

## Research on the Bicycle

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### Abstract

Landscapes are shaped by people. Local cultural narratives have an impact on how we see the spaces around us. At the same time, enjoying landscapes is an individual aesthetic experience. To experience landscape intimately, I spent four months traveling across Europe, much of it on bicycle. I will share my impressions from excursions through the metropolitan regions of Vienna/Austria, Budapest/Hungary, and the Ruhr Region in Germany. I also spoke to educators, planning and design professionals, and members of public administration. Those interview partners explained planning and policy backgrounds, helping me to place my observations into the context of suburban development.

The focus of my presentation will be on exploring the differing meanings of cultural landscapes in a suburban context by comparing European and US narratives of place.

The two very different, but commonly used, concepts of cultural landscape and suburbia have an interesting commonality: While we may have an intuitive grasp of these terms, we might find it difficult to provide a precise definition. However, both terms are intertwined with each other. The promise of open and beautiful landscapes supporting a healthy lifestyle has been and still is the motivation for many people to leave the city and move to suburbia in the first place. Ironically, these culturally appreciated landscapes were the first casualties of suburban sprawl.

My case studies of the metropolitan regions of Vienna/Austria, Budapest/Hungary, and the Ruhr Region in Germany, along with my case studies from New Jersey will be used for suggestions for adaption of environmental planning tools in New Jersey with respect to our home rule traditions. I argue that a cultural landscape perspective on suburban situations can improve quality of life for residents along with positive impacts on long-term resiliency and sustainability.

### Introduction

My goal of the research on the bicycle was to gain experiential insights into the cultural interpretations of suburban landscapes within the four above-mentioned metropolitan regions. The findings will inform a larger cross-cultural discussion on the possible role of suburban cultural landscapes in environmental planning and design. Supported by background research on the relevant concepts of "culture and place," this firsthand experience provides insights into the current evolution of the notion and importance of cultural identity and its impact on a diversified understanding of sense of place. Experiential research of this kind contributes to the overall project of developing cultural landscape approaches intended to create meaningful links to the past, while being inclusive of the cultures and identities of current and future (cf. Wiechmann 2025) residents when expanding or remodeling suburban areas. Outcomes will include suggestions for modifications to, or changes of, environmental planning tools with respect to the local planning systems and traditions.

### The Method of Reading Places

The experience of cultural landscapes is closely linked to one's own national, ethnic, or cultural group and can be described as the connection between a space and a narrative. From a humanistic-phenomenological approach (Raymond 2021), this narrative can evolve through centuries and provides the impression that places have genuine meanings. Since commodification in a capitalist(ic) system is threatening the physical existence of these places, historic preservation and other institutionalized measures are established to maintain the character of these sites. For example, the American National Park System was created when the aesthetic experience of the narrative of *nature as a space of opportunity* —the belief that the pristine nature of the “virgin continent” was God’s gift to the chosen people (Olwig 2005, 316; Hall 2005, 36) to fulfill the pursuit of happiness—was under threat of getting lost because the American West was settled and divided in the late nineteenth century. By contrast, the 2017 Hungarian National Landscape Strategy may serve as an example for institutionalized efforts to preserve an *anti-modern ideal of a Hungarian cultural landscape* that is closely linked to national identity. While the American nature narrative is ahistorical in celebrating individual freedom and opportunity, the Hungarian narrative is embedded in traditions inherited from the forefathers. Although the US and European narratives are obviously contradicting each other (individual freedom versus bonds to tradition), government institutions make sure that residents and visitors will have the opportunity to experience these established long-term narratives when experiencing the landscape. In short, the Hungarian (and for that matter Central European) landscape preservation and landscape planning policies value cultural landscapes that show human-nature interactions through traditional agriculture and craftsmanship. American environmental policies, on the other hand, focus on the preservation of pristine nature; landscapes that show a human touch are only considered worth preserving as cultural landscapes if they show explicit historic significance.

As a countermovement to the humanistic-phenomenological approach to meaning of place, as described above, Human Geography developed a progressive-relational approach in which short-term narratives of place identity evolve through social interaction at a particular location (Raymond 2021). The meaning of these everyday-places is usually not protected by institutions but may occur within a social group and may disappear when the group changes. For example, the local identity of the Hungarian community in New Brunswick, New Jersey, dissolved when these emigrants assimilated to the American mainstream or moved away (Tamas 1997).

Exploring experiential traces of well-established long-term narratives of place and evolving short-term place identities was the goal of the research on the bicycle. The method of reading a landscape as a holistic experience of an area and as inspiration for further investigation has a long tradition in geography and the study of landscape. Alexander von Humboldt travelled the world and considered the aesthetic experience of natural scenes as stimulant (*Anregungsmittel*) for scientific research on natural phenomena (Humboldt, et al. 2004, 189). This approach was further developed by German geographers in the 1920s (Gradmann 1924), and was brought to America by Carl Sauer (Groth and Wilson 2003). Landscape studies in the tradition of J.B. Jackson built on that approach. Jackson traveled the US on a motorbike, documenting his impressions of everyday landscapes in essays (Jackson 1970, 1980, 1984) in which he expressed appreciation of the everyday landscape of regular people. The art of seeing was further refined by John Stilgoe, who made the point that the firsthand experience requires walking or bicycling instead of using the car because a car moves

too fast and “insulates the motorist from every sort of nuance (Stilgoe 1998, 9). It is noteworthy that the holistic landscape experience was a core aspect of establishing a formal landscape planning framework in Central Europe while American landscape studies never made it into a formalized planning process.

The German geography and landscape planning discussion of the 1980s criticized the holistic landscape experience as an anti-modern and politically conservative approach, not suitable for progressive planners. Instead, they focused on tracing the tracks of human-nature interactions of current residents, considering this as a tool of empowerment for underprivileged groups. One example are the methods developed by Dieter Kienast and other faculty at Kassel University in Germany in the 1990s, in which the firsthand experience of reading places through walking became integrated into their planning and design methodology (Freytag 2014). Interestingly, J.B. Jackson’s everyday landscape narratives gained traction in the German landscape architecture and landscape planning discussion in the 2000s because his work allowed for a holistic view on landscape without any anti-modern, politically conservative bias (Höfer and Trepl 2010). The idea of the act of walking as part of the iterative process of landscape design was further developed by Henrik Schultz (2014). In his approach, walking with team members and local stakeholders supports an intensive perception of space and the interaction between participants.

This is the background of my own methodology. As a starting point, I selected locations I knew reasonably well from previous visits. From additional literature review I formed the assumption that each specific site adds a particular aspect towards the goal of developing a concept of suburban cultural landscapes and how that concept plays a role in suburban planning and design. This preparation made me an informed observer, equipped to reflect on my perception of the different place narratives. Each day when I prepared my route and hopped on the bike, I had already formed an understanding of what to expect. The philosopher Hans Georg Gadamer calls this a “preconception,” which is the beginning of the iterative process of understanding, discovering and creating meaning through one’s own interpretation. Gadamer described this iterative process of understanding, of reading and interpreting a text, as a *Hermeneutic Circle* (Gadamer 1990). a method I applied to the reading and understanding of places.

This iterative approach also guided my travel itinerary: I started with two weeks in Budapest, followed by three weeks in Vienna, and three weeks in the Ruhr Region. These travels helped to modify my methods and sharpened my eye. Then, I returned for three weeks to Budapest followed by two more weeks in Vienna. - A further source of information were 25 informal interviews with relevant actors in local environmental planning. Because these individuals were interviewed in their official capacity as university professors, design professionals, and planning officials, no submission to the Rutgers Institutional Research Board was required.

Modes of exploration:

- Individual bike tours
- Guided bike tour (Ruhr Region)
- Individual public transportation tours
- Individual rental car tour (once in Budapest)
- Guided car tours (Ruhr Region)

On site, I produced photographic imagery and written notes documenting the “feel” of the places visited, along with noting apparent qualities and deficits from a planning and design perspective. After each field trip, I organized images and notes in a PowerPoint presentation, with a selection of the 6 most characteristic photographs on one slide for one location. This allowed me to revisit and compare impressions. Below, I will provide some brief examples of applying my field work method and share my “preconceptions” and known landscape narratives that guided my visual experiences.

### Place Experience

The Danube River is a significant landscape feature in the Greater Budapest Metro Region in Hungary, part of the Eastern Block before 1989. After the fall of the Iron Curtain a shift occurred from socialist central planning to capitalist land use. Today, Budapest’s historic downtown riverfront is considered a UNESCO World Heritage site, while overall Hungarian cultural landscape preservation has a strong focus on tourism and national identity. Budapest comprises a concentric city region, where former rural villages are now home to commuters. The Hungarian government has introduced a capital planning region; however, the administrative structure for implementation of development goals appears to be lacking.

Colleagues at the Budapest Institute of Landscape Architecture, Urban Planning and Garden Art suggested that I visit Budajenő because this village is an example of gentrification in the outer Budapest suburbs, a formerly rural village that evolved into a pleasant commuter town. The town appears to be in good shape: It has a new library, well-restored historic cellars along its main street, and a memorial for the uprising against communist rule in 1956. An old fire station turned into a nice coffee place with young professionals working quietly on their Macs, next door children were chatting when leaving the local school. The word goes that the mayor’s excellent political connections helped with the funding. Budajenő’s homogeneous local character is an outcome of the borough’s design guidelines. Over the very short period of two years, similar guidelines were prepared for every hamlet, town, and city across Hungary. Mostly architects conducted historic research and prepared design suggestions following historic precedent. These guidelines are one example of integrating aesthetic ideals of an idealized past into planning and policy practice. When walking around town, I came across several new buildings following these design guidelines. Downtown, a posted map of the village caught my eye, and the road pattern in the northwest of town triggered my interest because they looked like suburban cul-de-sacs, just as I know them from New Jersey.

Following the map I discovered an ongoing suburban expansion, apparently outside the design guideline area. Most new homes were suburban bungalows, some larger mansions at the forest edge. It is noticeable that the forest itself was not touched by any settlement. In New Jersey, by contrast, large homes could have expanded into the woods. My Hungarian colleagues explained that forests enjoy a very high level of protection because they were not re-privatized after 1989 and are still owned by the state. This goes hand in hand with the Hungarian National Landscape Strategy: "Landscape is a basic component of the natural and cultural heritage that contributes to the formation of local cultures and to human well-being and has a significant role in the development and consolidation of national and local identity" (Hungarian Ministry of Agriculture 2017). This thinking also guides the protection and development of cultural landscapes in the

Budapest metropolitan region.

The Greater Vienna Metro Region in Austria is a concentric city region that has expanded into formerly rural areas. Historic cultural landscape elements are now part of the urban and suburban fabric. The preservation of large swaths of forest in 1912 (Wienerwald/Vienna forest) is the foundation for an open space system that extends beyond city borders along the Danube River. A small but effective office is in place to moderate communication between the city of Vienna and municipalities of the surrounding federal state of Lower Austria (Stadt-Umland-Management/City Suburbia Management). However, Vienna presents a picture-perfect example of the city-rural juxtaposition, of a narrative identifying the city with urbanites as very different from villages with country folks.

This became apparent on a bike tour south, along the River Danube and continuing through farmland and villages of the Marchfeld region. Starting downtown, I followed a section of the Danube flowing in a canal system for flood control. Passing through an industrial zone with refineries, I reached the preserved Danube Wetlands, a National Park with great touristic infrastructure including a public bathing site. Leaving the park behind, I entered the rural, productive agricultural landscapes of the Marchfeld, dotted by historic villages. Groß-Enzersdorf is among those villages that are well connected to Vienna with public transit and roads. The easy commute makes it possible to live in a rural setting while earning money in the city. Well-preserved farms and state-of-the-art homes connect tradition and modern living. Overall, the Marchfeld region still is an important agrarian landscape with significant vegetable production and a rich history.

On this 40 km (25 miles) long bicycle journey, I experienced open land between villages, feeling the heat on a summer day. Rows of wind farms in the distance reminded me that this is not arcadia, but 21st century Austria. Entering the village of Rutzendorf a bit more south, I rode along a main street with a seemingly more rural character than Groß-Enzersdorf, with old farm houses and a church—the bells of the clock ringing for midday. But around the corner, there were new single-family homes. The extensive impervious surface of new roads and driveways are examples of stormwater management challenges in suburban expansion. Here too people will most likely work an urban job while living in a rural setting. Leaving the village and continuing the ride again into the open agrarian landscape, I passed beautiful flower meadows, the outcome of a European Union meadow strip program. An old wayside shrine along the path illustrates the local relationship between nature and religion. My last village before returning to Vienna was Raasdorf. Here, I bought fresh strawberries at a farm, a nice firsthand farmland experience. Technically, all these villages are suburbs of Vienna, but they made me feel as if I was riding through quaint farmer's villages.

Later, several local experts told me that many villagers see the city critically and do not want higher-density residential development in order to preserve this rural appearance. Many former urban dwellers moved here because of the rural, conservative character. And the more people come, the less rural it gets. Still, my bike tours around Vienna strengthened my impression of a significant rural-urban juxtaposition.

The German Ruhr Region was selected because it shows significant similarities with central New Jersey: Industrial, commercial, and residential areas are intertwined with farmland and

transportation infrastructure. Local governments in the Ruhr Region, however, addressed the challenges of de-industrialization through innovative urban planning and landscape architecture: “design by event.” Facing the challenges of industrial decline and the resulting abandoned sites, landscape architects experimented by way of the international building exhibition IBA Emscherpark 1985-1995 with the integration of industrial relics into the design of parks and landscapes. The projects and discussions associated with the IBA fostered the idea of a post-industrial landscape that includes industrial artifacts in landscape design. The Landscape Park Duisburg-Nord stands for that paradigm change (Höfer 1998) (Dettmar 1999) (Weilacher 2008) (Latz 2016). Today, the post-industrial landscape and the appreciation of a “fourth nature” that establishes on derelict land (Höfer and Vicenzotti 2019) is a main attraction for the local tourism industry and has been serving as a starting point for both business and residential developments. Follow-up projects included the European Capital of Culture 2010, the city of Essen’s receipt of the award for European Green Capital 2017, and the International Garden Exhibition (IGA) that is scheduled to take place in 2027 in the entire region.

The best way to experience this post-industrial landscape is by utilizing the extensive recreational bike system, mostly developed on former railroad lines or along waterways. The system touches on UNESCO World Heritage sites, including the former coal mine Zeche Zollverein, public parks along the revitalized River Emscher, and passing by artificial heaps formed by material extracted when mining for coal. Those heaps became landmarks through land art installations at the top, adding to the unique character of this post-industrial cultural landscape. On one of my numerous bike rides, I passed by a suburban mosque, a reminder that our population is changing and that any consideration of cultural landscape must reflect today’s diverse cultures.

Parts of the Ruhr Region bike system are comparable to the American rail-to-trail program. Though most US programs are based on residents’ initiatives supported by NGOs, the planning of German bike systems has a much stronger state and federal government involvement. New examples for this state level bike network planning are high-speed, long-distance bike paths for commuters. They are not designed for leisure, but for people getting to work. Hence, the administrative unit for these dedicated bike paths lies not with the parks or recreation department but with the state department of transportation. This department follows the approach for designing roads, but in this case for bicycles. Experiencing the Ruhr Region and reading the often post-industrial landscape narratives leaves me with the encouraging thought that a former industrial region a reputation of decline and pollution can turn into a meaningful cultural landscape.

These brief examples of my field work in the metropolitan regions of Vienna/Austria, Budapest/Hungary, and the Ruhr Region in Germany illustrate how the low speed when riding a bicycle, the experience of smells and sounds, contribute to a first-hand landscape experience. Comparing my previous knowledge of the three sites with input from local experts made my individual aesthetic experience more meaningful, producing examples of the iterative process of reading landscapes.

### Findings and Outlook

The overall goal of my research on the bicycle was the observation and documentation of suburban cultural landscapes, using the inspiration of the case studies for refinement of the terms cultural

landscape and suburbia.

Through discussions of my observations with local experts it became apparent that the idea of landscape and the definition of cultural landscapes has a definite impact on planning practice. The rural-urban divide in Vienna is hindering collaboration and leads to increased impervious surface through the construction of single family homes. The Hungarian National Landscape Strategy applies a traditional image of cultural landscapes. The celebration of post-industrial landscapes is a core component of local identity in the Ruhr Region.

In many conversations, colleagues pointed out that the suburban expansion constitutes the main threat for cultural landscapes. The numerous newcomers to Vienna require more homes and infrastructure, adding to the development pressure. At the same time, the informal collaboration between city and municipalities seems to be a promising approach to guide development. In Budapest, the Communist-period moving restrictions and the post-communist privatization were drivers of suburbanization. Assessing the Budapest Region Plan will need more research, but the overall strict protection of forests is definitely very helpful for slowing the suburban growth. Housing and infrastructure development in the Ruhr Region followed the demands of large-scale industries, while de-industrialization opens opportunities for more sustainable designs within the intertwined suburban fabric.

One outcome of my research on the bicycle shows that good pedestrian and bicycle infrastructure supports the landscape experience at human scale and human speed. Hence, well-developed walk and bike systems can help long-term residents, immigrants, and visitors to develop an idea of place, a sense of home or belonging to this place or even local pride. This kind of (immediate) experience has the power to bridge national, ethnic, or cultural differences. It can forge a connection between a space, its residents and its ongoing narrative. A second outcome of my current research is the collecting of relevant material for a discussion of opportunities of cultural landscapes in the suburban context. Seeing and experiencing landscape – on a bike or on foot – on well- planned and well-designed paths can open a window of opportunity to connect the many ideas on what constitutes suburbia and cultural landscapes. For the scientific community and the people.

## References

Dettmar, J. G., Karl (ed) (1999). *IndustrieNatur. Ökologie und Gartenkunst im Emscherpark.* Stuttgart, Verlag Eugen Ulmer.

Freytag, Anette 2016: Dieter Kienast – Stadt und Landschaft lesbar machen, Zurich: gta

Gadamer, Hans-Georg 1990: *Wahrheit und Methode. Grundzüge einer philosophischen Hermeneutik.* 6. Aufl. (durchgesehen). Tübingen.

Gradmann, Robert 1924: Das harmonische Landschaftsbild. *Zeitschrift der Gesellschaft für Erdkunde zu Berlin.* 55 (3/4):129-147

Groth, Paul; Wilson, Chris 2003: The Polyphony of Cultural Landscape Study. In: Groth, Paul; Wilson, Chris: *Everyday America. Cultural Landscape Studies after J.B. Jackson.* Berkley. pp. 1-22.

Hall, Marcus 2005: *Earth Repair. A Transatlantic History of Environmental Restoration.*

University of Virginia Press. Charlottesville

Höfer, W. (1998). Post-industrial Landscape. Urban ecology. J. Breuste, H. Feldmann and O. Uhlmann. Berlin ;, Springer-Verlag: 671-675.

Höfer, W. and V. Vicenzotti (2019). Post-industrial landscapes: Evolving concepts, Routledge: 499-510.

Höfer, Wolfram; Trepl, Ludwig 2010: Jackson's Concluding With Landscapes – Full Circle. In: Journal of European Landscape Architecture. 10 (2). 2010. 40-51.

Humboldt, A. v., O. Ette, O. Lubrich and H. K. W. Berghaus (2004). Kosmos : Entwurf einer physischen Weltbeschreibung. Frankfurt am Main, Eichborn Verlag.

Hungarian Ministry of Agriculture 2017. National Landscape Strategy (2017-2026). Written under the coordination of the Department of National Parks and Landscape Protection, Ministry of Agriculture.

Jackson, J. B. (1980). The necessity for ruins, and other topics. Amherst, University of Massachusetts Press.

Jackson, John Brinckerhoff 1970: Landscapes. Amherst.

Jackson, John Brinckerhoff 1984: Discovering the Vernacular Landscape. Yale University Press. New Haven, London.

Lachmund, J. (2013). Greening Berlin : the co-production of science, politics, and urban nature. Cambridge, Mass, MIT Press.

Latz, P. (2016). Rust Red. Landscape Park Duisburg Nord. München, Hirmer.

Olwig, K. (2002). Landscape, nature, and the body politic : from Britain's renaissance to America's new world. Madison, Wis. ;, University of Wisconsin Press.

Olwig, Kenneth R. 2005: The Landscape of 'Customary' Law versus that of 'Natural' Law. In: Landscape Research; Vol. 30, No. 3, 299-320, July 2005.

Raymond, Christopher M., et al. Changing Senses of Place : Navigating Global Challenges. Edited by Christopher M. Raymond et al., Cambridge University Press, 2021.

Schultz, Henrik 2014: Landschaften auf den Grund gehen. Wandern als Erkenntnismethode beim Großeräumigen Landschaftsentwerfen. Jovis Berlin.

Steiner, F. R. (2008). The living landscape : an ecological approach to landscape planning. Washington, DC, Island Press.

Stilgoe, John R. Outside Lies Magic: Regaining History and Awareness in Everyday Places. New York: Walker and Co., 1998.

Tamas, Tamas. "Evolution of a Global Community: New Jersey Hungarians in a Trans-National Ethnic Network." International Journal of Politics, Culture, and Society 10, no. 4 (1997): 615–34. <https://doi.org/10.1007/BF02098735>

Weilacher, U. (2008). Syntax of landscape : the landscape architecture of Peter Latz and Partners. Basel ;.

Wiechmann, Thorsten 2015: Tomorrow's Climate Will Not Meet Today's Population -

Interactions between Climate Change and Demographic Change in Cities. In: Höfer, Wolfram; Gallagher, Frank; Lindberg, Arianna; Oberg, Angela, Schlecht, Sebastian (edit.): Climate Bridge. An international perspective on how to enact climate action at the government public interface. Rutgers University Press. 178-191.