

Being Reasonable: Rethinking Theory and Practice for the Twenty-First Century

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The retreat from reason

The Enlightenment movement of the 18th Century, which ushered in what is sometimes referred to as the age of reason, brought with it the promise of progress through science and rational thought. In the modern age, then, the terms 'reason' and 'rationality' are often used interchangeably to refer to the application of logic and the scientific method. As the philosopher Stephen Toulmin points out in his book *Return to Reason*, 'it is not always recognised that the two ideas [of rationality and reason] can be distinguished', to the extent that some European languages such as German have a single word to cover both concepts. For Toulmin, however, rationality and reason are distinct and complementary modes of thought, and his concern is that the latter has been subsumed in recent times by the former. That is to say, in striving to make rational decisions and judgments, we sometimes forget the importance of also being reasonable.

Within the academy, the distinction can be seen quite clearly in the rift between the arts and the sciences, as exemplified by the 'Two Cultures' dispute of the 1950s and 1960s between science (on the side of rationality) and literature (on the side of reason), and more recently in the 'quantitative versus qualitative' debate in social research. Martin Heidegger (1955) distinguishes between 'calculative thinking' which 'computes ... races from one prospect to the next ... never stops, never collects itself' and 'meditative thinking' which 'contemplates meaning' and is 'open to mystery'. And he warned back in the 1950s 'that calculative thinking may someday come to be accepted and practiced as *the only* way of thinking'. In fact, the schism can be detected as far back as the Ancient Greeks in their contrast between logic and rhetoric, and their attempt to construct a logical, context-free method for making rational decisions that did not rely on persuasion or subjective reasoning. For example, Plato advocated the Socratic dialogue as the most logical and rational method of arriving at truth, in contrast to the rhetoric of the Sophists, which he considered to be based on flattery and deceit. For Plato, then, rhetoric:

doesn't need to have any knowledge of the state of their subject matters; it only needs to have discovered a persuasion device in order to make itself appear to those who don't have knowledge that it knows more than those who actually do have it. (Plato: *Gorgias*)

For Plato, Socratic dialogue was a logical, rational method for uncovering the truth, whereas rhetoric is a technique (Plato calls it a 'knack') for convincing our audience that we know more than we do.

Aristotle, a student of Plato, further developed the Socratic method into a system of formal logic that included the various forms of syllogistic argument. Thus, for example:

All men are mortal	(major premise)
Socrates is a man	(minor premise)
Therefore Socrates is mortal	(conclusion)

It can be seen from this example that if the two premises are true, then the conclusion *must* logically follow. Aristotle developed the syllogism as a means of countering the misuse of language by the Sophists who, he believed, employed the deceitful art of rhetoric to arrive at false conclusions, as demonstrated by Plato:

Your dog has puppies, therefore he is a father
He is your dog, therefore he is your father (Plato: *Euthydemus*)

Rhetoric therefore came to be associated with deception and self-serving arguments, in contrast to the detached certainty of formal logic. As the art of rhetoric and the science of logic drifted further apart, so too did their associated modes of thought of reason and rationality.

Toulmin refers to these different but, in his opinion, complementary approaches to thinking as 'substantive argumentation' and 'formal arguments', and as 'the reasonableness of narratives and the rigour of formal proof' (p.15). Whereas formal rational arguments are judged according to their validity (that is, on logical or methodological grounds), substantive argumentation relies on its soundness and its appeal to reason (that is, on the force of conviction with which it is expressed). As an illustration of the dangers of taking a purely rational approach to human problems, Toulmin (2001) recounts the following eighteenth-century story of the Count and the Abbé:

Two old ladies are receiving visitors, and the first to arrive is a bigwig, who happens to be a count. The three of them discuss the Confessional, and the count remarks, "Well, Mesdames, I can tell you this much - I was the Abbé's first penitent." He soon leaves, and the Abbé himself comes in. The conversation goes on and, under pressure, the Abbé clears his throat and says, "Without violating my duty of secrecy, Mesdames, let me simply tell you this: My first penitent was a murderer."

A rational analysis of this story leads to a certain and inevitable conclusion:

The Count was the Abbé's first penitent
The Abbé's first penitent was a murderer
Therefore, the Count was a murderer

However, whilst rational argument tells us that the Count is guilty of murder, a court of law would be very unlikely to convict him, since the jurors would be asked not only to take account of *rational* argument, but also to apply the criterion of *reasonable* doubt.

If we attend to the substantive narrative of the case rather than simply respond objectively to the decontextualised logic, then it quickly becomes clear that there are many possible reasons why the Count might *not* be a murderer. The Abbé may have been mistaken in his assertion that the murderer was his *first* penitent, the penitent might not have been telling the truth when he confessed to murder, or the Abbé might have made up the entire story to impress his hosts. Similarly, the Count might have been mistaken that he was the Abbé's first penitent or else he too might have made up the story, and the two ladies might have misheard or misinterpreted one or more of the remarks.

Whilst rationality tempts us with the promise of a single and certain conclusion to the story, reason cautions us that narratives are the product of human discourse and that humans are fallible and not always logical. Furthermore, the two premises of the syllogism originate from two different sources, each with their own motives and reasons for saying what they did. As Toulmin points out, 'Once we "resituate" the formal argument, what conclusion we see as soundly or solidly based will depend on our assessments of the parties to the exchange'. That is to say, we have to take into account the credibility of the witnesses, something that formal logic goes to great lengths to exclude. Toulmin's point is that both rationality and reason are important, but that, in recent times, 'the human values of reasonableness are expected to justify themselves in the Court of Rationality'.

Whilst reason and reasonableness continue to play an important role in the justice system, the suppression of reason by rationality can be seen across many aspects of academic and professional life. In healthcare practice (what Toulmin refers to as the 'clinical arts'), this turn away from the 'human values of reasonableness' was stated explicitly in a position paper published by the Evidence-Based Medicine Working Group (1992), which asserted that

Evidence-based medicine de-emphasizes intuition [and] unsystematic clinical experience ... and stresses the examination of evidence from clinical research.

This seminal paper led to a subsequent rejection of intuitive decision-making in favour of practice based on algorithmic flow diagrams, clinical pathways and research-based procedures. Whilst logic, rationality and the scientific method are essential to safe and effective health care, Toulmin suggests that we ignore evidence from everyday experience, from reasoned discussion and from the arts humanities at our peril.

Language and logic

We have seen that, since the earliest times, the move away from reason has been based on a mistrust of language. Aristotle attempted to refine verbal arguments to the precise statements of the syllogism, and in the early twentieth century, Bertrand Russell took the process a step further by replacing the verbal statements with the symbols of Boolean algebra. The definitive expression of this attempt to impose rationality over reason is often considered to be Wittgenstein's early short work *Tractatus Logico-Philosophicus* (Wittgenstein 1922), which asserts simply that 'Everything that can be put into words can be put clearly' and 'What we cannot speak about we must pass over in silence'. However, whilst these statements were taken by the logical positivists such as Russell and Carnap to represent the ultimate triumph of logic over rhetoric, Carnap (1963) observed of Wittgenstein that:

His point of view and his attitude toward people and problems, even theoretical problems, were much more similar to those of a creative artist than to those of a scientist; one might almost say, similar to those of a religious prophet or a seer... When finally, sometimes after a prolonged arduous effort, his answers came forth, his statement stood before us like a newly created piece of art or a divine revelation...the impression he made on us was as if insight came to him as through divine inspiration, so that we could not help feeling that any sober rational comment of analysis of it would be a profanation.

The rationalist argument is that language is imprecise and misleading; it lacks the rigour necessary for clear and logical thought and its role must therefore be restricted simply to describing, explaining or reporting on the world rather than as a tool for actively engaging in an attempt to *understand* it. However, since Wittgenstein points out that we must 'pass over' as metaphysics anything that cannot be simply and clearly put into words, the project of science itself can only ever be descriptive and explanatory. As Auguste Comte, the originator of the doctrine of positivism, put it:

recognising the impossibility of obtaining absolute truth [the scientific mind] gives up the search after the origin and hidden causes of the universe and a knowledge of the final causes of phenomena. (Comte, 1830)

In restricting itself to the programme and methods of rational positivist science, social enquiry, including a great deal of research in the field of health care, is forced to abandon the search for meaning in favour of 'the explanation of facts' and 'laws of phenomena'. As Emile Durkheim, one of the first wave of positivist social researchers, asserted, 'the first and most fundamental rule is: consider social facts as things' (Durkheim 1895). Furthermore, because the discovery of facts and laws about populations requires statistical generalization, social research from the outset employed quantitative data collection methods in which context was stripped out.

Hermeneutics and the search for meaning

The establishment of the emerging discipline of social enquiry as a rational, quantitative, macro-level science provoked a growing response during the early years of the twentieth century. Max Weber demanded that social research must go beyond the mere explanation of facts and the discovery of scientific laws to 'accomplish something which is never attainable in the natural sciences, namely the subjective understanding of the action of the component individuals' (Weber 1922). This call for subjective understanding (*Verstehen*) over and above objective explanation (*Erklären*) was taken up most notably by a group of philosophers with an interest in hermeneutic phenomenology, including Wilhelm Dilthey, Martin Heidegger, Karl Jaspers, Alfred Schutz and, later, Hans-Georg Gadamer. Hermeneutics begins from a diametrically opposed position to rational scientific enquiry. Whereas science regards language as a barrier to clear and precise thought, hermeneutics considers that meaning can *only* be mediated through language. Whereas science seeks a rational *explanation* of how the world works, the project of hermeneutics is a deep subjective *understanding*. Whereas science strives to analyse the *object* of study by breaking it down into its component parts, hermeneutics attempts to reconceive the object as a *subject* and to integrate it into the experience of the researcher.

We can see the rational scientific mind at work most clearly in the quantitative social research paradigm, but scientific rationality is coming to dominate even the 'softer' qualitative approaches. For example, a great deal of so-called phenomenological research in nursing and the health care professions entails rigorous adherence to method as the guarantor of validity, the 'bracketing' of the researcher's own preconceptions to ensure objectivity, and the reductive analysis and categorization of transcripts to ensure generalizability. In contrast, a hermeneutic approach to the same study would shun an objective methodical approach to the collection of data in favour of an engaged conversation or discussion between two subjects in which the researcher draws on her knowledge, experience and humanity better to understand the knowledge, experience and humanity of the other. Similarly, the hermeneutic researcher does not analyse the resulting transcript in order to categorize and explain the data, but rather attempts to gain a deep and insightful understanding by imagining herself in the position of the other. For the scientist, the purpose of analysis is to reconstruct the original meaning as conveyed by the interviewee in order to theorise and generalise it. However, Gadamer tells us that *Verstehen* is not reconstruction but mediation, where the hermeneutic researcher can be thought of as 'participating in ... a process of transmission' (Gadamer 1960). Hermeneutics is not a method or a procedure; the researcher does not perform a detached reconstruction or analysis of the interview transcript, but is *part of the process* through which meaning and understanding are transmitted.

The anthropologist and writer Clifford Geertz coined the term 'thick description' to refer to this process of deep contextual understanding. The concepts of thick and thin description originate in the work of Gilbert Ryle, who makes the distinction between an objective 'phenomenalistic' description

of an action or a behaviour and a subjective, culturally aware interpretation of the same action. The thick description is not, as it is sometimes portrayed, simply a 'thicker', more in-depth account of a phenomenon; thick description is not a matter of reporting a situation in greater detail than a thin description; a thick description is not really a description at all, but entails a subjective, contextual interpretation or 'reading'. Geertz relates thick description specifically to ethnography, but it can be applied equally to all instances of social research as *Verstehen*. As Geertz points out, ethnography is not limited to the study of exotic cultures: 'The locus of study is not the object of study. Anthropologists don't study villages (tribes, towns, neighborhoods ...); they study *in* villages' (Geertz 1973). Ethnography, hermeneutic phenomenology or whatever name we wish to give to it:

is like trying to read (in the sense of 'construct a reading of') a manuscript - foreign, faded, full of ellipses, incoherencies, suspicious emendations, and tendentious commentaries, but written not in conventionalized graphs of sound but in transient examples of shaped behavior. (Geertz 1973)

Thick description requires an understanding of (sub)cultural codes, social mores and shared meanings; it entails reading between the lines, filling in the gaps and interpreting the 'incoherencies, suspicious emendations and tendentious commentaries'. It supplements the *rational* descriptions of science with the *reasoned* interpretations of literature, the arts and the humanities. It adds a subjective human understanding to the technical rational explanation of the scientific method. But in order to do so, the researcher must read widely and accumulate a wide range of experiences outside of her academic discipline. Unfortunately, the demands of the 21st century university for narrow specialists and discrete 'research centres' is pulling us in the opposite direction. The broad scholarship required for reasoned understanding is no longer valued in the specialised environment of the research-driven university.

Being reasonable

Since Toulmin made his appeal in 2001 for a return to reason, there has been a further shift in the opposite direction, particularly for those of us who work and study in the university. More and more, scholarship is being dictated and judged according to the criteria of rationality and method, not only in scientific and technical disciplines, but across the full scope of academic life and practice. In the discipline of nursing, the value of scholarly work is being measured increasingly by the impact factor of the journals in which our work is published, and the commercial pressures to increase those impact factors (that is to say, for the papers published in these journals to be cited in other journals) means that many journal editors are beginning to be selective not only in the quality of the papers they accept for publication, but also in the *type* of submission. For example, systematic reviews tend to be cited more often than discussion papers, randomised controlled trials tend to be cited more often than small-scale qualitative studies. As a result, some forms of academic writing such as the scholarly essay are nowadays almost impossible to get published in many of the 'top' academic journals.

More worryingly, however, the values of the scientific laboratory are beginning to be applied across the board to *all* academic work. Experimental and laboratory science depends for its reliability and validity on the researcher rigorously following set protocols and procedures, maintaining objectivity and avoiding researcher bias. Unfortunately, these principles of good scientific research have somehow become confused and conflated with the values of good scholarship, to the extent that criteria such as rigour, objectivity and value-neutrality are now used increasingly for making judgments not only about the quality of scientific research, but also about the quality of academic writing. In some cases, authors are compelled to conform to headings and structures that are simply not amenable to discursive or rhetorical forms, whilst in other cases papers which are making no claim to be adhering to the strictures and structures of the scientific method are being rejected by journal editors and reviewers as lacking in rigour, objectivity and balance. For example, the UK nursing journal with the highest impact factor recommends that contributors 'adhere to recognised reporting guidelines relevant to the research design used', and suggest seven different sets, depending on the type of paper being submitted. The guidelines suggested for qualitative studies include a 32-item checklist which, it is claimed, 'will indirectly lead to improved conduct, and greater recognition of qualitative research as inherently equal scientific endeavor compared with quantitative research' (Tong et al 2007). This claim clearly associates quality in qualitative research with rigorous adherence to protocols and guidelines, and suggests (albeit indirectly) that the paradigm of *Verstehen* be abandoned in favour of a rational, positivist approach if qualitative research is to be regarded as a 'scientific endeavor' of equal value to the experimental and scientific paradigms.

The assumption underpinning the rationalization of the discovery and reporting of knowledge is nicely summed up in an anecdote told by Clifford Geertz:

There is an Indian story ... about an Englishman who, having been told that the world rested on a platform which rested on the back of an elephant which rested in turn on the back of a turtle, asked ... what did the turtle rest on? Another turtle. And that turtle? 'Ah, Sahib, after that it is turtles all the way down. (Geertz 1973)

The Western scientific mind strives to construct a rational explanation even for myth and allegory. The turtle must surely rest on *something*, there must be solid ground and an epistemological (if not ontological) foundation somewhere down there on which to build a rational account of the universe (This, after all, was Descartes' project in the *Discourse on Method*, where he proposed to doubt everything until he finally reached the one thing that there could be no doubt about - the very activity of doubt itself: *cogito ergo sum*).

Scientific rationality is premised on the idea of progress, that the more we probe and analyse, the more we question nature, the more complete is our knowledge and the closer we get to being able to explain the world through a

general theory of everything. This project is sometimes referred to as the 'end of science', the idea that all the major scientific discoveries have now been made and there is nothing left for scientists to do other than tie up the few remaining loose ends. However, *Verstehen* proceeds from the very opposite assumption that the more we know, the more there *is* to know; that knowledge begets more knowledge. For the ethnographer, the phenomenologist and the hermeneutic researcher, knowledge is a human construct; where there are no people there is no knowledge. There is not a finite amount of knowledge 'out there' in the world waiting to be gathered up, organised and put to work; knowledge is something that we make (that is, something that we *make up*). the more knowledge we make, the greater the opportunity to make more. There is no limit, no foundation; it is turtles all the way down.

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