

## Text Analysis 1

### “Blue-eyed, dark-skinned hunter-gatherer emerges from ancient Europe DNA”, Frank Jordans

- 1 A hunter-gatherer who lived in Europe some 7,000 years ago probably had blue eyes and dark skin, a combination that has largely disappeared from the continent in the millennia since, scientists said Tuesday.
- 2 The discovery, published in the journal Nature this week, was made by scientists from the United States, Europe and Australia who analysed ancient DNA extracted from a male tooth found in a cave in northern Spain.
- 3 "We have the stereotype that blue eyes are found only in light-skinned people but that's not necessarily the case," lead researcher Carles Lalueza-Fox said in a telephone interview Tuesday with The Associated Press.
- 4 Lalueza-Fox, who works at the Institute of Evolutionary Biology in Barcelona, Spain, said the man's skin would have been darker than most modern Europeans, while his eyes may have resembled those of Scandinavians, his closest genetic relatives today. The combination of blue eyes and dark skin, which is sometimes seen in people with mixed European and African ancestry, may once have been common among ancient European hunter-gatherers, he said.
- 5 The researchers also found the man had genes that indicated he was poor at digesting milk and starch, an ability which only spread among Europeans with the arrival of Neolithic farmers from the Middle East. The arrival of this group was also believed to have introduced several diseases associated with proximity to animals — and the genes that helped resist them.
- 6 But the hunter-gatherer whose remains were found in the La Braña caves, near Spanish city of León, already had some genes that would have helped him fight diseases such as measles, flu and smallpox. This came as a surprise to researchers, indicating that the genetic transition was already under way 7,000 years ago, Lalueza-Fox said.
- 7 The lack of such genes among pre-Columbian populations in the Americas was one of the reasons they were so susceptible to these diseases when the Europeans arrived.

#### Answer the following questions:

1. Comment on the past participles in Paragraph 2. What are they examples of?
2. Explain the use of *that* in paragraph 5.
3. Explain the plural formation of the following nouns: *millennia* (par. 1), *tooth* (par. 2), *measles* (par. 6). Include other words which follow the same pattern.
4. There are several examples of adjectives with dependent prepositions in the text: *poor at* (par. 5), *associated with* (par. 5) *susceptible to* (par. 7). Would/Could you provide your students with any tool or strategy to learn them? Provide two more adjectives that are followed by (i) *at*, (ii) *with*, and (iii) *to* (Total: 6 adjectives).

5. Study the pro-form *this* in the following sentence: *This came as a surprise to researchers* (par. 6). Indicate its referent, and the type of reference it exemplifies.
6. Explain the meaning of *under way* in paragraph 6.
7. Explain the relative pronouns in paragraph 6 in as much detail as possible.

### EXTRA QUESTION TEXT ANALYSIS 1

1. Explain the following passive: *the arrival of this group was also believed to have introduced several diseases*. At what level would you teach it? Can you provide an equivalent –maybe easier– version?

## SUGGESTED ANSWERS:

### 1. Comment on the past participles in Paragraph 2. What are they examples of?

Topics 35 and 40

In paragraph 2 there are four past participles:

*Published*: this participle is the head of a reduced relative clause, also called 'contact clause'. Reduced relative clauses contribute to the economy of language and result from the ellipsis of the relative pronoun and the verb *to be*. The full relative clause would be: *the discovery, which was published in the journal [...]*.

*Made*: this participle is part of the passive construction *was made*. Passive voice in English is always construed by means of the verb *to be*, which functions as auxiliary, and the past participle of the main verb, *make* in this case.

*Extracted* and *found*: as happened with *published* above, these two participle are also the head of a reduced relative clause, or 'contact clause'. The full relative clauses would read *DNA which was/had been extracted from [...]* and *a male tooth which was/had been found in a cave [...]*.

### 2. Explain the use of *that* in paragraph 5.

Topics 40 and 41

*That* is used on two exactly parallel occasions: *genes that indicated [...]*, *genes that helped [...]*. In both cases, *that* is a relative pronoun which introduces a defining relative clause (let us remember that *that* can only be used in defining relative clauses). The antecedent in both cases is *genes*.

As regards syntactic functions, both relative clauses modify the preceding noun (*genes*) acting as a postmodifier. Besides, unlike conjunctions, which function as mere linkers or nexes, relative pronouns do have a syntactic function within their clause. In this case, *that* functions as subject in both cases (*that indicated he was poor [...]*; *that helped resist them*). Since it is the subject, it cannot be ellipted.

### 3. Explain the plural formation of the following nouns: *millennia* (par. 1), *tooth* (par. 2), *measles* (par. 6). Include other words which follow the same pattern.

Topic 39

*Millennia*: irregular plural formation – foreign plurals. Nouns coming from Latin and ending in *-um* (*millennium*) in the singular form their plural in *-a*. That is also the case of *datum/data*. Very often, these foreign words end up integrating so much in the language that they present two plural forms: the foreign plural and a regularised plural. However, the form *millenniums* is not widely recognised yet, if at all.

*Tooth*: irregular plural formation – mutation plural, which consists of the change of the medial vowel (*tooth/teeth*). In English, this phenomenon is restricted to the following nouns: *foot/feet*, *mouse/mice*, *goose/geese*, *man/men*, *woman/women*, *louse/lice*.

*Measles*: despite the final -s, this noun is actually singular, and so it takes singular concord. More than that, it is a singular invariable noun ('singularia tantum'), which means that it does not have a plural counterpart. Apart from *measles*, there are a few other nouns ending in -s which are also 'singularia tantum': *news*, some subjects and sciences ending in -ics (*linguistics, mathematics, phonetics*), some games (*billiards, darts, draughts*), and some other diseases (*singles, mumps, rickets*).

**4. There are several examples of adjectives with dependent prepositions in the text: *poor at* (par. 5), *associated with* (par. 5) *susceptible to* (par. 7). Would/Could you provide your students with any tool or strategy to learn them? Provide two more adjectives that are followed by (i) *at*, (ii) *with*, and (iii) *to* (Total: 6 adjectives).**

Dependent prepositions in English do not follow any rule or pattern, and so they must necessarily be learnt by heart. However, there are a number of ways in which we as teachers can ease this task for our students.

First of all, we should increase their exposure to English as much as possible, so that they encounter the pattern on different occasions and start to learn it unconsciously, just like we do in our mother-tongue (acquisition vs. learning).

Apart from that, it is true that explicit, focal attention should be drawn to dependent prepositions in the language classroom. In this case, we should favour the use of diagrams or mind maps with the preposition in the middle, and different stemming bubbles with the adjectives (or verbs) that make use of that preposition. This works particularly well for visual students, who can also use colours to remember better (retrieval of information).

Other ideas:

- tic-tac-toe /noughts & crosses
- dominoes
- bamboozle
- memory game with cards
- matching exercise with cards

*It would be highly advisable to explain each of these activities while relating them to a particular learning style:*

- *Visual-spatial students: diagrams/mind-maps; memory game with cards.*
- *Logical-mathematical: memory game with cards.*
- *Kinesthetic students: matching exercise; tic-tac-toe game.*

Other adjectives followed by *at* include (*you should only include 2*): *angry, annoyed, bad, good, surprised*.

Other adjectives followed by *with* include (*you should only include 2*): *angry, annoyed, bored, connected, happy, obsessed, pleased*.

Other adjectives followed by *to* include (*you should only include 2*): *addicted, attentive, grateful, kind, immune, indifferent, liable, prone*.

**5. Study the pro-form *this* in the following sentence: *This came as a surprise to researchers* (par. 6). Indicate its referent, and the type of reference it exemplifies.**

Topic 8

*This* is a case of 'reference', one of the mechanisms whereby we can add cohesion to our text, along with ellipsis, substitution, conjunction and lexical cohesion.

The pro-form *this*, also called co-referential or phoric unit, cannot be interpreted on its own, but rather its understanding depends on the semantic connection with its referent. It is precisely this semantic connection between different parts of the text that binds a text together (cohesion).

The referent is actually the whole clause that precedes it: *but the hunter-gatherer whose remains were found in the La Braña caves, near Spanish city of León, already had some genes that would have helped him fight diseases such as measles, flu and smallpox*. It was this discovery what came as a surprise to researchers.

Since the referent is recoverable from the text itself, it is a case of endophoric reference, which may be divided into anaphoric or cataphoric depending on whether the antecedent precedes or rather follows the pro-form. In this case it is clearly a case of anaphoric reference, since the referent appears at an earlier point in the text.

Finally, it is a case of demonstrative reference, which is expressed by demonstrative pronouns (the case under study here), the definite article *the* or deictic adverbs such as *here, there, then*, etc.

The use of pro-forms, along with the rest of cohesive devices, should be encouraged in the classroom, since discourse competence is one of the acknowledged aims of the attainment of communicative competence. In the case of reference, in the classroom context we typically refer to it as "the use of pronouns to refer back to what was said".

**6. Explain the meaning of *under way* in paragraph 6.**

*Under way* clearly means "in progress": the genetic transition was *already taking place* 7,000 years ago.

**7. Explain the relative pronouns in paragraph 6 in as much detail as possible.**

Topic 41

**Whose:** It is a relative pronoun which introduces a defining relative clause –"defining" means that it restricts the reference of the noun antecedent–. This adnominal relative clause functions as a postmodifier of *the hunter-gatherer*.

*Whose* is generally studied separately, but it is actually the genitive case of the pronoun *who*. It is used when it functions as a determiner (*whose remains*) with a genitive meaning ("the remains of the hunter-gatherer"). Inside its phrase, *whose* is analysed together with *remains* (let us remember it is a determiner) and they function together as subject of their clause (*whose remains were found in the La Braña caves*)

**That:** it is a relative pronoun introducing a defining relative clause. This pronoun can have both a personal and a non-personal antecedent. In the first case, it is interchangeable with *who*, whereas in the second case it would be interchangeable with *which*. In this case it has a clearly non-personal antecedent, namely, *genes*.

Still, we should not be misled and think that *that* is always an alternative for *who* or *which*. A second criterion must apply: whether the sentence is defining or non-defining. *That* can only be used in defining contexts. For our students, it is useful to tell them that *that* can never be used with commas, since non-defining relative clauses are always framed between commas.

The adnominal relative clause functions as a postmodifier of the antecedent *genes*. Inside its clause, *that* works as the subject of the relative clause, which means that it cannot be ellipted.

**Careful!:** [...] indicating that the genetic transition [...]. *That* is not a relative pronoun, but rather a conjunction introducing a nominal clause (direct object).

#### EXTRA QUESTION:

1. Explain the following passive: *the arrival of this group was also believed to have introduced several diseases*. At what level would you teach it? Can you provide an equivalent –maybe easier– version?

#### Topic 37

This is an example of complex sentence passivisation, which means that in the original active sentence the direct object was realised by a clause rather than by a phrase: *people believed* (main clause) *that the arrival of this group had introduced several diseases* (subordinate clause / direct object).

When passivising these complex sentences, the passive subject can be an empty *it*, which would be a slightly easier version because practically no modifications are required in the sentence (*it was believed that the arrival of this group had introduced several diseases*), or the subject of the nominal subordinate clause, which is the case we have in the text (*the arrival of this group*). This second version gains more favour than that with an empty *it*, since, whenever possible, English prefers a personal subject instead of an empty *it*.

This second type of construction with a clear subject requires the use of an infinitive form of the verb, whose form depends on the time reference of the main and subordinate clauses. If the time reference in the superordinate clause and the subordinate clause is the same or if the action is future, we use a simple infinitive (*to introduce*). However, if the time reference of the subordinate clause is anterior, which is the case now under study, the perfect infinitive is employed (*to have introduced*).

The form of the infinitive also depends on whether the original verb in the subordinate clause was in a continuous form or not. If it was, we would have to choose between *to be introducing* and *to have been introducing*. In our example, however, the verb is non-continuous.

Complex passivisation of this type is presented in Intermediate B2, either in the first or second year, depending on the School.