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# SXSW 2017 | A glimpse into the Future of Affective Computing

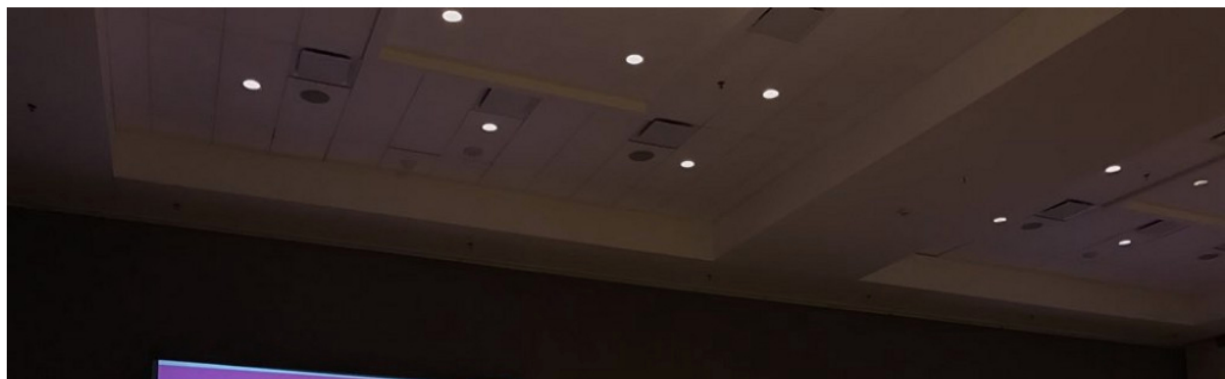


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Last week, I had the chance to be in Austin, Texas, for [SXSW](#) — as a visitor but also as part of the advisory board jury for SXSW Interactive Innovation Awards 2017. As part of my journey into the future, I attended some insightful conferences for Lost Mechanics. Here's a glimpse into the key learnings I got from an excellent conference on machines & emotions.

## Designing Emotionally Intelligent Machines

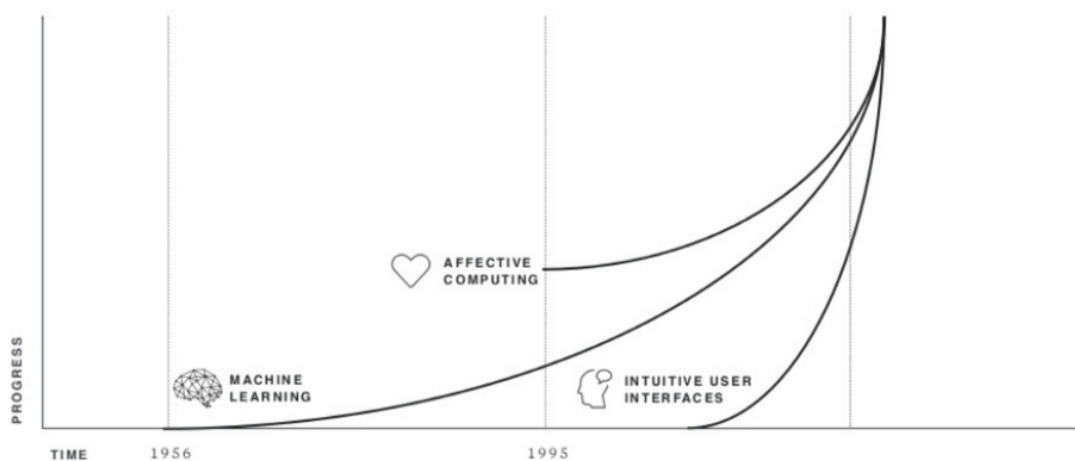




On the first day, Sophie Kleber, Product Innovation Director at Huge Inc., presented an inspiring keynote about Affective Computing. As Artificial Intelligence and Machine Learning slowly evolve into more mainstream concepts, she exposed her vision of how to design machines and intelligent services that would be closer to BayMax, rather than Ex Machina.

Affective Computing makes it possible to build intelligent yet empathic experiences. To expose her theories, Kleber shown how her experimentations humanise brands, through emotionally intelligent user interfaces, making their personality more tangible than ever.

#### WE ARE AT AN INFLECTION POINT



Throughout the history of design, there have been many examples of emotion / affection-oriented products (think about how “friendly” some of our daily objects are, or how leading tech brands achieved to make technology look less scary, so that the most sceptical ones of us would still adopt them after all).

So why is it so important to design emotionally intelligent machines, now?  
We have reached the end of the “terminal world”: today, we are at an inflection point where the evolution of Machine Learning, Affective Computing and Intuitive User Interfaces converge towards the same point.

#### INSIGHT

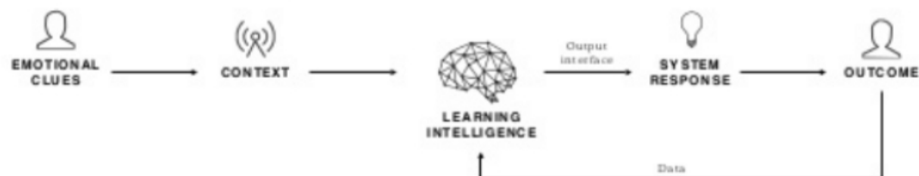
## When machines talk, people assume relationships.

The majority of the group was expecting some sort of friendly relationship with their conversational UI.

Expectation range from empathy to emotional support to active advice. The friendly assistant, acquaintance, friend, best friend, and even mom.

One person had named their Echo after their mom, one person had named it after their baby.

As emotions are a quite complicated to apprehend from a theoretical standpoint, Kleber conducted a survey to understand our relationships with machines. Through an open discussion, she studied how people who own an Amazon Echo or Google Home considered their intelligent assistant. And well, it seems that we tend to consider our machines as “friends”. Surprising? Not so much, when we think about it, we naturally expect these relationships to get close to what we know as human beings, empathy.



So how to design systems that act (and feel?!) just like us? First by detecting our emotions, so that it knows how to react to us (through facial and voice recognition, or biometrics). Adding the context gives machine the keys to build their response. But still, an ethical approach needs to be added to the overall experience.

*As Javier Hernandez from the Affective Computing Group at MIT Media Lab said, "Affective Computing is like nuclear power. We have to be responsible in defining how to use it."*

Before creating such advanced softwares, we need to have a scientific understanding of how human cognition works, and well, we're not quite there yet.

#### 3 REACTIONS

### 1. React like a machine.

Acknowledge emotions in decision making process.

Output is completely emotion-free.

### 2. React like an extension of self.

Acknowledge / interpret emotions. Expose, empathize.

User is in control of changing emotions.

### 3. React like a Human.

Diagnose and interpret emotions. Give advice, or automatically trigger actions to change emotions.

User agrees to let machine manipulate emotions.

On how to design such emotional experiences, that still respect our human nature, Kleber suggest a framework for doing the right thing. It starts with understanding the user's desire for emotion, and getting his permission to play with his emotions, in order to give him the proper emotional response.

#### DESIGNING EMOTIONALLY INTELLIGENT MACHINES

1. An agreement on intentions.
2. Design what can be understood.
3. A gradual progression of intimacy





Through such emotionally intelligent machines, Kleber identified 3 impacts:

- User expectations will shift: natural, emotional interactions will become the norm in ubiquitous computing,
- Brands will be able to form much deeper connections with people,
- A thorough understanding of emotional psychology will become mandatory in the design field.

*“Ten years down the line, we won’t remember how it was like when we couldn’t just frown at our device, and our device would say, ‘oh you didn’t like that, did you?’” Rana el Kaliouby, CEO at Affectiva*



Before we get there, I hope we’ll remember that even the cutest machines can be deadly anti-human predators ;-)

Artificial Intelligence   Machine Learning   Emotional Intelligence   Design   Technology



12 claps



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