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Experiment on the acceptability of complementizer-less relative clauses in English.

This experiment was included in a preliminary version of Donati, Foppolo, Konrad and Cecchetto (to appear), Whatever his arguments, whatever relatives are not free relatives. A reply to Caponigro's reply, *Linguistic Inquiry*. We did not report this experiment in the published article because it is affected by a possible confounding, namely sentences like (1c) may suffer from a global syntactic ambiguity that would render the sentence acceptable even for speakers who lack subject contact relatives (the sentence might in principle be interpreted as meaning "you can read that the article is triggering controversy").

The standard picture in the description of English is that *that* is optional in *ever*-relatives of all kinds (including subject relatives) but it is obligatory in subject headed relatives. This generalization is challenged by the Yale Grammatical Diversity Project English in North America (cf. <https://ygdproject.yale.edu/>), which reports that subject relatives without a relative pronoun or the complementizer are attested in many varieties of English.

We tested this issue in an experiment: we compared complementizer-less subject relatives introduced by *any* (1a), by *whatever* (1b) and by the definite determiner *the* (1c).

- (1) a. You can read any article is triggering much controversy
- b. You can read whatever article is triggering much controversy
- c. You can read the article is triggering much controversy

Participants

Forty-nine adult participants volunteered to participate after being recruited via personal acquaintances and a Facebook Group named “Americans in France”, a social network for American citizens that are planning to move or are living in France. They were between 21 and 76 years of age (mean = 48;8). All except 4 (91%) were native speakers of American English and declared to be born and raised in the US. Of the remaining 45, 2 were UK citizens, 1 came from South Africa and 1 person did not declare her origin. They did not participate in any of the other experiments described in the article.

Materials

Materials included 24 experimental items in the three experimental conditions described above in (1), and 16 filler items, presented in an individually randomized order for each participant after three practice items. Henceforth we refer to conditions (a-c) as *any* condition, *ever* condition, and *the* condition, respectively. A full list of the experimental materials is provided in Appendix.

Procedure

Participants were asked to judge each sentence on a 7-point Likert scale in which 1 meant “not natural at all” and 7 meant “perfectly natural”. They were instructed not to judge the content of the sentences, but only to pay attention to their “form”. They were also explicitly told not to rely on grammatical rules learned at school, but simply to judge the sentences on the basis of

how natural they sounded to them as speakers of English. The experiment was implemented and administered online on Ibex Farm (Drummond, 2013) and lasted approximately 15 minutes.

Results

The full pattern of results is presented in Figures 1 and 2, which show the distribution of ratings in each condition, on the 1-7 scale. Items in the *any*-condition received a mean rating of 2.21, items in the *whatever*-condition received a mean rating of 4.83 and items in the *the*-condition received a mean rating of 1.86.

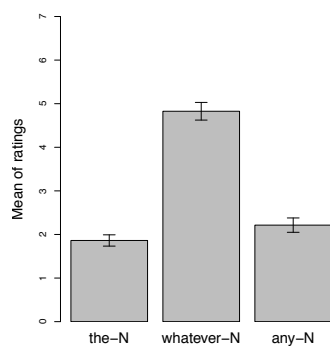


Figure 1. Mean ratings of experimental conditions

Fully grammatical filler sentences received high ratings (mean = 5.19), while ungrammatical fillers received very low ratings (mean = 2.05).

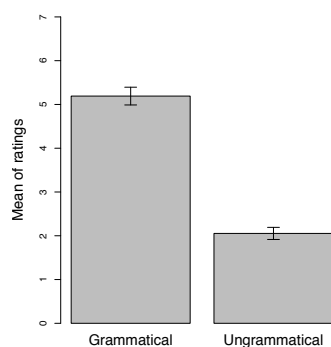


Figure 2. Mean ratings of control conditions

To evaluate the pattern of responses statistically, we implemented a mixed-effect ordinal regression model. We also used treatment contrasts, so that we could compare each condition to one another.¹

These results confirm the received wisdom about standard English (*pace* the dialectical variations documented by the Yale Grammatical Diversity Project English in North America): subject headed relatives do not allow complementizer deletion, while subject *ever*-relatives do. The difference between *ever*-condition and *headed*-condition is indeed significant ($z=-8.313$, $p<.001$). These data might go against a unification of *ever*-relatives and headed relatives in English.

Notice however that these data are also compatible with a different interpretation, which might make them irrelevant for the analysis of *ever*-relatives. The reason why complementizer-less subject headed relatives are degraded might be that they automatically activate a parse that is simpler than a relative parse. For example, suppose that the reason why the string “the article is triggering much controversy” cannot be a subject relative is that it gets automatically interpreted as a simple clause. This would explain why complementizer-less object and adjunct relatives are allowed, since this interference does not arise: the string “the controversy the article is triggering” cannot be attributed a simple clause parse. If this line of reasoning is correct, the reason why complementizer-less subject *ever*-relatives are acceptable is that strings like “whatever article is triggering much controversy” do not invite the simple clause parse that interferes with complementizer-less subject relatives. This conclusion would make the results of the irrelevant for any conclusion concerning the analysis of *ever*-relatives as headed relatives.

APPENDIX

1

You can read the article is triggering much controversy
You can read whatever article is triggering much controversy
You can read any article is triggering much controversy

2

You can take the book is on the table
You can take whatever book is on the table
You can take any book is on the table

3

You can choose the road turns to the right
You can choose whatever road turns to the right
You can choose any road turns to the right

4

You will buy the merchandise is available at the corner shop
You will buy whatever merchandise is available at the corner shop
You will buy any merchandise is available at the corner shop

5

You can point out the problem emerges during the procedure
You can point out whatever problem emerges during the procedure
You can point out any problem emerges during the procedure

6

You can vote the party is opposing death penalty
You can vote whatever party is opposing death penalty
You can vote any party is opposing death penalty

7

You can study the parameter measures social justice
You can study whatever parameter measures social justice
You can study whatever parameter measures social justice

8

You should pick the books focus on your discipline
You should pick whatever books focus on your discipline
You should pick any books focus on your discipline

9

You can choose the party supports a good candidate
You can choose whatever party supports a good candidate
You can choose any party supports a good candidate

10

You should finance the research contributes to the advancement of science
You should finance whatever research contributes to the advancement of science
You should finance any research contributes to the advancement of science focus

11

You should highlight the theories will support your findings
You should highlight whatever theories will support your findings
You should highlight any theories will support your findings

12

You can choose the artist represents your country
You can choose whatever artist represents your country
You can choose any artist represents your country

13

You should read the papers will be discussed at the next seminar
You should read whatever papers will be discussed at the next seminar
You should read any papers will be discussed at the next seminar

14

You will have to assess the student has been admitted into the program
You will have to assess whatever student has been admitted into the program
You will have to assess any student has been admitted into the program

15

You will appreciate the exhibit will be inaugurated in the museum
You will appreciate whatever exhibit will be inaugurated in the museum
You will appreciate any exhibit has be inaugurated in the museum

16

You should have a look at the pictures have been taken in our last trip
You should have a look at whatever pictures have been taken in our last trip
You should have a look at any pictures have been taken in our last trip

17

You will evaluate the project has been submitted to our committee
You will evaluate whatever project has been submitted to our committee
You will evaluate any project has been submitted to our committee

18

You could buy the cookies are sold in the charity fair
You could buy whatever cookies are sold in the charity fair
You could buy any cookies are sold in the charity fair

19

You should see the movie has been presented at that film festival
You should see whatever movie has been presented at that film festival
You should see any movie has been presented at that film festival

20

You will chair the board will be chosen during the next meeting
You will chair whatever board will be chosen during the next meeting
You will chair any board will be chosen during the next meeting

21

You can trash the document has been drafted by that lawyer
You can trash whatever document has been drafted by that lawyer
You can trash any document has been drafted by that lawyer

22

You will like the song has been composed by that musician
You will like any song has been composed by that musician
You will like whatever song has been composed by that musician

23

You will visit the city is described in that guidebook
You will visit whatever city is described in that guidebook
You will visit any city is described in that guidebook

24

You should return the product has been considered dangerous
You should return whatever product has been considered dangerous
You should return any product has been considered dangerous

CONTROL SENTENCES (FILLERS)

Grammatical sequence of tense sentences

If the homemade beer had been left to ferment more, it would have been recipeable.
If the spoiled toddler had stopped shouting when the baby sitter asked, he would have gotten a piece of candy.
If the small town tourist commission had put an ad in the travel magazines, they would have had more tourist business.
If the amateur marathon runners had practiced more, they would've finished in the top fifty in this year's marathon.

Agrammatical sequence of tense sentences

If the organized secretary had filed the documents when she first received them, they are easy to find.
If the careful scientist had tested his data one more time, he finds that his results were wrong all along.
If the overworked students had studied the readings, they get excellent grades in the toughest bowties.
If the tough boxer had gotten punched in the face one more time, he gets a concussion.

NPI, grammatical

No bills that the Democratic senators have supported will ever become law.
No fashions that the controversial models have worn have ever gotten popular with teenagers.
No coastlines that the Navy officers have patrolled have ever been popular among fishermen.
No concerts that the crazy fans can sneak into have ever been careful with their security.

NPI, agrammatical

Most shows that the famous critics have criticized harshly have ever had a big budget.
Most restaurants that the local newspapers have recommended have ever served adventurous dishes.
Most knots that the junior campers can tie quickly have ever been needed on short camping trips.
Most antiques that the private museums have exhibited have ever been sold to private collectors.

ⁱ In this case, it was a maximal model, since it converged.