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De Facto

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DE FACTO

DESIGN CULTURE IS EVOLVING INTO A DATA-DRIVEN CULTURE.

We see this all the time with projects such Aedas Al Bahr Towers, anything by Kieran Timberlake, or maybe even the nearest Panera. There seems to be so much information in this world, that we are forced to reduce it down into a manageable byte of space. At this time though, is seems that architecture students must take advantage of the colossal amount of information available to us. Whether the information is credible, reliable, or extremely tedious, this information is evolving into our cultural identity. But taking in all this information while learning to make architecture is no small task. In a design culture over-saturated with information, how can design students learn to work with data while learning to maintain the kind of beauty and stability that is characteristic of architecture?

Many students find themselves studying design if they are visually oriented. When information comes to us in the form of lots and lots of numbers, students have to figure out ways to change a digit into a visual cue, so that other designers are able to quickly understand what these records mean.

DESIGNERS DEFINE DATA

While this understanding seemed to make sense in theory, I hadn't come across the right project that would teach me to understand how to change data into real-life experiences. In February 2014, I conducted an interview with the principal of the Dutch research firm AMO. While the interview questions themselves were geared towards getting feedback on the themes of Datum No. 5, I realize now that Reiner de Graaf's responses would be much more substantial in helping me understand the role of data in design school. Retrospectively, what resonates the most from my interview with de Graaf was the way that he spoke about the project he traveled so far into the USA to present. The project was called "Foresight in Hindsight", and it sought to populate a database of historical predictions. Each prediction was then sorted into "True","False", or 'Kind of Both' categories based on the eventual validity of the historical "predictions". Then using these categories, de Graaf and his students cross-examined the different categories based on their content, in order to demonstrate the powerful understandings about the past, which could be gained from using the Foresight in Hindsight database.

The project helped me realize that another way to understand data is to think of it in terms of history. In the architecture program at Iowa State, we are bombarded with history classes at the beginning of our education. This is for a reason, because evolution and iteration in design can only be based off a prior experiment, or a previous understanding. History tells us what worked and what did not. Furthermore, data by definition is historical… no scientist will ever use data to publish findings unless it is rooted in proven evidence. As a result, reviewing a spreadsheet is like reviewing history through a different lens.

INSIGHT IS INTERPRETED

After his first lecture, I sat down with Reiner de Graaf and asked him my three questions, they were:

"One conclusion of "Foresight in Hindsight" is that a subject does not usually successfully predict its own future. Similarly, many students feel a pressure to find an area of emphasis in order to find success. Would you define this phenomenon in architectural education as fortune telling? Is this a beneficial or limiting act?"

Architecture students build their own database of influences in order to form their definition of success. In your experience with defining false and truthful predictions, how could architectural students learn to define a successful path in the many domains of architecture?

The project is divided into 5 subjects and 5 fields. If you had to define a few observable fields and/ or subjects in our current architectural education, what would they be? Do you think they would be accurately able to predict the future of each other, given that they are versions of themselves?

I thought that I had nailed down an opportunity for some really great feedback from a partner in one of todays most successful and respected firms. Instead, de Graaf gave me a series of answers that were directed more towards his curiosities with Iowa, and his confusion as to why we all thought he was so cool. Finally, after a couple of responses de Graaf provided me with the next bit of insight as to how I would learn to manage data as a designer. As the creator and organizer of the "Foresight in Hindsight" project, Reiner de Graaf did not want to be regarded as a fortuneteller. He did not want to make predictions about architecture school or the merit of one skill-set over another.

As the interview was winding down, de Graaf wanted to make sure that I, along with all of my peers, understood that this project was not meant to be a tool for speculation into the future. Rather, the database was simply a methodology, or a way to understand history in a data-like form. Regardless it is clear that the way in which data becomes content is entirely reliant on the one who interprets it.

FIGURES TAKING ON FORM

By now, I've argued that designers must find their own way of thinking about data, while maintaining an understanding that their interpretation will inherently affect the way a project will manifest.

A good friend pointed out a crucial difference in data-driven design, which seems to be the final lesson in learning to handle information while designing.

The first semester of the architecture program at Iowa State teaches students to design environmentally specific building features. A building's latitude directly influences the depth of a louver system, or a spatial arrangement aimed to naturally ventilate a house. This type of information based-design is visible to anyone equipped with this understanding. To further this type of understanding, at Iowa State we also spend the same semester memorizing notable vernacular designs. Historical precedents such as the thick masonry in Southern Italian churches or

Icelandic turf-home techniques show us how to recognize numerically based environmental design strategies in real life.

Architecture students are typically visually oriented, meaning that other types of data-based design are a bit tougher to identify. That is not to say that these types areunfamiliar though, after all, the data collected about our consumption patterns online is also another form of data-driven design. Demographics and consumption metrics tend to be what motivates the very clients that architects are hired by. For example, a restaurant owner will hire a designer to create a certain kind of atmosphere, if they know it will bring in a crowd with fatter pockets.

What's beautiful about this second notion is that there are as many design opportunities in creating ambiance as there are interests in one person's head. While projects such as "Foresight in Hindsight" may give us a data-based concept of history, it is still up to the designer to interpret it. Because lets be honest, no one can actually predict the future, but we can create architecture that sets the backdrop for what is to come.

By Isabelle Leysens