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Intro to intuitionistic design: How to bridge intuition to rationality in a design process

As designers, we often count on intuition as one of the primary design tools when addressing a design challenge, but what about rationality and logic? How can we combine logic and intuition to make effective design decisions?













"If he is a good designer the form he invents will penetrate the problem so deeply that it not only solves it but illuminates it." — Christopher Alexander Kevin Cyr

"
Notes on the Synthesis of Form" is a masterpiece written by Christ
opher Alexander. In his book, Alexander discusses concepts of form and context through the lens of complicated design problems.

Complicated design problems are the challenges that deal with multiple stakeholders, unknown requirements, rapid changes, etc.

Suruchi Biyani

Rings a bell?

Isn't that the definition of a challenge that we, as designers, have dealt with

at least once in our professional life?

Let's just take a moment and acknowledge that Alexander wrote "Notes on the Synthesis of Form" more than 50 years ago. So how is it that we still don't understand the complicated nature of a design process? Why do designers and developers still fight over the roles of logic and intuition inside an organization? Is there a secret design framework that can address these issues?

These are some of the questions that we try to address in this post.

Intuitionistic Design

Do you know how intuitionistic logic is different from the classical logic? Constructive, or intuitionistic, logic is an approach where mathematics is considered to be purely the result of the constructive mental activity of humans. That means counterexamples cannot be used when discussing the intuitionistic logic.

Diego Baigorri

How does it relate to design? Nowadays, the complicated nature of the design problems and the great amount of work that has been done by previous designers often force designers to discuss misfits to prove why their design solution will work.

But this approach is limiting the concept of **design** as a **liberal** art by forcing the stakeholder and consumers to believe that the proposed design solution is the only solution that will work because the other solutions are not appropriate or do not work.

What I'm trying to recommend here is to think of intuitionistic design as a flexible guideline, not a framework, and follow it in your design process, instead of persuading the audience through discussing the counterexamples and misfits. In other words, let's discuss what will work and why it will work.

Nicky McCatty and Panos Makris

This is our ethical role, as designers, to discuss the possibilities and think outside the box, instead of discussing impossibilities and giving up to the boundaries.

Suruchi Biyani and Shanti Hadioetomo

 $\label{lem:combination} \textbf{Intuitionistic design is the combination of incremental and iterative design.}$ This simply means

Diego Baigorri Suruchi Biyani and Lother

- keep your thoughts flexible when coming up with a ground for your design
- Put the bricks of your solution through building trust with your target audience
- Train your mind to come up with flexible grounds for your design that acknowledges the boundaries as well as the opportunities that exist beyond the border of our accumulative knowledge and rationality

But only a good designers can do that!

Who is a "good designer"?

A good designer is a designer who acknowledges her perspective!

Shanti Hadioetomo

Human-centered design does not mean that the perspective of designer herself should be eliminated from the design process. On the contrary, it means a good designer is a designer who accepts the responsibility of the decisions she makes throughout a process. A good designer uses intuition to form the rationality behind the requirements and constraints of a problem space she is trying to address. She deals with ambiguity of a design space and defines the appropriateness of a design solution using intuition while

Shanti Hadioetomo, Kevin Cyr, and 2 others

utilizing rationality and traditions to define the constraints and requirements of a project.

A good designer acknowledges logic and intuition by accepting the impact of her own perspective!

Marius Haugen, Dana Lyons, and 1 other

Self-consciously or unself-consciously, the design traditions are part of a designer's perspective. Formative research and design frameworks are part of the these traditions that impact both intuition and logic of a designer.

However, a good designer

· acknowledges the role of tradition

Panos Makris

• envisions the boundaries of tradition

Panos Makris

• utilizes the traditions to address a design challenge

Panos Makris and Diego Baigorri

That means a good designer tries to predict the cascading impact of her decisions and acknowledges them.

Claudio S

It is equally important to consider to understand that a good designer can effectively think outside the box if she knows what is inside the box and understand the boundaries of created by the box.

So Alexander is indeed right when he says the form will penetrate the problem so deeply that it not only solves it but illuminates it when it is invented by a "good designer", he just assumes that we all know who a good designer is [wink].

Of course other factors contribute to formation a good designer, but these two simple, yet complicated, factors are the **must haves** in order to accomplish the intuitionistic design.

Summary

- Rather than looking for a design framework, we need to look for flexible design guidelines.
- A flexible guideline needs to support intuitionistic design.
- Intuitionistic design includes both logic and intuition and acknowledges and accepts the perspective of designer in a design process.
- Intuitionistic design is a powerful tool that helps designers think
 outside the box by understanding the context of the box itself. It
 discusses the possibilities, rather than focusing on misfits and
 impossibilities.
- A good designer acknowledges her perspective and its impacts.
- A good designer uses both logic and intuition when addressing a design challenge.







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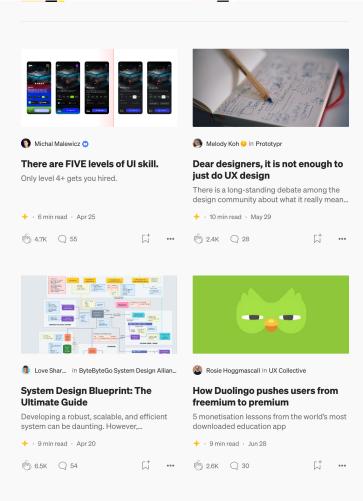


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