Weaving a Holistic Landscape Architecture and Occupational Therapy Web

text by Amy Wagenfeld

66

There is good reason to recognize that the synergy between the professions warrants further formal exploration for why including occupational therapy on landscape projects to enhance the usability of outdoor spaces is a valuable and beneficial idea.

Before starting to write this article, I wondered how many research articles had been published that explicitly explore an interprofessional relationship between landscape design and occupational therapy. As an occupational therapist with a strong background in human development, my curiosity comes from many years of consulting with landscape architects and designers to create therapeutic and healing outdoor spaces for people across the life course. In my work I have long recognized (and promoted) that occupational therapists and landscape designers share common perceptions on how user-centered design can benefit the people and communities they serve. But, because we are differently trained, and learn diverse theories, terminology, and measurement tools, I believe that shared knowledge is not readily apparent to either the landscape design or occupational therapy community. Hence communication is limited. Yet, there is good reason to recognize that the synergy between the professions warrants further formal exploration for why including occupational therapy on landscape projects to enhance the usability of outdoor spaces is a valuable and beneficial idea.

Why occupational therapy? Whether it is knowledge on how the body and mind function due to various disabling conditions and diseases, or the roles and occupations that people attribute as meaningful and purposeful parts of their daily lives, occupational therapists can and do communicate and advocate for the needs of users in the environments in which they live and function (Wagenfeld et al., 2017). These unique skills prepare occupational therapists to contribute to outdoor space design in ways that are both holistic and grounded in evidence (Amiri et al., 2017). One portal of our contribution is through consideration of the complex relationship between the client [an individual, group, or population], the activity and use of space [occupation], and the environment in which the activity takes place (AOTA, 2022). We are trained to understand the importance of a good fit between the person and environment, and occupation (use of the space) and can use what we know to effectively partner with landscape design teams to create outdoor environments that enable users of these spaces to do what they desire and need to do, all the while promoting health and well-being (Ainsworth & de Jonge, 2014; Canadian

Association of Occupational Therapists, 2013; Layton & Steel, 2015). We call this the personenvironment-occupation (PEO) fit. Collectively, this POE relationship enables participation or 'doing.' Summarily, occupational therapists have expertise in knowing how people (Person) function in and interact with (Occupation and Participation) their many environments (Environment) (Wagenfeld et al., 2017). The connection comes, as Lenker and Perez suggest, where design professionals and occupational therapists "intersect with their shared goal of maximizing human performance by minimizing unnecessary environmental complexity.... [through reduction of] physical, sensory and cognitive demands of the physical and social environment" (2014, p. 13).

Despite these important points of intersection, in doing a literature search I discovered a dearth of evidence in support of collaboration specifically between landscape architecture/design and occupational therapy. There is far more literature that promotes the value of occupational therapy and design collaboration with industrial design, and to a lesser extent, architecture. Three noteworthy exceptions in landscape design are Kelsey Moody's 2022 Master's (landscape architecture) thesis, A Study into the Application of Occupational Therapy Theoretical Framework in a Public Space Design for Kirkwood Neighborhood Park. Ms. Moody eloquently made the case through, among other things, comparing our theoretical foundations for a common ground from which occupational therapy and landscape architecture can and should proceed in designing community outdoor spaces together that meet the needs of the widest range of people regardless of age, ability, socioeconomic, physical, and mental health status. With full disclosure, I served on Ms. Moody's thesis committee and had the pleasure of being part of a dynamic team to help her develop a fulsome case for the need and value of an occupational therapy and landscape architecture/design, interprofessional approach to design.

Ulrika Stigsdotter's 2005 dissertation, Landscape Architecture and Health: Evidence-based Health Promoting Design and Planning, and an article written by Dr. Joanne Westphal in 2003, A Reflection on the Role of the Landscape Architect in American Health-care Delivery are two other evidence driven publications that link landscape architecture and occupational therapy.

When referring to her pilot (dissertation) project. Dr. Stigsdotter shared a salient point,

My greatest lesson from the pilot project was the realization that designing people's living environments, particularly environments for the weak and ailing, entails an enormous responsibility... I had my strongest experience from the pilot project while sitting with the nursing staff and together sketching a plan for Solberga Park. I realized then that I would never find their insights in books and that collaboration with nursing staff is crucial when designing gardens and parks for different patient groups. One clear result of the collaboration between the various professions is the bridge over the brook through Solberga Park, which involved the joint efforts of a physiotherapist. an occupational therapist, a landscape architect and a carpenter. It is not only a bridge, but also a fine example of universal design, as people can on equal terms - cross over the bridge regardless of whether they need a wheelchair, a walker, the support of a railing or are fully physically mobile (2005, p. 9).



The interprofessional collaboration between occupational therapy and landscape architecture provided an optimal balance of design and human function.



Top Left / Fig 1.

Fisher House VA Puget Sound Healing Garden Equitable approach to raised bed gardening. (Image credit: Daniel Winterbottom)

Bottom Left / Fig 2. Kline Galland Home Marty Bender UnfoldUnfurl Family Garden. (Image credit: Amy Wagenfeld)

Right / Fig 3. Els for Autism Sensory Arts Garden. (Image credit: Dirtworks, PC)

In Dr. Westphal's 2003 article, she indirectly reflects on the ways in which data can and must be collected to quantify the value of therapeutic outdoor spaces. Specifically, the results of therapies facilitated outside, such as occupational and physical therapies are necessary to record and determine goals and outcomes.

Other articles, which are designated with an asterisk in the reference list below, are the only others I was able to find that directly address weaving a landscape architecture and occupational therapy web. These articles are ones I have written with landscape architects or other occupational therapists. I think this lack of clearly identified collaborative value in the literature is concerning, because this is what can happen when the web is woven.

Academic projects can be enriched when design and occupational therapy students collaborate on projects intended to improve the human experience. For example, two design build projects conducted through the University of Washington Department of Landscape Architecture exposed students to the importance of what occupational therapy brings to design of outdoor spaces for vulnerable populations. Older adults living in residential facilities can be recipients of courtyard gardens that are not only easy to use and understand, and meaningful for them, but are also welcoming for their families to use, hence increasing the intergenerational value and encouraging more fulsome family visits. Image 1, of the Kline Galland Home Marty Bender Unfold/Unfurl Family Garden represents such a space. From the outset of the two studio courses (design + build), students were co-taught by a landscape architect and an occupational therapist, both on faculty in the Department of Landscape Architecture.

66

The person- environment-occupation (PEO) fit enables participation or 'doing'.

In figure 2, an earlier example of a collaboratively taught design build studio course, students learned what was necessary to make a healing garden be successful for families staying at a Fisher Home, a residence for families whose loved one is receiving care at a nearby veteran's hospital. The interprofessional collaboration between occupational therapy and landscape architecture provided an optimal balance of design and human function.

Figure 3, the Els for Autism Sensory Arts Garden is an example of an interprofessional collaboration between a landscape architecture firm and therapeutic design consulting firm. To tackle the unique challenges and complexity associated with careful and thoughtful design of a garden for children and adults with autism, yet be a design that would also have appeal to the general public, this collaboration was essential. In figure 4, designing a trauma responsive outdoor playspace and garden for children whose families are unhoused benefitted from the shared skills of landscape design and occupational therapy. In both of these examples, the user's needs were and remain the primary focus and intention of their respective spaces. Accordingly, both are prized outdoor spaces that enrich lives for the better.

Based on what designers and occupational therapists can contribute, interprofessional collaboration between landscape architecture and occupational therapy makes sense. Despite the very different areas and approaches within which the professions work, there is a critical overlap: the person, performing his or her meaningful occupations, within the environment. Summarily, the role and capacity of occupational therapy in collaborative and interprofessional design is multifold. It includes the capacity to represent, advocate for, and communicate the physical, mental, and emotional needs and abilities of the user and his or her family, to educate the wider community about disease and disability, to present the occupational performance challenges of the user, and suggest ways in which to design, modify, and adapt environments to enhance the functionality and usability of a space. It is also an opportunity to advocate for dignity, autonomy, and self-determination. As inclusive design movements expand and interprofessionalism becomes increasingly widely embraced, occupational therapy has strong potential to have a valuable role within interprofessional landscape design teams (Amiri et al., 2017). While this duality of roles, that of landscape architecture and occupational therapy is virtually untested, there is good reason to not only consider its value, but also to 'give it a go.'

Fig 4.

Edgerley Family Horizons Center and Play Garden. (Image credit: Rosemary Fletcher)



REFERENCES

Ainsworth, L., & de Jonge, D. (2014). The relevance and application of universal design in occupational therapy practice. *Occupational Therapy Now*, *16*(5), 5-7. https://www.caot.ca/ otnow/sept14/relevance.pdf

* Amiri, T., Wagenfeld, A., & Reynolds, L. (2017). Exploring the role of occupational therapy in user-centred design. *Design for Health*, *1*(2), 187-193, https://doi.org/10.1080/24735132.2017.1386367

American Occupational Therapy Association. (2022). About occupational therapy. https://www.aota.org/about/for-the-media/ about-occupational-therapy

Canadian Association of Occupational Therapists. (2003). Universal design and occupational therapy. *The Canadian Journal* of Occupational Therapy, 70(3), 187. http://www.caot.ca/pdfs/ positionstate/universaldesign.pdf

Layton, N., & Steel, E. (2015). "an environment built to include rather than exclude me": Creating inclusive environments for human well-being. *International Journal of Environmental Research and Public Health*, *12*(9), 11146–11162. https://doi. org/10.3390/ijerph120911146

Lenker, J., & Perez, B. (2014). The role of occupational therapists in universal design research. *Occupational Therapy Now*, *16*(5), 13-15. https://www.caot.ca/otnow/sept14/research.pdf

Moody, K. (2022). A Study into the Application of Occupational Therapy Theoretical Framework in a Public Space Design for Kirkwood Neighborhood Park (Master's thesis, University of Maryland, College Park).

Stigsdotter, U. (2005). Landscape architecture and health (Vol. 2005, No. 2005: 55).

* Wagenfeld, A., & Winterbottom, D. (2021). Coping on the inside: Design for therapeutic incarceration interventions - A case study. *Work, 68*(1), 97–106. https://doi.org/10.3233/wor-203360

* Wagenfeld, A., Sotelo, M., & Kamp, D. (2019). Designing an impactful sensory garden for children and youth with autism spectrum disorder. *Children, Youth and Environments, 29*(1), 137-152. https://doi.org/ 10.7721/chilyoutenvi.29.1.0137

* Wagenfeld, A., Reynolds, L., & Amiri, T. (2017). Exploring the value of interprofessional collaboration between occupational therapy and design: A pilot survey study, *The Open Journal of Occupational Therapy*, 5(3), Article 2. https://doi.org /10.15453/2168-6408.1354

* Wagenfeld, A. & Winterbottom, D. (2015, April). Interprofessional collaboration: Designing outdoor environments though landscape architecture and occupational therapy. *EDRA Connections*, 5-7.

* Wagenfeld, A., Roy-Fisher, C., & Mitchell, C. (2013). Collaborative design: Outdoor environments for veterans with PTSD. *Facilities Journal*, *31*(9/10), 391-406.

Westphal, J. M. (2003). A reflection on the role of the landscape architect in American health-care delivery. *Landscape Research*, *28*(2), 205-216. https://doi.org/0.1080/014263903200070201

* Young, D., Wagenfeld, A. & Rocker, H. (2019). The application of universal design as an occupational therapy intervention: A scoping review. *Annals of International Occupational Therapy*,2(4) 186-194. https://doi.org/10.3928/24761222-20190625-04