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In Response

A Science of History

Paul T. Mountjoy and Douglas H. Ruben
Western Michigan University

Parrott and Hake (1983) performed a service by presenting a balanced discussion of the similarities and differences between history and science. We shall suggest further similarities where they noted a difference. They state that "while both [history and behavioral science] study records, records are the raw data of historical studies; which is to say, historians can collect these data but they cannot produce them" (p. 125). They assume that historians study records *qua* records rather than the actual events producing those records. We shall argue that this difference is more illusory than real.

As do Parrott and Hake, we assume that there is an event continuum (Kantor, 1959) from which various intellectual disciplines have selected circumscribed portions for their area of investigation. But two major problems facing any investigator are reliability and external validity. Verbal records pose a potential hazard for *scientific historians* (cf. Barnes, 1962), since the possibility exists that documents may be inconsistent with actual events (external validity). Documentation of what were once "fluid actions or things" (Parrott & Hake, 1983, p. 125) runs still a further risk. This is when multiple documents, or different translations of that document, report on different aspects of events or even on different events entirely (reliability). Faced with unreliable and invalid documents, Parrot & Hake suggest historians try to synthesize verbal materials until they can draw inferences about the event proper. But, it is important to realize that all events are historical. By this we mean that events evolving from previously occurring events maintain a definite continuity in temporal perspective (cf. Kantor, 1963, p. 26). One example that demonstrates this concern for reliability and external validity within scientific historical psychology is Hannibal's crossing the Alps.

Hannibal crossed the Alps during his journey from Spain to Italy in 218 Before Common Era (BCE), thus inaugurating the Second Punic War. But the actual route and identity of the pass traversed remained a mystery until the first historian of this event produced a record of it. This was done by Polybius (ca. 210-00-ca. 120 BCE), who is regarded as one of the first scientific historians. Yet, in many ways his concern with natural events complements his predecessors Herodotus (ca. 484–425 BCE) and Thucydides (ca. 471-60-ca. 399 BCE). Herodotus was the first to write a comprehensive history of civilization. His successor Thucydides stressed accuracy and precision in reporting facts and eschewed supernatural causation. For these reasons he is often cited as the founder of scientific history. The last major Greek historian is Polybius who presented the first great treatise on the methodology of scientific history in his critique of Timaeus (ca. 345-ca. 250 BCE).

In the third book of *The Histories* Polybius produced what is usually regarded the most reliable record of the crossing of the Alps by Hannibal's army. He commented upon previous writers on this topic and rejected their accounts as biased and inaccurate. He reported that he had interviewed survivors of the march itself (and, given dates, might have contacted Carthaginian veterans). Although his records are decificient by modern standards, he does mention seeing a bronze tablet left by Hannibal at Lacinium which documented the numbers of the army (iii, 33) and a dispatch preserved in the prytaneum at Rhodes (xvi, 15). With this record of Hannibal's march from Spain to the Po Valley Polybius himself examined

the terrain in order to perform a "reliability check." He states: "[I] have personally inspected the country and made the passage of the Alps to learn for myself and see" (Polybius, Second Century BCE, p. 117).

The point is that scientific historians are concerned not only with reliability problems, but with problems of external validity—*the natural causes of events.* Frequently historians do work upon time spans greater than the life of an individual—but by no means always. Historians who concern themselves with longer periods of time give the appearance of being unable to generate records. Yet, even they often discover previously unknown documents. In this sense, the historical data base resembles that of behavioral science; though finite it is constantly expanding.

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