The enthusiasm for big data is obscuring the complexity and diversity of data in scholarship and the challenges for stewardship. Inside the black box of data are a plethora of research, technology, and policy issues. Data are not shiny objects that are easily exchanged. Rather, data are representations of observations, objects, or other entities used as evidence of phenomena for the purposes of research or scholarship. Data practices are local, varying from field to field, individual to individual, and country to country. They are a lens to observe the rapidly changing landscape of scholarly work in the sciences, social sciences, and the humanities. Data are far more complex objects than are publications, making them much more difficult to manage than other types of material collected by libraries. Yet librarians have the requisite expertise in knowledge representation, organization, and scholarship that is necessary to address the stewardship challenge. By rising to the opportunities presented by the data deluge, libraries and librarians can assert new leadership in the digital age.

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