# Chapter 3 Reclaiming Rivers from Homogenization: Meandering and Riverspheres



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**Abstract** Here I develop a model around two key riverine components: meandering and riverspheres. I show how an analysis of their conceptual and material workings, and their interactive dynamics, facilitates a *revaluing*, *reimagining*, and *rev*italizing of rivers and thus contributes to biocultural conservation and cultural diversification. Meandering and riversphere are presented as a functional, dynamic, nondeterministic model for moving beyond the confines of positivist constructs and assumptions about rivers and how we might live well with them as urban citizens, equitable and sustainable. The Meander River and the Los Angeles River afford a space for exploring rivers in human affairs. The Meander, once a geographic space critical to great historical movements and now nearly erased from the cultural imagination, serves as a profound metaphor upon which to build new old ways of thinking. The little Los Angeles River, once nearly forgotten by the very city that derived its existence from it, flows as an example of how rethinking and reimagining can lead to re-rivering and the redefining of a riversphere.

**Keywords** Meandering · Riverspheres · Urban rivers · *Mētis* · Los Angeles River

"There it is – take it!" With this legendary concise dedication speech, William Mulholland inaugurated the brand-new Los Angeles Aqueduct in 1913 (Mulholland 2000, p. 246). With these words, Mulholland had initiated not only an aqueduct but also an era, a new mentality, a modern lifestyle, a homogenization of water into a resource, and a stratification of rivers into aqueducts and reservoirs. Large-scale water infrastructure projects became paradigmatic of the twentieth century. Wildly diverse water bodies – rivers, streams, lakes, wetlands, estuaries, and aquifers – were pumped, piped, stratified, dammed, diverted, and converted, yielding a staggering loss of ecological and cultural diversity. Just in the realm of dam building, the World Commission on Dams (WCD) estimates that between 1945 and 2000,

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40–80 million people worldwide were evicted to accommodate large dam developments – the majority being indigenous peoples and ethnic minorities (Johnston 2012, p. 304; WCD 2000). Add to this, at least 427 million river-dependent people whose downstream way of life has basically been obliterated by the effect of hydrodevelopment (Richter et al. 2010), driving them to the homogenization of poverty. One can also see water development as one of the major factors in the global decline of both ecological diversity and cultural diversity (Johnston 2012, p. 305). Irrigated agriculture and thirsty cities have dammed rivers or rerouted them into complex river-linking schemes and changed natural lakes and aquifers into shrinking remnants of themselves, heavily impacting biocultural and hydro-ecological diversities. Water flowed into the twenty-first century homogenized as a marketable and transferable economic commodity.

This homogenization and utilitarian approach to water stands as a powerful and useful exemplar of Ricardo Rozzi's (2013) 3Hs model of biocultural ethics: it shows a *habit* (damming, canalizing, selling, and diverting waterways) that leads to homogenous *habitats* (infrastructure, paved-over or concrete "riverbeds," and aqueducts) with a consequent reduction of communities of *coinhabitants*. A 3Hs focus enables a reorientation toward *re*connecting to rivers and *re*valuing, *re*vitalizing, and *re*imagining riverine relations within processes of biocultural conservation and cultural diversification. Such a new cultural habit, including a biocultural mentality, would diversify habitats and broaden the spectrum of coinhabitants' survival and well-being.

In the following I develop conceptual tools to facilitate the emergence of such a new cultural relation in the context of urban rivers in the wealthier or so-called developed world. The twenty-first century is the century of the city. In 2007, the global urban population, for the first time in history, surpassed the rural population. According to the 2014 United Nations report *World Urbanization Prospects*, 66 percent of the world's population is projected to be urban by 2050. The report emphasizes that sustainable development challenges will concentrate in cities and will require integrated policies (UNDESA 2014, pp. 1–7). These trends compel us to rethink urbanism in terms of cities as agents of change rather than mere engines of growth – change for greater social justice and environmental sustainability. How we imagine cities and envision "urban citizenship" (Amin et al. 2000) around water bodies is of critical importance: living at the waterfront has become thoroughly commodified through high-priced property values resulting in gentrification, with cultural homogenization in its wake.

Toward facilitating rethinking rivers, I develop a model around two key riverine components: meandering and riverspheres. I show how an analysis of their conceptual and material workings, and their interactive dynamics, facilitates a *revaluing*, *re*imagining, and *re*vitalizing of rivers and thus contributes to biocultural conservation and cultural diversification. This corresponds with Rozzi's 3Hs model of biocultural ethics but is explicitly rooted in the workings of rivers and the diverse cultural relations to rivers. Thus, urban *re*connecting to the city's river is coconstituted by a joint agency of the river and urban citizens.

### 3.1 Meandering and Riversphere

Meandering refers to the sinuous movement of rivers carving through, and hence creating, a landscape. Because of the complexity of this sinuosity, meandering also stands as a symbol for prototypically nondeterministic systems. Important to my argument for the revaluing of meandering is the etymological root of the word in an actual river, the Meander – now Büyük Menderes – River in Anatolia, Turkey (Fig. 3.1).

In a meandering of history, the Meander River played major roles in antiquity and then all but disappeared from the cultural imagination (Klaver 2014b, 2016). From early modernity onward, rivers were homogenized; meanders were engineered away to facilitate major modern projects, such as commercial river transportation, property boundary determinations, and city planning. By then, meandering had acquired a negative connotation, synonymous with aimless wandering, ambling along a winding path, and rambling through a long-winded argument.

In the course of the latter part of the twentieth century, however, one can see an implicit re-evaluation of meandering (Klaver 2014b, 2016). New understandings of chaos and complexity became widely accepted and led to a revaluing of complexity in the sciences and in the cultural imagination. Meandering as a metaphor for a different sort of thinking is founded in and summarizes the nondeterministic models used in many fields of science that were once the hallmark of linear, positivist thinking.

Meandering makes room for thinking in terms of atmosphere, the less quantifiable three-dimensional aspects of rivers. Rivers are more than blue lines on a map,

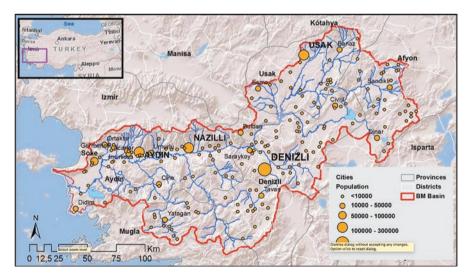


Fig. 3.1 Map of Büyük Menderes River Basin and its main cities. (Source: Handbook of monitoring in the Büyük Menderes River Basin 2015, p. 9)

more than their basins, their watersheds, or drainage areas. They influence the geology, the air, and soil around them, life around them, and cultures around them (Klaver 2012). They create their own hydrosphere, biosphere, and atmosphere. They form intricate networks of relations, conditions of possibilities. I specify the concept of riverine atmosphere as "riversphere" to examine rivers as places of multi-scalar and multi-vector connectivity and complexity.

My sense of riversphere resonates with Gernot Böhme's (1993) concept of atmospheres:

Atmospheres are indeterminate above all as regards their ontological status. We are not sure whether we should attribute them to the objects or environments from which they proceed or to the subjects who experience them. We are also unsure where they are. They seem to fill the space with a certain tone of feeling like a haze. (Klaver 2012, p. 114)

Riversphere also resonates with the notion of ambiance, the cosmopolitan and open ambiance of a city (Amin et al. 2000), and with Nikhil Anand's concept hydraulic citizenship (2017). The notion of riversphere as atmosphere adds social, political, cultural, aesthetic, and emotional dimensions to our thinking about rivers and cities. Riversphere is a thick concept. It enriches the conceptualization of rivers in the cultural imagination, intertwining hydrological, biological, ecological knowledge and experience with lived experience, social cultural and political activities, storytelling, etc. In *Hydraulic City: Water and the Infrastructures of Citizenship in Mumbai*, Nikhil Anand emphasizes the power of stories:

stories have multiple vocalities and multiple sites of production. Unlike discourses, stories are particularly attendant to the diverse locations at which human agency is thwarted or dreams are partially realized. Stories are unstable. ... The telling of stories is always a political act. (Anand 2017, pp. vii–viii)

Anand develops a notion of hydraulic citizenship predicated upon the deep intertwinement, the entanglement, of the dynamic infrastructural water flows in pipes and pumps, with citizens, technicians, politicians, and plumbers: a complex vibrant mix of stories, theories, facts, and experiences.

Theories of complexity are well suited to a twenty-first-century era of high technology, globalization, and urbanization. As John Law and John Urry (2005) state:

With its many convergent, overlapping and irreversible interdependencies "globalization" is remaking "societies" but not in a linear, closed and finalized form. We might see the growth and spreading of theories of complexity as part of, and simultaneously helping to enact, the very processes of global change. (p. 404)

Within a meander and riversphere approach, geometrical and homogenizing models of nature and city planning give way to models of complexity and indeterminacy (Klaver 2017), thereby giving room to biocultural conservation, to multiple models of flow – not just flows of water but of sediments, animals, plants, soils, people, capital, light, luggage, tourists, money, exchanges, and experiences.

Urbanization in a globalizing world comes with many forms of injustices, also the urban reconnecting to rivers in the developed world (Kibel 2007). In the meander model for reclaiming rivers from homogenization, I emphasize the importance

of the river as a space for the commons in the wake David Harvey's (2008) concept of right to the city.

The question of what kind of city we want cannot be divorced from that of what kind of social ties, relationship to nature, lifestyles, technologies and aesthetic values we desire. The right to the city is far more than the individual liberty to access urban resources: it is a right to change ourselves by changing the city. It is, moreover, a common rather than an individual right since this transformation inevitably depends upon the exercise of a collective power to reshape the processes of urbanization (p. 23). The crucial word here is "common." The center of Harvey's right to the city is the shift from an individual right to a common right. Water affords the materiality, medium, and framework or model to think this common, to think the "with."

Where rivers had been foregrounded as anchors of civilization since ancient times, they became backgrounded in the era of modernity, specifically in the industrial era (Klaver 2012, pp. 15–19). Polluted, diverted, and dammed rivers "disappeared" not only in the cultural imagination, but they were literally paved over or dried up because of impoundments or relegated to the unsavory side of town. Once the backbones of towns they became backsides: the unhealthy and unsafe zones, poor people's areas, harbors, dumping grounds, and sites of water on fire. In the second half of the twentieth century, a shift in mentality emerged with the rise of an environmental movement, culminating in growing environmental legislation, including the 1972 Clean Water Act. These developments facilitated a *re*newed foregrounding of rivers in city planning. Rivers meandered back into the cultural imagination (Klaver 2013, 2014b).

Climate change-driven floods and droughts in the twenty-first century have put water back on the map in bold. The cultural realm has been inundated with water; a flood of water-related books, advertisements, brand names, real estate ventures, art projects, and movies – including a James Bond film *Quantum of Solace*. Water has even streamed into the stock market: water stocks, as in infrastructure projects, desalination plants, and bottled water companies, have soared. Where in the "developed world," water had become rather backgrounded in the course of the twentieth century, often invisible in its infrastructural existence, it has come back with a vengeance and has become a solid part of our social-political, economic world and our cultural imagination. Many cities in the industrial world are designing projects to reconnect to "their" river. This bespeaks a shift in what I call environmental imagination: a socially, culturally, and environmentally revaluing of rivers (Klaver 2013, 2014a). River reconnection projects are often driven by real estate and chamber of commerce interests; it is especially in this context that a right to the river is called for to counter the injustices of gentrification, commodification, homogenization, and surveillance (Kibel 2007; Klaver 2018a, b).

In the following I explore the reconnecting of cities to their rivers as a meandering movement, a movement of the again and the *re*-. I first trace the value shifts in the notion of meandering and *re*connect meandering to the history of the Meander River in Anatolia, the Asian part of Turkey. I then turn to an exemplary case of urban *re*connecting to one's river: the City of Los Angeles' *re*vitalizing of the Los Angeles

River. I show how in the *re*conceptualization of the Los Angeles River as well as in its realization, meandering abound, as does the prefix *re*-, the again and again.

How do we reconsider our situation, reimagine our future, facilitate a change in mentality, and foster an environmental imagination? I argue that the prefatory syllable re-functions as catalyzer; it prompts the movement of the again: rethink, reconnect, rebuild, and reconfigure. The prefix re-conveys the creative capacity of meandering and reflects the trajectory from biocultural homogenization to biocultural conservation.

# 3.2 Meandering

Linearity has been the privileged paradigm of progress and its leading model of efficiency; its concomitant mind-set has been goal-oriented or teleological. Meandering, convoluted and seemingly undirected, is seen as not just the opposite of efficiency but as being in its way.

In the course of the second half of the twentieth century, nonlinear systems had become widely accepted in the sciences – physics, mathematics, and engineering. Einstein's theory of relativity and Heisenberg's uncertainty principle redefined a linear Newtonian world. Complexity, chaos theory, and nondeterministic as well as stochastic nonlinear modeling become the state of the art in many fields, including in analyzing the behavior of large-scale natural or social systems in ecology, economy, and politics. Analyses of both practices and systems highlight the importance of field-dependency, of a larger context. These dynamics and an increasingly complex society in terms of media, globalization, and education led to an acceptance of complexity in the cultural imagination and a revaluation of meandering.

Meandering in its material movement conveys the nature of the nonlinear, symbolically and metaphorically. It allows for ambiguity, uncertainty, and hybridity, for that which cannot easily be measured or replicated in laboratory experiments. Its activity of sedimentation and reactivation is based in the unpredictable workings of the material realm not ruled by structures of scheduled time. Meandering is messier than the straight line. It entails a rethinking of progress through complexity.

Revaluing meandering has a train of effects on a variety of concepts and practices. Meandering facilitates a different way of thinking about efficiency, acknowledging that it might be more efficient in the long term to take more time and explore possibilities, just as a river does when it meanders through a basin. It is a slower process than water running through a concrete channel, because it takes more factors into consideration.

Meandering as a method, as a mental strategy, privileges exploration: a messy process, learning from mistakes, and following contingent relations. Many human

<sup>&</sup>lt;sup>1</sup>The Meander and Metis sections are based upon previous writings. See Klaver 2014b, 2016, 2017, 2018a, b

practices develop in sinuous ways: learning through failing, honing a skill, building experience, facing unexpected challenges, and starting anew. Meandering foregrounds the searching in the notion of research. Meandering invokes a model of engineering in terms of ingenuity, a bricolage, and tinkering that acknowledges and interacts with various kinds of knowledge and expertise that is capable of adjusting itself to local situations and demands.

Meandering holds much in common with *metis* – a term describing practical, even cunning, intelligence in ancient Greek culture. *Mêtis* stands for resourcefulness, practical effectiveness, and experiential wisdom. Homer's Odysseus is described as *polymêtis* – experienced, crafty, wily, and cunning.

Meandering invokes, elucidates, and hints at a different imagination, another mind-set, a new epistemological and ontological model, and a cultural and political framework that diversifies what counts as expertise, knowledge, politics, progress, and efficiency. Meandering does not allow for simple analyses or reductionist geopolitical frameworks; it demands ongoing political deliberation. It bespeaks the social-political necessity of taking time to explore terrains, to elucidate attributes, relations, problems, and solutions, as a gateway to new constructs of imagination, to a capacity to aspire (Appadurai 2004).

The movement of meandering echoes an ongoing beginning and reveals how beginning works. Beginning does not take place in a vacuum, is not *a creatio ex nihilo*, but is always building on past experience, and, at the same time, can entail a break with this experience. The emergence and fading of the Meander River in the cultural imagination can itself be seen as a meandering: an appearance and disappearance of the very river that left its indelible mark on human culture by giving its name to the process in which it disappeared again. The self-referential character intensifies the complexity of the process.

#### 3.3 The Meander River

The Meander River (Anatolia, Turkey) once formed a mercantile and military conduit between Europe, North Africa, and Asia. Herodotus mentions the Meander's winding ways, and Strabo has given us the meaning of meandering as wandering. The earliest mentions of the Meander are found in Homer and Hesiod between approximately 750 and 650 BCE, in which the Meander region is portrayed as rather backward.

Not long thereafter the Greeks settled the Ionian Coast including the Meander Delta. The Meander Valley became the vital trading route between the Mediterranean and Asia and emerged as a region of high cultural significance.

We might call this the first meandering of the Meander River in the cultural imagination. From a "rural backwater" to the most precious gateway to the east: "vast caravans of wood, wheat and spices, marble and ivory" followed its course (Seal 2012, pp. 11–12). Trade and armies traversed the basin. The city at the high headwaters of the Meander River, Dinar (Celaenae in the fifth century BCE), was of

strategic importance: its pass connected east and west. Xerxes' Persians headed west in 481 BCE to conquer the Greeks; 150 years later Alexander the Great headed east from Macedonia to conquer the Persians. These classic power shifts between the east and the west kept meandering along the river that gave the process its name (Fig. 3.2).

Near the Meander's mouth on the Aegean Sea was the prosperous port of Miletus. In the sixth and fifth centuries BCE, it was a cultural center, booming and bustling with celebrated musicians, poets, engineers, mapmakers, and philosophers such as Thales, Anaximander, and Anaximenes. Aristotle called Thales of Miletus the first Greek philosopher. Thales considered water to be the beginning, an originating, and guiding principle or *archê* (Fig. 3.3).

The Meander River had created a fertile valley. However, in another meandering twist of history, the very same agricultural development that made the region prosper and provided food for military and mercantile caravans enhanced erosion and silt formation in the basin, and the once so powerful harbor city Miletus became a landlocked town. Over the centuries, the Miletus Bay silted up with alluvial deposits from the very river that nurtured its importance. The economy of the once-prominent harbor city collapsed. Nowadays, the ruins of the city lie some 10 kilometers from the Aegean Sea.

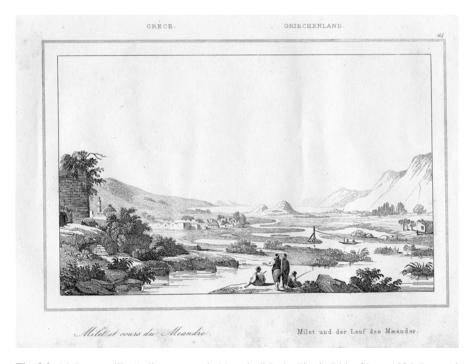


Fig. 3.2 M. Pouqueville, "milet et cours du Meandre," Paris: Firmin Didot frères, 1835. Personal copy of lithograph

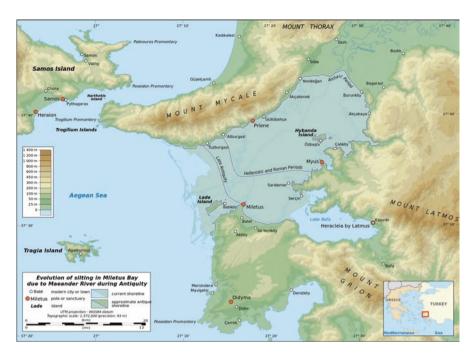


Fig. 3.3 Miletus Bay silting evolution map. (Eric Gaba, Wikimedia, 2009)

#### 3.4 Meander and Metis

The very twisting and wandering character for which meandering became so well-known bespeaks a way of thinking that has been long ignored, belittled, and even considered counterproductive, precisely because it connotes complexity and multiplicity instead of linearity and unity. In its polymorph character, adjusting itself to the circumstances, meandering is structurally comparable to the ancient Greek notion of applied or real-world and practice-based intelligence, *mêtis*.

In Greek mythology Meander and Metis ( $M \tau \iota \varsigma$ ) were brother and sister. According to Hesiod, Thetis and Oceanus had 3000 sons, river-gods or *Potamoi*, and 3000 daughters, the *Oceanid*, each of them patroness for a specific spring, river, or lake. Only the foremost were mentioned by name – among the sons, Meander, and among the daughters, Metis (Fig. 3.4).

Metis was, initially, an important deity, the first spouse of Zeus and represented wisdom, skill, craft, and cunning – a highly praised combination. However, Zeus, fearing her powers and her offspring, swallowed her, but she had already conceived Athena, who was born fully armed from Zeus' forehead. Metis faded from Greek mythology, eclipsed by her daughter, Athena, goddess of wisdom. Metis symbolized cunning intelligence in politics, practice-based knowledge in military art and



**Fig. 3.4** Winged goddess thought to be Metis, in a scene depicting the birth of Athena. Detail on black-figure amphora from 550 to 525 BCE in the collection of the Louvre. (Photograph by Marie-Lan Nguyen)

medicine, and the skills of the artisan crafts; all these forms of experiential wisdom, rooted profoundly in the intimacy of specificity, were called *mêtis*.

In *Cunning Intelligence in Greek Culture and Society*, Detienne and Vernant (1978) argue that *mêtis* escapes simple definition – it "always appears more or less below the surface, immersed as it were in practical operations" (p. 3). Its way of knowing, its kind of intelligence, and

its field of application [are] the world of movement, of multiplicity, and of ambiguity. It bears on fluid situations which are constantly changing and which at every moment combine contrary features and forces that are opposed to each other (p. 20).

According to Detienne and Vernant, *mêtis* is "at the heart of the Greek mental world in the interplay of social and intellectual customs where its influence is sometimes all-pervasive" (p. 3). However, despite its pervasiveness, *mêtis* is never explicitly thematized or analyzed in ancient Greek philosophical texts. While there are many treatises about logic, there are none about *mêtis*. The intellectual world of classic Greek philosophy, in contrast to its everyday mental world, was a dualistic world

with a dichotomy between being and becoming, the intelligible and sensible, and the unchanging one and changing multiple. In this framework of thought, there was no place for  $m\hat{e}tis$ , which "is characterized precisely by the way it operates by continuously oscillating between two opposite poles" (p. 5). The mode of thinking of  $m\hat{e}tis$  does resonate profoundly with pre-Socratic philosophers, specifically with Heraclitus.

The Meander confounded early lawyers concerned with boundaries and scientists concerned with the mechanisms of meandering streams. Meander symbolized irregularity, complexity, ambiguity, and instability. In the latter part of the twentieth century, precisely these "meandering" qualities brought out the value of multiple perspectives in arts and sciences; the weak ontology of becoming became as valuable as the traditionally more privileged strong ontology of being; the inductive, analogical, and emergent as valuable as control and generalizability (O'Connor et al. 2003, p. 99). The understanding of probability and complexity provided new forms of explanation and new ways to operate even within fields long founded on "ideal" characteristics and laws. The meander came to be seen as an irregular waveform, at once subject to and generating random processes and forms.

Various characterizations of ingenuity and of emergent and analogical thinking bear deep resemblance to the *mêtis* of antiquity. Dreyfus and Dreyfus (1986) speak of *expertise* in terms of "intuition [that] is the product of deep situational involvement and recognition of similarity" and note: "how experience-based holistic recognition of similarity produces deep situational understanding" (pp. 29, 32). Similar concepts characterize the notion of ingenuity and engineering design: explicitly pragmatic, contingent, visual in character, satisficing, messy, holistic, whimsical, and learning from failure (O'Connor et al. 2003, p. 104).

Hapgood describes the first phase of engineering design as a "metaphorical traversal through solution space," in which "failure, imagination, and stuckness" are at play. The traversal and design process is "idiographic and unpredictable" and often beset with "painful trials or iterations." For Hapgood the engineer is a "tinkerer who engages in activities within an artistic and subjective context" (Hapgood 1993, p. 96). O'Connor and Wyatt use the term "thinkering" to blend Hapgood's tinkering together with Dreyfus's deep situational involvement into "engineering discovery by doing" (O'Connor and Wyatt 2004, p. 12).

James Scott's seminal work, *Seeing Like a State* (1998), demonstrated the significance of *mêtis* for the social sciences and fields, such as geography and architecture. He invokes the term *mētis* "to conceptualize the nature of practical knowledge and to contrast it with more formal, deductive, epistemic knowledge" (p. 6).

There may be some rules of thumb, but there can be no blueprints or battle plans drawn up in advance; the numerous unknowns in the equation make a one-step solution unimaginable. In more technical language, such goals can only be approached by a stochastic process of successive approximations, trial and error, experiment, and learning through experience. The kind of knowledge required in such endeavors is not deductive knowledge from first principles but rather what Greeks of the classical period called *mētis* (...). Usually translated, inadequately, as "cunning," *mētis* is better understood as the kind of knowledge that can be acquired only by long practice at similar but rarely identical tasks, which requires constant adaptation to changing circumstances. (pp. 177–78)

In cogent prose Scott describes how this kind of knowledge had become backgrounded in modernity with devastating consequences. "The utilitarian commercial and fiscal logic that led to geometric, mono-cropped, same-age forests also led to severe ecological damage" (p. 309). It is this trajectory from homogenization to biocultural conservation into which I insert the importance of *mētis* again, this time in consort with meander.

## 3.5 Re-meandering

Re-meandering has become a popular practice in ecological restoration, even in places where there never were meanders. Rivers are resurfacing in the public imagination as places to congregate, and as cultural and ecological corridors, creating a cultural rejuvenation around urban renewal projects. Also in rural areas, river restoration is underway: the re-meandering of watercourses and restoring of floodplains are being carried out – sometimes even by the same engineering firms that straightened the waterways in the early or mid-twentieth century. New adaptive management regimes are seeking to work *with*, not against, rivers.

Meandering is dependent on the complex interaction of many material vectors. It is a symbol for how power operates in the everyday, lateral traversing, picking up material and depositing, reactivating in the process. Meandering stands for an ethics of adjustment, a politics of engagement, enabling and ongoing deliberation, a sense of experiment: tinkering, "thinkering," emergent, and transient. Meander brings the social, political, technological, and natural together in an ongoing dynamic. The Law of the Meander is not the straight line but the sinuous back and forth, symbolized linguistically by prefix re-, the notion of the again and again, the experience one gets in  $m\hat{e}tis$ , the exploration through wandering, and the essay in Montaigne's original sense of trial and attempt.

Meandering seems to be a slower process than the straight line of progress; yet this is only the case for the simply defined objective. Meandering proceeds by covering more ground, percolating into deeper depths, listening to the murmurs of more voices, being what it is when and where it is observed. Meandering makes room for what cannot easily be measured, what does not want to be measured, for the slow, and for the workings of the material realm not ruled by the structures of scheduled time.

The Meander River no longer functions as a Mediterranean thoroughfare, but the notion of meandering has re-emerged as valuable. Meandering is not a symbol for closure or homogenization but one of ongoing change and exchange, of biocultural conservation.

Perhaps no story better entwines re-rivering, meandering, and environmental imagination of riversphere than that of the Los Angeles River.

# 3.6 Returning to (Reconsidering) Mullholland: Reimagining and Revitalizing Los Angeles Riversphere

"There it is – take it!" Proclaimed Mulholland to 40000 citizens of Los Angeles as water rushed into the San Fernando Valley on that November day in 1913.<sup>2</sup> This was not the water of the Los Angeles River. This water came from afar, from the Owens River Valley, carried across 220 miles of desert through the pipes of the brand-new Los Angeles Aqueduct. Mulholland had supervised the Aqueduct's construction (Mulholland 2000, p. 246.) (Fig. 3.5).

"There it is – take it!" was the inauguration of an aqueduct and of an era, a new mentality, a modern lifestyle. The new supply of water precipitated an era of explosive growth in Los Angeles, transforming it from a stagnating industrial town into a megalopolis, the City of Dreams. The trajectory of water and growth in Los Angeles is an exemplary case of the trajectory of modernity. It exemplifies Ricardo Rozzi's 3Hs model of the intricate relations between habits, habituation, and inhabitants (Rozzi 2013). Los Angeles is paradigmatic for a new modern mentality: between



Fig. 3.5 The Opening of the Los Angeles Aqueduct November 1913. (Source: USC Digital Library http://digitallibrary.usc.edu/cdm/singleitem/collection/p15799coll65/id/8248/rec/21)

<sup>&</sup>lt;sup>2</sup>This section is based upon previous writing with J. Aaron Frith on the history of water supply in Los Angeles. See Klaver and Frith 2014

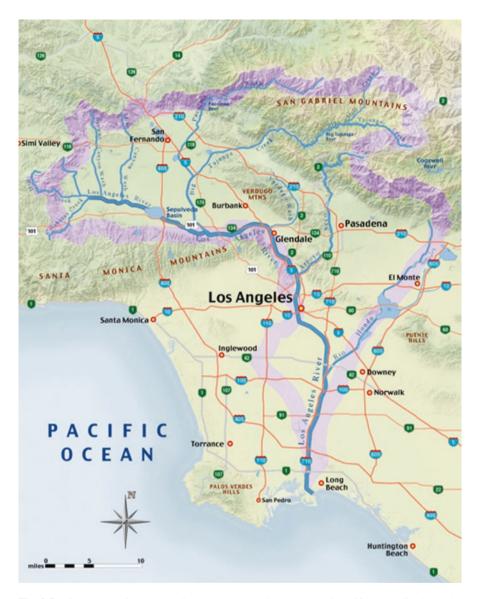


**Fig. 3.6** Channelizing the Los Angeles River. After devastating floods in 1934 and 1938, the US federal government embarked on a massive flood control program in Los Angeles in the 1950s, straightening and channelizing the Los Angeles River with 3.5 million barrels of cement and 147 million pounds of steel. With concrete lining its banks for 94% of its course, the river, once the lifeblood of the city, became a "fifty-one-mile storm drain." (Source: Image courtesy of Brian C. O'Connor, 2014)

1850 and 1970, it took a strictly utilitarian approach to water management, viewing water as a resource to be used as fuel for the urban "growth machine" (Fulton 2001). The city embraced a policy of "urban water imperialism," importing new water supplies from well beyond its city limits (Hundley 1992, p. 120). According to Reisner (1987), "The Owens River created Los Angeles, letting a great city grow where common sense dictated that one should never be" (p. 106) (Fig. 3.6).

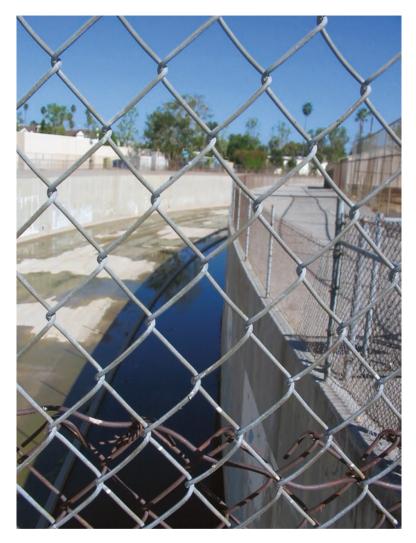
Water made Los Angeles – water mainly imported from rivers elsewhere. Waters of the Owens River, the Feather River, and the Colorado River were redirected in such great quantities that the Colorado River no longer reached the ocean and Owens Lake became a dust bowl. The Los Angeles River – the reason why the city was where it was – had been straightened into a flood control channel, a 51-milelong concrete scar (Price 2008, p. 547) (Fig. 3.7).

The Los Angeles River meanders throughout the story - a small unimposing river, outgrown, overgrown, and straightened and ditched by the city to which it gave birth - then reentering the cultural imagination as a character in its own right (Fig. 3.8).



**Fig. 3.7** The Los Angeles River and Greater Metropolitan Los Angeles. Fifty-one miles long, the Los Angeles River drains the Santa Monica, San Gabriel, and Santa Susana mountain ranges, passing through Glendale, Downtown Los Angeles, and East LA before emptying into San Pedro Bay just west of Long Beach. (Source: EnviroReporter.com LLC 2006–2013)

The Los Angeles River presents us with a green-gray hybrid infrastructure that questions strict separations between human built/technology and nature, between various social-economic cultures, and between different practices. This very hybridity gives promise of twenty-first-century urban rivers made to re-meander,



**Fig. 3.8** *The Forsaken River*. After it was channelized in the 1950s, the Los Angeles River looked more like a "deserted freeway" than a river. Unable to access the river, many Angelenos grew up unaware that Los Angeles had a river at all. (Photograph by Irene J. Klaver)

re-creating a sense of water as common and public space, a riversphere, which expresses a sense of culture as a capacity to aspire (Appadurai 2004). It is this re-rivering, the meandering back of rivers into a riversphere, that put rivers back on the map of our imagination.

In the 1980s Angelenos began to reimagine Los Angeles's original water supply, the Los Angeles River. Many did not even know they had a river in their midst, even though they had, as most Americans, seen striking images of it – in the movies. In

Them! (1954), James Arness encountered giant ants on its concrete banks; in *Grease* (1978), John Travolta drag raced across its paved bed; and in *Terminator 2*, future California governor Arnold Schwarzenegger escaped a killing machine from the future by fleeing down its concrete channel on a motorcycle (Gumprecht 1999, p. 244). People had no clue that this flood control channel was in fact a river. They did not see it as a river; they did not experience it as a river.

In 1985, a group of citizens began to re-envision the Los Angeles River. Poet Lewis MacAdams became fascinated with the river. His work attracted like-minded people, and together they founded the Friends of the Los Angeles River (FoLAR) "to bring the River back to life" (Gottlieb and Azuma 2007, p. 27).

This resonated with an emerging cultural imagination infused with environmental consciousness (Klaver 2014a) and laid the groundwork for a grassroots effort to revitalize the Los Angeles River. Working through FoLAR, community activists began building bike paths, planting trees, and lobbying for riverside parks, all with the intent of reclaiming the river, to make the Los Angeles River "a place of community and ecological revitalization" (Gottlieb and Azuma 2007, p. 24).

By the turn of the twenty-first century, the movement to revitalize the Los Angeles River had drawn the interest of academics and city planners, who crafted plans for an urban revitalization program centered on the river. FoLAR partnered with the Urban and Environmental Policy Institute at Occidental College to produce a series of events called "Re-Envisioning the Los Angeles River," which considered the possibilities of renewal from a multidisciplinary perspective (Gottlieb and Azuma 2007, pp. 32–33). Voters approved bond measures for park and recreational development along the river, and the city established the Ad Hoc Committee on the Los Angeles River to coordinate the efforts of community activists, business leaders, and city leaders to remake the river (City of Los Angeles 2007). Again, it was the inauguration of an era, a new mentality, a re-envisioned lifestyle, this time the era of the river (Fig. 3.9).



**Fig. 3.9** Reimagining the Los Angeles River. In the 1980s, community activists began to reimagine the Los Angeles River, urging city officials and fellow Angelenos to reconnect with the river and to reclaim it as a place of community and revitalization. Their efforts culminated in 2007 when the City of Los Angeles issued the Los Angeles River Revitalization Master Plan. Above, a promotional brochure explains the Plan's "bold vision for transforming the river." (Source: Los Angeles River Project, City of Los Angeles, Department of Public Works, Bureau of Engineering, 2008)

In 2007, the Committee issued the "Los Angeles Revitalization Master Plan," that re-envisioned the river as the "green spine" of the City. Renewing the river would renew the fragmented city: "the revitalized River would foster community identity and civic pride, thereby bringing communities together" (City of Los Angeles 2007, pp. 3–4). Its promotional brochure explains the Plan's "bold vision for transforming the river" and in large font with "re-" italicized: *RECLAIM*, *REVITALIZATION*, *REIMAGINE* OUR RIVER, OUR FUTURE.

Once forgotten, the Los Angeles River re-emerged as a model of urban reclamation and sustainability. Revitalization promised "flood control, cleaner water and cleaner air and desperately needed neighborhood parks, wetlands, and wildlife habitat," not to mention increased "local water supplies" (Price 2008, pp. 551–52).

Even the US federal government recognized the river's potential to re-create public space and reforge communal ties. In 2010, the Environmental Protection Agency (EPA) officially designated the Los Angeles River a "traditional navigable waterway," affording its additional protection under the 1972 Clean Water Act. The Los Angeles River and its community had removed the crust of concrete and invisibility and presented an exemplar of revitalization and renewal.

As urban planner and writer John Arroyo (2010) emphasizes in his thesis *Culture* in *Concrete:* Art and the Re-imagination of the Los Angeles River as Civic Space, "artists have taken to the River as a creative venue. Their actions have redefined the River and have allowed us (and impel us) to re-imagine the River as the civic space" (p. 3). They have flourished in "the un-designed, un-planned, and the spontaneous nature of the River space" independent of any formal urban planning or intervention (p. 3).

River revitalization plans often come with gentrification and a complex redrawing of the public and private: when the old abandoned, neglected, polluted, dangerous riverside becomes "beautified," poor neighborhoods all too often are elbowed out to make place for a new upper middle-class population. As Kibel (2007) states succinctly, with any of these projects, one needs to "consider the questions of who makes decisions about our urban rivers (...) and who ultimately benefits from or is burdened by these decisions" (p. 15). The danger of commodification is a sanitized and controlled space – lacking the conceptual and social "messiness" of abandoned and waste places, which function as meandering space. Foucault calls these places "heterotopias": "unique, nontraditional, and differentiated 'other places' where the constraints of typical regulations and rules were suspended" and which therefore entice the imagination, spontaneous reactions, and transformative powers (Arroyo 2010, p. 66).

It is too soon, yet, to say which ways the reimagined Los Angeles River will flow. Price (2008) sums it up nicely: "the revitalized river will be a product of continuous compromise and negotiation" (p. 552). In fact, this is the definition of the politics of an engaged community that fosters the ongoing deliberative process of civic life, engaging in ongoing debate, meandering like a river. In all its hybridity, the Los Angeles River crosses boundaries of race, class, and human and physical geography, concrete, and earth. As a re-meandering but still mainly concrete river, it is the symbol of a new twenty-first-century paradigm of hybridity in water management

and environmentalism. As such, the river provides a platform for the city to foster a sense of culture as a capacity to aspire (Appadurai 2004).

In conclusion, I return to the pre-Socratic philosopher Heraclitus to summarize our meandering through human relations to rivers. In two fragments Heraclitus observes (Kahn 1979, pp. 52–3): "as they step into the same rivers, other and still other waters flow upon them," and – one of his most famous sayings – "one cannot step twice into the same river." The philosopher reminds us that while we can step into the same location, the same coordinates in a three-dimensional space, we would at different times encounter different water, different sedimentary material being carried and being deposited, and even different materials in different formations on the river bottom. Likewise, other components of the riversphere will have changed, some nearly imperceptibly and some perhaps beyond recognition. While we may not be able to return any river or system of rivers to some former configuration, the words of Heraclitus can help to remind us that we might take steps that reduce homogenization that enable distinctly "other and still other waters" flow through our riverspheres.

The story arc of the Meander River gives us a vivid long view of a river in relation to humans, giving passage to great armies, bearing witness to the beginnings of philosophy, confounding lawyers and geographers, and all but disappearing from memory, yet showing us the value of sinuosity and "messiness." The story arc of the Los Angeles River enables us to reframe our relationships with our rivers and to revitalize the rivers and ourselves. Such stories revalue the practice of *mētis* and meander alike, and with the vigor of renewed imagination, re-rivered rivers meander back as experiential places.

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