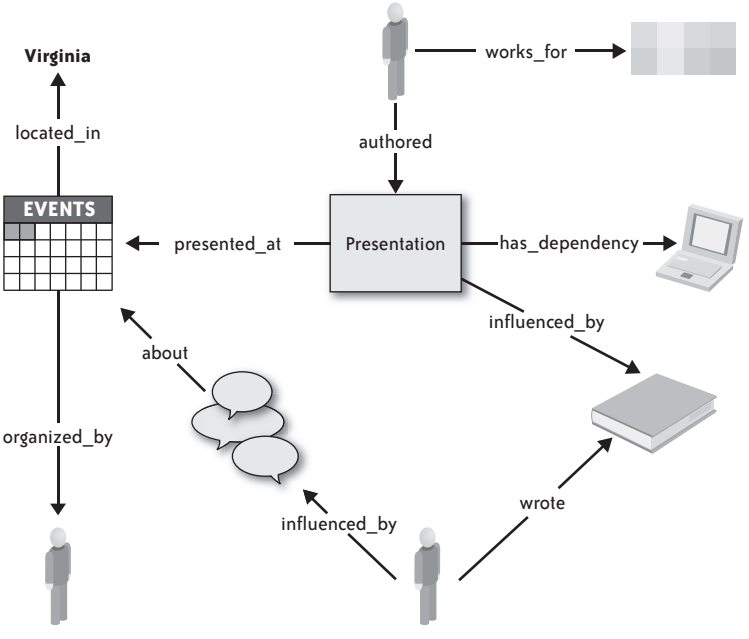

FIGURE 5-2. Web of Data

The basic interaction in this environment is a logical client-server request. We have an address for information of interest. The name, a Uniform Resource Locator (URL), is a type of identifier that not only disambiguates a reference in a global address space, but also tells us how to resolve the request. At no point during the process are we required to understand the technologies in place to satisfy the request. This keeps the process simple and resilient in the face of backend changes. As our favorite sites migrate from static to dynamic data production or change application server vendors, these facts are hidden from us. Although many sites do not effectively handle content negotiation in the process, we at least have the potential to receive different representations for the same named entity. We may wish to get something back in a different format, depending on whether we are making the request on a computer or a phone. Later in this discussion we will also see how to take advantage of this property to control the level of detail for access control and regulatory compliance.

The naming schemes used on the Web allow us to identify our documents, our data, our services, and now, even our concepts. We have historically had a difficult time differentiating between a reference to, say, Abraham Lincoln and a document about him. For example, the site *http://someserver/abrahamlincoln* could be either. The W3C Technical Architecture Group (TAG) has produced a recommendation[‡] that non-network addressable resources (i.e., things

‡ *http://lists.w3.org/Archives/Public/www-tag/2005Jun/0039*