

A war of words

Oliver Robinson on the history of the idiographic/nomothetic debate

This is a story of disinformation, disagreement, antagonism and confusion. It surrounds a century-long debate over the nature of psychology as a discipline and whether it should be focused on generating theory, understanding the individual, or both.

Our story starts in Strasbourg in 1895, at a presentation entitled 'History and Natural Science', given by the philosopher Wilhelm Windelband on the occasion of being appointed rector. During the address, he delineated two forms of evidence-based knowledge, which he termed idiographic and nomothetic (Windelband, 1895/1998). Idiographic knowledge, he said, is a description or explanation of a specific event or thing. This kind of knowledge defines the humanities, and it is exemplified by history. History deals with the description of particular events, and aims to explain them by way of their formative antecedents. Nomothetic knowledge, on the other hand, defines the natural sciences, and is characterised by the pursuit of general laws and theories.

The 19th century had witnessed a major shift in German philosophy, away from the idealism of Hegel and Kant towards a scientific reductionism that stated that *all* things could be described and explained through the methods of natural science. Windelband was a follower of Kant and rejected scientific reductionism. His take on philosophy was one where the human world of morals, values and stories did not succumb to

scientific experiments and explanations, but had their own domain and logic, represented by the humanities (Windelband, 1901/2001). Making the idiographic/nomothetic split was his way of drawing a clear line between the humanities and the natural sciences, and so maintaining a clear remit for the former.

On the other side of the Atlantic, philosophy and psychology were still closely linked. James Hayden Tufts was involved in both – you might not recognise his name, but he set up America's first dedicated psychology lab. Were it not for Tufts, it is likely that Windelband's rectoral address would have remained on a dusty shelf somewhere in Strasbourg and have never entered the lexicon of modern psychology. But one day in the late 19th century, he decided to translate Windelband's magnum opus *A History of Philosophy* into English (the translation is still in print today – see Windelband, 1901/2001). Tufts became well versed in Windelband's works as a result of this project, and came across a

transcript of his rectoral address. By publishing a review of it in the second edition of *Psychological Review* he then brought it to the attention of American psychology (Tufts, 1895).

Another big name in psychology at the time was Hugo Munsterberg, a German émigré working at Harvard at the invitation of William James, who became president of the APA in 1898. In 1899, Munsterberg wrote a lengthy critique of the idiographic/nomothetic distinction in *Psychological Review*. He argued that the distinction was too divisive, and that in reality natural sciences are interested in individual events, while the humanities are interested in theories and generalisations. A recent instance of idiographic science in physics/engineering is the body of published scientific research on the collapse of the Twin Towers on 9/11. This research aimed to explain a single event, not to test or generate theory, but was no less scientific for doing so, and bears out Munsterberg's



The 19th century had witnessed a major shift in German philosophy, away from the idealism of Hegel (above) and Kant

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view that natural sciences are idiographic too.

Munsterberg's critical attention to the idiographic/nomothetic distinction ironically led to its eventual popular acceptance. This is because several decades later, one of his pupils would remember his old teacher's coverage of the terms, and bring them to prominence by equating each term with a particular method for studying personality. That pupil was Gordon Allport.

In the late 1930s, Allport was involved in founding the trait approach to personality (Allport, 1937). In this approach, personality is measured on a number of dimensional traits that are derived from normal language and factor analysis. Having got this new approach off the ground, Allport realised that it omitted any focus on how personality is structured within individuals, and how personality uniqueness comes about. So he suggested another kind of method for studying personality to complement the trait approach, focused on how personality is organised at the individual level.

Allport latched on to the two neologisms that Munsterberg had discussed and criticised in his seminars at Harvard. In the idiographic/nomothetic distinction he saw a possible philosophical basis for the two ways of studying personality. Accordingly, in his pioneering textbook on personality (Allport, 1937), the nomothetic label was given to the trait approach, while the idiographic label was given to an approach that studied the organisation of personality at the individual level (which Allport never actually got around to developing). He hoped for a personality psychology in which both methods could happily coexist. That didn't happen. Instead, a steady polarisation between the two occurred.

Psychology, forever searching for scientific legitimacy, had found in the label of 'nomothetic' an ideal term for emphasising its scientific nature. Idiographic knowledge was increasingly

seen as the anti-science nemesis of nomothetic progress (Nunnally, 1978; Skaggs, 1945). In the decades following Allport, literature on the nomothetic-idiographic debate became based on the assumption that one or other was correct, but that they were inherently incompatible (Holt, 1962). Arguments for idiographic personality psychology were therefore shouted down by orthodoxy, for example when Beck (1953) wrote a review article entitled 'The science of personality: Nomothetic or idiographic?', Eysenck felt obliged to write a vociferous reply entitled 'The science of personality: Nomothetic!' (1954). This growing antagonism may have been a reason behind why Allport stopped using the words, changing them to 'dimensional' and 'morphogenetic' in his later book on personality (Allport, 1961).

The growing polarisation was not helped by the fact that the terms *nomothetic* and *idiographic* were being used in ways that had a tenuous relation to their original meanings. In order to understand how and why this change in meanings occurred, it is important to realise that in the first half of the 20th century there were two different ways of doing quantitative research in psychology, which can be traced to Wundt and Galton respectively (Lamiell, 2003).

The 'Wundtian' paradigm would employ a series of case studies, each of which was analysed at the individual level. If the same effect or pattern was found in every case, then a general law or effect could be postulated. Many of psychology's early pioneers used this way of doing research, including Pavlov, Ebbinghaus, Titchener, James, Cattell, Freud, Watson, Thorndike, Alzheimer and Kraepelin.

The 'Galtonian' paradigm, on the other hand, can be traced to Francis

Galton and his early research on intelligence testing. It involves gaining data from a large number of cases, and then analysing those cases as an aggregated group, by way of comparing group means, group variances, and looking at associations between variables at the level of the group. If a finding holds for the group as a whole, then it can be used to support or reject a probabilistic hypothesis. You will, I expect, recognise this as the mainstream quantitative approach of modern psychology.

Allport equated only the Galtonian paradigm with the word *nomothetic*, which was due to the fact that he was referring to personality methods, which had been developed from intelligence testing and were classically Galtonian.

In fact, the Wundtian paradigm is more closely aligned with Windelband's meaning of *nomothetic*. This is because the Galtonian approach is limited to stating generalisations or testing hypotheses at the level of the group and in probabilistic terms, while the Wundtian approach has the capacity to state what is common to all cases, and the word that Windelband used to describe nomothetic laws was *allgemein*, which means common to all (Lamiell, 1998, 2003).

The Wundtian approach was sidelined in psychology in the post-WW2 period, while the Galtonian paradigm rose to become accepted orthodoxy. This omission of the Wundtian paradigm from the nomothetic equation may have been a key reason behind the acrimonious divorce of idiographic and nomothetic psychology, for it is the Wundtian method that creates a direct bridge between theory and individual. It does this because it develops theories and laws using a series of intensively studied cases, each of which is presented and analysed separately. Rare examples of this in post-

"Munsterberg's critical attention to the idiographic/nomothetic distinction ironically led to its eventual popular acceptance"

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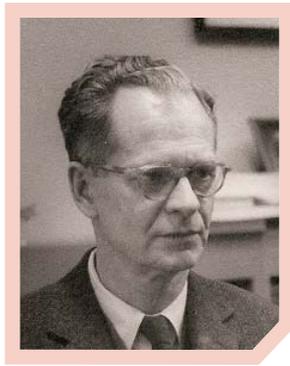
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looking back

WW2 psychology includes Newell and Simon's (1972) development of the theory of human problem-solving, in which Galtonian methods are explicitly avoided so that the fundamental commonalities of the problem-solving process can be found. Furthermore, the Wundtian approach requires theory testing to be conducted at a case-by-case level. Colby and Kohlberg's research is a classic example; they presented longitudinal moral stage development in every participant in their sample one-by-one, to test the proposition that all people progress in this manner (Colby et al., 1983). Another post-war champion of the Wundtian method was B.F. Skinner. The two journals that he founded – the *Journal of Applied Behavioural Analysis* and the *Journal of Experimental Analysis of Behavior* – remain committed to a case-by-case approach today. However while this approach has been marginalised in



B.F. Skinner championed the Wundtian method

psychology, it is still going strong in neighbouring disciplines, for example in neurology (Ramachandran, 1998).

From the 1980s, the idiographic/nomothetic distinction continued its spread across psychology, and the terms became increasingly fluid in what they could mean. Within the last 10 years, the word *idiographic* has been used to mean all kinds of different things, including: the use of moderating variables in a statistical analysis (Lutz-Zois et al., 2006); analysis of within-person change over time (Conner et al., 2009; Molenaar, 2004); qualitative data collection strategies (Barton et al. 2005; Rottenberg et al., 2005); qualitative case-study research (Eatough & Smith, 2006); and single-case experimental design (Barlow & Nock, 2009).

A step forward out of this ambiguity and confusion must surely entail a more

consistent use of the words *idiographic* and *nomothetic*. Windelband used the words to refer to research objectives, rather than research methods. In line with this, the term *idiographic* should really be retained for research whose objective it is to describe or explain a particular event, experience or behaviour, using existing theory. It should not be confused with qualitative methods, for it can proceed using quantitative or qualitative methods (Salvatore & Valsiner, 2010). *Nomothetic* psychology should be understood to have two branches, the Galtonian and Wundtian approaches. Wundtian-style research, despite its rarity, is the closest thing to truly *nomothetic* science that psychology possesses, because it permits statements about what is or is not common to all. If psychology is going to find a harmonious solution to the *nomothetic-idiographic* riddle, and reconcile the tension between the general and the individual, it must re-embrace this lost Wundtian tradition, for there lies the key.

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