NALT for the Machine Age

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The project NALT for the Machine Age is developing the USDA National Agricultural Library Library Thesaurus (NALT) as a "concept space" in support of automated subject indexing, data integration, and future applications of Al. As a concept space, NALT holds multiple SKOS concept schemes, or subschemes, such as NALT Core (of general scope) and NALT AWIC (about animal welfare). Where needed, NALT concepts are "punned" as properties for use in ShEx data shapes. Shapes serve as targets for normalizing agricultural data from heterogenous sources as required for agricultural research. Subschemes are managed on the backend in a source graph with distinct and potentially divergent hierarchies. The project works with research communities in the USDA Agricultural Research Service on creating domain-specific subschemes and on using NALT to maximize the interoperability of their data.