

# LANDSCAPE RESEARCH RECORD

---

No. 8 | March 6-9, 2019

**ENGAGED SCHOLARSHIP**

# Landscape Research Record

## Editor-in-Chief

Galen D. Newman, *Texas A&M University*

## Co-Editors

Bambi L. Yost, *Iowa State University*  
Jon D. Hunt, *Kansas State University*  
Judith Wasserman, *West Virginia University*  
Matthew Powers, *Clemson University*  
Benjamin George, *Utah State University*  
Ashley Steffens, *University of Georgia*  
Lisa Orr, *West Virginia University*  
Judith Wasserman, *West Virginia University*  
Yi Luo, *University of Florida*  
Paul Cosco, *Arizona State University*  
Stefania Staniscia, *West Virginia University*  
Christopher D. Ellis, *University of Maryland*  
Taner R. Ozdil, *University of Texas at Arlington*  
Chingwen Ching, *Arizona State University*  
Dongying Li, *Texas A&M University*  
Deni Ruggeri, *Norwegian University of Life Sciences*  
Ole Sleipness, *Utah State University*  
Byoung-Suk Kweon, *University of Maryland*  
Bin Jiang, *University of Hong Kong*  
Chuo Li, *Mississippi State University*  
Mallika Bose, *Pennsylvania State University*  
Benjamin Spencer, *University of Washington*  
Sohyun Park, *Texas Tech University*  
Mintai Kim, *Virginia Tech University*  
Sungkyung Lee, *University of Georgia*  
Jun-Hyun Kim, *Michigan State University*  
Phoebe Likwar, *University of Arkansas*  
Maggie Hansen, *Pennsylvania State University*  
Brett Milligan, *University of California-Davis*  
Kristi Cheramie, *Ohio State University*  
Rob Holmes, *Auburn University*  
David la Pena, *University of California-Davis*

## Editorial Assistant

Zhiha Tao, *Texas A&M University*

## CELA Board

Ashley Steffens, *President*  
Charlene LeBleu, *Past President*  
Sadik Artunc, *First Vice President*  
Galen Newman, *Vice President for Research & Creative Scholarship*  
Hala Nassar, *Second Vice President*  
Jun-Hyun Kim, *Secretary & Vice-President for Communications  
Outreach & Publications*  
Ebru Ozer, *Treasurer*  
Jolie B. Kaytes, *Region 1 Director*  
Kirk Dimond, *Region 2 Director*  
Taner R. Ozdil, *Region 3 Director*  
Matthew J. Kirkwood, *Region 4 Director*  
David Barbarash, *Region 5 Director*  
Elizabeth Brabec, *Region 7 Director*  
Nadia Amoroso, *Region 9 Director*  
David N. Myers, *Region 10 Director*  
Forster Ndubisi, *AoF Chair*  
Yiwei Huang, *CELA Student Director*  
Sara Jacobs, *CELA Student Director*

## CELA Executive Office

TBN Executive Director

LANDSCAPE RESEARCH RECORD is published annually and consist of papers focused on landscape architecture subject areas. Each issue is a collection of papers presented at the Council of Educators in Landscape Architecture annual conference of that year. Conference theme is expressed as the subtitle of *Landscape Research Record*. The views expressed in papers published in *Landscape Research Record* are those of the authors and do not necessarily reflect the views of the conference planning committee, or the Council of Educators in Landscape Architecture.

**PEER REVIEW OF PAPERS:** All papers published in *Landscape Research Record* have been reviewed and accepted for publication through the Council of Educators in Landscape Architecture's peer review process established according to procedures approved by the Board of the Council of Educators in Landscape Architecture. Reviewers are recruited by track chairs from among conference attendees and other outside experts. The track chairs also serve as co-editors in the peer review process. The Council of Educators in Landscape Architecture requires a minimum of two reviews; a decision is based on reviewer comments and resultant author revision. For details about the peer review process and reviewers' names, see **REVIEWERS** in Table of Contents.

**IN THIS ISSUE:** In 2019, the conference committee accepted 440 abstracts for presentation and rejected 43 abstracts. Authors of accepted abstracts were invited to submit a full paper. A total of 73 papers were received, 60 papers were selected for peer review. Finally, 36 papers were accepted for publication in this issue. The organization of this issue follows the standard conference tracks listed in the table of contents.

All Rights Reserved.  
ISSN 2471-8335



# THE ETHICS OF FORM: DESIGNING NEW LANDSCAPE HISTORIES THROUGH AN ALTERNATIVE PEDAGOGY

## BYRNE, FIONN

Assistant Professor, The University of British Columbia (UBC), School of Architecture + Landscape Architecture (SALA), fionn.byrne@ubc.ca.

### 1 ABSTRACT

*This paper presents the work of an advanced graduate level studio from the University of British Columbia that engaged disciplinary history as a site of research through speculative design. Fourteen students working in teams of two explored the relationships between physical form and social function in canonical works of building and landscape architecture completed in the eighteenth century at Stowe house, grounds, and park in Buckinghamshire, England. They used design as a tool to envision alternative proposals which give form to a set of contemporary ethics.*

*Stowe was critical in the development of the discipline of landscape architecture, as it provided the location, labor, and funds for William Kent and Capability Brown to formalize a new aesthetic, later called the “English landscape garden.” This design direction moved away from an ordered geometric design and toward a less formal, more picturesque approach. This landscape tradition also anticipated the rise of ecological design and an ethic of environmental responsibility.*

*Beginning with this historical narrative, this design studio asked, “what are the physical forms that other ethical commitments would have taken?” This question is particularly important in academia today, where social justice and activism are attracting increasing attention. This paper discusses how design was used as the method to research these historically celebrated works at Stowe, and critically engage with history through the proposal of alternative designs.*

#### 1.1 Keywords

design studio, research by design, history and theory, ethics, Stowe.

## 2 PURPOSE

Landscape today is pre-eminently the domain either of scientific study and land planning, or of personal and private pleasure. It no longer carries the burden of social or moral significance attached to it during the time of its most active cultural evolution. (Cosgrove, 1998, p. 2)

This design studio was motivated by a desire for useful critique of the history of the discipline. Research by design was the method employed by this studio to interrogate historic works of landscape and building architecture, where the focus was not on unearthing entirely new histories, but on challenging and uprooting the accepted history. It is increasingly recognized that the history of landscape architecture has been disproportionately focused on a Western gardening tradition, which traces the development of the field from the French formal garden, to the English landscape garden, and to its culmination in the American park. Most canonical works in the field are projects owned and paid for by an elite wealthy ruling class, while at the same time questions of labor, access, and discrimination are underrepresented. A publication like Jill Francis' *Gardens and gardening in early modern England and Wales, 1560 - 1660* (2018) points to the important research needed to expand discussions of disciplinary history beyond the "extravagant showpieces of the nobility," yet it also highlights the lack of such scholarly work.

A typical curriculum at the graduate level in landscape architecture has required courses in both design studio and history and theory. While design studio is primarily taught in a one-on-one teaching environment to explore solutions to a goal-oriented project, history education in landscape architecture is most often presented in a narrative form by way of lecture or seminar courses. This paper presents the work of an advanced level studio from the University of British Columbia, Canada, that merged these two goals and engaged disciplinary history as the site of design research. Broadly, this allowed for two ways of learning. First, the students were required to understand at a detailed level the design work discussed in typical history classes. This meant that precedent projects were not only shown as stock slides but were drafted in measured drawings. Secondly, the students were required to critically engage with disciplinary history. The past was not presented as a stable monolith but was subject to changing definition dependent on one's contemporary perspective and as a result, students actively participated in defining new historical narratives.

This way of framing a studio project, where disciplinary history is the site of design, has drawn inspiration from the contemporary American artist Fred Wilson. For the 1992-3 exhibition *Mining the Museum: An Installation by Fred Wilson*, Wilson organized the objects from the archives of the Maryland Historical Society in such a way as to create friction between adjacent pieces and demonstrated that history is never objective, static or simple. Furthermore, the exhibition showed how an artist can construct new historical narratives from existing objects. Speaking more generally about his approach to the display of artifacts in museums, Wilson has said, "I try to bring out the meanings that I see in the objects, often the ones that, for one reason or another, are hidden in plain sight. This is not to replace the museum's view of the object's meaning with my own, but to let both meanings or multiple meanings be present at the same time" (Graham, 2011, p. 321). This is an assertion that the canon need not be discarded, but that it must be opened to critique, allowing the voices of the disenfranchised to speak through historic works. So, while the discipline of landscape architecture should continue to teach precedent projects drawn from a Western elite gardening tradition, designers can re-envision these works to address historic injustices and give form to alternative meanings. In other words, while the form of a historic garden is useful disciplinary knowledge, if this form expresses or is the product of an unjust world view, then instead of recreating it, landscape architects today must be prepared to explore new formal designs.

Following this way of thinking, the approach of this type of studio is twofold. In simplest terms, the first design exercise is to define multiple social and moral meanings attached to the physical formation of a historic landscape or building. This is a critical step because linking social meaning to the particulars of a project as built will ensure the forthcoming critiques remain grounded and respond in kind, that is with physical form embodying the social critique or the alternative moral position. It of course follows that the second design exercise is to propose alternative forms that signify alternative social or moral positions. These counter-proposals render a new disciplinary history more inclusive and relevant to contemporary practice. In the end, the design work of such a studio seeks to confirm Cosgrove's opening remarks, that landscape has become more interested in either a scientific or phenomenological approach to design, and the consequence has been a silencing of the social and moral implications of the work. It is here argued that this position must be countered, as social and moral significance is not a burden to be avoided. Rather, it must be understood as a consistent and critical component of any design work.

### 3 BACKGROUND

Alexander Pope's dictum to "consult the genius of the place in all" are words well known by every landscape architect (1751, p. 42). This famous line is part of a poem that describes the house and grounds at Stowe in Buckinghamshire, England. Stowe is a landscape that would become nearly as famous as Pope's words and is a central project in the development of the discipline of landscape architecture. This one phrase represents the most concise written summary of a new design aesthetic pioneered at Stowe and later called the "English landscape garden," which sought to move away from an ordered geometric design to a more picturesque, less formal approach. Pope's words also anticipated the rise of ecological design that continues to attract contemporary designers. The "genius of the place" is today referenced interchangeably with notions of site-specific, context based, and environmentally sensitive design work.

Pope's poem was published in 1731 at a time when the garden designer Charles Bridgeman and the architect John Vanbrugh were just starting to experiment with new design directions at Stowe. Previously, the site was an exemplar of the Georgian formal garden and shared more in common with the French style of André Le Nôtre than the naturalistic style that would follow. What Bridgeman started at Stowe would be continued and significantly advanced by both William Kent, who arrived in 1730 and took over as head of garden design in 1735, and by Lancelot Brown, who served as head gardener from 1741 until 1751. As Kent and Brown worked on the landscape, they were joined by the architect James Gibbs. And while Bridgeman may have launched a new design direction, credit today is given to Kent, Brown and their successor Humphry Repton for defining and popularizing a new landscape aesthetic. This new organic or informal style sought to design with nature instead of seeking to arrest and control it. Kent removed any potential misinterpretation of Pope's poetic dictum when he stated: "nature abhors a straight line" and this design directive remains as relevant today as when it was first professed. (Price, 1842, p. 165)

Indeed, Ian McHarg's influential book *Design with Nature*, published in 1969, advocated for designers to return to a naturalistic aesthetic legitimized through a continuity with the design work first developed by Kent, Brown, and Repton. McHarg summarized the attitude of the eighteenth century landscape gardeners by arguing that their close observation and imitation of nature corresponded to a respect there for.

There is another great bridge, the 18th-century English landscape tradition. This movement originated in the poets and writers of the period, from whom developed the conception of a harmony of man and nature. The landscape image was derived from the painters of the Campagna – Claude Lorraine, Salvator Rosa and Poussin. It was confirmed in a new aesthetic by the discovery of the Orient and on these premises transformed England from a poverty-stricken and raddled land to that beautiful landscape that still is visible today. This is a valid western tradition, it presumes a unity of man and nature, it was developed empirically by a few landscape architects, it accomplished a most dramatic transformation, it has endured. Yet the precursory understanding of natural processes that underlay it was limited. A better source is that uniquely western preoccupation, science. (1969, p.28)

McHarg argued that this latent respect for nature found in the eighteenth century English landscape garden was paralleled in the 1960s, where observation of nature was enabled by the science of ecology and respect for nature was a product of the new environmental movement. Yet in both cases this respect for the environment did not develop independently of larger landscape and social changes. In retrospect it has been claimed of the eighteenth century that it is no coincidence that the move to a design style more sensitive to the forces and flows of nature happened in conjunction with the development of the agrarian and the industrial revolution in Europe. These large-scale social and landscape transformations saw private properties expand, farms growing larger, forests being felled, and the population in cities increase as urban areas expanded to cover more land. Correspondingly, the effects of pollution were starting to be seen in the air and water. It makes sense that McHarg would share an allegiance with the eighteenth century landscape designers, as in his time and so too in ours, we are living through accelerating rates of environmental transformation, with continued privatization of land for access to resources, the growth of megaregions, the felling of rainforests, and of course, as a consequence of this planetary urbanism, an overall warming of the globe. As nature continues to be degraded, designers continue to work in a style that optimistically adopts characteristics of the threatened landscapes. The sinuous paths and curving panted areas of contemporary practitioners share more in common with those of Kent or Brown than just stylistic similarities. As it was in the eighteenth-century, so too does it remain true today that to design with



nature is an aesthetic act rooted in an ethical attitude towards the environment. The naturalistic aesthetic associates well with a contemporary concern for global warming.

Undoubtedly a concern for the environment remains a major motivation for designers today, but so too are new ethical imperatives. It is increasingly common to hear designers speak about social justice, economic inequality, gender discrimination, racism, and the rights of nature for example, none of which would have concerned Kent or Brown. Indeed, as Raymond Williams has provocatively written, at times the English landscape gardeners were practicing in ways and supporting a social system which we would find objectionable, yet unfortunately, at times still common today:

Significantly, also, the history of English landscape in the eighteenth century has been, in the standard accounts, foreshortened. Reading some of these histories you might almost believe – you are often enough told – that the eighteenth-century landlord, through the agency of his hired landscapers, and with poets and painters in support, invented natural beauty. And in a way, why not? In the same ideology he invented charity, land-improvement and politeness, just as when he and his kind went to other men's countries, such countries were 'discovered'. (1973, p. 120)

And here then we arrive at a central question of this studio: if the organic style, otherwise called designing with nature, is the best physical expression of an environmental ethic, what designed forms can other ethical imperatives take? Or even more generally, our question is, how do formal design strategies express ethical values? What are the relationships between physical form and social or moral function?

It is worth remembering, for example, that throughout the eighteenth century acts of enclosure were dispossessing many poor of their ability to live off the land and forcing a migration into city centers; trees were most often seen as a resource to support the empire's navy; women could not vote; homosexual acts were punishable by death; and England still participated in the slave trade – not passing the Act for the Abolition of the Slave Trade until 1807. Even a social moderate with today's mores would appear as a radical three hundred years ago. So, by imagining oneself back in time and in competition with Kent or Brown, students are giving a comfortable distance to launch a design and social critique of famous built works, and more generally of the history of the profession. This studio leverages a forced moral discontinuity experienced by students to motivate speculative alternative design proposals.

Richard Neustadt and Ernest May's 1986 book, *Thinking in time*, argues that the careful study of history can usefully inform future decisions. In the introduction to their book they state that the "use of history can stimulate imagination: seeing the past can help one envision alternative futures" (1986, p. XV). So too, this studio allowed for a critical engagement with disciplinary history in an effort to better understand contemporary design trends, to explore a greater diversity of formal strategies, and to advance landscape architectural theory. Furthermore, with an underlying aim to decolonize landscape architecture and critique the profession's Eurocentric lens, this studio acknowledged that the design and organization of space, at any scale that affects the configuration of the social and natural world, is necessarily political.

#### **4 METHOD**

This course asked students to imagine themselves in the eighteenth century England, 1731 to be exact. Students did not need to pretend to have no knowledge of the present and were even encouraged to speculate on how their projects designed in the eighteenth century would affect us today, but the studio was not concerned with time travel. The method of arriving in the past or seeking ways to return to the present were not considered interesting. Instead students were asked to be solely concerned with presenting a design proposal to Richard Temple, 1st Viscount Cobham, the owner of Stowe House, Landscape Gardens, and Park.

These alternative design proposals had to respond to two main charges. First, the design should address an ethical imperative, uncommon or foreign to the eighteenth century but commonplace or topical to today's society. Second, the proposal should be imagined as an alternative to a historically documented work. In other words, students were designing the antithesis to any work of Charles Bridgeman, John Vanbrugh, William Kent, James Gibbs, or Lancelot Brown, completed any time in the eighteenth century at Stowe. Additionally, due to the design work being completed a few hundred years ago, it was productive to consider both the technology and methods of landscape representation and construction.

While this studio placed an emphasis on developing a compelling final design project, the course also devoted substantial time to research. And so, an additional aim of this course was to demonstrate how research and design are self-supporting acts. It is believed that strong research will coincide with strong design propositions. In the case of this studio, the context was foreign to most students, having less

knowledge of the eighteenth-century than of today. Yet it was argued that while not temporally displaced, it is often the case that designers will be required to work in foreign contexts and with foreign cultures. Thus again, the format and methodology of this studio was to be more broadly applicable.

This single-term studio was open to all eligible second- and third-year graduate students at the School of Architecture and Landscape Architecture (SALA) at the University of British Columbia (UBC), Canada, in the fall term of 2018. A group of fourteen self-elected to enroll in the course. The composition of the class was split between six graduate level architecture students (March), seven studying landscape architecture at the graduate level (MLA), and one dual-degree student (MARCLA). The studio was thirteen weeks long, with six reviews, followed by a final review in the fourteenth week of the term. Students worked in teams of two for most of the term, but some selected to work individually after the mid-term. In typical studio format, the majority of class time was scheduled for desk critiques, where teams would meet individually with the teaching faculty. The course was scheduled for two meetings a week of four and a half hours each.

## **5 FINDINGS**

The course proceeded through three quick research by design exercises of two weeks each before focusing greater attention on one design project that was followed to the end of the term. The following discussion will describe each exercise in turn, with an introduction to the theory and structure of the exercise, along with the description of a sample student project to give a sense of the design work produced during the term.

### **5.1 Exercise one: “Stops: the house and temples.”**

The aim of the first research exercise was to study the architectural elements of Stowe. It was the position of the studio that each discrete architectural object in the landscape can be investigated in two ways. On the one hand, the objects are built works and can thus be reduced to a set of structural, material, and maintenance decisions. In this regard, form and program are of paramount significance and measured drawings are best used to communicate the quantitative, objective reality of these structures. This is building and landscape architecture as an objective project and as a subject of scientific study. Historical texts and images served as the foundation for research and as this exercise proceeded, students were required to produce original illustrations, which included developing plan, section, and axonometric drawings of a selected architectural object in the landscape. Undoubtedly, at this stage the students would have benefited from a field excursion to visit Stowe, but the cost was decided to be prohibitive.

On the other hand, a second way to research these architectural objects is through studying their symbolic function. Building and landscape architecture of the eighteenth century, particularly in England, was focused on the symbolic meaning of design. Projects were overtly political and ideological and were intended to have direct and controllable impacts on the social and moral environment. Jonathan Lamb framed well the question posed to the students in this exercise, writing of Richard Temple, 1st Viscount Cobham, the owner of Stowe:

The material result of Cobham's indulgence of these heterogeneous notions, traced in memorials of friendship and icons of duty and pleasure, was a remarkable proliferation of structures: "Triumphal arches, Chinese houses, temples, obelisks, cascades, fountains, without end ... cupolas, spires, columns, carvings, statues, vases," "Temples, Pillars, Piramids [sic] and Statues." Walpole said, "Half as many buildings would be too many, but such a profusion gives inexpressible richness." The question is, what kind of richness, and for whom? (Lamb, 1996, p. 62)

And in this respect, the house, gardens and grounds of Stowe are a perfect study, being highly influenced by the social changes taking place in rural England and by projecting an enormous social impact on the eighteenth century and beyond. Yet, a representational challenge emerged quickly, as the symbolic function of building and landscape architecture is more difficult to illustrate than its structure. The primary purpose of a measured drawing is to communicate constructability, not symbolic effect. This studio sought to develop a qualitative drawing type, provisionally referred to as an “evidentiary collage” which could communicate this meta-structure of any project. Research began to answer, and subsequently illustrate, why projects were built, by whom, and under what conditions. In addition, students were asked to consider, for example, how the project communicates its meaning, at what scales it operates, how it was perceived, and then subsequently understood.

Divine Ndemeye, a third-year landscape architecture student, conducted research by design and investigated the Temple of British Worthies. Designed by William Kent in 1734, this temple housed sixteen busts of those who Richard Temple considered the most worthy British citizens. Included are monarchs, military figures, poets, natural scientists, and others, all of whom were men of European descent, with the exception of Queen Elizabeth I. Carved of stone and protected in niches which form an exedra, these busts remain in place today. Ndemeye sought not to propose an entirely new structure but to challenge the permanence of these monuments. It was important to recognize that while the figures represented have each made a significant historic contribution to British culture and out shared history, these individuals, as with all others, were fallible and contributed also to some social injustice and human suffering. Proposing that the busts be carved out of sugar, Ndemeye envisioned a temporary monument that forced a recognition of the role of the Atlantic triangular slave trade in the accumulation of wealth by elite Europeans. As the busts weathered, the carved faces would deteriorate, and sweet water would mark the face of the temple. The planting strategy proposed flowers of African origin be used to intercept the run-off before it entered the lake of the Elysian Fields (see Figure 1).



**Figure 1. Addressing the worthiness of those in the Temple of British Worthies (2018). Image by Divine Ndemeye.**

Working in this way, students gained a comprehensive understanding of existing built structures and their relationship to their surrounding landscape. They then responded with speculative design alternatives that illuminated previously unconsidered points of view. Ndemeye's project made clear the link between material selection and social significance. Proposing the use of sugar instead of stone completely transforms the moral meaning of the temple and challenges future designer to consider the political dimensions of specifying materials for built works.

## **5.2 Exercise two: "Walks: the garden and grounds."**

While the first exercise was focused on discrete architectural objects, the second expanded the scale of investigation and turned attention to Stowe landscape gardens. As the research moved up in scale, from discrete temples to components of the landscape, a significant change was noted by the studio in how the symbolic function of projects were understood.

It was argued in the first exercise that the physical formation of the architecture and its social significance were inseparable. Symbolic meaning was given form and communicated to a target audience through a controlled visual interaction. Most often it was statements about the status of the elite that were reaffirmed through a viewer's passive consumption of an image of an object. This method of communication through landscape formation was popular during the seventeenth century, especially in France for example, as Chandra Mukerji has explained, "the political culture of land control that was transforming the French landscape into a marker of the state's power was showcased around the royal residences, particularly Versailles, in the formal gardens that mobilized the same technologies of material power used throughout the state but that employed them to create dramatic visual effects from natural force" (1994, p. 652).



The English landscape garden of the eighteenth century is however different. Certainly, at times the physical form has direct symbolic and moral significance, yet in other instances it is the performance of the landscape itself that is most imbued with meaning. The English landscape garden indexes not only a material domination of nature, but also displays an extended control over those who work the land. For example, the fields for which Kent, Brown, and Repton would become famous required a significant labor force to work the land. Participants act out the landscape in well-defined roles over and over again. Of course, the ability to correctly perform requires a specific physical formation of the landscape, but in this case, the landscape is acting as intermediary between physical form and moral significance via the performance of actors. Consider for example the overall dimensions and solar exposure of a field, where advantageous growing conditions necessitate a greater investment in labor to maintain the landscape as a well-kept lawn. Thus, in this example, planting strategy, slope angle, and overall dimensions are all intrinsically linked to a hierarchical social structure, acted out each time the field is mown. Planting trees for shade, a topography which captures standing water, or maintaining a lawn at half the overall dimensions would each contribute to an alternative relationship between landowner and landscape laborer. Students kept this distinction in mind as the research progressed.

Alena Pavan & Michelle Gagon-Creeley, graduate students in architecture and landscape architecture respectively researched the Grecian Valley. The valley was built on previously farmed land in an area captured by the expanding Stowe garden perimeter. Lancelot Brown designed a large sinuous excavation intended to fill with water and flood an artificial river valley. Unfortunately, the project was a failure. The site did not provide or hold enough water to produce the lake.



**Figure 2. Precision and labor in the Grecian Valley (2018). Image by Alena Pavan & Michelle Gagnon-Creeley.**

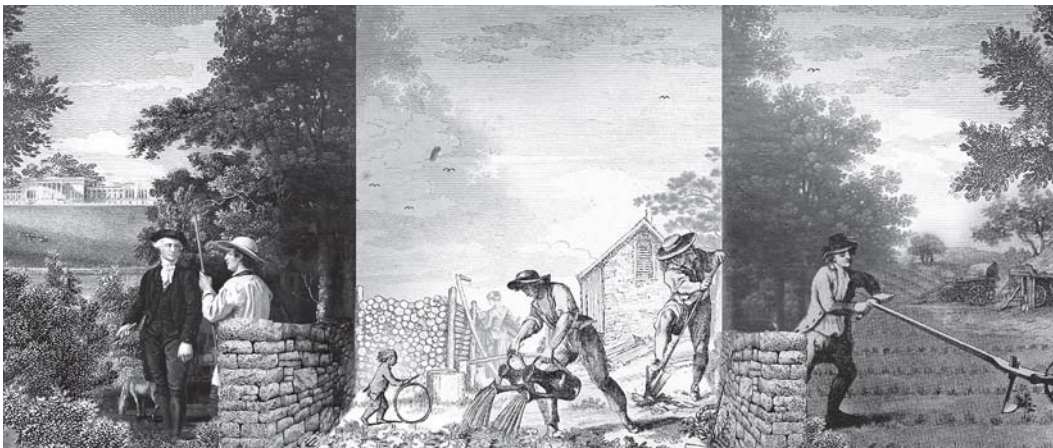
Yet, it is exactly this failure that Pavan & Gagnon-Creeley used to provoke some intriguing discussions. First, it must be recognized that Brown did not build the valley himself. He employed many laborers working long hours to manually move vast volumes of soil. In this project their effort was a failure relative to the designed intent. Yet, in addition to understanding the project as a failure, from their perspective in the present Pavan & Gagnon-Creeley noted that the Grecian Valley is a much-loved landscape of the Stowe garden. The consequent dry riverbed has been celebrated by landscape architects and the general public alike. As a response for this design research exercise the students used techniques of photo manipulation to render what the lake would have looked like had the project succeeded (see Figure 2). This effort questioned the degrees of tolerance and precision in landscape design. When viewing this work, one asks how it is possible that a failed lake could be equally celebrated as a vegetated valley. More generally it asks how we define failure in landscape architecture. We wonder, for example, if Brown had planned for the excavation of half the quantity of soil, would the project still have remained a success? Certainly, fewer hours of labor would have been committed to transporting soil across the Stowe garden.

### 5.3 Exercise three: “Drives: the park and woods.”

The third exercise again scaled up the scope of research. While exercise one focused on discrete architectural objects, and exercise two studied the grounds surrounding Stowe house, exercise three required the design research to move beyond the perimeter ha-ha to investigate the expanded landscape. Students explored how landscape organized infrastructure and urbanism in the eighteenth century. Yet, while the scale of landscape investigation increased, this exercise also focused on the technologies of landscape control. It was argued that the formal arrangement of larger landscapes have properties in plan and section that cannot be reduced to a useful typical. The arrangement of these landscapes are always site-specific and unique in every instance. However, while the overall formal geometry is less subject to a designer’s desires, the technology and material properties used in these landscapes have a significant and legible impact on the ground. For example, while every forest is different, planting equipment influences tree layouts, and while no two fields are the same, farming technology affects plant spacing and microtopography. The same is true of mines, where mining equipment determines a site’s surface impacts, and swamps, in which land drainage tools affect a swamp’s hydraulic regime, as well as many other landscapes.

To test this proposition, this research exercise began by drawing details of the newly invented technologies of landscape manipulation that influenced the spatial expression of a set of selected landscape types of the eighteenth century. In addition to the detailed drawings, a second drawing type was required to render this technology in use, illustrating its influence on the landscape in an exaggerated way by juxtaposing a certain area under technological control against an area without its influence. Lands brought under the influence of these newly acquired technological innovations were said to be improved. Ann Bermingham describes this environment well:

At the same time the improvement of the real landscape, increasing its agricultural yield, raised its commercial and monetary worth. Estates were valued not just because they conferred and embodied the prestige of lineage but also because they promised financial gains unknown to the grandfathers and great-grandfathers of the enclosing landowners. As a result of its new economic value, land at the end of the eighteenth century acquired new social and political value as well. (1986, p. 1)



**Figure 3. Hedgerow urbanism, occupying the border (2018). Image by Jiahui Huang.**

In response, Jiahui Huang, a third-year landscape architecture student decided to study the related issues of land enclosure and agricultural improvement. She began by focusing on the development of field technologies, such as the ever more efficient plow. Detailed drawings were used to show how the technology had consequence on the overall aesthetic of the fields, including plant spacing, furrow depth, and overall orderliness. As a design response, Huang wished to address the displacement of local residents resulting from acts of enclosure. Thus, Huang also studied in detail quick and dead hedges used during the eighteenth century to delineate field boundaries. By thickening this line, Huang developed a design proposal for a border condition beyond view (see Figure 3). This hidden linear occupiable space would serve as a free territory for the laborer or any others wishing to avoid the gaze of the landed gentry.

The conclusion of this project was the recognition that the organization of space conditions social structures. The expansion of fields through acts of enclosure that were dispossessing many poor of their land did not just change the physical world but modified also the political structure of society. Huang's design move, to return land for free expression and gathering, allowed the studio to envision alternative possibilities for the development of the agrarian revolution and reflected the contemporary organization of our own democratic and capitalistic society in a new light. To our benefit, this provoked the class to question both what spaces are missing and what new spaces could be designed to make for a more just and equitable society today.

#### 5.4 Exercise four: "Retrospective radicalism."

Speaking to designers at the Harvard Graduate School of Design in 2017, DeRay Mckesson reminded them of their critical role in imagining alternative futures, showing society how those futures could be built, and then lived. While Mckesson, a social activist and leader of the Black Lives Matter movement, continues to fight for justice, designers are needed to help show what a more equitable society could look like. If the role of the activist is to lead a movement, then it is left to the designer to envision and help build the destination. Mckesson put it in these terms:

If you can't imagine it, then you can't fight for it. It is a question of what does it look like? What does it feel like? What does it sound like? These are the things that I want to believe that our artists and designers actually do for us. That we think about art as both a window and a mirror. A window helping us see what could be, and a mirror helping us see who we are. (2017)

Undoubtedly, we live in a time of rapid social change. While Mckesson is an outspoken supporter of the Black Lives Matter movement, his words above could apply to many other organizations, from #MeToo to the LGBTQ social movement, the Occupy Movement, 350.org, the Water Protectors, or Idle No More, to name only a few. As a powerful sign of hope for future generations, many designers who enter academia are motivated by a desire to lead social change. While multiple course offerings currently discuss social justice, it is uncommon to explore the direct links between design and social activism, and specifically the relationships between physical form and social function, which can be hard to theorize and even more difficult to project the future impacts thereof.

It is often thought that environmental subtleties become more visible at extremes, with small changes having exaggerated effects. Many studios use these environments such that the impact of design will be most evident. This studio followed the same strategy yet explored social extremes. The moral and social landscape of the eighteenth century was entirely different from today. In that century, even the least radical student would find many of their opinions rejected by popular society. Back then, anyone designing with today's mores would be considered an activist. It is the goal then that by setting this studio into the past, not only will students observe the powerful links between physical formation and social function, but that contemporary design will be seen with new eyes. In this studio, students final design projects advocated that the social and moral significance of design is not a burden, but an absolute necessity that we must re-liven in a time of immense social change.

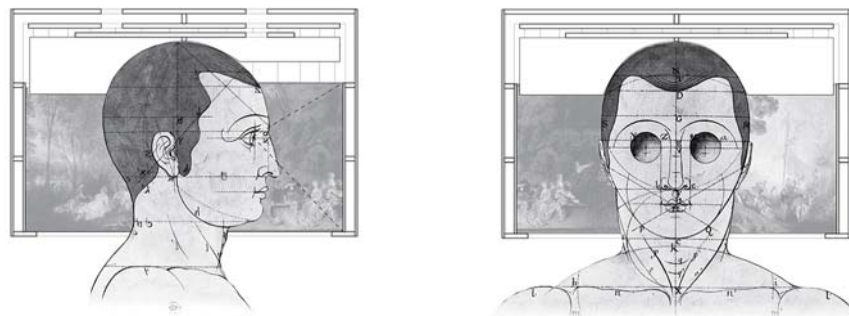




**Figure 4. Mucking about, multispecies cohabitation (2018). Image by Lisa Kusaka & Valia Puente Flores.**

Lisa Kusaka and Valia Puente Flores, two architecture students developed a project that designed a series of spaces for the cohabitation of multiple species. Their three designs included a stable re-designed to accommodate an aviary and a fox burrow; a landscape bridge re-designed to provide waterfowl habitat, safety for hunted deer, and drinking water for livestock; and finally, a dovecote layered with housing for sheep and with a fish well at the bottom (see Figure 4). The spaces they designed supported mutualistic opportunities for collaboration between species, where, for example, the heat generated by the sheep warmed the dovecote, and surplus bird seed would feed the housed carp. They argued that environmental activism was non-existent in the eighteenth century, and the treatment of nature and non-human subjects was deplorable. Their set of hybrid spaces destabilized the familiar human to animal relationships and instead flattened hierarchies while still serving as usable architectural proposals. Through this work they argued convincingly that the spatial configurations of building and landscape architecture affect our ethical attitudes towards nature.

As a final example, Vincent Perron pursuing a degree in architecture, responded to the studio brief by proposing a retrofuturistic technology entitled the “happy helmet” (see Figure 5). In this provocative project, Perron traced the development of representation in the field of landscape architecture and noted that the ability to simulate nature through digital means has developed concurrently with the devastation of nature by human technology. Contextualizing this contemporary conclusion in the eighteenth century, Perron speculated on what would have happened if fully immersive sensory experiences were accessible to the average citizen. Instead of facing the challenges of the agrarian and industrial revolution, for example moving to an urban center and being displaced from the land, the proletariat could opt out of this failed future and instead willingly commit themselves to experiencing a permanent illusion. Landscape painters, landscape gardeners, and landscape architects would be hired to mass produce immersive representations of an idealized nature for consumption. The projected consequence of the proposal is a generation dislocated from the land, oblivious to the radical transformations of their environment, and committed to consuming images of nature rather than experiencing it.



**Figure 5. The happy helmet (2018). Image by Vincent Perron.**

These five exemplary projects demonstrate the success of research by design, where it is the act of designing that provokes theoretical questions and moves forward a research agenda. In the case of this studio, the goal was to achieve both a wider understanding and a critical re-examining of the history of landscape architecture.

## 6 IMPORTANCE

This paper opened with a quotation from Denis Cosgrove writing in 1998 that landscape today falls within the domain of either the scientific study or personal pleasure. These words are mirrored by Karen M’Closkey, a landscape architect who teaches at the University of Pennsylvania, writing in 2014:

We are left with an enormous gulf between the “planner and the poet,” between analysis and design, because the methods used to translate information into physical formations remain largely

unexamined... It remains necessary to develop design responses that give physical and aesthetic expression to information in the digital realm beyond the pictorialization of processes or its quantification into graphs, maps, and charts. (p. 125)

When we read M'Closkey's words we are left with a challenge – how can research inform design? Or more specifically, how does the collection of information and the use of data inform a contemporary aesthetic? Yet to ask these questions assumes that the primary determinant of aesthetics is information and, furthermore, that design is about finding the greatest fidelity between the two. In this studio we were attempting to step around this question and ask perhaps a more critical question – that of ends, not means. In M'Closkey's characterization, the usefulness of information is for greater performance, but we should also ask what the objective of this performance is. Interestingly, this quotation also points to the fact the dominant aesthetic in the field of landscape architecture has changed little over the years, while at the same time, technologies of analysis and representation have advanced dramatically. This observation that the aesthetics of the work have changed less than the technologies with which we work, is perhaps a more important provocation. It leads us to question, if information has not had a direct and noticeable impact on the field then what other factors, which have presumably remained stable, could be affecting dominant landscape aesthetics?

For both M'Closkey and Cosgrove, we see the same characterization of the design field with an apparent rift between the scientific planner and the pleasure driven poet. Yet, if social and moral significance is a strong determinate of aesthetics, then searching for a link between objective science and subjective pleasures will necessarily be an incomplete project. The central proposition of this studio remains that physical formation is inextricably linked to social signification and that the ethical motivations of a work should have legible consequence on the aesthetic expression. Focusing on a false binary between the objective, amoral scientist and the biased, individualistic poet is not productive. Our current environment calls for the education of the ethical designer, concerned with their individual actions and cognizant of their responsibility to the larger collective.

In this studio, design was the method to rigorously and systematically study landscape history. Research was not limited to quantitative expression, nor seen as the sole domain of the scientist. Instead design research, as a method to study disciplinary history, taught an appreciation for the measured details of past built works while also translating these physical lessons into contemporary forms and expressions. A comprehensive understanding of what was built enabled speculative but grounded alternative proposals. The result is an approach to the canon which both recognizes its Eurocentric and elitist lens, but also welcomes and embraces diversity and ongoing critique. As new ethical imperatives and social injustices come to the fore, designers will be required to find new and appropriate physical forms to give shape to their social and moral significance.

## 7 REFERENCES

1. Bermingham, A. (1986). *Landscape and ideology: The English rustic tradition, 1740-1860*. Berkeley: University of California Press.
2. Cosgrove, D.E. (1998). *Social formation and symbolic landscape*. Madison: University of Wisconsin Press.
3. Francis, J. (2018). *Gardens and gardening in early modern England and Wales, 1560-1660*. New Haven: Yale University Press.
4. Graham, M. (2011). An interview with artist Fred Wilson. In D. Globus (Ed.), *Fred Wilson: a critical reader* (pp. 318-325). London: Ridinghouse.
5. Lamb, J. (1996). The medium of publicity and the garden at Stowe. *Huntington Library Quarterly*, 59(1), 53-72. doi: 10.2307/3817905
6. M'Closkey, K. (2014). Structuring relations: From montage to model in composite imaging. In C. Waldheim & A. Hansen (Eds.), *Composite Landscapes: Photomontage and Landscape Architecture* (pp. 117-131). Ostfildern: Hatje Cantz Verlag.
7. McHarg, I. (1969). *Design with nature*. Garden City, N.Y.: Natural History Press.
8. Mckesson, D. [Harvard GSD]. (2017, October 12). Black in Design: Closing Keynote, DeRay Mckesson [Video File]. Retrieved from <https://www.youtube.com/watch?v=0UARIZLNs18&t=2245s>
9. Mukerji, C. (1994). The political mobilization of nature in seventeenth-century French formal gardens. *Theory and Society*, 23(5), 651-677.



10. Neustadt, R., & May, E. (1986). *Thinking in time: The uses of history for decision-makers*. New York: The Free Press.
11. Pope, A. (1751). *Moral essays, in four epistles to several persons*. Edinburgh: James Reid Bookseller.
12. Price, U. (1842). *On the Picturesque: with an essay on the origin of taste, and much original matter, by Sir Thomas Dick Lauder, Bart. and sixty illustrations, designed and drawn on the wood, by Montagu Stanley, R.S.A.* London: Wm. S. Orr And Co.
13. Williams, R. (1973). *The Country and the City*. New York: Oxford University Press.