

### 3 Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

---

**Index** 3.1 Introduction. – 3.2 Study Overview and Research Questions. – 3.3 Femininity-Masculinity Image Evaluation Survey. – 3.4 The Reference-Assignment Experiment Through Identification of Images. – 3.5 Assessing the Relationship Between the Usage of Sexist Language and the Attitudes Toward It: Is There Room for an Inclusive Language? – 3.6 Questionnaire on Reading Preferences and Habits.

#### 3.1 Introduction

Our study constitutes one of the first attempts at investigating how nonbinary morphological innovations are interpreted and processed in Italian.<sup>1</sup> The experiment draws from various elements gathered across studies conducted on other languages (Bradley et al. 2019; Stetie, Zunino 2022), in an effort to contribute to the ongoing vigorous debate revolving on inclusive language. It is an exploratory study specifically focusing on the comprehension of sentences that contain the morphological innovation -ə as a suffix to generate nonbinary, mixed or unknown gender-identity reference. These linguistic stimuli

---

**1** For a more recent experiment on -ə, which was not available when our research was conducted, cf. Abbondanza et al. 2025.

are to be matched with images to check for the correct interpretation of the suffix -ə. It follows that the textual and the visual components of the task are equally central. As a corollary to the sentence-picture matching task, during which response times are also recorded, two questionnaires on reading preferences and habits and the attitudes toward a nonsexist language are added.

The chapter is structured as follows. The research questions are first outlined, followed by the Femininity-Masculinity Image Evaluation Survey, which is crucial for validating the visual materials. The main experimental design is further illustrated, together with the participants' description, the material analysis, and the experimental procedure. The composition of the two questionnaires is covered thoroughly in the remaining sections.

### **3.2 Study Overview and Research Questions**

Lexical access of a word depends on “its frequency (how often a given word appears in a text), the reader’s familiarity with its meaning, and the time that has elapsed since the last encounter” (Wolf 2007, 168). The intervention on the ending of a word may hinder its degree of familiarity, at least initially; yet continued exposure to the new form of the word may contribute to surmounting the apparent obstacle represented by the morphological innovation -ə used as a suffix. Being Italian a highly inflected language, as illustrated in Section 1.4, the selected morphological marking appears not only in noun phrases but also verb phrases containing past participles. Hence, it is the inflectional system of the language itself that accounts for the pervasiveness of a suffix-based strategy. The redundancy with which the selected suffix appears throughout a piece of text might indeed result in a habituation effect. Through repeated exposure, and by contrast with feminine and masculine gender markings, readers may gradually come to recognize the innovative suffix -ə as a gender marker and to familiarize themselves with its use, even if its referential function is not immediately recognizable.

With regard to the responsiveness to this form and the representations it activates, we formulated two research questions. The first question concerns the specialization of -ə as a third gender-marking form, extending beyond the binary opposition and allowing for both generic and specific readings:

- (I) Does the innovative suffix -ə manage to immediately refer to mixed groups with nonbinary people as their members (*generic meaning*) as well as to an individual who does not identify with the binary distinction of gender (*specific meaning*)?

The second question is about whether a novel form implies higher processing costs that translate into longer response times, although evidence from previous studies suggest the opposite trend (Stetie, Zunino 2022). Here, too, the habituation effect could impact on response times, hence determining the processing costs attached to this innovative suffix. In other words, once participants get used to it, their response times will no longer be affected by its originally unusual appearance. It is therefore a matter of ascertaining the following:

- (II) Is the processing of -ə cumbersome (i.e., time-consuming or cognitive-demanding)? Does the nonbinary form -ə require longer response times as opposed to the traditional, long-established suffixes used to refer to feminine and masculine referents?

As to the third question, the generic masculine enters the scene. The study also sets out to measure the influence exerted by the masculine form in leaning towards the exclusive reference to men. In other words,

- (III) Does the alleged generic masculine display a bias in favor of an interpretation that sees only men as the exclusive referents?

To examine how Italian speakers interpret referents that are marked with the suffix -ə, i.e., to answer question (I), a sentence-picture matching task was developed based on the one used by Bradley and colleagues (2019). As previously introduced, the authors investigated “whether singular, specific ‘they’ and the novel singular gender-neutral pronoun ‘ze’ are interpreted as gender-neutral (silent on gender and the gender binary) or referring specifically to referents of nonbinary gender” in English (Bradley et al. 2019, 1). Their findings suggest that the general lack of familiarity with ‘ze’ makes it hard to determine a definite interpretation, as opposed to the widely accepted singular ‘they’. In order to replicate Bradley et al.’s experiment, gender marking had to take a different shape in Italian because this language is pro-drop, and morphological gender marking is pervasive. Introducing a novel suffix not only affects the class of nouns, but also many other elements belonging to both functional and lexical categories (cf. Section 1.4), thus accounting for the risky invasiveness of such an operation. In the adaptation process, considerations of a cultural and social nature have contributed to forming the experimental material (e.g., adjusting to the Italian academic context in which it was to be transferred). The instructions and prompts used are illustrated in Section 3.4.2.1.

Before the actual experiment, we conducted an online norming survey, which was intended to assess the suitability of the

photographic material for the experiment. The authors of the study that inspired our work had also opted for this preliminary procedure so that they would have photos to be considered adequately representative of male, female and nonbinary individuals. For the same reason, we summoned a separate sample of participants who rated the photos by assigning each depicted person a perceived value of femininity-masculinity.

### **3.3 Femininity-Masculinity Image Evaluation Survey**

#### **3.3.1 Participants and Procedure**

An online questionnaire was distributed through a Google Form (Google platform) in February 2023. To be able to access the form and proceed with the filling out, each prospective participant read and accepted an informed consent form, in compliance with the regulation (EU) 2016/679. 90 Italian native speakers participated in the study as an independent sample of participants, whose contribution was restricted to the completion of this questionnaire only, with no further involvement in later phases of the study. The data collected were anonymous, hence respondents' identity could not be traced in any way. All participants were recruited relying on personal connections through a request for participation received via email. Compensation was not provided.

Information about the composition of the sample was gathered through an opening demographic section. 57.8% of the participants (n=52) indicated being between 18 and 25 years of age, and 40% (n=36) between the ages of 26 and 50. Only 2.2% of the participants declared that they were over 50 years old. As for the educational background, 23.3% of the participants (n=21) reported having completed secondary school, 51.1% (n=46) had obtained a Bachelor's Degree, and 24.4% (n=22) were in a higher education program or had received a Master's Degree. Only one participant referred to themselves as a PhD student.

All participants rated 24 photos based on femininity-masculinity judgments using 10-point Likert scales, with femininity and masculinity anchoring the two ends of the scale. The purpose of the task was to come up with three distinct categories containing photos depicting female, male and nonbinary referents, the latter corresponding to those receiving mid-scale scores. The set of photos to be evaluated came from stock photo libraries licensed for reuse, shared by the American research team led by Bradley (2019), responsible for the original selection. The complete list of photos is provided in Appendix A.



**Figure 1** Excerpt of a photo array used for photo selection in the experiment. These were rated by participants as feminine, nonbinary and masculine, respectively (following the order from left to right)

The following instructions preceded each photo to guide the evaluation process in an unambiguous and uniform manner:

*Indica su una scala da 1 (femminile) a 10 (maschile), il tuo giudizio di femminilità-mascolinità selezionando il valore che meglio rappresenta la persona raffigurata.*

‘On a scale from 1 (feminine) to 10 (masculine), give your judgment on femininity-masculinity by selecting the value that best represents the depicted person.’

Based on the ratings assigned to each image by the participants, photos were grouped into three different categories as a result of the application of the gender classification criterion: F (Feminine); M (Masculine); NB (Nonbinary), with each category including 8 photos. The criterion adopted here follows the one established by Bradley and colleagues (2019), for which a detailed description is given in Box 1, thus allowing for a comparison with the ratings obtained by the American sample of participants.<sup>2</sup>

---

**2** The criterion illustrated in Box 1 was determined by extrapolation from the numbers provided in the paper by Bradley and colleagues (2019). In the absence of a dedicated section, we proceeded by reconstructing it and making it explicit here.

### 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

**Box 1** The gender classification criterion explained

#### The Gender Classification Criterion

The gender classification criterion is established on the basis of the difference in the scores obtained by the photos. On a 1-10 scale, the threshold value is 6. Thus, to establish boundary values for each category, the score difference between the masculine and feminine category must be greater than 6 ( $> 6$ ).

The minimum score for a photo to be classified as masculine is obtained through the following calculation:  $7.1 - 1 = 6.1$ ; where 7.1 is the first available score (smallest number) to provide a number greater than 6 when the all-feminine score (1) is subtracted from it. From 7.1 (boundary value) onwards (up to 10, included) photos are thus classified as masculine, as the subtraction gives a number greater than 6. The same calculation applies to the feminine category: up to which scores is the score difference between feminine and masculine greater than 6? ( $7.1 - 1 = 6.1$ ;  $8.1 - 2 = 6.1$  etc.).

The boundary values that follow hence account for a valid tripartition:

- Feminine (1-3)
- Nonbinary (3.1-7)
- Masculine (7.1-10)

To sum up, for a photo to be classified as *feminine*, it must obtain a mean score ranging between 1-3. For it to be classified as *nonbinary*, it must be included in the interval 3.1-7, whereas the *masculine* range goes from 7.1 to 10, included.

### 3.3.2 Results

The data obtained from our sample of participants were interpreted by applying the classification criterion [box 1] posited by Bradley and colleagues (2019). The resulting classification (see Appendix A for a complete list) mirrors that outlined by Bradley and colleagues, with no differences that could point to cultural biases in the image-assessment activity, ultimately leading to the replication of the same tripartition obtained by the authors. The collected ratings turned out to fit into the intervals provided by the American researchers. Such intervals are responsible for demarcating the boundaries of each category, namely dictating the membership of each photo to either the feminine, masculine or nonbinary category, respectively. No photo ended up being 'misplaced', hence rated incongruous with the score obtained by the American sample. This proves that Italian respondents shared with the American experimental group the perception of the feminine-masculine profile of the depicted person for each single photo.

As shown in Table 4, the mean score for all ratings assigned to feminine photos is 2.09 ( $SD = 0.185$ ), thus placing the mean score of the category within the range previously defined by Bradley and colleagues (2019) as feminine (1-3). The most frequently assigned value (mode) is 1, corresponding to the upper threshold for classification as feminine. The same goes for the other two categories: the mean score

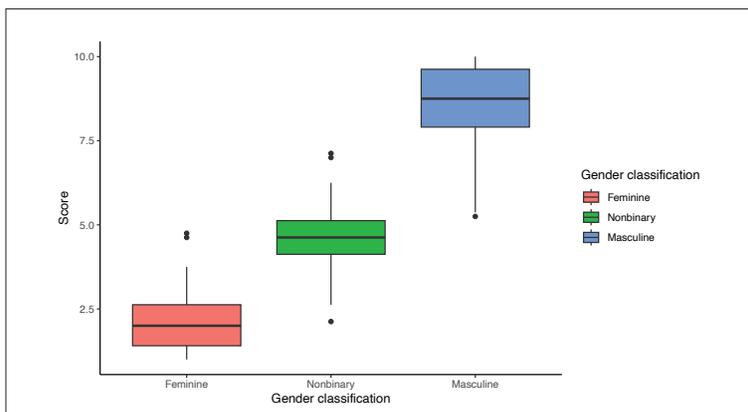
### 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

for the nonbinary category is 4.64 ( $SD = 0.078$ ), with the mode being 5, and for the masculine category is 8.58 ( $SD = 0.164$ ), with the mode being 10, corresponding to the upper threshold for classification as masculine. Both values fall within the specific range supplied by Bradley and colleagues (2019).

**Table 4** Mean score, standard deviation, mode, median, minimum and maximum values are reported for each category

	Mean	SD	Mode	Median	Minimum	Maximum
<i>Feminine</i>	2.0972222	0.185389	1	2	1	9
<i>Nonbinary</i>	4.6416667	0.078336	5	4.5	1	10
<i>Male</i>	8.5916667	0.164385	10	9	1	10

If we look at the score distribution for each category (F, NB, M) in Graph 1, the difference in score is clearly distinguishable, as each distribution, i.e., each box, is remarkably detached from the others. This allows us to visualize how all respondents did indeed perceive the pre-identified photos labeled as feminine as actually being feminine. The same patterns are detectable for the other groups (M, NB). The central line marking the median value further stresses the point by placing itself in conjunction with the center of the established intervals.



**Graph 1** Distribution of the assigned scores for each category

As an example, Table 5 reports the mean score and most frequent score for *Photo 2*. Not only does the image fall within the range labeled as feminine, but its most frequent score coincides with the maximum value of femininity (1) available in the scale. Hence, the

### 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

photo was rated unanimously as full-fledged feminine. No conflicting scores pointing to a different direction were recorded. As displayed by the mode of the feminine category [tab. 4], the remaining 7 photos showed the same trend detected in *Photo 2*. Appendix A reports the main descriptive statistics for each photo.

**Table 5** Mean score, most frequent score and assigned label are reported for Photo 2

	<b>Mean score</b>	2.18
	<b>Most frequent score (Mode)</b>	1 (39.3% of participants)
	<b>Photo rated as</b>	Feminine

#### 3.4 The Reference-Assignment Experiment Through Identification of Images

This experiment aims at testing whether sentences containing the -ə suffix are matched with photos of gender-diverse referents, so as to determine the feasibility of this strategy in achieving grammatical recognition of nonbinary gender. Besides the supposedly correct reference assignment, the feasibility of this strategy is equally tested. This will be determined by looking at the response times registered in correspondence of the stimuli displaying such morphological innovation, to be later compared with those containing the gender markers characterizing Italian. The experiment is conducted to determine whether the strategy's viability is real or whether it enters into a conflict with the language system, which is manifested through longer response times accounting for higher processing costs.

We simulated an assessment procedure in which participants were invited to assist the appointed committee members by reviewing the application materials and returning a preliminary evaluation of the candidates' profiles. Specifically, participants were asked to read the descriptions of the candidates, gauge their academic profiles based on three parameters and select the photos that match the described candidates. The test is presented in the following sections.

### 3.4.1 Participants

81 native Italian speaking participants (44 F, 37 M, age range 18-30 years, mean age 24;8 years) took part in the experiment.<sup>3</sup> One participant was excluded from the study due to their task performance error (i.e., selecting more than one required element at a single item). Hence, 80 participants are considered from now on.

As to their geographical origin, 61.25% of the participants (n=49) indicated Emilia Romagna as their region of origin, 17.5% (n=14) indicated Veneto, whereas the remaining indicated Lazio (n=4), Toscana (n=3), and Calabria (n=2). Campania, Lombardia, Piemonte, Puglia, Sardegna, Sicilia, Trentino, and Umbria count one participant each.

All participants were either recruited through in-person invitation on campus at Ca' Foscari University of Venice or through a request for participation received via email (in this case relying on personal connections). No compensation was provided. All participants gave informed consent to participate.

42/80 participants (F=24; M=18) were randomly assigned to the singular-plural tasks' sequence of administration and 38/80 participants (F=20; M=18) were randomly assigned to the opposite sequence (i.e., plural-singular), to control for a possible effect of the order of administration of the tasks.

### 3.4.2 Textual and Visual Materials

#### 3.4.2.1 Textual Materials

Two sets of eight items were constructed to be run in two separate experimental tasks (*Task 1*; *Task 2*), for a total of 16 items. The aim of the first task was to investigate whether the -ə suffix can be applied to a single nonbinary referent, whereas the purpose of the second task was to determine whether it can be used to refer to nonbinary-only or mixed-gender groups (of male, female and nonbinary composition). The overall goal was to establish the inclusive nature of the -ə suffix with both singular and plural referents. Therefore, number discriminates between the two tasks. *Task 1* contains singular terms, with feminine singular, masculine singular and nonbinary singular as its conditions, while plural was used in *Task 2* - where feminine plural, masculine plural and nonbinary plural are labeled as its conditions.

In both tasks, the independent variable is grammatical gender. The levels of the independent variable are three (feminine, masculine,

---

**3** No participant selected 'nonbinary' or 'other' as their gender identity.

### 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

nonbinary).<sup>4</sup> Each condition is repeated twice, so as to obtain two feminine stimuli, two masculine stimuli and two nonbinary stimuli (two descriptions for each level of the independent variable). Each participant thus received six singular descriptions for *Task 1*, and six plural descriptions for *Task 2*.

Additionally, each set included two items lacking gender marking, referred to as the *neutral* or *zero condition*. By incorporating this condition into the experimental trials, we aimed to detect any differences in response times by comparing participants' responses to gender-marked versus unmarked (i.e., neutral) conditions. The distractors in the experiment were the parameters used to prompt participants to evaluate candidates' academic profiles (e.g., 'academic preparation'), thereby shifting their focus away from the actual object of investigation.

Each item set consisted of eight target descriptions: six gender-marked and two unmarked (neutral) items (see Table 6 for the internal structure of each task's item set). The following section details the construction of the stimuli and the linguistic choices adopted.

**Table 6** Internal structure of the set of items that make up each task

Experimental set	Condition	Task 1	Task 2
Items	gender-marked	2 F SG	2 F PL
		2 M SG	2 M PL
		2 NB SG	2 NB PL
	unmarked for gender	2 neutral SG	2 neutral PL

Each participant was provided with the same sets of items - with presentation order randomized across participants - along with instructions that were presented in the form of an official notice issued by a hypothetical Italian university. This text was created after the instructions used by Bradley and colleagues (2019), which were kindly provided to us by Evan D. Bradley on November 29, 2022. The call designed for *Task 1* (to be referred to as *Instruction 1*) launches the opportunity to apply for a mentoring program, whereas the call conceived for *Task 2* (labeled as *Instruction 2*) is for funding research projects. They both served the function of instructions for the experiment. Since the purposes are distinct, the type of

<sup>4</sup> To maintain consistency with the use of the terms *masculine* and *feminine*, we have chosen to use the label *nonbinary* to refer to items containing the innovative suffix -ə. While we recognize that *nonbinary* is conventionally applied to people - and we use it that way elsewhere in this study, we adopt it also to describe a grammatical marking that is neither masculine nor feminine, yet still marks gender. We have deliberately avoided the term *inclusive*, as we cannot assume that this form is truly inclusive. Assessing the perceived inclusivity of this gender marking is a central aim of our study.

evaluation activity carried out by participants was set to slightly different parameters. The *Instruction 1* is provided in Box 2.

**Box 2** Instruction 1

**Bando per l'affidamento di attività tutoriali**

SELEZIONE PER L’AFFIDAMENTO DI ATTIVITÀ TUTORIALI, DIDATTICO-INTEGRATIVE, ATTIVITÀ PROPEDEUTICHE E DI RECUPERO

*Il Dipartimento di Studi Linguistici e Culturali indice una selezione per titoli per l'affidamento a studenti capaci e meritevoli, iscritti ai corsi di dottorato, di attività tutoriali, didattico-integrative, propedeutiche e di recupero da svolgere nel primo semestre dell'a.a. 2022/2023. I tutor dovranno assicurare la propria disponibilità in tutto il periodo in cui si svolgerà il servizio. In particolare, è possibile presentare domanda per le seguenti attività: linguistica generale, lingua inglese 1, e linguistica applicata.*

La selezione verrà svolta da una Commissione appositamente nominata dalla Direttrice del Dipartimento con successivo provvedimento. Per agevolare l'intervento della Commissione, la segreteria ha preparato dei riassunti dei materiali di candidatura degli studenti che hanno partecipato al concorso.

A partire da questi materiali, il tuo compito sarà quello di esprimere, per ciascun candidato, un giudizio in termini di:

1. Preparazione accademica (scarsa, media, buona, eccellente)
2. Esperienza pregressa (scarsa, media, buona, eccellente)
3. Idoneità al ruolo (scarsa, media, buona, eccellente)

Una volta conclusa questa prima fase di valutazione, ti verrà chiesto di selezionare l'immagine raffigurante il candidato descritto.

**'Mentoring Program Call for Applications**

*Recruitment procedure for educational and remedial courses*

The Department of Linguistics and Cultural Studies announces a merit-based selection process for the assignment of mentoring educational and remedial activities. This is awarded to capable and deserving students enrolled in Ph.D. programs, to be carried out in the first semester of the academic year 2022/2023. Mentors must ensure their availability for the entire period during which the service will be carried out. In particular, applications may be submitted for the following activities: General Linguistics, English Language 1, and Applied Linguistics.

A special committee appointed by the dean at a later time is in charge of the selection procedure. To facilitate the committee's work, summaries of the application materials for each student were provided by the administrative office.

Your job is to read the summary and rate each student on various qualities, and to decide whether to recommend them for the position.

1. Academic Preparation (Poor Average Good Outstanding)
2. Previous Experience (Poor Average Good Outstanding)
3. Suitability for the Role (Strongly Discourage Discourage Recommend Strongly Recommend)

Once this initial assessment phase has been completed, you are asked to select the photo that matches the description of the candidate.'

In adapting the original experimental materials shared by Bradley and colleagues (2019) to the Italian academic context, the resulting notice takes on the appearance of an actual document issued by an existing university. This served the goal of making it more credible to participants that they were actually working on something real, that they were making a contribution to the university administrative procedures having to do with allocating funds, causing, as anticipated, the gender issue to take a back seat. To this end, the instruction emphasized the importance of reviewing the application material extensively so as to optimize the whole selection process.

The formal nature of the notice further stresses the level of reality behind the task, in that it resorts to the linguistic choice of the ‘unmarked’ masculine (Pires 2020) – a defining strategy of the communication style adopted by the national academic environment introduced in Section 2.2.1. Instances of the ‘unmarked’ masculine in the plural or in the generic singular are found in the Italian version whenever the person to whom the formal notice is addressed is being overtly mentioned – be it referred to as the candidate, the mentor, or simply the student. More precisely, the following gender-bearing referents were underlined in the text: *studenti capaci e meritevoli* ‘capable.PL and deserving.PL students.M.PL’; *i tutor* ‘the.M.PL mentors’; *per ciascun candidato* ‘for each.M.SG candidate.M.SG’.

As noted above, three parameters act as distractors by redirecting the reader’s attention to the corresponding identified aspects constituting the core of the evaluation. For *academic preparation* (parameter 1) to be defined, reference must be made to the academic level achieved, expressed not only in the degree of education attained but also in the scores obtained. *Previous experience* (parameter 2) is assessed in terms of whether or not similar work experience has taken place in the past. Lastly, to determine *suitability for the role* (parameter 3), participants must rely on the pertinence of the candidate’s assimilated knowledge, indicated by the degree to which the proposed research project resonates with the kind of expertise required by the notice, to be established on the basis of the actual topic of the doctoral dissertation as well as the chosen leading discipline and the number of publications. All information meeting these three parameters was therefore included among the details disclosed for each candidate, as specified in the backbone scheme common to all items. This scheme follows a fixed sequence: enrolment year, doctoral program, passing grade, weighted average mark, leading discipline, dissertation proposal, number of publications, and number of courses as a mentor. These factors are considered crucial in Italy when assessing academic profiles, a relevance further reinforced by the task instructions simulating an evaluation procedure, which explicitly required their inclusion for a complete assessment. The scheme [box 3], adapted from Bradley and colleagues (2019, personal communication),

## 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

was applied uniformly across all items, except in the neutral condition, where some reformulation was necessary.

**Box 3** The backbone scheme of each item adapted from Bradley et al. (2019), here marked for masculine singular

Il candidato è uno studente dottorale del \_\_\_\_\_ (*anno di iscrizione*) anno in \_\_\_\_\_ (*programma di dottorato*).  
 In magistrale, si è laureato con un voto di \_\_\_\_\_ (*voto di laurea magistrale*).  
 La media ponderata del candidato, in magistrale, era di \_\_\_\_\_ (*media ponderata in magistrale*).  
 In ambito accademico, la disciplina di riferimento del candidato è \_\_\_\_\_ (*disciplina di riferimento*).  
 Il suo argomento di tesi dottorale sarà: \_\_\_\_\_ (*argomento di tesi dottorale*).  
 Il candidato vanta \_\_\_\_\_ (*numero di pubblicazioni*) pubblicazioni nella disciplina di interesse ed esperienza pregressa come tutor specialistico; nello specifico, è stato tutor di \_\_\_\_\_ (*numero corsi tenuti come tutor*) corsi.  
 Il candidato risulta regolarmente iscritto per l'anno accademico in corso.  
 'The candidate is a \_\_\_\_\_ (*enrolment year*) PhD student in \_\_\_\_\_ (*doctoral program*).  
 He graduated from the MA program with \_\_\_\_\_ (*passing grade*).  
 The weighted average mark of the candidate during the master was \_\_\_\_\_ (*weighted average mark*).  
 The leading discipline of the candidate in the academic arena is \_\_\_\_\_ (*leading discipline*).  
 The topic of the doctoral dissertation is \_\_\_\_\_ (*dissertation proposal*).  
 The candidate has \_\_\_\_\_ (*number of publications*) publications in the discipline of interest and past experience as a specialized mentor; specifically, he mentored in \_\_\_\_\_ (*number of courses as a mentor*) courses.  
 The candidate is duly enrolled in the current academic year.'

To fill out candidates' profiles, we adhered to multiple criteria. Moving from the need to produce realistic descriptions, the drawing from existent degree programs and universities was deemed imperative for choosing the characteristics of each candidate. Specifically, we opted for a matching criterion that would ensure the following chain to be formed: the leading disciplines in postgraduate studies were matched with doctoral programs representing their natural continuation, which in turn were assigned plausible project proposals reflecting the content stipulated in the PhD course syllabus. Analogously, the passing grade depended on the weighted average mark, and so on.

Before dwelling on the peculiarities of each item, there is one property whose value is shared by them all, that is, length. Each item counts a total number of 238 syllables. Controlling for this variable has enabled us to establish that length cannot interfere with any potential *different* processing of the stimuli. Should slower processing occur in any condition, as supposedly reflected in response times, we can confidently rule out the contribution of item length,

### 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

thereby attributing any observed effects to other factors. A functional criterion was also applied to maintain this syllabic uniformity across items. To this end, the various characteristics were counterbalanced in terms of their syllable count. Take as a reference the enrollment year. Since there is one syllable discriminating between *primo* 'first' and *secondo* 'second', those who are enrolled in a PhD program whose name contains 19 syllables were assigned to the first year of the doctoral program, whereas those enrolled in an 18-syllables program were assigned to the second year. In doing so, each text achieves the same number of syllables.

By completing the missing information in the backbone scheme, we obtain the first masculine singular item, illustrated in Box 4. The feminine and nonbinary singular items follow, thus proceeding from the alleged least marked to the most marked and/or innovative. The neutral condition, devoid of gender markers, is presented at the end of the analysis. With respect to where gender information can be retrieved, there are four grammatical categories present in the stimuli that dispose of such specification (cf. Section 1.4), that is, nouns (e.g., *candidato* 'candidate.M.SG'), determiners (e.g., *il* 'the.M.SG'), past participles (e.g., *laureato* 'graduated.M.SG') and articulated prepositions (e.g., *del* 'of+the.M.SG'), for a total of 15 gender markers per item.<sup>5</sup> By contrast, subject pronouns – also carrying the gender feature – do not appear, as their omission is permitted by Italian being a pro-drop language. The English translation contains glosses that provide information about the grammatical properties of gender and number, which are relevant to our study. The implemented tag system adheres to the Leipzig Glossing Rules (Comrie, Haspelmath, Bickel 2008).

---

<sup>5</sup> The reported examples are all taken from the masculine singular item 1.

**Box 4** Masculine singular item 1

Il candidato è uno studente dottorale del *primo* anno in *Filologia classica, italianistica e linguistica*. In magistrale, si è laureato con un voto di *110L*. La media ponderata del candidato, in magistrale, era di *29.2*. In ambito accademico, la disciplina di riferimento del candidato è *Lingua, Letteratura, Filologia Latina*. Il suo argomento di tesi dottorale sarà *La traduzione di Omero in Virgilio: sondaggi dal primo libro dell'Eneide*. Il candidato vanta 3 pubblicazioni nella disciplina di interesse ed esperienza pregressa come tutor specialistico; nello specifico, è stato tutor di 2 corsi. Il candidato risulta regolarmente iscritto per l'anno accademico in corso.

'The.M.SG candidate.M.SG is a.M.SG first-year PhD student.M.SG in Classical Philology, Italian Studies and Linguistics. [He] graduated.M.SG from the MA program with 110 cum laude. The weighted average mark of the.M.SG candidate.M.SG during the master was 29.2. The leading discipline of the.M.SG candidate.M.SG in the academic arena is Latin Language, Literature and Philology. The topic of the doctoral dissertation is *The translation of Homer in Virgil: surveys from the first book of the Aeneid*. The.M.SG candidate.M.SG has 3 publications in the discipline of interest and past experience as a specialized mentor; specifically, [he] mentored.M.SG in two courses. The.M.SG candidate.M.SG is duly enrolled.M.SG in the current academic year.'

When looking at noun classification, the noun *studente* 'student' is categorized as a common-gender noun by Italian normative grammar, due to its *-e* ending. However, our opting for the ending *-essa* for the feminine condition, and *-ə* for the third gender nonbinary condition, as illustrated shortly, allows us to interpret *studente* as masculine in our experimental design, so as to attain the same number of gender-specific occurrences (amounting to 15) across all items.

Rejection of pronouns serves two complementary purposes: on the one hand, it enables us to ignore the need to identify a pronominal form, which is a problematic operation for the nonbinary condition; on the other hand, it guarantees the reiteration of the noun phrase in its full form, hence imposing a certain representation of the referent, which repeatedly returns in the identified form. In the specific instance examined here, the full noun phrase *il candidato* 'the.M.SG candidate.M.SG' is forced to be a constant presence throughout the stimulus.

The feminine singular item reported in Box 5 shares the same characteristics of the masculine stimuli (singular task), i.e., repetition of the full noun phrase and related omission of pronouns. It reflects the regularities introduced by the masculine items.

## 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

## Box 5 Feminine singular item 1

La candidata è una studentessa dottorale del *primo* anno in *Scienze linguistiche - Curriculum Linguistica educativa*. In magistrale, si è laureata con un voto di 104. La media ponderata della candidata, in magistrale, era di 26.3. In ambito accademico, la disciplina di riferimento della candidata è *Psicologia cognitiva e dello sviluppo*. Il suo argomento di tesi dottorale sarà *Lo sviluppo della teoria della mente in contesti di deprivazione*. La candidata vanta 1 pubblicazione nella disciplina di interesse ed esperienza pregressa come tutor specialistico; nello specifico, è stata tutor di 1 corso. La candidata risulta regolarmente iscritta per l'anno accademico in corso.

'The.F.SG candidate.F.SG is a.F.SG first-year PhD student.F.SG in Language Sciences - Educational Linguistics Curriculum. [She] graduated.F.SG from the MA program with 104. The weighted average mark of the.F.SG candidate.F.SG during the master was 26.3. The leading discipline of the.F.SG candidate.F.SG in the academic arena is Cognitive and Developmental Psychology. The topic of the doctoral dissertation is *The Development of the Theory of Mind in Cases of Environmental Deprivation*. The.F.SG candidate.F.SG has 1 publication in the discipline of interest and past experience as a specialized mentor; specifically, [she] mentored.F.SG in one course. The.F.SG candidate.F.SG is duly enrolled.F.SG in the current academic year.'

It is no surprise that the nonbinary condition [box 6] corresponds to the synthesis of a series of inventive, yet informed linguistic decisions. The latter deserve much attention, as they have to do with the choice of the gender of the word base to which to bind the innovative suffix -ə, as evidenced by the variability of the productions found across speakers (cf. Section 2.2.2).

## Box 6 Nonbinary singular item 1

Lə candidatə è unə studentə dottorale del *primo* anno in *Linguistica applicata all'ambito clinico infantile*. In magistrale, si è laureatə con un voto di 108. La media ponderata dellə candidatə, in magistrale, era di 28.7. In ambito accademico, la disciplina di riferimento dellə candidatə è *Linguistica per l'acquisizione patologica*. Il suo argomento di tesi dottorale sarà *L'insegnamento esplicito delle frasi relative in bambini con DPL*. Lə candidatə vanta 3 pubblicazioni nella disciplina di interesse ed esperienza pregressa come tutor specialistico; nello specifico, è statə tutor di 2 corsi. Lə candidatə risulta regolarmente iscrittə per l'anno accademico in corso.

'The.NB.SG candidate.NB.SG is a.NB.SG first-year PhD student.NB.SG in Clinical Linguistics Applied to Language in Childhood. [They] graduated.NB.SG from the MA program with 108. The weighted average mark of the.NB.SG candidate.NB.SG during the master was 28.7. The leading discipline of the.NB.SG candidate.NB.SG in the academic arena is Linguistics for Atypical Language Acquisition. The topic of the doctoral dissertation is *The explicit teaching of relative clauses in children with DLD*. The.NB.SG candidate.NB.SG has 3 publications in the discipline of interest and past experience as a specialized mentor; specifically, [they] mentored.NB.SG in two courses. The.NB.SG candidate.NB.SG is duly enrolled.NB.SG in the current academic year.'

Articulatory simplicity and reading fluency were the guiding principles for selecting the gender on which we modeled the nonbinary condition. It was a delicate choice in that it determined the identification of the word root (intended in a broad sense) to be combined with the suffix under investigation. As it turned out, formation of determiners and nouns had to take different paths to ensure maximum articulatory accessibility.

As to determiners, despite wide fluctuations (Giusti 2022; Thornton 2022), even among the social community (Comandini 2021), between the two possible forms  $\emptyset$  and  $l\emptyset$  (built on *i.M.PL*, and *le.F.PL*, respectively), we opted for  $l\emptyset$  for both singular (and plural) nonbinary referents in an effort to facilitate the reading aloud of such stimuli [box 6, 11]. Selection of this particular form was thus dictated by phonological restrictions, impacting sound articulation and production. It is reasonable to assume that by choosing the option consisting of vowels alone, the reading aloud would be particularly hampered.

The discussion centered around noun formation, and the rationale for using a different starting root compared to determiners, is postponed to *Task 2*, as the phenomenon is most visible in the plural condition.

We now turn to the items whose main challenge lies in avoiding any gender-related information (i.e., the neutral condition). We therefore find ourselves on the opposite pole of the issue at hand.

So far we have looked at several strategies to uncover gender details. One of them was certainly the use of the masculine as a generic reference, particularly debated in recent years, which, in our experiment, makes its appearance in the instructions. We therefore return to this strategy specifically to emphasize the distance that is generated between the resulting instructions, deemed highly connotated, and a condition denuded of gender markers, thus having opposite features. Whilst the instructions deliberately reflect the most traditionalist views embraced within academia, welcoming the ‘unmarked’ masculine on credibility grounds [box 2], neutral items overtly display an alternative route free from gender specification. Their neutrality emerges with immediacy, ensuring an equally smooth reading, as can be seen in Box 7.

3 • Testing the Efficacy of Adopting the Suffix *-ə* to Achieve Grammatical Gender Inclusion

## Box 7 Neutral singular item 1

L'aspirante tutor frequenta il primo anno di dottorato in Scienze del linguaggio - Curriculum Letterario editoriale. Ha conseguito la laurea magistrale con un voto di 98. La media ponderata dell'aspirante tutor era di 23.9. In ambito accademico, la disciplina di riferimento dell'aspirante tutor è Elementi di editoria informatica. Il suo argomento di tesi dottorale sarà *Dalla carta al digitale: gli effetti sulle piccole case editrici*. L'aspirante tutor non vanta pubblicazioni nella disciplina di interesse ma esperienza pregressa come tutor specialistico di 1 corso. L'iscrizione all'anno accademico in corso risulta regolarmente registrata.

'The applicant for the position of mentor is carrying out the first year of doctoral research in Language sciences - Literary Publishing Curriculum. Having graduated from the MA program with 98, the weighted average mark of the applicant during the master was 23.9, whose leading discipline in the academic arena is Elements of Digital Publishing. The topic of the doctoral dissertation is *From paper to digital: the effects on small publishing houses*. The applicant has no publications in the discipline of interest but past experience as a specialized mentor for 1 course. Enrollment in the current academic year appears to be duly registered.'

Regarding the process of item construction, this instance proves that it is possible, albeit with effort, to produce descriptions omitting any indication with respect to gender. Among the strategies are epicenes and ungendered terms – a class of words in Italian for which “no gender assignment is predictable from either the word ending or the article” that accompanies it (e.g., *l'erede* ‘the.SG heir.SG’) (Cacciari, Carreiras, Cionini 1997, 517) (cf. Section 1.4 and 2.2.1). Analogously, epicenes prevent the exact identification of a specific gender to be attributed to these “functionally ambiguous words” or semantically common-gender terms by granting permission for a mismatch to occur between morphosyntactic gender and semantic gender (e.g., *la vittima* ‘the.F.SG victim.F.SG’) (Cacciari, Carreiras, Cionini 1997, 517; Giusti 2022). In both cases, the referent could be a female, a male or a nonbinary individual, and there is no way to infer that information from the mere juxtaposition of the determiner and the noun. The same goes for the periphrasis *l'aspirante tutor* ‘the aspiring mentor’. Although the noun *tutor* ‘mentor’ that appears in isolation can be easily disambiguated by means of the determiner, e.g., *il/la tutor* ‘the.M/the.F mentor’ – thus allowing for the overt manifestation of morphosyntactic gender –, the presence of the adjective cannot lead to gender determination owing to the *-e* ending and the initial vowel. Second-class adjectives display a single form (*-e*) for both masculine and feminine, contrasting with first-class feminine (*-a*) and masculine (*-o*) endings. The determiner consists of only the consonant /l/ because the following word starts with a vowel. Therefore, neither the noun-adjective agreement nor the determiner provides any clue about the gender of the referent.

A redundancy effect is exerted by the repetition of the noun phrase *l'aspirante tutor* 'the aspiring mentor', which appears insistently throughout the stimulus to prevent insertion of pronouns. As opposed to languages like English – being non-pro-drop, hence requiring explicit mention of the subject at all times, be it the full noun phrase or a pronoun –, Italian features null subjects, thus preventing gender-marked pronouns and even full DPs from entering each description. However, repetition of full DPs in subject position is a recurring feature across all items. This is particularly relevant in the nonbinary condition, which contains an innovative morpheme seeking to establish itself. The assumption is that repeated exposure within the same item, achieved even through the contribution of word endings alone, leads to a more likely consolidation of the innovative form (habituation effect; cf. Section 3.2). Habituation to forms that are unexpected at first glance but which, as the reading unfolds, end up being discernible and not foreign, is so promoted.

We now address the linguistic decisions underlying the plural conditions for *Task 2*. As specified earlier, *Instruction 2* announces the possibility of obtaining funding for research projects through a selection procedure whose main criteria are listed at the end of the notice. The *Instruction 2* is provided in Box 8.

**Box 8** Instruction 2

**Bando per il finanziamento di progetti di ricerca  
nel campo di Scienze della Vita**

*Con il presente bando si intende promuovere il potenziamento della ricerca e dell'innovazione nel settore di Scienze della Vita attraverso il sostegno a progetti di ricerca che **contribuiscono alla creazione di condizioni di benessere duraturo e sostenibile in termini di salute e crescita per gli esseri umani e l'ambiente**. A tale scopo, il programma si prefigge di finanziare progetti che per complessità e natura richiedono la collaborazione di più unità di ricerca. La costituzione del gruppo di ricerca è dunque flessibile, purché veda la partecipazione di più unità provenienti dallo stesso ateneo: LS - Scienze della vita.*

La selezione verrà svolta da una Commissione appositamente nominata che si pronuncerà a partire dai seguenti materiali di candidatura preparati dalla segreteria. Il tuo compito sarà quello di visionarli ed esprimere, per ciascun progetto, una valutazione sulla base dei tre parametri proposti:

1. pertinenza della proposta progettuale rispetto all'obiettivo in grassetto (cioè quanto questa proposta risponde all'obiettivo) (scarsa, media, buona, eccellente)
2. originalità e impatto sociale del progetto di ricerca (scarsa, media, buona, eccellente);
3. qualità del profilo scientifico del gruppo di ricerca (basandoti su bandi vinti, esperienza, pubblicazioni) (scarsa, media, buona, eccellente)

Una volta terminata questa prima fase, ti si chiede di selezionare l'immagine che pensi possa raffigurare il gruppo di ricerca descritto.

## 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

**‘Call for proposals:****Grant funding opportunities for research projects in the field of Life Sciences**

*The purpose of this call is to promote research and foster innovation in the field of Life Sciences by supporting research projects that **contribute to creating conditions of lasting and sustainable well-being in terms of health and growth for both human beings and the environment**. To this end, the program aims at funding projects that by their complexity and nature require the collaboration of multiple research units. Group composition is therefore flexible, as long as it sees the participation of more than one unit from the same university: LS - Life Sciences.*

A specially appointed committee is in charge of the selection procedure, whose work is based on the following application materials that were provided by the administrative office. Your job is to go through them, one by one, and rate each project on the basis of the three proposed parameters:

1. Relevance of the project proposal to the objective in bold (i.e., how well this proposal meets the objective) (Poor Average Good Outstanding);
2. Originality and social impact of the research project (Poor Average Good Outstanding);
3. Quality of the research team’s scientific profile (based on previous grants, experience, publications) (Poor Average Good Outstanding);

Once this initial assessment phase has been completed, you are asked to select the photo that matches the described research team.’

The assessing activity here focuses on the research project *per se*, being the object of scrutiny. In fact, the first parameter demands an evaluation in terms of project-orientation, with the second parameter calling for a judgment about its originality as well as social implications. Only in the third and last parameter concerning the quality of the scientific profile are the proponents called upon. However, they are referred to explicitly through the collective noun *gruppo di ricerca* ‘research group’. The distinguishing feature of collective nouns such as ‘group’ or ‘team’ (as in ‘research team’s scientific profile’) is that they allow to make reference to a community of people, whether large or small, while circumventing the gender issue (cf. Section 2.2.1). In other words, by adopting this strategy no assumption can be made as to the gender of the group components. The same rationale applies to the periphrasis *unità di ricerca* ‘research unit’. This kind of reasoning also underlies the shaping of the referents found in neutral plural items [box 12], which go by the name of ‘members of the research team’. The neutral condition for the plural will be further explored later on.

Two examples of the masculine and feminine plural items are provided in Box 9 and 10, respectively.

## 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

**Box 9** Masculine plural item 1

I candidati sono *ricercatori a tempo determinato di tipo A*. Negli anni precedenti, sono già risultati vincitori di 1 bando. I candidati propongono il seguente progetto di ricerca: *Analisi genetica di persone con Corea di Huntington*; la cui finalità è di proporre nuove strategie farmacologiche e cellulari per rallentarne il decorso o bloccarne l'insorgenza. I candidati saranno impegnati nell'attività di ricerca per un periodo di 24 mesi, e il progetto prevede la collaborazione con l'ateneo di *Santa Barbara, California*. Tutti i candidati si sono dedicati a questo settore di ricerca per 5 anni. Sono autori di 5 pubblicazioni scientifiche sull'argomento.

'The.M.PL candidates.M.PL are fixed-term type A researchers.M.PL. In previous years, [they] were announced.M.PL winners.M.PL of a funding program. The.M.PL candidates.M.PL are proposing the following research project: *Genetic testing for Huntington's chorea*; the aim of which is to come up with new pharmacological and cellular strategies to slow down its course or block its onset. The.M.PL candidates.M.PL will be engaged.M.PL in the research activity for a period of 24 months, and the project involves collaboration with the University of Santa Barbara, California. All.M.PL (the.M.PL) candidates.M.PL have been committed.M.PL to this field of research for 5 years. [They] have authored.M.PL 5 scientific publications on the subject.'

**Box 10** Feminine plural item 1

Le candidate sono *professoressa ordinarie*. Negli anni precedenti, sono già risultate vincitrici di 2 bandi. Le candidate propongono il seguente progetto di ricerca: *Studio delle interazioni tra specie e uomo-ambiente*, la cui finalità è di studiare le risposte delle comunità biologiche ai cambiamenti globali a tutela della loro sopravvivenza e del mantenimento della biodiversità. Le candidate saranno impegnate nell'attività di ricerca per un periodo di 24 mesi, e il progetto prevede la collaborazione con l'ateneo di *Lima, Perù*.

Tutte le candidate si sono dedicate a questo settore di ricerca per 7 anni. Sono autrici di 6 pubblicazioni scientifiche sull'argomento.

'The.F.PL candidates.F.PL are full.F.PL professors.F.PL. In previous years, [they] were announced.F.PL winners.F.PL of two funding programs. The.F.PL candidates.F.PL are proposing the following research project: *The study of organism-environment and human-environment interactions*; the aim of which is to study the responses of biological communities to global changes for the safeguard of biodiversity conservation. The.F.PL candidates.F.PL will be engaged.F.PL in the research activity for a period of 24 months, and the project involves collaboration with the University of Lima, Peru. All.F.PL (the.F.PL) candidates.F.PL have been committed.F.PL to this field of research for 7 years. [They] have authored.F.PL 6 scientific publications on the subject.'

The structure of plural items follows the one designed for the singular, with a change in content. The identifying entries for the plural descriptions are the following: academic status, number of research grants awarded, research proposal, project relevance, expected duration of the project in months, international collaborations,

### 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

temporal engagement in the research area, number of publications.<sup>6</sup> In compiling the profiles, the same criteria established for *Task 1* were applied; i.e., reality, consistency of the information provided within the items and shared syllable count. It should be specified that the assignment of academic status followed a semi-random procedure, designed to avoid reproducing gender stereotypes and biases in the items.

Following these general remarks, the linguistic peculiarities characterizing the nonbinary items in *Task 2* are presented in Box 11. For the formulation of the nonbinary plural condition, we stuck to the basic principles established for the nonbinary singular condition.

#### Box 11 Nonbinary plural item 1

Lə candidatə sono *ricercatorə post doc*. Negli anni precedenti, *non* sono risultatə vincitorə di bandi. Lə candidatə propongono il seguente progetto di ricerca: *Analisi economica del consumatore sul piano comportamentale, la cui finalità è di potenziare l'etichettatura dei prodotti alimentari, nonché i consumi sostenibili e salutistici, contro l'obesità*. Lə candidatə saranno impegnatə nell'attività di ricerca per un periodo di 12 mesi, e il progetto prevede la collaborazione con l'ateneo di Londra, Regno Unito.

Tuttə lə candidatə si sono dedicatə a questo settore di ricerca per 3 anni. Sono autorə di 2 pubblicazioni scientifiche sull'argomento.

'The.NB.PL candidates.NB.PL are postdoctoral researchers.NB.PL. In previous years, [they] were never announced.NB.PL winners.NB.PL of a funding program. The.NB.PL candidates.NB.PL are proposing the following research project: *Consumer Behavior Analysis*; the aim of which is to enhance food labeling, as well as sustainable and healthy consumption, in order to fight obesity. The.NB.PL candidates.NB.PL will be engaged.NB.PL in the research activity for a period of 12 months, and the project involves collaboration with the University of London, Great Britain.

All.NB.PL (the.NB.PL) candidates.NB.PL have been committed.NB.PL to this field of research for 3 years. [They] have authored.NB.PL 2 scientific publications on the subject.'

For the creation of the determiner, we deliberately drew from the feminine inventory because of an increased phonological accessibility, as previously claimed. For the formation of nouns (mostly occupational terms that end with a different suffix depending on whether they are masculine or feminine), we settled on the masculine form as the basis for the modeling, inasmuch it is more easily disguised, as can be seen from the nouns that appear in the description reported in Box 11. Hence, with regard to the choice of the agentive suffix to

<sup>6</sup> The identifying entries listed here are molded on the information needed to profile a research group.

be molded (cf. Section 1.4), we opted for *ricercatorə* ‘researchers.NB.PL’ and *vincitorə* ‘winners.NB.PL’, based on the masculine form *-tori*, and we did not adopt the construction from the feminine suffix *-trici*, the result of which, i.e., *ricercatricə* ‘researchers.NB.PL’, would have directed toward a feminine interpretation of the referent more straightforwardly.

As for the neutral condition of the plural task [box 12], the noun phrase *i membri del gruppo di ricerca* ‘members of the research team’ was chosen because *membri* ‘members’ can be understood as referring to both female and male referents.

#### Box 12 Neutral plural item 1

I membri del gruppo di ricerca *beneficiano di un assegno di ricerca*. Negli anni precedenti, *non* hanno vinto alcun bando. Tali membri propongono il seguente progetto di ricerca: *Studio di nuovi alimenti ed ingredienti alimentari*, la cui finalità è di *promuovere la salute attraverso il miglioramento dell'alimentazione e dello stile di vita*. L'attività di raccolta dati di ricerca richiederà un impegno complessivo pari a un periodo di 12 mesi, e per il loro progetto è prevista la collaborazione con l'ateneo di *Amsterdam, Paesi Bassi*. Tutti i membri si sono dedicati a questo settore di ricerca per 3 anni e vantano un numero di 4 pubblicazioni scientifiche sull'argomento.

‘Members of the research team are currently conducting research by means of a research grant. They have never won a funding program before. Members are proposing the following research project: *Study of new foods and new ingredients*, the aim of which is to promote health through improved nutrition and lifestyle. The research activity of data collection will require a total commitment of 12 months. The project involves collaboration with the University of Amsterdam, The Netherlands. All members have been working in this field of research for 3 years and count 4 scientific publications on the topic.’

#### 3.4.2.2 Visual Materials

As we are dealing with a sentence-picture matching task, we now address the issues that regard the images, ranging from the grouping criteria to the display modes.

The visual part of *Task 1* involves groupings of six total images following the descriptions. More specifically, each verbal stimulus was assigned six images. Two of the six images portray a person rated as male, two depict a female person, the remaining a nonbinary. As said above (cf. Section 3.3.1), images were taken from the photo array used by Bradley and colleagues (2019) and shared with us by Evan D. Bradley, later rated by an independent sample of participants, which led to the same classification as in the original experiment.

In compliance with the composition illustrated above, we randomly assigned six images to each item, making sure that no image appeared

## 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

more than twice throughout the experiment. The order of appearance of the images was also randomized across items.

The structure of each experimental item in *Task 1* is thus composed of the verbal stimulus (indicated as *prompt* in Table 7), marked for either the feminine, masculine, or nonbinary gender or else unmarked for gender (i.e., neutral condition), and the set of identified images.

**Table 7** Masculine singular item 2 (prompt and set of images)

PROMPT					
<p>Il candidato è uno studente dottorale del <i>primo</i> anno in <i>Marketing per la tutela dei beni culturali in Italia</i>. In magistrale, si è laureato con un voto di 101. La media ponderata del candidato, in magistrale, era di 25.2. In ambito accademico, la disciplina di riferimento del candidato è <i>Antropologia culturale e artistica</i>. Il suo argomento di tesi dottorale sarà: <i>Digitalizzazione delle visite museali: il caso degli Uffizi</i>. Il candidato <i>non</i> vanta pubblicazioni nella disciplina di interesse ma esperienza pregressa come tutor specialistico; nello specifico, è stato tutor di 3 corsi. Il candidato risulta regolarmente iscritto per l'anno accademico in corso.</p> <p>‘The.M.SG candidate.M.SG is a.M.SG first-year PhD student.M.SG in Cultural Heritage Marketing. [He] graduated.M.SG from the MA program with 101. The weighted average mark of the.M.SG candidate.M.SG during the master was 25.2. The leading discipline of the.M.SG candidate.M.SG in the academic arena is Anthropology of Art. The topic of the doctoral dissertation is <i>Digitization and virtual experience of museums: a case study of the Uffizi</i>. The.M.SG candidate.M.SG has no publications in the discipline of interest and past experience as a specialized mentor; specifically, [he] mentored.M.SG in three courses. The.M.SG candidate.M.SG is duly enrolled.M.SG in the current academic year.’</p>					
SET OF IMAGES					
					
A	B	C	D	E	F

As to the display modes, pictures are shown in sequential order, equally distant from one another. Depending on the device used, the size of the images will necessarily vary. A letter appears under each photo as its identifier. This way, participants can enter the letter corresponding to the selected image as an answer, as illustrated in Section 3.4.3.

In *Task 2*, exposure to one and the same image increases significantly, as six different groups are assigned to each item while still drawing from the same array of photographs. Every group is composed of three people embodying a specific gender. Group

### 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

composition with respect to gender is illustrated in detail in Table 8. The same person never appears more than once within the same item, yet every image belonging to the male and female categories shows up again seven times throughout the experiment, as opposed to the nonbinary photos appearing only four times. We chose two-gender groups composed of male and female members to test whether the suffix -ə would be used to refer to mixed-gender groups without nonbinary participants.

**Table 8** Gender composition of the set of images accompanying each plural condition

<b>Group</b>	<b>Gender Composition</b>
Male Group	M, M, M
Female Group	F, F, F
Nonbinary Group	NB, NB, NB
Mixed Group	M, F, NB
Two-gender Group A	M, M, F
Two-gender Group B	M, F, F

The grouping criterion in *Task 2* is twofold; as to the need to achieve a certain gender representation, calibrated among groups, academic position had to be added, which dictates certain combinations that must take factors such as seniority into account. In assigning the images, attention was therefore devoted to certain aspects related to physical features, such as age range. This way, higher academic positions (e.g., full professors as opposed to postdoctoral researchers) could be preferably matched with older people. This meant that in the presence of descriptions concerning full professors, for instance, we made sure that among the proposed groups, more adult-looking subjects were possibly present.

As with *Task 1*, Table 9 shows the structure of an item made up of the verbal stimulus (i.e., prompt) and the sets of images to be selected.

## 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

**Table 9** Nonbinary plural item 1 (prompt and set of images)<sup>7</sup>

<b>PROMPT</b>	
<p>Lə candidatə sono <i>ricercatorə post doc</i>. Negli anni precedenti, <i>non</i> sono risultatə vincitorə di bandi. Lə candidatə proponono il seguente progetto di ricerca: <i>Analisi economica del consumatore sul piano comportamentale</i>, la cui finalità è di <i>potenziare l'etichettatura dei prodotti alimentari, nonché i consumi sostenibili e salutistici, contro l'obesità</i>. Lə candidatə saranno impegnatə nell'attività di ricerca per un periodo di 12 mesi, e il progetto prevede la collaborazione con l'ateneo di <i>Londra, Regno Unito</i>.</p> <p>Tuttə lə candidatə si sono dedicatə a questo settore di ricerca per 3 anni. Sono autorə di 2 pubblicazioni scientifiche sull'argomento.</p> <p>'The.NB.PL candidates.NB.PL are postdoctoral researchers.NB.PL. In previous years, [they] were never announced.NB.PL winners.NB.PL of a funding program. The.NB.PL candidates.NB.PL are proposing the following research project: <i>Consumer Behavior Analysis</i>; the aim of which is to enhance food labeling, as well as sustainable and healthy consumption, in order to fight obesity. The.NB.PL candidates.NB.PL will be engaged.NB.PL in the research activity for a period of 12 months, and the project involves collaboration with the University of London, Great Britain.</p> <p>All.NB.PL (the.NB.PL) candidates.NB.PL have been committed.NB.PL to this field of research for 3 years. [They] have authored.NB.PL 2 scientific publications on the subject.'</p>	
<b>SETS OF IMAGES</b>	
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <p><b>A</b> </p> </div> <div style="width: 50%;"> <p><b>D</b> </p> </div> <div style="width: 50%;"> <p><b>B</b> </p> </div> <div style="width: 50%;"> <p><b>E</b> </p> </div> <div style="width: 50%;"> <p><b>C</b> </p> </div> <div style="width: 50%;"> <p><b>F</b> </p> </div> </div>	

<sup>7</sup> Based on Table 8, Male group corresponds to letter D, Female group corresponds to letter E, Nonbinary group corresponds to letter F, Mixed group corresponds to letter A, Two-gender group A corresponds to letter C, Two-gender group B corresponds to letter B.

Having tripled the number of images appearing in each item with respect to *Task 1*, the spatial arrangement of images was designed differently for *Task 2*. Photos of the same size were visually grouped into two vertical blocks, standing one next to the other, each hosting three independent groups. Photo identifiers are letters placed next to the opening image of each group. Groups' positioning was randomized across items. However, once the spatial arrangement of images was established for each of the eight items, this was replicated across sessions, with only the order of appearance of the items being randomized.

### 3.4.3 Procedure

The experimental paradigm consists of a sentence-picture matching task (adapted from Bradley et al. 2019). Each participant was asked to: (i) read the prompt, (ii) rate the academic profile, and (iii) select the photo of the described subject. One part of the task tested the singular condition and the other the plural condition, corresponding to *Task 1* and *Task 2*, respectively. *Task 1* and *Task 2* were administered separately, one after the other. The order of administration was counterbalanced across participants. In addition, two online questionnaires, i.e., the *Sexist/Inclusive Language Use in Italian* (SILUI) and the Questionnaire on Reading Preferences and Habits, were administered to the participants. The experiment and the online questionnaires were generated and administered through *Gorilla Experiment Builder*,<sup>8</sup> an open-source platform capable of running online behavioral studies while also measuring response times. Each participant was involved in a single experimental session, with no time limitation, comprising the sentence-picture matching task (i.e., *Task 1* + *Task 2*), the SILUI questionnaire and the Questionnaire on Reading Preferences and Habits. Participants' responses were automatically recorded and subsequently manually transcribed by the experimenter.

Data collection took place between November and December 2023. The experiment was carried out autonomously by each participant, who received the access link on their email address, and after reading and accepting an informed consent form, in compliance with the regulation (EU) 2016/679, went through the study at their own pace. The experiment lasted about 30 minutes, with remarkable differences in the actual execution time due to possible interruptions during completion. Participants were highly recommended to use a laptop given the abundance of visual and textual stimuli that each

---

8 Available at: [www.gorilla.sc](http://www.gorilla.sc).

## 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

screen contained in the sentence-picture matching task. As shown in Figures 2 and 3, every item indeed includes (i) the verbal stimulus (i.e., prompt); (ii) the three rating questions each accompanied by their corresponding slider (on which to express their judgment by placing the cursor on the detected value); (iii) the images together with a single-text entry where to insert the letter corresponding to the selected image. The English translations of the instructions and the verbal stimuli are given in Appendix B.

**RICORDA**  
Le attività da svolgere come tutor sono relative a questi corsi:  
– linguistica generale  
– lingua inglese 1  
– linguistica applicata

La candidata è una studenta dottorale del secondo anno in *Scienze del linguaggio - Percorso in Linguaggio e cognizione*. In magistrale, si è laureata con un voto di 110. La media ponderata dello candidato, in magistrale, era di 27.3. In ambito accademico, la disciplina di riferimento dello candidato è *Semantica e linguistica computazionale*. Il suo argomento di tesi dottorale sarà *I frame semantici dei verbi di moto. Prime annotazioni su FrameNet*. La candidata vanta 1 pubblicazione nella disciplina di interesse ed esperienza progressa come tutor specialistico; nello specifico, è stato tutor di 1 corso. La candidata risulta regolarmente iscritta per l'anno accademico in corso.

Come valuteresti la preparazione accademica della candidata?    scarsa                    eccellente

Come valuteresti l'esperienza progressa della candidata?    scarsa                    eccellente

Come valuteresti l'idoneità al ruolo della candidata?    scarsa                    eccellente

Ora puoi selezionare l'immagine della candidata, inserendo la lettera corrispondente nel riquadro:        Invio

  
**A**

  
**B**

  
**C**

  
**D**

  
**E**

  
**F**

Figure 2 Screenshot of one nonbinary singular item as it appears on Gorilla

### 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

**RICORDA**  
I progetti devono contribuire al benessere duraturo e sostenibile degli esseri umani e dell'ambiente (LS - Scienze della vita)

La candidato sono professorə ordinario. Negli anni precedenti, sono già risultatə vincitorə di 2 bandi. Lə candidatə proponono il seguente progetto di ricerca: *Studio di psicologia clinica per il sostegno psicologico di pazienti con diagnosi di malattie rare*, la cui finalità è di combattere le difficoltà psico-emotive di adattamento a carico di famiglie e pazienti. Lə candidatə saranno impegnatə nell'attività di ricerca per un periodo di 18 mesi, e il progetto prevede la collaborazione con l'ateneo di Lisbona, Portogallo. Tuttə lə candidatə si sono dedicatə a questo settore di ricerca per 7 anni. Sono autorə di 6 pubblicazioni scientifiche sull'argomento.

Esprimi un giudizio in termini di:

- Pertinenza della proposta progettuale
 

scarsa

1
  2
  3
  4
  5

ottima
- Originalità e impatto sociale del progetto di ricerca
 

scarsa

1
  2
  3
  4
  5

ottima
- Qualità del profilo scientifico del gruppo di ricerca
 

scarsa

1
  2
  3
  4
  5

ottima

Quale gruppo di ricerca corrisponde alla descrizione fornita?



A



D



B



E



C



F

Figure 3 Screenshot of one nonbinary plural item as it appears on Gorilla

### 3.5 Assessing the Relationship Between the Usage of Sexist Language and the Attitudes Toward It: Is There Room for an Inclusive Language?

This section presents the structure of the questionnaire on the *Sexist/Inclusive Language Use in Italian* (SILUI). The starting point was the *Inventory of Attitudes Toward Sexist/Nonsexist Language-General* (IASNL-G), designed, tested and distributed by Parks and Robertson (2000), aimed at measuring (i) the usage of sexist language, (ii) the attitudes toward sexist language, and (iii) the willingness to use inclusive language. The IASNL-G was translated into Italian, and the questions were adapted to the Italian political and socio-cultural context. All modifications are illustrated item by item.

The questionnaire consists of three sections: 1. “Convinzioni personali sull’uso sessista della lingua italiana” ‘Beliefs About the Sexist Use of the Italian Language’ (Items 1-13); 2. “Riconoscere la lingua sessista” ‘Recognition of Sexist Language’ (Items 14-17); 3. “Apertura all’uso del linguaggio inclusivo” ‘Willingness to Use Inclusive Language’ (Items 18-20). The complete list of items can be found in Appendix C.

A definition of sexist language opens the questionnaire, preceding all sections. The inclusion of an unambiguous definition of the concept,

otherwise subject to multiple possible interpretations, forces the formulation of all responses based on a common explication. The answers are thus interpretable precisely because they refer to a shared, well-defined framework (Parks, Robertson 2000).

An addition was made to the original definition: a specification concerning the explicit mention of all those who do not identify with the binary distinction of gender.<sup>9</sup> A sexist use of language is in fact also identified in the failure to recognize the population that does not fit in either one of the two canonical categories (i.e., male and female). Therefore, it is a deliberate attempt to include nonbinary people among the populations affected by sexist language use. The new version of the guiding definition reads as follows:

*Per la compilazione del questionario si prega di utilizzare la seguente definizione:*

*L'uso sessista della lingua concerne parole, frasi ed espressioni che tracciano distinzioni superflue tra maschi e femmine o che escludono, ridicolizzano o sminuiscono uno dei generi e ignorano completamente la possibilità che ci siano persone che non si identificano nella distinzione binaria del genere (non binary).*

'Please use the following definition in completing this questionnaire: Sexist language includes words, phrases, and expressions that unnecessarily differentiate between females and males or exclude, trivialize, or diminish either gender and completely ignore the possibility that there are people who do not identify with the binary distinction of gender (nonbinary).'

The first section of the SILUI, "Beliefs About the Sexist Use of the Italian Language", sets out to explore the respondents' "thoughts and opinions about sexist/nonsexist language" (Parks, Robertson 2000, 419), so as to draw a picture of the individual's view on the phenomenon under investigation. Among the 13 items contained in the beliefs section, there are some general questions that have remained unchanged, as they explore the participant's position with respect to broader issues applicable to any language. Here respondents are asked to indicate on a 5-point Likert-type scale how much they disagree (1=strongly disagree) or agree (5=strongly agree) with statements concerning the scope of the examined phenomenon, its

<sup>9</sup> The original definition reads as follows: "Sexist language includes words, phrases, and expressions that unnecessarily differentiate between females and males or exclude, trivialize, or diminish either gender" (Parks, Robertson 2000, 434). The added part contains the term *non binary* in parentheses, which is not translated into Italian as the English form is commonly used in Italian as well.

## 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

importance, its entrenchment, its dependencies on society, and its connection with politics.

Table 10 shows the SILUI Items juxtaposed with the original IASNL-G Items. In the first column, Blauberger's (1980) arguments against changing sexist language are reported. Advocated for during the 1970s by scholars, the latter are "still being used by contemporary college students to justify sexist language" (Parks, Robertson 2000, 420).<sup>10</sup> For this reason, they constituted the conceptual framework from which Parks and Robertson (2000) drafted their items.

The items reported in Table 10 were slightly changed in the adaptation process. The table was adapted and modified from Table I reported in Parks and Robertson (2000, 421), only gathering a few sample items. The asterisk signals that those items not contained in the original table have been assigned a particular Blauberger's (1980) argument by us.

**Table 10** SILUI items juxtaposed with their corresponding original versions (i.e., IASNL-G items), resulting from the arguments identified by Blauberger (1980)

<i>Blauberger's Argument</i>	<i>Identifier</i>	<i>SILUI Item</i>	<i>IASNL-G Item</i>
<i>It would destroy historical authenticity and literary works</i>	(3.1)	[Item 2] Non dovremmo cambiare il modo in cui la lingua italiana è stata tradizionalmente scritta e parlata.	We should not change the way the English language has traditionally been written and spoken.
<i>Language is a trivial concern*</i>	(3.2)	[Item 3] Il linguaggio inclusivo è una questione di poco conto.	Worrying about sexist language is a trivial activity.
<i>Change is too difficult, inconvenient, impractical or whatever</i>	(3.3)	[Item 6] La lingua italiana non verrà mai cambiata perché è troppo radicata nella cultura.	The English language will never be changed because it is too deeply ingrained in the culture.
<i>Language is a trivial concern</i>	(3.4)	[Item 7] L'eliminazione dell'uso sessista della lingua italiana è un obiettivo importante.	The elimination of sexist language is an important goal.

**10** The arguments against inclusive language identified by Blauberger (1980) are classified as follows: "(1) the 'cross-cultural' argument; (2) the 'language is a trivial concern' argument; (3) the 'freedom of speech/unjustified coercion' argument; (4) the 'sexist language is not sexist' argument; (5) the 'word etymology' argument; (6) the 'appeal to authority' argument; (7) the 'change is too difficult, inconvenient, impractical or whatever' argument; and (8) the 'it would destroy historical authenticity and literary works' argument" (Blauberger 1980, 135).

## 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

<i>Blaubergs' Argument</i>	<i>Identifier</i>	<i>SILUI Item</i>	<i>IASNL-G Item</i>
<i>Appeal to authority*</i>	(3.5)	[Item 8] Dal momento che le norme editoriali impongono agli autori di articoli di giornale di evitare l'uso di insulti di carattere etnico-razziale dovrebbero imporre un divieto anche sull'uso sessista della lingua.	Most publication guidelines require newspaper writers to avoid using ethnic and racial slurs. So, these guidelines should also require writers to avoid sexist language.
<i>Cross-cultural</i>	(3.6)	[Item 9] L'uso sessista della lingua italiana ha a che fare con il trattamento sessista delle persone nella società italiana.	Sexist language is related to sexist treatment of people in society.
<i>Freedom of speech / Unjustified coercion</i>	(3.7)	[Item 11] Tutti quei professori che pretendono che i loro studenti evitino un uso sessista della lingua italiana non fanno altro che imporre le loro idee politiche sulla classe.	Teachers who require students to use nonsexist language are unfairly forcing their political views upon their students.
<i>Change is too difficult, inconvenient, impractical or whatever*</i>	(3.8)	[Item 12] Anche se il cambiamento è difficile, dovremmo comunque cercare di eliminare l'uso sessista della lingua italiana.	Although change is difficult, we still should try to eliminate sexist language.

A general trend can be detected in the process of item adaptation: explicit reference is always made to Italian in the statements that comprise SILUI, even where the corresponding IASNL-G item reports a general consideration without openly referring to a specific language (see Items 7 (3.4), 9 (3.6), 11 (3.7), 12 (3.8)). Item 3 (3.2) undergoes a different change shown in the overturning of the internal perspective, in that the focus is shifted directly to inclusive language, testing respondents' urgency with respect to this issue.

The items that deviate the most from those of the first section of the IASNL-G are the ones developed *ad hoc* for the purpose of our study, which are analyzed in what follows.

(3.9) [Item 1] Il fatto che Giorgia Meloni si faccia chiamare “il signor presidente” è da considerarsi una scelta sessista.

'Giorgia Meloni goes by “Mr President”. That is to be considered a sexist choice.'

Item 1 (3.9) overtly displays a sexist language error attributable to the use of the common-gender term *presidente* 'president.SG'

## 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

preceded by the masculine expression *il signor* ‘the.M.SG Mr.M.SG’.<sup>11</sup> In considering gendered forms of address – “the formal titles used to address an individual in social and professional interactions” (Hord 2016, 15) – the masculine form is therefore preferred over its feminine counterpart, which would simply be *la presidente* ‘the.F.SG president.SG’, rather than *la signora presidente* ‘the.F.SG Mrs.F.SG president.SG’. The item is placed in the political context precisely to stress the pervasiveness of the sexist use of language that has long found fertile ground in the political sphere.

- (3.10) [Item 4] Il maschile plurale non è davvero inclusivo, ma dovremmo comunque continuare a usarlo per riferirci a gruppi misti di persone (es. maschi, femmine e persone non binary) perché risulta più immediato.  
 ‘The masculine plural is not really inclusive, still we should continue to use it to refer to mixed groups of people (e.g., males, females, and nonbinary people) because it is more immediate.’

Item 4 (3.10) raises the question of the immediacy of language, as to say, that of favoring non-inclusive instances of language that are straightforward over ones that are truly representative of the entire population, including minorities, and that most times result in more elaborate forms. This stance moves from the function of effective communication that language is called upon to perform. In the present case, we are dealing with the adoption of a unique form (i.e., generic masculine) that incorporates a multiplicity that is not visible, namely that of gender diversity (cf. Section 1.5). While admitting that the implemented strategy is not inclusive, but rather belongs to the category of false generics, its ease could still justify its use. Hence, Item 4 (3.10) sets out to establish which of these two sides should prevail (e.g., the representative vs utilitarian aspect), once the existence of this double nature is recognized.

- (3.11) [Item 5] Se una persona non si identifica nella distinzione binaria del genere è giusto che ci si riferisca a quella persona con ə: per es. *studentə*.  
 ‘When a person does not identify with the binary distinction of gender, it is only fair that we refer to that person with ə: e.g., *studentə* ‘student.NB.SG’.
- (3.12) [Item 10] Se in un gruppo di persone ci sono maschi, femmine e persone non binary, è giusto che ci si riferisca a loro con ə: per es. non *gli studenti* ma *lə studentə*.

<sup>11</sup> Note that the Italian masculine noun *signor* is not an indicator of marital status but a form conveying prestige, similar to English *Mr*.

### 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

‘If there are males, females, and nonbinary people in a group of people, it is appropriate to refer to them with ə: e.g., not *gli studenti* ‘the.M.PL students.M.PL’ but *la studentə* ‘the.NB.PL students.NB.PL.’

Items 5 (3.11) and 10 (3.12) are closely intertwined in that they both address the use of the innovative suffix -ə in singular and plural contexts. In Item 5 (3.11), the function of this suffix can be traced to the singular exclusive representation of the nonbinary population (i.e., specific meaning). In Item 10 (3.12), the suffix -ə is representative of a mixed group, including male, female and nonbinary people, hence presenting itself as the inclusive plural ending (i.e., generic meaning).

(3.13) [Item 13] È giusto che sulla carta d’identità dei minori restino le diciture “madre” e “padre” e saltino le qualifiche neutre “genitore 1” e “genitore 2”.

‘It is only fair that “mother” and “father” remain on children’s ID cards blowing up the neutral qualifiers “parent 1” and “parent 2”.’

The content of this item concerns the wording to be included in the birth certificate of children of transgender or homosexual couples and draws again from the political arena.<sup>12</sup> There is in fact no consensus among European countries on how to indicate persons who have transgender parental status in civil records relating to a child. Item 13 (3.13) reflects the proposal put forward on this issue, which was never approved by the Italian government. Replacing long-standing terms such as *madre* ‘mother’ and *padre* ‘father’ with *genitore 1* ‘parent 1’ and *genitore 2* ‘parent 2’ forms the core of the proposal. The latter terms indeed qualify as generics in all respects, as such terms do not impose identification with the role of mother and father by those involved in the childcare. At the same time, mother and father also dictate a precise gender classification, which is problematic when the composition of the family does not fully embody the concept of a traditional family. Since these are terms well entrenched in the collective imagination, proposing their replacement with neutral terms is but a daunting task. It is precisely because the topic raises so many tricky questions that we were curious to see what the respondents’ stand was on the issue.

The second section of the SILUI, i.e., “Recognition of Sexist Language”, is built on four “designation errors” (APA 1983). Respondents are instructed to express the degree of sexism underlying each highlighted linguistic form on a 5-point Likert scale, with 1 being ‘not at all sexist’ and 5 ‘clearly sexist’. The first error reported in Item 14 (3.14) has to

<sup>12</sup> The debate about this issue was taken from the article published on April 14, 2023, available at the link <https://ntplusdiritto.ilsole24ore.com/art/corte-edu-no-genitore-1-e-genitore-2-sostituzione-padre-e-madre-la-transizione-genere-AE10Z0HD>.

do with incorrect gender selection. The feminine given name *Marta* contrasts with the past participle marked for the masculine.

(3.14) [Item 14] Marta è una donna transgender. È nato nel 1986.

‘Marta is a trans woman born.M.SG in 1986.’

Item 15 (3.15) shows the assignment of a binary gender marker, which is in agreement with the feminine given name (i.e., Lucia), to a person who does not identify with the binary distinction of gender.

(3.15) [Item 15] Lucia non si identifica nella distinzione binaria del genere. Lucia è cresciuta a Modena.

‘Lucia does not identify with the binary distinction of gender. Lucia was raised.F.SG in Modena.’

Items 16 (3.16) and 17 (3.17) are the first to engage with the domain of social stereotypes. Here, traditionally male and female occupations are introduced separately (i.e., attorney and teacher, respectively). More specifically, an instance of occupational prestige is reported in Item 16 (3.16), for which we opted for the masculine term *avvocato* ‘attorney.M.SG’ to designate a female referent, identified with the name *Serena*. Item 17 (3.17), in contrast, sees the inclusion of “the feminine generic” (Pires 2020, 119) (cf. Section 2.2.2) – a phenomenon that fits within the framework of the “feminine resolution” (p. 117) – which reflects “the gendered nature of the workplace” (i.e., primary school) showing a statistically significant female predominance (Crawley 2014, 2). In other words, the presence of male teachers in primary schools hides behind the female majority, hence allowing for reasonably favoring a female representation, which, while reversing the canonical course, is still discriminating against the male population, being a minority in this particular case.

(3.16) [Item 16] Serena ha superato con successo l’abilitazione all’avvocatura. Adesso Serena è un avvocato.

‘Serena passed the bar exam. Serena is now an.M.SG attorney.M.SG.’

(3.17) [Item 17] **Le maestre** delle scuole elementari tendono a dare tanto spazio alle attività ludiche.

‘The.F.PL elementary school teachers.F.PL tend to give so much space to recreational activities.’

The third section, i.e., “Willingness to Use Inclusive Language”, does not introduce new uses of the suffix being studied; rather, it taps into what has been advanced so far in an attempt to measure the individual’s predisposition to accommodate these uses. The prompt is to express their willingness to adopt specific strategies under the three

### 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

---

conditions outlined. Specifically, respondents are asked to indicate how willing they are to accommodate the practices described by using a 5-point Likert scale (1= ‘very unwilling’ - 5= ‘very willing’). For the first condition, the use of the innovative suffix -ə as representative of the solely nonbinary population is applied to the case of the plural. Previously introduced with reference to the singular (cf. (3.11)), Item 18 (3.18) shows the plural exclusive nonbinary ending along with the splitting strategy, which involves the explicit mention of all three gender categories sequentially (Giusti 2022; cf. Section 2.2.1):

- (3.18) [Item 18] Quanto saresti disponibile a iniziare una mail con: *cari studenti*, *care studentesse* e *carə studentə* se sai che tra i destinatari sono presenti maschi, femmine e persone che non si identificano nella distinzione binaria del genere? ‘How willing are you to start an email with *cari studenti* ‘dear.M.PL students.M.PL’, *care studentesse* ‘dear.F.PL students.F.PL’ and *carə studentə* ‘dear.NB.PL students.NB.PL’ knowing that among the recipients are males, females, and people who do not identify with the binary distinction of gender?’

As opposed to the exclusive use of the suffix -ə to designate a particular population (i.e., nonbinary) found in Item 18 (3.18), Item 19 (3.19) shows an inclusive usage of the suffix -ə, thus encompassing multiple specific representations (i.e., male, female, nonbinary). The result is a single, short form that opts for the nonbinary ending precisely to indicate its integral participation. Such a function coincides exactly with the one in Item 10 (3.12).

- (3.19) [Item 19] Quanto saresti disponibile a iniziare una mail con: *carə studentə* se sai che tra i destinatari sono presenti maschi, femmine e persone che non si identificano nella distinzione binaria del genere? ‘How willing are you to start an email with *carə studentə* ‘dear.NB.PL students.NB.PL’ knowing that among the recipients are males, females, and people who do not identify with the binary distinction of gender?’

When it comes to the function assigned to the innovative suffix -ə, there is also exact correspondence between Item 5 (3.11) and Item 20 (3.20), in that they both adopt the suffix to refer to the singular exclusive representation of the nonbinary population only.

- (3.20) [Item 20] Quanto saresti disponibile a utilizzare il termine “*candidatə*” al posto di “*candidato*” quando il referente non si identifica nella distinzione binaria del genere? ‘How willing are you to use the term *candidatə* ‘candidate.NB.SG’ instead of *candidato* ‘candidate.M.SG’ when the referent does not identify with the binary distinction of gender?’

As for the implemented scoring system, also borrowed from Parks and Robertson (2000, 423), all items “were scored on a 5-point Likert-type scale. High scores (4-5) indicated a positive attitude toward inclusive language; low scores (1-2) indicated a negative attitude toward inclusive language. A score of 3 indicated neutrality or uncertainty”. Items 2 (3.1), 3 (3.2), 4 (3.10), 6 (3.3), 11 (3.7) and 13 (3.13) were reverse-scored.

### **3.6 Questionnaire on Reading Preferences and Habits**

Having determined (i) the respondents’ personal views on the sexist use of language, (ii) their ability to detect instances of this particular use, and (iii) their openness to inclusive language by means of the SILUI, a further level of analysis is added by looking into their reading preferences and habits, in an attempt to uncover their actual exposure to the phenomenon of inclusive language. Through these data, we could indeed potentially establish a correlation between the degree of familiarity with inclusive language and the intention and commitment to employ it or, conversely, to reject it.

For the construction of the 14-item *Questionnaire on Reading Preferences and Habits*, some of the elements were borrowed from existing, validated instruments, others were created for the purposes of our research. Items 1-8 of the questionnaire, given in (3.21)-(3.28) and devoted to the reading practice at large, are the result of the *ad hoc* design, or, where specified otherwise, the adaptation of questions taken from standardized surveys, operated by Cerutti (2023). Items 9-14, given in (3.29)-(3.34) and revolving around the strategies of inclusive language available in Italian, were instead formulated by us by building on the structure of some of the questions proposed by Cerutti (2023).

The items that make up the first part can be further classified into three categories reflecting the three areas explored by Cecil Smith (1990) in the *Adult Survey of Reading Attitudes* (ASRA), namely, “Reading Habits” (i.e., Items 1-6, given in (3.21)-(3.26)), “Reading Attitudes” (i.e., Item 7 (3.27)), and “Perceptions About Reading” (i.e., Item 8 (3.28)).

Item 1 (3.21) uncovers the reasons underlying the act of reading, distinguishable into obligation (i.e., for studying purposes/for work) or pleasure (i.e., for leisure, in one’s spare time). As attested by literature, reading in one’s spare time correlates positively with the improvement of text comprehension skills (Benevides, Peterson 2010; Mol, Bus 2011; McGeown et al. 2015).

- (3.21) [Item 1] Per quali motivi leggi? Puoi indicare una o due opzioni.
- o Per studio / Per lavoro
  - o Per svago, nel tempo libero

**3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion**

‘Why do you read?’

- o For studying purposes / for work
- o For leisure, in my spare time’

Adapted from Cecil Smith’s (1990) survey, Item 2 (3.22) digs into readers’ familiarity with different text genres. Respondents are asked to indicate on a 5-point Likert-scale item with 8 answers how often they are confronted with different text genres, ranging from school/university textbooks and scientific literature to technical documentation, fiction, nonfiction, periodical press, online information or other. Should a certain degree of familiarity with the same type of text presented in this experiment be found (i.e., technical documentation), it will be considered a factor of advantage in text processing, which could partially disguise the interference exerted by the innovative suffix introduced.

(3.22) [Item 2] Con che frequenza leggi le seguenti tipologie di testo?

1. Libri di testo scolastici / manuali universitari	mai (1)	molto spesso (5)
2. Letteratura scientifica (pubblicazioni / articoli scientifici)	mai (1)	molto spesso (5)
3. Documentazione tecnica (circolari, normative, manuali d’uso...)	mai (1)	molto spesso (5)
4. Narrativa (romanzi, racconti...)	mai (1)	molto spesso (5)
5. Saggistica	mai (1)	molto spesso (5)
6. Stampa periodica (quotidiani, riviste...)	mai (1)	molto spesso (5)
7. Informazioni online (argomenti vari: attualità, cucina, sport, cultura, viaggi, moda...)	mai (1)	molto spesso (5)
8. Altro (specificare): .....	mai (1)	molto spesso (5)

‘How often do you read the following types of text?’

1. School / university textbooks	never (1)	very often (5)
2. Scientific literature (academic papers)	never (1)	very often (5)
3. Technical documentation (regulations and regulatory circulars, how-to guides...)	never (1)	very often (5)
4. Fiction (novels, tales...)	never (1)	very often (5)
5. Nonfiction	never (1)	very often (5)
6. Periodical press (newspaper, magazine...)	never (1)	very often (5)
7. Online information (various topics: current affairs, cooking, sports, culture, travel, fashion...)	never (1)	very often (5)
8. Other (please specify): .....	never (1)	very often (5)

Time spent reading is one of the factors contributing to profiling the expert reader. According to their level of expertise, readers will indeed presumably treat linguistic innovations differently and be drawn by them in different ways. Item 3 (3.23) looks at the overall time spent reading on average each day (including reading for study, work and pleasure), by asking respondents to think in terms of hours. A multiple-choice format was chosen specifically to offer more response options and thus obtain a more granular and detailed measure of participants' reading time (Cerutti 2023).

(3.23) [Item 3] Quanto tempo dedichi alla lettura, in media, in un giorno?

- o Meno di un'ora
- o Da una a due ore
- o Da due a tre ore
- o Da tre a quattro ore
- o Più di quattro ore

'How much time do you spend reading each day?

- o Less than 1 hour
- o 1-2 hours
- o 2-3 hours
- o 3-4 hours
- o More than 4 hours'

Item 4 (3.24) alludes to the size of respondents' reading pile. Reading in one's free time, with particular reference to novels, has been found to discriminate between expert and nonexpert readers, as reported in several studies (e.g., Mol, Bus 2011; McGeown et al. 2015).

(3.24) [Item 4] Quanti libri hai letto, nel tempo libero, nell'ultimo anno?

'How many books have you read this year (in your spare time)? .....'

Items 5 (3.25) and 6 (3.26) explore the hotly debated opposition: print vs digital reading. Frequency of use with respect to different media is first addressed in Item 5, with Item 6 being confined to the preferences for the media to read from. Among the listed digital media there are e-readers, computers, tablets and smartphones, in that they differ in screen size, brightness, and ability to interact with the text and modify its layout to make reading smoother (Cerutti 2023). One of the most relevant aspects of digital reading is its being subject to linguistic experimentation, as a consequence of its increased diffusion and greater responsiveness to the emerging sociolinguistic phenomena. For this reason, digital reading is particularly interesting for the purpose of our study. In addition, since the experimental procedure we adopted relies entirely on onscreen reading, it is deemed necessary to investigate respondents'

**3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion**

habits, as previous experience or mere preference for either mode could affect performance.<sup>13</sup>

(3.25) [Item 5] Con che frequenza leggi su queste tipologie di supporto?

Carta stampata	mai (1)	molto spesso (5)
Smartphone	mai (1)	molto spesso (5)
Computer	mai (1)	molto spesso (5)
Tablet	mai (1)	molto spesso (5)
E-reader	mai (1)	molto spesso (5)

'How often do you read from the following media?

Print media	never (1)	very often (5)
Smartphone	never (1)	very often (5)
Computer	never (1)	very often (5)
Tablet	never (1)	very often (5)
E-reader	never (1)	very often (5)

(3.26) [Item 6] In generale, preferisci leggere:

- o su supporto cartaceo
- o su supporto digitale
- o non ho preferenze

'In general, you would rather read:

- o on paper
- o on screen
- o I don't have a preference'

Item 7 (3.27) looks into respondents' attitudes toward reading. The act of reading is here being evaluated from a personal perspective.

(3.27) [Item 7] Quanto sei d'accordo con queste affermazioni? (scegli un'opzione da 1=per niente d'accordo a 5=molto d'accordo)

Leggere è un'attività piacevole	per niente d'accordo (1)	molto d'accordo (5)
Leggere è un'attività noiosa	per niente d'accordo (1)	molto d'accordo (5)
Leggere è utile	per niente d'accordo (1)	molto d'accordo (5)
Leggere è faticoso	per niente d'accordo (1)	molto d'accordo (5)

**13** This consideration reflects the one reported in Cerutti 2023.

## 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

‘Indicate on a scale from 1 (strongly disagree) to 5 (strongly agree) how much you agree with the following statements:

Reading is an enjoyable activity	strongly disagree (1)	strongly agree (5)
Reading is a boring activity	strongly disagree (1)	strongly agree (5)
Reading is important	strongly disagree (1)	strongly agree (5)
Reading is hard	strongly disagree (1)	strongly agree (5)

Metacognitive in nature, Item 8 (3.28) was adapted from Cecil Smith’s (1990) survey. It urges respondents to make a self-assessment of their own competence by drawing from a given definition. Complex as it is, the question is narrowed down to the aspect of integrating multiple pieces of knowledge, which is a crucial skill in profiling the expert reader.<sup>14</sup>

(3.28) [Item 8] “Un lettore esperto ha la capacità di integrare le informazioni di un testo con ciò che già conosce.”

In base a questa affermazione, che tipo di lettore ti consideri?

poco esperto molto esperto  
 1 2 3 4 5

“An expert reader has the ability to integrate information from a text with what they already know.”

Based on this statement, what kind of reader do you consider yourself to be?

inexperienced very experienced  
 1 2 3 4 5

As previously anticipated, Items 9-14, given in (3.29)-(3.34), were designed *ad hoc* to measure the exposure to inclusive Italian. Item 9 (3.29) tests respondents’ prior knowledge of the examined phenomenon to prepare the ground for the specific strategies addressed in the next items. It serves to crucially establish whether or not it is the first time respondents are confronted with these language innovations. The binary response format thus imposes immediate categorization (i.e., first exposure vs previous exposure(s)).

(3.29) [Item 9] Prima di prendere parte a questo esperimento, avevi già sentito parlare di linguaggio inclusivo?

sì / no

<sup>14</sup> The wording in Item 8 (3.28) *un lettore esperto* ‘a.M.SG reader.M.SG experienced.M.SG’ appeared in Cerutti’s questionnaire and was reproduced *verbatim* to ensure methodological soundness, despite awareness of the gender issues it raises.

## 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

‘Have you ever heard of inclusive language before taking part in this experiment?  
yes / no’

With Items 10 (3.30) and 11 (3.31), respondents are encouraged to take a closer look at the strategies proposed for Italian. They are asked to indicate if, and how often, they have encountered each of the strategies listed in the table on a scale from 1 (never) to 5 (very often), considering the full range of formal and informal texts to which they are exposed in their everyday life. Then, they are asked to add whichever strategy they know of that does not appear in the list.<sup>15</sup>

(3.30) [Item 10] Hai già incontrato le seguenti strategie di linguaggio inclusivo nelle tue precedenti letture?

Coordinazione di termini femminili e maschili ( <i>splitting</i> )	<i>Salve a tutte e a tutti</i>	mai (1)	molto spesso (5)
Nomi collettivi ( <i>oscuramento</i> )	<i>Salve a tutte le persone qui presenti</i>	mai (1)	molto spesso (5)
“**” come terminazione finale	<i>Salve a tutt*</i>	mai (1)	molto spesso (5)
“@” come terminazione finale	<i>Salve a tutt@</i>	mai (1)	molto spesso (5)
“_” come terminazione finale	<i>Salve a tutt_</i>	mai (1)	molto spesso (5)
“x” come terminazione finale	<i>Salve a tuttx</i>	mai (1)	molto spesso (5)
“u” come terminazione finale	<i>Salve a tuttu</i>	mai (1)	molto spesso (5)
“ə” come terminazione finale	<i>Salve a tuttə</i>	mai (1)	molto spesso (5)

‘Have you ever come across the following strategies of inclusive language in your previous readings?’

Coordination of feminine and masculine terms ( <i>splitting</i> )	<i>Hello everyone.F.PL and everyone.M.PL</i>	never (1)	very often (5)
Collective nouns ( <i>oscuramento</i> )	<i>Hello to all the people here</i>	never (1)	very often (5)
“**” as the word ending	<i>Hello everyon*</i>	never (1)	very often (5)
“@” as the word ending	<i>Hello everyon@</i>	never (1)	very often (5)
“_” as the word ending	<i>Hello everyon_</i>	never (1)	very often (5)
“x” as the word ending	<i>Hello everyonx</i>	never (1)	very often (5)
“u” as the word ending	<i>Hello everyonu</i>	never (1)	very often (5)
“ə” as the word ending	<i>Hello everyonə</i>	never (1)	very often (5)’

**15** Please refer to Chapter 1 for the reasons underlying the identification of the strategies shown in the table of Item 10. Note that *tutti*.M.PL ‘everyone’ bears a gender marker, with its feminine counterpart being *tutte*.F.PL.

**3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion**

- (3.31) [Item 11] Conosci altre strategie riconducibili al linguaggio inclusivo?  
 .....  
 ‘Do you happen to know any other strategies attributable to inclusive language?’

From the compilation of the table, we expect greater recognition of the innovative suffix -ə, as it is by far the most debated strategy and the more widely used compared to others. In line with the central role played by the -ə suffix in this study, the remaining Items 12-14, given in (3.32)-(3.34), refer to this strategy. In an attempt to measure its outreach, we opted for including another table listing several text genres (cf. (3.22)) for each of which respondents had to mark whether they had witnessed the presence of the -ə suffix.

- (3.32) [Item 12] Indica in quali tipologie di testo hai già incontrato il simbolo “ə”  
 (inserendo una x in corrispondenza della categoria d’interesse)

1. Libri di testo scolastici / manuali universitari	
2. Letteratura scientifica (pubblicazioni / articoli scientifici)	
3. Documentazione tecnica (circolari, normative, manuali d’uso...)	
4. Narrativa (romanzi, racconti...)	
5. Saggistica	
6. Stampa periodica (quotidiani, riviste...)	
7. Informazioni online (argomenti vari: attualità, cucina, sport, cultura, viaggi, moda...)	
8. Social media <sup>1</sup>	
9. Altro (specificare): .....	
<b>1</b> It was deemed necessary to distinguish between online information, which can refer to either websites or blogs, and social media, by adding this entry to the original list of text genres presented in Item 2.	

‘Indicate in what types of text you have already come across the “ə” symbol by placing an x in the corresponding category:

1. School / university textbooks	
2. Scientific literature (academic papers)	
3. Technical documentation (regulations and regulatory circulars, how-to guides...)	
4. Fiction (novels, tales...)	
5. Nonfiction	
6. Periodical press (newspaper, magazine...)	
7. Online information (various topics: current affairs, cooking, sports, culture, travel, fashion...)	
8. Social media	
9. Other (please specify): .....	

### 3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion

Items 13 (3.33) and 14 (3.34) are strictly intertwined and both present a metacognitive nature. Item 13 (3.33) directly addresses the perception of the respondent who is dealing with the symbol -ə, by asking whether it is considered an obstacle to the reading of the word. The same question is further explored by Item 14 (3.34), which in turn consists of two sub-questions, committed to dig a little deeper: the opposition silent vs aloud reading is introduced, and so is the distinction between performativity and meaning. The multiple-choice format employed here is aimed to avoid making the question difficult to manage, as this is a rather complex question *per se*. Without a specific focus – made explicit and precisely delimited – , the questions would open up a whole range of considerations that go beyond the scope of our study.

(3.33) [Item 13] Nel complesso, reputi l’inserimento del simbolo “ə” a fine parola un elemento di ostacolo alla lettura della parola stessa?

assolutamente no					decisamente sì
1	2	3	4	5	

‘Overall, do you find the inclusion of the “ə” symbol at the end of the word to be an obstacle to reading the word itself?

absolutely not					absolutely yes
1	2	3	4	5’	

(3.34) [Item 14] Prova a leggere questa frase ad alta voce: *Lə kandidatə è unə studentə dottorale del secondo anno in Scienze del linguaggio – Percorso in Linguaggio e cognizione*. Ti risulta difficile da pronunciare per via dell’inserimento del simbolo “ə”? Ti è chiaro a cosa si riferisce?

- è difficile da pronunciare ed è difficile capire il suo significato quando leggo
- è difficile da pronunciare, ma è facile capire il suo significato quando leggo
- è facile da pronunciare, ma è difficile capire il suo significato quando leggo
- è facile da pronunciare ed è facile capire il suo significato quando leggo

‘Try reading this sentence aloud: *The.NB.SG candidate.NB.SG is a.NB.SG second-year PhD student.NB.SG in Language Sciences – Language and Cognition Curriculum*. Do you find it difficult to pronounce because of the inclusion of the “ə” symbol? Do you know what it refers to?

- It is difficult to pronounce, and it is difficult to understand its meaning as I read
- It is difficult to pronounce, but it is easy to understand its meaning as I read
- It is easy to pronounce, but it is difficult to understand its meaning as I read
- It is easy to pronounce, and it is easy to understand its meaning as I read’

**3 • Testing the Efficacy of Adopting the Suffix -ə to Achieve Grammatical Gender Inclusion**

---

Item 14 (3.34) represents the only data we collected regarding the viability of the proposal at the level of phonetic production. It attempts to measure - albeit indirectly, through personal judgment - the articulatory accessibility of the suffix -ə.

