

Report

Oral histories in meteoritics and planetary science: A commentary

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Between 2001 and 2004, Ursula Marvin published the oral histories of thirteen persons noted for their contributions to meteoritics and planetary science (Table 1). With her encouragement, and with the support of the editor of *MAPS* and NASA, I am continuing the series and the first article appears in this issue of *MAPS*.

Oral histories have seen an increase in popularity in the last few decades. There are now several books on their objectives and execution. There was a time when historians shied away from them, believing them to be unreliable and lacking objectivity. Documents were what mattered. However, there is now a realization that despite their obvious drawbacks, they have a unique role to play in writing history. Several major scientific organizations have programs to obtain and archive oral histories, among them NASA (http://www.jsc.nasa.gov/history/oral_histories/oral_histories.htm) and the American Institute of Physics (e.g., <http://www.aip.org/history/ohilist/4849.html>). Never has the value of oral histories been more apparent than in documenting the history of the Apollo program, and there is hardly a serious book on the Apollo program that does not cite them.

Of course, oral histories do not replace the documentary resources, the published and the unpublished papers cataloged in our libraries and museums. The oral histories complement the documentary histories. In a sense, the oral histories describe the sometimes subtle canvas on which the scientific advances were made. They identify the forces for change—intellectual, political, societal, and personal—that drove the scientific advances. This has always been true of science, and is true today. The Apollo program happened because World War II gave us the V2 and the Cold War, but writing on this canvas were the personalities of Von Braun, Jack Kennedy, James Webb, and many others. Writing on the canvas were also James Van Allen and Gerard Kuiper, so space and planetary science, as we now know this area of research, are also

driven by space missions, politics, and national budgets. Does anyone doubt that remarkable evolution of meteorite research since the Second World War was not due mainly to the space program and federal budgetary support?

Reading the scientific publications and tracing the dendritic interconnections between published papers tells us what happened in the history of science, it does not tell us how and why. It is by understanding how all these forces interplay, intellectual, political, societal, and personal, that we write the history of science. What the oral histories are not are biographies, but to understand what drives a person we need to know their biography. What the oral histories are not are descriptions of publication lists, although we obviously need to understand the interviewee's major contributions. What the oral histories are not is gossip, but we need to understand the small things that helped to set the scene and describe the personal dynamics that make us the scientists we are. Lastly, the oral histories are not an opportunity for self-promotion or short-cutting the peer review system in the publication of new work. This is not to say that the oral histories are not peer reviewed. They are, but they are reviewed as history, not science.

There are a great many textbooks describing how an oral history should be prepared. There is even a history of oral history. Oral history papers are essentially a report of an interview. The interviewer should be prepared by reading the subject's CV and publication list and reading or at least skimming some of the major publications. It is my practice to ask the interviewees to send me a list of their favorite twelve papers, to prepare them for the interview and provide some outline for discussing science progress. I am also including four or five figures that are intended to elaborate, clarify, or serve as a guide to the content of the interview. The textbooks say that the interviewer should be a historian and not a researcher in the field, and in this respect, I am

Table 1. Oral histories published in *MAPS* by Ursula Marvin.

No	Subject	Vol.	Pages	Year
I	Edward Anders	36	A255–A267	2001
II	Robert N. Clayton	36	A269–A274	2001
III	Robert M. Walker	36	A275–A283	2001
IV	James R. Arnold	36	A285–A292	2001
V	Brian Mason	37	B35–B45	2002
VI	Stuart Ross Taylor	37	B47–B56	2002
VII	Alastair G. W. Cameron	37	B57–B67	2002
VIII	Friedrich Begemann	37	B69–B77	2002
IX	Heinrich Wänke	37	B79–B88	2002
X	Ralph B. Baldwin	39	A163–A175	2003
XI	Masatake Honda	39	A177–A187	2003
XII	Gerald J. Wasserburg	39	A187–A197	2004
XIII	Fred L. Whipple	39	A199–A213	2004

at a disadvantage having been involved in meteorite research since the early 1970s. But my period as editor of *MAPS* (1992–2002), 9 years in essentially administrative positions (2002–2008), and a long-term interest in the history of meteorite research and the history of the space program, has given me a degree of objectivity and at least a desire to be the historian rather than the researcher. The interviewer for an oral history should also keep the discussion going, keep it on track, ensure that as much information is recorded as possible, identifying causes as well as effects, and keep jargon and assumed knowledge to a minimum. At the same time, the interviewer should be a largely unseen presence, keeping his own views discrete so as not to perturb the flow of the interviewee.

Upon completion, the interview is transcribed and edited for clarity, accuracy, and unnecessary insensitivities. Repetition can be removed. In this, I am following Ursula Marvin's example, but it is a controversial step because the

oral history is expected to be an accurate record of an interview and departures from the transcript should be minimal. The American Institute of Physics requires that the audio recordings are archived and historians are invited to listen to them rather than work from the edited transcripts. There is information in the tone of voice, pauses, and laughter that is lost in the edited transcript, and there is a danger of content being lost too. The AIP also cautions historians not to rely on the oral histories to determine critical facts, because memories are fallible and often selective. The job of an oral history is to obtain perspectives and perceptions, and obtain information not available elsewhere, not record facts that are better recorded in the documentary record.

To date, four histories have been completed and three interviews remain to be prepared for publication. I plan to continue the series as long as the community thinks it worthwhile. To a great degree, the subjects are persons whose accomplishments have been recognized by awards but, following Ursula's example, I will deviate from this when I want to explore a particular aspect of the history of meteoritics and planetary science, or when I have a unique opportunity, as Ursula had when she had a chance to interview Fred Whipple. I hope that, at some point, we can expand these from focusing on meteoritics to more probably cover planetary science, but that remains to be seen.

I hope the readers of *MAPS* enjoy these articles and I hope they help us glean a greater sense of the history of meteoritics and planetary science research. Ursula Marvin came a long way with her thirteen articles, and I am sure that as we add to these articles and expand their time span, we will learn more about the history of the field and how and why we did what we did. And, as they say, I am sure the whole will be greater than the sum of the parts.

Editorial Handling—Dr. A. J. Timothy Jull