

Please turn in by 1 February 2011.

1. Suppose that we all associate the same description with the names 'Neptune' and 'Poseidon', namely 'the god of the sea', though of course neither of these names refers to anything. We discussed three serious candidate answers to Frege's puzzle about identity sentences: Millianism, Fregeanism, and a simplified version of certain two-dimensionalist theories. Which answers are challenged by the sentence 'Neptune is Poseidon'? Summarize the challenges involving these identity statements.
2. Which candidate answers to Frege's Puzzle are challenged by the sentences 'Cicero is Cicero' and 'Cicero is Tully'? Summarize the challenges involving these identity statements.
3. Insert quote marks in the following sentences in order to create well-formed and true sentences consisting of as few characters as possible:
  - a. Of is a two-letter word of English.
  - b. The sense of of is the sense of of.
  - c. Of is the name of a word of English.
  - d. Of and of and of are all different token expressions.
  - e. Of and of and of are all different type expressions.
4. Is the type-token distinction fundamentally a bipartite distinction? Give an argument to justify your answer.
5. Can token expressions have the same sense but different referents? If you think they can, construct a case that illustrates your claim. If you think they cannot, explain why no such case can be constructed.
6. Consider the following example involving the character of Pierre as described in KRIPKE 1979: Pierre has a friend Polly who is fluent in French and English. Pierre and Polly have a conversation about London using the term 'Londres' while Pierre is living in Paris and aspiring to visit the pretty city he sees in travel magazines. Pierre and Polly have another conversation using the term 'London' while Pierre is visiting London and complaining about the ugly city around him. The following are all intuitive claims about token expressions used by Pierre and Polly on these occasions:
  - a. The sense of 'London' as Pierre uses it is identical with the sense of 'London' as Polly uses it.
  - b. The sense of 'London' as Polly uses it is identical with the sense of 'Londres' as Polly uses it.
  - c. The sense of 'Londres' as Polly uses it is identical with the sense of 'Londres' as Pierre uses it.
  - d. The sense of 'London' as Pierre uses it is *not* identical with the sense of 'Londres' as Pierre uses it.

These four claims are obviously incompatible. Which one(s) should we reject, and why?

7. From MCCAWLEY 1993: give an account in terms of Gricean conversational implicature of why the slogan 'Serving Chicagoland at over twenty locations' conveys that the company in question has fewer than 30 locations in the Chicago area.

8. From CHERCHIA & McCONNELL-GINET 2000: for each of the following pairs of sentences, explain why the first sentence conversationally implicates the second:
- a. Joan swung at the ball. / Joan missed the ball.
  - b. I wonder what time it is. / The speaker wants to be told what time it is by the addressee.
  - c. Jill and Greg went to the movies. / Jill and Greg went to the movies together.
9. Recall the discussion of scope possibilities for definite descriptions in RUSSELL 1905. Consider the sentence 'I thought the mother of the bride was taking Valium.' According to Russell, how many readings should this sentence have? Justify your answer.
10. Consider the following quantifiers:
- a. some
  - b. no more than seven
  - c. at least seven
  - d. most

For each quantifier, determine whether it is downward or upward monotone with respect to one or both of their argument predicates, and whether it licenses negative polarity items in one or both of its argument predicates.

## References

- CHIERCHIA, GENARO & SALLY McCONNELL-GINET. 2000. *Meaning and Grammar: An Introduction to Semantics*. MIT Press, Cambridge, second edn.
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- McCAWLEY, JAMES D. 1993. *Everything That Linguists Have Always Wanted to Know about Logic*. University of Chicago Press, Chicago.
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Phil 404: Problem set #2

Please turn in by 17 February 2011.

1. The following sentences are excerpted from your submitted solutions to the first problem set. Identify all use-mention confusions in each passage. If possible, correct the errors. If it is not possible to correct the passage, say why the use-mention confusion is crucial to the point being made.
  - a) Two-dimensionalists have to prove that in all nearby worlds in which 'Neptune' exists, he exists if and only if 'Poseidon' exists.
  - b) If one were to replace 'dog' with 'canine,' these would have the same sense, but they have different referents since the token expression 'dog' refers to the word 'dog' and the token expression 'canine' refers to the word 'canine'.
  - c) For example: 'a bicycle' is a type object, but 'the pink bicycle I got for my birthday' is a token object of the more general type. Thus, types and tokens are not completely unrelated.
  - d) The two-dimensionalist would have a hard time saying that 'Neptune is Poseidon' in this case.
  - e) The Greek God 'Poseidon' and the Roman God 'Neptune' are the same person.
  - f) Polly, by virtue of being fluent in both French and English, knows that London is 'Londres' in French.
2. Explain Rothschild's 2010 argument against the theory of negative polarity licensing given in LADUSAW 1979. In particular, identify a sentence such that Rothschild claims that Ladusaw makes an incorrect prediction about that sentence. State the prediction that Ladusaw makes about that sentence, and explain why the prediction is incorrect according to Rothschild.
3. Explain Rothschild's 2010 argument against the theory of definite descriptions given in RUSSELL 1905. In particular, state the theory of negative polarity licensing that Rothschild is assuming. State the Russellian theory that Rothschild is attacking. Identify a sentence such that Rothschild claims that the Russellian theory makes an incorrect prediction about that sentence. Explain why the prediction is incorrect according to Rothschild.
4. Can two tokens of the same question differ with respect to whether they are internal or external, in the sense of CARNAP 1950? If so, give an example. If not, explain why this cannot happen.
5. For CARNAP 1950 and for QUINE 1951, is analyticity a property of sentence types, sentence tokens, propositions, or something else? If Carnap and Quine give different answers, explain which notion of analyticity you think is more useful.
6. Consider the following passage from SIDER 2001:

Consider the debate over whether right action is maximization of utility or conformity to the categorical imperative. Both utilitarians and Kantians are happy to admit the existence of the properties of conformity to the categorical imperative and maximizing utility; what they disagree over is which property is the property of being morally right. Multiple predicate meanings are available to all, whereas multiple quantificational meanings—except for restricted quantificational meanings, which are in the present context irrelevant—simply do not exist.

Explain the contrast that Sider is drawing between predicates and quantifiers. How is this contrast relevant to the debate between Sider and his opponents?

7. Suppose you find two stones. The first is a blue stone. There is a note attached to the stone that reads, "This is a magic stone. Before you observed it, the stone was green." The second is a green stone. There is a note attached to the stone that reads, "This is a magic stone. Before you observed it, the stone was blue." Are either of these stones grue?
8. Is it necessary to talk about objects that change color in order to illustrate the arguments in GOODMAN 1955? Why or why not?
9. Define 'emerose' as Goodman does. Use the term 'emerose' to derive the conclusion that all roses examined from now on will be blue.
10. Suppose that you are about to flip a fair coin three times. Determine the objective chance that the coin will land heads each time, and the objective chance that the results of the three tosses will be either all heads or all tails. Then calculate the conditional objective chance of each of these propositions, conditional on each of the following:
  - a) The coin lands heads at least once.
  - b) The coin lands heads at least twice.
  - c) The coin lands heads all three times.

## References

- CARNAP, RUDOLF. 1950. "Empiricism, Semantics, and Ontology." *Revue Internationale de Philosophie*, vol. 4: 20–40.
- GOODMAN, NELSON. 1955. *Fact, Fiction, and Forecast*. Harvard University Press, Cambridge.
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- SIDER, THEODORE. 2001. "Criteria of Personal Identity and the Limits of Conceptual Analysis." In *Philosophical Perspectives 15: Metaphysics*, JAMES TOMBERLIN, editor, 189–209. Blackwell Publishers, Ltd., Oxford.

Please turn in by 29 March 2011.

1. Suppose that there is an external world, but suppose also that there is also an evil demon who often intercepts the deliverances of your senses and replaces them with misleading appearances in order to cause you to have false beliefs. Suppose that the demon makes a mistake, accidentally allowing you to form a true belief by exercising an ordinary perceptual method; say, for instance, that you believe that it is cold outside on the basis of feeling the cold air on your skin. Does your true belief in this sort of case count as a counterexample to the justified-true-belief analysis of knowledge? Justify your answer.

2. Consider the following example from BESSON 2009:

Suppose Nate wants to learn the rules of logic, and there is some logical vocabulary which he does not know: for instance, he does not know the word 'if' and does not have the concept of material implication. Brenda, who is a renowned expert in logic, agrees to teach him. Given that Nate does not know the word 'if', she intends to begin by teaching him the rules for 'if', that is to say, the rules of conditional proof and modus ponens.

The teaching goes well with the rule of conditional proof. But when she turns to the rule of modus ponens, Brenda gets tired and irritated. She decides to trick Nate, and sets about teaching him a fallacy. Instead of modus ponens (MP), Brenda decides to teach Nate the incorrect rule known as the fallacy of asserting the consequent (AC). Suppose that by sheer coincidence, just at the times when Brenda is about to utter (AC), or one of its instances, there is a whirlwind of sorts between her mouth and Nate's ear, which they both fail to detect. The effect of this whirlwind is that although Brenda utters the rule (AC), Nate hears the rule (MP).

Suppose that after this lesson, Nate truly believes that modus ponens is a valid rule of inference. Does his true belief count as a counterexample to the justified-true-belief analysis of knowledge? Justify your answer.

3. Which, if any, of the counterexamples to the justified-true-belief analysis of knowledge in GETTIER 1963 are answered by an analysis that stipulates that in order to count as knowledge, beliefs must be not only justified and true, but *sensitive*? Explain your answer.
4. Give a realistic example of a credence distribution  $C$  and propositions  $p$  and  $q$  such that  $C(p|q) \neq C(p)/C(q)$ .
5. For each of the following sentences, say whether it expresses a contingent or necessary truth as uttered by Kripke in the context of *Naming and Necessity*:
  - a) Nine is odd.
  - b) Nine is the number of planets.
  - c) The number of planets is odd.
  - d)  $S$  is one meter long.
  - e) Hesperus is Phosphorus.
  - f) Hesperus is not Mars.
  - g) 'Hesperus' and 'Phosphorus' corefer.
  - h) I am here.
  - i) I am the speaker of the context.
  - j) Grass is green if and only if grass is actually green.

6. For each of the sentences in (5), say whether it expresses a truth that is knowable *a priori*. Justify your answer.

7. On the basis of the discussion in WEINBERG et al. 2001, would you expect the knowledge ascriptions of the groups they identify as “East Asian” and “Western” to differ more drastically for thought experiments involving intervening epistemic luck or environmental epistemic luck? Explain your answer.
8. WEINBERG et al. 2001 put forward two speculative hypotheses about why there is a statistically significant correlation between socio-economic status and reported intuitions about their thought-experiments:

One hypothesis is that one of the many factors that subjects are sensitive to in forming epistemic intuitions of this sort is the extent to which possible but non-actual states of affairs are relevant. Another possibility is that high SES subjects accept much weaker knowledge-defeaters than low SES subjects because low SES subjects have lower minimum standards for knowledge. More research is needed to determine whether either of these conjectures is correct. (27)

Describe an experiment that would decide between these two hypotheses.

9. Consider the following case from BURGE 1979. Jane believes that she has arthritis because her thigh is in pain. She couldn't have arthritis in her thigh, though, because arthritis is a condition of the joints. However, we can imagine a counterfactual scenario where Jane and her thigh ailment are the same, but where the medical community came to use the term 'arthritis' to refer to muscular ailments as well as ailments of the joints. In such a counterfactual scenario, does Jane use 'arthritis' to express beliefs about arthritis? Explain your answer, and explain the importance of your answer for externalist theories of content.
10. What might WEINBERG et al. 2001 and other advocates of experimental philosophy say about your answer to (9)? Design and implement your own miniature philosophy experiment, involving at least five subjects. Report your experimental methods and your results here. Explain what importance your preliminary findings would have for externalist theories of content if they were reproduced in a more extensive study.

## References

- BESSON, CORINE. 2009. “Logical Knowledge and Gettier Cases.” *Philosophical Quarterly*, vol. 59 (234): 1–19.
- BURGE, TYLER. 1979. “Individualism and the Mental.” *Midwest Studies in Philosophy*, vol. 4: 73–121.
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Please turn in by 14 April 2011.

1. From HEIM 2010: in the fairy-tale "The Wolf and the Seven Little Goats," the little goats are home alone when the wolf knocks on the door and says: "Open the door, my dear little goats! I am your mother." Draw the propositional concept of 'I am your mother' as uttered by the wolf. What is communicated by this utterance: the horizontal or diagonal proposition?
2. For each of the following sentences, say whether it has a constant primary intension, and whether it has a constant secondary intension:
  - a) Nine is odd.
  - b) Nine is the number of planets.
  - c) The number of planets is odd.
  - d) *S* is one meter long.
  - e) Hesperus is Phosphorus.
  - f) Hesperus is not Mars.
  - g) 'Hesperus' and 'Phosphorus' corefer.
  - h) I am here.
  - i) I am the speaker of the context.
  - j) Grass is green if and only if grass is actually green.
3. Draw the propositional concepts of utterances of (b), (d), (f), (h), and (j) above.
4. Draw the propositional concepts of utterances of these sentences in the scope of the metaphysical necessity operator.
5. Draw the propositional concepts of utterances of these sentences in the scope of the dagger operator.
6. Consider a sophisticated descriptivist theory, according to which the meaning of a name is an actualized definite description. To take a toy example, suppose that 'Hesperus' is synonymous with 'the star that actually rises in the evening' and 'Phosphorus' is synonymous with 'the star that actually rises in the morning'. According to this theory, what is the propositional concept of 'Hesperus is Phosphorus'?
7. Can one accept the claim that names are rigid designators without accepting the claim that the meaning of a name is its referent? Explain why or why not.
8. HEIM 2010 makes the following observation:

That diagonalization is only a last resort means that it does not apply when it doesn't need to, i.e. when the literal character of the sentence uttered is constant across the common ground to begin with. As it turns out, however, this assumption is empirically vacuous: an alternative theory which claims that every utterance is understood via diagonalization would make exactly the same predictions.

Explain what Heim means when she says that the assumption in question is empirically vacuous. Give concrete examples to illustrate your explanation.

9. Compare and contrast the central problems concerning consciousness discussed in NAGEL 1974 and in CHALMERS 2006. Could an answer to one of these questions yield an answer to the other, or must the questions be answered independently?
10. Invent a difficult short-answer question that you think should be on the final exam for this class, and answer that question.

### References

- CHALMERS, DAVID J. 2006. "The Foundations of Two-Dimensional Semantics." In *Two-Dimensional Semantics: Foundations and Applications*. Oxford University Press.
- HEIM, IRENE. 2010. "Lecture Notes on Indexicality." Ms., Department of Linguistics and Philosophy, MIT.
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