
HOTSPOTS I:

DAN BOBROW MANAGER, PALO ALTO RESEARCH CENTER

Hi, I'm Dan Bobrow from the Palo Alto Research Center. You may have noticed [my bio] said "Xerox," but we have since been disconnected. *[Laughter]*

Now just imagine if you could just say, "Please play that Charlie Rose program from last week where he interviewed the four French intellectuals. I want to see it in the family room, but put the sound in the kitchen too, please."

This is just around our electronics corner. It consists of two parts: an easy part and a hard part. The easy part is those devices. Those devices will all be controllable by WiFi. Not only will they be controllable, but they'll be easily interconnected, and the data will flow over the WiFi. As Don Norman has pointed out, wires are the bane of connecting *anything*, and so they'll be gone by five years from now.

But the hard part is actually: what are you going to use to tell these devices what to do? Well, the device you carry around all the time – your phone – because it's WiFi-connected as well. The hard part about the phone is that – how does it know what to tell these devices? Well, the easy part is that it calls up the grid computer, and it gives the devices their description and their type to the grid computer. And an AI program, starting with a formal description of the goal, just makes a little plan and tells the phone what to tell your appliances so they'll all play the way you want. The hard part is taking the language we just said and going from the language to that formal description of what you really want. Now *that* hard part consists of an easy part and a hard part.

The easy part is the part about the speech, because speech is getting to be quite commercial at this point. You can get the words in, but the words don't give you the meaning. So the hard part is actually interpreting the language that you say – and you say very strange things when you really believe somebody's listening – and making that into a formal description of what you really want. But that's becoming easier. And I think in five years that's probably the thing that we'll see that's the most unusual, is you'll start to be able to talk to your devices.

Now that's the easier part; the hard part, of course, is dealing with your son or your daughter or your partner, and when they have their phone and they're also calling up and getting a plan, now you're back to the war of the remotes. But that's a problem that *you'll* have to solve. Thanks.