Today, designers are everywhere. Designing, as a field of study, is growing rapidly. People aspire to become designers. Design is an industry, it is a sought after degree, it is a lifestyle, it as an art form. Most importantly, though, is the fact it is ever so young. Designing, as we know it, has not been around for many years. Surely people have been designing and creating objects and products for centuries, but design has only recently become a predetermined process. That process has certain “dos and don’ts” that are held in high regard by many people. There are rules to designing. There are even rules that some may refer to as laws of design.

Some of these laws were first written by Christopher Alexander in his 1964 book, *Notes On The Synthesis Of Form*. Alexander’s book was a watershed to the design community of the 1960s. In it, he set forth a series of reasons why design was, in fact, in its infancy. He then explained why a proper form of design thought was necessary to the betterment of the design community. He then went into detail of why the need existed, what created it, and how it could be remedied. The book then provided a detailed process of how to go about fixing the problems of design.

This report will perform two separate functions. First, it will look to summarize Alexander’s work and clearly define why it was so important to the growth of the design community. Next, it will analyze the aspects of the book which were deemed the most influential and which should still be considered by today’s admittedly advanced designers. It has been many years since Alexander’s book was first published, but that does not mean it does not provide important insight for today’s community.

**Summary**

Christopher Alexander’s book, *Notes On The Synthesis Of Form*, was split into four sections, including an introduction and two extensive sets of appendices. The main sections of the book were fittingly entitled “Part One” and “Part Two.” It is in these two portions that he constructs his most compelling arguments. Each of these portions is itself split into smaller chapters, each focused on a different aspect of design’s history and processes.

Part One of *Form* is comprised of four separate chapters. The underlying theme of Part One is the history of the design process. Each of the subsequent chapters is a look at where design comes from, why it exists, and why it exists in the manner that it does. These chapters are, in order, “Goodness of Fit,” “The Source of Good Fit,” “The Unselfconscious Process,” and “The Selfconscious Process.”

The first two chapters of Part One are very compelling. While “Goodness of Fit” and “The Source of Good Fit” may sound like awkward titles at first, Alexander quickly assuages any doubt of his mastery of these, and subsequent, design terms. Early on he lays down a powerful precedent for the rest of the book, and unknowingly for designers for many subsequent years, by stating that “when we speak of design, the real object of discussion is not the form alone, but the ensemble compromising the form and its
context.” This statement becomes more powerful when he places it into the context of design’s historical origins.

Alexander goes on to argue that this “goodness of fit” comes from an historical context that still exists in certain parts of the world. The idea that some things simply fit and that others simply do not comes from a more simple time. The example he uses are in the huts and teepees of African tribesman and Native Americans. The men who build these constructs have been doing so for generations. They learn how to make them from their fathers. It is a skill they all possess. Over the generations they have perfected their craft. Their dwellings perfectly fit their needs and their resources. This is evident, but the most important part of his argument is when they don’t work.

When a crack appears in the mud wall of an African hut there is a problem. It is evident to the person who built it and who will subsequently need to fix it. What is different between the tribesman and the modern designer is the way they tackle the problem. The designer would seek to analyze the situation and consult numerous options and opinions. The tribesmen will go ahead and fix the problem. He will not contemplate alternative methods. He will find a solution that fits his needs, he will implement his solution, and he will remember his solution if the problem arises in the future. He, too, will then pass that knowledge on to his son. After generations of fixing so many problems the African tribesman will unwittingly have become a master designer. No formality is necessary, yet he will be able to design a dwelling that perfectly fits the needs of his surroundings and will be stable and adequate. It will be a good fit. If it is a bad fit, he will again fix it without question.

The third and fourth chapters, “The Unselfconscious Process” and “The Selfconscious Process,” respectively, go into further detail as to the origins of these processes. They explain the historical context of why the African tribesmen, along with other populations, have become such masters of design. It is in these chapters that Alexander details why today’s designers have trouble creating designs that fit their needs.

His analysis of these people circles around the fact that they are simply unselfconscious cultures. When an Eskimo’s igloo melts during the day and he must repair it at night, he does not think of what anyone else will say about his newly reformed igloo. The African tribesman will not worry if his mud hut needs a new patch applied to the outside and what his fellow tribesman will think of him for needing to fix his design. They simply make the necessary changes.

The most compelling example Alexander uses is that of Slovakian peasants who, during the early parts of the 20th century, were famous for making ornate woven shawls. They were prized the world over for their intricacies of pattern design. When chemical dyes were given to the peasants their shawls became ugly. They lacked the same luster and beauty. The fact was that the shawl makers were simply able to recognize badly woven shawls. They never thought of making a pretty shawl. They thought of not making an ugly one.

The main reason selfconscious designs differ from unselfconscious ones is that once someone becomes conscious of their own design they seek to make it their own. They create something that is to be called theirs and theirs alone. It is their personal achievement as a designer. This creates a need to break free from tradition and create unique objects, even if they are failures in design. The idea that a single person can create something out of nothing is a lie. We must all help one another to culminate ideas
and create designs for the betterment of all. One way to alleviate such problems of selfconscious design is to create diagrams of the true problem at hand. It is these designs that form the framework of the second part of the book.

The second part of Form is also divided into four chapters. These chapters, “The Program,” “The Realization of the Program,” “Definitions,” and “Solution” all focus on separate aspects of the diagram creation process. These processes are very in depth and quite technical. They very frankly would not be done justice in a textual summary of their message. In fact, it was difficult to understand most of their messages as they were presented in the book. Much mathematical jargon was used alongside confusing graphical representations of the text. The message was so convoluted and so difficult to discern that much meaning was lost. However, it is generally these processes that Form is remembered for. This means that at least some summary is required.

The most important thing to remember from the first chapter of Part Two is that, as we seek to create more complex designs in an increasingly selfconscious culture, we must create each subset of the process within the entire context of its function. This may sound confusing but it basically means not to forget any possible use or form the design may encounter. We must make sure that our designs completely fit within the intended context of the product’s use. This may sound like a daunting task, but it is (or at least was) commonly overlooked. Most products were designed with one use and one context in mind.

The second chapter, “The Realization of the Program,” is one of the better chapters of the book. It graphically displays the need for design diagrams. Good examples of proper diagrams are utilized to good effect. The best example is a traffic flow diagram which, when actually drawn, inevitably creates the actual road design plan for the highway required. It is an ingenious way of showing the reader exactly why these diagrams that Alexander is proposing are important to proper design.

The third chapter of Part Two is the most difficult to comprehend. It is in “Definitions” that Alexander employs many, often cryptic, mathematical formulas to legitimize his argument for diagram use. This chapter offers little to the design process besides in depth formulas which claim to “prove” why these diagrams work and why they are significant. Whether they are or not becomes borderline obsolete when considering the entire context of the book.

The final chapter, “Solution,” is where Alexander pulls everything from Part One and Two together. It is here that he ties the importance of historical and cultural context together with the use of diagrams. It is, essentially, his final call to the design population to heed his message. Alexander effectively makes his last couple of points, but some of his message is again bogged down by mathematical formulas. Luckily, at least in my printing, there is an Epilogue and two separate sets of appendices for each part of the book.

The Epilogue is an interesting addition for a book such as Form, which has been reprinted numerous times since 1964. In it, Alexander acknowledges the fact that his book had a huge impact on the design culture. He also admits it was an unintended impact. Apparently, after the book’s release, many designers focused heavily on the creation and use of design diagrams. He goes on to admit that he originally intended most people to use his advice on cultural contexts more than the diagrams. It is a nice addition that helps identify and truly clarify the author’s intended message, something
Critical Analysis

Reading Notes On The Synthesis Of Form was an assignment that I do not regret. As a burgeoning design student I found the book informative, not only for its historical perspective on the design community, but also for its actual content. After finishing the text it took me a while to fully comprehend everything I read about. It is apparent very early on that Alexander uses a more verbose style of writing that many today may find difficult to follow. To this end, once I sat and thought everything over I realized there was much that is still relevant to today’s design community.

On top of providing a deep analysis of the state of the design community in the 1960s, Form provides the reader with a rich understanding of many important aspects of design that are now taken for granted. There were certain portions of the book, sometimes simply sentences, wherein I could see where certain design philosophies possibly branched off. The most notable, and one that was mentioned earlier in the summary of the book, was designing for the complete context of the product. We currently learn to think of an end product as a complete experience or never to alienate a potential user. It is these types of thoughts that I imagine sprung directly from books such as Form.

While reading through the book I took particular interest in Alexander’s deep analysis of culture and the historical context in which design originated. I felt it was a solidly written and informed look at the origins of what we now today take for granted. We are often taught to “think outside the box” today and reading about why Alexander thought it better to return to the historical methods of old was fascinating. Not only did he pose such arguments but he also presented very convincing reasoning as to why such design was better. It was these points that Alexander intended people to take to heart and consider when creating their own designs. However, as he acknowledged in the Epilogue, most designers built a school of thought around his diagram creation process.

I agree with Alexander that the sections on design history and culture are the most important portions of the book, but I can also see why the design community focused on the diagramming portions. It is clear how these processes for diagram creation laid the groundwork for future prototyping processes, like beta programs and paper prototyping. Creating diagrams and mockups and putting ideas down on paper is clearly a stalwart step in the design process today. It is important to understand where this process comes from, historically, and why we deem it necessary to do so as a culture. However, I do not believe drawing a picture of your intended design was really as groundbreaking of an idea as considering the cultural, historical, and future context of your potential design.

In the end, I believe that Notes On The Synthesis Of Form is a book that simply needs to be read. It can be easily found on Amazon.com for as low as $13. It is a quick read and a quality one at that. If it is not read for its unique place in design history, then it should be read for its unique inspiration and reasoning behind design. It is no wonder that Christopher Alexander’s book became a cornerstone of the design philosophy. This alone makes it a must-read book by any good designer, student or professional.