Exam #3

I. Logic of Science [15 points]

1. Identify the major features of a deductive nomological explanation. Why is it sometimes referred to as a covering law explanation? [4 points]

2. Identify and define the two characteristics of arguments discussed in class. [4 points]
   
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3. Using the two characteristics from the previous question, compare and contrast inductive and deductive arguments. [2 points]

4. Compare and contrast realism and relativism in terms of what they say about the relationship between the real world and theory. [5 points]
II. Challenges to Positivism [10 points]

1. Describe logical positivism. Discuss both the “logic” and the “positivism.” [2 points]

2. What is Hume’s paradox? [3 points]

3. What does it mean to say that observation is theory dependent? What implications does the theory dependence of observation have for the traditional view of the scientific method? [5 points]
III. PERCEPTION AND PUBLIC RELATIONS [20 points]

1. What is the user illusion? What does Nørretranders mean when he says that what we see is a “. . . reconstruction, a simulation, a presentation of what my senses receive – a hypothesis”? [4 points]

2. What is the importance of the half-second delay to the user illusion? [2 points]

3. Construct a diagram of the functional model of perception presented in class. Making reference to the diagram provide a short description of the process of perception [7 points]
4. Construct a diagram of the “tree of talking”. Making reference to the diagram, describe the way in which a message is formulated by one person, emitted, and received by the other person. [7 points]
IV. MEMES [15 points]

1. What is a meme? How do they enter consciousness? [2 points]

2. In what ways is the scientific method a meme or a memeplex? [3 points]

3. Explain the following hypothesis from Dennett: [5 points]

   Human consciousness is a huge complex of memes . . . We weave our understanding out of memes.
4. From the point of view of science as a memeplex, address the following question: “do scientists proceed the way they do because there are objective reasons for doing so, or do we call these procedures reasonable because a specific group sanctions them? [5 points]

V. DRAFTING THE TEXT [20 points]
1. What are the primary steps in heterophenomenology? [3 points]

2. According to Jaynes, what is understanding? What role does language play in understanding? [2 points]

3. According to Jaynes, what is consciousness? How is consciousness related to the analog world? [2 points]
4. Identify and define the four major structural characteristics identified by Jaynes. [8 points]

5. Using Jaynes’ four structural characteristics of consciousness, describe how a person might create the text of an observation statement. [5 points]
VI. SENSEMAKING [20 points]

1. Identify the three questions of interpretation from Mailloux [3 points]

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2. Identify the two aspects of sensemaking from Weick? [2 points]

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3. Provide an interpretation of the following quotation from Nørreanders: “we can derive knowledge from the world; but we cannot derive the world from knowledge.” [5 points]
4. Write a five paragraph essay addressing the following question: how does sensemaking take place in the face of equivocality? In the course of your answer, be sure to weave as many of the following terms into your discussion: perception, tree of talking, memes, excerption, narratization, text, and interpretation. [10 points]