The Design of Everyday Things by Don Norman

General Reflection:

The Design of Everyday Things is one of those books where, after you read it, you look at the world in a new way. Even my thoughts about something as simple as a door have forever been changed and enhanced.

I see design everywhere I look now, especially when I’m on a website or using an app. And being more aware of design has added new layers of depth, complexity, and connectivity to how I think about things.

Key Takeaways:

**The concepts of design and design thinking apply everywhere**

* *“All artificial things are designed. Whether it is the layout of furniture in a room, the paths through a garden or forest, or the intricacies of an electronic device, some person or group of people had to decide upon the layout, operations, and mechanisms.”* (p. 4)
* *“Not all designed things involve physical structures. Services, lectures, rules and procedures, and the organizational structures of businesses and governments do not have physical mechanisms, but their rules of operation have to be designed.”* (p. 4)
* It’s clear to me now, after reading this book, that learning about design does improve your perception of the world and gives you a better appreciation of everything around you, and the thought that went into how it was made.

**The practice of design involves the technical knowledge of how things work combined with understanding how humans work**

* It’s one thing to make something that’s functional, and it’s another thing to make something that is both functional *and* usable.
* *“Design presents a fascinating interplay of technology and psychology, [and] designers must understand both.”* (p. 7)
* *“Good design requires good communication, especially from machine to person, indicating what actions are possible, what is happening, and what is about to happen.”* (p. 8)

**The seven fundamental principles of design**

* (p. 10, 72)

**Don’t blame the person. Blame the design.**

* *“We design equipment that requires people to be fully alert and attentive for hours, or to remember archaic, confusing procedures even if they are only used infrequently, sometimes only once in a lifetime… Then we wonder why there is failure.”* (p. 163)
* The onus is on the design, not on the person. This was a big shift in our thinking about design, and it is largely thanks to Don Norman.
* Keep in mind, when you do come across something that is poorly designed, don’t stop at blaming the design. Think about how you could make it better.
* *“Don’t criticize unless you can do better.”* (p. 73)

**Hindsight vs. foresight**

* This section comes from a chapter in the book about investigating errors and understanding how they occur. This quote I found interesting not only in relation to design, but also for the way we investigate and understand current or historical events in general.
* *“Hindsight makes events seem obvious and predictable. Foresight is difficult. During an incident, there are never clear clues. Many things are happening at once: workload is high, emotions and stress levels are high. Many things that are happening will turn out to be irrelevant. Things that appear irrelevant will turn out to be critical. The accident investigators, working with hindsight, knowing what really happened, will focus on the relevant information and ignore the irrelevant. But at the time the events were happening, the operators did not have the information that allowed them to distinguish one from the other.”*

**On conversation**

* I enjoyed this section on understanding errors using conversation as an example. The type of conversation he describes here is also a good reminder of how healthy and enjoyable conversations take place.
* *“Consider a conversation between two people. Are errors made? Yes, but they are not treated as such. If a person says something that is not understandable, we ask for clarification. I fa person says something that we believe to be false, we question and debate… We ask for more information and engage in mutual dialogue to reach an understanding. In normal conversations between two friends, misstatements are taken as normal, as approximations to what was really meant. Grammatical errors, self-corrections, and restarted phrases are ignored. In fact, they are usually not even detected because we concentrate upon the intended meaning, not the surface features.”*

These next few quotes, all having to do with design thinking, I believe speak for themselves.

**In design, the secret to success is to understand what the real problem is**

* *“Engineers and business people are trained to solve problems. Why would anyone ever give them the wrong problem?.. The real world is not like the university. In the university, professors make up artificial problems. In the real world, the problems do not come in nice, neat packages. They have to be discovered. It is all too easy to see only the surface problems and never dig deeper to address the real issues.”*
* *“The hardest part of design is getting the requirements right, which means ensuring that the right problem is being solved, as well as that the solution is appropriate. Requirements made in the abstract are invariably wrong. Requirements produced by asking people what they need are invariably wrong. Requirements are developed by watching people in their natural environment.”*

**Questioning the obvious**

* *“I am particularly fond of ‘stupid’ questions. A stupid question asks about things so fundamental that everyone assumes the answer is obvious. But when the question is taken seriously, it often turns out to be profound: the obvious often is not obvious at all. What we assume to be obvious is simply the way things have always been done, but now that it is questioned, we don’t actually know the reasons.”*

**Failures = learning experiences**

* *“Failures are to be encouraged—actually, they shouldn’t be called failures: they should be thought of as learning experiences. If everything works perfectly, little is learned. Learning occurs when there are difficulties.”*