

THE UNIVERSITY OF OREGON URBAN FARM EXPANSION: A DESIGN METHODOLOGY FOR COMMUNITY ENGAGEMENT IN A US CAMPUS SETTING

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ABSTRACT

The University of Oregon Urban Farm project began in 1975 as a student-led initiative to grow food on unused campus land. Spearheaded by landscape architecture professor Richard Britz, who outlined his theories in *The Edible City Resource Manual* (Britz, 1981), the initiative has continued to this day thanks to the efforts of Ann Bettman and Harper Keeler, current Urban Farm director since 2007.

Over the years, the space allocated for the Urban Farm varied significantly, alternating periods of growth by informally occupying leftover spaces with periods of shrinkage due to campus development. Since 2022, affected by the construction of a new adjacent research facility, the Urban Farm has lost 30% of its productive land, leading to a UO community's uproar, uniting students, faculty, and related allies beyond the University boundary. As a result, a new site along the Willamette River was secured in 2023 by the College of Design, in addition to a one-million-dollar fund to develop this land (University of Oregon, 2022).

In a climate of academic distrust, two architecture and landscape architecture professors led a collaborative studio in the summer of 2024 to create a visioning master plan for the new site with the help of students and local stakeholders. By combining principles of participatory action research, service design, rapid prototyping, and multimedia communication, this initiative aimed to rekindle a necessary dialogue while honoring the community-centric legacy of Christopher Alexander's work at the UO campus through his seminal work: *The Oregon Experiment* (Alexander et al, 1975).

In addition to shedding light on the unique campus planning system of the University of Oregon implemented by Alexander and how it influenced the Urban Farm, this paper analyzes the innovative co-design methodology that successfully brought the UO community and leadership back together for the future expansion of its nationally recognized Urban Farm program.

Keywords

Community Engagement, Co-Design Methodologies, Service Design, Campus Planning, Urban Farm

1 INTRODUCTION

Over the years, the space allocated for the University of Oregon's (UO) Urban Farm has significantly varied, alternating periods of growth by agilely occupying leftover spaces to respond to increasing student demand, with periods of shrinkage due to campus development (Keeler, 2011).

Since 2022, affected by the construction of a new adjacent research facility, the Urban Farm has lost 30% of its productive land, leading to an uproar from the UO community and uniting students, faculty, and related allies beyond the University boundary. As a result, a new 1.9-acre site along the Willamette River (the Riverside site) was secured in 2023 by the College of Design, in addition to a one-million-dollar donation to develop this land (University of Oregon, 2022). However, the complexity of the project and its contentious nature, with the UO community still mourning the recent loss, put the initiative on hold for almost a year until two architecture and landscape architecture professors led a collaborative studio to create a visioning master plan for the new site.

This paper focuses on the design and engagement process that took place in the summer of 2024 in the form of a landscape architecture studio to move the expansion of the UO Urban Farm forward with the help of students and the local community.

1.1 The University of Oregon Urban Farm

The University of Oregon Urban Farm (UF) project began in 1975 as a student-led initiative to grow food on unused campus land. Spearheaded by landscape architecture professor Richard Britz, who outlined his theories in *The Edible City Resource Manual* (Britz, 1981), the initiative continued to this day thanks to the efforts of other key UO faculty members, such as Ann Bettman, and Harper Keeler, current UF director since 2007. The UF represents today a local response to global challenges. As cities expand and the climate changes, the need for innovative and sustainable food production in urban areas is critical. In 2020, the UO Food Security Task Force reported "that 36% of UO students experience food insecurity at some point during their time on campus." To meet this and other critical needs, the UF provides "a model for alternative urban land use where people grow food, work together, take care of the land, and build community." This community-focused approach has engaged students for five decades, and "it is estimated that the urban farming program produces and distributes approximately 20,000 pounds of food to UO students per year." (University of Oregon, 2022). As part of the Department of Landscape Architecture, the UF offers hands-on courses to more than 300 students per year from 95 different disciplines across the University, with many more visiting or volunteering.

The original location chosen by Britz was on the northern edge of campus across Franklin Boulevard, only five minutes away from the College of Design. At that time, the UF was very similar in scale to the usable space of a typical Eugene city block, and Britz's idea was to use the UF site to test the feasibility of sustainable off-grid systems that could be extended to the rest of the urban fabric (Britz, 1981). In the early 90s, as student enrollment numbers on campus continued to increase and the UF re-gained popularity under the leadership of Ann Bettman, students were allowed to "repair adjacent land to the north and develop an area [...] known as the "Back 40" (B40)." As a leftover space in between bigger plots with more specific uses, the B40 was seamlessly integrated as part of the UF productive area, although its land designation did not change in the Campus Plan document. After almost 30 years of soil regeneration and flourishing agriculture, this land would become the center of the conflict that led to this paper.

In 2011, then interim and now current UF director Harper Keeler, defended his master's thesis titled 'Considering the UF Program and the Role of Place-Based Experiential Education in the Pedagogy of Landscape Architecture.' Having been part of the landscape architecture program as a student and a faculty member, Keeler acknowledged the informal nature of the B40 and predicted what eventually would happen a decade later:

"Although the "Back 40" has yet to be officially recognized as a part of the Urban Farm classroom, [...] this area and these elements play a central part in the Farm [...]. Because the University has undergone significant expansion with record numbers of incoming students, options for development are always being considered. [...] Approximately half of the Urban Farm space is officially considered part of the outdoor classroom, with the remainder being 'buildable space.' It seems unlikely that the University would decide to build in this area; however, pressures being as they are, this remains a concern. The Urban

Farm class would be seriously impacted should any further plans to reduce its usable area be entertained, and student objection to such a plan would most likely be considerable."

1.2 The Oregon Experiment and The University of Oregon Campus Plan

The UO originated in 1876, when the construction of its first building, University Hall, was completed in Eugene, OR. Nevertheless, it was not until 1914 that Ellis F. Lawrence developed a "Block Plan", setting the foundations for a comprehensive campus vision. Lawrence founded the School of Architecture and Fine Arts in 1915 and continued updating the campus plan in the following decades, resulting in the "network of interconnected quadrangles, squares, malls, and promenades" characteristic of today's campus" (University of Oregon, 2022).

By 1973, the University of Oregon had about 15,000 students and 3,300 faculty and staff, most of which resulted from rapid growth in the previous ten years (Alexander et al, 1975). Without signs of slowing down, and with an unsuccessful fixed-image campus plan developed just a decade earlier and incapable of absorbing unexpected development, the University hired Christopher Alexander and his Berkeley Center for Environmental Structure team to develop a new plan for the campus. The result of this collaboration was *The Oregon Experiment* (Alexander et al, 1975).

Alexander was an architect and mathematician who would eventually become famous for his seminal work *A Pattern Language* (Alexander et al, 1977), where he described a methodology for people to design their own "homes, streets, and communities" instead of relying on architects or planners. Patterns are diagrammatic solutions to recurrent spatial problems that non-designers can use to change the physical environment by themselves (Alexander et al, 1977). By the time he started working for the University of Oregon, his pattern theory had already been developed (but not published), and *The Oregon Experiment* became indeed a testing ground for these ideas. Instead of a static master plan, Alexander proposed six principles to guide the process of building and planning on campus: the principles of organic order, participation, piecemeal growth, patterns, diagnosis, and coordination.

Through these six guiding principles and 55 patterns (37 borrowed from *A Pattern Language* and 18 new ones created specifically for the University of Oregon), the main goal for Alexander's team was to change the way the physical environment of a US campus was traditionally designed through centralized power. First, by avoiding the previous mistake of creating a fixed campus master plan, and proposing instead a process-based plan capable of growing by adapting to the needs of its users. And second, by providing a guiding system that "people can understand in concrete and human terms, and in terms of their everyday experience" (Alexander et al, 1975).

Of the six principles outlined in *The Oregon Experiment*, the principle of participation was arguably the most radical at the time. Alexander wanted to create a participatory framework "in which buildings are designed by the users and are then built by architects and contractors" (Alexander et al, 1975). The suggested patterns would serve then as a common ground to articulate conversations between both parties.

Since Christopher Alexander was commissioned to implement *The Oregon Experiment* on campus in 1974, Richard Britz could have been inspired by Alexander's theories, starting the UF program in 1975. In *The Edible City Resource Manual*, published in 1981, where he outlined the process of building an 'Urban Block Farm Prototype at the University of Oregon Urban Farm', he described his methodology (and how to replicate it) in terms of principles, in a possible reference to *The Oregon Experiment* and *A Pattern Language*. From all the patterns that Alexander suggested for the UO Campus, several of them can be considered foundational for a space like the UF, highlighting the importance that *The Oregon Experiment* put on functional and social green spaces: Positive Outdoor Space, Accessible Green, Tree Places, South Facing Outdoors, and especially the Public Outdoor Room pattern, which was updated in today's Campus Plan as the 'Outdoor Classroom' pattern and defined as follows:

"Many campus open spaces serve as vital classrooms. These functions require open, sunny spaces [...]"

(a) Consider the use of the open space when siting buildings and trees, taking care to provide sunny, outdoor spaces for formal class meetings and informal group meetings and activities.

(b) [...] These open spaces should not be thought of as potential building sites without adequate

provisions being included for the replacement of these activities in equivalent spaces." (University of Oregon, 2022).

After Richard Britz left UO in 1979, Ann Bettman kept the project alive for the next two decades. She established successful connections with students and faculty across different design departments who contributed to consolidating the UF space until it was formally identified as an 'outdoor classroom' in the Campus Plan in the early 90s:

"The Urban Farm Outdoor Classroom should be preserved. Proposals should carefully consider impacts to Urban Farm activities currently occurring outside of the designated Outdoor Classroom and consider replacing any displaced uses to support this unique and important academic program." (University of Oregon, 2022)

1.3 The Knight Campus Expansion and Community's Uproar

Unfortunately, this formal consideration did not save the space and the program from upcoming impacts. In early 2022, plans were announced for the second phase of the Phil and Penny Knight Campus for Accelerating Scientific Impact (KCP2), a building that would be constructed on an existing parking lot adjacent to the eastern border of the UF. Prior to that, the design progress and construction plans had been shared during Campus Planning Committee (CPC) sessions, open to interested stakeholders but not heavily publicized. Early stages of the design showed that the footprint of the building wasn't technically impacting the UF productive landscape. However, as the proposal developed, new items were added to the plans: an underground utilities corridor through the middle of the Farm, a 30-foot work zone along the east edge of the Farm to move equipment around the construction site, and it was clear that the B40 (roughly 1/3 of the total productive landscape area) was going to be used for construction staging.

Two main conflicts would derive from this. First, since official outdoor classroom areas were going to be impacted by the new building, the University would be held responsible for funding and replacing the lost UF land following the Campus Plan's Principle 5: Replacement of Displaced Uses:

"All University uses are important to the University. A new use must not benefit at the expense of an existing use. All plans for new construction (buildings or remodeling projects) shall keep existing uses intact by developing and funding plans for their replacement" (University of Oregon, 2022).

Second, since the B40 was never formally designated as an outdoor classroom space and never legally incorporated into the UF boundary in the Campus Plan, the KCP2 development team was within its rights to claim the space for construction purposes. However, the appropriation of this land would mean the disruption of a beloved community space and a well-developed food-productive area for the last 30 years, including the removal of more than 34 trees, multiple hedgerows, berry bushes, and raised beds.

During the winter term of 2022 (January-March of 2022), UF stakeholders, including staff, faculty, and students, started to publicly express worry regarding the potential impacts of the KCP2 construction. The students' organized response during 2022 included "raising concerns and questions in faculty meetings and administrative town halls, working on an Associated Students of the University of Oregon (ASUO) resolution, engaging with local media outlets, planning and hosting the Urban Farm Spring Fest, attending CPC meetings and City of Eugene hearings, drafting Public Records Requests, hosting a march and rally, and launching a letter writing campaign to University admin and the Board of Trustees" (Witzleben, 2023).

Multiple local news platforms started covering the process and consequently adding pressure on the University administration and the KCP2 development team, including 'Eugene Weekly', 'KLCC Public Radio', 'KVAL13', and 'Ethos Magazine'. In parallel, the Instagram account "Save the Urban Farm", created in February 2022, was (and remains) the main platform to follow the updates of this process. Once the selection of the Riverside site was officially approved, the account changed to a much less reactionary 'Students for the Urban Farm' (<https://www.instagram.com/studentsfortheurbanfarm/>) in May 2023.

In response to the community's outcry, the College of Design's Dean, Adrian Parr, organized a task group to develop a visioning document for the future of the UF. After several meetings with stakeholders, including student representatives, faculty, leadership, and Campus Planning and Facilities Management (CPFM) staff, the team released the Urban Farm Visioning report in June 2022. This document provided

"an outline of the vision, strategies, and required resources to expand UO's urban farming educational and community impact while showcasing a uniquely Oregon-style exemplar of world-class research in an ecologically responsive and productive landscape." Shortly after, and in accordance with the Campus Plan's Principle 5: Replacement of Displaced Uses, the University pledged \$1M toward the College of Design vision to assist in implementing the expansion project. In October 2022, CPFM collaborated with the College of Design to start a site selection process and identify land for the UF expansion. Only one month later, the Riverside site was selected and approved by CPFM. Despite these efforts, and with the schematics of the KCP2 not changing despite the community's concerns, the students kept voicing their opposition to the project and organized a "Save the Urban Farm" rally on campus.

December 16th was the date announced for closing of the fence around the site (including the B40 area), in preparation for the official start of the construction process on December 19th. The week prior, the students gathered to celebrate the space and move the rich soil from the B40 to the Riverside site. Eventually, the inevitable happened and was narrated by the 'Save the Urban Farm' Instagram account: "The fences around the north and east sides of the Urban Farm closed. We thought they were not planning to cut down trees until the end of January, but we were wrong. At 4:00 am on Monday, December 19th, construction crews set up flood lights to start cutting down the trees while no one was looking. Urban Farm students and staff showed up later that morning to see this: most of the trees down, others being dragged away. We are grieving and infuriated by this duplicitous move. The row of Cedars and the 100-year-old English Walnut are gone, along with many others."

In January 2023, the College of Design put the project development on hold until the search for a new tenure-track faculty in the Department of Landscape Architecture to lead the Urban Farm Riverside (UFR) project was resolved. This decision led to the hiring of two professors in architecture and landscape architecture, who would eventually run the summer studio that this paper is analyzing.

Lastly, a couple of landscape architecture students in the last year of their degree decided to include the UF and UFR topics as part of their final BLA and MLA projects in the Winter and Spring terms of 2023. These narratives are essential to understanding the full picture of such a complex process and evaluating the alignments and misalignments between the official institutional message and the student's perspectives. With the latter claiming that the UO College of Design Visioning report was not "consensus-based and that the plan for the UFR was not only in opposition to student requests but also the campus planning process itself", it was clear that the path moving forward was going to be under considerable scrutiny (Witzleben, 2023).

1.4 Research Objectives

The summer 2024 Urban Farm Riverside (UFR) studio was an ideal opportunity to develop an experimental co-design methodology by helping College of Design students and the UO community envision the UF expansion master plan. By combining principles of participatory action research, service design, rapid prototyping, and multimedia communication, this initiative aimed to rekindle a necessary dialogue between students, faculty, and leadership, while honoring the community-centric legacy of Christopher Alexander's work at the UO campus. The research objectives of this paper include, first, shedding light on the unique campus planning system of the University of Oregon implemented by Alexander and how it influenced the evolution of the UF. And second, describe the innovative co-design methodology and process that successfully helped bring the UO community and leadership back together for the future expansion of its nationally recognized UF program.

2 METHODS

The term participatory action research (PAR) originates in the social sciences and "involves researchers, practitioners, and people who through collaboration, inclusion and social action aim to solve real problems." (De Rosa, 2022) While "community engagement" is often a required step in the design of contemporary public spaces, many of the most common methods employed—from voting for the inclusion of individual amenities to selecting a preferred overall design from a set of options—obtain superficial information from participants without truly integrating them into the process. In design, participatory action research can offer an academic scaffold for developing innovative, socially driven, and methodologically rigorous approaches for including community stakeholders in the design process.

Sherry Arnstein's well-known ladder of citizen participation (1969) articulates a typology of 8 levels of participation from "non-participation" at the bottom up to "citizen control" at the top. This model provides a valuable structure for systematically understanding levels of stakeholder engagement and the potential benefits and implications of each. In the context of the UO Urban Farm, the legacy of top-down planning decisions has led to mistrust and skepticism among stakeholders, a perception that is indicative of lower rungs on Arnstein's ladder. Trustworthiness and strong community connections are key kinds of "social capital," which is known to positively impact collective action (Ostrom and Ahn, 2009). Thus, beyond eliciting specific design guidance for the site, a critical feature of the UFR engagement process had to be rebuilding social capital by shifting to a model of participation that aligns with higher rungs on Arnstein's ladder.

The basic intent of better integrating community stakeholders into the design process is prevalent throughout scholarship and praxis, whether discussed as "community engaged design" (Yang et al., 2025), "participatory design" (Sanoff, 2022), or "co-design" (Gaete Cruz et al., 2023). In this studio, students were introduced to a wide range of approaches, both traditional and innovative, aimed at addressing the complexity of integrating site, stakeholders, and designers. Each method/tool was explored for its ability to convey concepts across a variety of audiences, its effectiveness in documenting and generating active engagement, and for its contribution to the design process in real time.

2.1 Redefining Objectives

The studio began with the critical evaluation of the Urban Farm Visioning report (UO College of Design, 2022) described in section 1.3., a written document meant to summarize the results of a series of conversations with faculty, staff, and students, and serve as a potential brief for any future development of the UFR site (Figure 1). The proposal outlined three areas of focus: Food Production, Research, and Education. However, after discussions with students, some of whom were involved in the UF movement, it became clear that these areas did not encompass the full potential of the Urban Farm's ethos. Consequently, two additional charges, Restoration and Community, were incorporated. These additions aimed to connect the site with the adjacent Willamette River Natural Area (WRNA) for restoration efforts, and to extend the historic social impact of the UF beyond just academic users and the university boundary. This early reconceptualization of the project framework based on stakeholder insights highlights the crucial feedback that can be gained through participatory methods at even the earliest stages of a project.

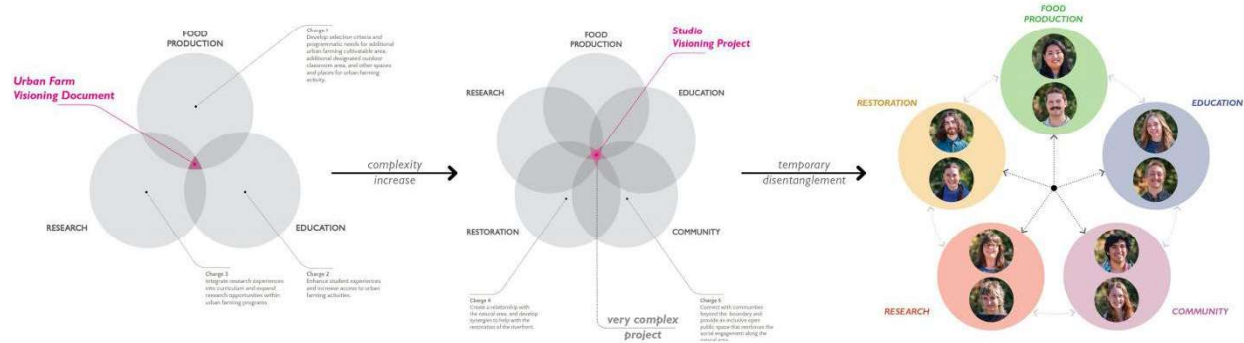


Figure 1. From redefining objectives to deconstruction of the problem.
Drawing by the authors.

2.2 Studio Structure

The studio was held from June 25th to July 31st, 2024. It was structured into five main phases, each lasting for a week: 1. Analysis, 2. Master Planning, 3. Community Engagement, 4. Synthesis, and 5. Final Presentation. The main challenge was to have the students reach a point of conceptual design that could be presented to the UO community after only two weeks of studio. Due to the objective of co-designing one single master plan for the UFR and the limited time available, students were divided into groups by focal topic. Groups worked independently for the initial stages of the studio before collaboratively integrating their concepts into a single final master plan. This meant that students had time to explore

focal topics in depth while assuring that they were working together and supporting each other towards a common goal, instead of encouraging competition through individual projects.

2.3 Deconstructing the Problem

Besides the legacy relationship between Christopher Alexander and the UF through *The Oregon Experiment* introduced in section 1.2., the design methodology implemented in the UFR studio was also inspired by Alexander's pioneering design theories published in *Notes on the Synthesis of Form* (Alexander, 1964). Although it might not sound radical today, this method was based on the combination of analytical and synthetic approaches to solve a design problem. It describes a designer's ability to divide design projects into smaller problems/needs, solve them in an isolated manner through a simple diagram (or pattern), and eventually assembling all the different patterns into a coherent whole. These patterns would remain individually legible and open for further improvements while simultaneously articulating and informing each other. The design methodology implemented for the UFR studio was inspired by Alexander's approach in order to keep the design process as transparent, accessible, and upgradeable as possible, both for students and stakeholders.

A traditional practice-based landscape architecture workflow for our five-bubble brief would involve developing several design options (2-3), all formally different from each other for easy identification, and each one supported by a straightforward design concept. These options would be presented to the community for preference and feedback. All the positive and negative remarks for each option would be collected, and the most voted items overall would ideally be kept and merged into a final single proposal, regardless of their design origin.

The problem with this approach is three-fold (Figure 2). First, developing several alternatives for an already complex project results in superficial proposals lacking rigor and depth. Second, the lineage and hierarchy of design decisions is untraceable, especially at the end of the process when the proposal turns into a collage of several disconnected items favored by the community. And third, there is a lack of intent to generate meaningful conversations with the stakeholders, including explaining the logic behind design decisions and discussing ways to improve them together. How can we, as designers, defend the validity of a proposal if, eventually, our main argument left is "because the community wanted it"? If the design of such a complex project as the UFR isn't challenging enough, the inclusion of the community into the design conversation requires the process to be both organized and transparent to facilitate communication. The aim is to produce solutions that draw on the complementary strengths of designers' technical expertise and community stakeholders' experiential knowledge.

The first step towards this was the subdivision of the project into five different problems to be solved in isolation first. Students were divided into five groups, each assigned to develop one specialized Urban Farm proposal related to one of the charges: food production, education, research, community, and restoration. Each "single-layer design path" would require each group to go through a series of design requirements (program, personas, journey map, and desktop walkthrough), eventually leading to a first site proposal related to that layer (n1). This proposal would be presented to the community during the co-design session evolving into a second alternative version (n2). After the engagement session, all the students would return to the studio with a clear idea of the strong and weak points of their proposals, including specific feedback from the community. They were requested to develop a third version (n3) condensing their layer's essence based on their thoughts and the community's. At this point, each group had enough expertise to understand the value and hierarchy of their decisions, and the capacity to negotiate with the other groups and find compromises. This resulted in a very dynamic decision-making process, with students being extremely confident about which aspects to keep or sacrifice when overlaying all the different proposals. It took us only one studio session to develop a final consensual spatial solution that incorporated the essence of each of the five charges.

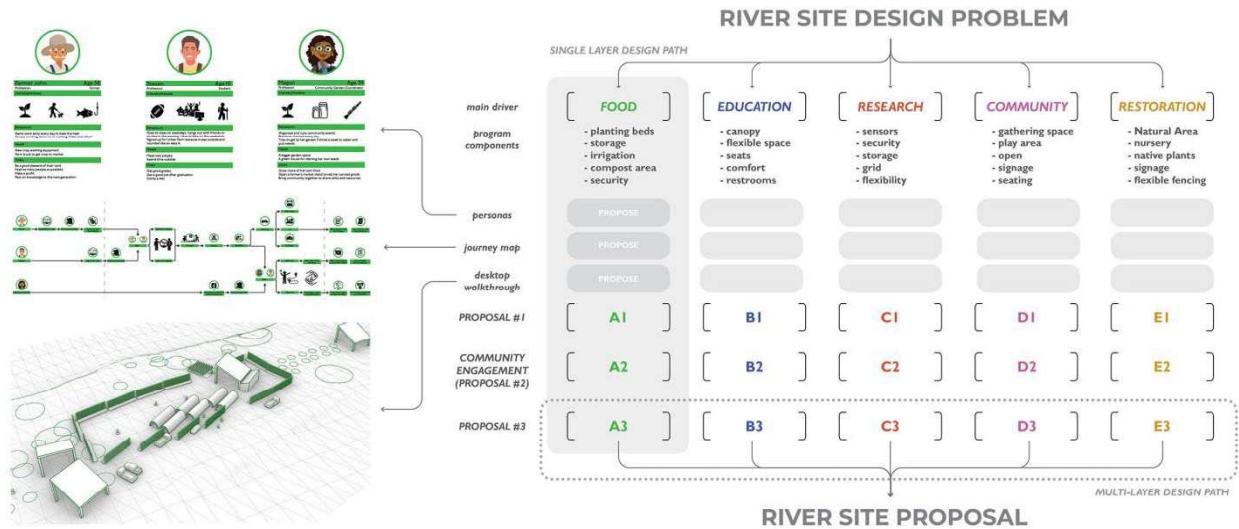


Figure 2. Design methodology.
Drawings by Tayler Uesato, Clark Frauenglass, and the authors.

2.4 Learning from Service Design

Service design, as defined by Holmlid and Evenson (2008), involves "systematically applying design methods and principles to the design of services." This relatively new field focuses on the curation of a meaningful customer experience when using a service, and it incorporates tools and methods from UX and UI design to explore the interactions between users and human, physical, and digital systems.

Knowing that students would have to lead a community engagement session after only two weeks of studio, we introduced them to three techniques from the Service Design Tools online platform to accelerate their design process (<https://servicedesigntools.org/>). By putting users at the center of the project conceptualization, these techniques helped the students empathize with the needs of others and prepare them to communicate with real stakeholders using creative narratives. The combination of service and spatial design (in this case, architecture and landscape architecture) creates an innovative framework to expand the field of participatory design, providing multiple avenues for feedback, enhancing cooperation between disciplines, and balancing socio-cultural with techno-physical environments (De Rosa, 2022).

The methodology explored was a compounding sequence of three tools: 'personas', 'journey maps', and 'desktop walkthroughs'. 'Personas' are "reference models representative of a specific type of user. They help us remember who we design for and get inspired by their specific life and challenges." Students developed personas for the different layers of the farm project, including food production, education, research, community, and restoration, creating the most likely users for each theme and imagining their needs and aims. For example, a persona related to food production could be the Urban Farm director, who actively teaches courses for the UF at the UO.

The 'Journey Map' focuses on a user's timeline in a service, described through a chronological sequence of actions and corresponding touchpoints (De Rosa, 2022). Students outlined diagrams representing a typical day for each persona, highlighting interactions and engagements with the Farm, which helped identify key touchpoints and needs for spatial design. In the case of a student, this could include arriving at the Farm by bike, storing it safely, using the restrooms, gathering with classmates before class, and meeting with the professor. A cross-comparison of each journey map is needed to see areas of overlap and similarity. Although these diagrams implied spaces, they are not connected to the physical context of the site.

Finally, the 'Desktop Walkthroughs' tool is based on a physical model where designers play out the sequence of interactions to envision insights. (Auricchio et al., 2022; Blomkvist, Fjuk, et al., 2016). Students printed a site plan with an overlaid spatial grid of their choice mimicking a game board. Then,

based on their personas and journey maps, they developed a set of 3D-printed tokens representing structures, programs, and people, and arranged them on the map to iterate through several master plan proposals. Ultimately, this model would be the students' primary engagement tool for dialogue with the community stakeholders.

2.5 The Community Engagement Session

On July 8, community stakeholders gathered at the UO College of Design's Lawrence Hall to discuss preliminary design ideas during a 3-hour co-design session. Participants included UO faculty, staff, students, and local professionals, who were encouraged to respond to design proposals through the lens of their expertise as well as their personal wishes for the site. Each of the five student teams was paired with a small group of stakeholders with interest in their group's focal topic (food production, research, education, restoration, and community). Students presented their preliminary design concepts using their 'persona', 'journey map', and 'desktop walkthrough' (section 2.4), following a script to guide the discussion. One teammate was designated as the presenter and the other was as the note-taker to ensure that data were recorded while conversation remained fluid. The three-hour event was split into two separate co-design sessions, allowing students to hear from a wider range of stakeholders and for participants with a diversity of interests to engage on more than one topic.

The physical models (desktop walkthroughs) were used as the main point of interaction between students and stakeholders. Since they were conceived as game boards, the initial proposals were only intended as starting points, encouraging participants and students to re-arrange the pieces on the model in real-time to explore design alternatives. At the end of each session, a plan-view photo of each entire table was taken to document how the conversation developed. Between each co-design session, students would return the boards back to their initial concepts and start the conversation again. Also, participants were requested to complete written feedback forms and reflect on the benefits and limitations of the design, including anything that was missing or needed refinement. Participants were asked to consider the design process itself, suggesting opportunities to explore and pitfalls to avoid moving forward. The questions ranged from open-ended to scaled inquiries. These surveys were collected at the end of the session, transcribed, and manually coded to elicit key themes from the feedback. Several graphics were included in the final presentation to visualize the interests of the participants, revealing common themes across sessions and highlighting ideas that were original or unique to each topic.

2.6 Multimedia Communication

In addition to the methods explored within the studio, public reimagining was part of the intent to change the narrative around the Farm and to foster conversations about its future possibilities. Film media was chosen for its immediacy and marketing potential. A student assistant with filming experience was incorporated into the teaching team. For five weeks, instances of the whole studio were filmed, including class activities, day trips, context, and interviews with key players involved with the UF, including the UF Director, former and current students from the UF program, and faculty from allied programs. These interviews provided a firsthand explanation of the events that had occurred to date, as well as the aspirations for what the new site might become, and gave recognition to all those involved up until this moment around the site. This micro-documentary was displayed at the final exhibition and highly praised. It will be used by UO to generate interest and expand information about the future of the site.

3 RESULTS

Although from an outcome-based point of view, the UFR master plan was the ultimate goal of our studio, the community-centric approach was indispensable. In other words, in the political climate involving the process, this proposal had to come from the community or not at all. Both the project and the "process leading to the project" had to be successful in dealing with past (honoring), current (listening), and future (accommodating) community input.

3.1 The Urban Farm Riverside Master Plan

The objective of the master plan was to expand upon the goals of the Urban Farm Visioning report and establish rules ensuring consistency and coherence in development, providing predictability, and aligning projects with community goals. Initially, the master plan had to account for some important environmental preconditions, namely an existing Oregon oak population, 14 transplanted orchard trees from the original

UF site, and a 100-foot protection buffer from the Willamette River. In the end, the oaks were the central piece of a public play area at the entrance of the site, the orchard trees were a key element of one of the main cultivation areas, and an E-W system of braided trails was proposed to integrate the site with the WRNA while respecting the required buffer zone when siting structures.

The programming followed the new five-bubble visioning diagram (section 2.1). It was developed separately by each student cluster, and later organically generated by overlaying the results of the co-design session (Figure 3). Common ground was met by creating a sequence of built and open spaces. The open spaces were arranged in terms of privacy and distance from the main entrance on the westernmost end, starting with the playground and the community gardens serving as a gateway for public attraction and interaction. Moving eastward, two zones were allocated for food production (garden beds and the orchard), culminating in a far eastern zone dedicated to experiments and research. On the other hand, three main buildings were evenly separated for service purposes, hosting educational programming and storage for research, food production, and restoration. This arrangement allowed all open spaces, including the WRNA, to be accessible from the buildings. These spatial rules were designed to facilitate coordination and orientation, creating a long-term infrastructure that sets the stage for future programming. An underlying system of spaces and grids provided a unifying means to plan for complex, unforeseeable interactions. The student proposals within this framework act as proxies or placeholders, serving as examples of what students, researchers, and faculty could achieve in the space.



Figure 3. Desktop walkthrough models generated during co-design session + final master plan.
Photos and drawings by the authors

3.2 Engagement with the Community

Although the week three co-design session (section 2.5.) could be considered central to our participatory action process, it was not an isolated case. The inclusion of the community in the design process was achieved through multiple touchpoints that allowed the studio cohort to open different channels of communication with faculty, staff, and other students. These ranged from more formal co-design sessions and final presentations to more intimate guest lectures, field trips, or informal lunches. This constant interaction with the community helped the students gain confidence in developing a more proactive dialog about the UFR project instead of taking everything they heard for granted. It is important to remember that our students were acting not only as designers but also as stakeholders themselves. This fact motivated them to adopt a critical approach and try to understand the reasoning behind the inputs they were receiving from the community, regardless of whether they were coming from an expert, a professor, or another colleague. The success of any design process depends on the frequency of iterations that allow us to move forward by trial and error and feedback loops. A very similar logic emerged when engaging with the UO community. During our co-design session, the students could have "just" listened to the stakeholders, taken notes, returned to the studio, and crafted a proposal based on the received comments. Instead, the students listened but reacted to the feedback in real-time, challenging the

audience and engaging in an enriching conversation with the only goal of achieving the best possible outcome for both parties. Right after the session ended, several students acknowledged that this was the best studio midterm review they had ever participated in.

3.3 Final Presentation

The studio's final presentation and exhibition was held in Lawrence Hall on July 30, 2024, and was open to the public and the UO community, attracting over 100 attendees interested or involved with the UF. These included a high representation of the College of Design administration: the Dean of the College of Design, the Director of the School of Architecture and Environment, and the Department Heads of Architecture, Landscape Architecture, and Interior Architecture. The event began with an introduction by the leading instructors, followed by the summary video that set the context narrative for the UFR studio. Each student group then presented their specific focus area, followed by a brief Q&A session. After the formal presentations, attendees were invited to the exhibition gallery to engage in independent conversations with the students. Each group displayed their pinned-up posters and physical prototypes, and the studio showcased a booklet, a large site model, and two masterplans detailing project phasing, all inviting feedback through post-it notes. The presentation was successful, reinforcing the support the UF holds across the UO community, and generating excitement and renewed interest in the UFR's future possibilities among students, faculty, and administration (Figure 4).



Figure 4. Community engagement process and tools. Photos by the authors.

3.4 Project Approval Process

In Fall of 2024, the project was presented to CPM. With funding secured and the site already selected two years prior, CPM submitted the project to the Provost's Office for approval. The final presentation in the summer demonstrated overwhelming support from the UO community after three years of public outcry, and the studio proposal was thorough, flexible, and feasible enough to be managed from a planning perspective. CPM requested an official boundary for the space allocation with a precise phasing of the project. Interestingly enough, there was no explicit request for Alexander's Campus Plan pattern catalog, which is required when submitting project proposals on campus.

We could argue that the pattern language approach was envisioned for non-designers to be able to articulate their design needs and goals, and in our case, design students and faculty were in charge of the project, designing the UFR master plan for themselves as primary users. The sensitive climate around the project and the positive inertia after the summer presentation undoubtedly helped expedite the submission and achieved the subsequent greenlight from the Office of the Provost. From the proposed boundary, the main entrance building was removed, and the proposal was approved for the fenced agricultural area as Phase 1 (Figure 5, right image). The approval letter mentioned a potential future Phase 2 that would include the entrance building and the adjacent public space. The space allocation was officially granted to

the College of Design on January 28th, 2025, and a Memorandum of Understanding (MOU) between the COD and the Department of Landscape Architecture to manage the land was signed in April 2025.



Figure 5. Project visuals + Approved Phase I boundary. Images by Tayler Uesato, Clark Fraueglass, Rachel Benbrook, Ben Michell, Comet Rajvanshi, Hattie Sterns, Blake Schouten, Anika Hall, Michael Mitchell, and the authors

4 DISCUSSION

Participatory design is a widespread topic nowadays in the fields of architecture, landscape architecture, planning, and urban design. People are more engaged than ever in the processes that shape the physical environment where they live and work, and a new generation of designers are acting as facilitators to help community stakeholders navigate such processes. Some of the participatory tools described in this paper might not seem very different from other case studies already published, including games, maps, physical models, surveys, and more. (De la Pena, D., 2017) This is not a bad thing, since many of these techniques are already well-established, have been proven effective and replicable, and are also compatible with each other to adapt to different or more challenging contexts.

However, these participatory design methods (or techniques) often lack the level of abstraction and systematization needed to tackle more complex design problems or achieve more innovative solutions. There is a good reason for this, mainly that these participatory tools are meant to be non-technical so that non-designers can understand and use them. And yet, more often than not, the results are conservative and focused on what people already know and want, instead of better unforeseen alternatives.

The emergence of design methods dates the mid-20th century in response to World War II's scientific and technological advancements, such as industrialization and mass production. The first design methodology books started appearing in the 1960s, including Christopher Alexander's *Notes on the Synthesis of Form* in 1964 (Cross, 1993). Interestingly enough, Alexander, a recognized design methods pioneer, rejected almost immediately the over-rationalization of design methods described in his first book, pushing himself to develop his more humanistic pattern language theory during the following decade (Jones, 1992). Few science-based design methodologies have made it into the landscape architecture field, and in most cases, if not all, these methods were developed (and are still used) for large-scale landscape and planning projects. The most prominent examples of these "landscape" methodologies are Ian McHarg's 'graphic overlay' approach described in his seminal *Design with Nature* from 1969, and Carl Steinitz's 'geodesign framework', published in 1990 as *A Framework for Theory Applicable to the Education of Landscape Architects (and Other Environmental Design Professionals)*. Thanks to their abstract nature, both methods allow for iterative, cumulative, and transparent design processes. Ian McHarg would call his method 'rational' (derived from science) and 'explicit' because "any other person, accepting the method and the evidence, is likely to reach the same conclusions." (McHarg, 1969). Despite these benefits, rarely would a design professional today use either McHarg's or Steinitz's approaches on a site-scale landscape project like the UFR, and instead rely on more artistic or intuitive models (Milburn & Brown, 2003).

With this paper, we claim that due to the participatory nature of the project, an abstract design methodology is highly recommended in this case. Besides the proven relevance of their methods on large-

scale projects, both McHarg and Steinitz were very clear about an implicit advantage in their approaches: the potential for community collaboration. In the words of McHarg: "This method permits a most important improvement in planning methods -that is, that the community can employ its own value system. [...] Today, many planning processes are unable to incorporate the value system of the community to be transected. At best, the planner supplies his own distant judgment" (McHarg, 1969, pp. 7–17). And in his *A framework for geodesign* from 2012, Steinitz stated: "The problems [...] are beyond the scope and knowledge of any one individual person, discipline or method. Instead such problems require both collaboration and ways to organize that collaboration. People must begin to understand the complexities, and then figure out ways to collaborate. [...] The practice of geodesign requires collaboration among the design professions, geographical sciences, information technologies, and the people of the place."

Engaging with community stakeholders for a true co-design project can be a very challenging endeavor with high levels of uncertainty. Such "social complexity" needs methods that can be simple enough to be understood and appropriated but also capable of articulating difficult conversations and achieving complex results. If we keep insisting on well-intended but isolated participatory techniques, we run the risk of promoting "social washing" and only aspiring for conservative, short-sighted futures. In our case, the combination of service design theory (where the development of a satisfactory user experience is paramount) and Alexander's systems thinking theories (where a design problem as a whole needs to be solved by the deconstruction and combination of multiple simpler strategies), pushes the present methodology a step further in terms of participatory action.

The final master plan showcases a complex overlay system between research, food production, education, restoration, and community layers that could not have been possible without a community of stakeholders being steered by a design methodology. The 'desktop walkthrough' approach and the resulting physical models for the co-design session translated into a final grid to guide and encourage interactions between the different layers. The resulting spatial framework balances determinism and flexibility, providing the necessary infrastructure to meaningfully support any emerging social uses and environmental needs in the future.

Besides the methodological aspect, another important linkage between our studio and Alexander's legacy relates to how, by supporting the students with the design of the UFR, we brought back some of the original radical ideas of *The Oregon Experiment* to the UO campus. With the principle of participation at the forefront ("All decisions about what to build, and how to build it, will be in the hands of the users"), Alexander wanted the campus to be designed by the community, arguing that "the daily users of buildings know more about their needs than anyone else", and that such process would "allow people to become involved in their community", and develop a "sense of ownership, and some degree of control" (Alexander et al, 1975). During the studio, these notions were reinforced through the transfer of responsibilities to the students, and the creation of multiple touchpoints with the community (faculty, staff, and other students) via master lectures, co-design sessions, and a final presentation. Finally, by providing a comprehensive master plan designed by the community for the community but also in compliance with all the campus regulations, we defended Alexander's suggestion that "the design team shall complete their schematic design before any architect or builder begins to play a major role" (Alexander et al, 1975). This subverts the current modus operandi of the planning and construction process on campus, where users are welcome to give feedback to projects developed by hired external consultants but are not really involved in the design process.

With *The Oregon Experiment*, Christopher Alexander wanted to transfer the power (from the administration) back to the people (students, faculty, staff, users). Since its inception, the UF has been a place for community building, led by the passion and commitment of faculty and students. And the new Riverside expansion should not be an exception. We provided a sequence of methods that made the design and decision-making process as transparent, traceable, and iterative as possible. We aimed for a high-quality engagement between the different stakeholders, where the community felt heard and was given enough space to share their knowledge, understand big-picture constraints, and inform the design; where the designers (our students) found the support to articulate, communicate, and defend complex and ambitious ideas; and where the decision-makers had the ability to manage the implementation process in time and space, while having the reassurance that all the design decisions were guided by designers and driven by the community. Although we acknowledge that the UO campus case study is tightly linked to

Alexander's experiment and Oregon's history of self-governance, the transferability of our design methodology could have great potential in participatory action processes in other campuses or urban contexts.

5 CONCLUSION

The impact the KCP2 had on the UF can be considered a social milestone in the recent history of the UO campus. The organized students' response was an inspiration for the entire UO community, uniting and reconnecting staff, faculty, and students across departments and drawing attention beyond the University boundary. Although these actions did not change the course of the building construction nor avoid the loss of one-third of the productive farmland, they effectively led to the acquisition of a new 1.9-acre site along the Willamette River and funds to expand the program. Unfortunately, it also generated a climate of distrust between the academic body and the administration that was not ideal for the development of the future location.

The UFR studio was designed as a platform for students, faculty, local stakeholders, and administration to rebuild trust by collaborating and envisioning the future of the UF. And doing so while honoring the efforts of all those who made the program grow and last for five decades. Through lectures, immersive workshops, field trips, research methods, student-led engagement sessions, and multimedia presentations, the studio cohort developed a proposal that achieved the impossible: to make everybody happy. With a unified academic body supporting the project, the administration approving it, and enough funding to start it, the future of the University of Oregon's Urban Farm program is looking bright.

This paper is a reminder of the principles Christopher Alexander brought to the UO Campus Plan with *The Oregon Experiment* 50 years ago. It is also proof that the UO community can still revive those principles despite the increasing centralized administrative control that seems to drive campus planning nowadays and that Alexander tried to revert through his theories. In the case of the UF expansion, students demonstrated once again that the community can still be responsible for the future of the physical environment where they live and work and that transparent and ambitious co-design methodologies such as the one presented here are essential to achieve such goals.

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