The Social Web has grown considerably in the past eight years, with the emergence of sites like Facebook, Twitter, Flickr and WordPress.com. Most sites on the Social Web offer similar functionality: users share content (be it photos, blog posts, videos, bookmarks, etc.); users connect with other users, either directly or via common interests often reflected by shared content; users add free-text tags or keywords to content; users comment on content items; and so on. There is a huge amount of inherently-meaningful metadata being made available on the Social Web through content creation, the formation of social networks, and other tasks being performed on these sites. However, much of the Social Web exists as data silos, with connections and content items (and their associated metadata) locked into various services, either by design or a because of a lack of standardization across these sites.

In parallel with the development of the Social Web, the Semantic Web has put in place standards and mechanisms for exchanging data between services, for creating agreed-upon vocabularies of terms in particular domains, and for enabling information integration across distributed data providers. It has traditionally suffered from a 'chicken-and-egg' problem where there was a lack of interesting applications due to a lack of data adhering to Semantic Web standards, but with the emergence of the Social Web, a large amount of data is being created on a daily basis by millions of users, and this provides a very rich data source for semantically-enabled applications to work with. The Semantic Web can also assist with the data silo issue referred to previously, by providing a set of common vocabularies for data exchange between sites on the Social Web (e.g. FOAF, SIOC, MOAT, Facebook OGP, etc.).

In this special issue, we present two interesting papers that tackle challenges or issues relating to the Social Web using semantic technologies (modeling community activity), and to using social techniques to solve problems in the Semantic Web space (improving ontology creation).

The first paper, “Community Analysis through Semantic Rules and Role Composition Derivation” by Rowe, Fernandez, Angeletou and Alani, describes how the distribution of different roles in an online community can affect its health, giving indications of how to maintain the activity and the positive social signals in any community. For this purpose, the authors have modeled the contributions and roles of users in business community forums (through a user behavior ontology that extends SIOC), running a rule-based interpretation engine on top of the data.

The second paper, “Folksonomized Ontology and the 3E Steps Technique to Support Ontology Evolvement”, by Alves and Santanchè, presents an approach to bidirectionally fuse folksonomies and ontologies (in what is called a folksonomized ontology or FO), with the aim of enhancing a social tag’s semantics and also of extracting the semantics embedded in folksonomies for producing and enhancing ontologies. The ‘3E steps’ technique for reviewing, visualizing and enhancing th FO data is described and tested using data collected from Flickr and Delicious.

We would like to thank our team of reviewers for their dedication to producing this special issue, both at the original review and revision stages of the process. We thank the journal editors Tim Finin and Steffen Staab for their kind invite to create this issue. Thanks also to Silke Werger for helping us through the process.

John Breslin (NUI Galway)
Meenakshi Nagarajan (IBM Research)