The Roots of the Kaplan-Lewis Analysis of *De Re*:
Quine (1956) and Kaplan (1968)

1. Quine (1956) "Quantifiers and Propositional Attitudes"

Quine begins by noting that the sentence in (1) is ambiguous, and seems to have the readings in (1a) and (1b).

(1) Ralph believes someone is a spy.
   a. Notional Sense (*De Dicto* Reading): 'Ralph believes there are spies.'
   b. Relational Sense (*De Re* Reading): 'There is someone Ralph believes to be a spy.'

(2) **Key Question:**
How should we logically represent the truth-conditions of the 'relational sense' (1b)?

(3) **Most Natural Solution (See Introductory Handout)**
The contrast between (1a) and (1b) is simply a matter of the scope of 'someone'.

   a. Truth-Conditions of (1a): Believes(Ralph, ∃x. x is a spy)

   b. Truth-Conditions of (1b): ∃x. Believes(Ralph, x is a spy)

(4) **Fundamental Problem: 'Double Vision' Cases** [1]

   a. Scenario: "There is a certain man in a brown hat whom Ralph has glimpsed several times under questionable circumstances… Ralph suspects that he is a spy. Also, there is a grey-haired man, vaguely known to Ralph as rather a pillar of the community, whom Ralph is not aware of having seen except once at the beach. Now, Ralph does not know it, but the men are one and the same… Bernard J. Orcutt, to give him a name."

   b. The Puzzle:
      - Intuitively, reading (1b) is true in scenario (1a).
      - Therefore, (3) would entail that (3b) is true.
      - Therefore, the following predicate would have to be true of some entity x:

        (i) [λx : Believes(Ralph, x is a spy)]

      - But, *what entity* is this predicate true of? Orcutt? But that would mean that (i) and (ii) can be true of the same entity, and we should "disavow" such a situation.

        (ii) [λx : Sincerely-Denies(Ralph, x is a spy)]

[1] Cresswell & von Stechow (1982) cite Klein (1979) as the originator of the term 'double vision' to describe cases such as these.

(5) **The Problem Restated for Our Scope Theory From the Intro Handout**

a. Scenario: (As in (4a))

b. The Puzzle for Our Simple Scope Theory from Handout 1:

- Under our Hintikka semantics for '*believes*' in the last handout, the truth-conditions of reading (1b) would be as follows:

  (i) $\exists$x . x is a person in w & $\forall$w' $\in$ Dox-Alt(Ralph,w) . x is a spy w'

- In the scenario above, however, it seems true to say that 'Ralph believes that Orcutt is not a spy'. Thus, the truth-conditions below also seem to hold.

  (ii) $\forall$w' $\in$ Dox-Alt(Ralph,w) . Orcutt is not a spy w'

- So, again, who is the person x in scenario (a) that witnesses the truth of (i)?
  - Orcutt? But then, given (ii), this would mean that Ralph holds inconsistent beliefs. (And it doesn't seem he does).

c. The Problem for a Hintikka Semantics for Belief:
We need a theory of (i) the belief state of Ralph in scenario (4a) and (ii) the truth-conditions of the *de re* reading (1b), such that (i) can be consistent/rational, and (ii) can hold in virtue of it.

(6) **An Even Stronger Version of the Problem (Kaplan 1968)**

In the scenario in (4a), it seems that *both* the following sentences can be read as true.

a. Ralph believes that Orcutt is a spy.
b. Ralph *doesn't* believe that Orcutt is a spy.

Therefore, it seems like the predicate below would have to be both *true* and *false* of the same entity (*i.e.*, Orcutt). **And that's absurd.**

c. [λx : Believes(Ralph, x is a spy)]

(7) **Additional Note**

While it seems that (6a) is true in scenario (4a), for the reasons explained above, we wouldn't want to represent its meaning via the following formulae.

a. $\exists$x. x = Orcutt & Believes(Ralph, x is a spy)
b. $\exists$x . x = Orcutt & $\forall$w' $\in$ Dox-Alt(Ralph,w) . x is a spy w'
c. $\forall$w' $\in$ Dox-Alt(Ralph,w) . Orcutt is a spy w'

(8) **Quine's (1956) Solution to the Puzzle**

- In other works, Quine has argued against logics that allow quantification into 'opaque' (intensional) contexts. **Therefore, formulae like (3b) should simply be disallowed (*i.e.*, not even generated by the syntax for our logical metalanguage).**

- What is the nature of the ambiguity in (1), then? Quine claims that it's (something like) a lexical ambiguity in "*believes*".
  (*He tries to wiggle out of saying that it's actually a lexical ambiguity, but his views here are rather obscure to me and others.*)

a. Believes$_1$
   - The 'notional sense' of *believes*
   - Binary relation between an entity (believer) and an intension (proposition)

b. Believes$_2$
   - The 'relational sense' of *believes*
   - Ternary relation between an entity (believer) another entity (object of belief) and an intension (property)

- Consequently, Quine proposes that the right way to represent the two readings in (1) is as follows. **Note that in neither one is a quantifier binding a variable inside an intensional context.** (No 'quantifying in' to intensions)

a. The Notional (*De Dicto*) Reading (1a): Believes$_1$ (Ralph, ∃x. x is a spy)

b. The Relational (*De Re*) Reading (1b): ∃x. Believes$_2$ (Ralph, x, [λx.x is a spy])

(9) **Application to the Double Vision Case**

In the scenario in (4a), all of the following formulae / truth-conditions hold. **All these formulae are logically consistent.**

a. Believes$_1$ (Ralph, the man in the brown hat is a spy)

b. Believes$_1$ (Ralph, the man on the beach hat is not a spy)

c. Believes$_2$ (Ralph, Orcutt, [λx.x is a spy])

d. Believes$_2$ (Ralph, Orcutt, [λx.x is not a spy])

Key Observation: As purely relational statements, (8c) and (8d) do not entail (8e) below. Therefore, we can model Ralph as holding consistent beliefs.

e. Believes$_2$ (Ralph, Orcutt, [λx.x is a spy and x is not a spy])

(10) **First Immediate Complication**

It's possible for the complement of *believes* to contain multiple NPs, *each of which is construed de re*. Consequently, we'll need an infinite number of different 'Believes$_n$'

a. Sentence: Ralph believes that Cicero denounced Cataline.

b. *De Re* Truth-Conditions:
Believes$_3$ (Ralph, Cicero, Cataline, [λx. λy . x denounced y])

(11) **Second Immediate Complication**

- The *de re* / *de dicto* ambiguity is not a special property of "*believes*", but holds for all propositional attitude verbs (*say*, *want*, *hope*, *expect*, etc.)

- Therefore, we'll have to assume that all such verbs are infinitely ambiguous.

(12) **Third Immediate Complication**

If we really can't bind into intensional contexts as Quine proposes (8), then how do we represent the truth-conditions of sentences like the following:

a. Someone$_1$ thinks he$_1$ is Napoleon.

Quine's Answer: The meaning of (12a) also makes use of Believes$_2$:
∃x. Believes$_2$ (x, x, [λy . y is Napoleon])

(13) **Remaining Problem**

As noted by Kaplan (1968), Quine's solution in (8) still has problems for the stronger version of the puzzle in (6). The truth-conditions for (a) and (b) would still end up being inconsistent.

a. Ralph believes that Orcutt is a spy.
Believes$_2$ (Ralph, Orcutt, [λx.x is a spy])

b. Ralph *doesn't* believe that Orcutt is a spy.
NOT(Believes$_2$ (Ralph, Orcutt, [λx.x is a spy]))

(14) **Final Note on Quine (1956)**

In the final part of the paper, Quine argues that the non-entity arguments of Believes$_n$ should not be viewed as intensions, but rather as syntactic/linguistic objects (like sentences).

Since this isn't picked up by any later authors, we'll ignore it here…

2. Kaplan (1968) "Quantifying In"

Kaplan 1968 is an extended response to Quine (1956). Its key contributions to the theory of the *de re* / *de dicto* ambiguity are as follows.

(15) **The Importance of Kaplan (1968)**

- Provides a solution to the Double Vision problem that avoids Quine's blanket proscription against quantifying into intensional contexts.

- Truth-conditions for the *de re* reading make use of the same (metalanguage) predicate 'Believes' that appears in the truth-conditions of the *de dicto* reading.

    - Caveat (Yalcin (2015) *et multa alia*):
      This doesn't guarantee that a *compositional semantics* implementing these truth-conditions won't still have to stipulate that the English word "*believes*" is lexically ambiguous…

- Analysis provides a potential solution to the stronger version of the Double Vision problem in (6).

- **Introduces the idea that the *de re* truth-conditions involve a special relation R holding between the believer and the object of belief (*res*).**
    - Lewis (1979) later introduces the notion that 'R' is an 'accessibility relation'

Kaplan 1968 is a huge article, dealing with a variety of important issues…
For reasons of time/relevance, I'm going to give a rather abbreviated / simplified presentation of the key ideas

(16) **The Key Idea / Claim, In a Nutshell**
While Quine is right that (b) doesn't represent the truth-conditions of (a) in the Double Vision scenario, *he's wrong to ban all quantification into intensional contexts.*

a. Sentence: Ralph thinks that Orcutt is a spy.

b. Incorrect Truth-Conditions: $\exists x.\ x = \text{Orcutt} \ \&\ \text{Believes}(\text{Ralph}, x \text{ is a spy})$

The formula in (c) – which does involve quantification into an intensional context – looks like a viable contender for the truth-conditions of the *de re* reading…

c. Kaplan's Analysis: $\exists \varphi.\ \text{Denotation}(\varphi) = \text{Orcutt} \ \&\ \text{Believes}(\text{Ralph}, \varphi \text{ is a spy})$

'*There is a term φ which denotes Orcutt, and Ralph believes (de dicto) that φ is a spy*'

Kaplan also explains at length that truth-conditions of the kind in (16c) are exactly the kind of truth-conditions that a Fregean would want to propose on independent grounds…

- *For our purposes, we can put those considerations aside…*
- But see Yalcin (2015) for more discussion of this issue…

(17) **Kaplan's (1968) General Take on 'Double Vision' Cases**

- Again, following Quine (1956), in the Double Vision scenario (4a), the following *de dicto* truth-conditions hold.

a. Believes (Ralph, the man in the brown hat is a spy)

b. Believes (Ralph, the man on the beach hat is not a spy)

- Now, since '*the man in the brown hat*' denotes Orcutt, it follows that the formula in (c) is also true.

c. ∃φ. Denotation(φ) = Orcutt & Believes(Ralph, φ is a spy)

- Also, since '*the man on the beach*' denotes Oructt, it follows that the formula in (d) is also true.

d. ∃φ. Denotation(φ) = Orcutt & Believes(Ralph, φ is not a spy)

- Clearly, (c) and (d) do not together entail (e). (Since the quantification over 'φ' can be – and is – witnessed by different expressions in the two formulae.)
  Thus, (e) can be false, even though (c) and (d) are true!

e. ∃φ. Denotation(φ) = Orcutt & Believes(Ralph, φ is a spy and is not a spy)

- So, if we view the formulae above as representing the truth-conditions of the following sentences, we see how they can all be simultaneously true, *without Ralph also holding inconsistent beliefs.*

(i) Ralph believes the man in the brown hat is a spy (truth-conditions = (17a))

(ii) Ralph believes that the man on the beach is a spy (truth-conditions = (17b))

(iii) Ralph believes that Orcutt is a spy. (truth-conditions = (17c))

(iv) Ralph believes that Orcutt is not a spy. (truth-conditions = (17d))

(18) **Advantage One**

We don't need a blanket ban on quantifying into intensional contexts in order to account for Double Vision cases.

- Kaplan (1968) explains at length why such a stipulation is problematic. We can take it for granted, though…

- Note: We still must somehow rule out the problematic truth-conditions in (16b) (More on that in a moment…)

(19) **Advantage Two**

We don't need to have an infinite number of different 'belief'-predicates in our metalanguage. All the formulae in (17) use the same predicate 'Believes(x,p)'. Similarly, 'multiple *de re*' sentences like (a) can be captured via formulae like (b):

a. Sentence: Ralph believes that Cicero denounced Cataline.

b. *De Re* Truth-Conditions:
$\exists\varphi$. Denotation(φ) = Cicero & $\exists\psi$. Denotation(ψ) = Cataline &
Believes(Ralph, φ denounced ψ)

- Note: Again, as detailed by Yalcin (2015), this doesn't necessarily mean that a compositional semantics for English will automatically be able to avoid postulating an ambiguity in the English verb "*believes*".

(20) **Advantage Three**

We have a potential solution to the stronger version of the Double Vision problem in (6). We can represent the truth-conditions of (6a) in scenario (4a) as (a) below, while the truth-conditions of (6b) are as in (b).

a. $\exists\varphi$. Denotation(φ) = Orcutt & Believes(Ralph, φ is a spy)

b. $\exists\varphi$. Denotation(φ) = Orcutt & NOT(Believes(Ralph, φ is a spy))

- In (20a), φ can be instantiated with 'the man in the brown hat.'
- In (20b), φ can be instantiated with 'the man on the beach.'

Caveat: Again, there is still the question/issue of how these truth-conditions can actually end up getting assigned to the English sentences in (6a,b).

2.1 Intermission: Kaplan's (1968) Analysis and Counterpart Theory

(21) **A Question of Principle**

If the Kaplanian truth-conditions (repeated below) are on the right track, this still raises the question of *why:*

a. *Sentence:* Ralph thinks that Orcutt is a spy.

b. *Kaplanian T-Conds:* ∃φ. Denotation(φ) = Orcutt & Believes(Ralph, φ is a spy)

Question: Is there a principled reason/explanation why a sentence like (21a) has a reading like (21b), and *not* a reading like (16b)?

Note, simply having a compositional semantics deriving the truth-conditions in (21b) needn't necessarily provide an answer to this question.

(22) **Kaplan's Answer**

If we adopt Frege's theory of belief contexts, we are ultimately pushed towards the view that *any* kind of quantification into belief contexts would have to be as in (21b).

- See Yalcin (2015) for a similar perspective.

But, what if we aren't Fregeans?

Is there another theory of intensional contexts, closer to the assumptions laid out in the first handout, that also pushes (in a principled way) towards truth-conditions like the ones in (21b)?

(23) **Enter the Counterpart**

It's sometimes noted in passing – though rarely highlighted or explicitly formulated (*cf.* van Rooy 1997) – that *counterpart theory* of the kind articulated by Lewis (1968, 1979, 1986, *etc.*) also gives a principled motivation for truth-conditions like the ones in (21b).

- That is, it will rule out the truth-conditions in (16b) in a principled way…
- But, it won't generally ban quantifying into intensional contexts (*cf.* Quine)
- And, it won't commit us to Fregeanism about intensional context (*cf.* Kaplan)

(24) **Some Central Notions of Counterpart Theory**

a. Any entity exists at *exactly one* possible world. There are no entities that inhabit multiple possible worlds.

- So, when Ralph believes that Orcutt is a spy, *Orcutt is not actually in any of Ralph's doxastic alternatives* (other than w_0, of course!).

b. Nevertheless, different entities in different worlds can be related as *counterparts*.

- Although there isn't *really* a possible world w' where Seth Cable is a Latin teacher….

- There is a possible world w' where someone just like me *in all relevant respects* is a Latin teacher…
(relevant respects = origin, childhood, appearance, classes in high school, *etc.*)

- That individual at w' is **my counterpart** at w'.

(25) **Partial Formalization**

CP(x)(w) = function that takes an entity x and a world w and returns the counterpart of x at w

- If x is an inhabitant of w, then CP(x)(w) = x

- Since CP is a function, any entity x has *exactly one* counterpart at any world w

(26) **Incorporating Counterparts into Our Intensional Semantics (First Pass)**

a. Sentence: Seth might be in that closet.

b. Previous Truth-Conditions (Handout 1):
∃w'. everything we know in w is true in w' & Seth is in that closet in w'

c. Truth-Conditions with Counterpart Theory (First Pass)
∃w'. everything we know in w is true in w' & CP(Seth)(w') is in that closet in w'

(27) **Counterparts and Context-Dependency**
The counterparts of an entity x at any possible world w' will vary with the context.

- When we evaluate the sentences below, the way in which my counterpart 'resembles' me changes.

Seth could have been a Latin teacher. / Seth could have stayed home today.

(28) **Key Conclusion** There isn't simply *one* CP function as in (25).
Rather, there's an infinity, and context determines which is at play.

(29) **Revised Counterpart-Theoretic Truth-Conditions**

a. Sentence: Seth might be in that closet.

b. Truth-Conditions:
$\exists$CP. $\exists$w'. everything we know in w is true in w' &
CP(Seth)(w') is in that closet in w'

We can also extend this to our semantics for propositional attitude sentences, as follows.

(30) **Counterpart-Theoretic Truth-Conditions for Propositional Attitude Sentences**

a. Sentence: Ralph thinks that Seth is in that closet.

b. Truth-Conditions:
$\exists$CP. $\forall$w' $\in$ Dox-Alt(Ralph,w) . CP(Seth)(w') is in that closet in w'

(31) **Counterparts and Individual Concepts**

- Given the definition in (25), CP(x) is going to be a function from possible worlds to individuals (at those worlds).
- Thus, CP(x) is an individual concept (type <se>)
- Furthermore, recall that for all entities x at world w, CP(x)(w) = x

With all this in mind, we can see that the counterpart-theoretic truth-conditions in (30b) basically amount to the following:

a. Revised Counterpart-Theoretic Truth-Conditions
$\exists f_{<se>}$. f(w) = Seth & $\forall$w' $\in$ Dox-Alt(Ralph,w) . f(w') is in that closet in w'

Moreover, if we assume that 'Denotation(f)(w) = x' *iff* 'f(w) = x', we see that these truth-conditions could also be rewritten as:

b. Re-revised Counterpart-Theoretic Truth-Conditions
$\exists f_{<se>}$. Denotation(f)(w) = Seth &
$\forall$w' $\in$ Dox-Alt(Ralph,w) . f(w') is in that closet in w'

(32) **Putting This All Together**

- According to the assumptions in (24), the problematic truth-conditions in (a) below should actually be *anomalous*.

a. Problematic Truth-Conditions:

(i) $\exists x.\ x = \text{Orcutt} \ \&\ \text{Believes}(\text{Ralph}, x \text{ is a spy})$

(ii) $\exists x.\ x = \text{Orcutt} \ \&\ \forall w' \in \text{Dox-Alt}(\text{Ralph},w)\ .\ x \text{ is a spy in } w'$

- Since Orcutt only exists at one possible world (Ralph's), it follows that (ii) would involve trivial universal quantification over a singleton set.
  - If such quantification is generally ruled out on pragmatic grounds, we can understand why these problematic truth-conditions are not generally available

- Furthermore, the assumptions in (24) entail that (b) would best represent the (non-anomalous) reading of (16a).

b. Counterpart-Theoretic Truth-Conditions

$\exists f_{<se>}\ .\ \text{Denotation}(f)(w) = \text{Orcutt} \ \&$
$\forall w' \in \text{Dox-Alt}(\text{Ralph},w)\ .\ f(w') \text{ is a spy in } w'$

'*There is an individual concept f whose denotation at the actual world is Orcutt, and in all of Ralph's doxastic alternatives w', the individual f(w') is a spy.*'

- **There is an obvious qualitative similarity between the counterpart-theoretic truth-conditions in (b) and the Kaplanian truth-conditions in (c)**

c. Kaplanian Truth-Conditions

$\exists \varphi.\ \text{Denotation}(\varphi) = \text{Orcutt} \ \&\ \text{Believes}(\text{Ralph}, \varphi \text{ is a spy})$

'*There is a term φ whose denotation (at the actual world) is Orcutt, and Ralph believes the following proposition: 'φ is a spy'*

In Summary:
Counterpart theory also independently repudiates the truth-conditions in (16b)/(32a) and independently pushes towards a theory very close to the Kaplanian analysis…

Note: This connection between counterpart theory and the Kaplan-Lewis analysis of *de re* readings is sometimes assumed by authors without special comment…
That's why I wanted to take the time to spell it out in detail here…

2.2 The 'Shortest Spy Problem': Strengthening the Kaplanian Truth-Conditions

We saw in (17) that *de dicto* truth-conditions in (33a), combined with the assumption in (33b), will entail the *de re* truth-conditions in (33c).

(33) **Predicted Entailment Relations**

a. Believes (Ralph, the man in the brown hat is a spy)

b. Denotation('the man in the brown hat') = Orcutt

c. ∃φ. Denotation(φ) = Orcutt & Believes(Ralph, φ is a spy)

Therefore, in a scenario where (34b) holds, a *de dicto* reading of (34a) will entail a *de re* reading of (34c). (Such a scenario would be the Double Vision case in (4a)).

(34) **Predicated Entailment Relations**

a. Ralph believes that the man in the brown hat is a spy.

b. The man in the brown hat is Orcutt.

c. Ralph believes that Orcutt is a spy.

(35) **The Problem of the Shortest Spy**
Due to the facts in (33)-(34), the analysis in (17) over-generates *de re* readings.

- If all we assume is (35a) [under a *de dicto* reading] and (35b), it's very hard to construe (35c) as true.

a. Ralph believes the shortest spy is a spy. (logical truth)

b. The shortest spy is Orcutt.

c. Ralph believes that Orcutt is a spy.

- However, the analysis in (17) would assign (35a) the truth-conditions in (d), which in conjunction with (e) entail (f), the proposed truth-conditions of a *de re* reading of (c).

d. Believes (Ralph, the shortest spy is a spy)

e. Denotation('the shortest spy') = Orcutt

f. ∃φ. Denotation(φ) = Orcutt & Believes(Ralph, φ is a spy)

(36) **A Reply Kaplan (1968) Immediately Recognizes (*cf.* Aloni 2005a,b)**
Maybe the anomaly of (35c) given only (35a,b) has something to do with the logical triviality of (35a)?

(37) **Revised 'Shortest Spy'**

a. Scenario: Ralph believes that all the members of the Communist Party of the USA (CPUSA) are spies. Consequently, sentence (b) under a *de dicto* reading is true. Let us also assume that (c) is true.

b. (i) Ralph believes that the shortest member of CPUSA is a spy.

(ii) Believes (Ralph, the shortest member of CPUSA is a spy)

c. (i) Orcutt is the shortest member of CPUSA

(ii) Denotation('the shortest member of CPUSA') = Orcutt

d. Judgment: In scenario (a) it is still very hard to judge sentence (e) as true. However, the analysis in (17) would predict that (b,c) should entail a true *de re* reading of (e).

e. (i) Ralph believes that Orcutt is a spy.

(ii) $\exists\varphi$. Denotation(φ) = Orcutt & Believes(Ralph, φ is a spy)

Note: In this case, the *de dicto* belief that validates the proposed *de re* truth-conditions is not logically trivial.

(38) **The Key Conclusion (Kaplan 1968, *et multa alia*)**

- The truth-conditions proposed in (16c) for *de re* readings are too weak.
- The problem with (16c) is that it quantifies over *all* terms φ.
- The 'Shortest Spy Problem' shows us that not just any φ will do in a *de re* reading.
    - There are additional conditions that have to be placed on the term φ to rule out the truth of a *de re* reading in (35) and (37).

(39) **The Conclusion in Terms of Counterparts (van Rooy 1997, Aloni 2005a,b)**
In the counterpart-theoretic truth-conditions in (32b), we must put additional constraints on the individual concept / counterpart-relation $f_{<se>}$

So, what should these additional constraints on φ ($f_{<se>}$) *look like?*

(40) **The Central Intuition (Kaplan 1968, Lewis 1979, *et multa alia*)**

It's not enough for φ simply to denote Orcutt. It also has to have special cognitive significance for *Ralph* (the believer).

- φ should be a term that Ralph uses (psychologically) to represent Orcutt to himself.
- That is, Ralph needs to have a kind of epistemic relation to Orcutt himself, one that is connected in an intimate way with the term 'φ'
    - In the 'Double Vision' case, Ralph actually *sees/encounters* Oructt on various occasions, and in those encounters, Ralph labels him with the term 'φ'
    - But in the 'Shortest Spy' case, Ralph never actually has any connection with Orcutt himself at all. Ralph doesn't ever in any sense *label* Orcutt himself with the term 'the shortest spy' (or 'the shortest member of CPUSA').

(41) **The Relation 'R(epresents)'**

The term φ **represents** entity x to entity y – R(φ,x,y) – *iff* the following hold:

a. φ denotes x

b. φ is '*a name of x for y*'

<u>That is, either (i) or (ii) below hold:</u>
(i) y has dubbed x to be φ on an occasion of perceiving x, *or*
(ii) y has acquired the name φ from an entity z for whom φ is a name of x.

- This is the notion developed later by Kripke and others that there must be a kind of 'causal-historical relation' between φ and the (named) entity x.

c. φ is '*sufficiently vivid for y*'

<u>Properties sufficient, but not necessary, for 'vividness':</u>
- Entity y can use φ to recognize/distinguish x.
- Term φ provides y with the means to locate x.
- Entity y believes/knows that they have perceived φ
- Term φ generally plays an active role in y's 'inner story' about themselves.

(42) **Revised Kaplanian Truth-Conditions for the *De Re* Reading**

a. Sentence: Ralph thinks that Orcutt is a spy.

b. *De Re* Reading: $\exists\varphi$. R(φ,Orcutt,Ralph) & Believes(Ralph, φ is a spy)
'*There is a term* φ *that* ***represents*** *Orcutt to Ralph, and Ralph believes that* φ *is a spy*'.

(43) **Key Consequences**

a. Double Vision Case:

- Following Kaplan (1968), in scenario (4a), the term 'the man in the brown hat' does *represent* Orcutt to Ralph.
    - Thus, R('the man in the brown hat', Orcutt, Ralph) holds
- Therefore, since the *de dicto* truth-conditions in (17a) hold, it follows that (42b) will hold, and so (42a) will be true under a *de re* reading.
- **Note too that all the other advantageous properties of the earlier analysis in (17) still hold for the revised analysis in (42).**

b. Shortest Spy Problem:

- Following Kaplan, in scenario (35) (or (37)), the term 'the shortest spy' (or 'the shortest member of the CPUSA') *doesn't* represent Orcutt to Ralph.
    - Because of the lack of any epistemic connection between Ralph and Orcutt, 'the shortest spy' cannot be a **name** of Orcutt for Ralph
    - Thus, R('the shortest spy', Orcutt, Ralph) *doesn't* hold.
- Therefore, the truth of the *de dicto* reading of (35a) (or (37b)) won't validate the truth of the *de re* truth-conditions in (42b), and so it won't be possible to construe (42a) as true under a *de re* reading.

(44) **The Role of Vividness**

- The actual role of the 'vividness condition' in (41c) is somewhat obscure.
- Kaplan himself suggests (p. 204) that the notion in (41c) might not be essential.
- Later authors (*e.g.*, Lewis 1979) generally leave off that aspect of the analysis…

(45) **Summary of Where We Are**

a. Contra Quine (1956), we can resolve the Double Vision puzzle without:

(i) A general ban on quantification into intensional contexts.
(ii) An infinite variety of 'Believes' predicates in our metalanguage

b. The proposed analysis will also resolve the stronger version of the puzzle in (6)

c. The proposed analysis existentially quantifies over *terms* (later, *individual concepts*, *counterpart relations*) rather than entities.

d. **In order to avoid the 'Shortest Spy Problem', the terms (concepts/relations) quantified over must also satisfy an additional constraint:**

- **They have to be connected with a kind of epistemic access between the believer and the *res*.**

(46) **Preview of a Later Issue**

While many analyses since Kaplan (1968) share the feature in (45d), *it is not without its problems*.

There are cases where it seems that (45d) is too *stringent* a constraint to put on the terms/concepts/relations quantified over in the *de re* reading…
(Sosa 1970, Aloni 2005a,b)