

The Uses of Argument

Updated Edition

STEPHEN E. TOULMIN

University of Southern California



Two last remarks may be made by way of introduction, the first of them simply adding one more question to our agenda. Ever since Aristotle it has been customary, when analysing the micro-structure of arguments, to set them out in a very simple manner: they have been presented three propositions at a time, 'minor premiss; major premiss; *so* conclusion'. The question now arises, whether this standard form is sufficiently elaborate or candid. Simplicity is of course a merit, but may it not in this case have been bought too dearly? Can we properly classify all the elements in our arguments under the three headings, 'major premiss', 'minor premiss' and 'conclusion', or are these categories misleadingly few in number? Is there even enough similarity between major and minor premisses for them usefully to be yoked together by the single name of 'premiss'?

Light is thrown on these questions by the analogy with jurisprudence. This would naturally lead us to adopt a layout of greater complexity than has been customary, for the questions we are asking here are, once again, more general versions of questions already familiar in jurisprudence, and in that more specialised field a whole battery of distinctions has grown up. 'What different sorts of propositions', a legal philosopher will ask, 'are uttered in the course of a law-case, and in what different ways can such propositions bear on the soundness of a legal claim?' This has always been and still is a central question for the student of jurisprudence, and we soon find that the nature of a legal process can be properly understood only if we draw a large number of distinctions. Legal utterances have many distinct functions. Statements of claim, evidence of identification, testimony about events in dispute, interpretations of a statute or discussions of its validity, claims to exemption from the application of a law, pleas in extenuation, verdicts, sentences: all these different classes of proposition have their parts to play in the legal process, and the differences between them are in practice far from trifling. When we turn from the special case of the law to consider rational arguments in general, we are faced at once by the question whether these must not be analysed in terms of an equally complex set of categories. If we are to set our arguments out with complete logical candour, and understand properly the nature of 'the logical process', surely we shall need to employ a pattern of argument no less sophisticated than is required in the law.

The Pattern of an Argument: Data and Warrants

'What, then, is involved in establishing conclusions by the production of arguments?' Can we, by considering this question in a general form,

build up from scratch a pattern of analysis which will do justice to all the distinctions which proper procedure forces upon us? That is the problem facing us.

Let it be supposed that we make an assertion, and commit ourselves thereby to the claim which any assertion necessarily involves. If this claim is challenged, we must be able to establish it—that is, make it good, and show that it was justifiable. How is this to be done? Unless the assertion was made quite wildly and irresponsibly, we shall normally have some facts to which we can point in its support: if the claim is challenged, it is up to us to appeal to these facts, and present them as the foundation upon which our claim is based. Of course we may not get the challenger even to agree about the correctness of these facts, and in that case we have to clear his objection out of the way by a preliminary argument: only when this prior issue or ‘lemma’, as geometers would call it, has been dealt with, are we in a position to return to the original argument. But this complication we need only mention: supposing the lemma to have been disposed of, our question is how to set the original argument out most fully and explicitly. ‘Harry’s hair is not black’, we assert. What have we got to go on? we are asked. Our personal knowledge that it is in fact red: that is our datum, the ground which we produce as support for the original assertion. Petersen, we may say, will not be a Roman Catholic: why?: we base our claim on the knowledge that he is a Swede, which makes it very unlikely that he will be a Roman Catholic. Wilkinson, asserts the prosecutor in Court, has committed an offence against the Road Traffic Acts: in support of this claim, two policemen are prepared to testify that they timed him driving at 45 m.p.h. in a built-up area. In each case, an original assertion is supported by producing other facts bearing on it.

We already have, therefore, one distinction to start with: between the *claim* or conclusion whose merits we are seeking to establish (C) and the facts we appeal to as a foundation for the claim—what I shall refer to as our *data* (D). If our challenger’s question is, ‘What have you got to go on?’, producing the data or information on which the claim is based may serve to answer him; but this is only one of the ways in which our conclusion may be challenged. Even after we have produced our data, we may find ourselves being asked further questions of another kind. We may now be required not to add more factual information to that which we have already provided, but rather to indicate the bearing on our conclusion of the data already produced. Colloquially, the question may now be, not ‘What have you got to go on?’, but ‘How do you get there?’. To present a particular set of data as the basis for some specified conclusion commits

us to a certain *step*; and the question is now one about the nature and justification of this step.

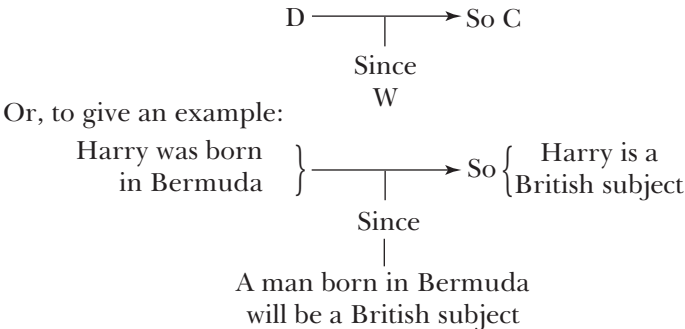
Supposing we encounter this fresh challenge, we must bring forward not further data, for about these the same query may immediately be raised again, but propositions of a rather different kind: rules, principles, inference-licences or what you will, instead of additional items of information. Our task is no longer to strengthen the ground on which our argument is constructed, but is rather to show that, taking these data as a starting point, the step to the original claim or conclusion is an appropriate and legitimate one. At this point, therefore, what are needed are general, hypothetical statements, which can act as bridges, and authorise the sort of step to which our particular argument commits us. These may normally be written very briefly (in the form 'If D, then C'); but, for candour's sake, they can profitably be expanded, and made more explicit: 'Data such as D entitle one to draw conclusions, or make claims, such as C', or alternatively 'Given data D, one may take it that C.'

Propositions of this kind I shall call *warrants* (W), to distinguish them from both conclusions and data. (These 'warrants', it will be observed, correspond to the practical standards or canons of argument referred to in our earlier essays.) To pursue our previous examples: the knowledge that Harry's hair is red entitles us to set aside any suggestion that it is black, on account of the warrant, 'If anything is red, it will not also be black.' (The very triviality of this warrant is connected with the fact that we are concerned here as much with a counter-assertion as with an argument.) The fact that Petersen is a Swede is directly relevant to the question of his religious denomination for, as we should probably put it, 'A Swede can be taken almost certainly not to be a Roman Catholic.' (The step involved here is not trivial, so the warrant is not self-authenticating.) Likewise in the third case: our warrant will now be some such statement as that 'A man who is proved to have driven at more than 30 m.p.h. in a built-up area can be found to have committed an offence against the Road Traffic Acts.'

The question will at once be asked, how absolute is this distinction between data, on the one hand, and warrants, on the other. Will it always be clear whether a man who challenges an assertion is calling for the production of his adversary's data, or for the warrants authorising his steps? Can one, in other words, draw any sharp distinction between the force of the two questions, 'What have you got to go on?' and 'How do you get there?'. By grammatical tests alone, the distinction may appear far from

absolute, and the same English sentence may serve a double function: it may be uttered, that is, in one situation to convey a piece of information, in another to authorise a step in an argument, and even perhaps in some contexts to do both these things at once. (All these possibilities will be illustrated before too long.) For the moment, the important thing is not to be too cut-and-dried in our treatment of the subject, nor to commit ourselves in advance to a rigid terminology. At any rate we shall find it possible in *some* situations to distinguish clearly two different logical functions; and the nature of this distinction is hinted at if one contrasts the two sentences, 'Whenever A, one *has found* that B' and 'Whenever A, one *may take it* that B.'

We now have the terms we need to compose the first skeleton of a pattern for analysing arguments. We may symbolise the relation between the data and the claim in support of which they are produced by an arrow, and indicate the authority for taking the step from one to the other by writing the warrant immediately below the arrow:



As this pattern makes clear, the explicit appeal in this argument goes directly back from the claim to the data relied on as foundation: the warrant is, in a sense, incidental and explanatory, its task being simply to register explicitly the legitimacy of the step involved and to refer it back to the larger class of steps whose legitimacy is being presupposed.

This is one of the reasons for distinguishing between data and warrants: data are appealed to explicitly, warrants implicitly. In addition, one may remark that warrants are general, certifying the soundness of *all* arguments of the appropriate type, and have accordingly to be established in quite a different way from the facts we produce as data. This distinction, between data and warrants, is similar to the distinction drawn in the law-courts between questions of fact and questions of law, and the legal distinction is indeed a special case of the more general one—we

may argue, for instance, that a man whom we know to have been born in Bermuda is presumably a British subject, simply because the relevant laws give us a warrant to draw this conclusion.

One more general point in passing: unless, in any particular field of argument, we are prepared to work with warrants of *some* kind, it will become impossible in that field to subject arguments to rational assessment. The data we cite if a claim is challenged depend on the warrants we are prepared to operate with in that field, and the warrants to which we commit ourselves are implicit in the particular steps from data to claims we are prepared to take and to admit. But supposing a man rejects all warrants whatever authorising (say) steps from data about the present and past to conclusions about the future, then for him rational prediction will become impossible; and many philosophers have in fact denied the possibility of rational prediction just because they thought they could discredit equally the claims of all past-to-future warrants.

The skeleton of a pattern which we have obtained so far is only a beginning. Further questions may now arise, to which we must pay attention. Warrants are of different kinds, and may confer different degrees of force on the conclusions they justify. Some warrants authorise us to accept a claim unequivocally, given the appropriate data—these warrants entitle us in suitable cases to qualify our conclusion with the adverb ‘necessarily’; others authorise us to make the step from data to conclusion either tentatively, or else subject to conditions, exceptions, or qualifications—in these cases other modal qualifiers, such as ‘probably’ and ‘presumably’, are in place. It may not be sufficient, therefore, simply to specify our data, warrant and claim: we may need to add some explicit reference to the degree of force which our data confer on our claim in virtue of our warrant. In a word, we may have to put in a *qualifier*. Again, it is often necessary in the law-courts, not just to appeal to a given statute or common-law doctrine, but to discuss explicitly the extent to which this particular law fits the case under consideration, whether it must inevitably be applied in this particular case, or whether special facts may make the case an exception to the rule or one in which the law can be applied only subject to certain qualifications.

If we are to take account of these features of our argument also, our pattern will become more complex. Modal qualifiers (Q) and conditions of exception or rebuttal (R) are distinct both from data and from warrants, and need to be given separate places in our layout. Just as a warrant (W) is itself neither a datum (D) nor a claim (C), since it implies in itself