### Chapter 1

#### Andrei Rolando Leon Salas

September 11, 2020

# Part I Summary

In the first chapter the author speaks about how the language is a wonder of the world. Is really important in order to transmit ideas, concepts and events among others things. Sounds as incredible as telepathy or mind control but it is not. Looking the concept of language outside of the box, instead of taking it for granted, make us amazed of all the complex things that happens in order to be able to use the language.

At the beginning he refers that with only making sounds with our mouths, we can transmit precise ideas to others begins that understand the language.

He show us, the readers, that he can do that with the writing and listening skills. He show us 3 different fragments.

in the first one i imagine as if it were a documentary, even hear the voice while Reading, how the octopus male tries to mate with a female of his species, and how the "act" is done.

The second one i imagine the specific infomercial, showing me how to clean a White suit with soda

The third one i imagine the situation, the people, even the tone of how Tad said "I love you". Is a couple that Dixie thought that Tad was dead but it was not, but now Dixie is married with Brian and also that the son is not Brian's son, but Tad

With this examples he explains that he transmitted knowledge to us without us needing to experience it. Even secrets of the drama All My Children with millions of people. And even if we need read/write skills, it let us communicate thought time, space and acquaintanceship.

He explains that the human being is an "impressive problem solver and engineer" to explain we are a clever species, captured in the story of the Tower of Babel, which even God felt threatened of us as with an only language we could improve a lot our intellect as a specie.

With communication we can share knowledge, coming from genius, trial and error or lucky accident, so we can all have that information without getting it in first hand, empowering the race as a whole.

Language is important that people always use it, even if there's nobody around, speaking to ourselves, as we can express our self with it. Aphasia for example makes the family feel like the person is lost forever.

The book is about human language, but not of his grammatical rules, instead of a more basic point of view. With the relativity new Cognitive science, there has been big advances in the language, and we have become experts in the topic. And he is going to transmit that knowledge to us via his book.

With the new information we have more understanding of the language and its role. Some people claim that is the most important cultural invention, and it is what separates human from other beings. Depending of how the individual learns a language affects his ability to construct grammatical sentences, as for example English is sometimes contradictory and difficult to learn, because it is not as rational as it should be. Book's objective is to convince us that all of this is wrong because language is not an artifact, is not something that we created, instead is part of the biological makeup of our brains.

As complex as language is, we learned to speak it as a child without conscious effort, in the contrary of others skills that we need to learn and do it consciously. That's why he claims that we learn by instinct, a knowledge we have just implanted in our brains, so language is a unique ability to the human being as breathing for a lot of living beings.

This concept was first articulated by Darwin at 1871, in The Descent of Man he did some observations:

- Language is an art, even is is thought different languages, as a base, all humans has a tendency to speak. It can not be a true instinct as every language have to be learned, but differs with ordinary arts, with babies trying to speak babbling, but no child has the instinct to bake or write
- In the modern time, philosopher supposes that language has been slowly and unconsciously developed by many steps, instead of thinking that language has been deliberately invented
- So Language is "an instinctive tendency to acquire an art"

William James extended this, explaining that as animals, we also have all the instincts as others animals, but our flexible intelligence comes from the interplay of many instincts competing, and asking why of any instinctive human act. For example why we smile when we are happy, instead of scowling. People normally answers Of course we smile, of course we love, but they don't rationalize about it, it is what is is.

As mysterious as some animals instincts may be, our instincts are not that different, as we also feel good when we follow them. We even speak without realizing what we said and embarrass ourselves because we just do it, eluding our mental censors.

Noam Chomsky argued that there were 2 fundamental facts about language:

1. Every sentence a person said is a new combination of word in the universe, so it cannot be an action-reaction effect, instead is a recipe or program that can generate infinite sentences with the words the persona knows

2. Children develop complex grammars skills rapidly and without formal instruction, so children should come with an basic Universal Grammar that helps them learning the language (no matter which one)

Chomsky also said that was curious how everybody have for granted how the physical structure of an organism is genetically determined, with all the variations that there are as size, rate of development and even external factors change human himself. In the same way is generally assumed that social environment is the dominant factor in the human cognitive systems, but when seriously investigated are as intricate as the physical ones. Based on this proposes that language should be studied as complex as the body. With this Chomsky and other linguists proposer that there's a Universal Grammar below all others. Actually there's thousands of more people studying the cognitive system and, thus, language.

The book is deeply influenced by Chomsky, but is not the story that Chomsky would said, as Chomsky argue against Darwinian natural selection, but author thinks that it is a evolutionary adaptation as any other.

#### Part II

## Personal opinion

I found this part interesting, as i never stop myself to think the language as something rational of instinct. I feel curious how the author is going to go deeper in the topic and argue why language is something biological and instinctive instead of something rational. I first thought as we need to be rational to be able to speak, as one of the things makes the human being different from animals is his ability to think. But as i finished the chapter i started to thing, well what if being rational is also something that started as a instinct.

To be honest, i need to think more of this topic as i only started today to thing about this specific topic, and normally i try to learn from different points of view before having a concussion for myself. Also i can connect how this concept of language relates to the one in programming, as right now my opinion is that computer language is something completely artificial created by us, and cant see how instinct could related to something so artificial.

Finally i think Pinker could have a biased opinion as himself wrote that Chomsky had a power full personality, but not as much as it could, as he at the end explains that differs with him in various topics