T such that f is an ε-mapping (i.e., $diam^{-1}(y) < \varepsilon$ for each $y \in T$). Let us mention that a continuum X is tree-like if and only if it is the inverse limit of an inverse sequence of trees with surjective bonding mappings. Compare e.g. [Nadler 1992, p. 24].

Using a concept of a nerve of a covering, one can reformulate the above definition saying that a continuum X is be tree-like provided that for each $\varepsilon > 0$ there is an ε-covering of X whose nerve is a tree.

Finally, the original definition using tree-chains can be found e.g. in Bing's paper [Bing 1951, p. 653].

locally

Let $\mathfrak{M}$ be a class of mappings between compact spaces. A surjective mapping $f : X \to Y$ between continua is said to be *locally* $\mathfrak{M}$ provided that for each point $x \in X$ there is a closed neighborhood V of x such that $f(V)$ is is a closed neighborhood of $f(x)$ and that the restriction $f|V$ is in $\mathfrak{M}$ (see [Maćkowiak 1979, Chapter 4, Section C, p. 18]).

locally confluent

A mapping f from a space X onto a space Y is *locally confluent* if, for each point y of Y, there is an open set U containing y such that $f^{-1}(\overline{U})$ is confluent.

local homeomorphism

A surjective mapping $f : X \to Y$ between compact spaces is said to be (see [Maćkowiak 1979, Chapter 3 and 4, p. 12-28]):
– a *local homeomorphism* provided that for each point $x \in X$ there exists a an open neighborhood U of x such that $f(U)$ is an open neighborhood of $f(x)$ and that f restricted to U is a homeomorphism between U and $f(U)$.

local separating point

A point p of a locally compact separable metric space L is a *local separating point* of L provided there exists an open set U of L containing p and two points x and y of the component containing p of U such that $U \setminus \{p\}$ is the sum of two mutually separated point sets, one containing x and the other containing y.

MO-mapping

A surjective mapping $f : X \to Y$ between compact spaces is said to be (see [Maćkowiak 1979, Chapter 3 and 4, p. 12-28]):