Épreuve orale de linguistique

L'épreuve comprend trois exercices. Le premier porte sur la morphologie, le second sur la syntaxe, et le troisième sur la logique et la sémantique.

<u>Exercice 1.</u> Morphologie

Dans cet exercice, nous vous demandons de comparer plusieurs hypothèses possibles concernant la composition en termes de traits des formes du verbe *être* de l'anglais (*to be)* au présent.

	singulier	pluriel
1ère personne	am	are
2ème personne	are	are
3ème personne	is	are

Vous supposerez que les formes lexicales sont insérées dans les noeux terminaux d'un arbre syntaxique. Par exemple, Dans le contexte syntaxique, la forme *is* (est la seule du tableau ci-dessus qui) peut être insérée à la place de X pour donner la phrase *John is here* :

John [$_{\text{3ème personne, singulier}}$ X] here

Cette insertion se fait en application du principe suivant (parfois appelé 'principe du sous-ensemble', ou 'subset principle' en anglais):

Principe d'insertion: 'Insérer la forme dont le contenu en termes de traits est le plus spécifique possible tout en étant compatible avec la spécification du noeud terminal.
Plus précisément: une forme A est insérée dans un noeud N si et seulement si:
(i) les traits de A sont un sous-ensemble des traits que contient N; et
(ii) il n'existe pas de forme A' telle que les traits de A' sont un sous-ensemble des traits que contient N, et les traits de A sont un sous-ensemble strict des traits de A'.

Question 1. Discutez des hypothèses suivantes concernant la spécification en termes de traits de chaque forme du présent du verbe *to be*. Expliquez pourquoi chaque hypothèse est ou n'est pas compatible avec les formes observées compte tenu du fonctionnement du Principe d'insertion ci-dessus. Quelle hypothèse vous semble offrir la meilleure analyse de la distribution des formes du verbe *be* au présent? [Nous écrivons are_1 et are_2 quand une analyse postule une homophonie entre deux formes.]

Hypothèse I

/am/ <-> 1ère personne, singulier, présent
/is/ <-> 3e personne, singulier, présent
/are[1]/ <-> 2e personne, singulier, présent
/are[2]/ <-> pluriel, présent

Hypothèse II

/is/ <-> 3e personne, singulier, présent
/am/ <-> 1ère personne, présent
/are/ <-> présent

Hypothèse III

/is/ <-> 3e personne, singulier, présent
/am/ <-> 1ère personne, singulier, présent
/are/ <-> présent

Question 2. Pour des raisons dont nous ne traitons pas ici, la forme 'amn't' est absente de beaucoup de dialectes, comme on l'a illustré en (1):

(1) a. Isn't it going to snow anymore?
b. Aren't you/they/we supposed to win?
c. *Amn't I going to be allowed to go?

Toutefois, la forme 'aren't' peut être utilisée dans ces dialectes pour exprimer (1c), comme on le voit en (2):

(2) Aren't I going to be allowed to go?

Suggérez une explication de l'acceptabilité de (2).

Exercice 2. Syntaxe

Dans cet exercice, nous vous demandons de (1) lire un résumé pédagogique récent (en anglais) présentant une approche contemporaine de la variation syntaxique, fondée sur la notion de paramètre, et illustrée sur l'exemple du Paramètre du Sujet Nul ('Null Subject Parameter'), puis (2) d'appliquer cette analyse à deux dialectes de l'arabe.

Partie (1): résumé et illustration de l'analyse de la variation syntaxique fondée sur les paramètres

"In *The Atoms of Language* (Basic Books, 2001) the linguist Mark Baker writes (p. 1):

> Deep mysteries of language are illustrated by an incident that occurred in 1943, when the Japanese military was firmly entrenched around the Bismarck Archipelago. American pilots had nicknamed the harbor of Rabaul 'Dead End' because so many of them were shot down by antiaircraft guns placed in the surrounding hills. It became apparent that the Japanese could easily decode Allied messages and thus were forewarned about the time and place of each attack.
>
> The Marine Corps responded by calling in one of their most effective secret weapons: eleven Navajo Indians. These were members of the famous Code Talkers, whose native language was the one cipher the Japanese cryptographers were never able to break. The Navajos quickly provided secure communications, and the area was soon taken with minimal further losses. Such incidents were repeated throughout the Pacific theater in World War II. Years after the end of the war, a US president commended the Navajo Code Talkers with the following words: 'Their resourcefulness, tenacity, integrity and courage saved the lives of countless men and women and sped the realization of peace for war-torn lands'. But it was not only their resourcefulness, tenacity, integrity, and courage that made possible their remarkable contribution: It was also their language.

Baker concludes:

> This incident vividly illustrates the fundamental puzzle of linguistics. On the one hand, Navajo must be extremely different from English (and Japanese), or the men listening to the Code Talkers' transmission would eventually have been able to figure out what they were saying. On the other hand, Navajo must be extremely similar to English (and Japanese), or the Code Talkers could not have transmitted with precision the messages formulated by their English-speaking commanders.

One should add that there is another reason Navajo should in certain respects be similar to English: any normal child raised in a Navajo-speaking environment will end up acquiring Navajo (in the same way that any normal child raised in an English-speaking environment will end up acquiring English). But if the argument we gave in earlier lectures is correct, the child can achieve this only because Universal Grammar is hardwired in him. Thus Universal Grammar must be compatible both with English and with Navajo, which imposes severe constraints on both of them. And yet English and Navajo are very different. How is this tension to be resolved?

One way to solve this apparent paradox is to postulate that Universal Grammar contains *free parameters*, which may be set in any number of ways. The idea has also been entertained that Universal Grammar comes with a 'default setting' of these parameters; on some views this explains why creoles that evolved from unrelated languages end up having a lot in common: a child raised in a pidgin-speaking environment does not have access to any coherent linguistic input, and as a result does not modify the default value of the parameters (or at least of some parameters). When the input is coherent, however, the child will reset the parameters so as to acquire something very much like his parents' language. Viewed in this way, language acquisition consists in the child's attempt to reset the parameters given to him by Universal

Grammar so as to match the linguistic input that he has access to (there is more to language acquisition than just this - e.g. children must learn the vocabulary of their language; but for the moment we will leave this aside).

While this may be somewhat abstract, an example will make clearer what linguists have in mind when they talk of parameters. Consider the following data from French, English, Italian and Catalan (unless otherwise noted, the word for word translation is given by the English example; as usual a star * indicates that an example is deviant for native speakers; the absence of a star indicates that the sentence is fine for native speakers):

A. Null Subjects

(1) a. __ parla (Italian)
b. __ parla (Catalan)
c. *__ parle (French)
d. *__ speaks (English)

Italian and Catalan allow verbs to have a null subject; French and English don't.

B. Person morphology (=endings that express person differences)

(Note: A kind of phonetic orthography is used for French in the example below. Several spelling differences are not reflected in the pronunciation, and are thus irrelevant for our purposes.)

	1st singular	**2nd singular**	**3rd singular**	**1st plural**	**2nd plural**	**3rd plural**
Italian	parl-o	parl-i	parl-a	parl-iamo	parl-ate	parl-ano
Catalan	parl-o	parl-es	parl-a	parl-em	parl-eu	parl-en
French	parl	parl	parl	parl-õ	parl-é	parl
English	**speak**	**speak**	**speaks**	**speak**	**speak**	**speak**

French and English have an impoverished person morphology; they only distinguish between two or three person endings (in English, the only distinction is that between 'speak' and 'speaks'). By contrast, Italian and Catalan have a rich person morphology: they both distinguish between six different endings in the present tense.

C. Subjects that follow the verb

(2) a. __ ha telefonato Gianni (Italian)
b. __ ha telefonat en Joan (Catalan)
c. *__ a téléphoné Jean (French)
d. *__ telephoned John (English)

Although in all four languages the subject can precede the verb, in Italian and Catalan it may also follow it. The latter option is precluded in French and in English.

D. Questions starting with 'who', where 'who' is the subject of the embedded verb

(3) a. Chi credi che telefonerà? (Italian)
b. Qui creus que telefonarà? (Catalan)

c. *Qui crois-tu que téléphonera? (French)
d. *Who do you think that will telephone ? (English)

The preceding facts require a bit more background. In the examples in **Erreur ! Source du renvoi introuvable.**, the interrogative word *who* is the *subject* of the embedded clause (the intended reading is: You think that *who* will telephone? The latter sentence is possible in English if I said: 'I think that XYZ will telephone', and you did not here what XYZ was. You may then ask me: 'You think that who will telephone?' However for most speakers a normal question could never be: *Who do you think that will telephone. French behaves like English, but Italian and Catalan *allow* the question that English disallows. By contrast, when *who* is the *object* (not the subject) of the embedded verb, the question is fine in all four languages. This is illustrated below for French and English (the second line of **Erreur ! Source du renvoi introuvable.**a is the word for word translation of the French example):

(4) a. Qui crois-tu que Michelle rencontrera __? (French)
Who believe you that Michelle will-meet ?
b. Who do you think that Michelle will meet __? (English)

Observe that I have written '__' after the verb. This is to indicate the linguist's belief that the word 'who' originates in the position that follows the verb (we do not explain here why in the process the auxiliary 'do' appears in the question; this fact may be disregarded for what follows):

(5) a. you think that Michelle will meet **who**?

b. **who** (do) you think that Michelle will meet ___ ?

The surprising fact, then, is that precisely when the word 'who' originates in a position that precedes the verb (as the subject of the embedded clause), the sentences become ungrammatical in French in English (as shown in **Erreur ! Source du renvoi introuvable.**c and **Erreur ! Source du renvoi introuvable.**d above), whereas they are fine in Italian and Catalan (as shown in **Erreur ! Source du renvoi introuvable.**a and **Erreur ! Source du renvoi introuvable.**b above). The ungrammatical sentence of English is represented below:

(6) a. * you think that **who** will telephone?

b. ***who** (do) you think that ___ will telephone ?

At this point we do not seek an explanation for these differences. We simply note that with respect to Property D. English and French display the same behavior, which is different from that exhibited by Italian and Catalan.

The observations developed in A., B., C. and D. are summarized in the following table:

	A. Allows null subjects?	**B.** Has rich person morphology?	**C.** Allows subjects to follow the verb?	**D.** Allows embedded questions with subject *who*?
Italian	**Yes**	**Yes**	**Yes**	**Yes**
Catalan	**Yes**	**Yes**	**Yes**	**Yes**
French	**No**	**No**	**No**	**No**
English	**No**	**No**	**No**	**No**

As can be seen, a *cluster of properties* emerges: Italian and Catalan have all of the properties A., B., C. and D., while English and French have none of them. The idea pursued by many linguists in the 1980's was that all of these properties are governed by a single parameter, called the 'Null Subject Parameter'. This gave rise to a very appealing theory of language variation: a single abstract parameter could account for a lot of apparent differences between the world's languages, since many diverse phenomena could -as in this case- depend on a single parameter. This provided a way to solve the Code Talker's Paradox:

(i) languages may vary considerably, since a single parameter may govern many phenomena. But at the same time the variation is severely constrained. For instance in the case of the Null Subject Parameter the only possible languages are those that give the answer 'yes' to all four properties, or give the answer 'no' to all of them. If the theory is correct there should be no mixed cases (whether this is indeed so is an open question).

(ii) the child's task in acquiring the language is not insurmountable, since any one of the four properties A., B., C. or D. will suffice to tell him whether he should set the Null Subject Parameter 'on' (as in Italian and Catalan) or 'off' (as in English). For instance it should be enough for the child to observe that person morphology is rich to infer that null subjects are permitted, that subjects may follow the verb, etc.

We now provide further information about the Null Subject Parameter. As it is stated at this point, the Null Subject Parameter is just a laundry list of unrelated properties. This is unsatisfying; such a laundry list cannot count as a real explanation of the phenomena we have observed. The linguist's task is to *explain* why the four properties A., B., C. and D. are related in the way that they are. A complete explanation would go beyond the present discussion. But two remarks might be suggestive.

Remark 1. If we posit that a subject may be empty only if the verb still contains enough information about the 'identity' of its subject, we may relate Property A. and Property B. The idea is that the mere shape of an Italian or a Catalan verb provides a lot of information about its subject, because the verb ending already indicates whether the subject is 1st, 2nd or 3rd person, singular or plural. Because of this (so the theory goes), the subject can be omitted. By contrast, in French and in English the verb ending is too impoverished to provide the relevant information, and thus the full subject must be pronounced. If this analysis is correct, we derive Property B. from Property A. (=it is because Italian and Catalan have a rich person morphology that they allow for null subjects).

Remark 2. As was noted in **Erreur ! Source du renvoi introuvable.** and **Erreur ! Source du renvoi introuvable.** above, in English and in French 'who' may *not* originate in the subject position of an embedded clause. On the other hand there is no problem if 'who' originates in the position that *follows* the verb of the embedded clause. By contrast, in Italian and in Catalan both patterns are possible (=Property 4).Why is this? Property 3 suggests an answer. Maybe all four languages are similar in that they allow elements that 'follow' the verb to be moved, but not elements that precede the verb. But because of Property 3, in Italian and in Catalan a subject may follow the verb. As a result, in Italian and in Catalan a subject 'who' may be 'moved' to the beginning of the sentence. The trick is that in such cases the subject does *not* originate in the pre-verbal position, but in the post-verbal one, as is illustrated below with an English word for word translation:

(7) a. you think that will telephone **who**? (Italian, literal translation)

b. **who** you think that will telephone ___? (Italian, literal translation)

If this proposal is on the right track we can hope to *derive* Property 4 from Property 3 (=it is because Italian and Catalan have Property 3 that they also have Property 4)
Needless to say, a complete theory would have to go beyond these remarks, and it would in particular attempt to explain how Property 3 is related to Property 2. We will do none of this in what follows, since our goal was merely to illustrate the notion of a Parameter."

Partie (2): Application de la théorie du Paramètre du Sujet Nul à deux dialectes de l'arabe

Considérez maintenant les deux dialectes suivants de l'arabe contemporain. Les phrases données sont issues d'un article en anglais des années 1980, dont les traductions littérales et les traductions idiomatiques ont été préservées.

A. Arabe libanais

(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. Arabe de Banu Hassan

(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. Quelle est la valeur du Paramètre du Sujet Nul en arabe libanais? Soyez très explicite, en disant si ce paramètre a dans cette langue la même valeur qu'en anglais ou qu'en italien. Donnez une justification à votre réponse.

Question 2. Quelle est la valeur du Paramètre du Sujet Nul en arabe de Banu Hassan? Soyez très explicite, en disant si ce paramètre a dans cette langue la même valeur qu'en anglais ou qu'en italien. Donnez **deux arguments distincts** pour votre réponse.

Question 3. Des deux phrases données en (7) et (8), une et une seulement est grammaticale. Laquelle est-ce, à votre avis? Justifiez de façon détaillée votre réponse.

- Arabe libanais:

(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?

-Arabe de Banu Hassan

(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.

Considérons de nouveau l'arabe de Banu Hassan. En (9), nous voyons que le mot signifiant 'qui' peut prendre deux formes, *min* ou *miin*. Toutefois ces formes ne sont pas possibles dans les mêmes contextes:

(9) a. min ∂arab miin
Who hit who
'Who hit whom?'

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?'

En ayant en tête les données de (9) et tout particulièrement de (10), considérez les contrastes présentés en (11). Est-ce qu'ils réfutent ou au contraire confirment l'hypothèse discutée dans la Partie (1) concernant le lien entre la Propriété 3 ('Property 3') et le Propriété 4 ('Property 4')? Justifiez votre réponse de façon précise.

(11) a. miin Fariid gaal innu kisar al-beeðа?
Who Fariid said that broke the-egg?
'Who did Fariid say broke the egg?'

b. *min Fariid gaal innu kisar al-beeðа?
Who Fariid said that broke the-egg?

Exercice 3. Logique et sémantique

Appelons une phrase *S* paradoxale si et seulement s'il est impossible de lui attribuer de façon cohérente une valeur de vérité ('vraie' ou 'fausse').

Question 1. La phrase (A) ci-dessous est-elle paradoxale? (Notez qu'il s'agit d'une phrase qui s'appelle *A*, et qui parle d'elle-même.) Justifiez précisément votre réponse: si vous pensez que la phrase n'est pas paradoxale, donnez une valeur de vérité ('vraie' ou 'fausse') qu'on peut lui assigner de façon cohérente; si vous pensez que la phrase est paradoxale, montrez qu'aucune valeur de vérité ne peut lui être assignée de façon cohérente.

(A) A est fausse.

Question 2. La phrase (A') ci-dessous est-elle paradoxale? Justifiez précisément votre réponse: si vous pensez que la phrase n'est pas paradoxale, donnez une valeur de vérité ('vraie' ou 'fausse') qu'on peut lui assigner de façon cohérente; si vous pensez que la phrase est paradoxale, montrez qu'aucune valeur de vérité ne peut lui être assignée de façon cohérente.

(A') A' est vraie.

Question 3. Les phrases (B) et (C) prises ensemble ci-dessous forment-elles une série de phrases paradoxales? Justifiez précisément votre réponse.

(B) C est vraie.
(C) B est fausse.

Question 4. Les phrases D_1, D_2, ... ci-dessous (prises ensemble) forment-elles une série de phrases paradoxales? (Il s'agit de l'ensemble des phrases de la forme D_k, pour $k \geq 1$). Répondez de façon précise: si vous pensez qu'elles ne forment pas une série de phrases paradoxales, proposez une assignation cohérente de valeurs de vérités; si vous pensez qu'elles forment une série de phrases paradoxales, expliquez pourquoi aucune assignation de valeurs de vérités ne peut être cohérente. (*Indication:* vous pourrez par exemple supposer d'abord que toutes les phrases de la série sont fausses; et supposer ensuite qu'au moins une phrase de la série – disons une certaine phrase D_m – est vraie.)

(D_1) Pour tout $n > 1$, D_n est fausse.
(D_2) Pour tout $n > 2$, D_n est fausse.
(D_3) Pour tout $n > 3$, D_n est fausse.

...
(D_k) Pour tout $n > k$, D_n est fausse.
...

Question 5. Il a parfois été soutenu que seules les phrases qui comporte de l'auto-référence (directe ou indirecte) peuvent être paradoxales. Sur la base des exemples précédents, que pensez-vous de cette assertion? Justifiez précisément votre réponse.