What do we expect when we pick up a book or buy a ticket for admission? When we turn to literature, what are we looking for? What is literary form? What is attention? How do literary forms work in the brain?

Reading:
Recall Yovell on memory (Jan. 26).
HANDED OUT PREVIOUSLY Solms and Turnbull, "Memory and Phantasy," ch. 5, 139-181. 43pp.
Holland, YMoM, ch. 8. "What Do We Expect?" Online. 15pp.
Hasson et al., "Intersubject synchronization." Handout. 9pp.

I. Panksepp, Ch. 8, SEEKING. Very important. As with other sci'fic papers, read opg, closg, then middle. SEEKING in Panksepp's sense underlies all human activity.

a) What is SEEKING? 144a8. Anticipation of rewards (147a8).
b) SEEKING vs. consummation. Wanting vs. liking. Appetitive vs. consummatory. 148a9. Curiosity. (Suspense in literature.)
c) 147b1. Termination, not onset, of "rewarding" brain stimulation is basis for "reinforcement" (opioids in brain). Bears on how you feel after the movie, novel, poem.
e) P. argues that the SEEKING system, self-stimulation zone of lateral hypothalamic circuitry is a unitary emotional system.
f) Primarily DA (dopamine) is released from nucleus accumbens during anticipation. Also norepinephrine, and serotonin inhibits (156b5).
g) Scalloped pattern of SEEKING response -- the TGIF phenomenon.
h) "Confirmation bias" -- human patterns of knowledge. Westen's papers on Lewinsky scandal.
i) We're not concerned with schizophrenia but dreaming is similar to literature--how?

II. Holland, "What Do We Expect?" Online. 12 pp.
Learn the memory systems. Solms & Turnbull reading.
As you go along, think about what systems are involved in any given literary experience.

What are the kinds of memory? What do they lead us to expect?
Chart the kinds of memory on p. 166 this text.

Important question: what memory systems are involved in doing literature?
Short-term immediate memory for continuity over short passages. "Working memory"?

Long-term:

Explicit/declarative:
- Semantic - lots, for understanding.
- Episodic - lots for emotional, experiential understanding.

Implicit / non-declarative/ non-verbal / unconscious
- Priming (example from Dog Day Afternoon)
- Procedural. Certainly in reading. Defense mechanisms?
- Emotional conditioning / learning: associations to characters, plot events,

etc.

Memory trace (early experiences) leading to character or style.

2 general expectations:
- not to act = disinterestedness.
- to get pleasure or not to feel unpleasure (e.g., disgust, excessive fear - Henry at the movies).

Then specific expectation of genre, actor, author, etc.

What memory systems in the brain are not involved? Can we locate them? Spinal reflexes.

So what parts of the brain are involved? Pretty much the whole brain above the medullar level?


Systems:
- RAS (reticular activating system). Sometimes ARAS = ascending.
- subcortical and limbic systems (incl. cingulate gyrus)
- posterior parietal lobe - what does this region do?
- frontal lobes, directed to motor activity (N.B. frontal eye fields)

Fig. 5-10 is useful.
- N.B., reticular structures here shown as one-way. "Ascending." Brain stem processign sensory input.
- "sensory representation" -- visual, auditory, sensorimotor(?)
- "motor representation" -- applies in literature?

Subcortical structures.
- 172a8: RAS alertness; sending preparatory signal.
- 172b8-9: basal ganglia (not motor here; selection among competing sensory stimuli).

Cerebral cortex
- How do these different kinds of attention enter into literary processing?
  - Focused attention
  - Alternating attention
  - Sustained attention
Attentional network:

a. Posterior parietal lobe mediates conscious attention to spatial targets. Interconnected to lateral & medial frontal cortex through the cingulate gyrus. CG goes to posterior parietal lobe & dorsolateral prefrontal cortex.
b. Superior colliculus directs eyes; inferior colliculus directs auditory attention.
c. Pulvinar (posterior bulge on thalamus) selects and filters sensory information
d. Right hemisphere does more to maintain vigilance than left hemisphere.
e. Norepinephrine important in maintaining alertness & attention (because it affects a, b, c above).

174b-175. Disorders that include attention problems. Not so important for us.

Sidebar on Frontal lobes: Understand Fig. 5.12. Important.


P. 177. Frontal lobes.
1) guide behavior (SEEKING) by internal representations (memory --> working memory)
2) guide behavior (SEEKING) by changing cognitive context (perception -->working memory)

Prefrontal cortex resolves ambiguity (177b5)
Frontal lobes important with novel situation. Routine, frontal lobes less involved.
177b9: Frontal lobes are sexually dimorphic. Males: left hemisphere more context-dependent; right hemisphere more context-independent. Females: less lateralized; both hemis are more context-independent.
177c5: Reticulo-frontal disconnection -- important for neurologists.

Next big question: How does literary form work in the brain?

IV. Hasson et al. The Israelis watching Clint Eastwood. Probably the most important paper you will read this semester in terms of responses to movies, maybe books as well.
A. The methodology issues. How do you measure response to an unstructured stimulus?
   2 techniques:
1. Predict response of another (you have to have a hypothesis)
2. Correlate what is onscreen with fluctuating BOLD in given area.
   Fusiform gyrus -- faces (any detailed object - auto hobbyists)
   Collateral gyrus -- scenes and buildings.
   Post central sulcus -- hands & objects
   Gives you an idea of how content floats around your brain.

B. What does this do to reader-response theory?
   Control parallel to one's own defenses. Text-active? Reader-active? Bi-active?
   Beyond form, content, meaning, etc., all individual.

C. Go through the paper in detail. What did the experimenters do? What happened?
D. What is the "content" of a literary work? What form delivers?
   Face of Eastwood, gun in hand of Eli Wallach, etc.

E. How do we make content? Do we? Does the author? Next week.

   A constructivist account. What replaced behaviorism. Viewer performs "operations."
   He is strongly anti-film theory. Anti-Lacanian.
   31a1. Sensory stimuli not enough; they are ambiguous. The organism constructs a percept.
   Hypothesis testing. NNH's feedback. 32a1: You cannot help seeing this.
   Use of schemata. An important term.
   32a1. "You cannot help seeing this" -- low-level constructive processes are automatic.

   2. Note that he is fairly cognitive. What is the advantage of starting with the brain as, say, Panksepp does?
   3. 39b3. Film 'triggers and constrains' formation of hypotheses. It does not uniquely specify or
determine them.
   Summary 39a1-4.
   Last parg: "it still assumes."

   For content: we have to fill in gaps. Rezeptionsästhetik.

   Note kinds of schemata:
   prototype
template (goal needs to be stated, preferably early on)
procedural schemata
stylistic schemata

   Schemata use assumptions about space, time, moment-by-moment change. Read
   38b9-39a5 carefully.


A. Note the "cognitive" approach.
   Introspection. The older XIXC psychological method. 131.7 "It is this prototype that initially makes
   us dislike Cal." 132.1 "For me at least . . . ."

B. 115.5. Distinction between story and discourse = distinction between form and content.
   Remainder of chapter: how you get from discourse to story.

C. Various principles that get you from discourse to story--
   1. 117.4 Principle of minimum departure
2. Principle of identity:
   118.9 Role of memory for continuity. Solms & memory & perception.
   119.8 Thematic reading: issues of narration and film.
   121. Complex inferences about Picasso picture. The original is room-size; this is evidently a "study for" and could be lost at sea.

3. Time
4. Continuity. 123.6 Ball under sofa --&gt; "Naive physics" of infancy.
5. Space. 126.8 We organize space around human activity. Remember the Hasson paper.
7. Character. Prototypes. Titanic uses character structures from Western but inverts them.

D. "Story" leads him to "universals" defined on 133.8. 3 dominant narrative structures all based on happiness: 1) personal context = romantic love. 2) social context = domination. 3) physical = food. Cp. Lord Raglan, Cambridge school, Jungians, Campbell, etc. nnh early interest.

STORY IS COGNITIVELY AND EMOTIONALLY COMPLETED (?) BY RDR.

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10. March 16. People often say that a given literary work "means" this or that--what does such a statement itself mean? How do literary forms do what authors want them to do? We speak of the "content" of a literary work--what does that mean? To what extent does it come from the work, to what extent from us? <br>

Reading:
- Holland, *YMoM*, ch. 9. "How Does Form Work?" [Online](#).
- Faust, "Obtaining Evidence of Language Comprehension." Handout.