平成31年度
大学院文学研究科博士課程前期2年の課程入学試験
（秋期・一般選抜）問題

専門科目Ⅰ 英語学

試験開始の合図があるまで、この問題冊子を開いてはいけない。
One of the most striking and fundamental properties of language—any language—is that speakers have the ability to produce and understand an unlimited number of expressions that they have never produced or heard before (indeed many of these will have never before been uttered by anyone). (A) This simple point is stressed in just about every introductory linguistics textbook, often phrased this way: “A speaker of a language is able to recognize as well-formed an unlimited number of expressions that s/he has never heard before.” Examples that demonstrate this are easy to construct. One can, for instance, note the existence of expressions like those in (1):

(1) a. the tallest linguistics major
   b. the tallest linguistics major who is graduating in December
   c. the tallest linguistics major who is graduating in December who is enrolled in formal semantics
   d. the tallest linguistics major who is graduating in December who is enrolled in formal semantics who took phonology last semester...

One can keep forming longer and longer expressions like this by adding new relative clauses (each of the phrases that begin with who here is what is commonly known as a relative clause). (B) But while this is often put in terms of a speaker’s ability to recognize that these are well-formed, that is surely only part of the story. Even more interesting (at least to a semanticist) is the fact that speakers know how to interpret these expressions. The rule system that speakers have unconsciously learned is hardly just a system to determine whether a given string of words is an expression of the language in question (here English); language would be quite useless if it were just a collection of meaningless strings.

And so, in modeling what a speaker of English “knows” (in an unconscious sense, of course) about her/his language we want to predict how it is that s/he can understand expressions like those in (1) no matter how many relative clauses they contain. Thus speakers obviously have as part of their knowledge a finite set of basic items—call these the words and call the collection of the basic items the lexicon. (C) Since the lexicon is finite, the meanings of the basic items can be learned on a case-by-case basis. But this obviously cannot be the case for the larger expressions: there has to be some systematic set of principles that speakers have that allows them to understand their meanings on the basis of the meanings of the smaller parts (ultimately the words) that make them up. This is the system which is called the compositional semantics—and one of the jobs of a theory of the semantics (of any language) is to model the rules and/or principles which allow speakers to understand an unlimited number of expressions.

Let’s look a bit more at the expressions in (1). When a speaker utters any of these expressions—perhaps as part of a fuller sentence like in (2)—the act of uttering these expressions takes place in a fuller discourse context, and we understand them relative to facts about that context:

(2) We need to make sure to order academic regalia which is long enough to fit the tallest linguistics major (who is graduating in December (who ...)))
The role of context will be discussed more formally at various points in the text, but the informal notion of a speech or discourse context is clear enough. So suppose we are using the expressions in (1) in a context in which it is obvious that we are concerned with the students at Brown University. Given this (or any other context), we can see that any speaker of English immediately knows some interesting facts about these expressions—facts which our model of the compositional semantics needs to account for. Take for instance (1a). It refers to some unique individual. The hearer may well not know who exactly that is—in fact the speaker might not either as is clear in a context like (2). But both parties assume that there is a particular individual (and only one) referred to by each of these expressions. And there are many other inferences that can be drawn from these. For example, (D) we immediately know that if the individual described by (1a) is Nora, then either she’s also the individual described by (1b) or else she is not graduating in December; Moreover, if Nora is not the person picked out by (1b) then whoever that person is, she must be shorter than Nora. Similarly, with each successively longer phrase we either refer to the same person, or to one who is shorter. Suppose that Zorba is the person described by (1b). We know that he is shorter than Nora, and also know that if he is not the person described by (1c) then he is not enrolled in formal semantics. And whoever the (1c) person is—let’s say Otto—Otto must be shorter than Zorba. (E) The addition of each successive relative clause either keeps the referent constant or allows shorter and shorter people to “rise to the top.” This kind of knowledge is automatic and immediate, and it is the job of a model of the compositional semantics to explicitly account for inferences like this.

We won’t give a serious account of any of this at this point, but can hint at one possible account. Suppose that an expression like linguistics major refers to some set of individuals. When this set is put together with the tallest (pretend that the tallest is a single word here), the entire expression ends up referring to the tallest member of that set. Nothing surprising so far. But what is more interesting is what happens with the addition of further relative clauses. It seems plausible that something like who is graduating in December also refers to a set (obviously, the set of December graduates). The above facts will make sense if the compositional semantics first combines the two sets (the set of linguistics majors and the set of December graduates) and intersects them to give a new set. The intersection of two sets is all things that are in both sets. So (1b) ends up picking out the tallest member of that set. It is now possible to demonstrate that the system correctly predicts that if the referent of (1b) is not Nora, it can only be because she is not graduating in December. For if Nora is taller than anyone in the linguistics major set (call that L) then she is taller than anyone in the intersection of L with the December graduates (call that D). After all, everyone who is in that intersection of L and D is also in L. So if Nora is not the referent of (1b) it can only be that she’s not in the intersection of D and L, and since she’s in L (by assumption) it follows that she can’t be in D. It also follows that if (1b) refers to Zorba, he must be shorter than Nora. By the definition of intersection, if Zorba is in the intersection of D and L he is in L, but we already know that Nora is taller than everyone else in L. (F) All of this is very simple logic that we—the linguists—can work out in the form of an informal proof as above. It could also be worked more formally if one were so inclined. Pedantic though it may seem, it shows that our compositional procedure (which involves intersecting two sets) can be used to correctly model inferences that speakers of English effortlessly make.

[Adapted from Pauline Jacobson, Compositional Semantics: An Introduction to the Syntax/Semantics Interface, Oxford University Press]
問１　下線部（Ａ）を日本語に訳しなさい。

問２　下線部（Ｂ）について、著者がそのように述べる理由を本文に即して説明しなさい。

問３　下線部（Ｃ）について、著者がそのように述べる理由を本文に即して説明しなさい。
問4 下線部（D）について、(1a,b)から得られるこの結論が本文で述べられている意味論の考え方からどのように導き出されるのかを説明しなさい。

問5 下線部（E）について、具体的内容を本文に即して説明しなさい。

問6 下線部（F）を日本語に訳しなさい。
[II] 文(1)の意味は多義的であるが、(2)の文の意味は一義的である。
それぞれの文において許される意味を日本語で示し、(1)と(2)の対比を統語論の観点から説明しなさい。

(1) Mary decided on the boat.
(2) Which boat did Mary decide on?
【III】以下の日本語の文を英語に訳しなさい。

言うまでもなく、科学的に知ることは「知ること」全体の中の一部でしかない。そもそも、科学的知識であるからには明確な言語で表現される必要があるが、一方では言語化することはなかなか困難な、しかしそれなしでは人間がどうして生きられないような重要な知識がある。*M・ポラニーが「暗黙知」とよぶものはこのような知を代表している。久しく会わなかった知人の顔を見て、直ちにその人とわかる。しかし、どうしてそのように判断できたかと問われても説明できない。「知っているから知っているのだ」としか答えられない。そのような判断は顔を構成する細部の知識に依拠していることは確かだが、それだけでは決定的に足りない何かがある。その表現しがたい「何か」が暗黙知である。

【藏書備考『新しい自然学：非線形科学の可能性』ちくま学芸文庫】

（注）*M・ポラニー：Michael Polanyi