

**The Archaeology of College Hill 2012:
Investigations at Brown University**

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ARCH 1900: The Archaeology of College Hill

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INTRODUCTION

Alex R. Knodell and Linda R. Gosner

This volume is comprised of the final reports produced by the members of ARCH 1900: The Archaeology of College Hill, a course offered in the fall semester of 2012 by the Joukowsky Institute for Archaeology and the Ancient World at Brown University. The course was taught by Alex Knodell and Linda Gosner (teaching assistant) and is part of a series of hands-on fieldwork courses that have been offered at Brown since 2006. Students learn foundational methods of archaeological research design and practice, including survey, mapping, excavation, documentation, artifact analysis, and interpretation. In class discussions, students deal with issues of presentation, outreach, political and ethical challenges in archaeology, and integrating multiple data sources in their research (documentary sources, oral histories, and museum collections, for example). An overarching goal of the course is for students to learn by doing, and to take an archaeological project from start to finish – design to publication. The reports compiled here are the result.

The first two weeks of the thirteen-week course involved discussions of and exercises in archaeological research design. What makes an area interesting, historically and archaeologically? What type of data sources can be drawn upon in archaeological research? What does archaeology as a discipline *do* that other historical disciplines do not? Students and instructors discussed these questions and more, as students researched and presented on particular areas on and around Brown's campus. These were then deliberated upon as potential targets for different types of archaeological fieldwork. Out of several areas of potential interest, the Quiet Green (formally known as the Front Green), located on the west side of the central part of the university campus, was chosen. This area was the original nexus of campus, and home to the oldest standing building on campus, University Hall, as well as Hope College, the oldest continuously inhabited dormitory. Old plat maps indicate that the First President's House was located in the center of this space, contemporary with University Hall (and was later removed). As a

group, the class decided to focus our fieldwork efforts in this general area. Weeks three and four moved into the field with surface investigations. These included intensive surface survey, mapping, and geophysical survey. Excavation activities followed, focused on two trenches in front of the former front door – now sealed back door – of Hope College. On Saturday, October 20, we welcomed visitors for a “Community Archaeology Day” outreach event, which coincided with Brown’s Family Weekend. Weeks 10-12 moved into the lab at Carriage House on Waterman Street for artifact identification and analysis. In week 13 students presented their final projects, based on the documentary research, fieldwork, and analysis of the previous weeks, to an audience including their peers, Brown University archaeologists, and members of the Rhode Island Historical Society.

The reports that follow are divided into two parts. The first discusses important contexts – research all students in the course contributed to concerning the documentary record related to the Quiet Green, Hope College, and the wider campus. Individual students were responsible for synthesizing and developing the efforts of the class as a whole and we hope that this information proves useful to future generations of ARCN 1900, should they be interested in conducting further work on campus. The second part turns to the results and interpretation of the archaeological fieldwork carried out during the course of the term. This includes the results of pedestrian and geophysical survey, as well as the excavation of two trenches. An initial chapter in this section puts everything in spatial context through GIS analysis and visualizations, while a final chapter discusses the importance of public archaeology and presenting these results to a wider audience. Also included is a poster that will serve as a public display in Rhode Island Hall (home to the Joukowsky Institute for Archaeology and the Ancient World).

1. THE EVOLUTION OF THE QUIET GREEN AS AN OUTDOOR SPACE

Cait Mylchreest

Introduction: A Change in Purpose

Since Brown University first moved to its current site on College Hill in 1772, the institution has seen some radical changes in student population and how this population has sought to use the resources provided by the university in daily life. This is reflected physically in the plot of land now known as the Quiet Green, which was the first land purchase for the college at its founding. Through our archaeological investigations near Hope College, we have gathered some answers as to what modern life is like on the green based on the material left behind. But what was life like on the Quiet Green in the beginning of Brown's founding almost 250 years ago? How have the uses of the land evolved over the university's history? This is the only landscape that has been used continuously by Brown since the institution moved to Providence in 1772, and therefore provides some valuable insights in to the overall evolution of the university.

The Birth of a Campus: Oriented Down the Hill

Brown University was born in Warren, Rhode Island in the church of James Manning, Brown's first president (Phillips 2000: 15). It took nearly six years for the Corporation to find a permanent site for the institution; however, they eventually decided on College Hill due to its "broad view of the town below" and remarked that surely "this spot was made for a seat of the Muses" (Phillips 2000: 21). The land began as an eight-acre plot and soon housed University Hall ("the College Edifice") and the original president's house, both oriented around the green known today as "the Quiet Green" (Phillips 2000: 21).

This view down the hill into the city of Providence establishes a greatly differing purpose for the green at the university's inception when contrasted with the modern usage. As seen in Figure 1, the area was the main focal point as it was the site of Brown's only two buildings. The front entrances to both structures faced down the hill in to the city of Providence. Therefore, it is important to note that this green was, for all intents

and purposes, “the Campus” of Brown’s 1772 life. Today, the “Main Green” serves as the meeting area and social center for all campus life. However, in 1772, this would not have been the case. The Quiet Green would have served this major social function according to the original placement of the college down the hill.

Evolution of University Buildings and a Move Away from the Quiet Green

One reason for the move away from the Quiet Green as the focal point of the university is presumably the change in the orientation of the dorms and classroom spaces over time. When Brown first occupied the hill, University Hall was the only dorm and therefore included the Quiet Green as the main public space, as stated above. In 1822, Hope College was built to accommodate the increase in student population and therefore a larger demand for student housing (Mitchell 1993: Student Housing). Manning Hall was also added in 1834 and Rhode Island Hall in 1840 to provide more classroom space. The focus still lay on the Quiet Green with all buildings facing the landscape as originally intended upon Brown’s founding.

However, an interesting change occurred in 1862 with the completion of the Rodgers Hall Chemical Lab, which occupied the same space as modern-day Salomon Hall (Mitchell 1993: Campus). Now that Brown owned a building away from “the Old Front Row,” a term used by former student Walter Lee Munro to describe Hope, Manning, University Hall, and the adjacent buildings added later, the Main Green, known as “the Back Campus” until 1870, comes in to play (Mitchell 1993: Campus). A direct correlation is seen with the inclusion of this new building and the official name change of the Back Green to “the Middle Campus” in 1870 to complement the Quiet Green, known then as “the Front Campus” (Mitchell 1993: Campus). The Back Green was a name to support the idea that all buildings faced away from the green and down the hill. However, with the addition of Rodgers Hall, the name needed to be changed, and thus the Back Green was elevated in status to the Middle Campus and presumably began to receive more student attention. The Front Campus was no longer the only area of outdoor focus at Brown.

After this change in focus, more buildings were added across Middle Campus, such as Sayles in 1881 and Wilson in 1891, as well as new dorms Messer House and

Howell House in 1892 and 1894 respectively, both demolished to be replaced by the John Carter Brown Library in 1904 (Mitchell 1993: Student Housing). There were now just as many buildings on the opposite side of the Middle Campus as there were in the Old Front Row.

The name of the Middle Campus changed once more in 1947, this time to a more superior, all-encompassing title of “the College Green” (Mitchell 1993: Campus). From this change in terminology on, the College Green now seems to be the primary meeting location of students on campus as opposed to the Front Campus.

The balance of campus buildings changed and therefore affected the outdoor spaces used. Until 1870, these instillations provide enough support to explain the founding of the Middle Campus as an outdoor space. However, how these two established outdoor spaces changed in usage after this cannot be expressed merely through an examination of university buildings. Student viewpoints are required to explain such a usage, as seen in the Brown Daily Herald articles discussed in the next section.

Comparing the Usage of Outdoor Spaces Through Student Perspective

The Front Campus



FIGURE 1.2 Google Earth Image of Main Campus. Front Campus (left) and Middle Campus (right). Left Row of buildings was known as “the Old Front Row.”

Changes in terminology and names of outdoor spaces can be gathered from historical accounts of the university. However, the actual usage of these spaces can be understood best through the eyes of the students themselves. Therefore, the archives of

The Brown Daily Herald proved an invaluable source and served as a starting point to make hypotheses about the change in usage of the Quiet Green over time.

Past names of the Quiet Green and the Main Green, the Front Campus and Middle Campus respectively, are recorded in an 1891 article mentioning the publishing of a Brown picture album, one that contrasts the beautiful spaces of both greens (*Brown Daily Herald* 1891). Through the use of the terms “front” and “middle,” the Main Green is clearly still an inferior social space at this time.

At the close of the nineteenth century, the Front Campus proved to be a meeting area for students to walk to events, such as sports games and concerts, across campus together. For instance, one *BDH* article from 1892 mentions meeting on the “front campus at 7:30pm” to attend a “promenade concert in the music hall (*BDH* 1892). In 1903, another article mentions a “Send-Off” for one of the school’s sports teams (*BDH* 1903). The population was encouraged to meet on the Front Campus to wish the team good luck. The Front Campus appears to have been a valuable social context in the lives of these students.

The establishment of the Van Wickle Gates brought further attention to the green in 1901. An article commemorates the occasion by mentioning the gates as “a handsome structure which graces the main entrance to the front campus” (*BDH* 1901). At this time, the Front Campus was clearly recognized as the receiving area to campus as the gates served as “the main entrance.” It was significant that the modern-day Quiet Green would be the first site to be seen upon entering the college.

Even though the Main Green was officially named “the Middle Campus” at this time, an article from 1902 seems to reinforce the idea that this outdoor space was still inferior and largely behind the main attraction of the Front Campus (*BDH* 1902). An anonymous student remarks that after the new fence and gates on the Front Campus, other parts of the university could benefit with some beautification. For instance, he mentions possible renovation on “the back campus.” Even though this term was not officially used by the university by 1902, students clearly still thought of the outdoor space as removed from daily college life and remained behind the main social location on campus.

However, an interesting twist in student and faculty perspective seems to take place in 1919. The Naval Opera Company spontaneously visited Brown and performed a concert on the Front Campus (*BDH* 1919). Even though this event can be viewed through a social lens of inquiry, the paper noted how “classes were broken up,” including “an Economics examination in Manning Hall.” The “large brass band dispersed any desires for concentration by several selections of a ‘jazzy nature.’” From this point on, the Front Campus seems to grow towards a quieter, more reserved area of campus intended for study and relaxation, unwelcoming to loud jazz bands.

Through the first part of the 1920s, however, the outdoor area still seems to be viewed largely as the front door to the campus. An article in 1929 discusses a new early registration system that began two days before classes in order to alleviate previous congestion (*BDH* 1929). Now, students no longer had to waste a day “spent complaining in an interminable, slow-moving line, stretched out across the front campus from University Hall, as the article goes on to state. The main entrance to this administrative center was, at this point, still facing the Front Campus. However, this could signal an increase in quieter, more administrative purposes for the outdoor space. Perhaps, while being associated with the front door of University Hall, the Quiet Green was the face of



FIGURE 1.3 A *BDH* article that advertises a quiet memorial on the Front Campus for President Kennedy in 1963. (*BDH* 1963)

all daily university functions in an administrative sense.

The green further moves towards a quieter, more removed setting in 1963 with the death of John F. Kennedy. An article, seen in Figure 3, advertising a memorial for the late president stated the location as the Front Campus on the steps of Manning Hall (*BDH*

1963). Even though the event was later moved to Sayles Hall five minutes before the ceremony due to rain, the university still assumed the Quiet Green would play a respectful role as a memorial setting. Again, the Front Campus begins to largely shift towards a quieter area of Brown life.

The College Green: 1947

Post 1950s, the term “Front Campus” is largely phased out in the *BDH* and presumably in student vernacular as the “College Green” is established in 1947. In 1952, for instance, an article commemorating the start of the school year in Sayles Hall, led by President Wriston, mentions a “precession across the College Green” (*BDH* 1952). The Front Campus is now set aside as the College Green hosts major university functions of social and academic significance.

Throughout the 1960s and 1970s, a radical time for student revolution on college campuses across America, many rallies were held on the College Green, proving the space had now risen to the major, outdoor social gathering space of Brown. The newspaper highlights one such rally in 1962 when 700 students met to discuss “curriculum and education reform” prior to the eventual establishment of the New

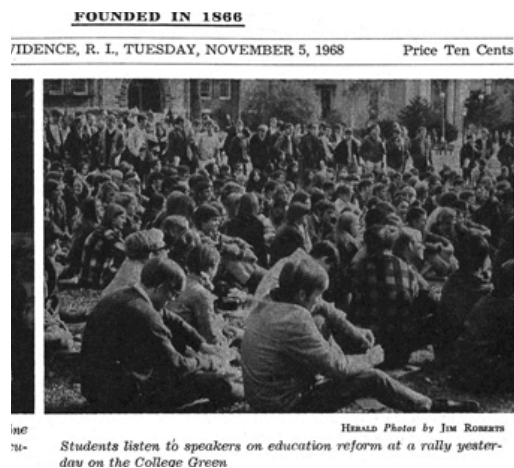


FIGURE 1.4 Curriculum Reform rally in 1962. Wilson Hall can be seen in the background, confirming the Main Green as the term the “College Green.” (*BDH* 1962).

Curriculum in 1969, seen in Figure 4 (*BDH* 1969).

The College Green eventually became referred to as simply “the Green,” a much more generic connotation which eliminates the possibility of meeting on the Front Campus entirely. Students would know to what location this vague term referred. This is shown in a 1973 article that discusses the tunnel system connecting “the Wriston Quad

dormitories and the buildings around “the Green” (BDH 1973). This modern day usage of “the Green” would presumably survive in daily student vernacular, officially phasing out the Quiet Green as the main, outdoor meeting space on campus.

The Front Green: Overshadowed by Actions on the College Green

The Front Campus, or more commonly referred to as “The Front Green” after the establishment of the corresponding “College Green,” still witnesses some social attention in the 1970s with a couple small rallies. An article from 1970 mentions the protests of the Ecology Action group on campus in response to the spraying of pesticides “twice as potent as DDT on university lawns...on the front green and Rock gardens” (BDH 1970). Also, in 1971, a small group of musicians held a demonstration for more practice rooms outside on the Front Green outside the President’s office window (BDH 1971).

These demonstrations, however, are intriguingly smaller in scale when compared to the larger curriculum rally held on the College Green in 1962. The Quiet Green was presumably still used for smaller-scale rallies for more exclusive causes. However, protests that would include the interests of the entire student population seem permanently settled on the College Green from this point forward. The social events on



FIGURE 1.5 A small group of musicians protesting on the Front Green in 1971. (BDH 1971)

the Front Campus, although similar in general purpose to activities occurring on the College Green, are smaller affairs and will presumably fade out over the next thirty years, leaving the Main Green as the superior social outdoor space on Brown’s campus.

A Differently Organized Space

As seen above, there has been an administrative connection with University Hall since Brown's founding. The main entrance was once oriented toward the Front Campus. For instance, students stretched out the front door of University Hall across the Front Campus, not the College Green, in 1929 as mentioned above (*BDH* 1929). This entrance was later reoriented to face the opposite green. The Front Campus for a time seemed to hold a more administrative function, as compared with its more relaxed atmosphere today.

The Quiet Green was actually a much more administrative location when compared with today's relaxed arena of camp, as opposed to the very beginning of Brown's history since the original president's house, seen in Figure 1.6, was located on the green as well (Phillips 2000: 21). However, once the house was moved off the green in 1840 to the current location of the John Hay Library, the green surely began to decrease in administrative function now that the president frequented the outdoor space less. However, it also important to note that the President's role would have changed over time from teacher to purely an administrator of the university. This is a possible reason for a growth towards a more reserved and out of the way location on campus. For more

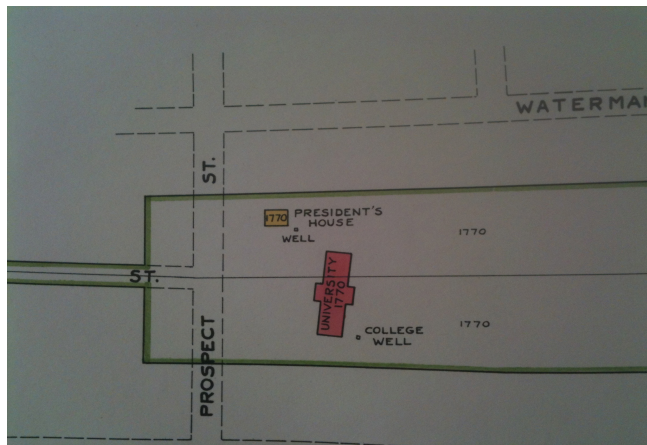


FIGURE 1.6 Land plat of the original President's house, in respect to University Hall, on the Quiet Green. (Burlingame 1938)

information on this potential excavation site, see Mallen, Chapter 3 of this volume.

Throughout the twentieth century, the Quiet Green has also been transformed multiple times using different systems of walking paths (Kim, this volume). This might signify a change in the area's use; a decrease in use and overall foot traffic might require

a decrease in paths. For more information, please consult Kim, Chapter II and Thompson, Chapter 7.

A Switch in Commencement and a Growing Population

Another interesting switch in focus in the use of university property over time is the relocation of the degree-granting ceremony for Brown's Commencement ceremony. Since the university first moved to College Hill, every commencement ceremony was held in the First Baptist Church. However in 1947, 1596 seats, including student and attending family, were required (Mitchell 1993: Commencement). Due to this rapidly growing Brown population, the administration was forced to move the degree-giving portion of the program to the College Green, while the orations are still held in the First Baptist Church to this day.

The fact that the degree-giving ceremony skips over the Front Campus entirely and is held on the newly named College Green is noteworthy. Not only is a major university event not held on the Front Campus, but also college ceremonies now seem to



FIGURE 1.7 The Quiet green of 1912. Note the addition of a gate and path that does not exist in the modern organization of the area. (Images of Brown Collection, Brown Library).

require a larger space to encompass a growing population. The Front Campus would not have been capable of catering to an entire graduating class in 1947. Therefore, the outdoor area seems to shift towards a more auxiliary roll in university proceedings. Today, ceremonial processions for commencement and convocation still pass through the Front Green. However, the outdoor area only seems to serve as a throughway and front door to the main area of the ceremony on the Main Green.

In general, the university begins to significantly grow in population throughout the twentieth century. The very first graduating class of 1769 was only seven students

(Mitchell 1993: Commencement). However, the 1947 ceremony proved that Brown was no longer such a quaint college. Today, an average graduating class numbers 1500 students, with a total school population of 6380. The Front Campus served to provide a more intimate, enclosed setting for student meetings at the end of the nineteenth century, as seen in the *Brown Daily Herald* articles above. However, this outdoor location simply cannot serve the demands of a growing university adequately, and although smaller rallies continue to be held on the green through the 1970s, this space begins to decrease in social significance when concerned with larger, all-inclusive university events. Presumably, the outdoor space moves entirely to an auxiliary sphere of relaxation as Brown's population grows.

The Quiet Green Today

After examining the student perspectives of Brown's history and inferring the change in usage of the Quiet Green as an outdoor space, we can see a trend over time: a decrease in social activity, corresponding with a larger association with quiet and relaxation. Also, the space now seems auxiliary when compared with the history of the Main Green, which exhibits the exact opposite trend as it grows as a popular university meeting area over time.

Using the data obtained from our excavations near Hope College, we can further compare the history of the Quiet Green's usage with its modern day purpose as an outdoor university space. By comparing the data from trenches QG#1 and QG#2, our Quiet Green trenches labeled one and two respectively, as well as the data obtained from our initial intensive gridded survey, we observe material mostly from a residential sphere of university life. This further supports the trends observed from the space's change over time. The Quiet Green has grown more subordinate in the social arena of college life, but increasingly residential over time.

When comparing our activities in our survey, QG#1, and QG#2, I will mostly focus on the glass deposits found in all three locations. This proved to be the wealthiest type of artifact found and therefore allows us to make more accurate and significant comparisons across the three areas.

Surveying

One of the first steps of our archaeological process was to survey the entire Quiet Green in order to glean some valuable insight in to how the space is used as a whole today according to the material deposit left behind. The deposit proved to be relatively light across the green as a whole, most likely due to the management of the green by facilities in a desire to keep the area clean and relaxing. However, a few key items helped to define the space. To-do lists and pieces of loose-leaf paper helped to further define the area as a reserved location for study. Food wrappers attested to the every day usage of the Quiet Green, even after an almost 250 year history. However, there were only 102 pieces of glass spread out across the entire green. Although we did not complete a minimum number of objects analysis, there were most likely only a few whole bottles due to a relatively low color variation and concentrations of smaller glass pieces together along certain transects, signaling that the glass was broken and deposited together.

It is crucial to note the heavy density of objects found in Figure 1.8 below. Although light across the entire green, the artifact deposit proved to be significantly heavier around transects 1 and 7-8. This corresponds with the ends of the green and the two residential centers on either end: Hope College, which we examined in our excavations, and Slater Hall. This helps to prove a residential significance of the Quiet Green in its modern day usage to pair with its decrease in more populated and louder social usage over time.

For more information and analysis concerning our surveying techniques, please consult Gunderson, Chapter 6.

	Distance Walked	Density (Objects per Square Meter)
CH1	171	0.272
CH2	218	0.034
CH3	239	0.069
CH4	241	0.062
CH5	268	0.252
CH6	100	0.23
CH7	25 m2	0.8
CH8	25m2	1.16

FIGURE 1.8
Chart showing
the results of
our QG survey.
Courtesy of
Ariana
Gunderson.

Trench QG#1 and Trench QG#2



FIGURE 1.9 and FIGURE 1.10 (Left) QG#1, (Right) QG#2. QG#1 experienced a significantly higher archaeological deposit as walls from the residence hall bordered it. QG#2



	Glass Shards
Context 1	24
Context 2	103
Context 3	4
Context 4	4
Context 5	3

(Left) FIGURE 1.11 QG#1, Context 2 Glass Deposit. (Above) FIGURE 1.12 Decreasing deposits as contexts continue, but still much higher than QG#2.



	Glass Shards
Context 1	35
Context 2	256
Context 3	81
Context 4	30
Context 5	10
Context 6	14

(Left) FIGURE 1.13 QG#2, Context 2 Glass Deposit. (Above) FIGURE 1.14 Lower glass deposits across all contexts.

Before we even began our excavations in QG#1 and QG#2, we expected a significantly higher archaeological presence in QG#1 due to a closer proximity to Hope College and its corresponding door and windows. Even though this door is not accessible today, this trench near a window egress showed a significantly higher deposit than QG#2 a bit further away from Hope.

QG#1's archaeological deposit was significantly greater than QG#2. This can most clearly be seen in their corresponding glass deposits. Also of interest is the greater color variation in QG#1. We observed brown, dark green, light green, yellow, and different shades of blue. However, in across the five contexts in QG#2, clear glass was the clear majority of the deposit with little other colors represented. This indicates a larger minimum object count for QG#1 and therefore a larger artifact count near Hope College.

A larger artifact count near one of the residential centers on the Quiet Green as opposed to further away from the building indicates a larger residential presence of dorm life on the Quiet Green. Over time, the space has certainly become quieter and less central. However, its primary purpose today as seen through our excavations seems to be as a residential sphere of campus life.

For more detailed analysis on QG#1 and QG#2, please see chapters in this volume by Deal and Cleofe, respectively.

Conclusion: Trends on the Quiet Green Over Time

As the Quiet Green evolved over Brown's illustrious history, it is clear from historical and archaeological evidence that the space grew into a quiet, more auxiliary outdoor space when compared with the Main Green. Also as time progresses, the space becomes less of a meeting area and social center and instead grows towards a residential focus on campus. As more buildings are added elsewhere on campus, especially centered around the Main Green, the focal point of student activity shifts away from the Quiet Green. The area is still used for quieter activities, such as studying and relaxation.

However, the Quiet Green still serves its original purpose from its founding on College Hill as a respectful entrance to Brown. It is interesting to note that expansion of

Brown's campus over time trended eastward, as opposed to westward down the hill into Providence. This leaves the Quiet Green as the main entrance to Brown. In fact, the administration of Brown still believes that the outdoor space serves as the face of all life at the university (Gunderson, this volume).

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2. A HISTORY OF HOPE COLLEGE

Christopher Kim

Introduction

Hope College is Brown University's second oldest edifice, erected in 1822 and named for Hope Brown Ives, the sister of Nicholas Brown, who single-handedly paid for the building's \$20,000 cost and purchased the \$5,189 lot on which it stands (Mitchell 1993a; Bronson 1914:173). Unlike University Hall, Hope College is unique in that it was designed exclusively as a dormitory from the start (Bronson 1914:173), and has remained in use as such without interruption through its 190 year history. The objective of my research was to reconstruct a detailed history of Hope College by collecting various sources and joining them together into a single narrative.¹ Where possible, I also attempt to reveal how the physical space of Hope was utilized by past residents. In light of the recent excavations completed at Hope College in the fall of 2012, I close with a few thoughts on what material culture we might expect to find at the site.²

The Early Years of Hope College

There are no direct written records on Hope College in its first decade of use that I have been able to uncover, but we may nevertheless make some inferences from the University's *Annual Catalogues*. The student population in 1820-1822 hovered around 150, with an average of 38 living off-campus each year (*Brown University Annual Catalogues, 1821-22 to 1835-36*). Most men shared double rooms, although a few were single occupants. Students appear to have changed rooms yearly, although records indicate that by 1901, they were able to keep the previous year's rooms if they desired; others participated in a drawing to select rooms (*Catalogues of Brown University, 1901-1902:160*).

¹ See Table 1 for a timeline of Hope College's physical changes.

² I have opted to include all figures at the end of the paper in order to preserve their chronological ordering. Viewing them in such a sequence, readers will be able to more clearly discern the changes (or indeed, the lack thereof), that Hope College underwent through the years.

In the academic year in which Hope College was opened (1823-1824), the University's enrollment rose to 162. In contrast to previous years, only 12 of these opted to live off-campus. Interestingly, most of those were underclassmen, whereas in previous years more or less the same number from each class lived off-campus. Seniors, of course, lived in the choicest rooms. In Hope's first year of operation, 40 out of 43 seniors lived in Hope (1 lived off-campus, 2 in University Hall), whereas 58 out of 64 underclassmen lived in University Hall. Of the six residing elsewhere, only one had the luck to live in Hope College. This man, Edward A. Park of Providence, lived in 10 Hope College with one Harrison G. Park, a senior, also of Providence (*Brown University Annual Catalogues, 1821-22 to 1835-36*).³ I suspect the two were brothers, as there are other instances of brothers lodging together.

The following year (1824-1825), Harrison had graduated, but Edward was able to keep his 10 Hope College address, which he now shared with one Calvin E. Park, presumably his younger brother. The enrollment this year dropped to 141, and continued to do so; in 1825-1826, there were only 118 students. In that year, Edward's family appears to have moved to Wrentham, MA, and his younger brother Calvin is no longer listed in the *Catalogues*. Enrollment reached a low in 1828-29 at 98 students, but recovered gradually until in 1835-36, there were 195 students at Brown (*Brown University Annual Catalogues, 1821-22 to 1835-36*).

Utilities in Hope College were minimal in its early years. It was not until 1885 that interior drainage, connected to the Providence water system, was installed (*BAM 57.5:6*).⁴ Before that, "water was carried in pitchers from the well in back [*sic*] of the building" and "waste water was deposited in a large iron bowl in the south end of the building where the only drain pipe was located" (Mitchell 1993a). One occupant of Hope at the time, Anthony McCabe, wrote, "it was by no means a pleasant task upon a cold winter morning for those occupying the upper floors" (*BAM 57.5:5*). In particularly frigid winter weather, the singular pipe would freeze and waste water would be thrown out the windows. Sometimes, "like waterbags of later generations, this would be well aimed"

³ Page numbers not marked in this volume.

⁴ *Brown Alumni Monthly* abbreviated *BAM*, followed by Vol.No:Pg.

(*BAM 57.5:7*). It is worth noting that throwing anything at or out the windows was a finable offence according to the rules of the University (Bronson 1914:183).

Gas heating appears to have been installed in the 1860s (*BAM 57.5:5*). Before that, coal stoves were the only source of heat in the building. Each room had a separate coal closet and every hallway had iron ash cans in which ash could be disposed of (Mitchell 1993, “Hope College”). As one humorous story goes, a resident of Hope found himself with a room to himself when his two roommates (presumably they were a suite of three) failed their exams and left the University. They had already purchased the winter’s supply of coal, three times more than was now needed, but there was difficulty finding buyers. Unfortunately, “When he finally found a customer for his coal, he discovered his bin was empty. His friends had cut their way from their closet through the separating partition into his supply” (*BAM 57.5:7*).

Coal or gas, the residents of Hope found opportunities for mischief. At the onset of gas heating, there existed only one gas meter for the whole of Hope College, which prompted its residents to form a particular association, described by Wilfred H. Munro, Class of 1870 and later professor at Brown, in *Memories of Brown*:

Only a few of the rooms enjoyed the blessing of gas. We of Hope were of the elect. We formed an association which was embalmed in the *Liber*. The mystic letters H.C.G.L.A. may be seen there surrounding a skull and crossbones, the letters standing for Hope College Gas Light Association. Singularly enough, the one really important office in the Association, that of Treasurer, always went to a Freshman. This may have been because the Treasurer was responsible to the gas company for the bills. He was supposed to collect them, *pro rata*, from his fellows. If these did not pay, then, like the Roman Curial of old, the Treasurer was forced to make up the deficiency (*BAM 57.5:5*).

One year, the treasurer was unable to collect enough money and was unwilling to spend his own, thereby causing the gas company to cut off Hope’s supply. One night, however, a gas company official, passing by the building, “saw that the edifice was even more brilliantly illuminated than in the olden days. Investigation disclosed the fact that it had

occurred to some student that a rubber tube might be applied to the pipe leading to the meter in such a way as to bypass the shut-off. The next night saw Hope once more shrouded in darkness” (*BAM* 57.5:5).

Rent and gas costs were indeed a real concern for many students, many of whom had to live frugally. William L. Stone, Esq., Class of 1858, described a fellow resident of Hope College who “for many months literally subsisted on crackers and water” in order to afford his education (*BAM* 1.3:27). In 1890, the rent for a room in Hope College ranged between \$25 and \$50. Gas cost between \$10 and \$20 (*Brown University Annual Catalogues, 1890-91 to 1893-94*). In 1920, the rent had increased to between \$118 and \$142; in contrast, the tuition for a single semester was \$100. In 1921, the rent again increased to between \$142 and \$170 (*BAM* 20.9:172). Hope College rooms were unfurnished, and there was a provision that “not more than two students” were allowed to live in a single room (*Catalogue of Brown University, 1901-1902*:160).

Unlike later years when the University’s enrollment far exceeded its housing capacity, not all of Hope College’s 48 rooms were needed initially for dormitory purposes. The top floor of North Hope housed the Philermenian and United Brothers Societies, both literary organizations (Bronson 1914:173). Their rooms extended “the entire width of the upper story of the north division of Hope, opposite each other, and possessed very creditable libraries” (*BAM* 7.1:4). The Philermenians’ library, when it was first moved to Hope in 1823, contained 1,594 volumes (Bronson 1914:180-181). By 1854, the two societies combined owned some 7,000 volumes (*BAM* 7.1:4).

Stories of Hope: A Glimpse of Student Life

Life in 19th century Hope College is well-documented. We know a little of a student’s daily schedule in the 1850s (and likely the years before that as well), from the writings of T.H. Tucker, Class of 1854. During his time at Brown, there were eight professors and between 200 to 250 students (Tucker 1905:11-12). Morning prayer was held from 6:00am to 8:15am, evening prayers later in the day. Between 7:00pm and 9:00pm on weekdays, students were required to study in their rooms, a rule enforced by the professors, who did their rounds in both Hope College and University Hall (Tucker 1905:12). This rule, which was present in the Laws of 1803, was in fact omitted in the

Laws of 1823. At the start of the Wayland presidency (1827-1855) however, it was reinstated. According to the Laws of 1827, officers were to “occupy rooms in College, during the hours appropriated to study” and report daily any absences or violations to the president (Bronson 1914:206). The president himself, in fact, “set the example, and could regularly be found hard at work in his room [office] in [18] Hope College” (Bronson 1914:206; Brigham 1908:116).

If the University rules are any indication of the reality of life at Brown, then it must have been a rowdy place. The possession or use of guns and gunpowder in or near University premises was strictly forbidden. Moreover, students were forbidden to “make indecent, unnecessary noises in the College at any time, either by running violently, hallooing, or rolling things in the entries or down the stairs” (Bronson 1914:183). At least one story of miscreants rolling cannonballs down the corridors of University Hall at night is recorded (Bronson 1914:350). Such infractions and others appear to have been fairly widespread (Bronson 1914:184). In 1858, for instance, “nearly the whole sophomore class were suspended for a few days” for hazing and vandalism (Bronson 1914:350). I will venture a few more remarks about vandalism, as it perhaps relates directly to the renovations of Hope College that occurred later in 1891 and 1958. Bronson writes in his *History*, “Soon after the completion of Hope College, a committee of the Corporation reported that ‘the outside doors in the New College have been injured in a shameful manner & the Committee are sorry to remark, there appears a disposition to cut waste & destroy the Buildings’” (Bronson 1914:184). One alumnus said of the early 1860s, “where the fun came in I do not know. The general disregard of property was extreme” (*BAM* 7.1:3).

A number colorful stories are also recorded; here, I will recount two from which more insights can be drawn than the rest. The first story, recounted by Walter Lee Munro, Class of 1879, concerns a cow in Hope College. During his time at Brown, students would often play football on the field behind Hope College (present day Main Green). It appears that at least one cow was pastured on the field, and it sometimes obstructed the games. One day, the unfortunate cow was led up to the third floor of Hope College, its head stuck out the window. While this was ongoing, Billy Hale said:

“one of the boys from University who had been told that a friend upon the top floor of the middle division was sick and wished to see him, arrived upon the run, burst open the door and landed in the arms of the president who, holding him at arm’s length by his collar, demanded in terrible tones what he was doing there. Much frightened, he stammered out his excuse, when the president, giving him a final shake, replied, ‘Young man, don’t lie to me; go back to University [Hall] where you belong’” (Munro 1901:148).

From the quotation, it is apparent that residents of University Hall and other buildings were not permitted to enter other dormitories. After reprimanding Billy Hale, the president went upstairs to deal with the cow; shortly after this incident, cows were no longer pastured on the campus. The cow was not the only casualty of such pranks. One time, President Wayland’s horse was similarly taken to the top floor of University Hall and left there overnight, much to the befuddlement of, as one secondhand source describes it, “his amazed master passing below” (Bronson 1914:184).

The second, shorter story concerns two Brown alumni and their wives, who were spotted one night “clambering through a window of Hope College from Waterman St.” When questioned, one of the men explained, “When we were undergraduates, we roomed together in North Hope. Many a night when the night was embarrassingly late, we used to climb in through the window from the street. We just wanted to see whether we could still do it, and our wives did it with us, just for the heck of it” (*BAM* 56.9:2). It appears that a curfew was enforced, thus causing some students to look for alternate means of entry to the building. It is also worth noting that the old well on the east side of Hope College was the location for much mischief over the years. Due its proximity, Hope College and its residents were invariably involved; interested readers should see Brown 1905 for accounts of the old well. An account of some of Hope College’s former residents of the 19th century can be found in McCabe 1908.

1891: The First Renovation

By the late 1800s, both Hope College and University Hall displayed clear signs of wear and age. The April 1868 issue of *The Brunonian* criticized the campus dormitories:

Old and worn out floors ruinous to decent carpets, may be a necessity: tumble down ceilings and broken plaster, are often attendants of respectable poverty, which we believe to be the condition of Mother Brown; but broken ill fitted window sashes, through which the winter wind whistles hoarsely, and cracked doors giving unrestrained admission to lively breezes, surely these are badges of shiftless wretchedness, and admit of no excuse. These, however, are rule, not the exception, here... In many of these apartments the paint and paper are old, tattered and rusty,--the furniture is broken, rickety and of many fashions, and they are lighted in the evening by the pauper method of oil lamps (Bronson 1914:374).

President Robinson (1872-89) said of University Hall, “Its battered floors, its defaced walls, the gaping flooring of its hall-ways, and the unmistakable odor of decay pervading the building, made parents who came to select rooms for their sons, turn from the premises with ill-concealed disgust” (*BAM* 57.5:5). Hope College was “only a little less uninviting... The entries and stairways of the dormitories had never been lighted at night; the students groped their way up and down as best they could” (*BAM* 57.5:5). In the summer of 1891, Hope College was renovated (*BAM* 9.4:77). Marshall Woods, Class of 1845, supervised the \$35,000 renovation: “Hope College, which was much out of repair—the north wall cracked, timbers rotting, and the whole interior worn and dingy—was thoroughly renovated; a cellar was dug, weak parts were strengthened, and the interior was completely refinished in far better style than before” (Bronson 1914:459; *BAM* 57.5:5). The 1891 renovation is evident in the photographic record (for instance, cf. Figure 2.6, which does not depict a cellar, and Figures 2.9-2.10, with cellars clearly visible).

In the two decades following the 1891 renovation, various additions were made to Hope College. Showers were installed in 1904 and nine new bathrooms in 1912 (Mitchell 1993, “Hope College”; *BAM* 4.9:198; *BAM* 12.7:192.). In 1906, a wish that the building be outfitted with a Mansard roof was expressed (*BAM* 6.9:190). Two years later in 1908, Hope’s wooden shingle roof was replaced with a slate roof, although it is unclear if the

style was changed as well (*BAM* 9.3:86).⁵ Finally, by 1909, Hope College was connected to the University's tunnel system. Details of the tunnel under the building are sparse, but perhaps it was not dissimilar to the tunnel built in 1909: "The tunnel to connect the new library with the old has been constructed. It is about six feet in height and four in width. It joins the present tunnel from Hope College to the library just inside the college fence. This passage is designed to carry the heating pipes and also an electric book-carrier which will make exchange of books between the two buildings easy and rapid regardless of the weather" (*BAM* 10.4:88). There exists at least one photograph of the tunnels under Hope College (Figure 2.17), which roughly fits the description above, excepting, of course, the book-carrier.

Additionally, along with a number of other University buildings, Hope College received external ornamentation in the form of ivy. In 1903 it was written, "Other buildings on which ivies are all ready growing prosperously are the library, Hope College, Maxcy Hall and Pembroke Hall" (*BAM* 4.3:61). A record from five years later, in 1908, states, "Hope College is nearly half hidden by the vines..." (*BAM* 9.3:86). It is possible to see the growth of the ivy through the photographic record. Hope College as depicted in Figure 6, for instance, is clearly devoid of vines, which appear in Figure 2.9. Figures 2.13-2.16 each display progressively more growth on the walls of the building. However, ivy growth was doubtless seasonal. In Figure 2.18, thick ivy vines are clearly visible clinging to the walls of the building in the background (Hope College), although there is not much growth. The photograph dates to March 1943, by which year the building was certainly covered in ivy, but just emerging from the winter, the ivy leaves had not yet returned.

1958: Hope Restored

Despite the 1891 renovation and the installation of various features in the 1900s, Hope College once again soon deteriorated. President Wriston (1937-55) said of his tour

⁵ The slate uncovered in the excavation could date to this time, although it was likely deposited there in 1958, when the roof was redone once again. It is unclear with what material the new roof put in 1958 was made of; if it was also slate, then possibly the slate uncovered in the excavation could be broken pieces from that event rather than the one in 1908.

of Hope College while he was being considered for the presidency, “Don’t take me in any other buildings. If they want me to come, I’d be too discouraged by what I’ve seen” (*BAM* 57.5:7). Despite this, he did accept the position, although, at the time of his retirement he did remark, “Hope College is an historic structure, one of the oldest in continuous use in the United States, the College home of famous men for 135 years. Yet, after 135 years, it stands in a condition unworthy of its great past, scandalously unfit to uphold its great tradition. It is a place where I found myself completely frustrated” (*BAM* 57.5:7).

The University thus recognized, as early as 1938, that the second oldest campus edifice was “in need of the same kind of restoration that is assured for University Hall” (Adams 1938:247). Indeed, in 1941, it received “From an Anonymous Friend, \$100,000 for the renovation of Hope College” (*BAM* 42.2:35). However, the University was unable to act due to severe housing shortages at Brown. Hope’s 48 rooms, which routinely housed around 100 students, simply could not be spared. As early as 1900, the University had recognized this problem: “What Brown needs sorely is more roofs to shelter her ever increasing student family” (*BAM* 1.1:5). Enrollment then numbered 874 men and 149 women (*BAM* 1.3:27). Also in that year, a private dormitory (Brunonia Hall) to house 32 students was constructed (*BAM* 1.1:2; Mitchell 1993, “Richardson Hall”), later purchased by the University in 1920 “to help solve housing problems” (Mitchell 1993, “Richardson College”; *BAM* 21.3:cover). Sometime between 1897 and 1903, three buildings—Howell, Messer, and Brown Street—were also in use as temporary dormitories (*BAM* 4.1:4). In 1904, Caswell Hall was completed and opened, alleviating, for a time, the housing shortage at Brown (*BAM* 4.5:99).

Enrollment, however, kept on rising. In 1905 the students numbered 988 (*BAM* 5.8:170). In 1915 there were 1032 (including 72 graduate students) (*BAM* 16.4:105). Just five years later, the number had jumped to 1304 (*BAM* 20.9:172). In the decade immediately prior to the 1958 renovation, Adams, Judson, and Ames Houses were appropriated for emergency dormitory purposes (Doebler 1955:14). However, “Even with these additions, we were forced to ask some local students to live off campus. Veterans and transfer students were permitted to live off campus as long as housing was crowded. When it finally appeared that there was no other way to solve the problem, we

were forced to add one extra man to the double rooms in Hope College and Maxcy Hall... There is not an empty bed in the place” (Doebler 1955:14-15). It did not help that a high percentage of students wanted on-campus housing: 74 percent in 1951 and 85 percent in 1954 (Doebler 1955:14).

In 1955, shortly after Hope doubles were made triples, the Dean of Students, who at that time was Edward Robinson Durgin (*Liber Brunensis*, 1955), remarked, “It IS a little crowded in Hope College, but the boys seem to love it” (*BAM* 55.4:11). A number of minor improvements were made from 1948-1958, such as the installation of new showers. During that same period, the western doors of the building were “blocked to prohibit traffic there... When the walks of the Front Campus were relocated, the paths to those doors were obliterated” (*BAM* 57.5:13). Despite these minor improvements, it was high time for something to be done about Hope College’s sorry state. The perfect opportunity came with the opening of the West Quadrangle (present day Keeney Quadrangle) in 1957, with room for nearly 600 students (Mitchell 1993, “Keeney Quadrangle”). President Keeney remarked then that “This project should not wait for the year ahead will be the only one in which we can easily spare the rooms in Hope College” (*BAM* 57.9:29). In 1957, Hope College was officially closed to allow for the proposed restoration to finally take place, at a cost of \$350,000 (*BAM* 57.9:29; *BAM* 57.5:4). Recognizing the building’s historical significance as one of the oldest buildings in the United States in continuous use, the Providence Preservation Society also supported the renovation (*BAM* 58.6:19).

Conclusion

Hope College has been through two major renovations and numerous other additions of a smaller scale in its 190 years of service. The dynamic nature of the site presents several points of consideration, insofar as archaeological research at the site is concerned. The cellar dug as part of the 1891 renovations followed by the digging of the tunnel connecting Hope College to the University tunnel system would have removed a great deal of soil from the area. Pre-1891 material culture in that soil would have been removed simultaneously. Between 1891 and 1958, however, a considerable amount of material may have accumulated. Figures 2.9 and 2.16 indicate that the area immediately

adjacent to the building's exits and walls were used, probably regularly. If the textual records, which repeatedly mention that materials were often thrown out the windows, are any indication, we might expect to find that many smaller pieces of debris accumulated between 1891 to 1958 and then again from 1959 to the present, as well as construction debris from the 1958 reconstruction.⁶ The east side of Hope College may be more fertile than the west, if only because it was the back entrance of the building until 1948-1954, when the center of campus shifted to what is today the main College Green. Residents of Hope may have been more inclined to throw out unwanted objects on the east side rather than the west. Additionally, the old well located at the east side of Hope College was a point of convergence and high traffic, which increases the likelihood of dropped or discarded objects in the vicinity.

This paper has presented a detailed history of Hope College as well as a picture of college life for past residents of the building. Hope College is undoubtedly, as President Keeney (1955-1966) remarked during his tenure, "second only to University Hall as a sentimental and architectural asset" (*BAM* 57.5:4). Generation after generation students passed through its doors, just as generations to come will live under its roof during their years at Brown University.

⁶ Current finds, consisting mainly of broken pieces of glass and ceramics, do indeed meet this expectation.

Figures

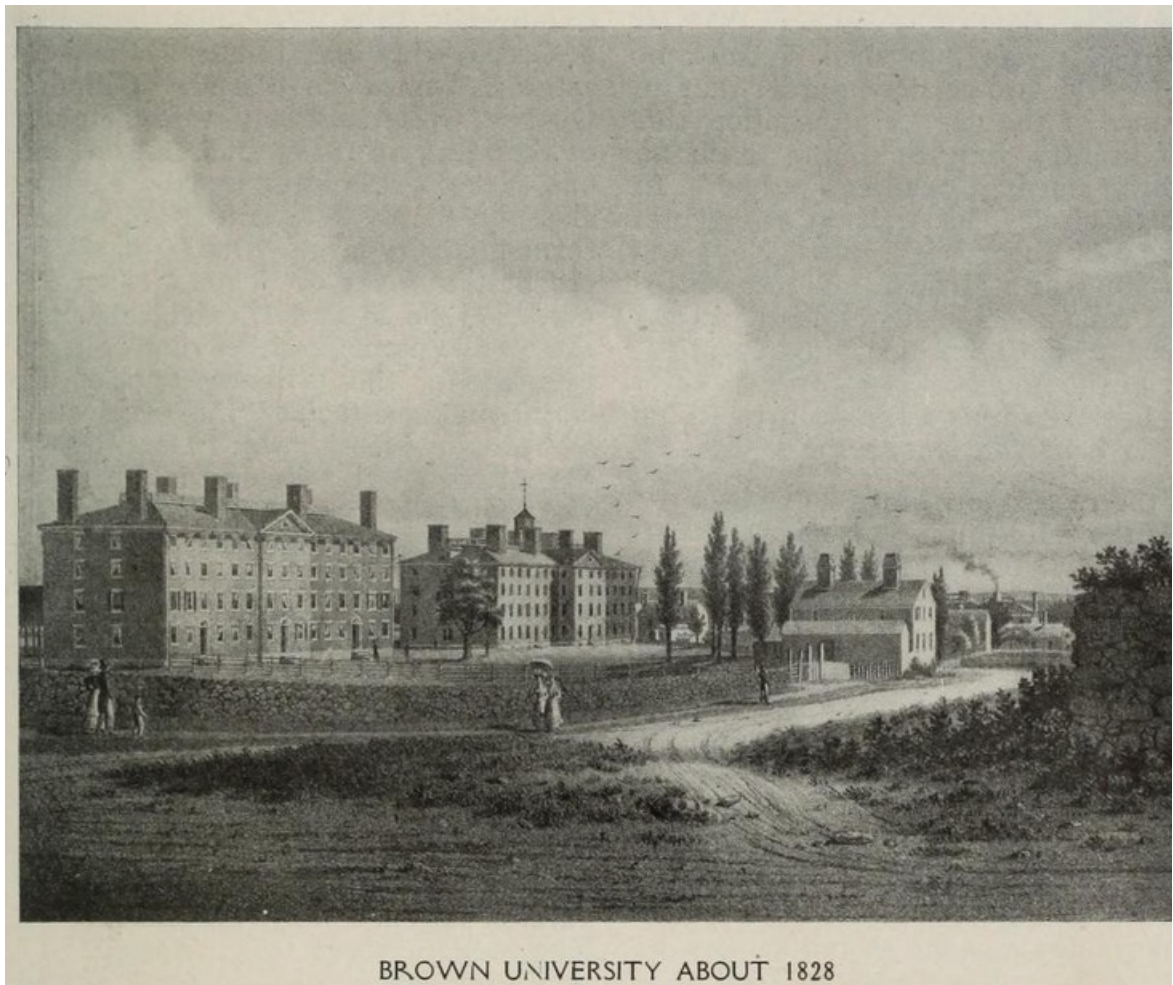


FIGURE 2.1. Reproduction of an early engraving, 1828.

“Brown University About 1828.” 1828. Engraving (reproduced). *Brown Alumni Monthly* 9(7):159.



FIGURE 2.2. Front campus. Photograph facing south, 1800s.

“Campus.” 1800s. Photograph. *Images of Brown*.

<<http://library.brown.edu/find/Record/dc1116421062629375>>.



FIGURE 2.3. Front campus. Photograph facing east, 1800s.

“Campus.” 1800s. Photograph. *Images of Brown*.

<<http://library.brown.edu/find/Record/dc11164253684375>>.



FIGURE 2.4. West side of Hope College. Pphotograph, 1800s.

“Hope College.” 1800s. Photograph. *Images of Brown*.

<<http://library.brown.edu/find/Record/dc1119009874468750>>.

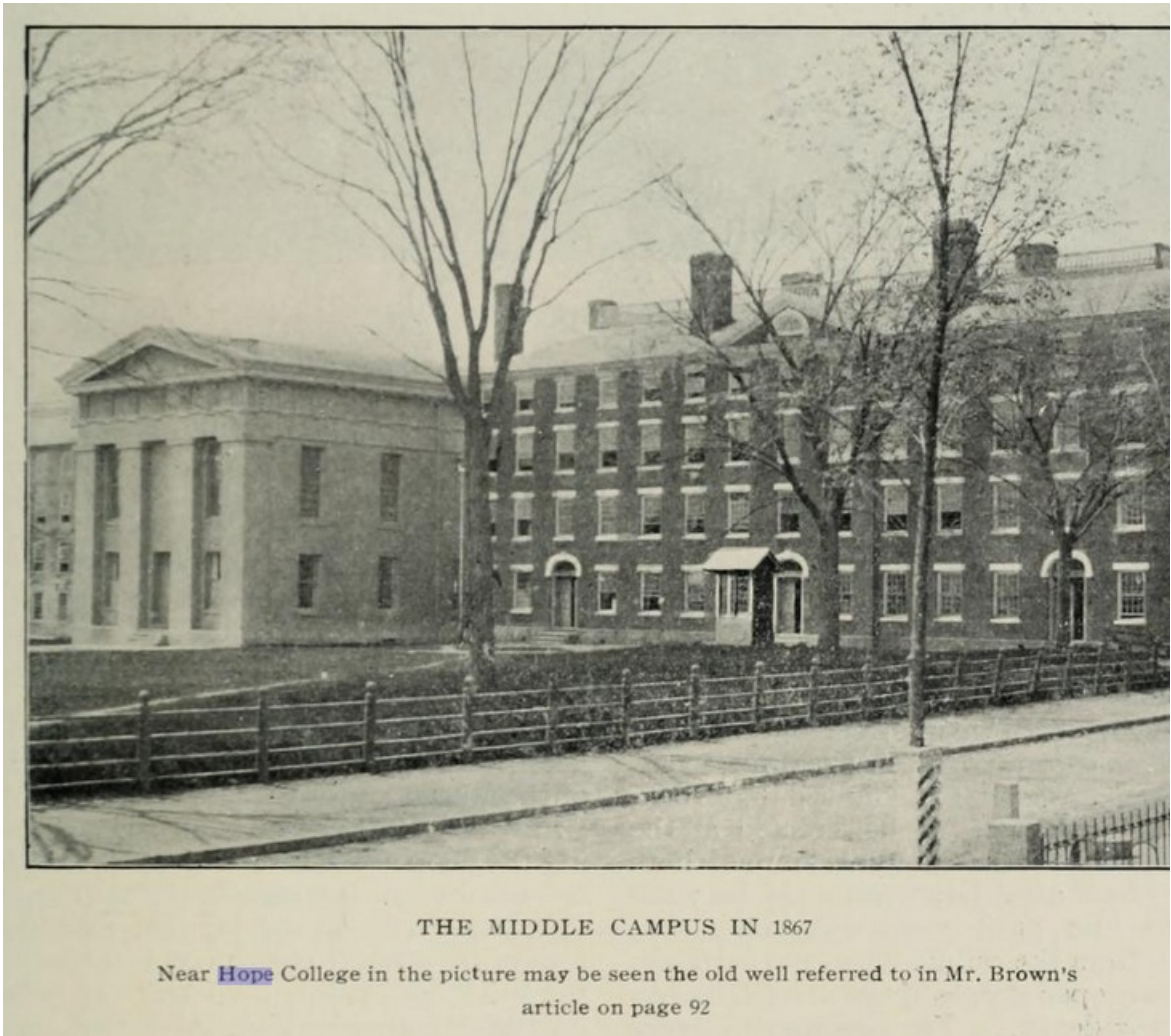


FIGURE 2.5. East side of Hope College, the old well in the foreground. Photograph, 1867.

“The Middle Campus in 1867.” 1867. Photograph. *Brown Alumni Monthly* 5(5):89.



FIGURE 2.6. East side of Hope College. Photograph, 1874. Notice the absence of the old well.

“Hope College.” 1874. Photograph. *Images of Brown*.

<<http://library.brown.edu/find/Record/dc1119010787453125>>.



FIGURE 2.7. Room of Henry A. Barker, Class of 1888, in Hope College. Photograph, 1884-1888.

“Room of Henry A. Barker in Hope College.” 1884-1888. Photograph.
<<http://library.brown.edu/find/Record/dc1133789871569755>>.



FIGURE 2.8. Henry Ames Barker, Class of 1888. Photograph, 1888 (date given).

“Henry Ames Barker.” 1888. Photograph. *Images of Brown*.

<<http://library.brown.edu/find/Record/dc1129572036671875>>.

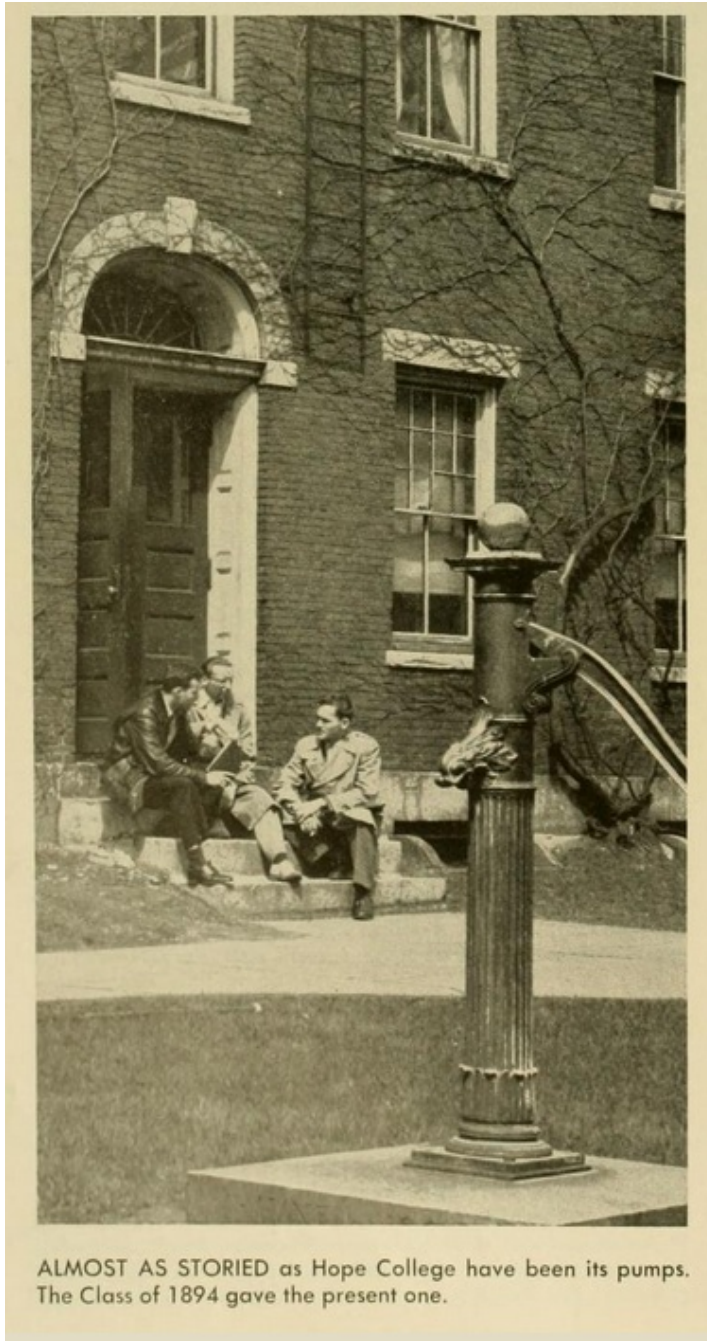


FIGURE 2.9. Hope College pump, at the site of the old well. Photograph, c.1894. Note the ivies on the walls of the building, not yet fully grown.

“Almost As Storied...” c. 1894. Photograph. *Brown Alumni Monthly* 57(5):6.



FIGURE 2.10. Hope College, drawing facing south, c.1903. As yet no ivies on the walls. The fences surrounding the central campus were erected in 1903.

“Brown University, Providence, R.I.” c. 1903. Photograph. *Images of Brown*.
<<http://library.brown.edu/find/Record/dc1123424029601971>>.

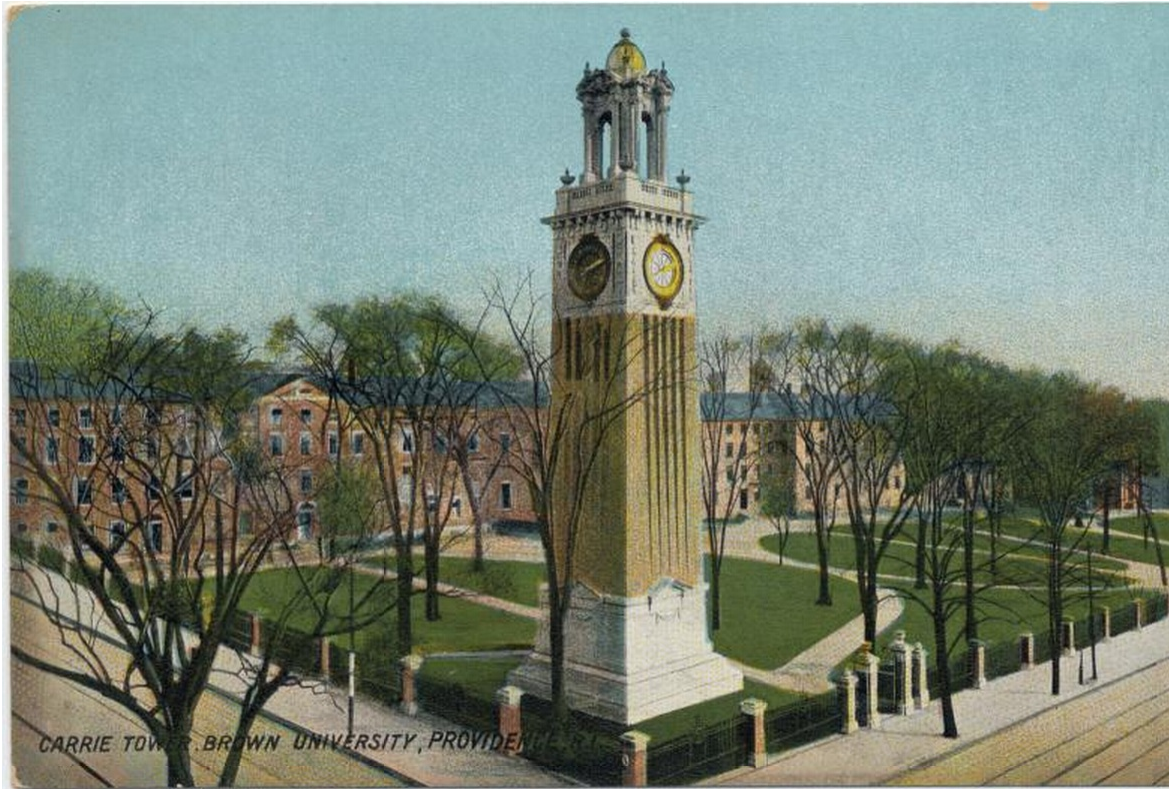


FIGURE 2.11. Carrie Tower, foreground, Hope College, background. Photograph facing east, c.1904. The tower was built in 1904.

“Carrie Tower, Brown University, Providence, R.I.” c. 1904. Drawing. *Images of Brown*. <<http://dl.lib.brown.edu:8080/ImageServer/scrollnav.jsp?filename=1123427293545291.jp2>>.

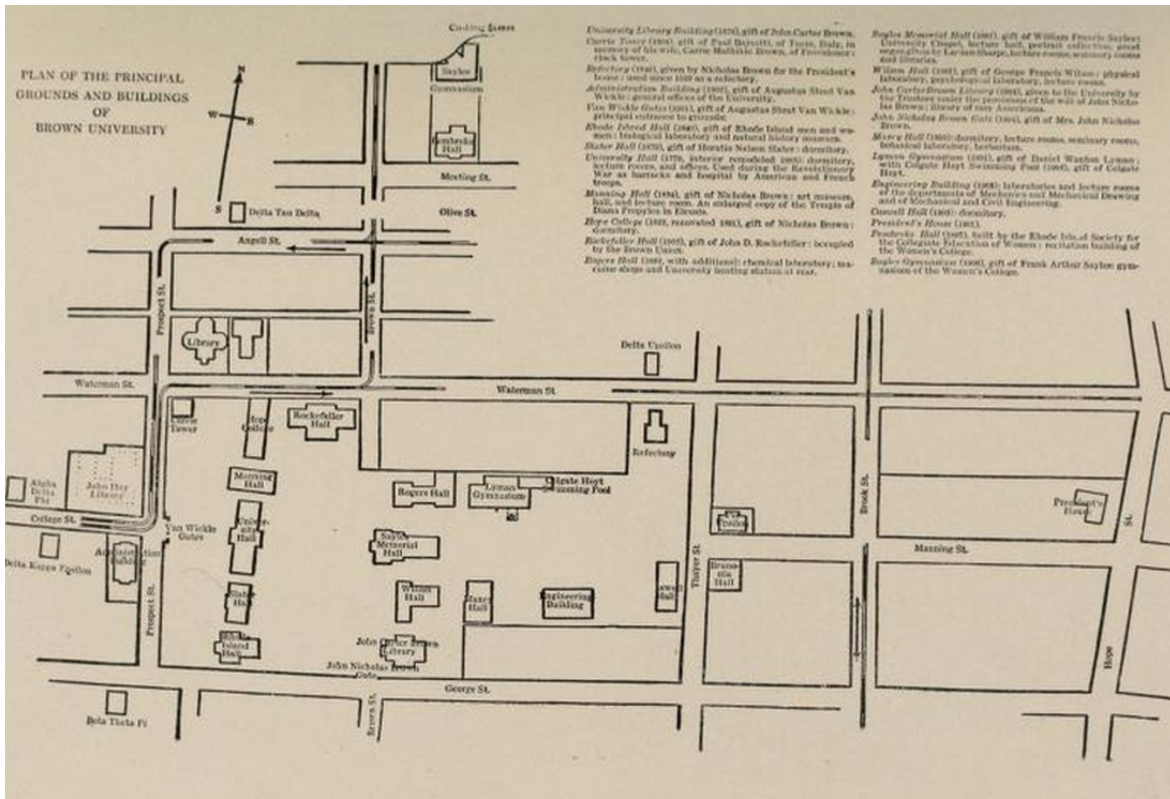


FIGURE 2.12. Plan of the Principal Grounds and Buildings of Brown University in 1908.

“Plan of the Principal Grounds and Buildings of Brown University.” 1908. Map. *Brown Alumni Monthly* 9(4):77.



FIGURE 2.13. Hope College. Photograph facing southeast, April 28, 1908. Ivies starting to cover the walls.

“Hope College in 1908.” 1908, April 28. Photograph. *Brown Alumni Monthly* 8(10):201.



FIGURE 2.14. Robinson Gate and Hope College. Photograph facing south, 1908-1911. Textual records indicate that ivies were growing on Hope as early as 1903 and that by 1908 half covered the building. In this figure, there is more ivy on the walls of the edifice than shown in Figure 2.12, but less than in Figure 2.14.

“Robinson Gate and Hope College, Brown University.” 1908-1911. Drawing. *Images of Brown*. <<http://library.brown.edu/find/Record/dc1123439996851748>>.

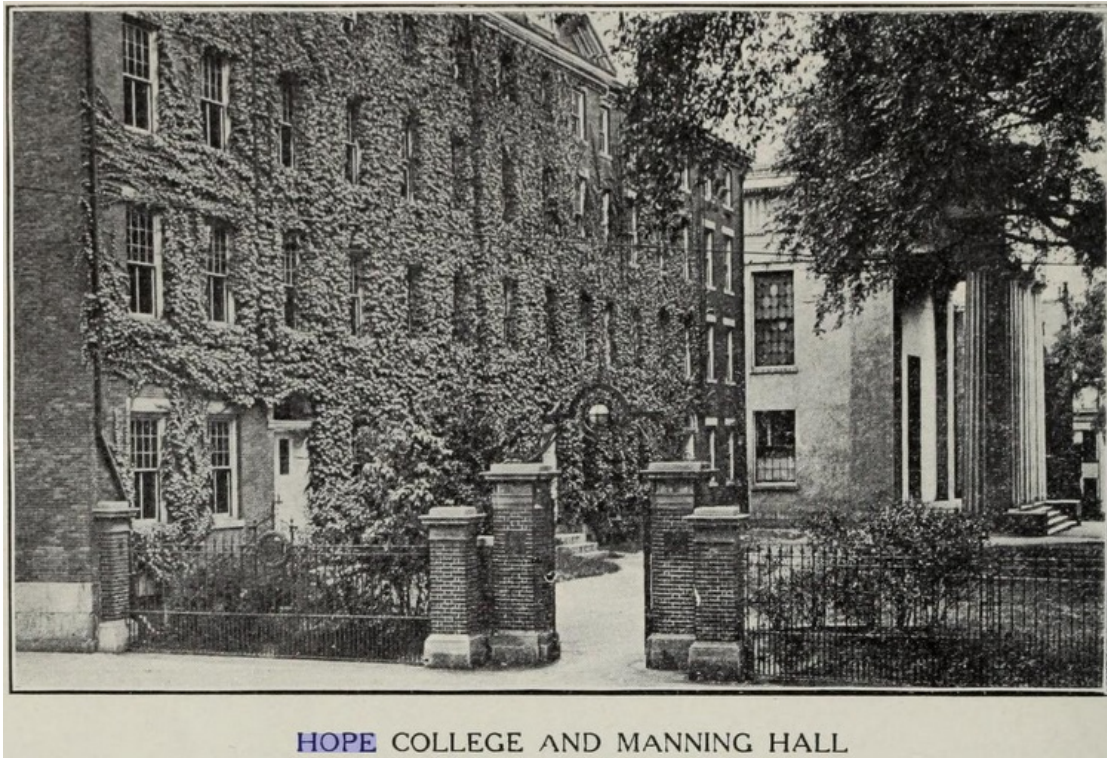


FIGURE 2.15. Hope College, facing south. Photograph, c.1911. There is more ivy growth in this photograph than in Figure 2.13, signifying a later date. This picture was published in the March 1911 issue of the *Brown Alumni Monthly*.

“Hope College and Manning Hall.” c. 1911. *Brown Alumni Monthly* 11(8):194.



FIGURE 4.16. Hope College. Photograph facing east. c. 1911-1954. The amount of ivy on the walls suggests *terminus post quem* of c.1911 (cf. Figure 2.15). Lack of lamppost in foreground, although the perspective is questionable, suggests *terminus ante quem* of 1954 at the latest (cf. Figure 2.19).

“Hope College.” 1911-1954. Photograph. *Images of Brown*.
<<http://library.brown.edu/find/Record/dc1119008383765625>>.

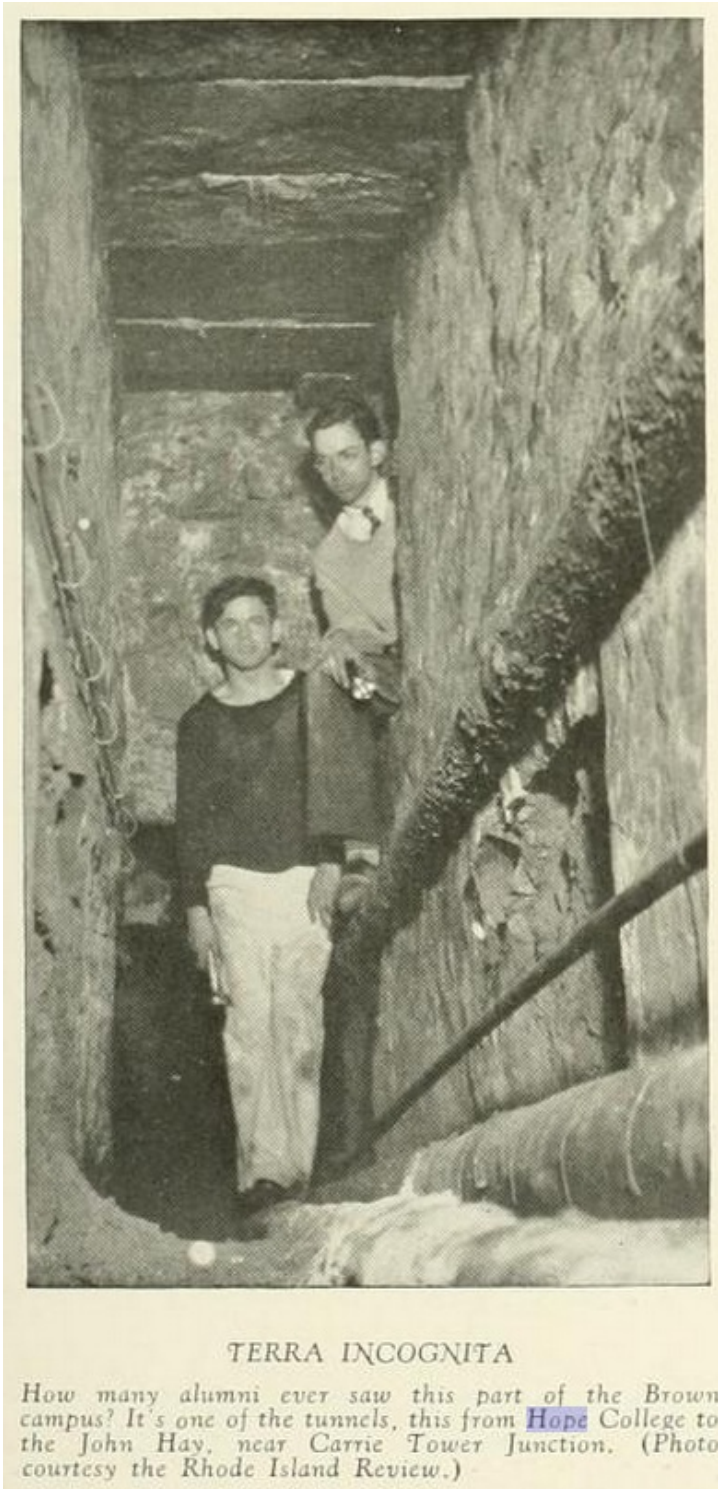


FIGURE 2.17. Tunnel under Hope College. Photograph, 1934.

“Terra Incognita.” 1934. Photograph. *Brown Alumni Monthly* 35(1):5.



FIGURE 2.18. Undergraduate army recruits posing in front of Hope College. Photograph, 1943.

“Hope College. March, 1943.” 1943, March. Photograph. *BAM* 43(7):cover.



FIGURE 2.19. Hope College. Photograph facing northeast, August 31, 1954.

“A Hundred Years A Growing.” 1954, August 31. Photograph. *Brown Alumni Monthly* 55(1):3.



FIGURE 2.20. Hope College roof during 1958 reconstruction. Photograph, facing west (Carrie Tower in the background), 1958.

“Hope College.” 1958. Photograph. *Images of Brown*.

<<http://library.brown.edu/find/Record/dc1118861735359875>>.



FIGURE 2.21. Hope College during the 1958 reconstructions. Photograph, facing east, taken from Carrie Tower, 1958.

“Hope College.” 1958. Photograph. *Images of Brown*.
<<http://library.brown.edu/find/Record/dc1118866060500>>.



FIGURE 2.22. Hope College, newly renovated. Photograph, facing east, taken from Carrie Tower, 1959.

“Hope College.” 1959. Photograph. *Images of Brown*.

<<http://library.brown.edu/find/Record/dc1118866565375500>>.

TABLE 1

RECONSTRUCTED TIMELINE OF HOPE COLLEGE, PHYSICAL CHANGES

1822	Hope College built (Mitchell 1993, "Hope College")
1860s	Hope has gas (<i>BAM</i> 57.5, 5)
1868	In <i>The Brunonian</i> : "worn out floors, tumble down ceilings, broken plaster, broken ill fitted window sashes, cracked doors..." (Bronson 1914, 374)
1885	Hope tied into Providence water system (<i>BAM</i> 56.5, 6)
1872-89	President Robinson on University Hall: "battered doors, defaced walls, gaping flooring of hall-ways, unmistakable odor of decay"; added that Hope College "was only a little less uninviting" (<i>BAM</i> 57.5, 5)
1890-1909	Hope connected to University tunnel network (<i>BAM</i> 57.5, 5; <i>BAM</i> 10.4, 88)
1891	"cracked north wall, rotting timbers, interior worn and dingy" (<i>BAM</i> 57.5, 5); renovated, cellars dug (Mitchell 1993, "Hope College")
1903	ivies "growing prosperously" (<i>BAM</i> 4.3, 61)
1904	showers installed (Mitchell 1993, "Hope College"; <i>BAM</i> 4.9, 198)
1904	Oct. 30, Sunday afternoon: small fire in the roof of Hope (<i>BAM</i> 5.5, 105)
1908	Hope "nearly half hidden by the vines" (<i>BAM</i> 9.3, 86); slate roof replaces old wooden shingles (<i>BAM</i> 9.3, 86)
1912	nine new bath room installation announced (<i>BAM</i> 12.7, 192)
1937-1955	President Wriston on Hope: "don't take me to any other buildings" (<i>BAM</i> 57.5, 7)
1948-1958	"new showers, western doors blocked, paths obliterated" (<i>BAM</i> 57.5, 13)
1958	renovated

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3. FURTHER AREAS OF ARCHAEOLOGICAL INTEREST

Joseph Mallen

3.1 Introduction

For the fall 2012 class The Archaeology of College Hill, the excavation took place at Hope College, Brown University's second building. The class hoped to discover artifacts deposited by students in the past and collect information regarding past usage of the area known as the Quiet Green. Two one meter by one meter trenches were dug; one against the foundation on the West side of the building and the other a small distance away.

The semester-long course was the first of its kind because in the years prior excavations took place at the John Brown House. Because the excavation for this class was actually going to take place on campus, much thought went into where the class should dig. Green spaces at Brown were amongst the most popular suggestions because these spaces contain artifacts deposited by students. Through research of the campus's history more than five viable locations were presented. The original intention of the course was to excavate close to the dormitory Hope College and Brown's planning office, which handles any project on the campus, had previously provided plans to the class for this purpose. Suggestions for other locations, was required of the students. The most popular of the options, was an excavation on the campus's Quiet Green, particularly the site of the university's first President's house (1770). Another option considered an excavation of the South end of Brown's Main Green just east of Rhode Island Hall where the dormitory Slater Hall was meant to be constructed. The class also took interest in excavating the grounds of Brown University's office of admissions building, known as the Corliss-Brackett house. This site was intriguing because the house has remained unchanged throughout much of its existence and the house was only acquired by the university through a donation in 1970. Other suggestions included Brown's faculty club building on Magee St, and the grounds of Andrews House, Brown's infirmary.

3.2 The President's House of 1770: The Quiet Green

In the Fall semester of 2013 the class could focus its efforts on uncovering the exact location of the first President's House built in 1770. This house was located in front of present day Manning Hall and remained at this location until 1840 until it was moved down College Hill to College Street (three houses down from Benefit Street). There the house stood until it was demolished by the Rhode Island School of Design in order to build a new school building. In 1840 a new President's House was built across Prospect Street from the original location where the John Hay library now stands. The first depiction of the house, on a copper plate engraving called "A S.W. View of the COLLEGE in Providence together with the PRESIDENT'S HOUSE & GARDENS" (Drawn by a student David Leonard class of 1792, and engraved by Boston engraver Samuel Hill) (Emlen 2011) we know that the house was situated so that the front of the building and the main entrance was to the South and towards University Hall. The foundation as depicted in "A S.W. View of the COLLEGE in Providence together with the PRESIDENT'S HOUSE & GARDENS" appears to be rather tall to compensate for the West end of the house leading downhill. For archeological study, the size of this foundation would be worth noting because when the house was moved its base might have been hard to remove therefore it was simply covered instead. We can also tell by the engraving that basement of the building was made of large square stone.

This particular President's House served as the residence for four of the University's presidents: Reverend James Manning (for whom it was built for), Reverend Jonathan Maxcy, Reverend Asa Messer, and Reverend Francis Wayland who was the president during the transition period during which the old house was moved and the new one constructed in 1840. It would be very interesting if artifacts were found, to put a timescale to the different objects found and view how personal possessions could have changed over time.

The location of the President's House is marked in Plats of Brown University: 1770-1938 as being within 200 feet directly northwest of University Hall. The plans drawn up are very informative as they depict the college as it was laid out in past centuries. But they could be even more helpful because the plat-book marks down the exact location of the current street layout, this provides the reader with a good

understanding of where the locations of buildings that no longer exist based off of where the streets are now. According to this plan of the college holdings, the President's House was square with Prospect Street and had a well close on the Southeast corner. According to the scale of this plan, the house was about fifty feet in length and 35 feet in width and stood approximately 140 feet off of the Northwest corner of University Hall. What could be expected to be uncovered during an archaeological study of the site would be (unless it was dismantled) a foundation of the house, along with the foundations of the houses two chimney's toward its center. Other finds could include the deposition of materials around the houses perimeter. Ideally, personal items could be found, but the things most likely to have survived will be glass and other ceramics such as porcelain similar to the sherds, fragments, and shards found during the fall 2012 excavation at Hope College. If the foundation was simply covered over which was common practice in the eighteenth and nineteenth centuries, the fill used to cover the foundation could have traces of refuse from elsewhere and therefore it could contain other artifacts from early Providence.

The geophysical survey during the 2012 class produced some interesting results. Fairly conclusive evidence was found during our geophysical survey of an old path that used to lead to Manning Hall. This path was covered during the nineteenth century but a footprint of it remains and may be worth exploring. A rectilinear feature was also apparent on the image generated by the ground penetrating radar. It is entirely possible that this feature is the remains of a foundation for the 1770-1840 President's House. For a complete analyzation of the Geophysical survey that was conducted during the fall 2012 semester, see Thompson, Chapter 7.

The broader significance of a study of the President's House would be a better understanding of the lives which these first few Presidents of the University led. Were they lavish? Or were they quainter? We could also get a broader understanding of what life was like in the very early days of the University through artifacts. Artifacts found, might teach us something we might not already know. Along with the discovery of artifacts the exact location of where the house once stood could be definitively marked. A simple point on a map depicting the location of it would be helpful because it appears to be a very elusive part of Brown's history because it was removed so long ago. If the foundations of the president's house were to be discovered I believe that the university

would take great interest in the discovery because of the approaching 250th anniversary of the school's founding.

3.3 Slater Hall: The Original Location

The South end of Brown's Main Green could be another great site for the next Archaeology of College Hill class to explore. This site was intended to be the location of Slater Hall and likely contains the remains of the foundation. Slater Hall was designed and built under the tenure of President Ezekiel Gilman Robinson as Brown's seventh building. The funds for the dorm were provided by Horatio Nelson Slater hence its name. While modern day Slater Hall currently occupies the site situated between Rhode Island Hall and University Hall, this was not the original intended location. An initial site was chosen on the "south end of middle campus" with a cellar dug and foundation put down in the autumn of 1877 (Bronson 392). Records from the Brown University Corporation of September 4, 1878 note "the foundation was laid according to contract in a substantial manner, completed in the following month, December 1877, at a cost of \$2000 (Corporation Records). Residents of George Street were enraged that the University would block their view of the College Green. They enjoyed the open natural space before their house and were very unhappy to have the space enclosed by a building. Eventually, the placement of the building was changed to its present location and work was finished in 1879. A *Providence Journal* article mentions that the dimensions of the original Slater Hall site was to be about "50 feet by 50 feet," larger than it is today. The construction, and then the removal or covering of such a foundation would have without a doubt left a mark on the plot of land. The area also has not seen any further development since the foundation was laid down; therefore the chance of existing of materials is high. Questions could spring from the discovery of such a foundation surrounding what the University had envisioned for the future of the space we now call the Main Green. Beyond the architectural remains and the material culture associated with construction in the late nineteenth century, the site would hopefully contain artifacts of student life. Further work and research in Brown University Archives in the John Hay Library as well as in the Archives of the city of Providence could produce plans of the original Slater Hall. Upon

acquisition of these records, there would be multiple ways to approach the site. Before any excavating could begin it would be best to conduct a geophysical survey of this area.

A geophysical survey is conducted using a ground penetrating radar device to produce an image of what is below the Earth's surface. If the foundation was indeed below the surface, it would absolutely appear on the image produced by the ground penetrating radar (GPR). With this information, the dig could then move forward. If the results of the survey are not very encouraging, than the class could consider another site. If focusing solely on this one site, and not others around campus, I would recommend digging two trenches: both that bisect the foundation edge in different peripheral locations. Initially, I would suggest one side closest to the current face of Rhode Island hall and the other facing George Street, because refuse from the street might be found here. Choosing this site will not only uncover the remnants of a past building but will hopefully provide material evidence of how use and activity levels of this area changed and the central focus of the campus changed as well. What are students leaving behind? Are there remnants of farming from periods before this site was used for collegiate purposes? If more than one site was chosen, a comparative analysis of material culture could help elucidate questions of site use. How do different spaces on campus change over time in their use and what can the material found tell us?

3.3 The Corliss-Brackett House: 45 Prospect Street

The Corliss-Brackett House sits directly on the corner of Prospect and Olive Streets and has three green spaces that could be of archaeological interest. The construction of the Corliss-Brackett House began in 1875 and ended in 1882 (National Register 2011). The 7 years of construction were necessary because the house was for its time incredibly unique. Although residence began in 1879 extra construction was necessary to install the house's central heating (Mitchell 1993), rudimentary air conditioning, internal wall piping, extensive indoor plumbing, and what is thought to be the world's first hydraulic elevator. These design elements were not included in most homes of the late nineteenth century and were evocative of its innovative, industrious architect, George Corliss (Gilbert). The modern developments installed in the house are for the most part, still operating today. The house itself stands four stories tall and is

connected via hallway to what were once servant quarters and a carriage house. Corliss died in 1888, survived by his widow and a daughter from his first marriage. The two women as well as their staff lived in the home until their deaths in 1929. Charles Brackett, a distant nephew of Corliss and famous director, became owner of the estate upon the deaths, and, in 1955, pledged to donate the building to Brown University come his own death. Brackett died in March of 1969, and the University obtained the property in 1970. Renovations and repairs were made on the building between 1970 and 1973. In 1973, the College of Office Admissions made its permanent home in the Corliss-Brackett House. (Gilbert). It remains the Office of Admissions to this day. The most recent renovation projects have been mainly restricted to outdoor, garden areas and have consisted almost entirely of landscaping work.

For an archeological survey of the Corliss-Brackett House, the garden to the East of the building would be the best location to explore. It borders a footpath and receives the most foot traffic of any green space near the house. Furthermore, the garden itself is close to the area that was once the carriage house and servants' quarters (Gilbert). This history is likely to add more variety to the possible finds. The site's pre-Brown construction efforts can be referenced via local historic district zoning (RI National). During trench location consideration during the fall of 2012 semester, the class considered the discovery of College Hill's first water supplying pipes at this site. Remnants of these pipes could be discovered and the team could note what material these pipes were made out of as well as a general direction of where they originated from. For the discovery of utilities such as these pipes, a geophysical survey would be helpful, but not absolutely necessary. An excavation at the Corliss-Brackett house could likely explore the change in material culture associated with the transition from a residential to an administrative use after Brown's acquisition of the property. An excavation could also be useful in exploring urban and technological development because the Corliss-Brackett house may contain a level of material and technological culture far, far above any of its contemporaries. Therefore, an excavation of this kind could very likely explore the process by which a building and its technologies transition from futuristic, to standard, to obsolete. The undisturbed grounds of the Corliss-Brackett House should be considered for the 2013 Archaeology of College Hill class. The grounds are sure to hold some pieces

of material culture that could provide information about the house's past before it became a possession of the university. Factors to consider for an excavation at the Corliss-Brackett House would include obtaining plans from the Brown Planning Office so that the exact locations of the utilities running through the area can be determined and subsequently avoided. Another factor to consider is whether the university would allow for the digging of the grounds of the destination for all of their perspective students and their families. Would the presence of an archaeological excavation prove to be intriguing to these people? Or would the university consider it to be too unattractive? Trenches at the Corliss-Brackett House could produce valuable information that would give a more detailed history of the building.

3.4 Other Areas of Interest on the Brown University Campus

Three other locations were researched during the fall 2012 semester. Although these locations were not researched as extensively as the most popular sites aforementioned, they are definitely worthy of consideration. The building that now serves as the Brown Faculty Club (1 Magee St. and Fig. 3.4D) was originally the Zacariah Allen house and was built in 1864. The house became the official Faculty Club building in 1938 (Burlingame 15) therefore artifacts uncovered on the grounds could provide a detailed historical record of domestic life, as well as the site's history as a part of the Brown community.

Another exploration of the university's community could take place at Andrews House, the current Brown University infirmary located a block away at 13 Brown St. Andrews House was constructed in 1901 for the Coats family who were wealthy Providence textile manufacturers. Of an even larger significance, the house served as the Governor's Mansion during the administration of R. Livingston Beekman, Governor of Rhode Island from 1915 to 1921 (Mitchell, 1993) Brown acquired the house in 1922, remodeled it and named it after President E. Benjamin Andrews (1844-1917) The home was the location of the original faculty club (1922-1938) (Mitchell, 1993) until . president of Brown University from 1889–1898. This site could provide the class with a detailed archaeological record of not only the building's history with the university, but also of its opulent owners.

Another interesting location to consider is Pembroke field. Located North of the main campus in between Brook and Hope Street, Pembroke Field was formerly known as an estate owned by the brothers Charles T. Aldrich and Henry L. Aldrich, graduates of 1875 and 1876. The brothers left the home to Brown in 1931 upon their deaths. Soon thereafter, the house was demolished and the land was graded so that the estate could be used for athletic purposes (Burlingame, 1938). The Aldrich's barn was converted into the Pembroke Field House containing a lounge and storage space for athletic equipment. An archaeological survey of Pembroke field could reveal more about the land's existence as a residential property. Also, the field could reveal more about its recreational use. Perhaps the class could uncover more about the early days of women's sports at Pembroke College and Brown University. Pembroke field could prove to be a very valuable study given the transition from a private family estate to a recreational area. These three locations are absolutely worth considering for archaeological survey. The sites are all very feasible locations for excavation; Pembroke Field is removed from campus and the Faculty Club and Andrews House have fenced in grounds. Each of these three locations have a unique story to tell and should not be forgotten. The archaeological possibilities are great, and all discoveries could help us learn more about the past lives surrounding Brown.

3.5 Conclusions

I would have to suggest that the fall 2013 should continue the exploration of the site of the former President's house. The Geophysical survey of 2012 provided some rather surprising truth to the existence of remnants of the foundation. Also, the class has done extensive research about the site and our findings would make it much easier to continue. It may be possible uncover plans or more images of this house whether on its original site or where it existed on College Street. The Slater Hall site would still be a very interesting site to explore, yet with much of the research already completed on the 1770 President's House, along with the already completed geophysical survey, it would be easier for the fall 2013 class to continue where the 2012 class left of. There may also be chance that the foundation was simply deconstructed and used to make the finished

Slater Hall product. Valuable stone such as the granite used to form the basement of Slater Hall, would not have simply been covered over.

My proposal would be to seek approval for excavations on the grounds of the Corliss-Brackett House beforehand and let the site serve as a reserve location. In the fall semester of 2012 our class employed this strategy by getting approval and plans for the Hope College site from the Brown Planning Office early on. Excavation time is short, and therefore it is crucial that the class have a pre-approved site that it can easily access. Although the geophysical survey of the Quiet Green had some rather interesting results, but the inauguration ceremonies for Brown's President Christina Paxson, required a tent to be put over our exact trench site and therefore the Hope College excavation went ahead as planned. Having a fall back site would be suggested in case events like this occur. The discovery of an eighteenth century foundation under the Quiet Green at Brown would be a very noteworthy find. A discovery of the remnants of a long forgotten building on the campus would allow current students to reflect upon the very old orientation of the campus. The artifacts found could provide a more detailed account of the days of the early university.

Figures



FIGURE 3.1 Detail of the Quiet Green: 2012 map of Providence, RI. (Courtesy of Google Earth, 2012)

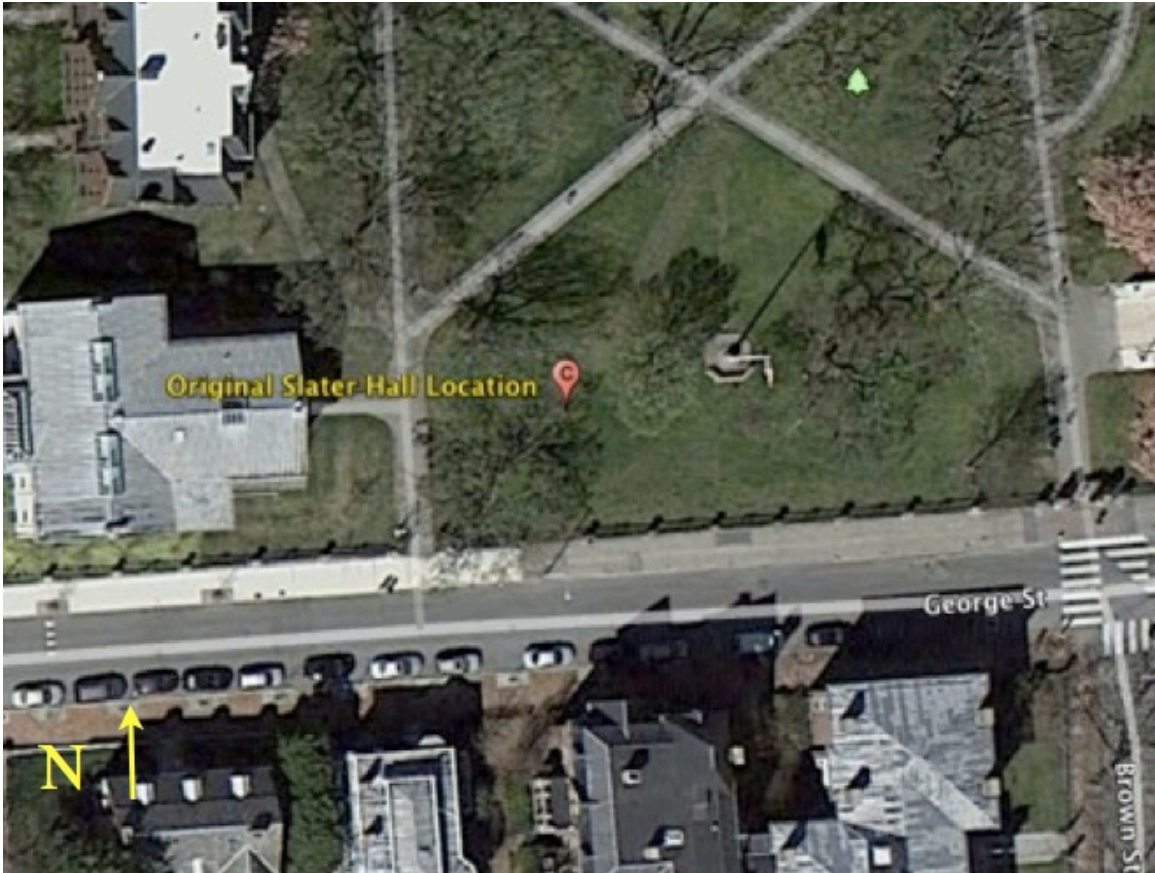


FIGURE 3.2 Detail of the South end of the College Green: 2012 map of Providence, RI. (Courtesy of Google Earth, 2012)

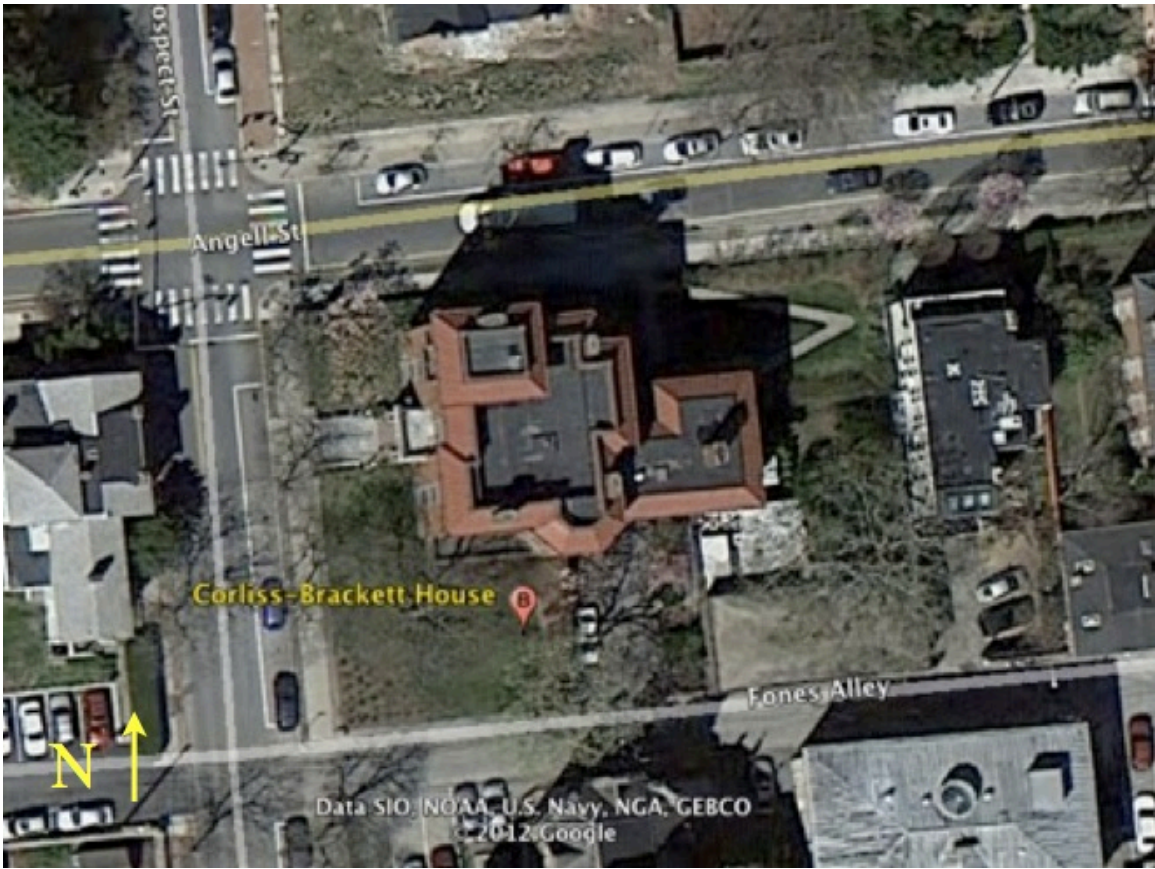


FIGURE 3.3 Detail of 45 Prospect St, The Corliss Brackett House: 2012 map of Providence, RI. (Courtesy of Google Earth, 2012)



FIGURE 3.4 Detail of the Southern end of the Brown University campus Inset: Pembroke Field north of campus. 2012 map of Providence, RI. (Courtesy of Google Earth, 2012)

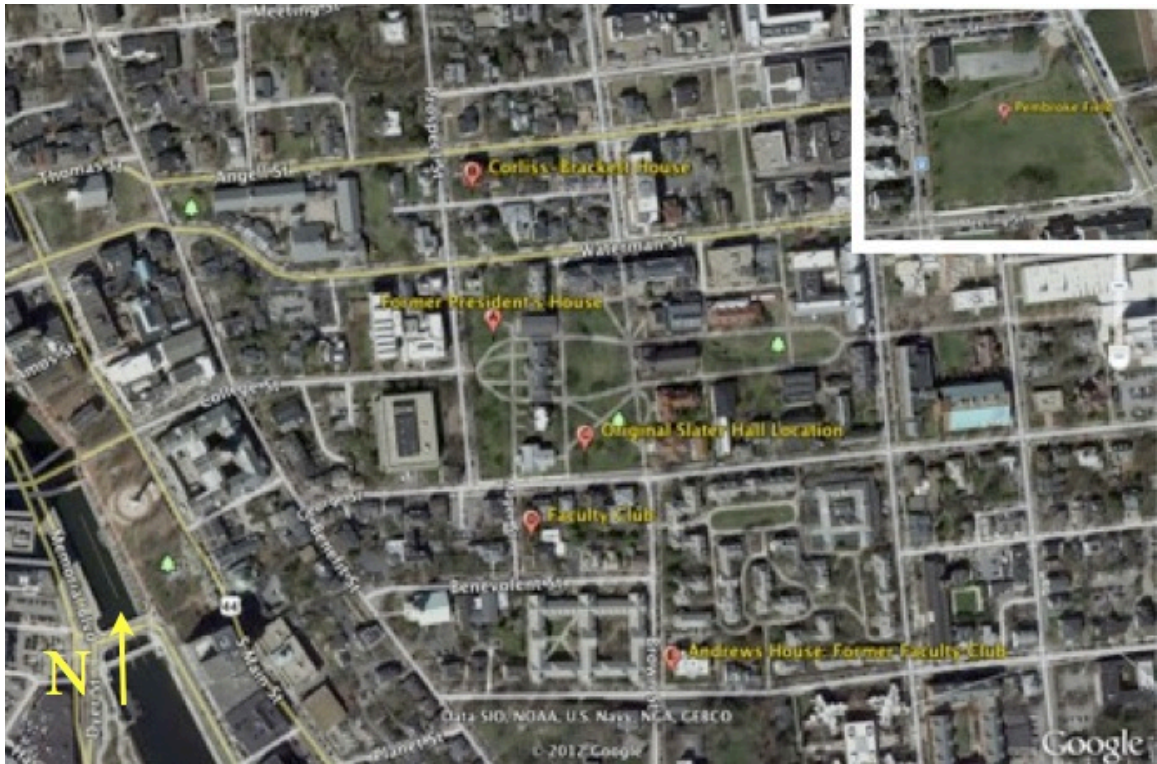


FIGURE 3.5 Detail of the Brown University campus. (A) *President's House*, (B) *Corliss-Brackett House*, (C) *Original Slater Hall Location*, (D) *The Faculty Club*, (E) *Andrews House*, (F) *INSET: Pembroke Field*. 2012 map of Providence, RI. (Courtesy of Google Earth, 2012)

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For further excavation proposals see the Response Papers sections of the **ARCH 1900**

The Archaeology of College Hill 2012 Class Wiki at:

<<http://proteus.brown.edu/collegehill2012/17337>>

4. THE BROWN-PROVIDENCE RELATIONSHIP

Peter M. Johnson

Introduction

The previous three chapters have focused solely on Brown University, its buildings, landscape and overall physical plant. Yet, an important distinction must be noted. Brown University is situated within Providence, RI and cannot be seen as a purely independent entity. The archaeological practice emphasized for this course and our work has pressed the importance of context, examining our material and our work with regards to the various relationships that define it. Thus, it is important not to overlook a larger relationship, that between Brown University and the city of Providence. In our work we have been thinking about how our finds relate to a Brown experience, or rather how they can be seen as part of a Brown narrative or history. In this chapter I would like to broaden the scope of our work by examining Brown and Providence, using the same contextual frameworks undertaken in our other analyses. Brown and Providence cannot be seen as separate entities, but are rather intertwined through their history, and by taking a diachronic view I aim to demonstrate how this relationship evolves and is contingent upon meeting the needs of each body. In particular, I will focus on this relationship through the lens of Brown's expansion.

Providence was founded in 1636 and Brown 128 years later in 1764. Thus, these two bodies have been engaged for almost 250 years. Undertaking an in-depth study of the relationship between the two over this period is out of the scope of the project here. Instead, I have decided to focus on 4 periods or events I believe typify monumental shifts or are characteristic of how Brown and Providence have interacted. To begin, I look at the founding of Brown. I will show how in this endeavor Brown University relied on Providence to become established. The next section will look at the Early Development of the Campus as an example of early tensions between the college and the city. Afterwards, I will highlight massive post-WWII expansion efforts that precipitated community outcries and reaction. Finally, I study a shift in community-focused efforts on the part of the university.

A Founding in Cooperation

Brown is the seventh oldest institution of higher learning in the United States of America⁷ and was considered the Baptist response to the Congregationalist Yale in Connecticut and Harvard in Massachusetts. Rhode Island was a primarily Baptist colony, tracing back to the heretical views of Roger Williams (Phillips 2000:8). Having no Baptist institution yet in the colonies, local Rhode Islanders saw the colony as an ample place for fulfilling this need for local Baptist-grounded instruction. The institution was founded in Warren, Rhode Island by a group of local influential business- and clergy-men. The charter was drafted and highlighted Brown as “highly beneficial to society” and integral in “preserving in the community a succession of men duly qualified for discharging the offices of life with usefulness and reputation”(Brown University 1764).

After the founding, Brown remained in Warren, always thought of as a temporary location, for a short time until funds could be raised and a location chosen for the college. Realizing the importance and benefits a college could bring to a town, upon the news that Brown would be moving to a permanent location, proclamations came from East Greenwich, Providence, and Newport as to why they were best suited to house the college (Phillips 2000:19). Brown ultimately chose Providence, possibly through the influence of the Brown family from which resources had already been dedicated and the school would eventually find its namesake.

While the Corporation members certainly had an influence in situating the college in Providence, these inaugural years saw efforts and help come from the community. Before University Hall⁸ was completed, students were dependant upon Providence residents for housing and to live with. Additionally, while the construction of the main building was made possible by the Brown Family, a majority of the donors consisted of local citizens contributed small donations, giving what they could because they likely saw the college as integral to the success and growth of the town (Jane Lancaster 2012, pers. comm.). Indeed Brown was meant to be Rhode Island’s school and a tradition of educating the local population continued throughout the majority of the history of Brown.

⁷ At the time of founding, the United States of America had yet to form and the thirteen colonies were still an entity of Britain. For this reason Brown University is also referred to as one of the colonial colleges.

⁸ Initially named the College Edifice

Early Development of the Campus

Brown continued to rely on Providence's private citizens through the early years of growth. Upon realizing a need to house more students, the college bought land from Nathaniel Waterman and relied on donations from Nicholas Brown for the building of Hope College, the site where our excavations took place (Phillips 2000:39). Yet, while private citizens were important, Brown also looked back to the state for help, the first time doing so since developing the charter in 1764. In 1796 the college⁹ petitioned the state for a lottery to raise \$25,000, which they were granted (Bartlett 2003:15). Again in 1811 the Corporation of Brown petitioned the state for a lottery of \$20,000 "to be applied to the building of a house for the accommodation of the steward, and generally to promote the objects of said institution" (Bartlett 2003:18). The funds from the lottery came directly from Rhode Island citizens purchasing tickets. Both the size of funds granted from the lottery and the fact that Brown was given lottery funds to begin with are significant. Very few of the lotteries in Rhode Island during this period were granted for private entities, but rather were used to raise funds for public works projects, things that were seen as necessary for all and for the betterment of society. The fact that Brown was able to acquire funds through this state apparatus emphasizes the public's view of Brown as integral to the well being of the state.

It has been shown that both private citizens and the state were integral in the growth of the colonial college. This dependant relationship also meant that citizens felt they should have their say in the college's activities. One of the first publicly recorded outcries came in 1877 when a citizen under the pseudonym "Tax-Payer" wrote a column in the *Providence Journal*.¹⁰ The corporation began work on a new dormitory to be named Slater Hall by laying a foundation¹¹. However, work was arrested because of public opinion over the location of the proposed building. The article published on November 17th, 1877 proclaimed, "whatever concerns the welfare of Brown University is a matter in which the public should be interested" (*Providence Journal* 1877). This citizen, who only signs the opinion piece "Tax-Payer" goes on to demand a halt in

⁹ Not yet named and was referred to as Rhode Island College or formally the College of Rhode Island and Providence Plantations

¹⁰ See Figure 4.2 for a reproduction of the journal article.

¹¹ See Figures 4.3, 4.4 for original plans and sketches of the proposed Slater Hall.

construction and change of location for the building, as the building would “obviously violate hygienic laws...and would grossly offend the public sense of propriety and taste” (*Providence Journal* 1877). Additionally, the fellow continues on by lamenting the possible loss of sight to the old college yard if the structure were to be built:

“I desire to record my surprise and regret that the city is to be deprived of what it has in some sort come to regard as its own: that old “college yard,” historical in association, and through the length of which the pure air of heaven has full sweep, is soon to be partially closed to the eye; and that grounds upon which so many are accustomed to gaze while taking their daily walks are to be disfigured by the march of events.” (*Providence Journal* 1877)

The piece makes it clear that the public still very much feels an attachment to the college and believes it is indebted to the community in some ways, here open access and sight of the grounds. Further, by signing the note “Tax-Payer” the author is indicating that, as a rightful tax-paying citizen, the university should be indebted to Providence citizens. Indeed, as a tax-exempt university, Brown does heavily rely on taxes of the local people for essential services. This tension is one which continues to resurface in Brown’s history.

It has been assumed that the person affiliated with the opinion column was actually on the Corporation since members owned many of the houses on that stretch of George Street. Nonetheless he or she felt the need to publicly express their opinions and reaffirm the debt they thought the university owed to its community (Jane Lancaster 2012, pers. comm.).

According to Bronson, a petition was signed by many of the most influential residents in the city (Bronson 1914:393). In this same report, he mentions that President Robinson published an “ironical rejoinder”, the publication of which is not mentioned (Bronson 1914:393). Eventually, the placement of the building was changed to its present location and work was finished in 1879.¹²

¹² Figure 4.1 shows different stages of development of the Brown University Campus. Under Slater Hall, the original intended location is marked as well as the final one.

Expansion through Destruction

Wriston's Vision

More recently you see Brown and Providence come head to head. The post-WWII era saw a boom in expansion at Brown University. The GI Bill, which subsidized education for veterans, meant that post-war enrollments increased at all colleges. During this time Brown saw an increase of 100% and had to cope with multiple problems: President Wriston, following in Wayland's footsteps, wanted to see Brown become a more residential university; There were increasing complaints about fraternities, whose houses were in the neighborhood, and the community urged the university to change the structure of how fraternities were being dealt with; and the university needed more housing for its increasing numbers of students (Schermerhorn 2005:42). After quietly acquiring pieces of nearby land of the university, President Wriston came to the decision that building a large residential quadrangle was necessary (*Brown Alumni Monthly* 1945:12-13).

In framing the debate for whether the university should grow, Wriston received the support from then Rhode Island Governor J. Howard McGrath (Schermerhorn 2005:42). With state support, the University sought to attract alumni donations for the costly \$4 million project by arguing increased residential experiences and growth was part of Brown's duty to the nation in housing and teaching veterans (*Brown Alumni Monthly* 1946:127-129). In particular Wriston engaged in post-war ideology by linking freedom to the concept of university housing:

If I were launching a campaign for brick and mortar alone, if this campaign was merely for beauty and comfort...we would have no right to ask all the alumni and all the friends of the university to contribute. Only because the real purpose is to put Brown in a more effective position to go forward in its best tradition and keep alight the flame of freedom can such an appeal be made (*Brown Alumni Monthly* 1946:7).

During the interim before the dorm was completed the university required assistance from the community in housing students, the majority of them veterans. The *Brown*

Alumni Monthly celebrated the community's response as proof of the healthy relationship between Providence and Brown (*Brown Alumni Monthly* 1946:45).

Even though it seems that the university took aims to assuage negative community reaction, as the university charged forward with permanent expansion at a time when incoming students were no longer veterans, community sentiment began to change. The *Providence Journal* termed the construction "one of the largest land clearing projects in the city's history." (*The Providence Journal* 1949). The University did try to take some precautionary measures, moving eight historic homes to other locations, but the majority of the homes, historic in nature and contributing to the character of the neighborhood, were not salvaged (Schermerhorn 2005:59)¹³. Also, there was some concern that because the university was tax-exempt, this would increase the real estate taxes on the surrounding areas, something that did not end up happening (Schermerhorn 2005:64). Ultimately, while the public took notice of this project and there was a considerable amount of discontent, the community never actually came together as a coalition or formed a resistance to the efforts. This may be in part because of President Wriston's support from influential leaders and compelling arguments of moving the students of Brown out of the community's hair and into a more confined legislated space.

Faculty Tax-Exempt Status

After students began moving into the dorms, community-neighbor concerns quieted but 6 years after its completion another debate arose, this time around a provision maintained in the charter that noted that professors were not required to pay taxes on their personal property. The original charter granted Brown, as an educational institution, freedom from taxation on not only the "College estate," but also on "the estates, persons, and families of the President and Professors" (Wriston 1950: 5). This was amended in the Civil War era when it was capped at \$100,000 (Brickman 1966:65-69). This topic arose again when increasing suburbanization led faculty outside of Providence and into the suburbs. In 1949 the town of North Kingston tried to tax a professor on their property (Schermerhorn 2005:73). Brown appealed the action and the case eventually went to the

¹³ See Figures 4.5, 4.6, 4.7 for photos of the original character of the neighborhood and the destruction of the houses.

superior court where it was upheld for all remaining faculty, but not new ones. Providence residents were displeased by this action and the University tried to reach a compromise with the state but the Professors would not give up this privilege, something the university could not legislate without the faculty assent (Wriston 1951:15). It would be over a decade before the faculty eventually gave up this privilege, leaving residents sour with the University's handling of the matter.

Growth under President Keeney

More discontent and distrust in Brown's expansion and community response came when Barnaby Keeney took office after Wriston. Looking to grow from the strides made by Wriston, and aiming to address the remaining problem of a student housing shortage, Keeney pushed forward with recommendations for building another residential quadrangle. However, unlike Wriston, Keeney now had to contend with a growing opposition, which would eventually coalesce into the Providence Preservation Society (PPS), formed in 1956 largely in response to Brown's massive postwar growth. (Schermerhorn 2005:81).

Within a very short period of time of becoming president, Keeney acquired building permits for a new quadrangle, now named Keeney Quadrangle. Like Wriston, Keeney initiated a policy whereby it would sell houses inexpensively if the owner paid for it to be moved. However, lack of public ability to save these houses and the destruction of many houses to build Wriston Quadrangle still in recent memory caused a public outcry (*The Providence Journal* 1956). The inaction of the University to save the homes caused a group of individuals to come together to form the Providence Preservation Society. While unable to save the homes or stall the construction of Keeney Quad, PPS was eventually able to enact legislation that would make future unchecked expansion of Brown impossible. The organization did so by establishing historic zoning policies and restricting the university to an institutional zone out of which it could not expand (*The Providence Journal* 1956).

University as Community Member

Since that time there have been some continued debates about Brown's role and contribution to the city. In the 1970s and 80s there was a public debate over land Brown owned in the Fox Point neighborhood of Providence (Gorman 1998). Brown was initially poised to take land by having the site condemned through a scheme devised with a local developer. It was the intention of the University to use this site, the bread-bond site, located at the corner of Brook and Williams, to build a parking lot for faculty. After plans were leaked to the public both the community and student body pushed back on university expansion into the neighborhood.

The local residents of the Fox Point neighborhood were already upset because the university had continually been allowing more and more students to move into the neighborhood, increasing noise levels and pushing out low-income families. Students also began to see the potentially mal-intentioned effects university expansion could have in destroying a neighborhood fabric. As a result these groups called for the University to build low-income housing for the community instead of a parking lot. In addition to doing this, Brown issued a report to address these larger issues (Brown University 1969). Eventually, this prompted Brown to buy the Bryant University Campus and expand more towards the east and not southwards into Fox Point (Brown University 1970). The increased engagement and investment in the surrounding community eventually became part of the larger mission of what is now the Swearer Center for Public Service (Gorman 1998).

Brown as Contributor in the 21st Century

Following the unrest of the 1970's and 1980's the notion that Brown University was to be a community partner had become ingrained in Providence community. Brown continued to offer support through programming at the Swearer center. However, upon moving into the 21st century cities across the country started asking more of the Universities that resides there and used valuable services. Cities, Providence included, began asking for monetary support from Universities. Providence did so in 2003 under the argument that since the school was tax-exempt, the school did not contribute enough

to the services it uses that taxes would cover. These include primarily property taxes. Brown is one of the largest landowners in the city and occupies land that is some of the most valuable and expensive. Additionally, Providence has a high number of non-profit organizations which detract even more from the amount of taxable constituents they have. Because of this Providence asked a number of private colleges and universities to give monetary support to the city. After a fair amount of controversy of the distinction between the freedoms and rights of non-profits, the colleges came together to write the Memorandum of Understanding (MOU). This document outlined how the colleges would support the city over a long period monetarily and also created a new tax abatement policy for newly acquired properties.

Even though the MOU was meant to be a long term solution for Brown's financial investment in the city, the recession brought on in late 2008 caused the city of Providence to once more be limited in funds and needing to close a budget. Without reaching out to Brown University and other non-profits, the city would either have to drastically cut services or raise taxes. Yet, when asked to provide more to the city in 2011, Brown was reluctant because it seemed as if the MOU made in 2003 was being disregarded. In response, the city was able to polarize Brown within the Providence community, seen as sitting on a bed of money, and distanced from a local effort because of its increased emphasis on global acclaim. Even though the University administration, student body, and faculty tried to stress the other ways in which the University contributed, it was wholly unsuccessful in winning over local support. Eventually after multiple months of debate, attacks, and deliberation, the University and Providence Mayor, Angell Taveras, came to a deal in 2012 whereby the city would receive more funding. After resolving the conflict, both parties showed an interest in healing any remaining wounds and moving forward to continue a productive community partnership.

Conclusion

Today Brown University's mission statement calls the university to serve community, nation, and world (Brown University 2012). As I have shown, this hasn't always been the case. Brown University started as a quaint local college, and over time developed deeper ties with the nation and eventually the world. These periods of growth

were often the times when Brown and Providence came head to head, disagreeing over actions they believed the University should take.

It is my hope that this historical look at the Brown-Providence relationship elucidates a fundamental point, that Brown and Providence are not fundamentally different entities. Further, I believe that this type of work is paramount to the work of archaeology. By broadening the scope of the questions asked, archaeology has room to address some of these larger issues. Finally, creating histories like this one, public histories, in which I was able to engage with members of the community and various documentary resources are integral not only in light of recent strains on the relationship between Brown and Providence, but also in archaeology's aim to remain accessible and relevant to the communities within which they work.

Figures



Fig 4.1
Development of Brown
University (Halsband 2006)

Brown University and the New Dormitory.
To the Editor of the Journal.

Whatever concerns the welfare of Brown University is a matter in which the public should be interested. Venerable in years, high in character, this seat of learning sustains a reputation throughout the State and country which is surpassed by few institutions of a kindred character in the land. Powerful in the cause of education, a fountain of intelligence from which all who would be invited to drink, and with an elevated standard of scholarship, it sheds upon this community and the country at large those influences which, born of intelligence, are chiefly exercised (featured by) minds.

It is therefore with genuine satisfaction that I hail the announcement recently made that the Trustees of the University are about to erect a large and handsome brick dormitory for the use of the students. It is thought by quite a number of persons, and they have so expressed themselves to me, that the Trustees would have shown a larger wisdom had they decided to use the generous sum of money at their command for the purpose of repairing and putting in the necessary order either University Hall or Hope College. Others, equally intelligent, maintain that what Brown University most needs is another building to be used for recitations. While these opinions are entitled to respect, it is fair to assume that the authorities of the college are more competent, as they certainly are the more proper, persons to decide upon what is best for its interests.

So intimately bound together are the interests of the University with those of the community, so great is their mutual dependence, so reciprocal and reflex are the influences of each upon the other, that no public criticism, within the bounds of decorum, of the affairs of the college should be deemed an invasion of the province of its managers. This remark is made as an introduction to what follows.

Among the many varieties of opinion to which utterance has been given concerning the proposed action of the college authorities, none are so pronounced as the feeling that the committee on building have capitulated, not only in their decision to have the dormitory front to the south, but also in their selection for its site of the south end of the College Campus, east of Rhode Island Hall.

The former, if carried out, would obviously violate hygienic laws. The latter, if persisted in, would grossly offend the public sense of propriety and of taste. These two statements are seriously made; and, what is more, they will now be seriously though briefly considered.

The first assertion embraces neither more nor less than the recognition of a fact beyond dispute, namely, that deductions drawn from experience and observation show that, other influences being equal, the occupants of rooms daily exposed to the sun are more healthy and robust than those whose chambers are never exposed to its rays. In other words, what is true in respect to the vegetable is equally true in respect to the animal kingdom. The proposed dimensions of the dormitory are, if report be true, about 125 feet in length and not far from 50 feet in width. It can therefore readily be seen that with the exception of the northeast and northwest corners, scarcely a ray of sunlight would during any day of the year ever penetrate a single room, whether bed or study, on the north side. The failure of the committee to be governed by these considerations is one of those inexplicable blunders into which men gifted with intelligence are now and then betrayed. Fortunately, however, it yet lies within their power to repair the mistake by placing the building that the sunlight would every day stream for hours into all the rooms and at the same time cover almost every brick with its warmth.

A few words in reference to my other assertion, Mr. Editor, and I will bring this communication to a close. I desire to record my surprise and regret that the city is to be deprived of what it has in some sort come to regard as its own; that the old "College yard" historical in association, and through the length of which the pure air of heaven has full sweep, is soon to be partially closed to the eye; and that grounds upon which so many are accustomed to gaze while making their daily walks are to be disfigured by the march of events. More than a century has passed since University Hall was erected; and in all these years the public has cherished the conviction that no hands would ever be permitted to mar the form and beauty of the college grounds unless necessity could be alleged as an excuse. That necessity has not yet arisen, for the reason that there is plenty of land elsewhere belonging to the college, upon which a dormitory could be placed.

Why, then, should the college persist in their...
 If, in obedience to a general sentiment, it should abandon the people regard it a graceful recognition public has never...
 At the same time, the State has the right, as provided in the charter of the charter...
 T. J. PAYER.

Fig. 4.2 (left)
 Article Written by "Tax-Payer" stating his or her disapproval of the placement of the new Brown University Dorm (*Providence Journal* 1877).

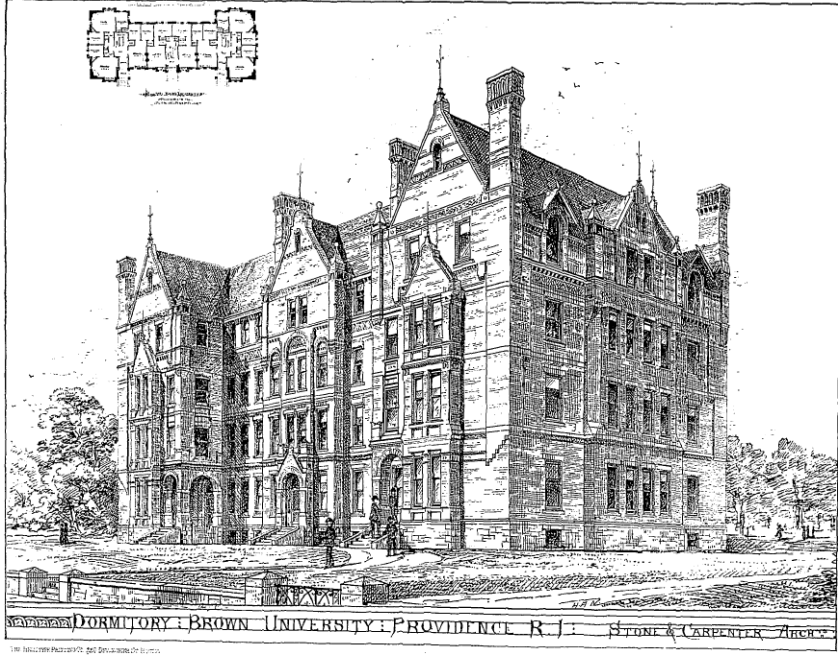


Fig. 4.3 (above)
 Stone & Carpenter winning original facing plan for Slater Hall (American Architect 394)

Fig. 4.4 (below)
 Walker & Gould competition design for south facing Slater Hall (American Architect 395)

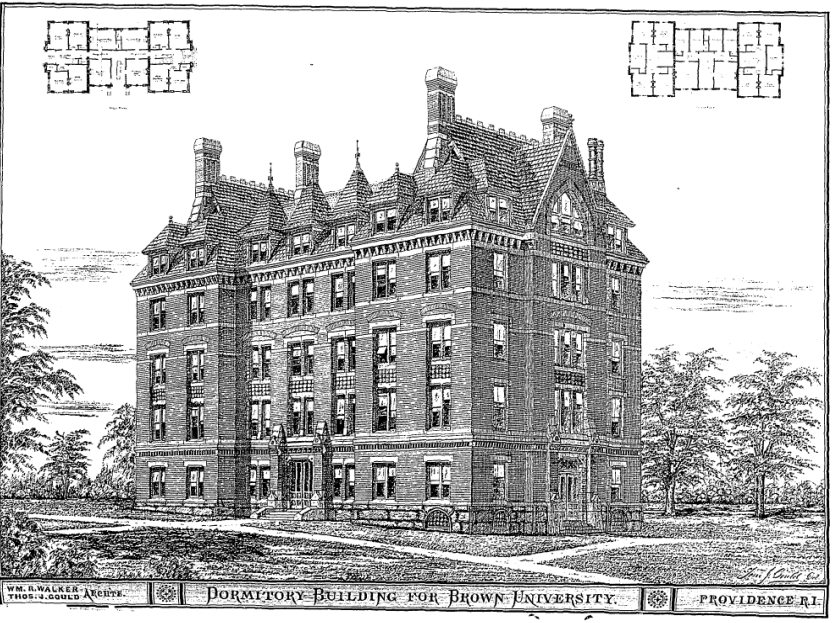




Fig. 4.5
Southwest
corner of
Thayer St.
and George
St, where
the Sharpe
Refectory of
Wriston
Quad now
sits
(Univesity
Archives)



Fig. 4.6
Undated
Photo of
University
Leaders
after the
destruction
of houses
in order to
build
Wriston
Quad
(University
Archives)



Fig. 4.7
Undated
Photo of
destruction
of houses in
order to
build
Keeney
Quad.
(University
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5. SPATIAL ANALYSIS AND VISUALIZATION: PLACING OUR FIELDWORK ON THE MAP

Morgan Albertson

Introduction

Archaeological fieldwork and research regularly involves various concepts of space in order to record the organization of past human activity. All of the data generated on an archaeological project has some sort of spatial component and it is important to recognize that “time and space are intricately connected to the archaeological record” (Harris 2002:131). The use of geographic information, or more specifically the location, orientation, and depth or elevation of artifacts, features, sites, and landscapes, is very valuable to the discipline of archaeology and is utilized in various ways to form more complete interpretations. Considering spatial characteristics is just another important part in establishing context.

The tools used in our project to aid in the incorporation of spatial data were the total station, a Global Position System [GPS], and a Geographic Information System [GIS]. A total station is a “very accurate, distance-measuring electronic theodolite [instrument that measures angles in the horizontal and vertical planes] capable of diverse mapping and position-measuring tasks” (Rick 1996:1). A GPS is a handheld device that uses satellites to provide the longitude and latitude for a point on earth’s surface (Renfrew and Bahn 2000:88). GIS is “computer software designed for...mapping and geographically analyzing systematically collected information linked to known geographical units and locations” (Knowles 2008:2). These three tools allowed for the organized and accurate acquisition of spatial data in the field, the management of spatial data in the field and laboratory, the creation of a spatial database to explore the relationships between the datasets, the analysis of the spatial data, and finally the display and presentation of the spatial data (Conolly and Lake 2006:13). The use of maps can show us what we did during fieldwork as well as bring new meaning to our fieldwork. Considering the spatial context can enhance interpretation and also our ability to present

our work, therefore this strategic and precise method for data collection, analysis, and visualization made our specific project at Brown University efficient and successful.

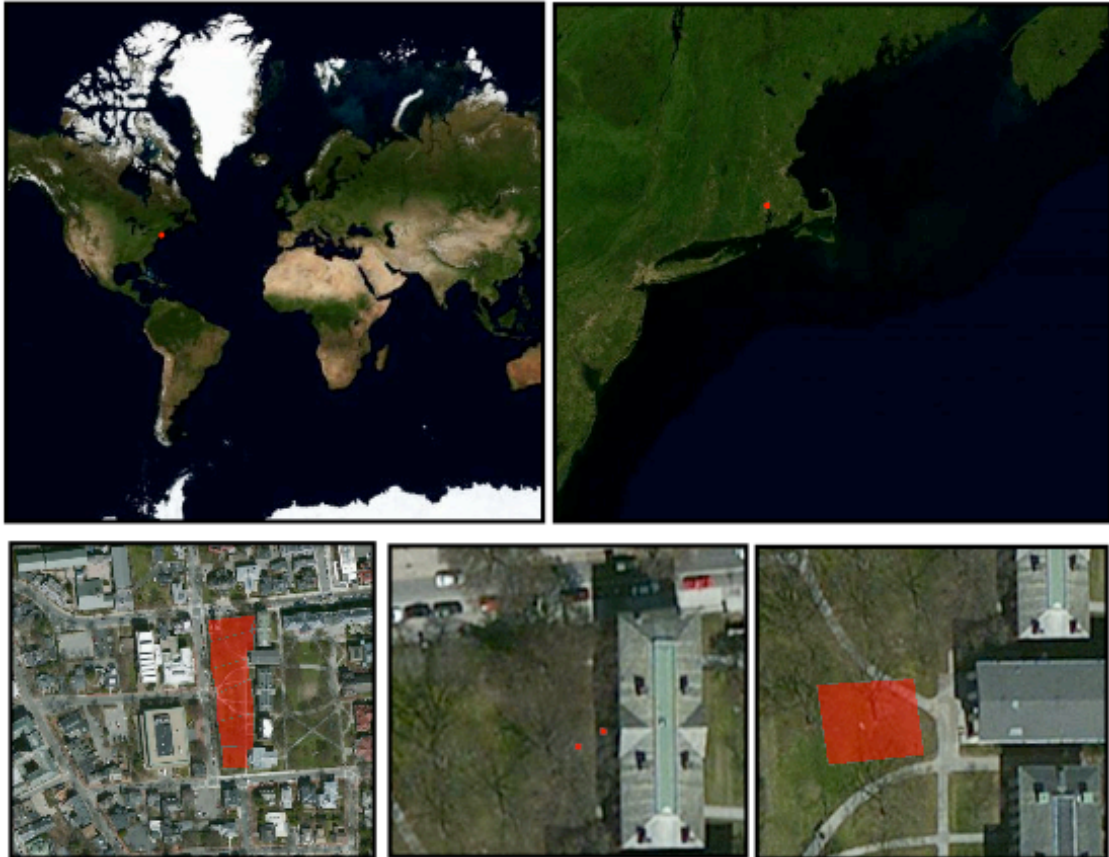


FIGURE 5.1 A series of maps with several different scales illustrating the fieldwork completed during the fall 2012 semester. To orient our project on a global scale, the top two aerial images show roughly the world and coastal New England and the red dots pinpoint exactly where the class was working. The bottom three images are zoomed in snapshots of the pedestrian survey units, excavation trenches, and geophysical survey conducted on the ‘Quiet Green’ of Brown University. (Basemap courtesy of ESRI 2012)

Fieldwork on the Quiet Green

Survey points and spatial analysis

For our Quiet Green excavation, pedestrian survey, and geophysical survey spatial data was collected in two ways. The coordinates of each corner of the pedestrian survey

units were recorded using a GPS device. For plotting the points of the geophysical survey and excavation trenches, a total station was used. On the first day of fieldwork we set up the total station in order to locate points in space, create grids, and measure distances and other landscape features. In order to use the total station it must be sighted to a fixed point linked in with some absolute national standard so that the instrument can be placed in a geographic coordinate system and leveled (Collis 2001:38).

Therefore, we placed the total station on the corner of Prospect Street and College Street at point 226, a coordinate on an already established Providence city grid, marked by a pink circle painted on the sidewalk. One student worked with the total station while another then walked to the next city-recorded point, point 225, at the corner of Fones Alley and Prospect Street. A tall rod with a prism was held level at this point. The total station measures the distance to the stadia rod with an infrared laser that is reflected back by the prism and is thus the total station is able to recognize its position (Rick 1996:1). Now that the machine was located in space, we were able to set up the total station at the datum point, a previously recorded coordinate established by the instructor of the course, Alex Knodell, on the pathway between University Hall and Manning Chapel. We positioned the total station on the point and back sighted to point 226, once again leveling the total station and placing it on the known coordinate system.

Spatial Data Collection

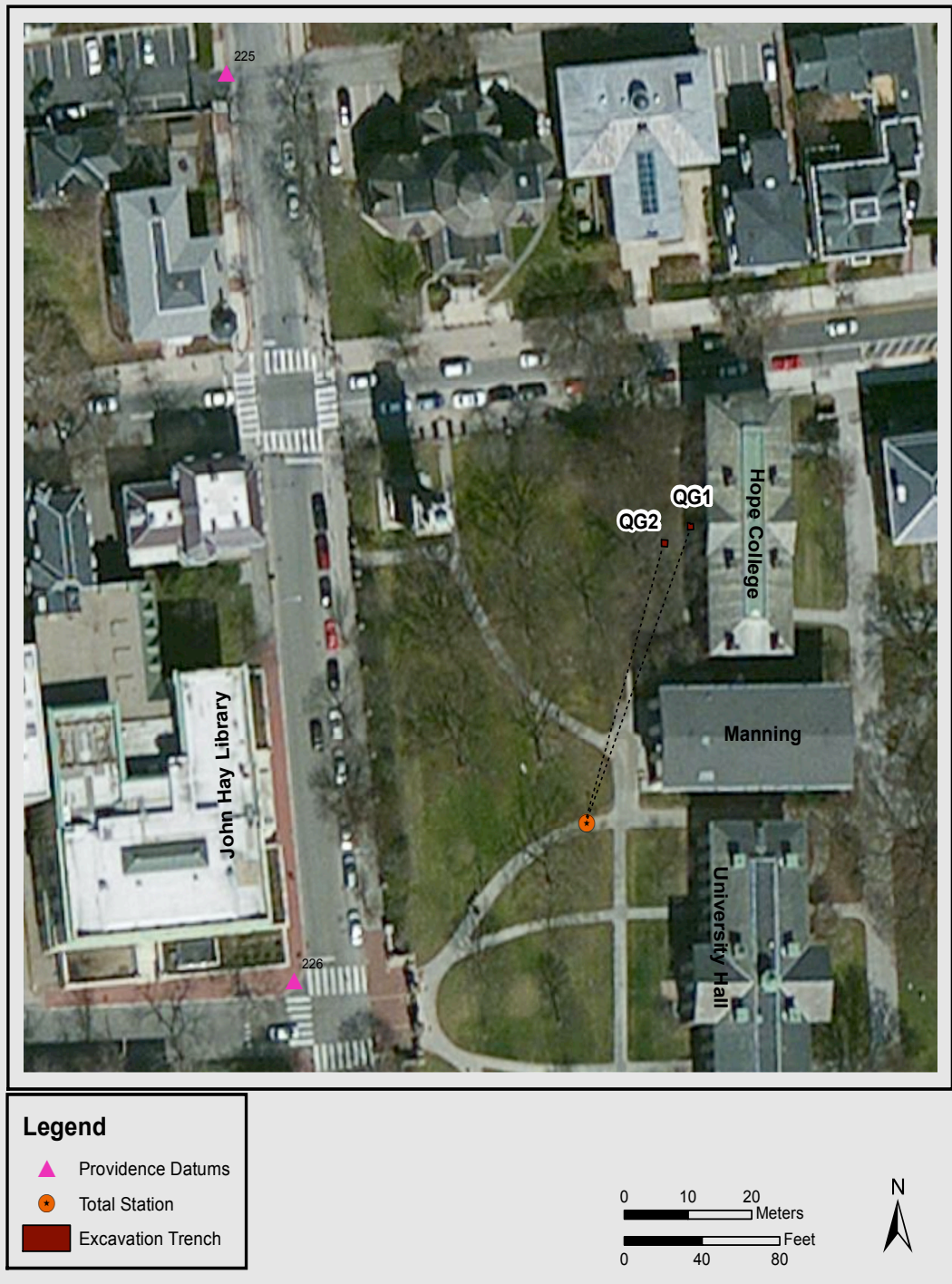


FIGURE 5.2 Providence datum points and total station (Basemap courtesy of ESRI 2012)

The total station was set up on each day of fieldwork. We shot the X,Y,Z coordinates of points relating to the trenches and the geophysical survey. These coordinates correspond to the point's position on the earth's surface as well as the elevation of the point. Points were recorded in a notebook as well as in a 'Data Collector,' a small computer that receives information from the total station via a Bluetooth connection. The corners of opening and closing contexts, multiple points of uncovered features, and the boundaries of the geophysical survey were all recorded.

Eventually this data as well as data from Brown University Facilities Management, Rhode Island GIS, ESRI GIS, and historic images from the university's digital archive, were downloaded and compiled into a database to be used with a program called ArcGIS. This program allows one to visualize geographic patterns, observe evidence at multiple scales, aggregate data from different units, and integrate material from textual, cartographic, and visual sources (Knowles 2008:2). With ArcGIS these layers of data were displayed and manipulated in various ways to visualize the work we had completed on the Quiet Green as well as start to identify and examine spatial patterns or trends.



FIGURE 5.3 The Basic layout of the pedestrian survey units, transects, and direction of field walkers. (Basemap courtesy of ESRI 2012)

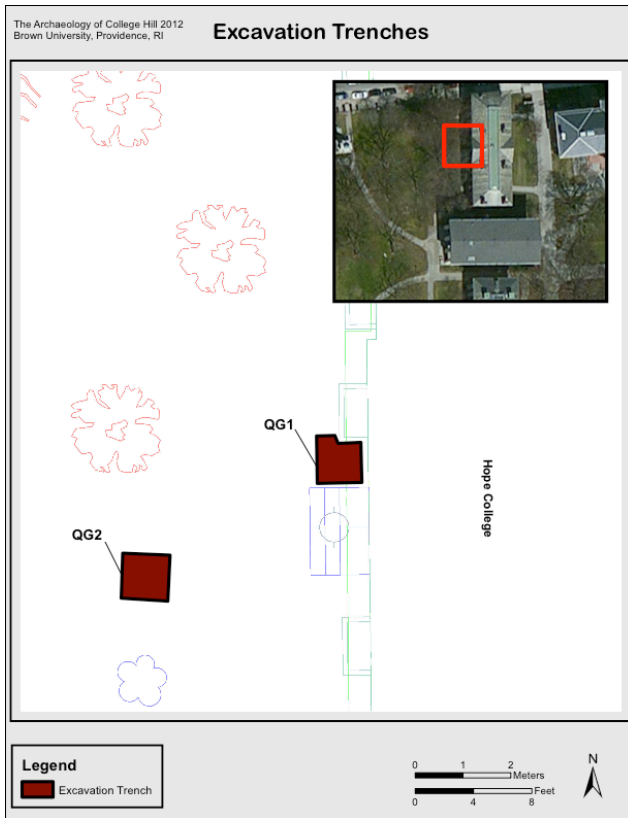


FIGURE 5.4 Location of excavation trenches next to Hope College. Inset map depicts the general area of the trenches on the Quiet Green. (Basemap courtesy of ESRI 2012)

FIGURE 5.5 Outline of the geophysical survey conducted on the Quiet Green. These basic maps, created using survey points, were the starting point for further spatial investigation. (Basemap courtesy of ESRI 2012)



The types of analysis conducted using ArcGIS were artifact distribution, exploration of site and feature relationships, and observation of spatial patterns. Professionals working with this technology argue “spatial patterns and relationships that may have significant explanatory power often are revealed only when the information is presented visually in the form of a map (Churchill and Hillier 2008:66).” Our research and fieldwork clearly show how cartography and archaeology are mutually beneficial.

For the pedestrian survey we calculated the density of finds in each survey unit and then displayed this on a map using graduated color to depict areas of high concentrations and low concentrations. The interpretation of this map is further discussed in the next chapter (Gunderson, this volume).

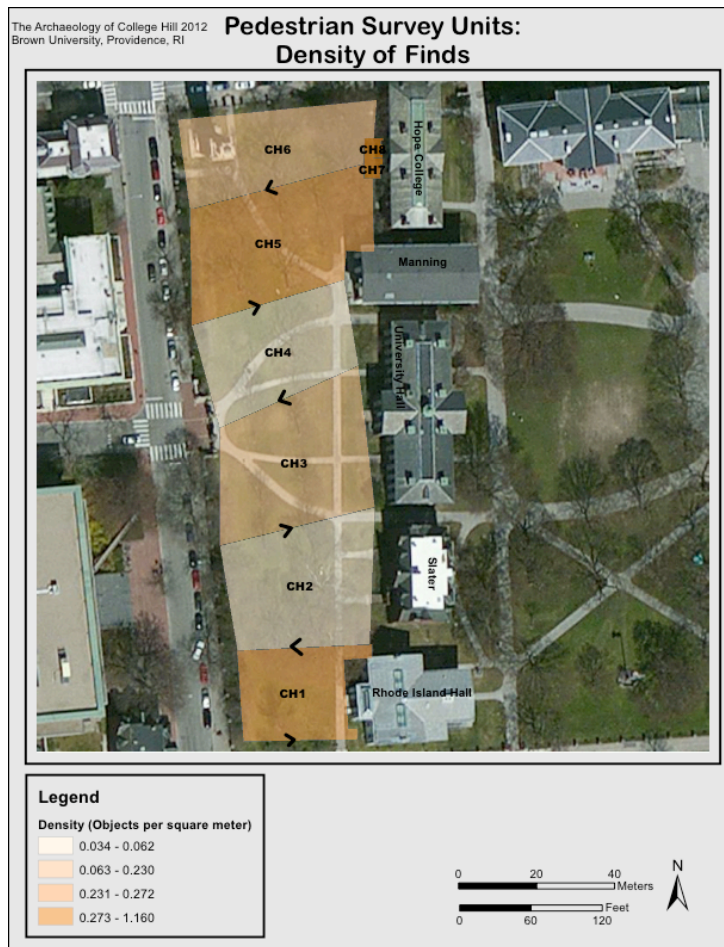


FIGURE 5.6 Artifact Distribution Analysis. (Basemap courtesy of ESRI 2012)

Another unique way that GIS has aided in our analysis of our fieldwork is by integrating historic information with our own data. By examining historic photos and paintings of the Quiet Green from 1900-1910, an approximate path was drawn in ArcGIS. The feature

uncovered in context 4 of QG2 and precisely recorded by the total station was also drawn in ArcGIS. These two layers were overlaid on top of each other to compare our findings with the documentary evidence from the early 20th century. This analysis reveals that the excavated feature and the estimated path almost exactly line up, giving us reason to believe that we have uncovered a part of the old path system.



FIGURE 5.7 Quiet Green Painting 1904-1910 (Image Courtesy of Brown University Center for Digital Scholarship 1911-1954)

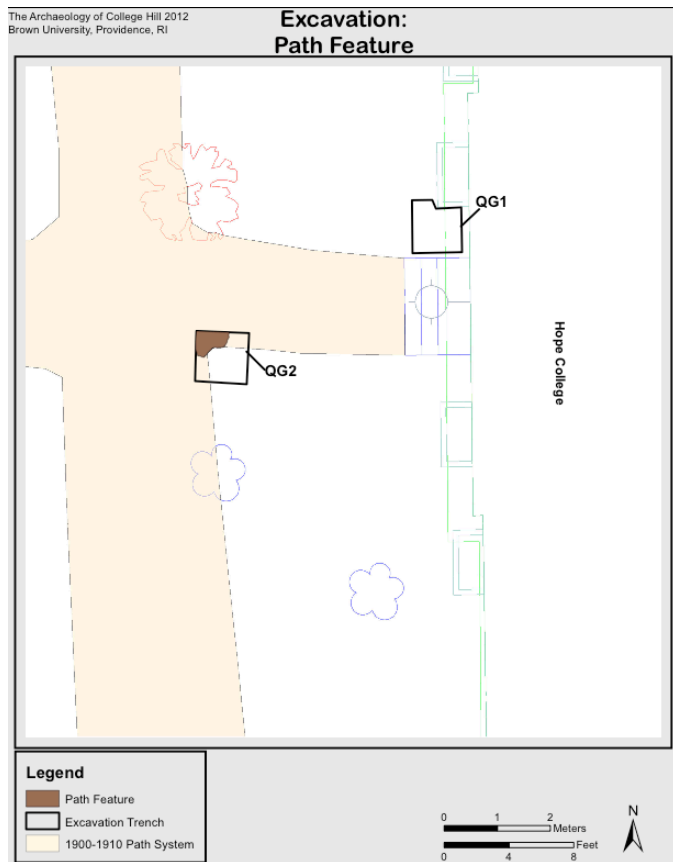
FIGURE 5.8 Hope College Photograph 1911-1954 (Image Courtesy of Brown University Center for Digital Scholarship 1911-1954)





FIGURE 5.9 Early 20th century path system in relation to current organization of the Quiet Green (Basemap Courtesy of ESRI 2012)

FIGURE 5.10 The overlap of the old path system and the QG2 feature. While there is a certain degree of estimation and thus error in this map, it is still quite suggestive that we



uncovered a piece of the old path system.

For the geophysical survey, images at various depths were overlaid with historic and current maps to point out where potential features lie underneath the ground in relation to the current spatial organization of the Quiet Green as well as the historic layout of the Quiet Green as depicted by the recorded land plats throughout the 20th century. The potential for this analysis will be queried further in chapter 7 (Thompson, this volume).



FIGURE 5.11 Potential Features
(Basemap courtesy of ESRI 2012 and
Land Plats 1938)



FIGURE 5.12 Future Trenches and Paths
(Basemap courtesy of ESRI 2012)

In general, our use of spatial analysis and visualization has greatly added to our understanding of the archaeological record at Brown University. There is much more to be explored with the integration of spatial analysis, specifically GIS and archaeology.

Future Possibilities

GIS and Archaeology

This type of work has great implications for archaeology, especially historical archaeology, which is already such an interdisciplinary field. Since the 1970s the potential of GIS and the collection and use of spatial data relating to the archaeological record has been described as a method that fully “illuminates the past,” by integrating site plans, satellite images, aerial photographs, geophysical surveys, and historic maps (Knowles 2008:1; Renfrew and Bahn 2000:88) We have been able to successfully use this technology to bring greater insight to the interpretation of our finds and excavation as well as convey this information to the University and general public in an effective manner.

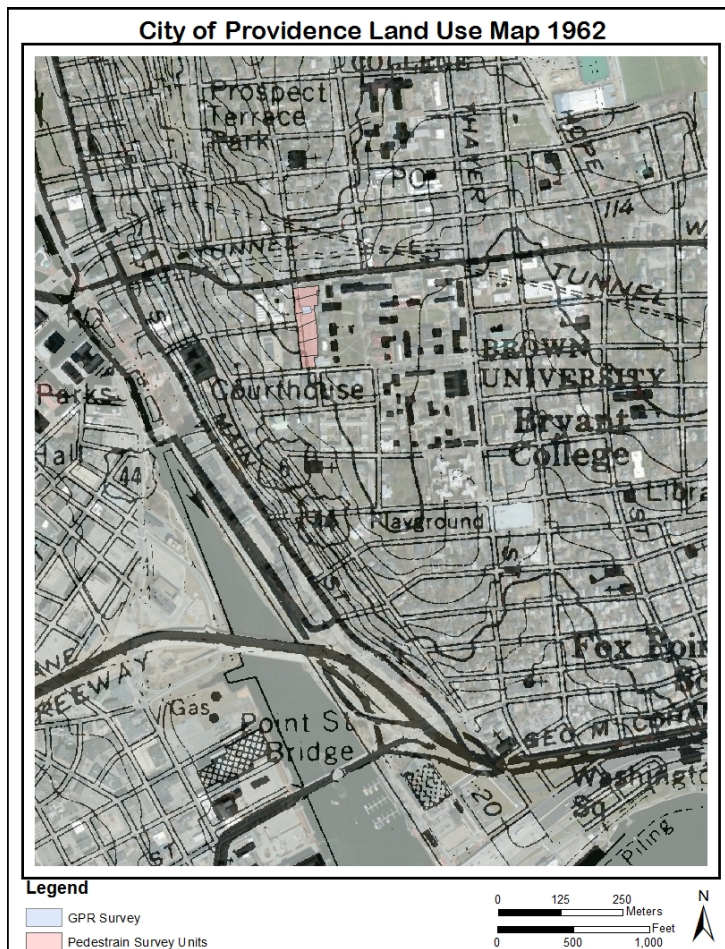


More specifically for the Archaeology of College Hill Project the next step would be to utilize spatial data, GIS, and historic maps to identify areas of potential archaeological interest. FIGURE 5.13 A georeferenced paper map from 1750.

Underneath the paper map is a current aerial image of the city as well as our survey units. (Images courtesy of Public Archaeology Lab 2003 and ESRI 2012)

There are a few ways to go about this; the first would be to conduct pedestrian surveys in multiple locations across campus and then map and compare the results. Areas with high concentrations of surface finds could be marked for further examination and possible excavation. Another interesting way to pinpoint areas with potential archaeological value would be to overlay historic maps of the city with current maps to visualize the changing landscape as well as identify areas of continuous activity. Finally, it would also be useful to combine these maps marked with potential sites with present-day maps of hydrology, soils, topography, and facilities to highlight the places where modern features may cover or disturb the archaeological record, possibly marking these as places to avoid for future excavation (Harris 2002:132).

FIGURE 5.14 1962 map overlaid with current aerial map. This image could lead to potential comparisons. (Maps courtesy of RIGIS 1972 and ESRI 2012)



Besides being a tool to predict or find archaeological sites, GIS and spatial analysis could include the mapping of historic data. Future projects could involve the mapping of historic census data such as population, land use, or

median household income to gain a better understanding of the cities changing demographics. Organizing and displaying historic data using GIS will complement the archaeological dataset and will aid in forming a more complete interpretation of past Providence and Brown University life.

GPS devices, total stations, and GIS are all tools used for collection, analysis, and presentation of archaeological data however it is necessary to understand the potential pitfalls of such technologies and the obstacles that might be encountered when attempting to use them. Future fieldwork endeavors must consider the costs, practicality, and accessibility of such equipment.

This technology requires a lot of time, money, and expertise, all which might not be available to future projects (Bodenhammer 2008:228). Also making, reading, and interpreting maps will “always have a level of subjectivity,” and

therefore it is absolutely necessary to understand the varying degrees of distortion when utilizing spatial data (Hodder and Orton 1976:6). In general when using data, one must always assess the reliability and accuracy of the dataset in order to be confident in the results they produce from it (Addison 2008:32). Finally, GIS is great for managing large datasets, however this data becomes useless if it is not properly stored, recorded, and made accessible (Addison 2008:39).



FIGURE 5.15 1939 Aerial image of Providence on an unknown coordinate system and therefore cannot be projected with other datasets. This is a helpful visual aid but it really emphasizes that a data user needs to fully understand what they’re looking at in order for the data to be used properly. (Map courtesy of RIGIS 2002)



FIGURE 5.16 1939
Aerial image zoomed
into the main campus of
Brown University.
(Image Courtesy of
RIGIS 2002)

This field season on the
Quiet Green is hopefully

the first of many on the Brown campus and it is therefore crucial to make this data available and usable for future classes so that complete, well-informed interpretations can be made about the history of Brown University.

The potential and necessity of spatial analysis and GIS in archaeology is remarkable. Despite the drawbacks, the spatial context is one more piece to the puzzle and “aids but does not replace narrative; it finds patterns, facilitates comparisons, enhances perspective, and illustrates data” (Bodenhammer 2008:230). It should be actively pursued by all future projects at Brown University because it allows for a more detailed and precise examination of the relationships within sites and with the surrounding landscape and neighborhood.



FIGURE 5.17 Aerial image of Providence in 1950. This map is not georeferenced and does not have a known coordinate system, therefore it cannot be reprojected and aligned with other datasets. However it can still be useful in comparing the changing landscape of Providence throughout time. (Image courtesy of RIGIS 2002)

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6. EXAMINING THE MODERN QUIET GREEN THROUGH PEDESTRIAN SURVEY AND PERSONAL INTERVIEWS

Ariana Gunderson

Before we investigated the history of the Quiet Green through excavation, we examined the modern uses of the Quiet Green through a pedestrian survey. This is a method of surface survey in which the team members document objects found on the Quiet Green. In addition to this quantitative analysis, I completed several interviews with Brown Students and Facilities employees to learn about the phenomenological role of the Quiet Green and its place in the students' conception of campus. Through a combination of these methods, we were able to learn much about the current uses and role of the Quiet Green.

Modern Conceptions of the Quiet Green

Student Perspective

To understand the modern role of the Quiet Green in the student body's conception of Brown's Campus, I interviewed several students about their experience on the Quiet Green.

When asked to describe the Quiet Green, every student offered "quiet" as the first descriptor (Downes 2012; Edwards 2012; Gutierrez 2012; Heckman 2012; Pinilla 2012; Yee 2012; Zeidman 2012). Many went on to provide synonyms such as "peaceful," "tranquil," or "calm" (Pinilla 2012; Yee 2012). Many interviewees contrasted it with the Main Green, typically the site of large events (Edwards 2012; Pinilla 2012; Yee 2012). Nearly all of the students that I interviewed commented on the relative emptiness of the Quiet Green, noting that the lack of boisterous students created the "peaceful" and "tranquil" atmosphere of the Quiet Green (Downes 2012; Edwards 2012; Heckman 2012; Pinilla 2012; Yee 2012).

Many students remarked upon the Quiet Green's beauty. Interviewees commented on the attractive, stately trees and the sunny lawns (Edwards 2012; Yee

2012). One interviewee identified the Quiet Green as the location on campus most likely to feature on college brochures (Yee 2012). Nathaniel Edwards (2012) said, Sometimes I'm struck by how pretty Brown is and that seems to happen a lot on the Quiet Green. Occasionally on the Main Green, but more, like, I leave the Main Green and then go on the Quiet Green and then all of a sudden I'm like, 'Wow, the sun's out, these trees are really beautiful, and no one's around, and Brown's really pretty, actually.' I forget that sometimes.

All the students I interviewed agreed that the Quiet Green is well maintained, and most appreciated the plugs available in the lampposts (Heckman 2012; Pinilla 2012). Several students stated that they wish the Quiet Green had benches to make it a more comfortable space to work (Heckman 2012; Pinilla 2012; Yee 2012; Zeidman 2012). However, if there were more benches on the Quiet Green, would it become a more popular site for students? Would the higher number of students change the nature of the Green, moving it away from its identity as the 'Quiet' Green?

The major theme I picked up from my interviews was the idea of the Quiet Green as a liminal space. Though the Quiet Green is not the western-most edge of campus (indeed, the John D. Rockefeller Library, a significant Brown campus landmark, is further west), many students felt that it was the ideological barrier between Brown and Providence.

Drew Heckman (2012) shared this anecdote:

Drew: I frequently go there to eat...so I'll sit on the steps that are attached to the building with the President's Office in it.

Ariana: University Hall.

Drew: University Hall. And I'll look out, look down College Street, like, through the [Van Wickle] Gates to the skyline of Providence.

Many other interviewees discussed a similar experience they have had on the Quiet Green: standing on Brown's campus and looking down, through the gates, to downtown Providence (Downes 2012; Yee 2012). Another piece of evidence for the Quiet Green as the site of the psychological divide between Brown and Providence is the tradition of the Van Wickle Gates. The ritual entrance of students in their freshman year

and the exit of the seniors is a literal marking of the psychological border between Brown and Providence, marked by the Van Wickle Gates.

Although not the actual border between Brown property and Providence, the Van Wickle Gates and the Quiet Green as a whole represent the psychological border between them.

Facilities Perspective

I also conducted an interview with the Facilities employee in charge of the maintenance of the Quiet Green, Patrick Vetere (2012). He called the Quiet Green by its official name, the Front Campus Green. He told me that the Quiet Green receives a high priority from Facilities because “it is the entrance to the campus.” Most of the work they do there is focused on the lawns and small beds along the buildings (most notably University Hall and Manning Hall).

Only a few events take place on the Quiet Green, such as the Campus Dance, some reunion events, and, most recently, the President’s Inauguration. When asked about events on the Quiet Green, Vetere noted that the steep grade of the Quiet Green makes it difficult to set up large events. Its relatively smaller size also makes it less appealing for large-scale events.

Vetere said that he enjoys how peaceful the Quiet Green is, but that he worries about the elms in front of Rhode Island Hall. He said that the trees “don’t have a good growth habit” and that he would prefer to replace them with American Elms, which are resistant to Dutch Elm Disease.

Conclusion

The Quiet Green is an integral part of the Brown Campus, but is not a major focus of campus activity. Instead it serves as a space for quiet relaxation and recreation. Though not the physical boundary of campus, the Quiet Green and the Van Wickle Gates serve as the students’ psychological border between Brown and Providence.

Pedestrian Survey

To quantitatively examine the current uses of the Quiet Green, we completed a surface survey. By walking methodically across the Quiet Green and taking notes on our finds, we were able to quantify the trash-producing activities that took place on the Green.

Transect Survey


Methodology

Before we began the official work of our pedestrian survey, we first each measured our stride length. Each of us determined the number of steps we took per five meters, so that we reduce the number of measurements we needed to take. After this step, we officially began our surface survey of the Quiet Green.

Pedestrian Survey Units



Legend

 Pedestrian Survey Units

0 20 40 Meters
0 60 120 Feet



Figure 6.1 Surface Survey Units

We moved to the southwestern-most corner of the Quiet Green to begin our first survey unit, College Hill 1 (CH1) (Figure 6.1). 6 of us lined up in an order that remained constant throughout the survey. Caitlin Deal was the first student in line, and she used a compass to orient our line of students along the



Figure 6.2 Survey units with each transect marked by a dotted line.

North-South axis. The six surveyors then spread out in a line, with 5 meters between each student. We then walked in our line from West to East across the southern-most edge of the Quiet Green. Each line walked by a surveyor is known as a transect (Figure 6.2).

As each student walked their transect, they were instructed to make note of the number and type of objects within 1 meter on either side of their transect. After the students finished walking the transects, this data was collected by the Team Leader for this unit and noted on the Survey Unit Form (Figure 6.3).

Included on the Survey Unit Form was information about the setting of the pedestrian survey, including weather, date, and time at the start of that unit. The waypoints taken at the corner of each unit were noted, as were the initials of all team members for that unit. The team leader also drew a map of the survey unit, including major features of the unit, buildings, and the location and direction of the transects. Finally, the information about each team member's finds was included on the form. After completing CH1, we lined up once again along a north-south axis, this time on the eastern side of the Quiet Green. Our transects, once again five meters apart, moved from east to west in CH2. We continued this process, moving east to west and then West to East as we moved from south to north across the Quiet Green.

College Hill—Survey Unit Form

CH - 2012

Data entered:
Entered by:

SU ID (Area + #) CH 2	Date (DD/MM/YY) 01/10/12	Start time 15:50	Team Leader CFK	Completed by: CFK	Type and # of Bags
Team Members CMD, CMDR, PMJ, CMT, AUG, CMM					
Bearing (degrees) W	GPS/Trimble ID #/Name	Waypoint #s			
Max Width (m) 20m	Spacing (m) 5m	Structures (and #):	Conditions:		
Max Length (m)	Special Finds	<input checked="" type="checkbox"/> Sidewalk 2	<input checked="" type="checkbox"/> Full Sun		
Visibility (%) 80%		<input type="checkbox"/> Wall/Fence	<input type="checkbox"/> Partly Cloudy		
Soil Type:		<input type="checkbox"/> Building	<input type="checkbox"/> Overcast		
Contains Feature #s:		<input type="checkbox"/> Garbage Can	<input type="checkbox"/> _____		
		<input type="checkbox"/> Tree 8			
		<input type="checkbox"/> Lamp 2			

Description (Geology, topography, agriculture, paths, etc.):

Collection Strategy:
 Transect/Intensive
 Complete/Gridded
 Random/Grab

SU sketch: (include adjacent SU#s, direction, N arrow, features, waypoints, etc.)

Photos:
Card #: _____ Photo #(s): _____

Notes:
3 discarded mushrooms

In feature # (if applicable): _____

Team Member	Distance Walked	Paper trash	Paper food wrapper	Plastic trash	Plastic food wrapper	Cigarette Butt	Metal (food related)	Metal Other	Glass	Other
CMD	34			1	2					
CMDR	35					1				1
PMJ	36	1		2					1	
CMT	36	1				2				
AUG	38	1								
CMM	39	1			1					
Total	218									

Figure 6.3 Sample Survey Unit Form

The table below contains the complete catalogue of items recorded on the Quiet Green in our pedestrian survey, divided by type of object and unit (Figure 6.4).

	Distance Walked	Paper Trash	Paper Food	Plastic Trash	Plastic Food	Cigarette Butt	Metal (Food)	Metal	Glass	Other
CH1	171	1	1	3	1	7	3	0	75	2
CH2	218	4	0	3	3	3	0	0	1	1
CH3	239	13	6	9	1	2	2	0	0	0
CH4	241	5	2	7	1	8	4	0	0	3
CH5	268	24	3	17	5	60	7	2	4	13
CH6	100	2	0	3	4	22	0	0	7	8

Figure 6.4 Table representing all finds from the transect survey

Potential Problems

Though certainly effective as a data-collecting exercise, our transect-based pedestrian survey had some inaccuracies. We intended our survey units to be square, but they were instead more irregular shapes. This was due to three main factors:

1. Human error. This is an unavoidable part of any human-executed study.
2. The orientation of the Quiet Green. It is slightly off of the north-south axis, making it difficult to maintain a firm north-south orientation.
3. The uneven surface of the Quiet Green. The ground slopes downward toward the West on the Quiet Green, making the judgment of direction more difficult for the surveyors.

Though the survey units are of irregular sizes and shapes, the data we collected is still useable. As will be explored below, by considering the mismatched sizes of the units when calculating data, the differentiation in sizes will not affect the data interpretation. When counting total number of objects found, it is important to consider the types of objects. For example, one cigarette only produces one cigarette butt, but one bottle can be broken into a hundred pieces. The 75 pieces of glass in CH1 were most likely from only one bottle (they were in an extremely small, restricted location and all of the pieces contained the identical type of glass. Additionally, a Nantucket Nectars cap was only a few inches away, leading me to believe that all 75 pieces were from one Nantucket Nectars bottle). This misrepresentation is an inherent flaw in counting the number of

objects found, and must be considered when examining the data, but does not make the analysis completely worthless.

Interpretation of Data

Density

In order to examine the Quiet Green as a whole, we calculated the density of objects per Survey Unit. Not all Survey Units were equal, however, due to the inconsistencies mentioned above. We calculated to the total number of square meters examined by totaling the distance walked using GIS. Morgan Albertson plotted the transects noted on the Survey Unit Forms onto a GIS Map and calculated the total meters walked per unit. Finally, because each team member examined two square meters for every meter walked (one square meter on either side of their transect) we multiplied the total distance walked by two to attain the total number of square meters examined. To calculate the density of each unit, we divided the number of objects found per unit by that unit’s total number of square meters examined. The table below lists this information (Figure 6.5).

	Total Finds	Total Area	Density (Objects per Square Meter)
CH1	93	342	0.272
CH2	15	436	0.034
CH3	33	478	0.069
CH4	30	482	0.062
CH5	135	536	0.252
CH6	46	200	0.23

Figure 6.5 Table representing the relative density of objects found in the transect survey.

Albertson then created a map representing the density of each unit, with darker units containing a higher density of objects (Figure 6.6).

Pedestrian Survey Units: Density of Finds

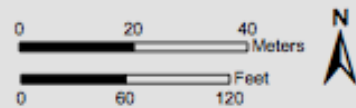
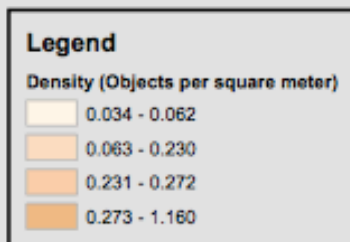


Figure 6.6 Map of the Quiet Green depicting the relative density of objects found in the transect survey.

From this map, we can easily see that the units furthest to the north and south of the Quiet Green contain a higher density of objects. This could be for a few reasons:

1. The edges and corners of the Quiet Green are a lower cleaning priority for facilities because they are seen by fewer people and are more difficult to clean due to underbrush.
2. These units are adjacent to the two dorms on the Quiet Green, Hope College and Slater Hall. Perhaps these buildings encourage a higher rate of trash disposal because of the high traffic of students.

I suspect the first hypothesis to be true because Hope College does not have an entrance onto the Quiet Green, so it probably would not contribute significantly to Quiet Green foot traffic and therefore trash production.

Types of Objects Found

By examining the types of objects found on the Quiet Green, we hoped to learn more about the activities that take place on the Green. Below is a table with the totals of each category of object found Green-wide (Figure 6.7).

	Distance Walked	Paper Trash	Paper Food	Plastic Trash	Plastic Food	Cigarette Butt	Metal (Food)	Metal	Glass	Other
CH1	171	1	1	3	1	7	3	0	75	2
CH2	218	4	0	3	3	3	0	0	1	1
CH3	239	13	6	9	1	2	2	0	0	0
CH4	241	5	2	7	1	8	4	0	0	3
CH5	268	24	3	17	5	60	7	2	4	13
CH6	100	2	0	3	4	22	0	0	7	8
TOTAL		49	12	42	15	102	16	2	87	27

Figure 6.7 Table representing the total number of objects found by category

The two most common objects are, respectively, cigarette butts and glass, both most likely recreation-related, demonstrating the importance of the Quiet Green as a recreational space. The third most commonly found object was non-food-related paper, some of which was most likely school-work related (pens were also found in the course of the survey), indicating that the Green is also the site of schoolwork in addition to recreational activities.

Gridded Survey

Methodology

After completing the transect survey of the entire Quiet Green, we focused more closely on the areas we would be digging in. We conducted two gridded surveys in the area immediately surrounding the (now closed) door from Hope College to the Quiet Green (Figure 6.8).

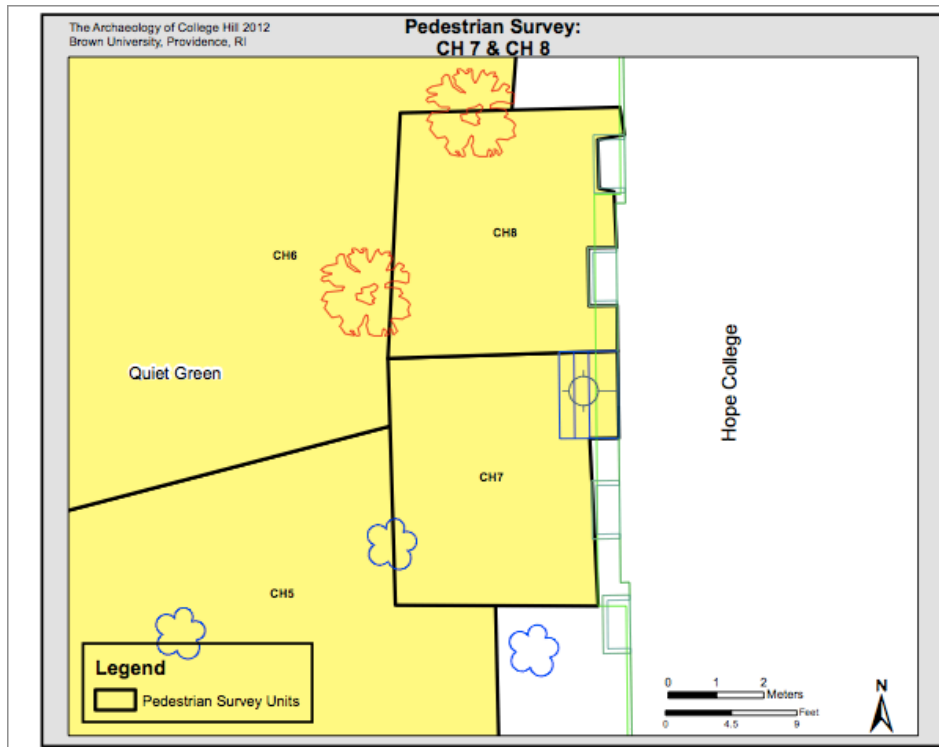


Figure 6.8 A map depicting CH7 and CH8, the two gridded survey units. These survey units, CH7 and CH8, were 5 meter by 5 meter squares on either side of the door and its steps. We counted every object in these 25 m² squares and noted them on the survey unit forms (the forms were identical to the transect survey forms) (Figure 6.3).

	Distance Walked	Paper Trash	Paper Food	Plastic Trash	Plastic Food	Cigarette Butt	Metal (Food)	Metal	Glass	Other
CH7	25 m ²	4	1	2	4	1	1	1	3	3
CH8	25m ²	3	0	3	0	5	1	2	10	5

Figure 6.9 A table representing all objects found in CH7 and CH8

Interpretation of Results

Density

	Total Finds	Total Area	Density (Objects per Square Meter)
CH7	20	25	0.8
CH8	29	25	1.16

Figure 6.10 Table representing the relative densities of CH7 and CH8

Once again, we calculated the density of these units. CH8 is higher than CH7, but I do not think that indicates any significant difference between the two units (CH7 included the steps of the building, therefore encompassing less land) (Figure 6.10).

Types of Objects Found

The most common objects found are very similar to the results found for the whole of the Quiet Green. The most common object found was glass, the second most common was paper trash, and the third was cigarette butts. These results reaffirm the use of the Quiet Green as a recreational space.

Potential Problems

In both the gridded survey and the transect survey, the information we gather from these initiatives is a small representation of all items deposited on the Quiet Green. Facilities Management works intensively to maintain the Quiet Green and limit the amount of trash present. While this does not discount our research, it should be kept in mind when considering the results. We do not have access to the whole picture of the Quiet Green, but our results, however limited, have value.

Objects Collected



Figure 6.11 Objects collected in the gridded survey

We collected some of the objects found in our gridded survey units (Figure 6.11). We collected two pieces of glass, four pieces of pottery, and one penny, dating to 1989. In the Carriage House lab, I compared each piece to objects found in both trenches, but I found no definitive link between any of the objects found in our survey with any collected in the excavations. I also could not definitively date any pieces, other than the penny.

Next Steps

If the Archaeology of College Hill class were to dig on the Quiet Green again next year, I would suggest completing a gridded survey over the area the students plan to excavate. Though I do not expect the results to differ greatly from ours, I still consider it worthwhile. The students might find something interesting, or something that relates to an object that they later excavate. The process is not difficult, expensive, or lengthy, and I consider the completion of a gridded survey over the excavation site part of an archaeologist's due diligence.

Conclusion

By examining the Quiet Green through a pedestrian surface survey, we were able to quantitatively identify the probable activities that take place on the Green: smoking, drinking, and, to a lesser extent, homework and other activities that involve paper. This data complements and matches the data I collected in my personal interviews with students and Facilities that students view the Quiet Green as a peaceful space for relaxation and recreation.

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7. GEOPHYSICS ON THE QUIET GREEN

Christopher Thompson

Introduction

Early historical records indicate the first president's house of the University stood approximately 25 ft. in front of Manning Hall. In order to explore this claim, specifically for future excavation, our class, with the help of Tommy Urban, scanned the area using ground-penetrating radar. Our results produced three interesting features. This paper will investigate the science of geophysics, and specifically examine ground-penetrating radar in relation to our survey. I will consider our three features and what they might be, and then offer three potential trenches for future excavation work.

What is Geophysics?

In the last 50 years geophysics has become an important part of archaeology, offering non-invasive techniques to uncover and map features, sites, and landscapes (Gaffney and Gater 2010:12). Demand for his technology has outpaced its growth in effectiveness betraying a growing awareness of widespread destruction caused by agricultural processes, urban development, and forces such as erosion of the archaeological record (Gaffney and Gater 2010:12). Calls for non-invasive, convenient, and effective technology have been answered by a diversity of techniques including magnetometry, microgravity, electrical resistivity, and seismic methods (Gaffney and Gater 2010:126).

The history of geophysics reaches back to Lieutenant-General Augustus Pitt Rivers, an English army officer who could read the tones produced from the strike of a pickaxe against the ground, and thereby distinguish the ring of buried features versus sterile ground (Gaffney and Gater 2010:13). Since then, geophysics has expanded considerably, borrowing heavily from geology, and developing technology and software that can even produce three-dimensional models in an afternoon's work. The class's work with geophysics centered on a technique called ground-penetrating radar.

Ground Penetrating Radar

Why GPR?

Ground-penetrating radar was well suited for the class's purposes. First, the equipment was available for rental from Jack Hermance, a professor in the Department of Geological Sciences at Brown; but more importantly it provided good a depth of study, produced a three-dimensional model of the results, and was suited to our soil. By contrast, electrical resistance methods could also have produced a three-dimensional model, but would have required much more intensive post-processing, as well as a more time-consuming survey involving multiple offsets (Thomas M. Urban 2012, elec. comm.). Magnetometry was not feasible due to the infrastructure around and under the quiet green, such as power lines, buildings, and metal piping, which would cause anomalies and interference (Gaffney and Gater 2010:81-82). Ground-penetrating radar offered precise depth information that magnetometry, acoustic, (which would have received much interference from the vibrations of pedestrians and cars [Gaffney and Gater 2010:13]) and electrical resistance techniques could not have (especially considering the small window of time we had to work on the data).

How GPR Works

The antenna of the ground-penetrating radar emits radio waves that penetrate, as the name implies, the ground. The waves travel through the soil and are constantly reflected off features, and scattering. In fact, attenuation, or energy loss, is a major component in GPR work and must be considered by the operator when he presets the frequency to be produced. Geometric loss happens as waves travel deeper and deeper through the earth, naturally shedding energy (Thomas M. Urban 2012, elec. comm.). This means lower frequency waves (which the operator would have preset) are able to travel farther through the earth, but do so at the loss of resolution (Conyers and Goodman 1997:45) –we understand a central trade-off between depth of study and clarity of the survey. Loss of energy also occurs as the radio waves travel through conductive environments (such as clay, or even better, wet clay), as well as when the waves hit rocks and features, thereby reflecting and scattering (Thomas M. Urban 2012, elec. comm.). Those waves, which do make it back to the antenna are recorded in terms of velocity; the

number of waves received back as well as their velocity indicates features or anomalies (Conyers and Goodman 1997:23). Figure 7.1 provides a clear illustration of how features affect the reflection and reception of radio waves. Our team set the frequency at 250 MHz, which allowed for four to five meters of penetration and clarity (Thomas M. Urban 2012, elec. comm.). It is interesting to note that without a signal amplification procedure (a procedure which incrementally strengthens the signal of the wave) the reach of penetration would not exceed one meter (Thomas M. Urban 2012, elec. comm.).

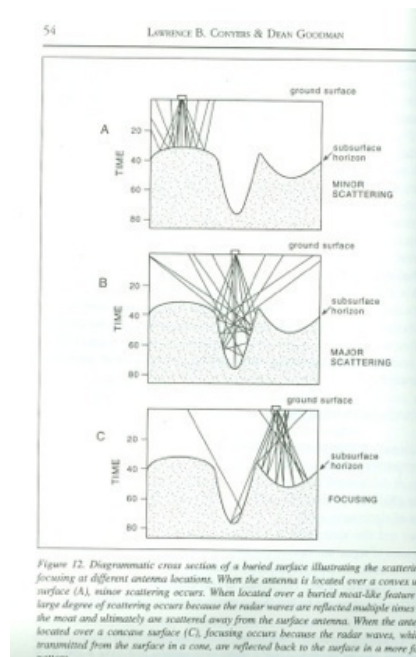


FIGURE 7.1 General patterns of reflection for A) a convex surface B) a moat-like feature and C) a concave feature. (Conyers and Goodman 1997:54)

Our Scan

The Parameters

Our team scanned an 18 m by 18 m square directly east of Manning Hall (Figure 7.2). These parameters were chosen based on the plat of the old president's house as indicated in *Plat of the Rhode Island College...* (Figure 7.3) (Burlingame 1938:College Holdings 1770).

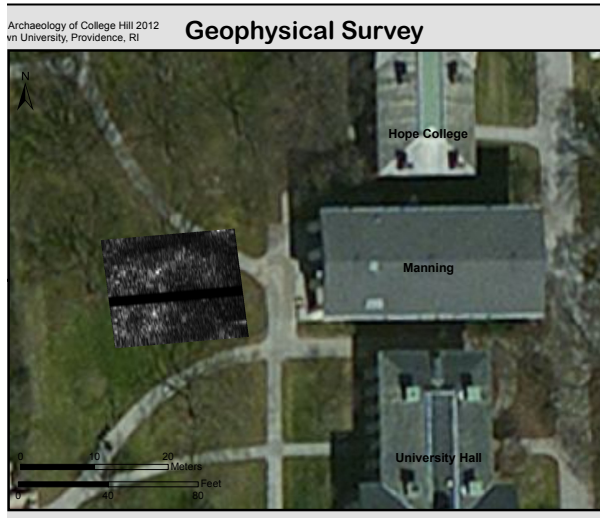


FIGURE 7.2. Map of quiet green with GPR scan in gray. (map by Morgan Albertson 2012)

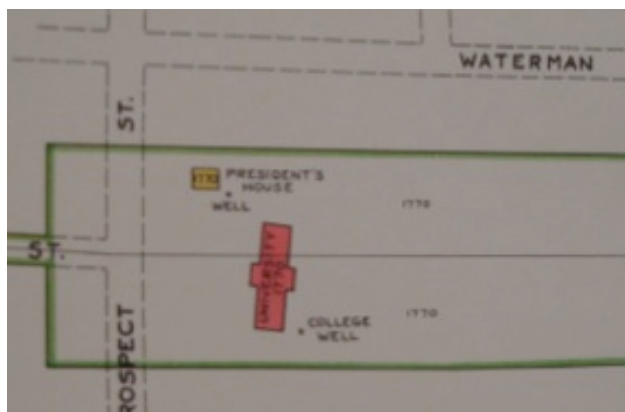


FIGURE 7.3. Plat of old president's house from 1770. (Burlingame 1938:College Holdings 1770)

The Process

Urban directed the class' GPR survey. The team laid out an 18 x18 m square, which served as the parameters for the area we scanned using the geophysics equipment. This equipment consisted of an antenna on a sled dragged along by an operator. He or she wore a harness with a computer monitor, and a battery pack carried around the waist. The operator dragged the antenna directly across the square guided by a tape measure that at each pass would move to the leading edge of the antenna (Figure 7.4). This ensured a complete scan of the area. This process resembled the passes of a lawnmower. The team also consisted of a recorder who noted features. It is important to note the tree that

resulted in the black swath that cuts through the middle of our radiogram. This indicates four 50 cm wide passes that we did not scan in order to avoid the tree.



FIGURE 7.4. Caitlin Deal helps Joey Mallen to reverse antenna. (Photo by author, 2012.)

Post-processing of the data included cleaning up extraneous interference and correcting the vertical and horizontal scales (Conyers and Goodman 1997:77). It is important to note that GPR depth slices can look quite different from the features it indicates – the post-processor looks for hyperbolas, which indicate interference and reflection, and using computer software creates a more readable outlay of the data (Conyers and Goodman 1997:84). This includes the three-dimensional model that is possible by melding a series of transects produced from the scanning together to create a three-dimensional block of “time slices” (Gaffney and Gater 2010:47).

Our Results

Our class found evidence of three features: a pipe-like feature, a path-like feature, and a rubble-like feature. The three-dimensional product of the survey is seen in Figure 7.5.

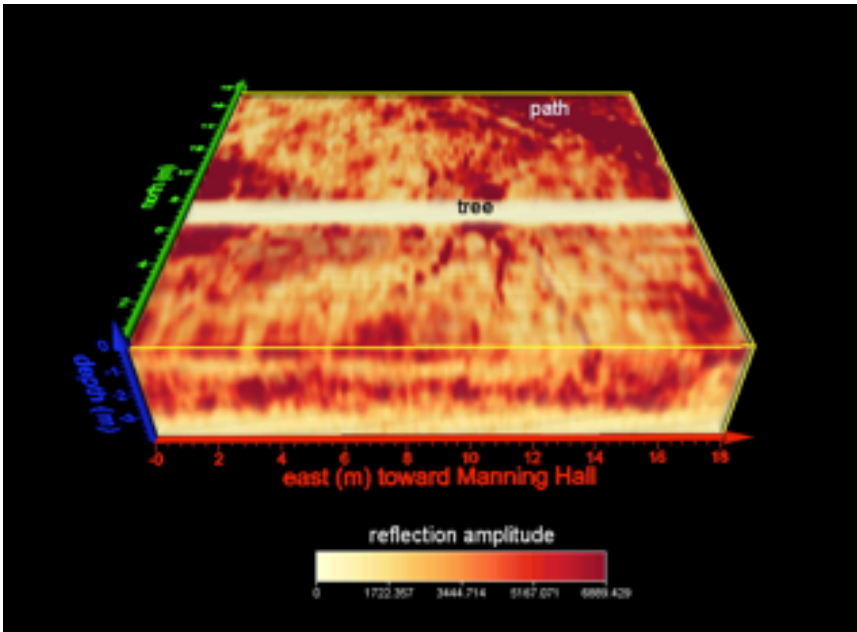


FIGURE 7.5. Three-dimensional model of survey. (Processed by Urban 2012)

The Pipe-like Feature

The scan indicated a long, thin feature approximately 100 to 140 cm below the surface of the ground in the most western third of the scan running directly north south. Due to its size, shape, and depth it appears to be a pipe (Figure 7.6).

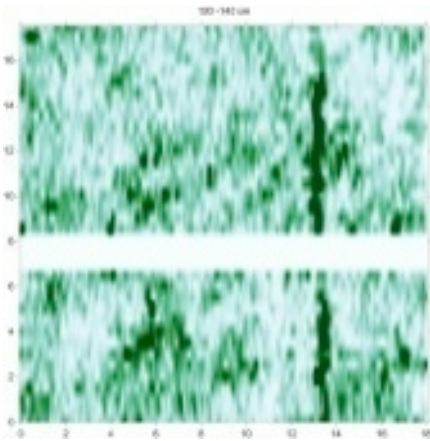


FIGURE 7.6. GPR slice with pipe-like feature visible. (Processed by Urban 2012)

Brown University facilities (Chad Cavanaugh 2012, pers. comm.) suggested it might be a water main. He noted one ran north south in this area, buried no deeper than 1.5 to 2 ft. (approx. 47 to 60 cm). This is consistent with neither the depth of the feature,

nor the position (the water main is reported to run about 15 ft. to the west of our feature) and must be ruled out (Chad Cavanaugh 2012, pers. comm.).

A pamphlet entitled “Sewers of the City of Providence” does not mention a sewer beneath this green, but points to one a couple blocks to the west, nearer to Hope Street. The possibility of it being an old water main seems unlikely as the city’s maps of waterworks from their construction in the mid-19th century indicate they ran beneath streets –nearby Prospect street housed one (Figure 7.7) (1853 Engineer’s Report). However, it is possible that if it is a pipe, our feature may have extended from the upper reservoir, running south down College Hill. Private companies as early as 1770 built water supply systems for paying residents using hollowed out wooden logs (Cady 1957:47-48). Finally, this feature could be a piped brook or stream, several of which (unpiped) are described in the original deed of the property (Providence Deeds:book 19, deed 106).

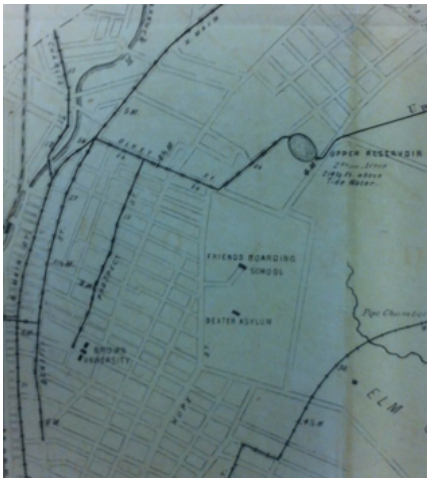


FIGURE 7.7. 1853 map of Providence waterworks. (1853 Engineer’s Report)

The Path-like Feature

Our scan indicates a path-like feature 40 to 60 cm below the surface of the ground in the center of the eastern-most third. The shape of the feature very clearly resembles that of a forked path (Figure 7.8). Photographic and historical records clearly point to this being the remains of a path, although the date of construction is not clear. The earliest record of any path on the green is described in the *History of Brown University with Illustrative Documents* (Guild 1867:278) in which they were laid following the move of

the old president's house, and in lieu of landscaping done directly afterward. An etching accompanying the same book shows this forking path with one of the legs leading to what are now the Van Wickle gates (Figure 7.9) (Guild 1867:Frontispiece).

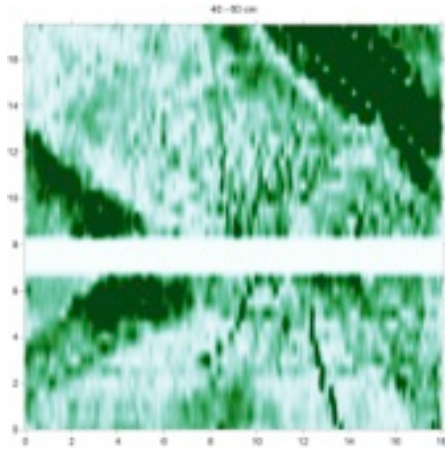


FIGURE 7.8. GPR slice with old path evident. (Processed by Urban 2012)



FIGURE 7.9. 1867 etching of Front Campus. (Guild 1867:Frontispiece)

However this image cannot be used to accurately date our feature, as the etching is the only indication of a forking path in this area prior to a 1904 commencement photograph, (Figure 7.10) (Brown University Commencement 1904). In fact, an undated photo from the 19th century, as well as the plat books from 1882 and 1895 shows no forked path indicating either an inaccurate etching or a change away from, and then back to this similar structure of forked path (Figure 7.11; Figure 7.12) (G.M. Hopkins 1882) (Everts & Richards 1895). Plat books from 1926 and 1937 indicate a similar layout of our

forked feature in the same area of the green suggesting that some landscaping was done between 1895 and 1904 (Figure 7.13) (G.M. Hopkins 1926) (G.M. Hopkins 1937).



FIGURE 7.10. 1904 Brown Commencement. (Brown University Commencement 1904)



FIGURE 7.11. Photo of Front Green from mid-18th century (Brown University Archives)



FIGURE 7.12 Brown campus, 1882 Plat Book. (G.M. Hopkins 1882 Providence Plat Book)



FIGURE 7.13. Brown campus, 1926 Plat Book. (G.M. Hopkins 1926 Providence Plat Book)

It is important to note that the found feature may actually be a remnant of an earlier path (the one depicted in the 1867 etching; Figure 7.9). Due to the possible inaccuracies of the 1867 etchings, and the general imprecision that comes with comparing photographs to our actual layout of the feature, it is difficult to tell from which period it comes – there may have been two periods of time with in the history of the Front Campus with similarly forked paths as seemingly indicated by the etching and the plats. There is the possibility that the landscaping done between 1895 and 1904 was a return to the old path design and what seems to be two paths are actually one, hidden for many years and then uncovered.

Another factor that must be considered is tree living directly over what was the root of the forked path. Dating this tree would tell us a minimum age of the path as the path must have existed before it did. It would be hard, although not impossible, to accurately identify the tree from old photographs and come by the age that way. Postcards from 1910s show a young tree that could be the same as that which interrupted our scan and covers the path (the smaller tree above the crux of the path in Figure 7.14; the small tree directly in the center of Figure 7.15) If that were the case it would mean our feature is older than the path depicted in these postcards (and the 1904 photo, and the 20th-century plats).



FIGURE 7.14. Postcard of Front Campus. (Seddon 1918)



FIGURE 7.15. Postcard of Front Campus. (Leighton 1910s)

Furthermore, the gravel paths laid after the 1840 landscaping of the green may be the same or similar to those depicted in the 1867 etching, as it is not unlikely the campus would have existed for 27 years without a major landscaping. I do not suggest new paths were not added, but it is not unreasonable to suggest no major earth moving was done, especially considering the small size of the university at the time. If this were the case, there is a possibility that the path-like feature, and the earth beneath it, dates from 1840. This would be very important to consider if excavations are carried out, as the context at and below would reflect a similar time frame.

The Rubble-like Feature

Depth slices from 100 to 300 cm show a large feature that covers almost the entire area scanned. The texture of the feature is dimpled and scattered, and is consistent with that of rubble. Even more telling is the rectilinear shape of the feature consistent across the depth slices (Figure 7.16). This may very well be evidence of the buried foundation of the old president's house.

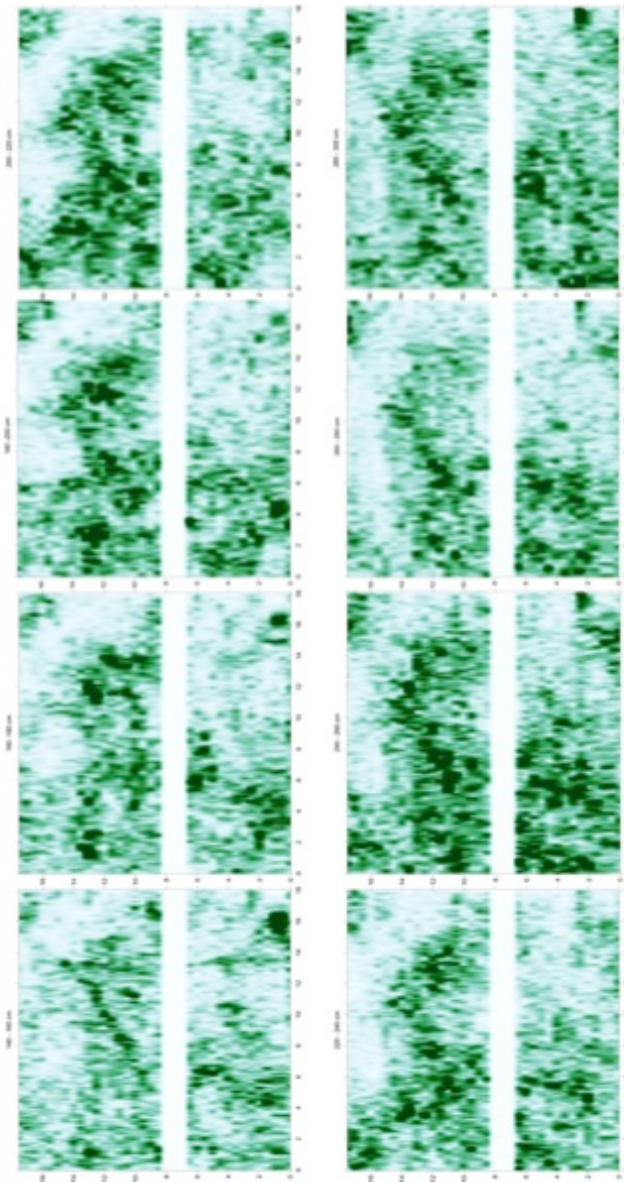


FIGURE 7.16. Progression of depth slices from 100 cm to 300 cm. (Urban 2012)

Built at the same time as University Hall, the old president's house was two and a half stories tall, and was referred to as being northwest of University Hall (Bronson 1938:57). It was enclosed by stonewalls to the north and west (Guild 1864:157), and gardens that stretched all the way to what is now Hope Street to the east (Bronson 1914:5). An engraving from around 1795 depicting the President's House and the College Edifice matches this description (Figure 7.17) (Meriden Gravure Co. 1795). In September of 1840 the president's house was moved to College Street, and "the grounds in front of the University buildings were...graded and adorned with graveled walks; the Lombardy poplars were removed, and their places supplied by... elms." (Guild 1867:278) This is valuable information: if excavation is to be carried out, as buried graveled paths above a foundation could be dated to the year 1840.



7.17. Engraving of College Edifice and President's House. (Meriden Gravure Co. 1795)

However, there is no record of the house plan or its location, with the exception of a plat recorded in the *Plat of the Rhode Island College*. This placement of the old president's house from this plat is consistent with the engraving mentioned above, and the plat of University Hall lines up exactly with the true orientation of the building. This implies an accuracy of the plat, although by no means guarantees it; no doubt the plat of University Hall were taken from existing, well-documented plans, while the same may not be true of the house.

Significantly, the size and orientation of our rectilinear feature does not line up with the plat (Figure 7.18). The plat records a house 36 ft. by 26 ft., an area larger than our found rectilinear base. These differences could be explained by an incorrect plat drawing – the preface to the book does suggest, “allowances should be made for

occasional sketchy description in the original deeds...” (Burlingame 1938:Preface). Additionally, almost two hundreds would have passed between the 1938 plat book and it the move of the old president’s house. Our feature may not be the actual foundation, but rubble from the moving of the house, and so explain the difference in orientation. The difference in size could be a result of the limited parameters of the scan, which fail to capture a picture of the complete (and larger) foundation of the house.

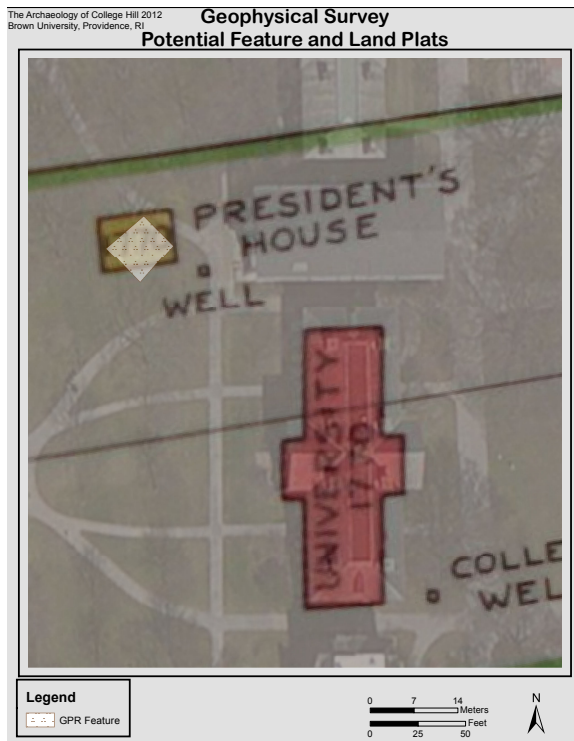


FIGURE 7.18. Overlay of feature and plat. (map by Morgan Albertson 2012)

Proposed Trenches

Trench No. 1

Trench No. 1 would be 1 x 1 m at the southern edge of the survey so that the pipe-like feature runs directly through the trench (Figure 7.19). At little more than a meter, this is a feasible excavation depth for a semester-long course, and is small enough to allow another trench by another team from the class (trench No. 2). It is important to note the presence of tree roots at some levels of this trench, which may make excavation farther south along the line of feature ideal. Examining the pipe-like feature would be one of the main objectives of this trench, answering whether or not it is a pipe, what is it made of, as

well as from what time period it was buried. This question is especially important given the contexts of the other feature; it is important to investigate more than one feature as they offer important clues to the others. I suggest that this is a pipe, and it may have been buried when the old president's house was moved, and the green graded and landscaped in 1840. It certainly came after the rubble, sitting a meter or so above.



FIGURE 7.19. Proposed trenches at 100 to 120 cm. (map by Morgan Albertson 2012)

Trench No. 2

Trench No. 2 would be 1 x 1 m, located in the southeast quadrant of the scan, and would specifically target investigation of the path-like feature, which runs diagonally through half of the proposed trench (Figure 7.20). Excavation to lower depths would expose some of the rubble-like feature. The smaller size of this trench would allow another team to work at trench No. 1 and feasibly allows investigation into all three features, although specifically focusing on the path-like and pipe-like features. The path-like feature, at 40-60 cm below the ground, would be easily accessible to excavators, and could offer interesting artifact finds to due to the nature of paths being high traffic areas. Thirdly, the investigation of the path might offer clues, such as composition, as to when the path was laid. This could be important in dating the contexts that lie below it.



FIGURE 7.20 Proposed trenches at 40 to 60 cm. (map by Morgan Albertson 2012)

Trench No. 3

Trench No. 3 would be 2 x 2 m situated on the northeast quadrant of the scan and would target investigation of the path as well as the rectilinear feature, both of which overlap with corners of the proposed trench (Figure 7.21). This trench would be larger and would require more attention and manpower from the students of the course. However, due to its size and position over one corner of the rectilinear base, it could offer more insight into the context and structure of whatever the feature maybe.

Confirming the rubble-like feature to be the old president's house, and consequent investigation would offer much to the University. University Hall and the president's house were built at the same time, and comparisons of the foundations of both could be interesting. More importantly, the 250th anniversary of the school is approaching; this excavation could offer clues into how the early president's lived. These are men whose names dot campus, but more significantly, whose hands shaped the very foundation that our school rests on. The artifacts of their lives are valuable to the student body and legacy of the university.

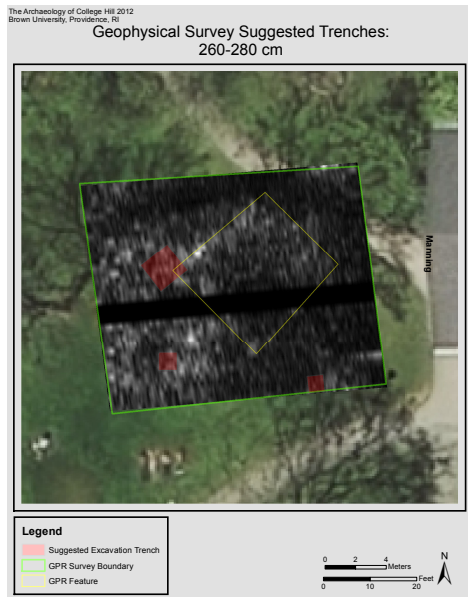


FIGURE 7.21. (map by Morgan Albertson 2012)

Conclusion

The class' geophysics survey was successful in that it produced a rough plan of buried features, but more so in that it produced interesting and worthwhile questions. Happily these are questions well suited to a semester's worth of excavation; given the context of the three features, as well as historical records, there are specific dates and relationships to investigate through archaeological research. This will prove to be an exciting project for whoever pursues it in the future.

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8. A SUMMARY OF QG1

Caitlin Deal

Introduction

The excavation of QG1 took place from 15 October 2012 to 17 November 2012. QG1 was the first of two trenches on the Quiet Green for this year's class (see Figure 8.1). QG1 consisted of eight contexts in total. The contexts were determined by changes in the soil, therefore not all the contexts were of the same size. This was the first year for the class to be digging on Brown's campus, as before the work had been done at the First Baptist Church, and then at the John Brown House. However, circumstances prevented us work continuing at either of those places.

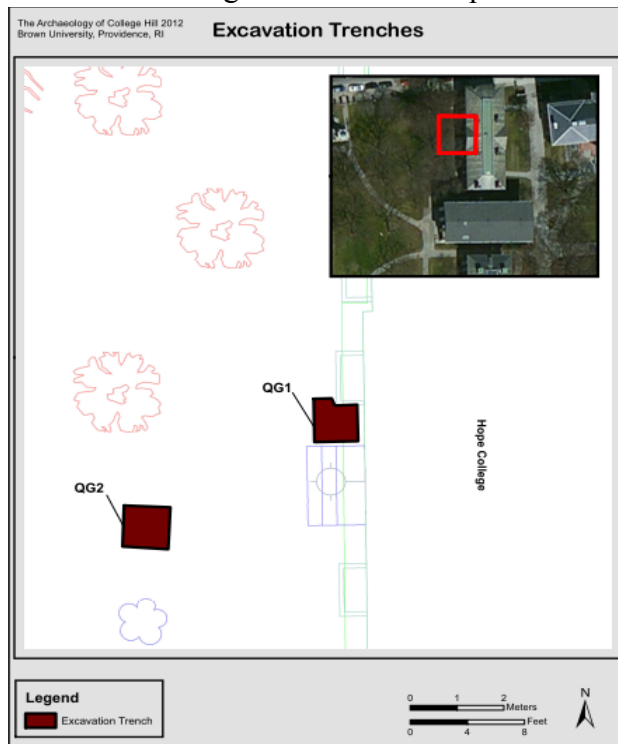


FIGURE 8.1. Detail of location of Trench QG1 on the Quiet Green of Brown University. (Courtesy of Morgan Albertson, 2012)

The first few weeks of class were spent deciding on a place to excavate. After many suggestions from the group, it was decided that excavations would begin on the west side of Hope College, between one of the doors (no longer in use) and a window egress.

This site had been researched before class began, in the case that we could not place our trenches in the desired locations.

The exact location of QG1 was thought to be in a good position for finding artifacts for a number of reasons. Hope College is one of the oldest buildings on campus and has always been used as a dorm. The doors on the west side used to be the front

doors to the dormitory, and the area between the steps and the egress would have been a prime spot for the deposit of refuse from those that frequented the area. Now, the area is out-of-the-way but still used (see Gunderson, this volume), so while there is still the potential for more modern deposits, a large amount of time did not have to be spent worrying about anyone not in the class disturbing the trenches.

Methodology

The methodology followed in the excavation of QG1 was fairly simple, as resources and time constraints did not allow for anything too elaborate. The main tools used during the excavation were trowels, a variety of brushes, and a sifter. When small roots became a problem, root cutters were used to remove them. The main difficulty in the excavation phase was the fact that the trench was only accessible from two sides, as one of the sides was against the side of the building, and another was against the set of stairs leading up to the door (see Figures 8.1 and 8.8). While students were allowed to carefully get into the trench to even out the layers and clean up certain spots that were otherwise hard to reach, it was something that the group did not really like to do as it encumbered the activities of the others working in the trench, and one had to remain in an awkward position in order to do anything.

As trowels were used to scrape away layers of dirt, careful attention was paid to not damaging artifacts found as students worked at the earth around them so that they could be removed and put into the correctly labeled bag. Students also carefully looked for artifacts when sifting the buckets full of dirt that had accumulated as the excavation went deeper into the ground. Whenever someone saw that the soil was changing color or consistency, work was stopped at that area and continued in the rest so that the whole trench would remain in the same context. Everything was carefully recorded, and photographs were taken at the closing of every context (see Figure 8.7). Total station points were also taken at the close of every context, or at the end of the day if the end of a context was not reached (see Albertson, this volume).

Once in the lab, artifacts were separated into trays and students carefully washed the objects that could be (i.e., not corroded metal). Some things, such as metal and bone, could not be washed due to the artifacts' state of fragility. Pictures were taken both of

groups of artifacts (there were so many small pieces that it was not feasible, nor did it make sense, to take pictures of every individual artifact), and of individual artifacts that were thought to be significant/diagnostic.

A Summary of the Contexts

Context 1

|

Context 2

|

Context 3

|

Context 4 — Context 5

author,

2012)

FIGURE 8.2. Harris Matrix of QG1. (Figure by

Context 6

|

Context 7

|

Context 8

Context 1

Context 1 was opened and closed on the first day of excavation, 15 October 2012, and consisted of dark brown topsoil. Among the glass shards found, there were four pieces with letters/decoration, 2 of which were able to be fitted together, and 1 piece that was thick and stippled. The only items in this context that could be diagnostic would be the two pieces of glass that were able to be fit together (see Figure 8.3), however there were not enough letters for anything to be concluded from the pieces.

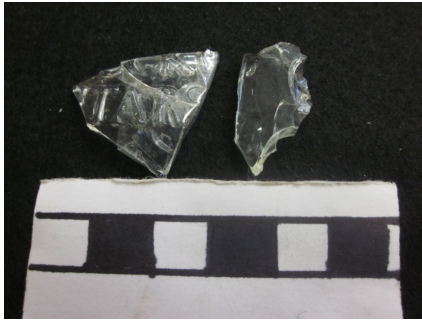


FIGURE 8.3. *Left:* Glass with ‘STAR’ imprinted. *Right:* Glass with letter ‘A’ imprinted. (Photo by author, 2012).

Type	Total	Notes
Glass	35	<ul style="list-style-type: none"> • 28 clear, 6 brown, 1 green • 4 clear pieces with letters/designs • 2 clear pieces join together
Ceramic	3	<ul style="list-style-type: none"> • White
Metal	1	<ul style="list-style-type: none"> • Bullet cartridge

TABLE 8.1. Artifacts from Context 1

Context 2

Context 2 was located immediately below Context 1, and it was also opened and closed on 15 October 2012. The soil remained dark brown, but was a little more wet. A penny dating from 1976 was found in this context giving a possible terminus post quem for Context 2 (and, therefore, Context 1). However, three ceramic sherds were also uncovered, which can be pieced together to form part of a calendar for the month of August, with the first of the month landing on a Tuesday (see Figure 8.4). After doing some research (of the years after 1976), it was determined that August began on a Tuesday in the years 1978, 1989, 1995, 2000, or 2006. Therefore Context 2 has both a terminus post quem of 1978. There is no terminus ante quem for this context, as someone could have had something ceramic (a vessel seems most likely, especially

considering the curve of the pieces and their thickness) with this calendar on it in years after that which the calendar was for, and it only got deposited at the site in the past few years.



FIGURE 8.4. Ceramic sherds with calendar print from Context 2. (Photo by author, 2012).

Type	Total	Notes
Glass	257	<ul style="list-style-type: none"> 156 clear, 48 brown, 39 green, 10 yellow, 4 blue
Ceramic	13	<ul style="list-style-type: none"> 7 white, 3 white calendar print, 1 black, 1 grey/brown, 1 blue and white
Metal	8	<ul style="list-style-type: none"> 7 nails, 1 penny (1976)
Mineral/Stone	1	<ul style="list-style-type: none"> Hornblende

TABLE 8.2. Artifacts from Context 2.

Context 3

Context 3 was located directly under Context 2, and was also both opened and closed on 20 October 2012. The soil here remained a dark brown, but was noticeably wetter than the soil in the previous contexts. Many more tree roots began to appear in this context, as did a concentration of slate at the south end of the trench, against the staircase. This pile of rubble came to be termed Context 5, and will be discussed later. Three bones that were found were determined to be those of a bird; however the exact

species was not determined. Diagnostic items from this context included the different colors of glass, the bullet cartridge, and the large amount of slate from this context; all of which shall be discussed later. The charcoal deposits (see Figure 8.5) found in this context and others could be from a variety of things, the most probable being refuse from a grill/fire, such as one would find after a barbeque.



FIGURE 8.5. Charcoal from Context 3.
(Photo by author, 2012).

Type	Total	Notes
Glass	81	<ul style="list-style-type: none"> • 66 clear, 6 green (4 bright green, 2 olive), 5 brown, 2 yellow, 1 blue, 1 opaque (possibly window glass)
Metal	19	<ul style="list-style-type: none"> • 18 Nails--in bad condition • 1 bullet cartridge
Mineral/Stone	13	<ul style="list-style-type: none"> • Slate
Bone	3	<ul style="list-style-type: none"> • Bird, though exact bones unknown
Other	Uncounted	<ul style="list-style-type: none"> • Charcoal

TABLE 8.3. Artifacts from Context 3

Context 4

Context 4 was opened on 20 October 2012, and closed on 22 October 2012. The soil differed considerably from those of previous contexts, being relatively dry and of a yellowish-red color. Two of the ceramic sherds (see Figure 8.6) were patterned in blue and white, but as both the blue and white color combination, and the pattern of the pieces, were common from the first residency of Brown until currently, these pieces are nearly impossible to date with only these small sherds. It is a similar situation with the other ceramic sherds from this context; they are simply too small and do not contain any distinguishing features that could be used to date them with our limited resources. However, there was one sherd found that was not much remarked upon on its discovery, but now seems likely to be a part of the pipe(s) that were recovered in other contexts (see Figure 8.14). The pipes will be discussed in more detail later.

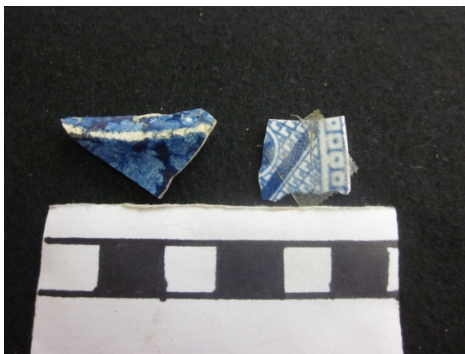


FIGURE 8.6. Ceramic sherds from Context 3.
(Photo by author, 2012).

Type	Total	Notes
Glass	30	<ul style="list-style-type: none">• 25 clear, 3 green (1 bright, 3 olive), 1 aqua, 1 brown• Some of the clear glass is stippled
Ceramic	9	<ul style="list-style-type: none">• 2 brick fragments, 2 white (1 rim), 2 white-and-blue (1 of which is

		<p>definitely printed, and 1 rim), 1 black-glazed, 1 pipe bowl, 1 brown/purple-glazed</p> <ul style="list-style-type: none"> • The brown/purple-glazed sherd could be a part of the pipe(s) that were found in later contexts
Metal	3	<ul style="list-style-type: none"> • 1 nail • 1 bullet cartridge • 1 unknown
Other	Uncounted	<ul style="list-style-type: none"> • Charcoal

TABLE 8.4. Artifacts from Context 4

Context 5



FIGURE 8.7. Opening of Context 5. (Unknown, 2012).

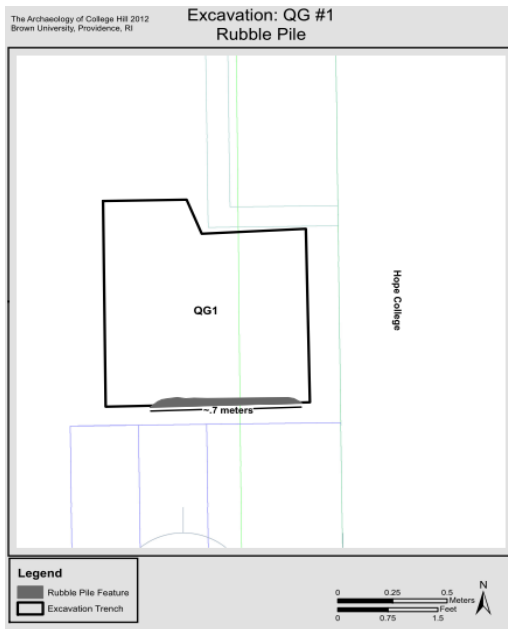


FIGURE 8.8. Outline of QG1 and Context 5. (Courtesy of Morgan Albertson, 2012).

Context 5 was both opened and closed on 22 October 2012 (see Figure 8.7). This context was composed of the various pieces of slate, brick fragments, and medium-sized rocks that formed the rubble pile at the south end of the trench, against the stairs. The pile was approximately .7 meters long, and varied greatly in width along that length (see Figure 8.8). At the southeast corner of the context a hole was uncovered that had to be carefully worked around in order to not enlarge it anymore than had already been done. A notable find in this context was an almost-whole brick that was thought to be possibly diagnostic, as the dimensions of a brick can sometimes be used to date it. The brick from this context was unfortunately not complete enough to perform any such research. However, upon comparison, it seemed similar to the bricks currently facing Hope College, so the

hypothesis of the rubble pile being from the remodeling of the building in the 1950s continues to seem plausible.

Type	Total	Notes
Glass	10	<ul style="list-style-type: none"> • 4 clear, 5 green (3 bright, 2 olive), 1 brown
Ceramic	2	<ul style="list-style-type: none"> • 1 brick, 1 white • The brick is almost complete, however not enough to be diagnostic
Metal	4	<ul style="list-style-type: none"> • Nails

TABLE 8.5. Artifacts from Context 5.

Context 6

Context 6 was opened and closed on 5 November 2012. The soil was moist due to the rain from Hurricane Sandy, which caused us to miss a week of excavation. It was sandy and rocky, with many small pebbles. Many similar artifacts to those from previous contexts continued to be found in Context 6, with one new, interesting addition. Five medium/large pieces of purple-glazed sewer pipe were found in this context, and a discussion of the pipes will follow the context summaries. Several cigarette butts were also found in this context, though they were not collected or counted. There is some argument as to the amount of years it takes for a cigarette butt to degrade, with some studies suggesting that that do not ever fully decompose (CigaretteLitter.org, no date). However, it is generally thought that most cigarette butts will be mostly decomposed within 10-15 years (CigaretteLitter.org, no date), giving this context a tentative terminus post quem of 1997. Another notable find in this context was the two large pieces of stippled glass that were joined together in the lab. Stippled glass will be discussed in the section after the context summaries.

Type	Total	Notes
Glass	14	<ul style="list-style-type: none"> • 13 clear, 1 dark green • 2 clear, stippled pieces join together
Ceramic	10	<ul style="list-style-type: none"> • 5 purple-glazed pipe, 3 brick, 2 white
Metal	1	<ul style="list-style-type: none"> • Unknown
Mineral/Stone	5	<ul style="list-style-type: none"> • Slate
Other	1	<ul style="list-style-type: none"> • Charcoal

TABLE 8.6. Artifacts from Context 6.

Context 7

Context 7 was by far the largest of all the contexts of QG1, taking three days to excavate completely. This context was opened on 5 November 2012, continued through 12 November 2012, and closed on 17 November 2012. The soil was rocky, brown, and moist, with many dark gray, sandy inclusions. Glass continued to be the most numerous artifact in this context, however a large amount of ceramic sherds were found as well, mostly consisting of the purple-glazed sewer pipe and more plain white ceramic. As in previous contexts, the patterned white and blue ceramic sherds were too small, with too common a pattern, to be given a date any more definite than between the mid 18th century and present day (Delta Archaeology 2012). It is interesting to note that, in this context, none of the metal that was uncovered was unmistakably nail-shaped, as in most of the other contexts. Unfortunately, however, as in the other contexts, all of the metal artifacts were far too corroded to be able to conduct any research on them. Once again, there were charcoal deposits in this context, however it was decided that collecting charcoal samples was no longer necessary during this excavation.

Type	Total	Notes
Glass	40	<ul style="list-style-type: none"> • 33 clear, 4 green (1 bright, 3 olive), 3 brown

Ceramic	36	<ul style="list-style-type: none"> 15 purple-glazed pipe, 10 white, 8 brick, 3 white and blue
Metal	6	<ul style="list-style-type: none"> All unknown and of unusual shapes
Mineral/Stone	6	<ul style="list-style-type: none"> Hornblende

TABLE 8.7. Artifacts from Context 7.

Context 8

Context 8 was opened and closed on 17 November 2012, the last day of excavation. The soil was tanish-brown and seemed similar to clay, with fewer rocks/pebbles than in Context 7. The same types of artifacts were found in this context as in many others: glass, ceramic, and metal. Also as in other contexts, the majority of artifacts were not diagnostic, save for the different colors of glass and possibly ceramics (which, again, will all be discussed in the following section).

Type	Total	Notes
Glass	22	<ul style="list-style-type: none"> 18 clear, 3 green (1 bright, 2 olive), 1 aqua
Ceramic	10	<ul style="list-style-type: none"> 6 white, 3 purple-glazed pipe, 1 brick
Metal	2	<ul style="list-style-type: none"> 1 nail, 1 unknown

TABLE 8.8. Artifacts from Context 8.

Context Unknown

During excavation on 17 November 2012 a small part of the trench wall collapsed inward, and on other days we found artifacts sticking out from the sides of the trench walls, that led to a small collection of items that, regrettably, cannot be placed definitely in any one context (see Figures 8.9 and 8.10). However, we still felt it important to collect and record the items that were collected during those times.

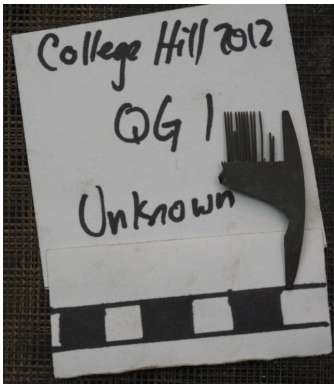


FIGURE 8.9. Plastic comb from an unknown context. (Photo by author, 2012).



FIGURE 8.10. Glass shards from unknown contexts. (Photo by author, 2012).

Type	Total	Notes
Glass	3	<ul style="list-style-type: none"> • 2 clear, 1 yellow
Metal	1	<ul style="list-style-type: none"> • Bullet cartridge
Other	1	<ul style="list-style-type: none"> • Plastic comb

TABLE 8.9. Artifacts from unknown contexts.

Diagnostic Artifacts

Many of the diagnostic artifacts recovered from QG1 were similar to, or were able to be joined with, artifacts from other contexts. This suggests that many of the artifacts, and the contexts themselves, were at some point jumbled together. However, as the contexts were determined by changes in soil, there were at least different depositions of soil and artifacts. This could correlate to the remodeling of Hope College in 1958, as this would have disturbed the ground around the building. This mixing of contexts could not have occurred in 1891, when the cellar was constructed, because many of the artifacts

could have been produced and deposited by then, even in the final contexts. Therefore, this section of the chapter will give a brief description of the artifacts that were found in multiple contexts, in a further attempt to come to some conclusions about the trench.

Bullet Cartridges

Bullet cartridges were found in Contexts 1, 3, 4, and one was also recovered when a small part of the trench wall collapse on 17 November 2012 (see Figure 8.11). The cartridges are for rimfired .22 bullets, and were used at some point. This is known due to the fact that there is a small indent on the side of each cartridge's head, from the firing pin striking it. The headstamp on the head of the bullet is a simple 'U', which was the headstamp used by Union Metallic Cartridge Company located in Bridgeport, Connecticut (Newcomer, no date). This company was incorporated by Remington in 1867 (Remington, no date). Rimfire cartridges first started being mass-produced around this date (Hawks 2012), though an exact year for Remington cartridges is unknown. The most probable reason for four of these cartridges to have been found within QG1 is that, at some point in the history of Hope College, there was a student who collected bullet cartridges. .22 boxes and cartridges are especially popular with collectors for various reasons (Rains, no date), and there are few other reasons for there to have been four cartridges at this site. However, these cartridges do not help to date the contexts of QG1, as the contexts in which the bullet cartridges were found already have terminus post quem in the mid-nineteenth century. And though the factory in Bridgeport was closed in 1988 (Remington, no date), there is no reasonable explanation for the disturbance of soil as far down as Context 4, other than the 1959 remodeling of the dormitory.



FIGURE 8.11. Bullet cartridge from Context 3. (Photo by author, 2012)

Glass

Glass was very much the most numerous group of artifacts from QG1, and multiple colors were found in each context (see Figure 8.12). Different colors of glass can be dated to different time periods, which can help to more firmly fix the possible time period of the individual contexts, and the trench as a whole. Machine-made colorless glass, which was the majority of what was found, was not massed produced until 1905, so that gives every context a tentative terminus post quem of 1905. Dark olive-colored glass, which was found in every context and believed to be from a single vessel, was rarely used in bottles after the twentieth century, unless the bottle was for an alcoholic product (Lindsey 2012). Knowing the history of Hope College as a dormitory, while looking at the pieces of olive glass spread throughout the contexts (their thickness, color, etc., as well as entertaining the idea of mixed contexts), suggests that this was indeed the case for the shards of olive glass found in QG1, so the terminus post quem does not change. Neither does it change with finds of blue, amber (or yellow, which is considered a shade of amber by the SHA), bright green, aqua, or yellow glass. All of these colors stopped being common as bottle colors in the late nineteenth and early to mid twentieth century, except in the case of bottles for soda and/or alcohol (Lindsey 2012), which have probably been popular at Hope College for the duration of its use.



FIGURE 8.12. Glass shards from Context 2. (Photo by unknown, 2012).

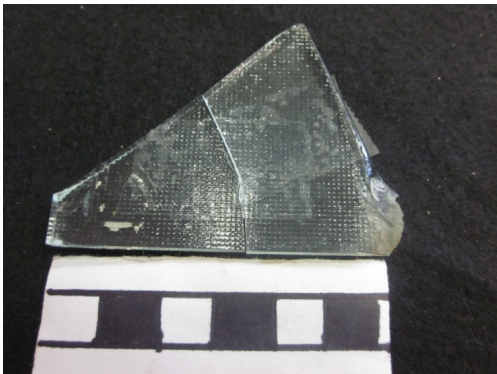


FIGURE 8.13. Joined stippled glass pieces from Context 6. (Photo by author, 2012)

Stippled glass, as well, can be used to date the contexts in which it was found. Shards of this glass were found in Contexts 1, 2, 3, 4, and 6 (see Figure 8.13). Stippled glass was not mass-produced until 1940 (Cleofe, this volume), giving these contexts a new terminus post quem. The distribution of stippled glass also would make sense in the context of the building's 1958 remodeling. The absence of stippled glass in Contexts 7 and 8 might suggest that these contexts were not mixed together with all the rest, were it not for other artifacts that were found in those contexts as well as in the others.

Purple-glazed pipe

Pipe sherds were found in Contexts 4, 6, 7, and 8 (see Figure 8.14) . They are probably the remains of a previous sewer system, as vitrified clay pipes with both exterior and interior salt-glazing, were commonly used in sewers in the USA from the 1890s through much of the twentieth century (Sewerhistory.org 2004). It was manufactured in all sizes, from having a diameter of two inches to having one of three feet. The distribution of connecting pipe sherds through multiple contexts fits with the hypothesis of the contexts of QG1 having been mixed up during the remodeling of Hope College. Going one step further with that idea, it is possible that the pipes were first broken up in 1891, when the cellar was built, and then the area was again disturbed during the 1958 remodeling.



FIGURE 8.14. Joined pipe fragments from Contexts 6, 7, and 8. (Photo by author, 2012).

Slate, brick, and hornblende

Remnants of construction materials were found in every context of QG1 except for Context 1. This is understandable, however, as Context 1 only consisted of the topsoil of

QG1. Hope College received a slate roof in 1908, though this roof was replaced in the 1958 remodeling. However, this roof would still explain the slate debris found within the contexts. The brick fragments are also likely from this remodeling, as is the hornblende. Hornblende is a component in many rocks that are used for construction (Hayman 2007), therefore linking it to the drastic remodel of 1958 as well. That these materials were found even in Context 8 serves to further prove that, during the 1958 construction, many of the contexts were jumped together, but the soil and artifacts within it were deposited at different times.

Conclusion

The artifacts found within QG1 firmly attest to the history of Hope College as a dormitory, and to its periods of renovation. Due to the occurrence of many similar (or pieces of the same) artifacts, it can be concluded that the contexts of QG1 were likely mixed up during the remodeling of 1958, though the contexts were all deposited at different times, which explains the differences in the soil. Though some of the artifacts have a terminus post quem of earlier dates, the date of the remodeling is the terminus post quem of Contexts 3-8. However, due to the penny found in Context 2, both Contexts 2 and 1 have a terminus post quem of 1976. Due to the fact that the majority of the artifacts found were not diagnostic, it is difficult to give any of the contexts dates that are more exact.

If a future class were to return to QG1, they would most likely continue to find remnants of the 1958. However, due to the placement of the context between the building, the stairs, and the window egress, it would be difficult for future excavation to go deeper into the ground than this excavation did. Therefore, it is suggested that, though this trench did provide some interesting finds, future classes not return to this exact spot.

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9. UNIT SUMMARY FOR QG 2

Edward Cleofe

Introduction

Unit 2 was opened on 22 October 2012. Under the supervision of Alex Knodell, students Morgan Albertson, Christina DiFabio, Caity Mylchreest, Joey Mallen, Chris Thompson, and Edward Cleofe began excavation.

A 1m x 1m trench was opened roughly 3m southwest of Unit 1, itself situated just north of Hope College's western central staircase. Unit 2 was opened in order to explore the difference in artifact type and artifact density between entrances and pathways. Unit 1 provides information pertaining to entrances, and Unit 2 provides pathway information.

The location of the trench was selected through the use of historic maps and photographs of the Quiet Green area. Excavation location was intended to cover the edge of a portion of a historic pathway. Actual excavation began on 22 October 2012 and ended with trench backfilling on 17 November 2012.



Figure 9.1 Unit 2 Opening.
Taken Facing North.

Excavation Methods

Multiple methods of excavation were used for Unit 2. Excavation began with defining and measuring the boundaries of the trench. Using a basic Pythagorean triangulation method, a 1m by 1m square was drawn. Nails with orange flags were driven into the corners of the square, and twine was strung from the resultant vertices. Morgan Albertson, Christina DiFabio, and Edward Cleofe recorded the location of the trench via total station.



The total station records an absolute and relative location of whatever points shot in via laser and stadia rod. Rather than using a grid of arbitrary design, the total station was backsited to a known point on Providence's own municipal city planning grid. Morgan Albertson and Christina DiFabio would continue to record points and levels throughout the excavation process, with occasional assistance from Edward Cleofe.

Figure 9.2 Alex Knodell with Total Station

Excavation proper began with shovel shaving the surface of the trench. The use of shovels was also helpful in clearly demarcating the edge of the trench. Trowels and brushes were used extensively in all further contexts. All disturbed soil, no matter its mode of removal, was then sifted with $\frac{1}{4}$ inch mesh sieves. Artifacts uncovered via excavation were bagged, separated by type of artifact material as well as context number.

At the end of excavation, artifact bags were transferred to the Carriage House Archaeology Lab. Artifacts were cleaned via brush and, if not damaging to the material type, water. Artifact analysis was done in a comparative fashion, with analysis dually focused within single contexts as well as the unit as a whole. Diagnostic artifacts were selected for dating in order to provide a relative chronology of the unit. After analysis and dating procedures, artifact bags were relabeled for clarity and stored within Carriage House.

Recording of data during excavation and artifact analysis took many forms. Excavation forms were filled out during excavation, with a new form coinciding with each new context. Soil qualities were described, but Munsell values were not used. Due to the nature of the soil as well as frequent saturation and drying of the soil, Munsell values would have been unnecessary, inaccurate, and misleading. Photographs were taken by the excavation team itself, and video and stills were taken by a Brown University Media Services technician. All excavators kept weekly field blogs, and a weekly unit summary was also written, with information covering the excavation as a whole.

Excavation Finds Summary

Context 1

Context 1 was opened on 22 October 2012. As the first layer of the trench, it was composed of grass, sod, and soil. The soil was relatively dark, loamy, and loose, so shovel and trowel excavation proved to be relatively easy.

Excavation uncovered a moderate amount of artifacts, mainly glass shards. In the case of ceramic sherds and glass shards, the minimum number represented was determined by detailed observation of the different qualities of the fragments. This process was repeated for all other trenches. Several other types of artifacts were found: finds are summarized in the table below in Figure 9.3.

Artifact Type	Number Present	Minimum Number Represented	Approximate Date Range
Ceramic Sherds	5	3	1830s-present

Glass Shards	24	11	1940-present
Metal	3	--	1963-present
Plastic	5	--	1955-present
Shell	1	--	--
Pennies	3	--	1982-present

Figure 9.3 Summary of Finds, Context 1

Conditions of deposition were not ideal for preservation: though a few sherds of ceramic were found, the only distinctive patterns on them were of dark blue negatives with white positive space, as seen in Figure 9.4. This style of pottery began production in the 1830s and has been popular and mass produced since (Miller 2000a). Sherds of this type are found in



Figure 9.4 Dark Blue Negative Pottery Sherd

every context and are the only dateable ceramic artifacts. As such, number of sherds –and thereby artifact density– is a much more valuable analytic tool than dating when considering only sherds in Unit 2.

Though plentiful, only one shard of glass provided any definitive dating information. A flat, clear piece of glass with stippling was found, pictured in Figure 9.5. Stippled glass was first produced in 1940 and remains in production to the present (Spude 2007).



Several pieces of metal were also found in Context 1. The most diagnostic of which was a pull tab, likely discarded from an aluminum food can. Pull tabs were invented in 1963 (Spude 2007). Also from a discarded food container, the corner of a condiment packet was also unearthed. The condiment packet was patented and began mass production in 1955 (Kaplan 1955).

Figure 9.5 Stippled Glass

Both pieces of food container remnants are found in Figure 9.6. Although undateable and relatively useless in material culture analysis when considering the unit as a whole, a sea shell was found in this context. Its coloration, white with a slight lavender tinge, is pictured in Figure 9.7. Similar shells were found in Contexts 2 and 3 as well. Their



presence can most comfortably be assigned to a private collector's loss.

Figure 9.6 Aluminum Pull Tab & Condiment Packet Corner

Ds;lfkja Figure 9.7 Shell



Figure 9.8 Pennies



The finds with the most recent and exact dating implications was the unearthing of three pennies, dated to 1975, 1980, and 1982. Their dates and relative levels of tarnishing can be seen in Figure 9.8. Though there was likely a gap

between minting and deposition, the pennies are the most verifiably recent finds within the entirety of the Unit.

Context 2

Context 2 began with a change in soil quality: the loose, loamy soil of Context 1 eventually gave way to denser, clay heavy soil. This context was extremely artifact dense. Finds are summarized in the table below in Figure 9.9.

Artifact Type	Number Present	Minimum Number Represented	Approximate Date Range
Ceramic Sherds	32	10	1830s-present
Glass Shards	103	28	--
Metal	7	--	--
Plastic	2	--	1944-present
Shell	1	--	--
Stone	14	--	--

Figure 9.9 Summary of Finds, Context 2

The ceramic and glass found in this context, and all following contexts, was too small and fragmentary for any significant chronological analysis to be done. Figures 9.10



Figure 9.11 Fragmentary Ceramic



Figure 9.10 Fragmentary Glass

and 9.11 illustrate the absolute sizes of the fragments found. The fourteen fragments pictured above are representative in size of the majority of artifacts found, at roughly 1cm² in size along the largest faces.



Despite the conformity in size, a great deal of diversity in glass color, texture, and form was excavated, as seen in figure 9.12, but no reliable means of dating only by color was ascertained during the artifact analysis in Carriage House.

Figure 9.12 Diversity of Glass Color

Metal finds were also degraded and oxidized, making them altogether useless for dating. One of the most degraded finds can be seen in Figure 9.13. The detail needed to date screws or other construction implements was completely obfuscated by rust (Rybczynski 2000).



Figure 9.13 Rusted, Bent Metal Find



The only truly chronologically diagnostic material unearthed from Context 2 was Styrofoam, which was first invented and distributed in 1944 (Miller 2000b). The small piece of styrofoam uncovered can be seen in Figure 9.14

Figure 9.14 Styrofoam

The biggest find in Context 2 was not removed: a sprinkler pipe –unmarked on all previously examined facilities maps–was uncovered during excavation. It runs in a roughly East-West orientation. It is likely directly connected to a sprinkler valve located roughly 20m northwest of the trench. Figure 9.15 illustrates the probable connection.

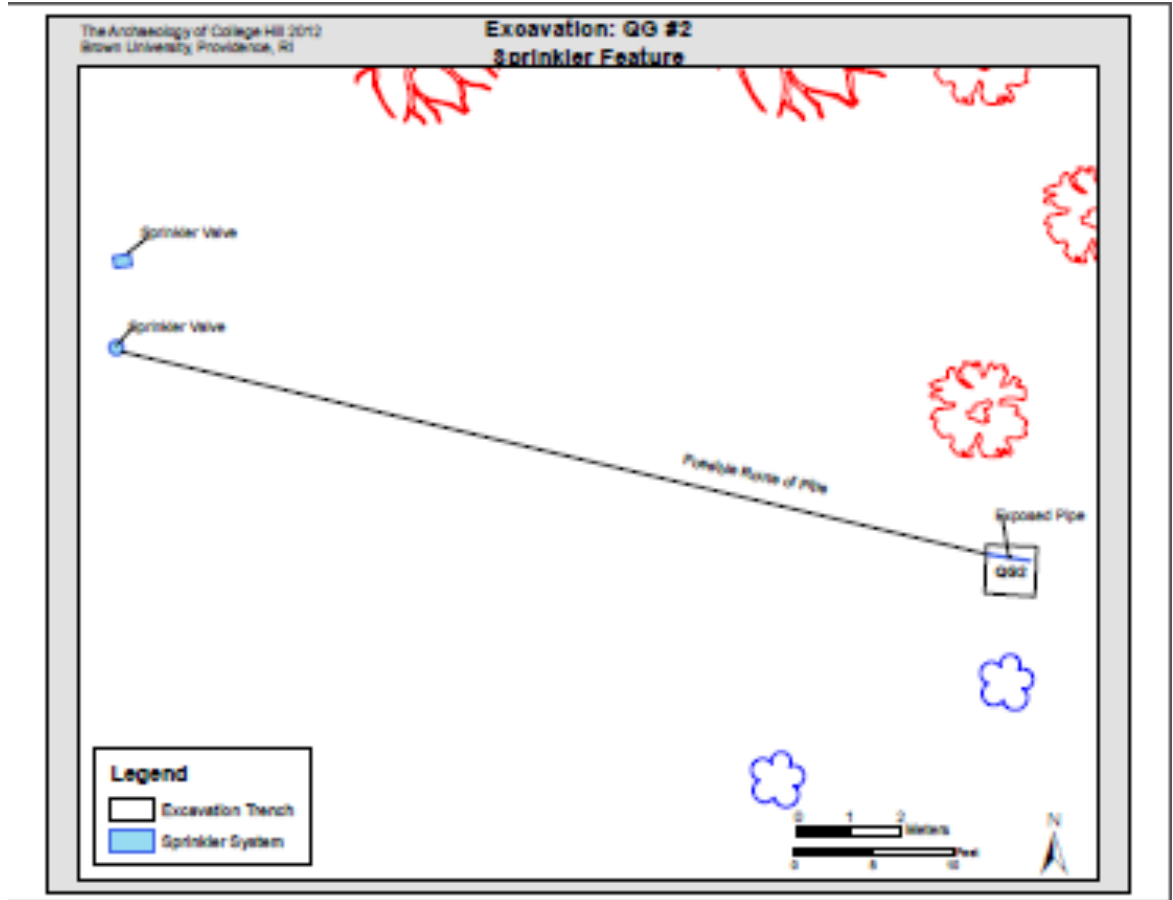


Figure 9.15 Sprinkler Feature



Figure 9.16 Context 2 Closing, Context 3 Opening. Taken Facing South.

Context 3

Context 3 was opened upon hitting a layer of distinctly light brown, sandy soil. The number of artifacts found in Context 3 was substantially smaller than that found in Context 2. A summary of finds is presented in the table below in Figure 9.17.

Artifact Type	Number Present	Minimum Number Represented	Approximate Date Range
Ceramic Sherds	11	7	1830s-present
Glass Shards	4	3	--
Metal	4	--	--

Plastic	3	--	1955-present
Shell	1	--	--
Asphalt	4	--	1870-present

Figure 9.17 Summary of Finds, Context 3

A notable find in Context 3 was a preponderance of asphalt. Originally thought to be charcoal then burnt brick, its distinctive smell revealed its true identity. The relatively large size of the asphalt, compared to the size of other finds, is illustrated in Figure 9.18. Asphalt was first used in paving roads and pathways in 1870 (de Smedt 1870). As such, the presence of asphalt is not especially useful in dating but is indeed useful in suggesting



the presence of a path. A condiment packet corner was also found.

Figure 9.18 Asphalt & Packet Corner

Although artifact density was relatively low, the floor of the trench itself began to reveal more information. Large, relatively flat stones were uncovered, revealing a rough paving of the trench floor. Though not verified, the large, flat fragments were visually read as slate or another slate type stone.

Through an examination of historic maps and photographs, a schematic of the 1900-1910 pathway system present to the west of Hope College was created. The projection of the probable historic path is illustrated by Figure 9.19.



Figure 9.19 1900-1910 Pathway Projection

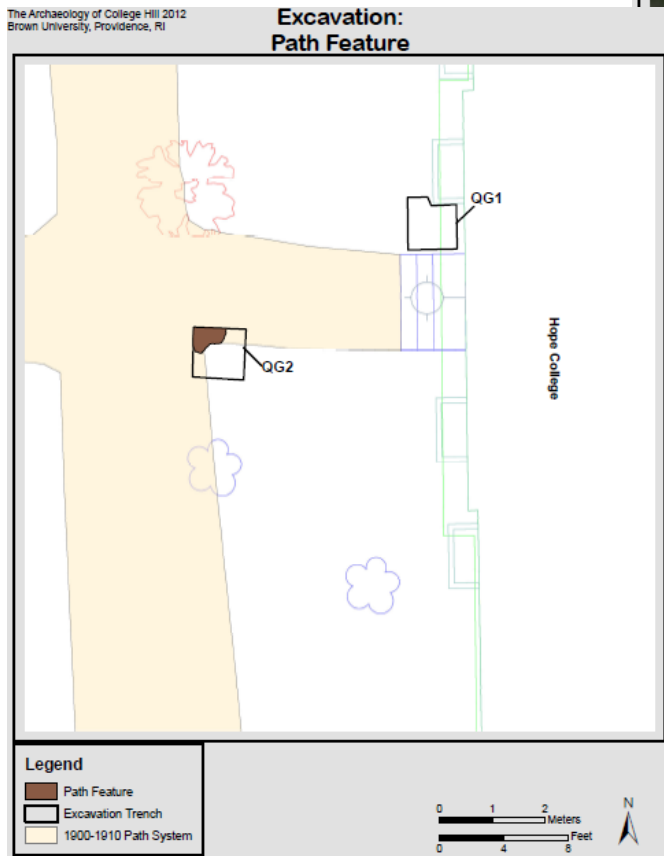


Figure 9.20 Path Feature

According to the above reconstruction, the trench does indeed intersect a piece of the old pathway system. A similar analysis as the one above was done but with a smaller area of focus. This smaller area of focus is illustrated in Figure 9.20. The figure suggests that the large, flat stones were indeed part of the former pathway system connected to Hope College.

Context 4

Context 4 was opened upon reaching a layer of flat, gray stone. The stones that composed the path feature described above were left in place, but the stones covering the floor of the trench proper were excavated. The context yielded very, very few artifacts. What was found is summarized in the table below in Figure 9.21.

Artifact Type	Number Present	Minimum Number Represented	Approximate Date Range
Glass Shards	4	3	--
Asphalt	4	--	1870-present

Figure 9.21 Summary of Finds, Context 4

The asphalt pieces recovered in this context were noticeably smaller than those found in Context 3, as seen in Figure 9.22.



Figure 9.22 Asphalt Sample

Before the closing of Context 4, the path feature was extensively cleaned via brush in order to be clearly photographed for Figure 9.23.



Figure 9.23 Context 4 Closing. Taken Facing North.

Context 5

Context 5 was opened when a change in soil qualities occurred after the revealing of the path feature. The path feature itself was only brushed and cleaned, and the floor of the trench proper was troweled. Very little was found in this context, which is to be expected if it were near or under the path when close to the surface. What was found is summarized in the table below in Figure 9.24.

Artifact Type	Number Present	Minimum Number Represented	Approximate Date Range
Ceramic Sherds	2	2	1830s-present
Glass Shards	3	3	--

Figure 9.24 Summary of Finds, Context 5

The dearth of materials found did not reveal much information, but the materials found, sherds and shards, were very much representative of the most common artifacts found in unit as a whole. The small size and amount of the finds can be seen in Figure 9.25.



Figure
9.25 All
Finds,
Context 5

One pottery sherd did have a negative dark blue, positive white, giving the broad date of the 1830s to the present for the context. All other finds were too fragmentary to provide much more information. A final change in soil color to a dark grayish brown led to the closing of this context. Due to time constraints, this would be the final context and its closing would mark the closing of the trench entirely. The bottom of the entire trench can be seen in Figure 9.26.



Figure 9.26 Context 5/Trench Closing

Chance Finds

Three chance finds were found during excavation: all were found as a result of a small bit of the trench wall collapsing. None of the finds were particularly notable, but they were very much emblematic of the material culture common to the trench as a whole. Finds are summarized in the table below in Figure 9.27.

Artifact Type	Number Present	Minimum Number Represented	Approximate Date Range
Ceramic Sherds	1	1	1830s-present
Glass Shards	1	1	--
Plastic	1	--	--

Figure 9.27 Summary of Finds, Chance Finds

Analysis

A Harris matrix was constructed in order to illustrate the special relations of the contexts: the matrix is simple but effective tool in communicating context relations.

These relations are illustrated in Figure 9.28.

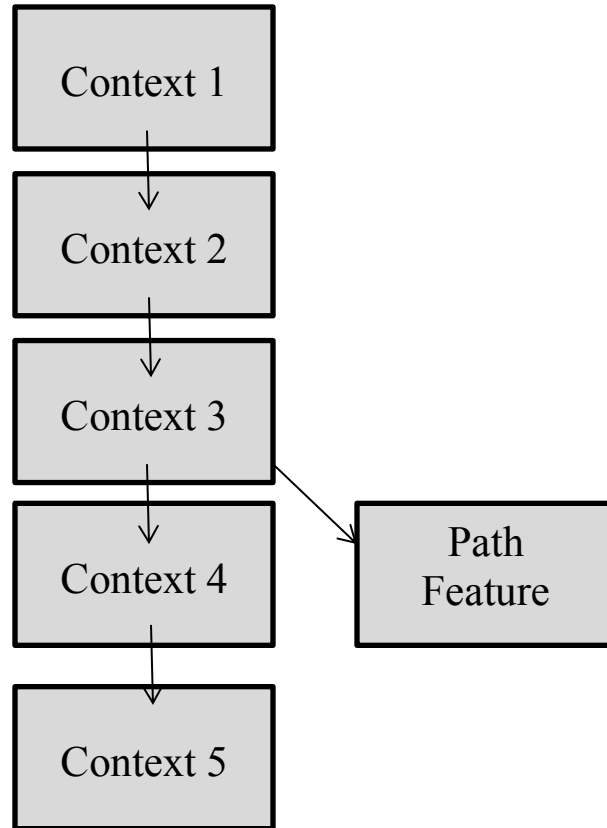


Figure 9.28 Harris Matrix for Unit 2

Unfortunately, very little of the material culture uncovered was diagnostic. Of this diagnostic material, very few exact dates of production and deposition could be gleaned. However, some trends can be extrapolated from what was found.

Exact dating based upon the material found in the trench is more or less impossible; relative dating, however, is not. Many materials found in contexts closer to the surface were not present in lower contexts. These included pennies, aluminum pull tabs, and condiment packet corners: compared with the ubiquity of glass shards and ceramic sherds, these objects are relatively more recent. This trend could very well imply

a more recent, populated occupation of contexts closer to the surface relative to contexts further from the surface.

Another useful source of information is artifact density. Contexts closer to the surface have many, many more finds than those further from the surface. Figure 9.29 provides the exact number of finds per context and thus shows the general trend of decreasing artifact density from the surface.

Context Number	Total Number of Finds
1	39
2	159
3	27
4	8
5	5
Chance	3

Figure 9.29, Total Number of Finds by Context

This change in artifact density is most saliently illustrated between Contexts 2 and 3 and between Contexts 3 and 4. Context 2 is very close to the surface, with its only anomalous feature being the sprinkler pipe: the sprinkler pipe was very likely inserted in a way that prevented almost all soil disruption. Context 3 held the top of the path feature, strongly implying that the soil below it had been greatly disturbed then covered, thereby creating an environment very unlikely to hold much cultural material. Context 1's relatively small amount of finds can likely be attributed to recent landscaping projects. Bearing all of these elements in mind, the contexts' artifact densities are very much consistent with more recent occupation of contexts closer to the surface.

Many finds were likely deposited as a result of construction: a large amount of screws, nails, and metal wire were found. Unfortunately, their condition was not conducive to dating. The presence of slate, in both small fragments and likely as the large, planar stones that composed the path feature, is also most probably the result of construction. In the United States, paths were constructed using stone foundations paved

over by concrete largely composed of Portland cement by the 1880s (Auburn 2008). The pathway system constructed between 1900 and 1910 was almost certainly constructed in this manner.

Ultimately, the excavation of Unit 2 revealed much, especially when compared to the finds in Unit 1. The materials found in Unit 2 communicate much information from the past, from materials and methods of construction to the nature of pathway use and occupation. An exploration of pathways and associated material culture near other units will likely be insightful, useful projects in the continuation of excavations occurring on College Hill.

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10. THE PUBLIC ARCHAEOLOGY OF COLLEGE HILL

Christina DiFabio

Introduction

As part of our archaeological responsibility, our class strived to engage in public archaeology through research and education. Public archaeology is a difficult term to define because it has such broad implications: which group is the targeted public, and what relationship does it have with archaeology? Often public archaeology is thought of as the presentation of results by professional archaeologists to the community outside of academia; while this is certainly one aspect, recent movements also have pushed to engage the public not only as an audience, but also as part of the whole process of investigation.

In any definition however, the engagement of the community is agreed to be essential for the maintenance and continuation of the field. As a course designed to educate about the archaeological process, The Archaeology of College Hill especially embodies public archaeology. While we did participate in aspects of public archaeology throughout the course, our final outreach to the public was the development and publication of an educational poster. The poster is an effective method both to display results of the investigation, and to create an all-encompassing visual presentation of our class' purpose and the whole archaeological process to the greater Brown community.

A Brief “History” of Public Archaeology

The idea of public archaeology has long been a part of the archaeological process, as the need to present and publish results to others is a driving force in the discipline. The motivations and processes however in which the public has become involved in the discipline have significantly changed in the recent era. Shanks connects the rise of public archaeology with three main factors: the conservation movement, the need for a cultural identity among new nation-states and indigenous communities, and the tourism at cultural sites (2006:221).

The introduction of the term was in 1972 by McGimsey's publication *Public Archaeology* (McGimsey 1972; Merriman 2004:3). The movement of public archaeology is attributed to this 1970s era of conservation, especially evidenced by the United Nations Educational, Scientific and Cultural Organization (UNESCO) Conventions in 1970 and 1972, concerning the limitation of illicit activities related to cultural property and the conservation of heritage sites, respectively (UNESCO 1992, 1995). On the one hand, this movement created a greater awareness of preserving archaeology for the public. On the other hand, as Merriman notes, it also shaped public archaeology as part of Cultural Resource Management, which entails "archaeologists managing cultural resources *on behalf of* the public, rather than entailing a great deal of direct public involvement in the work itself" (2004:3). While Cultural Resource Management is crucial to site preservation and education, in a way it does not promote the public knowledge of the actual archaeological process.

Recently, the new movement to shape public archaeology is not just to provide information to the public, but also to bring the public into all steps of the archaeological process. Within this movement, more definitive terms categorized broadly as public archaeology have appeared. For example, Shackel (2004:12) presents public archaeology as the idea of applied anthropology. The combination of the two creates the idea of "applied archaeology" in which, due to their public roles, archaeologists "require new skills and expertise related to working effectively with communities and a variety of stakeholders" (Shackel 2004:12). Marshall also draws upon this concept in his presentation of "community archaeology" especially to engage indigenous groups: local communities should aid in the research process, and not just see the results (2002:218). Additionally, Sabloff (2008:27) emphasizes the idea of "action archaeology", in which archaeology is conducted in a manner so as "to improve sustainability of planet and quality of life for people around the world." Overall, public archaeology now has many facets, but in the end all have the same purpose: to somehow engage the public with the discipline to promote education.

Relevance to Archaeology of College Hill

Just as other archaeological investigations have the responsibility of presenting the past they are studying to local communities, our class had the responsibility of presenting our study to the greater Brown community. As the first class in the course's history to conduct fieldwork on the actual Brown campus, we had the unique opportunity to not only promote the class but also the application of archaeological research methods to study the area which the Brown community calls home. Brown University already has a strong sense of community, but our investigation was especially well-received in the anticipation of the 250th anniversary of the University in 2014. The timing generated the perfect atmosphere in which we could promote the modern population's understanding of the Quiet Green's archaeological past.

Since the purpose of the course is to promote the education of archaeological techniques through first-hand experience, it already has an aspect of public archaeology built into its design. Not everyone in our course is an archaeology concentrator, and prior to the course, most had limited experience with field techniques. The specific location of the course this year also was conducive for public archaeology: while our excavations at Hope College were somewhat isolated in a corner of the Green, our investigation on campus was much more visible to the community than the investigations of previous years at off-campus locations. We also had the opportunity to engage with the community on National Archaeology Day (20 October 2012), which coincided with Brown's Family Weekend. On this day, we promoted our study of the Quiet Green and Hope College by demonstrating and teaching archaeological techniques to visitors. *The Brown Daily Herald*, a student-run newspaper, even featured our class in an article, titled "Archaeology class excavates Quiet Green" (Draper, 2012). Lastly, Brown Media Services recorded our class meetings, which may be used in a Brown Coursera free online course about archaeology, to be developed by Sue Alcock, Director of the Joukowsky Institute for Archaeology and the Ancient World. In this way, our seemingly small investigation could be shared not only to the Brown community, but also to people around the world via digital media.

All of these engagements with the Brown community are examples of how the class engaged with public archaeology throughout the semester. While bringing the

public into the archaeological process was a very important aspect of the course, the publication and presentation of the course's investigation and conclusions were still essential to complete our archaeological responsibility. In previous years, the classes installed exhibits presenting select artifacts in the basement of Rhode Island Hall, the building which houses the Joukowsky Institute for Archaeology at Brown University. Since most of our artifacts were not suitable for display due to their small sizes, we decided instead to make a poster as another form of visual presentation and education. For my final project, I developed the poster by compiling all aspects of our archaeological investigation, from initial research to conclusions, into an effective display for the public (Figure 10.1).

Effective Communication in our Presentation

Many considerations were present during the development of the poster. Merriman stresses the fact that communication is a "specialized field with its own research and disciplinary framework" (2004:10). The poster is a form of communication itself: it must effectively describe the information we want to convey, as well as capture the viewer's interest. Since the purpose of our course was to promote the education of the archaeological process as a whole, I wanted to emphasize this in the poster by highlighting each aspect of our investigation. In this way, the viewer not only learns about our results, but also undergoes a similar educational process which we as students of the course experienced.

One of the first important considerations was the intended audience. While ultimately the poster is going to be displayed in Rhode Island Hall, members of the Brown community, as well as those visiting Brown, who walk through the building have various academic backgrounds. Given these considerations, I wanted to provide general overviews of each aspect of our investigation as well as avoid overly technical terms in the descriptions. In addition to the descriptions of the techniques, I included images of our class performing these techniques, which provides a visual representation of what we were physically doing in the field. Thus, both provide the viewer with a more complete understanding of our investigation.

The design of the poster itself had many considerations. To effectively display each step of our investigation, I created six categories, each to be contained in its own box on the poster:

- Introduction
- Pedestrian Survey and Mapping
- Geophysical Survey
- Excavation
- Artifact Analysis
- Conclusion

The flow of the poster effectively mimics the temporal order in which we conducted each aspect, as just listed: the viewer begins by reading about the history of the Quiet Green and Hope College which we first consulted in our initial research, and then progresses through each technique to reach our interpretations and suggestions for further research. Images of both data and our class accompany each box of information. A balance of text and images was important to keep the viewer's interest as well as to promote education. While the overall goal of the poster is to present Archaeology of College Hill to the greater Brown community, the poster also must be aesthetically pleasing in order to engage its audience.

A Final Consideration and Conclusion

The final consideration for the poster is where it should be physically displayed. The ultimate location will be in Rhode Island Hall, since it houses the Joukowsky Institute for Archaeology and the Ancient World at Brown. It is important to consider, however, whether the poster will be effective in the past location for the class exhibit: the basement of the building. Unfortunately the basement is a low-traffic area of the building, so this location likely does not allow the greatest educational impact. Alternatively, I proposed displaying the poster in virtual form in the main lobby of the building, via the PowerPoint that the JIAAW circulates to feature current events. While this may entail some formatting so the text can be read more easily, I believe that this location has the best potential of reaching out to as many people as possible. In addition, a printed version of the poster will be made. While it may not be possible to display this version in the

main lobby, if it is displayed in the basement along with the virtual version in the lobby, this is likely to be most effective in reaching the public.

Archaeology of College Hill is unique in the fact that students are able to participate in a multi-faceted archaeological project within a semester, and be the driving forces in the investigation. Since we had the opportunity to learn and apply archaeological techniques to consider the past of Brown University, we certainly have the responsibility of presenting our investigation to the greater Brown community. It is especially noteworthy that there was not only a general public interest in our studies, but the public also was able to physically engage with our studies. The poster is the final aspect of our attempt to make The Archaeology of College Hill a public project. As the first Archaeology of College Hill class to conduct fieldwork on Brown University's campus, we not only anticipate successful investigations in the future, but also anticipate the growth of the Brown community's involvement as subsequent classes continue to study the archaeological past of the University.

Archaeology of College Hill 2012

Hope College and the Quiet Green

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Teaching Assistant: Linda Cooner
Poster by Christina DiFabio

Acknowledgements: The Joukowsky Institute for Archaeology and the Ancient World, and Sue Alcock, Director; Tommy Urban; Adrian Randall; Brown University Department of Facilities Management, especially Pat Vitere; Brown Planning Office, especially Chad Cavanagh and Michael Lopes

Conducted at Brown University, Providence, RI, through the Joukowsky Institute for Archaeology and the Ancient World

Introduction

Archaeology of College Hill (ARCH1100) is a course which provides Brown students with first-hand experience in archaeological techniques through a multidisciplinary field project. For the first time in the course's history, the investigation for fall 2012 was held on the actual campus of Brown University. This not only provided a connection for this course to the Brown community, but also allowed the students in the course to be fully integrated in the archaeological process from site selection to publication.

The first step was to decide where on campus the class would be digging, and each student performed individual research to identify a site of historical importance which would be worth further investigation. It was decided to focus on the Quiet Green, since this is the oldest part of the University.

Brown University was originally founded as Rhode Island College in 1764. The first physical building was the current University Hall, built in 1770. The original President's House was also in this area at the time Hope College in the second oldest edifice, built in 1822. Hope College is unique since it has kept the original purpose of a dormitory throughout its history.

Our investigation consisted of four groups of studies:

- Pedestrian Survey and Mapping
- Geophysical Survey and Mapping
- Excavation
- Artifact Analysis

Excavation

To study the West side of Hope College, we conducted archaeological excavations in two trenches, named Quiet Green 1 (QG1) and Quiet Green 2 (QG2). Both were 1 meter by 1 meter in size.

Methods

Trowels and dustpans were used to remove the soil layers. Removed soil was placed in buckets, and was later put through a sieve to isolate any material culture. Any artifacts were placed in labeled bags categorized by material and context. When there were significant changes in soil color and/or texture, we changed the context layer. Reference points were taken with the total station for each new context and at the end of each day of excavation.

Photographs were taken at the opening and closing of each context to track our progress in excavation (see example photographs to the left), and recorded in a photo log. Records for each context were also taken to note the progress and type of soil.

QG1 was located right along the West side of Hope College, next to the middle door and stairwell. There are no longer in use, but used to be the old entrance to the building. We completed a total of 8 contexts, and found abundant material culture.

QG2 was located 2 meters west of the middle stairwell. We excavated a total of 5 contexts. While there were fewer material culture finds, we did excavate a small granite pipe (which we took care not to disturb and by context 4 hit a flat stone paving that was likely a path leading to the entrance of Hope College).

On our final day of excavation, we backfilled the trenches with the pile of soil we had sifted from the other days of fieldwork in order to leave the area as close to its original state as possible.

Pedestrian Survey and Mapping

As part of the survey of the archaeological landscape, the class performed a survey of the whole Quiet Green to note the distribution of material culture and physical features in the area. Pedestrian survey is an important first step in order to have an overall context of the area.

A group of eight from our class began the survey from the South end of the Quiet Green. We set ourselves apart by 5 meters, and we walked together, carefully noting any finds and physical features.

We completed six general survey units, walking the whole Quiet Green in alternating directions of East and West. In addition to the general survey, we completed two intensive 5 meter by 5 meter survey units by the West side of Hope College where we planned to open trenches. (See Figure 3 for survey units.)

Mapping with the total station was also important for the context of our investigation. Points were taken with the total station in the trenches during every context change, and at the end of each day of excavation (see Figure 4). The data allowed us to know exactly where the trenches were located and gauge our progress, which was essential for mapping.

Artifact Analysis

After excavation, the final step was to analyze our data by categorizing and interpreting our finds. Artifact analysis is essential to drawing any conclusions about the investigation and what implications they have about the area.

Artifacts, except for metal finds, were washed carefully using toothbrushes and water. They were then organized on drying tables according to material, context number, and trench. QG1 had a greater density as well as diversity of material culture than QG2. Both trenches contained glass, ceramic, and metal. QG1 had some unique material including three brass bones, three .22 caliber bullet cartridges, and large ceramic pipe pieces.

As part of the recording process, photographs were taken and recorded for each group. All materials were photographed with labels and a 1cm scale (see example to the right).

Within these groups, artifacts were further categorized based on similar features. Glass especially was grouped based on color, thickness, and any impressions. Ceramic was also categorized by clay and glaze. By subdividing these groups, we attempted to determine a minimum number of objects represented by our material finds.

As part of the analysis, the artifacts were dated as accurately as possible with the given resources. For mailable materials such as plastic and Styrofoam, invention dates were especially helpful. Some coins were found in each trench, which were useful for determining terminus post quem (first after which), or the earliest date for a context layer.

Geophysical Survey

Geophysical survey is a non-invasive technique in which features underground can be studied without actual excavation. Our class used Ground Penetrating Radar to investigate the area of the Quiet Green where the old President's House once stood, according to the 1770 land plat.

With the help of Tommy Urban (Oxford University), a group of students conducted the survey. An antenna sends radio waves into the ground, when those waves hit an object, they reflect and provide data back to the receiver. The group surveyed the area in 5 meter transects, and the data was recorded as images in a portable computer.

The results of the geophysical survey yielded three features:

- **Path-like feature** – 40-60cm below the surface. The old path is not depicted in any photographic records, but is shown in old land plat maps from 1836 and 1826 depict a similar path in the path which is seen in our data.
- **Pipe-like feature** – 105-120cm below the surface. There are no records of a pipe in this area from Facilities Management, but it is known that the city used hollowed logs to transport water before actual water mains were built in the mid-19th century.
- **Bubble-like feature** – 160-200cm below the surface. It seems to have a rectangular shape and is in the same location of the President's House according to the plat, but has a different orientation. (See Figure 5.)

Conclusion

Overall, QG1 had more material culture than QG2, indicating a higher level of activity closer to the building.

The pipe feature encountered in QG2 appears to be part of the old path system that connected to the West side of Hope College. Records indicate that the path was destroyed between 1943 to 1950, and the entrances on the West side were blocked from entry.

Dating artifacts was challenging, but most artifacts were dated to be at least as old as the early 20th century, which correlates with the demise of the West side as an entrance. Pottery shreds with regular blue patterns (blue background color and white details) could be as old as the 1830s, based on the peak of popularity of this pattern.

Further suggestions for the study of the Quiet Green:

- Trench closer to the current path system to analyze more recent and frequent activity.
- Trench directly on the proposed old Hope College path system.
- Trench containing western corner of rectangular structure seen in the Geophysical Survey.

Other areas of the Brown University campus also have great archaeological interest:

- Southern end of Hope Green – initial site of Stone Hall.
- Corlies-Bancroft House, 65 Prospect Street, (Brown University Admissions)

We hope that future courses on the Archaeology of College Hill will benefit from our work in these areas and that interest in the material past of Brown University continues to grow.

Figure 1, 2: West side of Hope College, 1911 (1) and 2012 (2)

Figure 11: Peter and Morgan use trowels and dustpans to excavate the trench by the stairs of Hope College (QG1)

Figure 12: Context 7 of QG1, November 12, 2012

Figure 13: Context 5 Closing Shot of QG2, November 17, 2012

Figure 3: Layout of Quiet Green Survey Units

Figure 4: Alex sets up the total station

Figure 5: Geophysical Survey data on top, rectangular structure and facilities superimposed on 1770 land plat on bottom

Figure 6: Caitlin digs the antenna as Eddie assists

Figure 7: Eddie, Joey, and Chris perform the geophysical survey

Figure 8: Joey, Chris I, and Eddie excavate in trench QG1

Figure 9: Christina and Morgan sift soil for any material culture

Figure 10: Location of trenches on Quiet Green with projection of old path system

Figure 14: Ariana washes an artifact with a toothbrush

Figure 15: Linda, Caitlin, Cole, and Chris organize QG1 artifacts

Figure 16: QG2 Context 3 Ceramic artifacts with 1cm scale

FIGURE 10.1. Overview layout of Archaeology of College Hill 2012 poster (DiFabio, 2012).

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