Affect, emotion, and addiction

• What do we mean by affect?
  • Very common effect
  • Happens with many things
  • Very powerful
  • Can lead to dependence, identity, direction
  • Can be heavily gendered
Affect, emotion, and addiction

• What do we mean by affect?
  • Emotion
    • Positive or negative experiential quality
    • Positive / negative can vary in magnitude
    • Accompanied by facial expressions and body language
    • Elicit certain types of behavior
    • Follow particular thoughts
    • “Cold” thoughts vs. “Hot” emotions
Affect, emotion, and addiction

• What do we mean by affect?
  • This is a relatively new aspect of computing and technology
  • But not a new aspect of human nature
  • Attachment to nonliving things
  • Addiction, dependency, and withdrawal
  • Causes and treatments
The Oregon Trail

You may:
1. Travel the trail
2. Learn about the trail
3. See the Oregon Top Ten
4. Turn sound off

What is your choice? [ ]
Affect

• Let’s talk about your phone
• How do you like it?
• Do you use it a lot?
• Do you talk to it?
• Interact with it?
• Does it sleep in bed next to you?
Affect

• Survey by Nuance (2103)
  • 57% of respondents felt a personal connection with their virtual assistant
  • 50% want a VA with a sense of humor
  • ~33% want a virtual assistant who is ‘sassy’
  • Both women (71%) and men (66%) have named their virtual assistants
  • 5% have asked their VA for love advice
  • 20% asked about the meaning of life
Affect

• Attachment is more common with personalization and AI
• A digital device becomes like a friend
• It knows you, knows about you
• Is no longer an impersonal tool
• Familiarity can breed affect
• Very common response for a human
Affect

• This is especially true with cell phones
• Younger people consider their phone (and media) part of their identity and their image
• That leads to emotional attachment, the device becomes more than a communications tool
• Never happened with regular phones or other devices
An important question

• Which would you rather give up for a day?
  • Your phone
  • Your toothbrush
An important question

• Which would you rather give up for a day?
  • Mobile App Behavior survey (Apigee, 2013)
    • 82% claim critical apps they need daily
      • Email – 57%
      • Facebook – 41%
      • Alarm clock apps – 31%
    • Spain was most app dependent, with 93% saying they couldn’t get through the day without them
    • 50% of Americans said they couldn’t last 4 hours
An important question

• Which would you rather give up for a week?
  • TeleNav survey (2011)
    • 22% would rather give up toothbrush than phone (iPhone users: 40%)
    • 33% would rather give up sex than their phone (70% of these respondents were women)
    • 83% of iPhone users said other iPhone users would make the best romantic partners
    • 50% sleep with their phone next to them
An important question

• Which would you rather give up for a week?
  • TeleNav survey (2011)
    • 55% more willing to give up caffeine
    • 55% more willing to stop dining out
    • 63% more willing to give up chocolate
    • 70% willing to forego alcohol
    • 20% willing to go shoeless
    • 22% willing to give up significant other
An important question

• Is it ok to give an infant or toddler a smartphone or tablet?
  • Why or why not?
  • What are the impacts?
    • Immediate
    • Long-term
  • What about an older child?
  • What about the whole family?
An important question

• When *is* it ok to use your smartphone?
  • Family dinner?
  • In class?
  • Business meeting?
  • Vacation?
  • Wedding?
  • Funeral?
    • This was actually a thing that was happening
An important question

• Let’s talk about funerals (Source: Cooperative Funeralcare)
  • Topped public’s list of most inappropriate time to use a cellphone
  • Two out of five would not turn off phone while attending one
    • 70% would set it to silent
    • 10% would simply leave it on
  • One in five funerals interrupted by cellphone
  • One mourner’s phone rang, to the tune of “If you are happy and you know it, clap your hands”
  • Cultural shift / Double standard
Affect

• Nomophobia
  • 2015
  • Iowa State University
  • Where did the word come from?
  • Measured through a questionnaire
Affect

• So:
  • Technology has symbolic importance
  • Technology shapes our use and interpretation of information
  • Technology dictates how we communicate information
  • The more information we have/need/want, the more technology arises to shape that need
Affect

• Consider:
  • Blackberry
  • Myspace
  • Bing
  • Linux, but for different reasons
Affect

• When it comes to robots, their design can have an impact on affect
• With sufficient cognitive distance between robot and reality, affect can (and does) occur.
• Without that distance, we experience repulsion
• That repulsion is the Uncanny Valley
• Very important in design
Affect

• Speaking of AI, what does it mean?
• Can a digital device actually be intelligent?
• Is that something we would want?
• When a machine knows you better than you
• Many in the industry are becoming concerned
• Difference between sentience and intelligence
• Examples and critique of AI
Mood

• We’ll discuss this more in a later class, however Facebook and other social media sites can have a profound impact on mood, affect, self-esteem, and other measures of the person.
Addiction and dependence

• What is addiction?
  • Two types:
    • Substance
    • Behavioral
  • The physiological results are the same for both
  • The personal, interpersonal, and social results are often the same for both as well
Addiction and dependence

• What is addiction?
  • For something to be considered a dependence, it must meet three of the following criteria:
    • Tolerance
    • Salience
    • Withdrawal symptoms
    • Difficulty controlling use
    • Continued use despite negative consequences
    • Neglecting other activities
    • Desire to cut down
Addiction and dependence

• Young’s (2009) criteria for Internet Addiction is based on the DSM IV criteria for gambling
  • Preoccupation with use of the computer, think about previous online activity/anticipation of next online session
  • Craving more and more time at the computer
  • Making efforts to cut back on computer use or stop, and failing repeatedly
  • Feelings of emptiness, depression and irritation when not at the computer or when attempting to cut down
  • Staying online longer than originally intended
  • Jeopardizing or risk losing significant relationships, job, career or education because of the Internet
  • Hiding the extent of computer/Internet use to family and friends
  • Use of the Internet as a way of escaping from problems or of relieving a dysphoric mood (e.g. feelings of helplessness, guilt, anxiety, depression
Addiction and dependence

• Digital dementia (Spitzer, 2012)
  • Dependence on technology makes us...less smart
  • We don’t use our minds as much as we used to
  • GPS, autodial, autocorrect, and others
  • That leads to deterioration of short-term memory
  • Also leads to a casual approach to things such as relationships and proper writing; the response is what’s important
Addiction and dependence

• People can’t multitask, so prioritization is a must, but that can be difficult
• If you don’t, you end up not doing anything completely
• The best approach is to take a day off from technology every once in a while
• Which you will!
Addiction and dependence

• Detoxing
• Is it possible?
• More importantly, is it necessary?
• Students especially have incredible difficulty detaching even for 24 hours
• They suffer the same physiological responses as if they were experiencing withdrawal
Health risks

• Carpal tunnel
• Repetitive stress injuries
• Vision trouble
• “Technostress”
• The above can be signs of addiction
Virtual worlds

• What are they?
• Addictive qualities
• Why do people become addicted?
• Can it be considered an actual addiction?
• Legislative responses
• How to address the issue
Treatment

• Does it need to be treated? Medicated?
  • That depends on the symptoms
• Therapy, wind-down, retreat
• Valid alternatives
Health benefits

• Health informatics and IT
• Wearables and the Internet of Things
• Phobia and addiction treatment
• Coping mechanism
• Support communities
• ICBT