Archaeological Survey of Center Chapel, Franklin County, Kansas

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INTRODUCTION
Center Chapel is a small chapel ruin located in a patch of trees that now lies off the southwest junction of Oregon and Pawnee Road, northeast of the city of Ottawa, in Franklin County, KS. The project undertaken was an archaeological survey of the site. Largely, the research introduced me to key surveying techniques, as well as helped to familiarize myself with archaeological fieldwork.

Archaeology focuses on the remains and artifacts of the past. Through these vestiges, the archaeologist is able to reconstruct the past. Due to the fact that history is slowly being lost when it is not being analyzed, this project was an attempt to preserve what could be gathered about a small but interesting ruin that does not receive much attention. As such, this project is extremely valuable to local Franklin County history. The final product will be presented to the Franklin County Historical Society, an organization that collects information about the aforementioned county and will inevitably find the information useful.

Dr. Philip Stinson, assistant professor of Classics at the University of Kansas, was instrumental in teaching me the proper techniques to survey this structure, as well as explaining key concepts, such as how to identify the various periods of use. In addition, my father, Mark Thomas, assisted me in measuring the walls and surveying their heights.

BACKGROUND AND METHODS
Center Chapel is currently owned by the Sims family, who live just west

Q&A

How did you become involved in doing research?
I was enrolled in a class taught by Professor Michael Vitevitch that explained the basics of undergraduate research. We were all instructed to pick a potential topic and develop some sort of research project idea out of it. I chose to look at a local chapel. After the class concluded and I was picked for an Undergraduate Research Award, I secured permission from the individuals who own the structure, and began working with Professor Philip Stinson, a professor in the classics department, on archaeological techniques.

How is the research process different from what you expected?
Originally, I thought that most of my research would be text-based and that I would be trying to locate original photographs and messages about the building. I realized that fieldwork would play a big part in this project, but at first I thought that I could survey this building in a few days. It took much longer to survey—granted, part of that was due to the weather—and my project was almost entirely based in the field; I found hardly any textual evidence about the chapel.

What is your favorite part of doing research?
The most interesting part of the research was drawing the structure. Although it easily took the most time—because I had to draw each stone by hand and then convert the image to a vector file on the computer—it was the most rewarding because I could see what I was doing. It also stretched my art skills and allowed me to grow my knowledge of archaeology, which is always something exciting.

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of the site. Much of the information regarding the structure has been lost over the course of 100 years, although the Franklin County Historical Society did have information pertaining to the building in its archives: “This stone building was an independent church known as Center Chapel, built around the turn of the century by men of the community. The Gothic style creates a picturesque ruin in fall and early spring” (Franklin County Historical Society 2001). According to the Sims family, the chapel was constructed so that new ministers who had recently graduated from Baker University would have a place to practice before they were reassigned to other churches (Sims Family 2012).

The first course of action was to scout out the site and take pictures. Following this step, I would begin measuring the structure. Finally, I planned on reproducing several key maps. The first of these would be a site map of the structure (Fig. 1). This map, illustrated as if one were looking down onto the structure, would provide a layout of the ruin and would feature various rocks, wood beams, and debris fields. Next, I would create a state drawing of one of the walls, which is an illustration of the status that the ruined wall is in currently (Fig. 2). With the information collected and recorded—the site map, state drawings, and various historical documents—I planned on reconstructing a state-elevation of the chapel prior to its ruination in graphics editing software AutoCAD. Originally, this model would have shown what the structure looked like before its ruination. However, as the project progressed, I decided to use AutoCAD to create the state drawing itself and bypass the idea of what the original structure looked like; this was largely due to time constraints, as well as the fact that my interest shifted towards the state that the ruin is in today.

RESULTS
After basic textual information about the site was gathered, the archaeological survey of the structure began. Six trips were made out to the structure between January and May 2013. During the first of these trips, the purpose was to become familiarized with the structure, its ruination, and the area that surrounded it. The trip was taken in the middle of winter to minimize the presence of plant growth. The five remaining trips were undertaken for the purpose of documenting and surveying the ruins. The site was documented in situ—that is to say, in the position of deposition that the artifacts and ruins rest. This was to ensure that the state of decay—such as areas where the walls have collapsed—were explicitly recorded, lest archaeological context be lost.

Currently, only the north and west walls of the structure are still standing. The north wall is for the most part complete, with four window cavities largely preserved (the remainder of the paper will refer to these windows by the numbers 1, 2, 3, and 4. The first window is the farthest east, whereas the fourth window is the farthest west). The third window even has the skeleton of its wooden window frame preserved (this will be expanded upon later). The west wall did not have any windows to begin with, and is one solid surface. The top of the west wall terminates into an apex. The slopes of both sides of the apex have eroded, most likely due to either the weathering of time, or the collapse of the roof. Both the south and east wall are fragmentary. The only remnant of the south wall is a single wall fragment that had originally stood between the east wall and a window. The remaining south wall collapsed long ago and the stones are missing. Local residents salvaged them for other uses; in fact, the Sims’ home is partially constructed from these repurposed stones (Sims Family 2012). Similarly, the east wall is limited to a single wall fragment that connects directly to the north wall.

Much of the surrounding area is littered with the fallen stones of the structure. Most of these stones have been dislodged and weathered for so long that it is all but impossible to tell where they originated from on the structure. Despite this limitation, there are several important artifacts surrounding the chapel. The first of these artifacts is the structure’s cornerstone. Located an average of 1.6 feet away from the corner of the east and north walls, the corner stone had been culled from the base of the structure and flipped onto its side. There is a small cavity on the side of the stone that looks as if at one time there was a small plaque or inscription stone inside it. The damage that the removal of the cornerstone did was rather severe; the entire lower portion of the northeast corner is missing and caving in (Fig. 2).

In front of the east wall are the remains of the sidewalk that led up to the chapel’s front door. Due to tree growth, most of the cement blocks that were laid in the ground have been uprooted and broken. The only remnant of the chapel’s door is a space between the vestiges of the east wall, and this space is not well defined due to the complete ruination of the east wall.

The interior of the chapel is filled with a mix of fallen rock, scattered wooden beams, and miscellaneous debris. The eastern portion of the interior is largely a tangle of said beams, many of which seem to have been deposited following the structure’s abandonment. The southern portion of the interior has developed into a mound of rocks and soil. Only the slightest edges of the south wall—largely the stones that make up the southeastern
corner—emerge from this mound. The northern part of the interior is scattered with fallen stones and wooden beams, although the beams are less densely layered than the eastern portion. Although most of the artifacts—especially the wooden ones—have been weathered, certain key finds were recorded inside the ruin. For instance, many of the wooden shards were identified as parts of the various windows’ frames. Just south of the second window are the telltale remnants of both a jamb and a window’s curved head. South of the first window, a lever from one of the windows’ pulley systems was discovered. Directly north of the second window is the remnant of a decayed jamb. Curiously, it appears that all of the confirmed wooden remains belonged to the north wall’s windows; no wooden remnants from the south wall’s windows were discovered or documented (Fig. 1).

Inside the ruin, key artifacts helped establish the various periods of use. The chapel, according to various sources, was constructed in the 1900s. This would be the first period of use. While documenting the site, it was noted that embedded wooden beams in the lower part of the chapel’s interior walls were charred and blackened, evidence of a fire. What is more interesting, however, is that many of these beams were covered by plaster that had just recently begun to crack and flake away, revealing the carbonized wood beneath (Fig. 3). This is evidence that after a fire had burned much of the original wood, someone attempted to rebuild or at least repair parts of the chapel. This is the second period of use, which I referred to as the “post-fire” period. Finally, “out-of-place artifacts” found inside the ruin—such as modern bottles, cans, gutter railing, and contemporary wood beams—as well as the currently ruined state of the structure, seems to suggest that after the repair, this structure was finally abandoned, was no longer occupied, and was used as a receptacle for unwanted objects. This is the final period of use.

Once the ruin itself was documented via photographs, it was then surveyed. Because of time constraints, a large portion of this survey focused almost exclusively on the north wall because it was both the most preserved, as well as the most interesting, due to the preserved window cavities and the artifacts surrounding it. It was decided early on to measure the entire structure using the Imperial system of measurement. Although most archaeological expeditions use the metric system, the reason that the Imperial system was utilized is due to the fact that it was the system utilized by the builder of the original chapel. It was reasoned that it would be easier and quicker—given the short period of time allotted for this survey—to use the Imperial system. The chapel measures 50.35 feet from east to west, and roughly 30 feet from north to south. The eastern end of the north wall is 15.4 feet high, and the western end is 15.29. The median of the wall is 14.42. The top of the north wall has crumbled, making the top uneven and non-horizontal. The wall itself is divided into nine segments: five wall segments, and four window segments. The wall segments measure roughly 7.25 feet wide. The window segments are roughly 3.65 feet wide.

The cross-section width of the walls was roughly two feet. Using a level, it was discovered that the north wall is beginning to cave in by a distance of about 1.5 inches in the middle. This could potentially be due to the removal of the cornerstone. Using a surveying compass, it was calculated that the structure’s north wall is situated roughly 5 degrees north of east.

The windows are all roughly the same size and measure 3.65 feet across. Due to the sloping nature of the windows, a plum-bob was used to measure the varying heights. The plum-bob was attached to a string and then dangled from the height that was being measured. Gravity would then pull the weight down, and after it stopped swinging, an accurate measurement of the height could be taken. From the peak of the window to the base measures 10.41 feet. The completely vertical part of the window jamb measures roughly 8 feet high. Below each window is a centered rectangular ledge that measures 4.35 feet wide by 0.42 feet high. The ledge was missing from both the first and the fourth windows. Furthermore, the wall segment below the fourth window had largely deteriorated.

Of note, the structure’s third window still had the skeleton of the original window frame intact (Fig. 4). Unlike the other windows, whose frames had been scattered onto the ground and deteriorated, this window frame was in remarkable condition. Due to the settling of the structure, the frame was off-center and leaning heavily towards the eastern side of the stone cavity. However, both a single horizontal grille as well as the metal latches are still connected to the frame (Fig. 5). In addition, the internal weight and pulley system that were originally used to open and close the window are still preserved within the wood, although they have long since stopped functioning.

Once the information and measurements were acquired, a site map was produced (Fig 1). This map illustrates, as if from a bird’s-eye view, all of the major walls, as well as debris fields, the location of artifacts, and orientation of the structure. After this map was created, a state drawing of the structure’s north wall was created (Fig. 2). Originally, I planned
on constructing a state drawing for each wall, but due to time constraints, the other walls had to be scrapped. All of these maps were hand-drawn onto graph paper that measured 11 by 17 inches. Great care was taken to ensure that each stone was drawn precisely where it was with respect to the walls. The illustrations were then scanned onto a computer, and, using AutoCAD, a vector image of the maps was reproduced.

**CONCLUSION**

First and foremost, the survey of Center Chapel was instrumental in locating various artifacts that had once been integral parts of the building, such as window beams and a pulley. Furthermore, the location of all of these artifacts was preserved, so that the context of the ruin was successfully documented. This survey allowed for both an accurate digital reconstruction to be created on the computer, as well as to preserve the artifacts for the future. One of the biggest finds during this survey was the discovery of the burnt wooden beams. These telltale beams shed new light on how and why the structure may have been initially ruined; prior to this survey, information regarding the chapel’s abandonment was either unclear or lacking.

This project was also invaluable to my education. Not only have I received the opportunity to practice archaeology out in the field, I have also learned key surveying techniques—such as measuring, documenting, sketching, and rendering images on the computer—that will prove extremely useful in my future career. As mentioned before, I plan on submitting my findings to the Franklin County Historical Society. I am also looking into finding a contractor to see if the damage made to the cornerstone can be alleviated so that the site may be preserved for several more years.

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**References**

Franklin County Historical Society

2001 Welcome to Ottawa and Franklin County Kansas—Driving Tours: Northeast Tour of Franklin County.


The site map of Center Chapel. South is oriented towards the top of the image. This map notes several artifacts including a lever from a window (1), an arching jamb (2), window beams with sockets for where the latches had been (3, 5), charred wood (4), and the original door cavity (6).

The digital reconstruction of the north wall of Center Chapel. Note the preserved third window, as well as the missing cornerstone in the bottom left-hand corner. The window on the far left is Window 1, whereas the window on the far right is Window 4; the window numbers progress left to right.
Carbonized wood, covered in plaster; this is evidence that the structure experienced a fire and then was repaired.

The third window, complete with frame.

The original metal latches to the third window’s frame.