

Project Summary: Nursery Practices and Spatial Justice

Abstract

In landscape architecture, plant nurseries are important partners in the creation of vibrant and ecologically diverse landscapes. Rather than simply supplying plants as construction materials, the operational goals of commercial nurseries affect the ability of designers to create biodiverse, sustainable, and place-appropriate projects. Retail nurseries and garden centers are also sites of public interactions: plant availability and supportive programming influence which plants and ecologies feature in public imaginaries -- and which do not.¹² How can contemporary design practice mobilize these relationships for good? Could they be fertile ground for spatial justice?

In the United States, both nurseries and landscape design are complicit in patterns of inequality. During the 20th century, regulation of the emerging nursery industry disempowered communities by defining who could sell, raise, or care for plants in 'public' spaces.³ Municipal nurseries and street-tree planting campaigns sowed the seeds for racial and socioeconomic disparities in urban canopies that persist today.⁴⁵ In many cases, beautiful and healthy landscapes in some neighborhoods were and are created at the direct cost of others.⁶ Today, the nursery industry is heavily dependent on shrinking water sources, polluting synthetic fertilizers and single-use plastics, and an increasingly vilified migrant workforce.⁷⁸ Creating resilient and just built environments means contending with these past and present impacts of commercial(izing) plant production.

This research explores how plant cultivation practices can promote social and spatial justice. It traces how commercial nurseries became a dominant form of plant cultivation in the U.S. and highlights plant growers and growing spaces that operate outside of this model. Historical and case study analysis of resultant material lifecycles reveal strategies for application in design practice. What can landscape architects learn by broadening our definitions of 'plant nurseries'? How might we engage with and incorporate plant cultivation within our projects to advance spatial justice and equity? These strategies are distilled into a speculative, 'kit of parts' for reclaiming plant cultivation as community organizing, resistance, and rehabilitation.

¹ Hartigan, John. "Plant Publics: Multispecies Relating in Spanish Botanical Gardens." *Anthropological Quarterly* 88, no. 2 (2015): 481–507. <https://doi.org/10.1353/anq.2015.0024>.

² Mastnak, Tomaz, Julia Elyachar, and Tom Boellstorff. "Botanical Decolonization: Rethinking Native Plants." *Environment and Planning D: Society and Space* 32, no. 2 (April 2014): 363–80. <https://doi.org/10.1068/d13006p>.

³ Bloch, Sam. "Shade." *Places Journal*, April 23, 2019. <https://doi.org/10.22269/190423>.

⁴ Locke, Dexter H., Billy Hall, J. Morgan Grove, Steward T. A. Pickett, Laura A. Ogden, Carissa Aoki, Christopher G. Boone, and Jarlath P. M. O'Neil-Dunne. "Residential Housing Segregation and Urban Tree Canopy in 37 US Cities." *Npj Urban Sustainability* 1, no. 1 (December 2021): 15. <https://doi.org/10.1038/s42949-021-00022-0>.

⁵ Sonja Dümpelmann, *Seeing Trees*. New Haven: Yale University Press, 2019.

⁶ Taylor, Dorceta. *Toxic Communities: Environmental Racism, Industrial Pollution, and Residential Mobility*, 2014. <https://www.degruyter.com/isbn/9781479805150>.

⁷ Dennis, Jennifer H., Roberto G. Lopez, Bridget K. Behe, Charles R. Hall, Chengyan Yue, and Benjamin L. Campbell. "Sustainable Production Practices Adopted by Greenhouse and Nursery Plant Growers." *HortScience* 45, no. 8 (August 2010): 1232–37. <https://doi.org/10.21273/HORTSCI.45.8.1232>.

⁸ Velandia, Margarita, Amy Fulcher, Kimberly L. Jensen, and Susan M. Schexnayder. "Labor Use and Challenges Faced by Tennessee Nursery and Floriculture Producers," n.d., 5.

Proposed Research Methods:

- 1) Historical research tracing the emergence of plant nurseries as mechanisms for producing 'ideal' plants to specifications and at scale, and how this mode of production facilitated inequities in the built environment.
- 2) Case study analysis focusing on how key contemporary examples affect social and spatial justice while operating within the current political-economy.
- 3) Design toolkit offering a 'kit of parts' for how incorporating or attending to nursery practices can advance equity in GGN projects based on project type, scope, and/or beneficiaries.

Quarterly Deliverables:

Fall 2021: Historical Essay

- Project Abstract/ Summary
- Historical Essay
- Determine case study analysis and documentation methods - e.g. photographs, field sketches, interviews, ethnographies) for Winter 2022
- Select and arrange site visits to local case studies for Winter 2022

Winter 2022: Case Studies

- Fieldwork at selected case study nurseries
- Analysis and summary of findings for quarterly ARC presentation
- Presentation and design charrette at GGN

Spring 2022: 'Kit of Parts'

- Develop typology of plant cultivation practices
- Graphically represent case study findings and typology.
- Write and compile ARC report.