semantic by deciding dynamically which pages would be useful destinations, based on the current user's activities, instead of having to hardwire the same links for all users ahead of time. It would be possible to *integrate* information across websites, instead of users currently having to do a "mental copy-paste" whenever they find some information on one site that they want to combine with information from another.

1.1.2 Design Decisions for the Semantic Web

There are many ways of going about building a more "semantic" web. One way would be to build a "Giga Google," relying on "the unreasonable effectiveness of data"[1] to find the right correlations among words, between terms and context, etc. The plateau in search engine performance that we have been witnessing over the past few years seems to suggest that there are limitations to this approach: none of the search giants have been able to go beyond returning simply flat lists of disconnected pages.

The Semantic Web (or The Web of Data, as it is becoming known in recent years[2]) follows different design principles, which can be summarized as follows:

1. make structured and semi-structured data available in standardized formats on the web;

2. make not just the datasets, but also the individual data-elements and their relations accessible on the web;

3. describe the intended semantics of such data in a formalism, so that this intended semantics can be processed by machines.

The decision to exploit structured and semi-structured data is based on a key observation, namely that underlying the current unstructured "web of text and pictures" is

[1] The Unreasonable Effectiveness of Data Alon Halevy, Peter Norvig, and Fernando Pereira, IEEE Intelligent Systems, March/April 2009, pgs 8-12, http://static.googleusercontent.com/external_content/untrusted_dlcp/research.google.com/en//pubs/archive/35179.pdf.

[2] http://www.readwriteweb.com/archives/web_of_data_machine_accessible_information.php.