# Final 2017 (due May. 11, 2017)

Jean Mark Gawron SDSU\*

May 9, 2017

#### **1** Introduction

The final will be due at 12:15 PM on Thursday May 11, 2017 in my office in Storm Hall West, SHW 238.

### 2 Modality [25 pts]

For the following modal sentences, write down modal truth definitions for **all** the readings. Please note: There **are** ambiguous examples. Some sentences exhibit more than one of three possible kinds of modality,

For example:

- (a) Alice must leave.
- (b) p = Alice leaves"Alice must leave" is true iff  $\forall w_{po}[p \text{ is true in } w_{po}]$

Note the following error strongly suggests you aren't thinking very hard about this:

<sup>\*</sup>San Diego State University, Department of Linguistics and Oriental Languages, SHW 238, 5500 Campanile Drive, San Diego, CA 92182-7717, gawron@mail.sdsu.edu.

- (a) Alice must leave.
- (b) p = Alice must leave."Alice must leave" is true iff  $\forall w_{po}[p \text{ is true in } w_{po}]$

Notice the possible worlds aren't playing any role in the explanation of what *must* means, since since you're just made *must* part of the unanalyzed statement p. If you don't factor out the modality in your definition your answer gets zero credit.

Important: Translate modal expressions like *can*, *could*, *may*, *might*, *must*, *should*, and *allow*, consistently. For example, if you use  $\exists$  for epistemic readings of *may*, use it for deontic readings as well, and if you use it in one example with *may*, use it in all.

- 2.1. John may not read the letter.
- 2.2. John may not have read the letter.
- 2.3. John must be in the kitchen.
- 2.4. John must not believe in fairies.
- 2.5. John must have read the letter.
- 2.6. John could have read the letter.
- 2.7. If Frank studies hard, he will pass his semantics final.

## **3** Opacity

#### 3.1 Basic

For each of the following sentences, determine whether the underlined NP is in an opaque context. **Demonstrate** you are right with a substitution test. **Explain** how the results of the test justify your conclusion.

- (1) a. Larry thinks that <u>Rebecca</u> is a white militant.
  - b. Larry regrets that <u>Rebecca</u> is a white militant.
  - c. Larry persuaded the masked burglar to leave.
  - d. Frank needs the leader of his choir to approve his trip.

### 4 Additional

The following sentence has *de re* and *de dicto* readings. Explain what these are by giving a context in which each is true. Then give logical translations showing that these readings can be treated as a scope ambiguity. Please say which translation represents the *de re* reading and which translation represents a *de dicto* reading.

(2) Lisa wants to hire a Norwegian.

### 5 Aspect

Classify the following sentences as achievments, accomplishments, processes, or states. Provide tests sufficient to justify your classification, and explain what each test shows. Use the subinterval property in at least two different examples, and use an appropriate test to show that the given clause either has or does not have the subinterval property, If you think an example is ambiguous, says so, and provide tests to justify the ambiguity.

- (3) a. John crossed the bridge.
  - b. Ferdinand resembles a unicorn.
  - c. Rita sang songs.
  - d. Frank ran a tavern.

#### 6 Events

#### 6.1 Basic

Translate the following sentences using event semantics. You may translate all NPs as a constant. (*the teach* = t).

- (4) a. John carefully crossed the bridge.
  - b. Fred assisted the teacher with the grading.
  - c. Alice jumped over the fence.
  - d. Susan called Ed up on the phone.

#### 6.2 Putting it all together

Translate the following sentences using event semantics. This time you may not translate all NPs with a constant. You can only do that with proper names and definites. You must translate quantified NPs with quantifers, as in the following example:

a. John gathered the leaves with a rake.
b. ∃x [rake(x) & ∃e [gather(e) & agent(j, e) & patient(l, e) & with(x, e)]]

Unless instructed otherwise, you should be on the look out for ambiguities. Explain them. Give two translations. Say which reading goes with which translation.

- (6) a. John found a quarter in the kitchen. (do the most likely reading, ignore any possible ambiguities).
  - b. John saw a man with a telescope.
  - c. Susan lent Fred an excellent book.

#### 7 A Final thought

Of that which we cannot speak we must remain silent.