

Supplemental Online Materials: **Who’s Afraid of Allan Savory?**
Renewable Agriculture and Food Systems – **Sherren & Kent**

Supplementary Table 1: Subject terms used, along with scoping notes for more information

Term	Scope note
Agriculture	<i>Livestock and land management for the purposes of food production</i>
Biodiversity and Ecosystem Management	<i>Management applying to ecosystems/organisms. Includes land management where not motivated solely for food production. E.g., sustainability</i>
Resource Management	<i>Management where the focus is providing resources to humans. E.g., fisheries, forestry</i>
Ecology	<i>Interactions between organisms and their environments. Includes conservation</i>
Plant and Animal Biology	<i>Large scale, without considering interactions with landscapes/ecosystems</i>
Cellular and Molecular Biology	<i>Fine Scale, without considering interactions with landscapes/ecosystems</i>
Marine and Freshwater Studies	<i>Includes management and biology, relating specifically to aquatic systems/environments</i>
Earth Sciences	<i>Geochemistry, geophysics, geology, meteorology, oceanography, climate change</i>
Economics	<i>Business economics, farm-gate economics. Includes financial decisions related to farm management</i>
Public Administration and Government Law	<i>Government law, policies</i>
Technology-enabled Methods, Models, and Decision-making	<i>Focus on the methods and process. E.g., GIS, remote imaging, statistics modeling</i>
Anthropology	<i>Applies to people and societies. E.g., ethnic/cultural studies, political/regional studies</i>
Archaeology	
Sociology	<i>Applies to humans where culture/ethnicity is not involved. E.g., group learning, group social change, adopting new practices, knowledge systems, the “philosophy history of science”, activism</i>
Human Health, Medicine, Psychology	<i>All things mental, physical, and medical that apply specifically to humans</i>

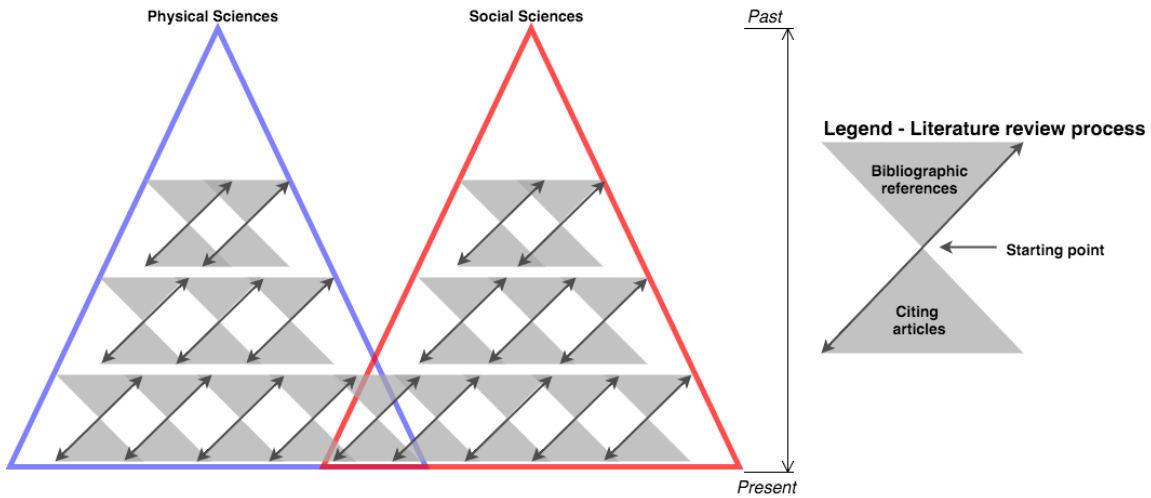
Supplemental Box 1: A primer on typical search protocols in literature review

Any research activity is built on the shoulders of other scholarly work. When searching for resources, scholars first make a crucial estimation of their own uncertainty, informed by their level of expertise in the field, before devising strategies aimed at reducing that uncertainty (Pontis and Blandford, 2015; Gottlieb et al., 2013). When approaching an unfamiliar discipline, scholars look for a starting point to gain an understanding of the key concepts – this may be leftover knowledge from previous education, common knowledge, or it may mean starting fresh to find influential individuals or trends (Pontis and Blandford, 2015). In all searching, scholars base decisions on what they deem authoritative sources, and they frequently backtrack when lost or stuck (Pontis and Blandford, 2015). The ease with which this is accomplished is heavily influenced by the searcher's familiarity with using specialized resources such as databases (Palmer and Cragin, 2008).

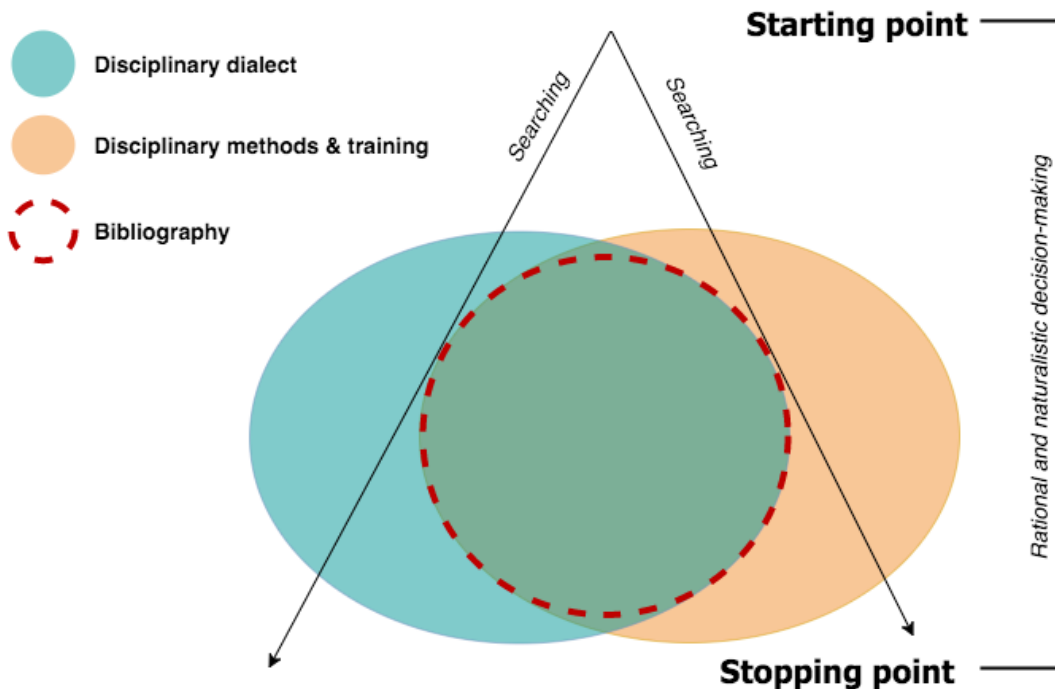
Decision processes throughout the search process rely heavily on the searcher's familiarity with the context and how well-defined the problem is (Berryman, 2007). Decisions are made using cognitive filtering to balance the amount of time and effort dedicated to the process and the anticipated quality of the results (Fadel et al., 2015), which helps to define an internal "stopping rule" (Browne et al., 2007). When searchers are less comfortable with the domain in which they are searching, they are likely to forego clearly defined courses of action and rational assessment of alternatives (Jungermann, 2000) in favour of using heuristic models and recognition to evaluate their options, "satisficing" by selecting the first feasible option (Berryman, 2008). This may also be determined the searcher's own disciplinary training and accustomed language and norms.

A popular search strategy known as 'chaining' (following citation trails forwards and backwards to discover new sources) leads to funneling into established domains rather than traversing or spanning them (represented in Supplemental Figure 1). Other popular search methods include browsing and using crafted text searches in database. Given the established decision-making processes (Berryman, 2008, Browne et al., 2007, e.g. Fadel et al., 2015, Jungermann, 2000), barriers in comprehension and esteem between disciplines (Bracken and Oughton, 2006, Gieryn, 1983, e.g. Rhoten and Parker, 2004), and the paradigmatic boundaries present (Burrell and Morgan, 1979), traversing domains when approaching social-ecological research is very difficult.

In all search methods, stopping points are critically influential. Each scholar's literature review encapsulates a complicated cognitive process balancing the heuristic values of desired and anticipated quality with the time and effort available (Fadel et al., 2015). Scholars begin their research at a starting point, progress through their search (as represented in Supplemental Figure 1) and eventually determine a stopping point as they progress through sources (Supplemental Figure 2). Filtering, selection, and backtracking decisions are informed by the scholar's assessment of the information's quality. These assessments are informed by critical considerations in interdisciplinary research: language, methods, and training. The final bibliography of a publication resulting from any literature search represents where the searcher's language and accepted norms in terms of disciplinary methods and training align with those of the found sources (Supplemental Figure 2).



Supplemental Figure 1: Two sample domains of literature, with some interdisciplinary overlap. When conducting literature reviews, scholars can scan forward and backward in time from known sources based on citations, but seldom encounter literature from outside their familiar domain.



Supplemental Figure 2: Scholarly research trajectory illustrating the informative decision-making factors involved in filtering and selection: vocabulary, methods and training.

References for Supplemental Box 1

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