By the end of today’s class, you should be able to answer the following questions:

1. What is the user illusion? What does it mean to say that our consciousness is our user illusion for ourselves and the world?

2. Highlight the key characteristics of the perceptual analysis component in Dennett’s subpersonal flowchart. Be sure to include a diagram that captures the essence of his argument. In light of these characteristics, how might you interpret the following excerpt from William James:

“The mind works on the data it receives very much like a sculptor works on his block of stone. . . . other sculptors, other statues from the same stone.”

3. Using the “tree of talking” as a base, describe the way in which a message is formulated by one person, emitted, and received by another person.

4. Compare and contrast information and exformation.

5. Discuss the following quotation from Norretranders: “We can derive knowledge from the world; but we cannot derive the world from knowledge.”

I. A Visit to the Phenomenological Garden

- Philosophers use the term phenomenology to cover all items that inhabit our conscious experience—thoughts, smells, hunches, and all the rest.
- We can use the term to refer to all those things in experience that we want to explain
- We believe that there is a real world “out there” – we accept, and presuppose, that a single, unique, physical world exists independently of observers.
- By real world, we mean physical world
  - We cannot see whatever we want to see
  - Under a wide variety of circumstances, what we see in various situations remains stable. Hence, when a number of observers look at a picture, a physical object, there is a sense in which they “see” the same thing.
- It does not follow, however, that they have the same perceptual experiences. There is an important sense in which they do not see the same thing!
II. User Illusion
A. Our mind presents us with a picture or map of the world
   a. The map is heavily edited or interpreted
   b. We experience the world as if we have access to raw data
B. The “I” is a user illusion
   a. I experience that it is “I” that acts
   b. But it is Me (which contains a lot that I is not interested in)
C. Perhaps consciousness arises when the brain’s simulation of the world
   becomes so complete that it must include a model of itself
D. Access to what is happening inside our brains is limited
   a. We don’t know how the brain does its magic
   b. Metaphor – computer
      i. When I interact with a computer, I have limited access to
         events inside
      ii. Thanks to the scheme of the programmers, I am treated to an
         elaborate audiovisual metaphor—an interactive drama acted
         out on the stage of the keyboard, mouse, and screen
      iii. I, the user, am subjected to a number of benign illusions
         1. I seem to be able to move the cursor to the exact point
            where my file is
         2. Once cursor is there, I click and retrieve the file
         3. The file appears on the screen
         4. I make all kinds of things happen by pushing keys, etc.
         5. I don’t know the details
         6. I maintain control by relying on my understanding of
            the detailed audiovisual metaphors provided by the user
            illusion
      iv. The user illusion, then, is the picture the user has of the
         machine—what matters is not explaining to the user how the
         computer works but the creation of a myth that is consistent
         and appropriate—and is based on the user, not the computer
E. According to Norretranders – “But it is not only the I experienced as our
   personal identity and active subject that is an illusion. Even what we
   actually experience is a user illusion. The world we see, mark, feel, and
   experience is an illusion>”
   a. There are no colors, sounds, smells out in the world
   b. They are things we experience
   c. This does not mean that there is no world – there is
   d. The world, however, just is
   e. It has no properties until it is experienced (e.g., I see a panaorama, a
      field of vision, but is not identical with what arrives at my senses. It is
      a reconstruction, a simulation, a presentation of what my senses
      receive – a hypothesis
F. People do not simply see – they simulate.

G. Einstein – “The whole of science is nothing more than a refinement of everyday thinking.”
- Everyday life is much more complicated than the scientific world
- The trick of science is to ignore everything it cannot get the better of
- Bohr – “We are suspended in language in such a way that we cannot say what is up and what is down.”
- Science is about everything we can say to each other in an unambiguous way
- That is not much, compared to everything we experience, sense, and think—not to mention what we feel.
- Science is a collective project aimed at knowing the world in a way we can tell each other about
- Knowledge becomes scientific knowledge only after it is told in a way that allows other people to reproduce that knowledge—in an unambiguous way.
- Art is also about what we can share—but it is not about what we can share in an unambiguous way
- A scientific education consists of working one’s way through a vast number of experiments, calculations, and arguments so that the student knows what others mean by these activities. In an unambiguous way everyone performs the same experiment achieves the same results—even if the details are not identical.
- Backward tracing problem – the bandwidth of language is far lower than the bandwidth of sensation. Most of what we know about the world we can never tell each other.
  - Bandwidth of language – 16 bits/sec
  - Bandwidth of sensation – millions of bits/sec

H. Consciousness does not contain much information, for information is otherness and unpredictability.
- Consciousness will find composure by acknowledging that people need more information than consciousness can supply.
- Man also needs the information contained in consciousness, just as we need a map to find our way around the terrain. But really counts is not knowing the map—it is knowing the terrain.
- The world is far richer than we know from looking at a map of it.
- We ourselves are far richer than we know from looking at a map of ourselves.

_Lao-tzu_ – “Those who know do not talk. Those who talk do not know.”
III. Understanding

- Finding a metaphor – “a figure of speech in which a word or phrase literaterally denoting one kind of object or idea is used in place of another to suggest a likeness or an analogy”

IV. Half Second Delay

- 1979 experiment by Libet asked the question: when do we sense stimulation of the skin?
- Awareness is experienced one half second after skin stimulation
- But it is experienced as if it occurs when the brain puts out the evoked response
  - There is a subjective relocation in time
  - The brain is already in action when we think we decide (this is why déjà vu occurs)
- The decision to act is not the starting point – no separate self jumping into the synapses
- The conscious experience is projected back in time
• Access to what is happening inside the brain is limited
• Consciousness is an interpretation, a simulation, a presentation of what the senses receive (one half second ago)
• Consciousness presents its possessor with a
  o Pictute of the world
  o a picture of himself in the world
  o both pictures are heavily edited
• Consciousness is a fraud that requires a temporal cooking of the book
  o Enormous quantities of information are discarded
  o What is presented is what is relevant
  o We have a half a second to reduce 11,000,000 bits of information to 16 bits of consciousness – and erase the trace
  o We have a thousand billion neurons and a half second

• William James – “The mind works on the data it receives very much like a sculptor works on his block of stone . . . other sculptors, other statues from the same stone. My world is one in a million alike embedded, alike real to those who abstract them.”

V. Towards a Cognitive Theory of Consciousness
   A. Functionalist Approach
      -the whole is a careful assemblage of coordinated parts that at its best acts with a unity
   B. Sub-personal Flow Chart
      1. PR--public relations
      2. C—Control
         • Allocation of cognitive resources -- attention
      3. M--Memory
      4. Perceptual Analysis
         • Begins with sense organ stimulation
         • Iconic memory – short-term storage of uninterpreted sensory information
         • Feature detection – yield crude but local-specific information about shapes, colors, etc.
         • Hypothesis generation and confirmation – a sequential process that utilizes both stored world knowledge and the results of the feature detection to determine the generation of hypotheses and their confirmation or disconfirmation
         • Frames or data structures provide the means to interpret the data
      5. Problem Solving
      6. Dreaming
C. Proposals

- One perceives more than one experiences
- The content of one's experience includes whatever enters the buffer memory $M$
- One experiences more at any time than one wants to say then
- One experiences more than one attends to.
- One's access to one's experience is accomplished via the access relations $PR$ and $M$
- Our feelings of special authority in offering introspective reports --the basis for all the misbegotten theses of introspective incorrigibility and infallibility--arise from the fact that our semantic intentions, which determine what we want to say, are the standards against which we measure our own verbal productions
IV. Functional Model of Perception

Perceptual Analysis

Hypotheses

Testing

Parallel Process

Iconic Memory
The Tree of Talking

- Depth
- Information – there is more information in experience than in an account of experience
- Exformation

A. Talking Initiated
   - *First, the person has to think*
   - Person has to summarize an experience, an emotion, or a memory
   - Lots of information gets discarded (EXFORMATION)
   - When one’s mental state is summarized through the discarding of a whole load of information, there are some words left that can be said
   - Lots of information is compressed
   - These words are transferred (spoken) to the other **person**

B. The Receiver
   - The words are received and are **unfurled** to reveal their meaning
   - The process of attaching meaning is called excitation
C. Tree of Talking and the Public Relations Component

- A message has depth if it contains large quantities of exformation
- Enormous amounts of information have to be discarded before we can communicate
- Incitation, communication, excitation – discarding, transfer, and evocation of information
- EG. When we listen to music, certain states are created in our minds.
- Where does it come from, this ability to reconstruct information not present in the information we receive?
  - The narrator compresses a lot of information into very little information
  - It passes downward on the left hand side
  - Much information becomes little information – exformation is generated
  - The little amount of information is transferred through the horizontal pipe and is received unchanged.
  - The next problem is how to associate outward and up the tree, and obtain all of the associations needed.
  - How do we learn this?
  - How can the appropriate information be excited For example, road sign – curve ahead – what makes it a sign and not just a sheet of metal covered in paint?

Theory of language production

- How do I know what I think until I hear what I say
- We often discover what we think when we hear what we say – and do not correct – If I said it, and I did not correct it, then I probably meant it
- There is always a mismatch between
  - The content that is in position to be expressed
  - The various candidates for expression
- The most accessible or available words could actually change the content of the experience
- We need to divide the text into two parts
  - How it seems to me
  - What it means

We can derive knowledge from the world; but we cannot derive the world from knowledge.