectivity?

It seems natural that such a basic idea as objectivity would have a generally agreed meaning, so that our first step should be to set out a clear, core definition of objectivity, using it to identify misunderstandings. If only things were so simple! Objectivity, alas, is not a straightforward concept. Many difficulties are generated in the search for a definition, because 'objectivity' can be understood in different ways. Different expectations arise as a result – some are reasonable, some not. These difficulties are compounded by the fact that the different understandings of the

term, and the different expectations they generate, are not wholly independent of one another.

Our first task is, then, to identify some of the more significant understandings of objectivity, indicate how they differ, and to try to capture what motivates them. These understandings will not necessarily be incompatible with one another, and they will usually be open to stronger or weaker formulations, but our primary purpose here is to get a sense of what is at stake: fine-tuning can wait until later.

The first understanding of objectivity is perhaps the most common one. It is that an objective judgement is a judgement that is free of prejudice and bias. One might put this by saying that it is a judgement to which any fair-minded person could agree, no matter what views they held. 'Fair-minded' and 'objective' are interdefinable here to some extent – to be objective is to be fair-minded, and to be fair-minded is to be objective – and this is enlightening. It locates objectivity in a social realm of everyday life, by contrast with that of science, for example. The idea of science, with its rigorous empirical testing, as embodying standards of objectivity is not a core notion in this idea of objectivity. We don't think of scientists as instituting standards of 'fairness', and the struggle for objectivity in science is hardly a matter of contemporary physicists and chemists freeing themselves from prejudice. There are accounts of science that take it as embodying universal canons of objectivity, which are then extrapolated to other realms of life – a 'scientific ethics' was popular in Britain in the 1920s and 1930s, for example. But if one thinks of objectivity as freedom from prejudice, then such an extrapolation, far from appearing natural, will be something whose appropriateness one will want to question. The idea of objectivity as freedom from prejudice and bias, while not irrelevant to science, seems somewhat marginal to its concerns as we now understand them. At the other end of spectrum, it provides some hope in applying standards of objectivity to ethical

and aesthetic judgements, for example, and perhaps even to religion, although this is far more problematic. We shall return to these questions. For the moment, what I want to draw attention to is the fact that how we think of objectivity depends a great deal on where we locate its primary application. A notion devised to cover everyday life might have relevance problems when we come to consider science, and it might have application problems when we come to consider aesthetic judgements. Nevertheless, the idea of freedom from prejudice and bias may still be the most powerful general notion of objectivity that we have. I shall be arguing that this is in fact the case, and that it can be complemented by compatible but differently focused notions, especially when we turn to science, on the one hand, and ethics and aesthetics, on the other.

The second understanding is that an objective judgement is a judgement which is free of all assumptions and values. On the face of it, this looks like an extension of the idea of removing prejudices and bias. After all, one might argue, who is to say that the views we hold are prejudices and biases? Surely the sensible thing is to exclude all beliefs that we bring to a judgement, whether *we* consider them as prejudices or not. But the one is not merely an extension of the other, and there is a clear conceptual difference between them. The idea of prejudices and biases carries connotations of distortion, whereas that of assumptions and values need not. One way to think of the difference is that, in the first case, those things which one brings to a judgement that are not shared should be removed if the judgement is to be objective, whereas in the second case, the claim is that those things which one brings to a judgement, whether shared or not, should be removed if the judgement is to be objective. The difference is absolutely crucial because many sceptical and relativist arguments against the possibility of objectivity conflate the first and second understandings, so that the (achievable) task of removing all prejudices from arguments is treated as if it were the (unachievable) task of removing all assumptions.

The idea that we should aim to remove prejudices from our decisions might be difficult to realize in some cases (though not as difficult as it is sometimes made out), but the idea of a prejudice-free judgement makes perfectly good sense. By contrast, that we should aim to remove all prior beliefs is not merely impossible to realize, the idea does not stand up to scrutiny. This issue is the most important that we shall be dealing with, because it is the one with the gravest consequences.

The third notion of objectivity is focused directly on how we arrive at our views or theories. It is that an objective procedure is one that allows us to decide between conflicting views or theories. Whereas the first two notions set out to describe a particular state of mind – one free of prejudices or one free of any assumptions – to which we must aspire if we are to be objective, this notion does something different. It dictates that procedures of a particular kind must be in place and must be followed if we are to achieve objectivity, namely ones that enable us to decide between theories that conflict with one another. This is very much a notion that finds its home territory in science, and it was used, for example, by the philosopher Karl Popper, who effectively equated objectivity and science, to rule out history as an objective discipline. His argument was that in science our hypotheses have empirically different consequences, so we can check these against what actually happens. In history, by contrast, the relevant facts are always before us when we construct our hypotheses, so we cannot test them against the facts. What is the general principle at stake here? It is that objectivity requires us to devise procedures to decide between competing judgements in order to discover which makes factually correct predictions, and that we must prefer that which makes factually correct predictions. This cannot be all there is to objectivity, however. How the predictions are made and tested surely also raise questions of objectivity. There are in fact a range of other questions about interpretation of results, and of the content of the theories that are being compared, which, as we shall see, mean that comparing predictions turns

out to be not at all straightforward, even in science. But here, what I want to draw attention to is the fact that in this case we have something more like a proposed necessary condition of objectivity, rather than a definition of objectivity *per se*. That is, this criterion does not tell us what objectivity is, as the first two understandings do, but rather proposes something we must do if we are to secure objectivity. But this does not make it an added extra. It is not something we must do if we are to secure objectivity *however understood*, because it imposes significant constraints on how one understands objectivity. For one thing, it is tied up with an understanding of objectivity which takes scientific objectivity as a general model, and this is a very substantive assumption. Second, this is reinforced by the fact that, if it is indeed a necessary condition for objectivity, then anything that lacks a means for deciding between views cannot be objective. In short, what we are looking at with this understanding of objectivity is a procedure that we must follow if we are to proceed in an objective fashion in science. It only becomes a general procedure if one thinks one can extrapolate from decision-making in science to decision-making generally. Popper thought one could, but the price paid is that nothing outside science comes out as objective: serious history and political propaganda come out as effectively equal, for example.

The 'decision' criterion aims to provide us with a procedure for deciding between competing hypotheses. It cannot establish that one of these is true, only which we should prefer relative to the evidence. Both hypotheses might turn out to be false: it is just that the evidence that would show them both to be false may not be revealed by this particular test. In fact, none of the understandings that we have examined up to now would enable us to establish the truth of a hypothesis. To see why, consider the standard definition of knowledge, due originally to Plato. This states that knowledge is justified true belief. Justified belief isn't enough for knowledge, on Plato's view, because justification is relative to the evidence. The history of science is littered with

justified false theories: before the 16th century, the rotation of the Sun and the planets around the Earth had more justification – observational and theoretical – than the theory that the Sun was at the centre of our system. Similarly with true but unjustified theories: if I believe that the Earth is roughly spherical because it is the eyeball of a giant cosmic elephant, then I have a true belief, that the Earth is roughly spherical, but I cannot be said to know it, because my reasons for believing it are false. So, truth and justification are different things. On the views of objectivity that we have looked at up to now, the first (lack of prejudice) and the third (some procedure to decide between competing hypotheses) have taken objectivity to be a matter of justification, not truth. Objectivity is something that you must aspire to if you want your views to be justified. The second is a bit more ambiguous, since one direction that the ‘no assumptions’ argument might go in is to claim that, if we do away with all interpretations and assumptions, then we finally see things as they really are, independently of any subjective preconceptions we might bring to the judgement. That would connect truth and objectivity.

This has been generally recognized by philosophers as a problematic move and is not the route that has much traffic since the heyday of logical positivism. But philosophers have nevertheless been inclined to bring truth into the discussion of objectivity at a fundamental level, to tie truth and objectivity together. One could of course maintain that an approach is objective if it seeks the truth, where the aim might be described, as Aristotle put it, as ‘saying of what is that it is, and of what is not that it is not’, but this makes seeking the truth automatically a question of objectivity, which is implausible. There are any number of ways in which I might seek the truth, from reading tea-leaves to smashing particles into one another in an accelerator. They are hardly all objective. The connection has to be established in a different way, and we shall be focusing on the idea of ‘accurate representation’.

This is the fourth understanding of objectivity, and in philosophical and scientific discussions from the 18th century onwards, we find a move away from a negative understanding of objectivity as freedom from prejudice or bias, towards the positive idea that objectivity consists in accurate representation. There are a number of fundamental differences between this conception and the lack of prejudice and lack of assumptions conceptions. The striking difference is that it offers what might be called a positive theory of objectivity. That is, it does not claim that we should remove something from our judgements if they are to aspire to objectivity, but rather that they need to be pointed in the right direction, so to speak. While the negative conceptions distance objectivity from truth, the positive one brings the two together in an apparent area of overlap, for accurate representation can be thought of both in terms of truth and in terms of objectivity.

The objectivity as accurate representation approach can be thought of as being motivated by two sets of considerations. The first is that we cannot make sense of objectivity without bringing in truth, because once we ask why we want to be objective in the first place, what role it serves, then the answer is that the whole point of objectivity is to reveal the truth. If objectivity and justification were not directed at truth, they wouldn’t be objectivity and justification. The second is that, confining ourselves to objectivity in science, the role of objectivity in science is to enable it to provide an accurate representation of the world. I shall be arguing that both of these considerations are mistaken. As regards the first, truth in any substantive sense is just not the kind of thing that could guide scientific enquiry. On the second point, we shall be looking at practical issues in representation in science, and we shall see that ‘accurate representation’ raises questions of judgement not questions of truth. In short, I shall be arguing that objectivity plays an important role in scientific knowledge, for example, but this is because it strengthens and secures the justification requirement, not because it has anything to do with the truth requirement.

There is one final understanding of objectivity that needs to be considered briefly. This is the idea that something is objective if it leads to conclusions which are universally accepted. Part of the motivation for this idea is that when one considers results in the natural sciences, for example, there is a very significant level of agreement, a level of agreement that cuts across cultures, religions, and just about any other kind of cognitive endeavour. But this is at best a test of, or sign of, objectivity, not a definition of what objectivity is. Note, however, that it cannot be objected to this notion that there are periods in the history of science when there has been near universal agreement on a theory, such as geocentrism, which turned out to be wrong. This is irrelevant if objectivity is a matter of justification rather than truth. It would be a different matter if there were periods in which there had been universal agreement despite the evidence: then universal agreement would not be a sign of objectivity. One can make up stories where this would be the case, but I know of no such cases in reality where this can plausibly be maintained. The problem lies rather in 'universal' agreement, for there are always dissenting voices.

In sum, from among the conceptions I have outlined, we shall be examining three as contenders for general accounts of objectivity: that the judgement or theory should be prejudice-free, that it should be assumption-free, and that it should be an accurate representation. The claim that objective accounts should enable us to decide between alternatives can only be taken as a proposed necessary condition for objectivity, not an account of what objectivity is. Similarly, the 'universal consent' can only be taken as a proposed sign of objectivity, not an account of what objectivity is. Of the three general accounts, each can hold in both the everyday or the scientific cases, although the second and third are more closely modelled on the scientific case. Possibly as a result of this, the second and third are more problematic if we want to apply notions of objectivity in ethics and aesthetics, but these are particularly difficult cases anyway, as we shall see, and if

objectivity as something assumption-free, or as accurate representation, turned out to be an inappropriate notion in the context of ethics or aesthetics, this wouldn't necessarily be a decisive factor.

It will be clear from what I have already said it would not be fruitful to propose a definition of objectivity, and then to test it against competing definitions. Different, sometimes incompatible, things are expected of objectivity, and, as I have indicated, seeking conceptions of objectivity that work primarily for science, for everyday concerns, and for social, moral and aesthetic questions may well lead us in different directions. What would be most useful would be a general conception of objectivity that was sensitive to the special demands of science on the one hand, and to those of the moral and aesthetic realms on the other. Supplementary considerations can then be introduced in these areas enabling us to show how and why the form that objectivity takes differs – in its specific goals, in how we recognize it, in what we require of it – while still leaving us with a sense that there is some core to the idea of objectivity, important if we are to understand why we value objectivity as a general desideratum.

This is an ideal, one which we are unlikely to satisfy in every respect. But the important thing is that we increase our understanding of the issues, even if we do not resolve all of them. We will learn that what scientists require of objectivity, in the context of representing the world, is something instrumental rather than something absolute: not that it meet demands of truth, but rather that it meet those of reliability. We will learn that what we require of objectivity in making everyday decisions has little to do with stripping our beliefs of judgements and interpretations so as to make them more factual, but with improving our judgements, which often means adding more interpretation, not less. In this way, as we shall see, science and everyday decisions are closer in what they require of objectivity than might initially be thought. Finally, as far as moral



and aesthetic judgements are concerned, we shall see that rather different considerations hold, and to the extent to which objectivity can be secured in these cases, they cannot be assimilated.

In the chapters that follow, I have tried to identify a series of questions, questions that in some cases readers may already have asked themselves, which provide different problem contexts in which the issues can be explored in a specific way. I begin, in Chapter 2, by looking at the claim that a general feature of objectivity, one that establishes its standing as a central cultural value, is that it is a form of intellectual honesty. In Chapter 3, I examine developments in science sometimes thought to show that everything is relative to the observer, and hence that objectivity is impossible. Chapters 4 and 5 explore the connections between freedom from prejudice or bias, and the attempt to remove any assumptions from our reasoning. In Chapter 6, I focus on the question of how we are to understand scientific representations of the world. In Chapter 7, I look at the connection between objectivity and numerical presentation. Finally, in the last three chapters, I look at what objectivity might amount to in the human or social sciences, in ethics, and in aesthetics.

Objectivity

## Chapter 2

# Is objectivity a form of honesty?

In a recent interview, Larry Sanger, the co-founder of Wikipedia, describes the attitude of many of those working to build up Wikipedia in terms of a

complete disregard for expert opinion among a group of amateurs working on a subject, and in particular... their tendency to openly express contempt for experts. There was this attitude that experts should be disqualified [from participating] by the very fact that they had published on the subject – that because they had published, they were therefore biased.

This is a surprising view: as if scientists, for example, were not qualified to write on science because the large amount of research they have published makes them biased. It is such an odd thing to believe, that one suspects that part of the problem is that something at least marginally more plausible has been formulated badly. It will help, if we are to uncover what might lie behind this view, if we can capture the motivation behind it.

The initiators of Wikipedia set out to provide a cumulative, open-source reference resource, quite different from the traditional reference volumes. Rather than attempting to offer definitive canonical statements by experts, it opened up its resources to anyone who cared to contribute (while indicating