

# IPD

INTEGRATED PRODUCT DESIGN

# SEMINAR



**Donald A. Norman**  
Northwestern University  
Nielsen Norman Group

**Tuesday, April 8th**

**Reception: 5:30 PM**  
Nobel Laureate Hall, Lower Level  
of the Chemistry Building

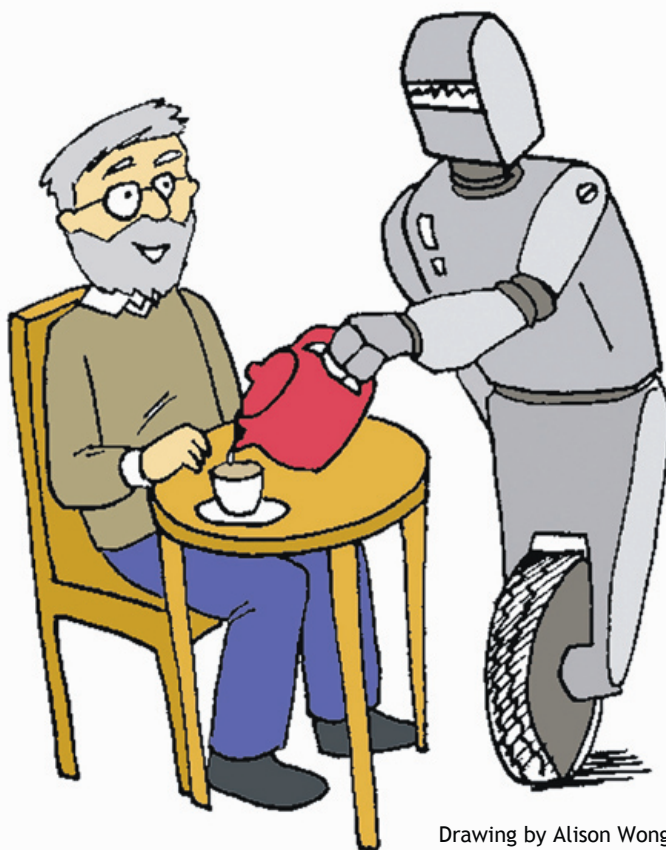
**Seminar: 6:00 PM**  
Chemistry Building, Room 102  
231 S. 34 Street, Philadelphia, PA

## The Design of Future Things: Cautious Cars & Cantankerous Kitchens

Cautious cars? We already have them. Cantankerous kitchens? Not yet, but they are coming. Our products are getting more intelligent and more demanding. Not only do they tell us what routes to take when we drive, but also how to drive. In fact, if they don't like our driving, they are starting to take control. When one model of the Lexus senses a potential collision, it looks at the driver through its TV camera on the steering column and, if the driver is not paying attention to the road, it brakes.

Alas, these well-intended devices fail the test of proper social interaction, sometimes amusingly, but possibly tragically. The technologists talk of human-machine interaction, of dialogs between person and system. We cannot have a dialog with machines: there is no shared understanding, no common ground. Instead of dialog, we have two monologues: we command our machines; they command us. Two monologues do not make a dialog.

The future is one of increasing encroachment of automation into our lives, especially in the home and automobile. But the machines are not intelligent; the intelligence is in the minds of the designers, people who are not present when the unexpected happens. There is a way to build systems so as to maximize utility and pleasure while minimizing the dangers and frustrations.



Drawing by Alison Wong



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