Marston Quadrangle: Past, Present, and Proposals for a Sustainable Future

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MARSTON QUADRANGLE: Past, Present, and Proposals for a Sustainable Future

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Readers:
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INTRODUCTION

When you first set foot onto Marston Quadrangle, your eye is immediately guided along one of several strong visual axes. Depending on the direction you enter the space, your eyes are drawn to either Bridges Hall of Music to the south, Smith Campus Center to the north, or Bridges Auditorium and Carnegie Hall to the east and west, respectively. Marston Quadrangle, or “the Quad,” is a large grassy rectangle at the approximate center of the Pomona College campus, crossed by three south-north paths that divide the space into thirds and connect South Campus, where underclassmen live, to North Campus, where upperclassmen live. The east-west axis is defined by the long open expanse of lawn, enhanced by a lining of large sycamores and redwoods. The longer visual axis is by far the strongest, with open ends showcasing the grand columns of Bridges and Carnegie. This particular viewing angle across the expanse of the Quad has graced many Pomona College advertising materials, and photographs of it often feature students lounging or crossing the paths through the center, suggesting it as a place central to the campus residential life.

But Marston Quad is more than a set for promotional photo shoots. On nice days, the lawn is often used for students to relax and study, or to play a game of pick-up frisbee. The openness of the space allows for this kind of casual use, but also allows the Quad to be converted into a site for various events, including reunion for alumni, Founders Day celebration, and Commencement (see Fig. 1). Over the course of a few days, Marston Quad can become filled with a stage, tents, tables and chairs, etc. On the 125th anniversary Founders Day, celebrated on October 14, 2012, the Quad contained a bouncy house, tile flooring for ballroom dance performances, a stage for a mariachi band, and a carousel (see Fig.1). Days later, all traces of this event were erased, except for a few bald patches of lawn.
from the heavy foot traffic. Marston Quad, then, is open, in the literal physical sense of a
large expanse of lawn and in the sense of possibility for events of social and ceremonial
importance to the community.

Fig. 1. From top to bottom: (1) 2010 Commencement celebration. (2) 2012 Founders Day on the Quad. (3) A site specific dance performance on the Quad, facing Bridges Auditorium.
The design of this place of openness and gathering relies heavily on a campus design tradition made famous by Thomas Jefferson in his design of the University of Virginia, and as such, is rich with the architectural history of the American Campus. But as one might suspect, an expanse of verdant lawn in an area of Southern California that is natively populated by coastal sage scrub is not without its environmental costs. The Marston Quad lawn is watered four times a week, and kept in a state of near perfection with frequent mowing. Some of the recently added plants in the beds surrounding the grass are native, but most are not, also requiring regular watering. While changes have been made in an effort to improve sustainability of the Marston Quadrangle landscape, it remains a visual and symbolic stronghold of a generation of gardening that valued a varied, exotic plant palette over native plant species. Ultimately, this thesis proposes feasible changes to the plant palette of Marston Quad, in order to better reflect the campus’s changing identity and commitment to sustainability. The intention of these suggested changes is to confront the history of Pomona College’s most iconic green space in a way that acknowledges its long-standing tradition but is also sensitive to the unique environmental needs of Southern California as an ecological site as well as the goals of the institution in moving forward sustainably. Site specific, thus, means several things in this thesis, including the ecological specificity of the design location, the history surrounding the origin of the design, and the current needs and desires of the campus community.

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1 Hunt, Myron, and Elmer Grey. Pomona College, 1908. *Pomona College Campus Bulletin*. Pomona College Archives, Special Collections, Honnold/Mudd Library of The Claremont Colleges, Claremont, CA.
A CHANGING CAMPUS

It is important to note that Pomona College is not entirely adverse to native landscaping or a desert aesthetic, as shown by recent landscaping projects on campus. The landscaping beside Pomona Hall, one of the newest residential dorms, and the landscaping between the freshman dorms on South Campus display a variety of native and low-water use plants (see Fig. 2). These new developments are part of the college’s commitment to sustainability, particularly as it relates to the college’s Sustainability Action Plan for water. The plan notes the need for water transport from Northern California and the Colorado river due to the long history of water shortages in Southern California.4 In June of 2008, the Metropolitan Water District that serves Claremont issued an alert urging areas to conserve water, as the Colorado River has experienced drought for a decade and its reserves are dwindling.5 The Action Plan notes that while Pomona is fortunate to have access to two abundant wells, it also has a responsibility to set a positive example by reducing consumption of potable water.6 It lists the ways the college has made and can continue to make improvement in this area, with changes to:

irrigation frequency, technology, and strategies and the strategic removal of turf and shrubs and replacement with drip-irrigated plantings and/or mulch. Further restrictions can be made with more judicious use of turf and replacement of current plantings with more drought-resistant and native species, where appropriate.7

The new landscape projects reflect these changes to different kinds of plantings and a move away from turf as a widespread landscape element. While these changes are laudable, they are ultimately only gestures that reduce water use but do not change the overall character

5 Ibid
6 Ibid
7 Ibid, emphasis mine.
Fig. 2. From top to bottom: (1) Landscaping outside of Pomona Hall, a residence hall on the north side of campus. (2) Landscaping between Harwood Court and Mudd-Blaisdell, south campus residence halls.
of the college’s campus.

Due to the central nature of Marston Quadrangle, as well as its size compared to the other landscaped spaces on campus, it overwhelmingly defines the college landscape. Evidently, it has not been deemed one of the places that is “appropriate” for more widespread native plantings. While sustainable improvements have been made to Marston Quadrangle, they too are insufficient because the space does not have an aesthetic of sustainability. The issue of campus water and landscape came up often in the Fall of 2012 in a series of articles in the campus newspaper, *The Student Life*, praising both the changes made already and calling for even more changes in the future. In an article about movements toward environmental goals at the Claremont Colleges, a student notes the efforts that have been made by Pomona’s grounds crew, “reducing grass on campus by 43,402 square feet from 2010 to 2011 alone.” Part of the impetus for this is that in 2007, students at the Claremont Colleges (5Cs) began investigating water use, and concluded that nearly twice the amount of water that could be deemed sustainable was being used. Currently, attempts are being made to create two water treatment plants at the 5Cs that would be able to treat the 42% of 5C water that goes to sewage so that it can be repurposed for landscaping, which makes up the other 58% of water usage.

This would be a huge savings, if the project is successful, but the campuses, including Pomona, have received criticisms on how things are being watered in addition

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to the nature of the water that is used for irrigation. One student, Casey Breen, wrote an op-ed on environmentalists at the Claremont Colleges who unfairly target the grass as a source of environmental harm.\(^\text{11}\) He asserts that these students are spoiled, and points out that Pomona has already cut its water consumption by 30% and continues to do reduce its water use, even though half of the water it consumes comes from two wells on campus.\(^\text{12}\) He points out that there isn’t a better alternative for grass, and that “local fauna and plants aren’t capable of creating such an aesthetically pleasing atmosphere” and “aren’t conducive to sports and recreation.”\(^\text{13}\) While I think he has a point that grass is perhaps more suitable in some high use areas of campus, his assertion that it is spoiled for students to ask for more reduction of water use is thin in the dry area of Southern California. Casey uses the fact that half of the water used here comes from one of two wells that Pomona College draws water from, which produce 400 million gallons of water per year.\(^\text{14}\) This is a reason I often hear cited by students who feel water issues are overstated, but the water we use ultimately takes away from the water that people south of us can use.\(^\text{15}\) The college itself has acknowledged the importance of this issue, and students are right to remind the institution that they would like to see us keep striving for changes, especially when the lawns are often visibly being over-watered, with pavements flooding with runoff.


\(^{12}\) Ibid.

\(^{13}\) Ibid.


\(^{15}\) Interview with Ginny Routhe, Assistant Director Facilities and Campus Services at the Pomona College Sustainability Integration Office. Personal interview. 20 Nov. 2012.
The focus of this thesis is not reducing water use, however. It is about the symbolism and aesthetics of a commitment to sustainability. The parts of the campus that remain planted with non-native plants, particularly Marston Quad, are reflective of a reluctance to a full commitment to sustainable landscapes and maximum reduction of water use. As Paul Faustich, a Pitzer professor says, “The priority should be that we’re ecologically sensitive...Our campus landscapes are education landscapes, and they teach every bit as much as in our classrooms. What kind of message do we want to be sending to our students? An ecological one. Ecological and beautiful.”

Marston Quad is an example of a message that is not ecologically sensitive, and it is a particularly strong one, given its size and centrality to the Pomona campus. While it defines the campus character for many, it is also out of place in the climate, and in a campus landscape that has many native plantings. Given the current conversations happening around campus, and the presence of students willing and interested in landscaping changes (like the school’s Ralph Cornell Society that does small native planting projects in unused areas), I began to wonder about the Quad. Thus, the questions that guided my thesis were the following:

• Why does Marston Quad look the way it does?
• Why has it remained a location of largely unsustainable landscaping, as the rest of the campus moves away from this?

17 In a survey I conducted, students responding to the question: “Does Marston Quad fit into the campus identity or character? If so, how?”, 20% of respondents specifically mention that Marston Quad establishes the East coast school character the campus is emulating, and 13.8% mention that all colleges should have a quad.
• What were it’s original intentions, and is it still in line with the college’s goals?

• Can history and sustainability be better reconciled?
TYPOLoGY: WHAT IS MARSTON QUADRANGLE?

To more fully understand the intentions of Marston Quadrangle, one must first understand the typologies of landscape design it explicitly references. The most obvious reference is made to the quadrangle, an architectural planning tradition started in England at Oxford, with the intention of protecting the students by having a few gates that could easily close off the courtyard of buildings.\(^ {18}\) These quadrangles are in the monastic cloister tradition and are typically entirely closed off courtyards, completely surrounded by the buildings of the complex (see Fig. 3). Thus, architecturally, the traditional quadrangle design is markedly dissimilar from the very open Marston Quadrangle, in spite of the shared name. The openness of Marston makes it slightly closer in design to the open air quadrangle tradition started by Dr. John Caius at Cambridge, who in 1557 designed a quadrangle with one open side, apparently for the benefit of health (see Fig. 3). A building should not be built on the fourth side, he asserted, “lest the air, from being confined within a narrow space, should become foul,” and thus began a new notion of college planning in England.\(^ {19}\) Both the more conservative quadrangles at Oxford and the open quadrangles at Cambridge began to use prominent gates to emphasize axial symmetry and promote focal points.\(^ {20}\) Marston Quad draws on this tradition of axial organization to make the buildings on the east-west axis (and to a lesser extent, the north-south axis) into focal points of the space. However, the similarity stops at axial organization and four sides, as Marston Quad is really more akin to a mall, given that the buildings are set back from the lawn much more than a traditional or even open quadrangle.

\(^ {19}\) Ibid., p. 12.
\(^ {20}\) Ibid., p. 12.
Fig. 3. From top to bottom: (1) Mob Quad from Chapel Tower, Merton College, Oxford. A closed quadrangle. (2) Bird’s eye view of Gonville and Caius College, Cambridge by David Loggan. An open quadrangle.
The tradition of the mall in American campus planning was first seen in 1801 at the University of South Carolina, where the campus buildings were arranged in a horseshoe shape lining a lawn with trees (see Fig. 4). This design is similar to the open quadrangle designed by Caius, but markedly longer, and open at the corners where the buildings would usually meet. A decade later, Thomas Jefferson began to design a similar mall plan for the University of Virginia, as he disliked the concentration of many colleges into one large building, and wished to create an “academical village.” Thus, his plan was originally designed with an American village green in mind, including faculty and student residential houses lining a large central green space. As the plan developed, he added a Rotunda library to the north side of his design, the first time a library was made the focus on an American campus (see Fig. 4). Later in the planning period, constraints of the land used required a narrowing of the plan, which further emphasized the long “mall” aspect.

Marston Quadrangle was at the outset even more similar to this plan than it is today; it first stood as a long stretch of land with Carnegie, originally a library like the Virginia Rotunda, standing at its head to the west. This, effectively, was mirroring the “horseshoe” plan of the University of South Carolina and Virginia. However, the original Pomona plans distinguish themselves from the University of Virginia plan by placing a large administration and chapel building to the east, a spot now occupied by Bridges Auditorium. The plan for closing the fourth side may partly explain the desire to classify Marston as a “quadrangle,” however open and unconventional.

21 Ibid., p. 59.
22 Ibid., p. 80.
23 Ibid., p. 80.
24 Ibid., p. 83.
25 Ibid., p. 83.
Fig. 4. From top to bottom: (1) South Carolina College, horseshoe mall. Cropped from a birdseye-view map. (2) The Lawn at University of Virginia.
Fig. 5. Aerial shot of Pomona College, circa 1927. Marston Quad is within the red box (which I have added). It is quite barren on the lawn in this shot, lacking the tall sycamores that stand there today. There is a large space to the right (north) where Smith Campus Center would later stand, and a space where Bridges would later be below Marston Quad (to the east) that is partially occupied by the heating plant.
A TIME OF PLANNING: THE QUAD AND IDENTITY

A history and analysis of Marston Quadrangle cannot be separated from the history and analysis of the broader campus planning, including the architectural plans for the college and expansion plans for the consortium of the Claremont Colleges (now colloquially referred to as the 5Cs). In 1908, a campus bulletin published by architects Myron Hunt and Elmer Grey made “Recommendations to the city of Claremont and the Trustees of Pomona College, relating to the future development of the College Campus”. In it, they emphasize the need for foresight in planning, noting that “no conspicuous examples of such forethought can be found during the entire century following the establishment of Virginia.” Their deep appreciation for Jefferson’s architectural planning is evident in their written praise and in a side-by-side comparison of their sketches, both of which are included in the Campus Bulletin (see Fig. 6).

Hunt and Grey note that their buildings serve to emphasize what would later become Marston Quadrangle: “The central campus is now more thoroughly defined by the additional buildings flanking it…” This flanking organization is one of the defining features of the revered Virginia plan, and quite important for Pomona in its attempt to better establish itself as “A Christian College on the Pacific the Peer of the Many Colleges on the Atlantic” This was the heading on the top of an announcement of the new architectural plan, an announcement that describes the architectural plan as an expression of Pomona’s goals:

29 Ibid., p. 2.
30 Ibid., p. 10.
31 Pomona College Is Building To a Plan. Claremont: Pomona College, 1910. Pomona College Archives, Special Collections, Honnold/Mudd Library of The Claremont Colleges, Claremont, CA
Every great civilization needs great colleges. None more so than the civilization of the Pacific slope. Pomona aspires to serve efficiently. It has great hopes and purposes. It will take long to realize these ideals. But every step is toward a definite goal. Of this goal these architect’s plans are an outward expression.\footnote{Ibid.}

If, as the invitation says, the architectural plans are an outward expression of Pomona College’s goals, we can infer several things from the organization of the plan. First, a commitment to residential life, as shown by mirrored clusters of buildings to the north and south of what is now Bridges Auditorium. This is made explicit in a later

\footnote{Ibid.}
publication, which reads: “actual residence within the institution is urged as an inestimable advantage and opportunity”\textsuperscript{33}. The Quad is the central space that ties the flanking buildings and residence halls together, and the center from which the campus can grow. This space, marking the approximate center of the campus, makes all that is around it seem more important by framing it with strong visual axes. The original design planned for the library, an administrative building/chapel, and potentially buildings for the Art Department and Christian Associations, signifying a commitment to learning, arts, and religion, in keeping with the motto “Our Tribute to Christian Civilization”.\textsuperscript{34} The placement of a music hall instead, while likely mostly due to the opportunity of Appleton Shaw Bridges funding offer, is thus emblematic of the secular institution that Pomona is today. After all, the music hall location, as Hunt and Grey explained, “is the most important location on the campus”.\textsuperscript{35} Marston Quad is now surrounded by a politics building (Carnegie Hall), the admissions (Sumner Hall), administrative (Alexander Hall), and student buildings (Smith Campus Center), as well as two music halls (Mabel Shaw Bridges Hall of Music and Bridges Auditorium) and the music building (Thatcher Music Building). Thus, the Quad highlights some of the central offices to the college’s operations, as well as a commitment to music and performing arts.

It was later that Ralph Cornell, a student at Pomona shortly after the plans were made (1909-1914), would help to realize the landscape features of the architectural plan

\begin{flushright}
\textsuperscript{33} Claremont Colleges. Claremont: Claremont Colleges, c. 1925. Claremont Colleges Archives, Special Collections, Honnold/Mudd Library of The Claremont Colleges, Claremont, CA. p. 4
\textsuperscript{34} Hunt, Myron, and Elmer Grey. Pomona College, 1908. Pomona College Campus Bulletin. Pomona College Archives, Special Collections, Honnold/Mudd Library of The Claremont Colleges, Claremont, CA.. p. 11.
\textsuperscript{35} Ibid., p. 7.
\end{flushright}
(see Fig. 7). In 1919 George Marston donated funding for the creation of the quadrangle at the center of campus. With the completion of Marston Quadrangle in 1923, the campus became closer to the east coast campus model Myron Hunt and Elmer Grey referenced, and situated itself more firmly as a college that could hold its own among the institutions of the east coast. The large lawn served to establish Pomona College, as a “college in a garden” instead of a “sagebrush college in the desert”.

Interesting, these design changes occurred concurrently with the plans for incorporating the “Claremont Colleges,” a result of Pomona’s devotion to maintaining the

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38 Ibid., p. 46.
quality of a small institution with the resources of a larger university. In a publication on the proposed plan for the Claremont Colleges, Pomona explains its plan as a response to expansion pressure, and a way of guaranteeing high quality education: “The essence of the proposed plan is to add to the intimate advantages of the small college the large facilities of a group of colleges in such a way as to insure a better educational product than has been achieved heretofore.”39 Here Pomona is again attempting to establish itself in relation to its east coast peers, in this case distinguishing itself as the first American collegiate institution to follow something like the English model, which Pomona feels is “the best combination of economy and efficiency”.40 Proudly, a publication proclaims the Claremont Colleges as not only unique, but extremely influential:

…it may be said that Claremont Colleges is the only institution in the west which represents this plan. Indeed, it antedates in this respect any similar institution in this country. It was the pioneer in developing the plan and is undoubtedly having a definite influence in the reorganization of the forms of higher education in the whole nation. The development of the Claremont Colleges is therefore a contribution to one of the major influences for greater efficiency in educational life in America.41

During this period, Pomona College literature regarding the plans for Pomona and the Claremont Colleges struggles to define the institutions as similar to (and therefore comparable in quality) to their east coast and English peers, but also attempts to distinguish themselves as in a different league entirely. The appearance of the campus was essential in this process of defining Pomona as a distinctly American institution, with the educational efficiency of the English campuses.

41 Ibid., p. 8.
THE CASE FOR A NATIVE LANDSCAPE AESTHETIC

The resistance to changing the design aesthetic of the Quad is likely due to the deeply rooted historical pride Pomona has about the campus landscape. “An Introduction to Pomona College” on the college website opens with:

In the desert landscape that was inland Southern California in 1887, it took audacity to imagine “a college in a garden.” Yet far from the ivied halls of the Northeast, Pomona’s founders envisioned “a college of the New England type,” with small classes, close relationships between students and faculty, and a green jewel of a campus. From that audacious beginning, Pomona has grown to be one of the nation’s premier liberal arts colleges.42

And indeed, in the 1920s when Ralph Cornell worked on Marston Quad, it did take audacity to transform the desert campus into a “green jewel”. In our current historical moment, however, it takes audacity to re-envision a campus green space like Marston Quad so that it fits with the ecology of the site and the vision of a sustainable future. Perhaps another part of the resistance to change is out of deference to Ralph Cornell, who planned for a widely varied palette of plants from different climates (see Appendix 1 for plant list now represented). However, a closer look at Ralph Cornell’s background shows that the same man who created the campus landscape aesthetic had ideas and goals compatible with a sustainable future.43

This is something Nicholas Tyack, another Pomona student, explores in his thesis, Ralph Cornell and the “College in a Garden.” In chronicling Cornell’s life and career, he seeks to understand how a man who had a deep interest in native plants in his youth came to design a largely non-native landscape for the college. During his time at Pomona from 1909 to 1914, Cornell developed a love for plants, particularly those of the native

Southern California landscape. In 1912, he wrote an essay calling for “A Genuine Southern California Ground Park,” in which he commented upon the “abundant wealth of [native] flower and foliage...inviting recognition and adoption” in Southern California. He noted the trend of making “parks as artificial as possible” and complained that the dry sites for parks were often installed with “an elaborate water system” and planted with “plants entirely foreign to such an environment...they must serve a life-long sentence of struggle for existence under conditions entirely adverse to their developments.”

Only five years later, Cornell would write as a recently discharged soldier to Pomona President James Blaisdell, in hopes that he and his friend and then landscape partner, Theodore Payne, might serve the college in moving “towards a greater future”. In the letter, he sets the tone for the close relationship with the college he would continue to have until his death by suggesting a flat service fee: “...it had been our thot[sic] to place our relationship on a basis whereby you would feel free to call upon us at any time, for personal service, without the fear that you might be running the expense account into unwarranted figures...” Thus, it was Ralph Cornell’s wish from the beginning of his tenure as landscape architect at Pomona to serve the college and its future. Interestingly, the materials Cornell favored for landscape design shifted to mostly non-native plantings while he worked at Pomona. Tyack quotes Cornell in a 1921 essay for the Pomona College Alumni Quarterly, in which he explains the shift away from native plants:

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Even ten years ago it could still truthfully be said that Claremont lay in the sagebrush belt… At that time it would not have been fitting for the campus to bloom like a rose when the country all around flowered as the desert. But we quote the oft heard lament that “times have changed” with the added comment that the campus, too, has changed and is making its effort to keep pace with the times. Truly we regret the passing of the old order, so dear in memory and association; but the work that has seemed, to some, like unnecessary destruction of existing plant life, has been sanctioned only after very deliberate thought and consideration for the future constructive development of the college grounds.⁴⁸

Tyack further explains this re-prioritizing as a high value on the decorative effect of different landscape materials, since decoration was the primary purpose of campus plantings. Cornell writes, “the landscape or decorative values are matters of first and last importance, since school grounds are planted primarily to achieve decorative effects.”⁴⁹ Tyack explains this as a shift away from worrying about “whether or not plantings were appropriate or would require high levels of irrigation” which was not as important as appearance.⁵⁰ This shift in thought explains the wide array of non-native plants used in the periphery of the Quad, and is in line with the ideas of many landscape architects past and present. So often, the value placed on aesthetics far outweighs how design functions ecologically.

Interestingly, Nicholas Tyack’s thorough chronicle of Ralph Cornell’s landscape career and philosophy shows that he later recanted his mid-life views on landscape design. Appalled by the environmental degradation of Southern California, and feeling himself partly to blame for the loss of plant life, he began to advocate for the landscape architects like himself who had caused environmental harm to turn toward preservation work and native landscaping.⁵¹ Perhaps most radically, especially given his role in bringing the lush

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⁵¹ Ibid., p. 37.
green swaths of lawn to Pomona College, he wrote about the possibility of planting no grass at all in desert regions:

The greater part of the United States takes grass for granted. It is assumed to be a symbol which bespeaks good design in garden, park, and rural developments...grass may be very logical in New England, Kentucky, or northern Europe...its Creator never intended that it should be planted on the fringes of desert desolation.52

Fig. 8. Aerial shot of the campus in 1930. A sparsely planted quad with a strikingly barren stretch of grass. What would later become large trees that defined the Quadrangle appear to be only meak shrubs, here.

In spite of Cornell’s change of heart, in the Summer of 2012, the college made efforts to restore the landscaping around Marston Quadrangle, “...to the original plans, primarily through thinning existing plants and adding native plants to the existing landscape palate[sic]. The purpose of this work is to restore the open feel of the Quadrangle as it was originally designed.”53 We can see that clinging to the original design intentions of the much admired Ralph Cornell is misguided, because as Tyack’s thesis leads us to believe, Cornell would not have wanted to see the reestablishment of his old design happen. Significantly, this “Restoration and Renovation Project” is a restoration of original design and history instead of an ecological restoration. The design and cultural history of the space has been given greater weight than the environmental history of the site or what is best for the future of sustainability.

Since Pomona’s landscape and architectural planning were central to Pomona’s ideas about itself in the past, changes to the landscape might help Pomona establish itself once more as unique in the present. The landscape is not only an opportunity for Pomona to distinguish itself as a leader in the field of sustainable landscape, it is a place for Pomona to reidentify itself as tied to its origins, and give students a sense of place that is specific to the Southern Californian institution they have chosen to attend. A return to native plants would in part fulfill the role of the “Genuine Southern California Ground Park” that Ralph Cornell wrote of, a place “at once unique and individual; … decidedly typical and distinctive of California; … a garden spot of nature, a mecca for birds, a plant paradise; it would be a delight alike to the student, the botanist, the sight-seer and nature lover, each in his own

way.”

Making changes to the Marston Quad plantings, while it goes against the landscape history the Quad is steeped in, would honor Cornell’s dream in addition to helping Pomona in meeting various goals it has set for a more sustainable campus (See Appendix 2: A Vision for Sustainability). Specifically, reduced water use (Goals 1 and 2) and better community education and sustainable leadership (Goal 5 and 7). Shifting to native landscaping on Marston Quad, a change that has been made in some of the other places on campus, would help Pomona College once again establish itself as a model of excellence as they were with the incorporation of the Claremont Colleges. Native Southern California landscaping in a space so visually tied to the iconography of the American campus would make a bold statement in keeping with Pomona’s professed desire to make “public declarations of sustainability commitments”.

56 Ibid.
“GREENING” THE AESTHETIC OF MARSTON QUAD

In the case of Marston Quad, and similar college green spaces, improving the ecological integrity and individual character of the site has a great deal to do with the materials used for planting. Alterations to the materials, while they go against many of the trends of landscape planning at the time Pomona and similar institutions were being established, do not fundamentally alter the architectural plan or function of the site as a central green space, or a campus garden. For the scope of this thesis, I focus on the aesthetics of sustainability, and thus look specifically at the plant materials of the Quad instead of focusing on the improvements that could be made to hardscape or water features. With the functional goals of the site in mind, as well as the need for a shift to more sustainable materials, the following basic goals have been made:

GOAL 1: Maintain Trees

Maintain mature and well established trees.

Marston Quad has a number of old evergreens, coastal live oaks, and California sycamores, which are all well established. The largest and most prominently featured, which are the California sycamores along the lawn, the coast redwoods in the corners of the quad, and the coastal live oaks are all native to California. Although only the coastal live oak is found natively in Southern California, the other species are well adapted for the environment with some watering. They are not only an important part of the history of the college because of their old age and stature, they serve as a habitat and food source for wild life. Squirrels nest in the oaks and gather the acorns that fall from them. Owls and

other birds of prey use the tall redwoods and sycamores as perches for hunting and nesting.

Since they are an established part of the Quad’s ecosystem, history, and fundamental to the aesthetic, the other plantings will need to fit around and work with them.

The following large trees are present and well established (see Appendix 1 for a list of other, smaller trees ornamental trees, such as camellias):

- Cedrus deodara (Deodar Cedar)
- Cedrus spp. (Cedar)
- Metasequoia glyptostroboides (Dawn Redwood)
- Pinus canariensis (Canary Is. Pine)
- Platanus racemosa (California Sycamore)
- Quercus agrifolia (Coastal Live Oak)
- Sequoia sempervirens (Coast Redwood)

The sustainability of the tree landscaping has been improved over time by replacing Stover Walk hardscape (to the north of the Quad) with pavers over an aggregate base that is permeable and by using drip irrigation where possible (which is significantly more efficient). The California sycamores which are on the lawn are irrigated with the same rotor system that waters the lawn four times a week, or as needed depending on the weather that week. The more established oak trees along Stover Walk are now able to survive without any additional watering. Maintaining the trees, while they may not be ideal for the climate, could allow for some native plants that require slightly more water than others to be placed strategically near these trees’s root systems. The smaller ornamental trees such as the camellias will be evaluated as part of the general understory and considered for removal and replacement like the other plantings in the periphery.

58 Quanstrom, Kevin. “Interview with Kevin Quanstrom Head of Groundskeeping.” Personal interview. 27 Nov. 2012.
59 Ibid.
60 Ibid.
GOAL 2: Plant Native Understory

Move toward native, low water use plants for the “understory” planting.

**Constraints:**

- Plants need to do well with shade, part shade, and part sun, depending on their location.
- Plants must be native to California, preferably close to the San Bernardino mountain region.
- Need to work with rocky alkaline soil type, or be adaptable, as the mulch and fallen leaves add acidity back into the soil.\(^6\)
- Should be low or no water, and grouped according to those needs. Some plants that require more water may be placed near the base of trees to minimize water waste.

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Fig. 9. Photograph showing the large sycamores, and in the background of the photograph, a few redwoods. These are defining features of the quad.

61 Quanstrom, Kevin. “Interview with Kevin Quanstrom Head of Groundskeeping.” Personal interview. 27 Nov. 2012.
While some native plants were added with the Marston Quadrangle Restoration and Renovation Project, the understory plantings that frame the boundaries of the Quad along the walkways are, even to the untrained eye, a hodge podge of plants from different ecosystems. The few natives are mixed with plants of various origins, an exotic blend of plants from all over the world. Currently, the native species present include some Oregon grapes, several species of iris, and toyon (see Appendix 1 for full list of plants present). Plants native to Asia and Europe are far more thoroughly represented in the Quad, giving it a character distinctly foreign to Southern California.

Means:

Native plants should be selected that do well in shade and part shade, depending on the area of the Quad and the level of tree shelter. Student feedback on Quad aesthetics should be considered, in addition to the water use of the trees that exist in the peripheral beds. A valuable starting point is the plant list from Ralph Cornell’s book *Conspicuous California Plants*, which the Ralph Cornell Society notes on their webpage:

- **Toyon** (Heteromeles arbutifolia), the plant for which Hollywood is named.
- **Catalina cherry** (Prunus ilicifolia)
- **Mountain cherry** (Prunus lyonii)
- **Sugarbush** (Rhus ovata)
- **Sumac** (Rhus laurina)
- **Lemonade berry** (Rhus integrifolia)
- **Redberry** (Rhamnus crocea)
- **Coffee Berry** (Rhamnus californica)
- **Bigberry Manzanita** (Arctostaphylos glauca)

For further inspiration, I turned to the nursery at the Theodore Payne Foundation (the same Theodore Payne that was Ralph Cornell’s good friend and at one point landscape

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62 In a survey I conducted of 80 Pomona College students, responses to the question, “How do you feel about the aesthetics of Marston Quad? Is there anything you’d like to see changed? (Please respond in a few sentences)” included eight (10%) of the responses requesting more flowers and eighteen (22.5%) responses criticizing water use of the quad and/or requesting native plants.

partner) and the associated website, which exhibits many native California plants suitable for a variety of conditions. Some suitable plants for the understory in addition to the natives already present are listed on the Theodore Payne Foundation as good under shade, particularly of oaks:64

- *Berberis aquifolium var. repens* (Creeping Barberry)
- *Arctostaphylos* groundcovers (Manzanita)
- *Ceanothus* groundcovers (CA Lilac)
- *Mimulus aurantiacus* (Sticky Monkeyflower)
- *Ribes viburnifolium* (Evergreen Currant or Catalina Perfume)
- *Salvia spathacea* (Hummingbird Sage)
- *Sisyrinchium bellum* (Blue-eyed Grass)
- *Carpenteria californica* (Bush Anemone)
- *Galvezia speciosa* (Bush Snapdragon)
- *Keckiella cordifolia* (Heart-Leaved Penstemon)
- *Lepechinia fragrans* (Pitcher Sage)
- *Thalictrum fendleri* (Meadow Rue)
- *Venegasia carpesioides* (Canyon Sunflower)

This list is comprised from the Theodore Payne Foundation website, and includes all drought tolerant and low water plants that work well in the shade and are adaptable to our soil. They all have flowers, and are a mix of evergreen and deciduous plants, so parts of the garden could be green year round. The periphery of the Quad is notably without much active wildlife when compared to the squirrels and the birds of prey in the trees, and many of these plants would draw hummingbirds and butterflies native to this region. Several of these plants would work well as replacements for existing plants, such as the showy flowering bush anemone for the camellias and the meadow rue for the fern plants.65 This combination of plants would work well under the trees and add a greater variety of flowers to the area, particularly in the spring. All of them would be able to survive once established with any excess water from the trees, meaning many of the sprinklers in the side beds could be shut off from their usual schedule, leaving only the necessary tree irrigation. The

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65 *Ibid.* All plant information taken gleaned from the pages linked to here.
benefits of this are obviously the lower water use, but also the presence of more distinctly Californian plants would provide a more cohesive palette that speaks to the identity of the school and educates students and visitors about native flora and fauna.

**GOAL 3: Replace Lawn**

Reduce the water needs of the lawn area and make it more in line with a school in Southern California.

**Constraints**

- Must be able to sustain foot traffic.
- Should be in season for most of the year (particularly for Founders Day, Graduation, Alumni Weekend).
- Must reduce the water use of the Quad.

**Means**

This might be achieved in several ways, or a combination of the following two methods: (a) shifting to different, lower water grasses and/or (b) shifting to native ground cover alternatives.

Since 2004 when Kevin Quanstrom, the current head of grounds, came on board, many changes have been made to watering and lawn use. Watering occurs on a four times a week schedule, down from five days a week. Since Quanstrom’s arrival, they have fully utilized a central control system installed in 1993 for irrigation, which means that it now takes the weather into account and changes the schedules accordingly. This, in addition to the fact that they no longer replace the sod with dwarf fescue when it is overrun by

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66 Quanstrom, Kevin. “Interview with Kevin Quanstrom Head of Groundskeeping.” Personal interview. 27 Nov. 2012.
67 Ibid.
the invasive and hardy Kikuyu grass and Bermuda grass, means a large water savings. The water savings is due to the fact that the invasive species require less water and have deeper root systems, requiring less replacement and reseeding. The watering and sod replacement changes mean a more sustainable Quad by far, but the base of the Quad is still dwarf fescue, which needs regular watering. One simple improvement would be to let the Kikuyu and Bermuda grass that are already invasive here take over, since they require less water and reseeding. The potential objection to this is that the dwarf fescue stays green all year and grows in the cool season, while the other two have the possibility of going brown if it is too cold in the winter. Ideally, if the campus is to keep large lawns like this, we should accept this part of the growth cycle, just as we will need to accept some dormant natives in the periphery if we are to be true to the native ecology. But if the college insists on traditional turf, we might be best off looking at other varieties to include in the lawn, like the UC Verde Buffalograss variety that has been developed for this region and would require watering once a week in the hottest months and significantly less in the coldest months. Another possible alternative is a special seed blend like Bluestem Nursery’s Enviro-Turf, which is said to stay green and need water only every ten to fourteen days.

The trouble here is that traditional turf grass is so out of place in an aesthetic of Southern California sage scrub and other native plants, but also a valuable groundcover for outdoor events that have heavy traffic. Realistically, Pomona College will never be willing

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68 Ibid
69 Quanstrom, Kevin. “Interview with Kevin Quanstrom Head of Groundskeeping.” Personal interview. 27 Nov. 2012.
to change the graduation venue, but we might find a way to adapt to a lawn that is brown for part of the year (one month of which the students are home on winter break) or replace parts of the lawn that are used less with native ground cover alternatives, ultimately minimizing the traditional lawn used. One possibility for the east and west edges, where events don’t tend to be set up, is varieties of *Achillea millefolium* (Yarrow), which are usually known for their flowers but can be mowed into a lawn and tolerate light foot traffic. Another, more traditional looking alternative is *Agrostis pallens* (Diego Bent Grass), which stays green year round with some supplemental summer watering and can be mowed and trod upon moderately. This would be a more seamless alternative, since it looks more like the fescue than the yarrow does, and could possibly be blended into the lawn at the edges and mixed lightly throughout. Unfortunately, there is no perfect groundcover alternative that maintains functionality, but we can change the turf we use and add some native ground covers to make the lawn low water and more specific to Southern California.

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CONCLUSION

Marston Quad is the center of the campus, and is deeply tied to the design tradition of the East coast schools and English colleges it once strived to emulate. The Quad is part of what makes the college look collegiate and prestigious, but its lush aesthetic is a reminder of the ability to dominate the natural landscape, and is distinctly unsustainable in its appearance and function. When it was restored in Summer 2012, it was configured to look as much like it originally did as possible, because Pomona is proud of its history. The rest of the campus landscapes have been shifted to native landscaping to help meet the college’s sustainability goals, but the physical, symbolic, and ceremonial campus center remains a place where a landscape tradition that has nothing to do with sustainability is sheltered and upheld. This happens in an increasingly critical campus community, with many students calling for the most sustainable landscaping measures possible.

Ironically, or perhaps tragically, this monument to the campus history is no longer making Pomona unique on the West coast. The campus has acquired a reputation of prestige on its own merits, and no longer needs to rely on a lush, green, New England-like campus center to bring students from all over the world. The new goals we have set for sustainability, particularly with regard to reducing water use and becoming a sustainable leader, necessitate a shift to a different aesthetic character of the college. A Quad that isn’t as sustainable as our other campus landscapes diminishes the value of these new campus areas, and continues to be the dominant aesthetic character of the campus.

By keeping the architectural shape of the Quad and the large trees, but changing the peripheral planting and lawn to as close to a completely native plant scheme as possible, Pomona can once again establish itself as a leader in sustainability and reconnect itself to
the Southern California landscape. The proposals I have made are merely intended to be a suggestion for the future of the Quad, with a partial list of plant alternatives. They are not meant to replace the expertise of Pomona College’s Grounds Department, or to exclude the possibility of trial periods with other plants. Ideally, whatever changes are made will involve the expertise of Grounds as well as feedback and collaboration with interested students, possibly with the collaboration of the Environmental Analysis classes that are interested in ecology and/or design. It is precisely because of the iconography of the quadrangle and the campus mall of the East that Marston Quad is such a vital place to make a symbolic statement, one that reflects a flexible college that is committed to sustainability at its heart.
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Quanstrom, Kevin. “Interview with Kevin Quanstrom Head of Groundskeeping.” Personal interview. 27 Nov. 2012.


IMAGE SOURCES

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Fig. 1


Fig. 2


(2) Landscaping on Pomona’s South Campus, Pomona College. Personal photograph by author. 2012.

Fig. 3


Fig. 4


Fig. 5

“This Is How the Pomona Campus Looked Twenty Years Ago.” [Claremont, CA] c. 1927:

6. Claremont Colleges Archives, Special Collections, Honnold/Mudd Library of The Claremont Colleges, Claremont, CA.

Fig. 6


Fig. 7

Cornell, Ralph D., and Theodore Payne. “Marston Quadrangle Plan, Pomona College.”
Fig. 8


Fig. 9

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<th>BOTANICAL NAME</th>
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From an email communication with Kevin Quanstrom, head of Groundskeeping.
Sedum spp.
Senecio cineraria
Stachys byzantina
Syringa vulgaris
Viburnum carlcephalum
Viburnum tinus
Westringia fruticosa
Zantedeschia

Trees
Arbutus u. 'Marina'
Arbutus unedo
Cedrus deodara
Cedrus spp.
Magnolia soulangeana cvs.
Magnolia stellata cvs.
Metasequoia glyptostroboides
Pinus canariensis
Platanus racemosa
Quercus agrifolia
Sequoia sempervirens

Stonecrop
Dusty Miller
Lamb’s Ear
Common Lilac
Snowball Viburnum
Laurustinus
Coast Rosemary
Calla

Trees
Strawberry Tree
Deodar Cedar
Cedar
Saucer Magnolia
Star Magnolia
Dawn Redwood
Canary Is. Pine
California Sycamore
Coastal Live Oak
Coast Redwood
APPENDIX 2: A VISION FOR SUSTAINABILITY

The following set of goals were established by the President’s Advisory Committee for Sustainability in their 2007 report to the President. These goals form a vision for sustainability that have guided the creation of the Sustainability Action Plan.

Goals
Goal 1: Reduced greenhouse gases
Greenhouse gas emissions are the driving cause of global climate change and are implicated in a wide variety of College activities, including energy use and energy sources, solid waste management, water use, transportation, and the use of refrigerants and fertilizers.

Goal 2: Reduced resource impact
Reduced resource impact means consuming materials and generating wastes that can be fully integrated into natural systems as much as possible; in other words consuming as few non-renewable resources as possible and generating as little non-compostable or -recyclable waste as possible. Where the College is concerned, this goal includes issues such as energy use, water use, waste generation, and purchasing.

Goal 3: Reduced air, water, and soil pollution and toxins
The goal is to reduce the amount of contaminants and toxins released into the environment, which occurs from a wide variety of activities including transportation, chemical use (cleaning products, fertilizers, refrigerants, etc.), and waste disposal methods.

Goal 4: Increased environmental health for all members of the College community
A variety of College activities can have potentially harmful impacts on human health, including the use of chemicals found in cleaning products, fertilizers, and refrigerants, off-gassing of volatile organic compounds from facility furnishings and finishes, and the food served in campus dining facilities.

Goal 5: Environmental awareness and education
This goal intends to increase awareness of environmental issues and the importance of these issues among all members of the campus community, along with to provide information about how individuals and groups can reduce their impacts. More specifically, this goal includes that every student who graduates from Pomona has a greater environmental awareness than when they came. Whether curricular or co-curricular, educational efforts are central to any sustainability program or project.

Goal 6: Sustainable sustainability
Sustainability itself must be sustainable, meaning physical and organizational infrastructure must be in place to provide the support, resources, and motivation for sustainability efforts.

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to continue. Whether financial (staffing and funding), procedural (policies and processes),
or social (inclusion in public reports, speeches, and conversations about College priorities),
resources and support are necessary for these efforts to continue.

**Goal 7: Public commitment to sustainability**
As stated above in Guiding Principles and Goals, this plan is partially based on the
assumption that Pomona strives to be a leader in sustainability. In most cases, leadership
takes the form of public declarations of sustainability commitments in internal and external
communication outlets. This Plan will provide a valuable source of information for this
type of communication.