hereditarily locally connected

A continuum X is said to be *hereditarily locally connected*, written *hlc*, provided that every subcontinuum of X is a Peano Continuum.

hereditarily unicoherent

A connected topological space is said to be *hereditarily unicoherent* provided that each of its closed, connected subsets is unicoherent.

homogeneous

Let $\mathfrak{M}$ be a class of mappings. A space X is said to be *homogeneous with respect to* $\mathfrak{M}$ (or shortly $\mathfrak{M}$-*homogeneous*) provided that for every two points p and q of X there is a surjective mapping $f : X \to X$ such that $f(p) = q$ and $f \in \mathfrak{M}$. If $\mathfrak{M}$ is the class of homeomorphisms, we get the concept of a *homogeneous* space.

HU-terminal

A subcontinuum K of a hereditarily unicoherent continuum X is said to be a *HU-terminal continuum* of X provided that K is contained in an irreducible subcontinuum of X and for every irreducible subcontinuum I of X containing K there is a point $x \in X$ such that I is irreducible about the union $K \cup \{x\}$.

hyperspace

Given a continuum X with a metric d, we let 2^X to denote the *hyperspace* of all nonempty closed subsets of X equipped with the *Hausdorff metric* H defined by

$$H(A, B) = \max\{\sup\{d(a, B) : a \in A\}, \sup\{d(b, A) : b \in B\}\} \quad \text{for } A, B \in 2^X$$

(see e.g. [64, (0.1), p. 1 and (0.12), p. 10]). If $H(A, A_n)$ tends to zero as n tends to infinity, we put $A = \operatorname{Lim} A_n$. Further, we denote by $F_1(X)$ the hyperspace of singletons of X, and by $C(X)$ the hyperspace of all subcontinua of X, i.e., of all connected elements of 2^X. Since X is homeomorphic to $F_1(X)$, there is a natural embedding of X into $C(X)$, and so we can write $X \subset C(X) \subset 2^X$. Thus one can consider a retraction from either $C(X)$ or 2^X onto X.

indecomposable

a continuum X is said to be *indecomposable* provided that X cannot be written as the union of two proper subcontinua.