Introduction

Experimental Methods in Language Exploration

The use of experimental approaches has had a long history in phonetics and phonology but has been extended very fruitfully to syntax, semantics, pragmatics, and language acquisition. It has been argued that experiments provide non-biased data, more illuminating than the professional linguist's judgments (Arunachalam 2013, Katsos and Cummins 2010).

While phonetics pioneered experimental approaches to language analysis, other branches of linguistics have taken a more tentative stance under the concern that one is not able to unfold empirical studies without having a theoretical perspective and that linguistic facts may not be accounted for independently of a theoretical structure. Derwing (2013: 102) drew attention to the fact that such a view had led to the undesirable attitude of considering valid only those data justifying an already embraced theoretical stance and of looking upon data that contradict it as "uninteresting".

Nevertheless, as early as the 1970s, Prideaux (1979: VII) signalled that interest for experimental linguistics had increased due to the growing awareness that "purely theoretical formulations and speculations about language must necessarily be tested against the empirical facts of language knowledge, use and acquisition" and saluted this shift of focus as a sign of scientific maturity for linguistics as a discipline in itself.

In more recent years, more and more researchers working in various branches of linguistics have started resorting to quantitative work with a view to experimentally confirming their linguistic hypotheses. For instance, experimental syntax has been rapidly growing as a field of research, given the view that it is fundamentally connected to theoretical syntax and that the experimental tools resorted to will prove valuable in answering new or crucial theoretical syntax questions, which "become more tractable when the informal judgement collection methods are formalized using experimental syntax techniques" (Sprouse 2015: 89). Thus, random sampling, gradient judgments or factorial logic have now become standard tools of analysis in the aim of doing away with spurious results and supplying reliable data.

Experimental methods have also been successfully implemented in language acquisition research to study the development of a wide

range of linguistic domains such as relative clauses, tense, lexical aspect, or scalar implicatures. Experiments can be designed to focus both on the comprehension or production of these elements. A very effective investigative method used to explore the comprehension of various linguistic structures is, for instance, the truth value judgment task (Crain and Thornton 1998).

In response to these recent developments in linguistic research, the current volume proposes several papers in linguistics, which employ experiment-based approaches and investigate data that are either purely experimental or extracted from text corpora.

Adina Camelia Bleotu's article reports on the production and interpretation of semi-artificial denominal (SAD) verbs by Romanian adult speakers. The research question is whether SAD verbs are used (in)transitively and with (in)animate subjects. The study also investigates the interpretations assigned by analysing the paraphrases that the participants came up with for the SAD sentences. According to the results, in sentence production, animate subjects were more frequent than inanimate subjects, irrespective of the type of denominal verb class (object/place; fruits/vegetables; animal; human). This confirms a Human/Animate bias for sentence subjects (Arnold 2010). Intransitive frames were preferred for the object/place, fruits/ vegetables and animal classes, while for the human class transitive uses were preferred. The responses abided by Kiparsky's (1997) Canonical Use Principle, in that they reflected typical situations associated with the nominals that the verbs were based on. Another important finding was that the interpretation of denominals was heavily influenced by world knowledge, as evidenced by the contrast between the preference for figurative "become/behave like" readings for human/animal SADs, and for literal readings for object and fruit/vegetable SADs.

In their article, **Aleksandra Lappalainen** and **Fredrik Heinat** look at the anaphoric interpretations of quantifiers, which were assigned by adult speakers of Serbian. Four quantifiers were investigated through an offline acceptability judgment task. The results indicated that, in the case of positive quantified expressions (QEs), the focus was on the Reference set, while for negative QEs, the focus fell on the Complement set. The same was found for English (Sanford *et al.* 1996) and Swedish (e.g., Heinat & Klingvall 2019). The study reports, however, a difference: Serbian seems to be more flexible than English and Swedish in that it more readily allows Reference set focus with negative quantifiers than the latter languages.

Gabriela Bîlbîie explores case marking alternations (nominative/accusative for pronominal subject remnants) and animacy in gapped comparatives (elliptical structures with two remnants) in Romanian. The study seeks to prove the value of formal

methods of compiling data for this type of issue. The study finds that the case of the pronominal subject remnant is related to the animacy of the second remnant: the accusative is preferred if the second remnant is inanimate, while the nominative surfaces if the second remnant is animate. This surprising finding is accounted for from a processing vantage point, as it does not support a deletion-based analysis. The difference in case marking emerges due to a need to disambiguate: if both remnants are animate, they receive different case marking in order to be distinguished. If the first remnant is animate and the second is inanimate, there is no need for differentiation through case and thus the accusative can be used for both remnants. The author stresses that the investigation of structures such as gapped comparatives benefits more from data collected through acceptability judgment tasks, whose graduality better illuminates the impact of "soft constraints" such as animacy.

Alina Tigău's experimental study on the discourse properties of Romanian direct objects investigates three dimensions of discourse prominence (i.e., choice of reference, potential for topic shift, and the type of lexical category used to resume the direct object) with three types of Romanian direct objects expressed by means of indefinite descriptions: unmarked direct objects, differentially marked direct objects, clitic doubled and differentially object marked direct objects. The initial hypothesis proposed by the author is that the degree of marking counts as a measure of prominence: the more marked a direct object is the more prominent it will be in view of the three parameters mentioned above. The experimental data show, nevertheless, that only the mechanism of clitic doubling contributes to the increase of prominence, while Differential Object Marking is shown to have no effect in this respect, with differentially marked direct objects evincing similar properties to their unmarked counterparts.

The paper proposed by **Irina Stoica** reports on new experimental results with English factives, showing that the distinction between cognitive factives (*know, find out a.o.*) and emotive factives (e.g. *regret, resent*) is not that relevant when it comes to adjunct extraction: both groups of factives ban such extraction, in spite of the fact that cognitive factives have been shown in the literature to evince a more permissive behaviour regarding various linguistic phenomena (complementizer omission, topicalisation, taking *wh*-subordinates, argument extraction). Thus, both cognitive and emotive factives behave as weak island inducers in English, disallowing adjunct extraction.

Mihaela Tănase-Dogaru investigates the syntax and semantics of the productive suffix -*adă* in modern-day Romanian, using data coming from a corpus compiled by Croitor (2021). It argues that the respective suffix displays the features of a classifier. It has two main readings, referring to events or series of events. It satisfies the

principles of economy of expression and semantic transparency, while also conveying pejorative undertones. Syntactically, the suffix is analysed as the head of a Classifier Phrase, incorporating the noun by morphological merger (Matushansky 2006). The suffix is considered to be an equivalent of the Greek suffix -*áða* or the French -*aine*.

In her contribution **Shima Salameh Jiménez** uses eye tracking to explore the properties of the discourse marker *o sea* 'I mean', which is analysed as a polyfunctional marker. The author identifies several functions of this discourse marker: paraphrase, reformulation, conclusion, correction, mitigation, hedging and formulation, but focuses only on paraphrase and correction in this article. Using information about eye movements and the reading times of sentences with the marker in paraphrase or correction contexts, the author reported that the paraphrase function did not pose great difficulties for the participants; the processing results showed, however, that it can be differentiated from the other functions. The participants found correction more difficult, as shown by the reading values. At the same time, correction without the marker *o sea* proved more costly in terms of processing, which highlights its importance for the adequate comprehension of the discourse.

The study proposed by **Isabelle Stabarin** aims at identifying enunciative spontaneity in spoken French by analysing various spontaneity markers within a specially designed corpus and paying special attention to linguistic complexity as a major spontaneity marker (grammatical and lexical reductions, intonation a.o.). The corpus that the author gathers allows her to compare semantically equivalent predications which have been uttered with different degrees of spontaneity.

Ioana Stoicescu's paper focuses on the acquisition of activities in Romanian showing that children are sensitive to both situation type aspect and grammatical aspect from an early age. The results reported in this paper thus disconfirm the hypothesis proposed by Bertinetto *et al.* (2015) according to which children draw on the specific morphological properties of the target language and not on the aspectual semantic categories as a source of information. Applying this hypothesis to Romanian, where situation type aspect is covert, this would mean that aspectual features do not affect the acquisition of tense-grammatical aspect morphology, so one would expect a significant mismatch between situation type classes and the morphology that a child produces. This paper proves that, contrary to expectations, Romanian children tend to associate activity predicates with an imperfective meaning.

Sébastien Lucas reports on an experimental study on interlinguistic transfers with bilingual children having French and Norwegian as acquired languages. His paper investigates such transfers

with respect to grammaticality judgments and the connections with the meta-syntactic competences of bilingual children when it comes to reading comprehension activities. The experiment proves the existence of interlinguistic syntactic transfers that weaken metasyntactic skills in situations where the errors arise from preposition usage.

Chiara Meluzzi and **Camilla Masullo** explore the emergence of linguistic stereotypical attitudes towards various Italian regional accents. The study relies on experimentally collected data from 79 Italian-speaking children aged 6-10. The authors introduce an adaptation to the Likert-scale questionnaire methodology, in that the numerical scale is replaced with an emoji scale in order to allow the collection of data from children with a low level of literacy. The study revealed that as early as 6, children associated various accents with stereotypical sociocultural values – e.g., the local accents (Piedmontese, Venetian, Sardinian) were more likely to be associated with friendliness, while (non-local) Lombard and Neapolitan accents were regarded as more unfriendly. The local accents were also associated to a low socioeconomic status, as reflected in the children's assessment that, for Piedmontese, Venetian and Sardinian speakers, there is a low likelihood of owning a status symbol such as an expensive car.

In their paper **Fabienne Baider** and **Christiana Anaxagorou** examine hate speech from an interdisciplinary experimental perspective, studying respondents' reactions to various hate speech experiences (e.g., statements and memes that were racist, homophobic, anti-migrant or sexist). Their approach is interdisciplinary in that it unites several methodologies ranging from a sociolinguistic study to a psychological experiment. The experimental results reveal strong disagreement on the part of the speakers regarding hate speech related to migration but varying reactions for topics such as sexism, homophobia and racism.

This issue also includes a number of interesting varia articles, as follows:

Hadjira Medane focuses on the interpretation of silence in testimonies on suffering given by women who have been victims of domestic violence. The author investigates a corpus comprised of testimonies made by battered women and focuses on the duration and the position of pauses, commenting on their function as expressions of pain. The paper concludes that silence has the role of structuring speech, planning ideas, and accentuating the emotional dimension of the testimony.

Andreea Teletin and **Iulia Nica** put forth a multimodal approach to the activity of teaching Romanian as a foreign language, by relying on a corpus of audio-visual advertisements in order to teach

the notion of high intensity. The authors argue that when teaching *high intensity* one should take into account the various grammatical categories and linguistic levels involved, as well as the pragmatic and discourse related phenomena, which might help learners master the usage of this notion, along with other relevant aspects related to rhetoric, argumentation, or verbal (im)politeness. The empirical study reveals the existence of various phenomena pertaining to the area of intensity, which are, however, often disregarded by linguistic studies or dictionaries but which may be recuperated and actualized in the corpus of advertisements. The noteworthy didactic advantage of such corpora therefore ensues.

In her article, **Sophie Anquetil** builds upon the concept of *co-illocutions*, i.e. chunks of pragmatic actions, or texts where one may identify several co-existing speech acts, to analyse a report issued in 2016 by the Common Mission of Information of the French Senate and entitled « De l'Islam en France à un Islam de France, établir la transparence et lever les ambiguïtés » ("From the Islam in France to an Islam of France, establishing transparency and eliminating ambiguities"). The aim of the article is to establish a typology of forms of dialogism and their role as part of the illocutionary action directed at clarifying the ideological nature of the principles legitimizing political control. The text under discussion is shown to rely upon various components of a latent macro-act PRESCRIBE, whose performativity is argued to depend on the performative power of the institutional subject, which passes through non-inscription into the enunciation.

The papers included in this special issue provide insights into the morphology, syntax, pragmatics and acquisition of various languages by building on a wide variety of experimental and corpus data. They thus represent a valuable contribution to the field of experimental and theoretical research in linguistics.

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