Cyborg Landscapes: Relevance to River Restoration in the Context of Climate Change

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RETURN OF THE SIX MILLION DOLLAR MAN AND THE BIONIC WOMAN
Boston: Back Bay Fens, Frederick Law Olmsted -- begun in 1878
Highly artificial, eventually naturalistic -- Olmsted believed that a pastoral aesthetic was better for human health.
Olmsted’s pastoral landscape getting a complete facelift 125+ years later (USACE photo 2015)
The “cyborg” term is useful because it introduces a less polarizing term, allows discussion without triggering dichotomies, maybe even a little humorous.
Complex cyborg landscapes with mechanical parts often need maintenance – like any machine.
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How is the idea of a cyborg landscape related to the idea of a novel ecosystem?
Is target ecosystem altered because of anthropogenic forcing?

If no, go to Historical ecosystem.

If yes, proceed to Time and/or restoration.

The final outcome is Cyborg landscape.
Link to climate change context

**Figure 3.** Mean Annual Air Temperature (MAAT) in Sion (24 km from Arolla) between 1864 and 2014 as deviation from the reference mean established between 1961 and 1990, with the 10 year moving average. The numbers signal the years with available aerial imagery. Data: Swiss Federal Office of Meteorology and Climatology MeteoSwiss (www.meteoswiss.admin.ch).

Hypothesis:

The concept of a cyborg landscape can be used to reflect critically on our intentions for appearance and perception in river and stream projects, without relying on dichotomies that trigger emotional reactions (natural vs. artificial, novel vs. historic).

It offers particular advantages in a time of human-caused climate change.
Urban-rural-wildland gradients of legibility

Allegheny Riverfront Park, Pittsburgh
Urban-rural-wildland gradients of legibility

Orting, WA – new Calistoga Levee
Urban-rural-wildland gradients of legibility

Engineered log jam, Still Creek, OR
Rural example

Gravel bars on the Willamette River, OR

(D. Hulse, photo)
Wildland example

Carbon River Road
Mt. Rainier National Park, WA

(Washington Trails Association, photo)
Wildland example

“...the more advanced a society is, the greater will be its interest in ruined things, for it will see in them a redemptively sobering reminder of the fragility of its own achievements.”
-Alain de Botton

(Washington Trails Association, photo)