ADVANCING INTERACTION
Synthesizing Theories on Users, Design, and AI

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How can theory help us rethink and advance interaction?
A guiding goal of this workshop is identifying theoretical frameworks that can help us rethink interaction.
A guiding principle for this workshop is identifying theoretical frameworks that can help us rethink interaction. But what does it mean to help us rethink interaction?
How do we use theory, through frameworks or operationalization, in the design process?
In this talk, we’re going to look to the constructs of users and human-machine relationships to work through how we might use theory in rethinking interaction design.
INTERACTION OUTSIDE THE USER
One of the guiding questions in this workshop asks us, how can we create interactive digital environments that are flexible enough to support appropriation by end users?
Well, let’s start with the end users.
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Design in HCI often starts with asking, **who is your user?** However, we need to ask ourselves **if this is the right question.** What are we talking about when we focus on the end user?
To home in on what it means to interrogate the construct of the user, let’s take a look at Intersectional HCI.

INTERSECTIONALITY TAKEAWAYS

The user is an overloaded construct. There are many different people with various gender, racial, and SES backgrounds who are using and experiencing technology in various ways.
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Some of these users have overlapping marginalized identities that result in experiencing bias in unique and varied ways, even in the things we design and research.
Coming back to the question of appropriation by the end user, what do we do with the overloaded construct of the user?
Post-Userism suggests we abandon it.

Baumer and Brubaker explain that a “fixation on the user limits our ability to see other configurations of interaction with computers.”
Rather than limiting ourselves with a focus on end-users generally, we ought to start with particular experiences from diverse sets of people focused on flexibility and appropriation.
AGENCY IN MACHINE-USER PARTNERSHIPS
The other guiding questions for this workshop ask us about **combining human intelligence with artificial intelligence**, and about varying levels of **control in human-computer partnerships**.
An important aspect of these questions is the relationship, or partnership, between human and machine.
But these partnerships are difficult to create, maintain, or understand.
Part of this difficulty is **understanding** the **agency of computers**.
To walk through this, I am going to overview my forthcoming CHI publication about race, chatbots, and AI, titled, Let’s Talk About Race.

This research is about taking the first steps towards more just AI chatbot technologies.
By drawing on technologies, theories, histories, and experiences, we can look at a specific problem space like race and chatbots to understand why it is so hard for chatbots to talk about race.
By drawing on technologies, theories, histories, and experiences, we can look at a specific problem space like race and chatbots to understand why it is so hard for chatbots to talk about race. And, we can use these insights to develop strategies for handling race-talk in new and improved ways.
One of the main struggles with this work was tying theories and social systems to specific technical configurations.
One of the main struggles with this work was tying theories and social systems to specific technical configurations. In other words, connecting the agency of social systems to the agency of the machine.
Once we developed these connections, we were able to take seriously the agency of machines, and make sense of the impact their agency has on creating different interaction outcomes.
Linking **theory** to specific technical configurations **enabled us to rethink interaction** for AI chatbots.
Coming back to the guiding questions, theory can help us tackle difficult problems like combining human intelligence with artificial intelligence and allocating control in human-computer partnerships.
WORKSHOP GOALS
Developing strategies to make working with theory in interaction design more concrete.

Learning from you how you think about and use theory in their work.

Sharing some examples that were too big to fit into this talk.
BUILD ON THEORY TO RETHINK INTERACTION

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