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Tristan M Bice* (tristan.bice@gmail.com) and **Charles A Akemann**. *Hereditary C*-Subalgebra Lattices*.

Hereditary C*-subalgebras are often likened to the open subsets of topological spaces. Despite this indication of its importance, comparatively little is known about the hereditary C*-subalgebra lattice $\mathcal{H}(A)$ and various special elements that lie within it. Our recent research aims to rectify this by relating the order structure of $\mathcal{H}(A)$ to the algebraic structure of A in various ways. For example, we characterize ideals as \wedge -distributive elements, which yields the quantale structure of $\mathcal{H}(A)$ purely from its lattice structure. We also show how *-annihilators are separative and how this allows for C*-algebra type decompositions that are completely consistent with the original von Neumann algebra type decompositions. (Received August 10, 2014)