Abstract. eScience communities are often encouraged to share datasets, applications, methods, workflows, reports and other digital resources. But how should these resources be organized so that they can be both located easily and, once located, understood or interpreted appropriately? An Organising metaphor is needed, that can address the following: (1) The sheer volume of resources in digital collections. (2) The dynamic nature of the resource catalogs. (3) The need to support multiple search strategies to locate useful resources. (4) The need to help explain what resources mean, or to contextualize them in some way. (5) New connections and evolving understanding being captured and also represented.

In this presentation I describe an approach to discovering, describing and understanding e-resources based on the notion that meaning is carried in the interconnections between resources and the actors in the cyberinfrastructure (including individuals, groups, organizations), as well as by ontologies and conventional metadata. Navigation around this universe is achieved by implementing the idea of perspectives as dynamic, conceptual views that not only act as filters, but also dynamically promote and demote concepts, relationships and properties according to their immediate relevance to some given context. I describe a means to represent a wide variety of interactions between resources using the notion of a knowledge nexus, and illustrate its use with resources and actors from two geo-communities: geoscience eResearch community (GEON: www.geongrid.org) and Human Environment Regional Observatories (HERO: www.hero.psu.edu).

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http://www.sges.auckland.ac.nz/about_us/our_people/gahegan_mark/index.shtm