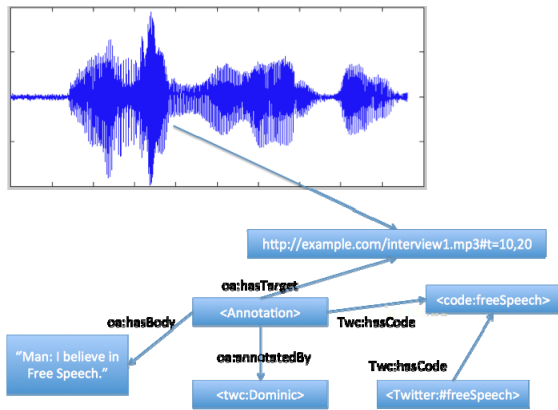




can take any tabular data and convert this to RDF, and remodel it using any vocabularies or ontologies. the Open Annotation Data Model (<http://www.openannotation.org/spec/core/>) to model the annotation (in our case the transcription is the annotation). Additionally, we included coding of these transcriptions from the interview. In Figure 1, an example outline of one such transcription annotation is provided. This annotation is linked to the metadata that describes when it took place, who wrote the annotation, etc. With this structure, other researchers can provide their own annotation and transcription to this same audio section, link it to the specific audio URI and preserve his or her own interpretation or understanding of the same artifact. Additionally, these annotations can be linked to other data and media assets. For example, this annotation in Figure 1 could be linked to a tweet that took place at the same event and was coded in the same manner by the original or other researchers.



**Figure 1: Model of an audio segment being transcribed and coded by a research, using RDF**

## 2.1 DISCUSSION

While this annotation tool is an interesting first step in utilizing linked data and semantic web technologies for structuring and modeling ethnographic data, much more work still remains. First and foremost is the need for better tools and user interfaces that allow non-technical qualitative researchers to produce linked data on their own. Our example of the RDF encoding was only successful because of the research team's technical proficiency and familiarity with the tools used. Additionally, one must have working knowledge of data modeling and semantic web technologies. The key is to develop and integrate these semantic technologies into tools and frameworks already used by social scientists.

We also recognize that in enabling such collaborations, safeguards to protect the privacy of the data will be critical. As most human-centric research requires institutional approval, considerations for how certain data parameters and consent should

be deliberated. For example, we ask questions of *how much and what can be shared?*; *how is anonymity maintained?*; *how do researchers evaluate risks for subjects if data is shared?*; and, *how can we leverage linked data to protect and control this information?*.

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