Biophilia—the love for nature—is the term that explains humans “innate and evolutionarily based affinity for nature” (Building Green, 1). Humans seek this connection to nature for the entirety of our existence, and attempt to find remnants of nature in our daily lives. Harvard biologist Richard Wilson goes further to define biophilia as “a complex of weak genetic tendencies to value nature that are instrumental in human physical, material, emotional, intellectual, and moral well-being. Because biophilia is rooted in human biology and evolution, it represents an argument for conserving nature based on long-term self-interest” (Building Green, 1). Humans will fight for biophilic features because we have evolved to see the closer we are to nature, the safer and more likely we will survive as a species. Biophilia brings us closer to the systems that sustain us—food, water, shelter, and health. It is strongly connected with the mental and physical well being of humans. Without some connection to nature, the decline of these attributes becomes visibly apparent. The most significant benefits of biophilia have been demonstrated in studies concerning healing, learning, and creativity. In 1984, a landmark study quantified the benefits of biophilic designs in patient's’ recovery time—those who had views of nature healed more quickly and with less reliance on pain medication than those without natural surroundings. The Heschong Mahone Group Inc. found that schools with more daylight exposure had a 5-10% improvement in student performance. Although creativity is more difficult to quantify, many researchers claim that a connection to nature improves cognitive functioning on higher-order tasks, which can result in the ability to have greater creative thinking. The correlation between nature and health is crucial to keep in mind when establishing built environments and designing spaces for human existence.

With the benefits of biophilia in mind, it is essential that we analyze the spaces we occupy with a critical lens to acknowledge the effects of the presence or absence of biophilic features. The Denison Library at Scripps is a place I frequently use to study. Compared to many other academic spaces on campus, Denison Library seems to increase my level of productivity and decrease my level of stress that often comes with coursework. Denison Library has many areas for students to occupy. There is a southern-most room where the walls are covered in glass cases full of old texts, the windows look out to a courtyard, and the lighting is dim. The next room over has high ceilings, bookshelves, and lounge chairs scattered in front of a brick fireplace. The final room accessible to students is the main foyer of the library, which is the specific space I will be analyzing in this paper. The room is rectangular in shape, and the longest side with has an east-west orientation with windows lining it. The high ceiling is arched with evenly spaced columns, and in between those columns are windows with similar roman arches.
The columns seem to be made of a pale stone, and the windows let in a generous amount of light. The room is lined with wooden bookshelves that section off individual work areas for students to use, and each cove has wooden tables and chairs. The coves are organized in a very symmetrical fashion; in between the rows of shelves there are various display cases full of special artifacts. There are floral carvings on all of the trims of the bookshelves as well as the side casings. It is an aesthetically pleasing space and is much less sterile than most of the buildings on campus. However, it lacks much of the biomimicry that could capitalize on our inherent biophilia, and ultimately increase the creativity and productivity of the space.

There are a few features in the Denison Library that subtly call to our biophilic tendencies, and make it a more pleasant environment for human existence than most constructed spaces on campus. The room is filled with wooden furniture, which mimics our connection to the natural world and reminds us of the trees that cannot be seen inside the building. There is natural light, and through the stained glass the trees and sky are partially visible. The high ceilings allow for slight variation in airflow, and mimics the idea of an open air-space in comparison to low-level ceilings found in other buildings. Since the main foyer of the library does not contain many biophilic features, there is a courtyard just north of the room. This area correlates strongly with our biophilia, and resembles the natural world in much more explicit ways—a water feature, trees, birds, the open sky, an unobstructed view of the outdoors, wind, and fluctuation in temperature. This outdoor space is accessible to those who use the Denison Library, and is perhaps close enough that the need for biomimicry in the library itself is not necessary. However, the courtyard does not serve as a space for academic productivity; it is useful as a place for study breaks but there has to be a way to fuse our desire for natural elements within the spaces that are designated for academics. Since the library itself does not have strong biophilic attributes, students are often utilizing the outdoor courtyard to decrease anxiety or spark inspiration when motivation eventually runs out inside the building. The coves are private and provide intense spaces for academic work; yet the confined space of the coves and the perfect symmetry of the bookcases create this sense of dullness and predictability that can quell creativity and slow productivity. The lack of biophilic features ultimately makes the Denison Library feel disconnected from the natural world, and dismisses our inherent biophilia. It can be extremely trying to stay focused and productive in the space for long durations. There is much room for improvement, and a few adjustments could vastly improve the experience of working in Denison.

Two features that could be introduced to the library to increase ecological function, human connection to the natural world, and nature inspired forms or processes are renovations of
the nook areas and improved access to the courtyard. The individual table spaces of Denison are suffocating—the view of the occupant is completely obstructed and the window is difficult to look through since they are up so much higher than eye-level. There is also a harsh artificial light that hangs above the old, wooden desks that creates an artificial atmosphere not reminiscent of natural light. Although the wooden tables are biophilic, they can be improved to also allow for the presence of actual vegetation in the library. Perhaps furniture that allow for actual natural processes, like the conference table with a C-channel groove filled with wheat grass commissioned by Clodagh Design, can be installed in the nooks (Building Green, 3). The integration of plants in the furniture can allow for the actual growth of flora in the library and the potential for direct interaction with natural processes due to proximity. The enclosed design of the nooks cannot be realistically undone, but there is potential to create biophilic spaces within this generally non-biophilic atmosphere. Something as simple as putting up an image of nature or a hanging plant in the nooks could drastically improve the lack of biophilia—designating even a shelf of the many bookcases to create a plant installation could be very feasible.

Improving access to the courtyard would also be another effective way to increase biophilia in the Denison Library. Currently, the courtyard is only accessible through one door that is obscured by book shelves and is difficult to distinguish from the rest of the walls. In successful biophilic design, it is helpful to blur the transition between interior and exterior spaces. Although the courtyard outside of the library is an excellent example of a biophilic space, the current design of the courtyard’s doorway does not allow for the area to be utilized to its full potential. The path to the courtyard from within the library is uninviting, and people have to exert considerable effort to figure out that the courtyard is an accessible option. If there was a window at eye-level that looked out into the courtyard, it would make the space more visible and people would be more inclined to actually visit the courtyard. The improved access to the outdoor space will increase human connection to nature and natural processes—the library will seem significantly less disconnected from the environment. With this revitalized connection to nature, perhaps Denison will be an even more productive space that promotes the kind of balance and creativity needed to be holistically successful in an academic setting.

The need to cater to our biophilia is crucial when designing urban spaces and built environments. As we seem to become increasingly separated from the natural world, the negative impacts become more apparent. It is widely accepted that nature is good for human civilization—its inclusion in our daily lives and spaces is integral to the health of a society. Not only does biomimicry increase productivity, promote healing, and foster learning, it is also at the core of building a lasting environmental movement. The inclusion of natural processes in artificial spaces cultivates a crucial appreciation for nature that will lead to our desire for its conservation and preservation. Apt attention to biophilia increases the potential for education about natural spaces and the importance of conservation—undoubtedly something that we have to consider when looking at the future of the planet and the role civilization will play in constantly changing circumstances.