

Coastal Landscape Change: Abandonment, Dereliction, Preservation, and Regeneration

Craig Colten

Globally, coastal cities face grim prospects from sea-level rise including the departure of residents and their assets and the dereliction of vacated structures. Innumerable social and environmental consequences follow this widespread and protracted retreat. This project investigates the processes and outcomes of retreat from coastal towns and cities and the social attention to the preservation and protection of threatened landscapes. The foundation for this investigation will be established literature on urban and rural dereliction and the enduring landscapes that result along with the emerging scholarship on retreat from coastal areas. In addition, inquiries into ecological transformations in abandoned human landscapes will provide the basis for merging the thoroughly interrelated biophysical with social processes. To date, these scholarly streams have not been integrated.

Concern with shrinking cities and the removal or renovation of abandoned residential and commercial properties has transitioned from the negative portrayals of “shrinking cities” to an optimistic view of right-sizing or re-greening of cities like Leipzig and Detroit. Urban agriculture and parks are touted as positive alternatives to forsaken real estate. An overarching theme that has arisen from attention to dereliction and economic decline is that they provide an opportunity for landscape restoration and regeneration; this positive treatment often follows the labelling of such places as derelict to justify their rehabilitation for vastly different purposes. Conditions created by sea-level rise will obstruct such positive landscape regeneration in threatened coastal settlements.

Related literature on environmental migration exposes the multiple motivations that propel people and communities to depart established settlements. Droughts such as the American Dust Bowl prompted a voluntary exodus from water-starved farms while massive reservoir projects have forced people to relocate to cities with unfamiliar opportunities for livelihoods. Both gradual environmental change and rapid-onset catastrophes have nudged coastal residents into motion. Adaption and movement of people away from China’s coast accompanied historical changing sea levels. Major hurricanes such as Katrina (2005) and Maria (2017) compelled many residents to leave New Orleans and Puerto Rico, respectively. The departing left damaged homes to the forces of nature, but the literature on this process seldom touches on the environmental ramifications that has followed out-migration.

What distinguishes movement inland due to climate driven sea-level rise is the absence of opportunity for the regeneration of derelict landscapes in situ. Structures abandoned for retreat from coastal waters will follow a different path of dereliction. Scant literature exists on the abandonment of coastal fishing villages in Europe during the Little Ice Age, retreat from rising seas in the Pacific basin, and accounts of town abandonments due to repeated hurricanes in the southeastern U.S. With major urban centers on the front lines of sea-level rise, it will be virtually impossible to move most structures to higher ground or to permit rehabilitation on site. What does the historical record reveal about littoral abandonment and dereliction? How have past communities dealt with the material landscapes they had to leave behind? What are the objects and structures that are valued for some type of protection or movement? How does the pace of change and adaptation influence landscapes? What efforts have been made to reconstruct valued landscapes in destination sites or memorialize places departed?