

# Talking with the Planet

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Over the past century, the British Library collected more than 70,000 oral history interviews. Recent years have seen dramatic acceleration in the rate at which similar materials are being created and indexed. Over the course of a single decade around the turn of the century, the Shoah Foundation interviewed more than 50,000 Holocaust survivors. And in just the past decade StoryCorps has collected more than 100,000 interviews. Several billion people have a digital recorder – their smartphone – close at hand at this very moment, so there is potential for collection of stories to accelerate further. What will we do with this cornucopia? Many things are possible, but my interest is in talking with the past.

When we first think of searching stored content, we often think in terms of what's been called the "ten blue links" paradigm. We type a query, and a search engine ranks the results. Advances in speech recognition have made it possible to use this approach with spoken content. But it may not be the best approach for conversational content. The "ten blue links" approach embeds an implicit assumption that the content we find can be understood on its own – that it is what we might call "self contextualizing". But when retrieving content that was originally embedded in a recorded conversation we will sometimes need new ways of providing the needed context. For example, if I search NASA oral history interviews for "rivalries", one result is:

"I have to say tongue in cheek that there were the engineers who worked on the life support systems that worked very closely with them and just almost became one with them. Then there were thermal analytical engineers that would calculate stuff—with their slide rules by the way—would calculate the stuff. We always had a little friendly rivalry on who could predict it more closely. I don't remember the numbers, but a fair number of times, we winged it a little more closely than they could do it with their slide rules. It was always pretty close. We never were in any particular risk."

That's in the middle of an answer to the question "Where were you on Apollo 11?" The entire answer runs several pages in the typed transcript of the interview. It's useful to know that this is from an interview with Tom Sanzone, who as an engineer working for the contractor that built the lunar spacesuit's life support systems was in the Mission Evaluation Room for the Apollo 11 moonwalk.

That leads to the question of how we should provide that sort of context. One option would be to conceive of the search process as mirroring a question and answer session in a panel format, where a moderator can take questions from the audience and call on the "panelists" (i.e., passages from the recorded interviews) for responses, providing any needed context as they do so. For example, in response to the question "what rivalries were there during the Apollo program?" the moderator might introduce Tom Sanzone's answer by saying "Tom Sanzone, you were monitoring Neil Armstrong's life support systems during the first moonwalk. What sort of rivalries did you see?" This isn't the only option we might consider, but it is an intriguing approach that would move from the current query-results-in-a-list format toward a more natural interaction style in which users could talk with the past. Back when collections were small, this would not have worked. But in the modern era of mesoscale collections of conversational content, the range of questions that we could usefully answer in this way is rapidly expanding.

Which leaves just two questions to be answered: (1) how can we build such systems?, and (2) how well will they work? Ah, something to discuss at the workshop!