I. Administrative – 5 minutes
   A. Presentation this Thursday
   B. General questions?

II. Final Thoughts on Possible Worlds Semantics – 10 minutes
   A. Questions about modality?
   B. Questions about intensionality?
   C. Questions for Jordan about counterfactuals?

III. Kripke & Kaplan – 15 minutes
   A. Kripke’s contributions
      1. Rigid designation
      2. Metaphysical essentialism
   B. Kaplan’s contributions
      1. Direct reference
      2. Semantics of indexicality
   C. Soames’ 5 Theses
   D. Conceptual Background: necessity/contingency, aprioricity/aposterioricity, analyticity/syntheticity
IV. **Principal Lessons** – Remaining Time

A. **Semantic Lessons** (T1, T3, T4, T5)

1. The relationship between rigid designation and direct reference

   a. **Rigid Designation**

      i. *Informal*: a term \( t \) rigidly designates its referent \( o \) iff \( t \) designates \( o \) in all possible worlds where it exists and doesn’t designate anything else

      ii. *Formal* (Generalized – p. 97): “A singular term \( t \) is a rigid designator iff for all contexts \( C \), assignments \( A \), circumstances of evaluation \( E \), and objects \( o \), if \( t \) refers to \( o \) with respect to \( C \), \( A \), and \( E \), then \( t \) refers to \( o \) with respect to \( C \), \( A \), and \( E' \), for all circumstances \( E' \) in which \( o \) exists, and \( t \) never refers to anything else with respect to \( C \), \( A \), and any circumstance \( E' \).

   b. **Direct Reference**

      i. *Informal*: a term \( t \) directly refers to \( o \) iff \( t \) contributes \( o \) as its meaning to all linguistic items of which it is a part

      ii. *Formal* (p. 97): “A singular term \( t \) is directly referential iff for all contexts \( C \) and assignments \( A \) the referent of \( t \) with respect to \( C \) and \( A \) = the semantic content of \( t \) with respect to \( C \) and \( A \).”

   c. **Relating Rigid Designation and Direct Reference**

      i. If \( t \) is directly referential, then \( t \) is a rigid designator. (Why?)

      ii. If \( t \) is a rigid designator, then it is not necessarily directly referential (e.g., ‘the cube root of 27’).

      iii. Rigid designation focuses on the *modal character* of the term, while direct reference focuses on the *compositional contribution* of the term. They both have to do with the semantic content of the term, but the former has more to do with the nature of the distal semantic relationship between term and content, while the latter has more to do with the
proximal relationship between term and content.

2. “Giving the meaning” vs. “Fixing the reference”

   a. These are importantly different semantic roles that something can play for a linguistic item—you can have something give the meaning for a referring term without fixing its reference, and something fix the reference for the term without giving its meaning

   b. \(D\) gives the meaning of a term \(t\) if \(D\) specifies the semantic content, or what \(t\) means, in a way that counts as synonymy

      i. Think here of Humpty Dumpty’s claim that his name means his shape (although this doesn’t go as far as something like strong descriptivism would require)

      ii. Consider ‘bachelors are unmarried male human beings’: the two halves of these are interchangeable in all contexts where meaning preservation is the focus

      iii. If \(D\) gives the meaning of \(t\), then \(^t = D^\) is a necessary truth, since \(D\) and \(t\) mean the same thing

      iv. This has both modal and epistemic implications

   c. \(D\) fixes the referent of a term \(t\) if \(D\) determines what \(t\) refers to without giving its meaning

      i. Think here of Alice’s response to Humpty’s question concerning the meaning of her name—she would be happy to allow for reference, even though she is not convinced about meaning

      ii. Consider ‘water is \(H_2O\)’: here, one might take the chemical formula to fix the referent of the kind term ‘water’ without giving the meaning of the term

      iii. Reference fixing of the sort that matters here is a matter of linguistic rule—if \(D\) fixes \(t\)’s reference, it has epistemic implications for someone who knows what \(t\) refers to; thus, the corollary on p. 81

3. The tension between logic and semantics
a. This is mentioned in Soames’ discussion of Kaplan

b. The idea here is that there may be elements or moves required for logical formalization that are not required to provide the semantics of natural language

i. In the case of Kaplan, Soames argues that he accommodates indexicality in his formal language LD in a way that does not comport with how indexicality occurs in natural language; worse, “some features of [Kaplan’s] system, designed to further the goal of logical formalization, are semantically significant departures from natural language” (p. 94).

ii. This can also go in the other way—what may be required to make sense out of the semantics of natural language may not comport with one’s preferred formal system; this is one lesson of Montagovian semantics, and it is even more obvious the farther you drift from logical approaches to semantics

4. Semantics of:

a. Proper names

i. Strong Descriptivism: descriptions associated with proper names by speakers both give the meaning of those names (i.e., their “semantic content”, or what they contribute to the meanings of larger linguistic items of which they are a part) and determine their referents at world-states (p. 80)

• Argument against:

P1. Assume SD for \( n \): there is some description D associated with \( n \) that gives its meaning and fixes its referent

P2. If P1, then in any possible world where \( n \) refers, its referent must be D

P3. Let ‘Richard Nixon’ have its meaning be given and reference be fixed by the description P: ‘the 37th President of the United States of America’

P4. It is certainly possible that Richard Nixon (e.g.)
became a gas station attendant and did not go into politics

P5. If P4, then it must be the case that we can imagine a possible world in which ‘Richard Nixon’ refers to Richard Nixon but where he is not P

6. It is not the case that in any possible world where n refers, its referent must be D

7. P1 is false

C. SD is false

ii. **Weak Descriptivism**: descriptions “associated with a name n by speakers semantically fix the referent of n at the actual world-state, without giving its meaning. Once reference is fixed, n is stipulated to retain that referent at other world-states” (p. 81).

   • **Argument against**:

   P1. If WD were true, then if Schmidt had actually proven the incompleteness of arithmetic, the name ‘Gödel’ as used by someone who associates it with that description would really be referring to Schmidt (i.e., ‘Gödel’ would be her name for Schmidt)

   P2. One would not be referring to Schmidt in these circumstances with the name ‘Gödel’

C. WD is false

iii. **Causal “Picture”**: proper names have their reference fixed by the causal chain that begins with the initial baptism of an object with that name and is extended by transmission of the name to new people who learn it and intend to use it as it was used by the people from whom they learned it

b. **Kind terms**

   i. These have also been given descriptive semantics, but are seen as rigid designators by Kripke

   ii. Following Soames: “The general term ‘green’ is to
designate the color of all, or nearly all, paradigmatic ‘green’-samples (and none, or nearly none, of the paradigmatic non-‘green’-samples)” (p. 88)

iii. Does this seem correct? It supports the view of necessity indicated below

c. Indexicals
   ii. These are supplied a two-dimensional semantics by Kaplan, in terms of character and content
   iii. Compare how words like ‘here’ and ‘Richard Nixon’ refer

d. Demonstratives
   i. Examples: ‘he’, ‘she’, ‘that’
   ii. Kaplan also works to accommodate these into his theory
   iii. They are distinguished from indexicals in that they require a demonstration in order to pick up a referent
   iv. The demonstration was built into the semantics initially, but has since been replaced by a speaker’s “directing intention”

B. Metaphysical Lessons (T3, T4)
   1. The metaphysical foundation of semantics
   2. Necessity/possibility and necessity/contingency
   3. The nature of the necessary aposteriori
   4. Implications of metaphysical essentialism

C. Epistemological Lessons (T2, T3)
   1. The epistemological foundation of semantics
   2. What must we know to use language meaningfully?
   3. What role do intentions play in meaningful speech?
D. Further Questions

1. What is the relation between rigid designation and the necessary a posteriori?

2. More generally, what is the relation between rigid designation and modality *de re*?