

Introduction à la Linguistique - ENS 2004

Feuille d'Exercices - I

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Exercise 1 French [Level II]

Consider the following paradigm:

- (i) a. On mange
 we-colloquial *eat*
 'We are eating'
 b. Nous mangeons
 we-formal *eat*
 'We are eating'

- (ii) a. Pierre mange rien
 Pierre eats nothing
 b. Pierre ne mange rien
 Pierre not eats nothing

1. What is the difference between the conditions of use of (ia) and (ib)? (iia) and (iib)?

2. Based on the preceding data, can you explain why for many French speakers there is a sharp contrast between (iia), (iib) and (iic) [the * indicates that a sentence 'sounds odd', i.e. is ungrammatical in a descriptive sense]?

- (iii)a. On mange rien.
 we *eat* *nothing*
 'We eat nothing'
 b. Nous ne mangeons rien
 we not eat nothing
 'We eat nothing'
 c. *Nous mangeons rien
 we eat nothing
 'We eat nothing'

Answer:

Exercise 2 [Level I]

Consider the following passage due to R. Jackendoff:

"Bird species differ radically in how they learn their songs. In some species, such as the cuckoo, the song is entirely innate. (It had better be: cuckoos lay their eggs in other birds' nests, so baby cuckoos do not grow up hearing parental cuckoo songs.) In other species, such as the bullfinch, the song appears to be entirely learned: a young bullfinch raised in a cage with a canary will end up singing the canary's song.

More interesting are the species where there is an interplay of innate and learned characteristics. Chaffinches reared in isolation from birth sing only a rudimentary song. It is necessary for these birds to hear other chaffinches sing in order to acquire the full detail of the song. Acquisition goes on over a period of about ten months. If a chaffinch is isolated somewhere along the way until after it is ten months old, its song remains in its intermediate state, and no amount of exposure after the age of ten months helps the bird learn more."

Question: Can you think of a phenomenon in human language that makes it similar to the acquisition of its song by the chaffinch?

Answer:

Exercise 3 [Level II]

Consider the following remarks by Ray Jackendoff:

"Imagine we're listening for the very first time to some tune, say 'Happy Birthday', and let's compare this experience with hearing the same tune played upside down and backwards. Even on the first hearing, we will surely recognize the former tune as a coherent tune, and we'll probably be able to hum along after hearing it a couple of times. But the latter (let's call it 'Yadhtrib Yppah') will sound odd, like a bunch of senseless notes, and it will be pretty tough to hum along with. What accounts for these radically different reactions?

The difference is that 'Happy Birthday' conforms to *patterns* of music that we are familiar with, and 'Yadhtrib Yppah' doesn't: its rhythm feels all irregular, its melody doesn't seem to go anywhere, and its ending doesn't sound like an ending. But what are these patterns? They can't be memories of specific pieces of music we've heard, because by hypothesis we've never heard either of these particular tunes. Rather, the patterns are *commonalities* we've extracted from pieces we've heard.

Knowing these patterns enables us to do other things too. For instance, even on a first hearing of 'Happy Birthday', we may well be able to notice it if the performer plays wrong notes. Why? Because (some) wrong notes violate the melodic or harmonic patterns that we associate with this style of music. Or consider listening to a jazz arrangement of a familiar tune, in which each of the players takes a chorus. They don't play the literal notes of the tune - it wouldn't be jazz if they did. Rather, they play something that is related to the tune in harmony, rhythm, and melodic structure. We can recognize these relationships (to a greater or lesser degree, depending on the style of jazz they're playing). How? Evidently by intuitively extracting and comparing the patterns of the original tune and the solo choruses.

What does 'intuitively' mean here? It means that we don't carry out these comparisons *consciously*. All we consciously register is 'Oh, yes, it fits' or 'Something odd is going on'. Without some study of music theory, the patterns themselves are unconscious'."

PART I

Question: In what respects is the knowledge that one has of music similar to the knowledge that one has of language?

Answer:

PART II

Ray Jackendoff continues:

'Musical styles aren't as universal as a lot of people think. For instance, people who have been exposed only to American popular music will be hard put to understand what is going on in Indian ragas, or ceremonial Japanese *gagku*, or Bulgarian folk dances. They may have a pleasant (or unpleasant!) overall impression. But everything will sound more or less strange. Not only won't they be able to hum along with the music, they may not even be able to tap their foot to it. They won't be able to tell whether mistakes are being made, and they won't be able to tell what parts of the music are variations on what other parts'

Question: Can you think of similar facts in the domain of language?

Answer:

PART III

What hypothesis about the acquisition of musical intuitions could Jackendoff's discussion suggest?

Answer:

Exercise 4 [Level I]

Consider the following data from Spanish:

(A) Conjugation

'to buy' [present tense]	comprar
1 st person singular	compro
2 nd person singular	compras
3 rd person singular	compra
1 st person plural	compramos
2 nd person plural	compráis
3 rd person plural	compran

(B) Examples

(1) a. Maria compra un coche
Maria buys a car
 'Maria is buying a car'

b. Compra un coche
buys a car
 'She (or he) is buying a car'

c. Compra un coche Maria
buys a car Maria
 'Maria is buying a car'

Question 1. How is the Null Subject Parameter set in Spanish?

Answer:

Question 2. (A) below is grammatical in Spanish (note that the word *a* appears because *whom* is the object of *saw*; similarly *a* appears in (B) because *Juan* is the object of *saw*. You may assume that *a* is not the source of any ungrammaticality in these examples). Given the theory that was developed in class, should one predict that (B) is grammatical as well?

Answer:

(A) ¿A quién dijiste que Juan vio?
particle whom you-plural-said that Juan saw?
 'Who did you say that Juan saw?'

(B) ¿Quién dijiste que vio a Juan?
Who you-plural-said that saw particle Juan?
 Intended: 'Who did you say that saw Juan?'

Exercise 5 Two Arabic Dialects [Level II]

Consider the following dialects of Arabic:

A. Levantine Arabic

- (1) Fariid kaal inn ha ishtarat l-fustaan.
Fariid said that she bought the-dress
 'Fariid said that she bought the dress'
- (2) *Fariid kaal inn ishtarat l-fustaan.
Fariid said that bought the-dress
- (3) Fariid kaal innu l-bnt ishtarat l-fustaan
Fariid said that the-girl bought the-dress
 'Fariid said that the girl bought the dress'
- (4) *Fariid kaal innu ishtarat l-fustaan l-bnt
Fariid said that bought the-dress the girl

B. Bani Hassan Arabic

- (5) al-binit gaalat innu ishtarat al-libaas
the-girl said that bought the-dress
 'The girl said that she bought the dress'
- (6) Fariid gaal innu ishtarat al-binit al-libaas
Fariid said that bought the-girl the-dress
 'Fariid said that the girl bought the dress'

Question 1. What is the setting of the Null Subject Parameter in Levantine Arabic? Be explicit, i.e. say whether the Null Subject Parameter is set as in English or as in Italian, and motivate your answer.

Answer:

Question 2. What is the setting of the Null Subject Parameter in Bani Hassan Arabic? Be explicit, i.e. say whether the Null Subject Parameter is set as in English or as in Italian, and motivate your answer. **PROVIDE TWO ARGUMENTS FOR YOUR ANSWER**

Answer:

Question 3. Exactly one of the sentences in (7) and (8) is ungrammatical. Which one is it likely to be? Be sure to motivate your answer based on (i) and (ii).

Answer:

-Levantine Arabic:

- (7) ayy bint Fariid kaal inn ishtarat l-fustaan?
which girl Fariid said that bought the dress
 Intended: 'Which girl did Fariid say bought the dress?'

-Bani Hassan Arabic:

- (8) wayy binit Fariid gaal innu ishtarat al-libaas?
which girl Fariid said that bought the-dress

Intended: 'Which girl did Fariid say bought the dress'

Question 4.

Consider again the Arabic dialect of Bani Hassan. In (9) you may see that the word for 'who' can in fact take two different forms, *min* or *miin*. These forms are not possible in the same environments, however:

- (9) a. *min* ∂ arab miin
Who hit who
 'Who hit who?'
 b. **miin* ∂ arab miin
Who hit who
 c. **min* ∂ arab min
Who hit who
 d. **miin* ∂ arab min
Who hit who
- (10) a. *min* istara wuss?
Who bought what
 'Who bought what?'
 b. **miin* istara wuss?
Who bought what
 c. wuss istara miin?
What bought who
 'Who bought what?'
 d. *wuss istara min?
What bought who
 'Who bought what?'

With the data in (9) and especially (10) in mind, consider the following contrasts. Do they refute or do they confirm the hypothesis discussed in the Lecture Notes I concerning the relation between Property 3 and Property 4? Be sure to motivate your answer.

- (11) a. *miin* Fariid gaal innu kisar al-bee ∂ a?
Who Fariid said that broke the-egg?
 'Who did Fariid say broke the egg?'
 b. **min* Fariid gaal innu kisar al-bee ∂ a?
Who Fariid said that broke the-egg?

Answer:

Exercise 6 [Level III]

In *Wittgenstein on Rules and Private Language*, the philosopher Saul Kripke writes:

"I, like almost all English speakers, use the word 'plus' and the symbol '+' to denote a well-known mathematical function, addition. The function is defined for all pairs of positive integers. By means of my external symbolic representation and my internal mental representation, I 'grasp' the rule for addition. One point is crucial to my 'grasp' of this rule. Although I myself have computed only finitely many sums in the past, the rule determines my answer for indefinitely many new sums that I have never previously considered. This is the whole point of the notion that in learning to add I grasp a rule: my past intentions regarding addition determine a unique answer for indefinitely many new cases in the future.

Let me suppose, for example, that '68 + 57' is a computation that I have never performed before. Since I have performed - even silently to myself, let alone in my publicly observable behavior - only finitely many computations in the past, such an example surely exists. In fact, the same finitude guarantees that there is an example exceeding, in both its arguments, all previous computations. I shall assume in what follows that '68 + 57' serves for this purpose as well.

I perform the computation, obtaining, of course, the answer '125'. I am confident, perhaps after checking my work, that '125' is the correct answer. It is correct both in the arithmetical sense that 125 is the sum of 68 and 57, and in the metalinguistic sense that 'plus' as I intended to use that word in the past, denoted a function which, when applied to the numbers I called '68' and '57', yields the value 125.

Now suppose that I encounter a bizarre skeptic. This skeptic questions my certainty about my answer, in what I just called the 'metalinguistic' sense. Perhaps, he suggests, as I used the term 'plus' in the past, the answer I intended for '68+57' should have been '5'. Of course the skeptic's suggestion is obviously insane. My initial response to such a suggestion might be that the challenger should go back to school and learn to add. Let the challenger, however, continue. After all, he says, if I am now so confident that, as I used the symbol '+', my intention was that '68+57' should turn out to denote 125, this cannot be because I explicitly gave myself instructions that 125 is the result of performing the addition in this particular instance. By hypothesis, I did no such thing. But of course the idea is that, in this new instance, I should apply the very same function or rule that I applied so many times in the past. But who is to say what function this was? In the past I gave myself only a finite number of examples instantiating this function. All, we have supposed, involved numbers smaller than 57. So perhaps in the past I used 'plus' and '+' to denote a function which I will call 'quus' and symbolize by '⊕'. It is defined by:

$$\begin{aligned} x \oplus y &= x+y, \text{ if } x, y < 57 \\ &= 5 \text{ otherwise.} \end{aligned}$$

Who is to say that this is not the function I previously meant by '+'?

The skeptic claims (or feigns to claim) that I am now misinterpreting my own previous usage. By 'plus', he says, I *always meant* quus; now, under the influence of some insane frenzy, or a bout of LSD, I have come to misinterpret my own previous usage.

Ridiculous and fantastic though it is, the skeptic's hypothesis is not logically impossible. To see this, assume the common sense hypothesis that by '+' I *did* mean addition. Then it would be *possible*, though surprising, that under the influence of a momentary 'high', I should misinterpret all my past uses of the plus sign as symbolizing the quus function, and proceed, in conflict with my previous linguistic intentions, to compute 68 plus 57 as 5. (...) The skeptic is proposing that I have made a mistake precisely of this kind, but with a plus and quus reversed.'

(from: Saul Kripke, *Wittgenstein on Rules and Private Language*, Harvard University Press, 1982, pp. 7-9)

Question 1. In what way is Kripke's argument about addition similar to Chomsky's 'argument from the poverty of the stimulus' about language?

Answer:

Question 2. Chomsky's 'argument from the poverty of the stimulus' was crucially based on the observation that children are not given explicit instruction about the rules of language. Does Kripke's argument rest on the same assumption? **Motivate your answer.**

Answer: