Some have long advocated for a broader perspective on the “spatial” adjective, beyond the narrow confines of geographically referenced locations in physical space. Such a wider view seems appropriate even—and perhaps especially—among geographers, GIS experts and the like, a community to which I happily count myself. The various disciplines that profess an intimate concern with space as a central concept and a source of foundational principles, from geography to architecture, physics, etc, have a lot to contribute and to gain by applying their thinking, concepts, and methods to the core themes of this expert meeting, from spatial mediation to spatial support and spatial discovery.

By adopting spatial concepts (proximity, region, scale . . .) as a set of unifying principles, it becomes not only possible to “provide single-point access to research data, across distributed repositories and catalogs,” i.e., access to research artifacts, but also to the actors that produce and consume such artifacts in the course of various activities (Fig. 1). While the notion of “One Space” in the diagram is meant to reflect a unifying power, harkening back to John Snow and the spatial analysis tradition, there typically are multiple spaces (perhaps reminiscent of Gärdenfors’ separable domains) of distinct dimensions, via which and in which a given set of items could be meaningfully
represented. Examples include geographic location, certainly, but also locations in knowledge domains, like pediatrics, finance, or information science.

![Diagram](image)

**Figure 1.** Spatial Approach to Integration of Domain Actors, Artifacts and Activities.

It turns out then that spatial approaches cannot merely “be applied to topic spaces”—note the tautology in question 3— but that discovery and “single-point access” based on topic spaces simply is just another form of spatially mediated discovery.

The spatiality of topic spaces, term spaces, concept networks, etc, is inherent in the inner workings of many search mechanisms, such as when ranked proximities between a text query and corpus content are computed. However, that spatiality is rarely made explicit to users. Notable exceptions include efforts at *spatialization* of abstract spaces, with the goal of making such spaces more accessible to human cognitive abilities. In that context, in 2000 I called for moving “from metaphor to method” in the engagement of cartographic principles for non-geographic information visualization. Much progress has since been made, in that (1) methods have been developed that explicitly link cartography, information science, and computing, and (2) a robust empirical body of evidence regarding corresponding cognitive issues has been built. There have also been sustained efforts at popularizing the visual mapping of knowledge spaces, notably the “Places & Spaces” exhibit ([http://scimaps.org/](http://scimaps.org/)) spearheaded by Katy Börner, now in entering its 13th annual iteration.

Still, I wonder whether the three questions posed going into the expert meeting are reflective of these being rather academic pursuits, with impact on broader society being implied rather than being realized through an overt translation of novel methods into products. In other words, are we doing enough to enable stakeholders in business, government, and academia to adopt spatially mediated discovery in the pursuit of their mission?