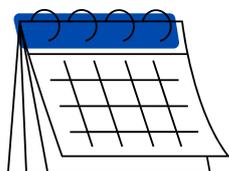
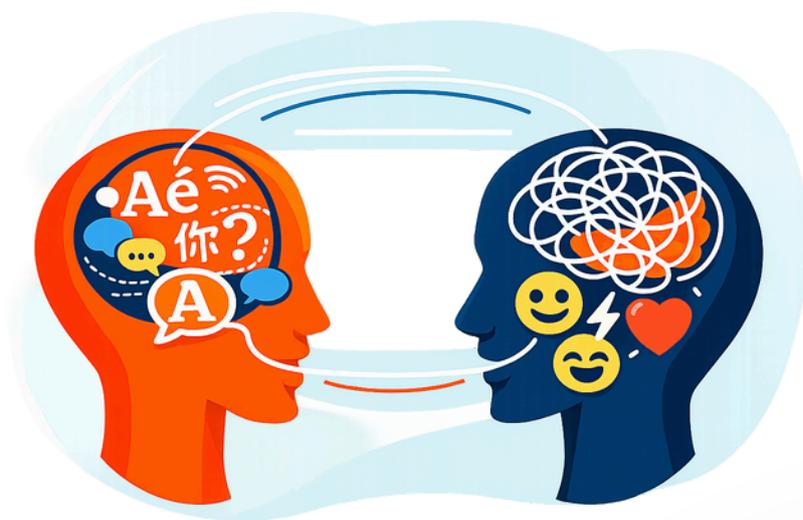


1st INTERNATIONAL WORKSHOP ON FACIAL AND EMOTIONAL EFFECTS ON LANGUAGE (FEEL)



2026ko otsailak 12
February 12, 2026
12 de febrero, 2026



Micaela Portilla Ikergunea, Areto Nagusia
Micaela Portilla Research Center, Assembly hall
Centro de Investigación Micaela Portilla, Salón de Actos

Erregistroa eta informazioa
Información y registro
Information and registration



WORKSHOP PROGRAM (Room 0.8 talks & Room 0.12 posters)	
9:50-10:00	Opening remarks
10:00-10:50	Keynote 1: Dr. Lucía Vieitez Portas: Language beyond grammar: Emotionality effects on gender agreement processing.
10:50-11:20	Coffee break
11:20-12:10	Keynote 2: Dr. Anna Hatzidaki: Bridging emotions through languages
12:10-13:00	Keynote 3: Dr. Eduardo Navarrete: Positive, therefore true: The role of processing fluency in credibility
13:00-14:30	Lunch break
14:30-15:30	Poster session
15:30-16:20	Keynote 4: Prof. José Antonio Hinojosa: Emotional language under the spotlight: From databases to large scale studies
16:20-17:00	Short Oral FEEL talks: Brief presentations of the planned and ongoing studies related to the FEEL project.
17:00-17:10	Closing remarks

The Bilingual Mind Research Group

Gogo Elebiduna/La Mente Bilingüe

The Bilingual Mind Research Group, based in Vitoria-Gasteiz, investigates how humans acquire, represent and organize language in their brain. In order to investigate the universal characteristics of language representation and processing, we make use of behavioral techniques (Reaction Times), electrophysiological measurements (ERPs) and eyemovement recordings. Our three main lines of research are:

1. Language learning and processing. We study the mechanisms of control and change of languages, the learning processes of lexicon and syntax, the effects of cross-linguistic influence, and the impact of grammatical structure on linguistic processing. One of the main goals of our research team is to investigate these matters with a special focus on bilingualism, given the linguistic reality of our speech community. We pay special attention to the Basque language, as well as to the different ages of acquisition and degrees of linguistic competence of bi/multilingual Basque/Spanish/English/French speaker populations.

2. Linguistic processing in aging. A growing body of work shows that our linguistic abilities do not remain stable throughout adulthood. And yet, the study of language processing to date has focused mainly on young adult populations. In order to fully understand how humans process language, we examine younger and older adults in parallel, using the same techniques for linguistic research. Given that a decline of certain linguistic abilities can be an early indicator of various neurodegenerative disorders, our research allows us to tease apart normal from pathological decline, as well as to determine if, how and when bilingualism may offer a cognitive protection against said decline.

3. Linguistic variation. Basque is typologically different from its better known, extensively studied Indo-European neighbors. For this reason, another main objective in our research group is to describe and analyze Basque in its synchronic dimension, focusing on its contemporary dialectal variations.



Scientific Committee

The following members of The Bilingual Mind research group:



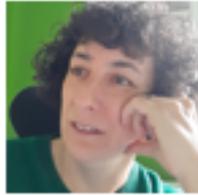
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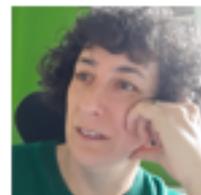
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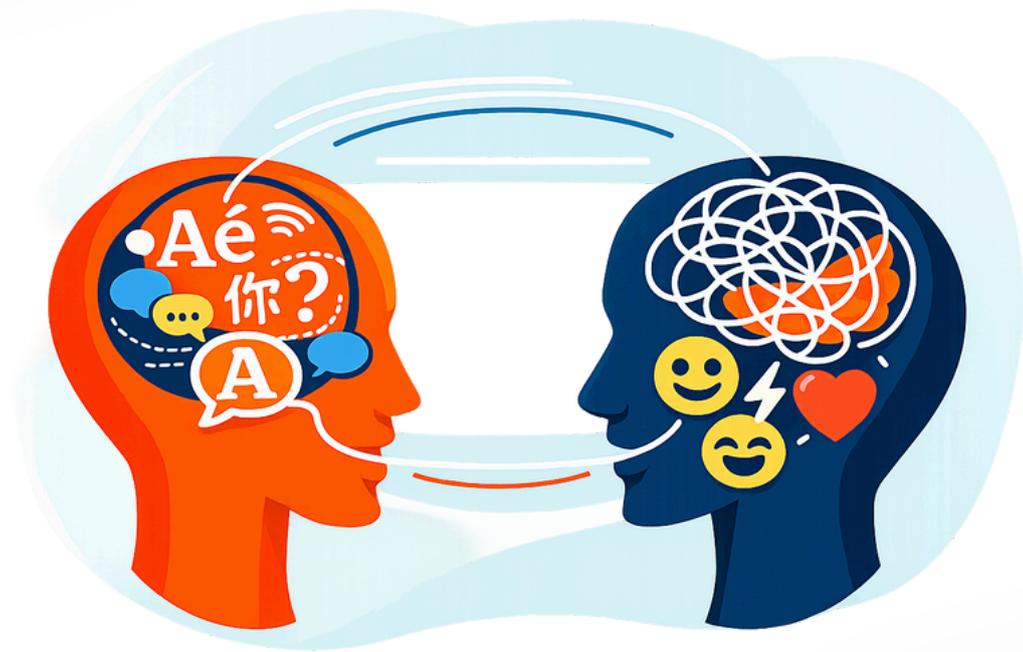


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GOGO ELEBIDUNA
THE BILINGUAL MIND
LA MENTE BILINGÜE



Hizkuntzalaritza
eta Euskal
Ikasketak Saila
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de Lingüística
y Estudios Vascos

Keynote 1

Language beyond grammar:

Emotionality effects on gender agreement processing.

Lucía Vieitez Portas

Universidade de Santiago de Compostela

There is emotion in language, but can emotionality affect how we process grammar? Modular and interactive models of language processing propose discrepant responses to this question, and empirical evidence is inconsistent. While some studies report interactive effects between emotionality and grammaticality in the Left Anterior Negativity (LAN) component, others have failed to find evidence of such an interaction. Interestingly, recent data from number agreement studies has shown that there are individual differences in how the human brain processes grammar. These individual differences challenge the functional interpretation of the LAN and the P600, two ERP components commonly understood as indices of two subsequent phases of morphosyntactic processing.

This is precisely the context in which my thesis is situated. Its aim was to conduct a comprehensive investigation into the neural and behavioural correlates of the interplay between grammar and emotion, with a particular focus on several variables—namely, individual differences, gender type, and gender class—that may modulate whether the interaction between the two occurs during linguistic processing. Hence, three gender agreement studies were conducted, two centred on Event-Related Potential (ERP) data and one on behavioural measures. In each study, participants performed a grammaticality judgement task where the critical word could either agree (match) or disagree (mismatch) with the gender of the preceding word (e.g., *laf cuchillom [the knife]). Additionally, the emotionality of the critical word was manipulated (neutral vs. unpleasant). In Studies 2 and 3, gender properties, such as gender type and gender class, were also manipulated (arbitrary vs. natural; feminine vs. masculine).

In a nutshell, our results indicate that high-arousal unpleasant words can affect gender agreement processing and that these effects can be observed at both the neural and behavioural levels. Although the specific results differed across studies, the effect of unpleasantness on agreement processing was consistently detrimental. Furthermore, our findings indicate that both individual differences and gender properties seem to modulate these effects. The interactive effects of grammar and emotion were limited to participants with a positive dominance profile (larger P600 effects and no LAN effects) and to natural gender nouns. These findings challenge the idea of a universal, strictly modular syntactic processor, emphasising the importance of considering how these variables may affect linguistic processing in future research.

Keynote 2:**Anna Hatzidaki**

(National and Kapodistrian University of Athens)

Bridging emotions through languages

Across several studies examining emotional language processing in bilinguals, consistent findings suggest that L2 is not necessarily less emotional than L1, but bilinguals may experience emotional content in varied ways depending on context and language type. This talk will provide a discussion ground for that, considering findings from two studies, investigating emotion not as an inherent reduction phenomenon in L2, but as socially regulated and contextually embedded in bilingual language use. The first study examines switching to L2 for emotion expression from a sociocultural perspective, exploring whether language choice reflects norms governing appropriate emotional expression rather than diminished emotional resonance. The second study extends this perspective by investigating whether L1 and L2 differentially shape how goals are construed and emotionally engaged with. Results from these studies are interpreted as demonstrating a controlled and flexible response system operating in L2, where heightened emotional salience shapes emotional perception and expression, but is used flexibly across languages regulated rather than uniformly attenuated in L2.

Keynote 3**On the relationship between processing fluency,
positive experience, and credibility**

Eduardo Navarrete

Università di Padova

Imagine that you are not very familiar with Italian geography and come across the following trivial statement: Padua is located in northern Italy. How would you determine whether it is true or false? Unless the topic is personally significant for you, which would prompt greater scrutiny, research has suggested that the cognitive effort required to process a statement can influence the perception of its credibility. When something requires less effort, we feel more confident in our ability to evaluate it, for example, to judge whether it is true or false. The subjective experience of ease of processing, often referred to as processing fluency, leads to more positive experience. A consequence of this positive metacognitive feeling is that we often equate ease of processing with truth, following a “positive, therefore true” heuristic. This talk examines the boundary conditions of the relationship between processing fluency, positive experience, and credibility.

Keynote 4

Emotional language under the spotlight:

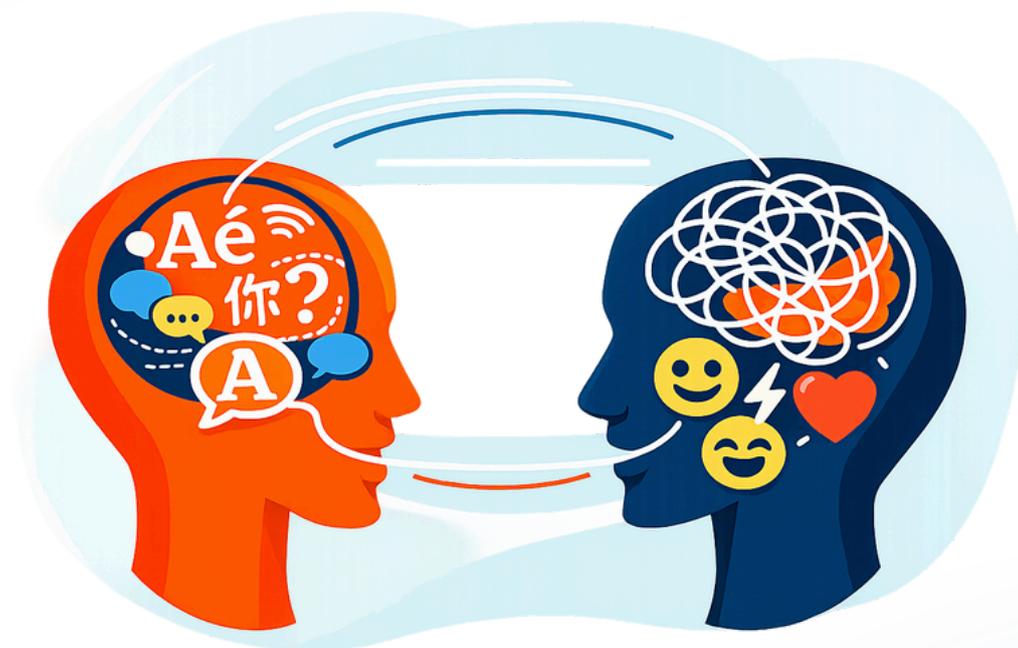
From databases to large scale studies

José A Hinojosa

Universidad Complutense de Madrid

Interest in investigating the interplay between language and emotions has increased rapidly in recent years. Several research tools have made this growth possible. Studies in this area have relied heavily on the results of normative studies that provide estimates of various emotional features of words, such as valence and arousal, or specific emotions, for thousands of words from hundreds of participants across several languages. These large datasets have stimulated research about the effects of emotion in areas such as morphology, phonosymbolism, and lexical processing, as well as the development of mega-studies whose results have underscored the close relationship between language and emotions.

POSTER SESSION



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Poster Session**The Impact of Language Modality on the Foreign Language Effect:
A Study on Moral Decision-Making in Italian Sign Language (LIS)**

Alessia Bongiorno ¹, Robert Hartsuiker ², Brendan Costello ³

¹ European Master's in Clinical Linguistics (EMCL++), ² Ghent University,

³ Basque Center on Cognition, Brain and Language (BCBL)

Abstract

Cross-linguistic research on Foreign Language Effect (FLE) highlights how foreign languages influence moral judgments by reducing emotional intensity and favoring utilitarian responses (Costa et al., 2014). Most studies focus on spoken languages (Geipel et al., 2015; Keysar et al., 2012), but less attention has been given to the visual-gestural modality of sign languages, which rely heavily on iconicity, spatial representation, and physical embodiment, thus amplifying emotional expression through multimodal channels (Sandler, 2022). This study investigates whether language modality affects decision-making and emotional regulation. Three groups (Italian adults with L2 Italian Sign Language (LIS); Deaf adult LIS signers with L2 Italian; Italian adults with L2 English) will respond to a set of moral dilemmas in their L1 and to another set in their L2. We expect to find the FLE in the Italian-English bilinguals. For the hearing L2 signers, we predict that heightened emotional expression in sign language will attenuate or eliminate the effect, supporting the idea that FLE is driven by less emotional engagement when using a second (spoken) language. For the Deaf signers, we expect the FLE (in Italian); this group may also reveal the impact of modality on decision-making in L1 (through comparison with the L1 Italian participants). These findings will contribute to a deeper understanding of FLE across language modalities and challenge traditional assumptions about emotional detachment in foreign language processing. Data collection is pending; we will not be able to present results at the workshop but hope to receive feedback on the experimental stimuli and protocol.

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Poster Session**Off-hand remarks: the brain tracks the head and the face
during sign language processing**

Joaquín Ordoñez ¹, Chiara Luna Rivolta ², Mikel Lizarazu ¹, Brendan Costello ³

¹ Basque Center on Cognition, Brain and Language (BCBL), ² Universidad del País Vasco (UPV/EHU), ³ Basque Center on Cognition, Brain and Language (BCBL); Ikerbasque

Abstract

In spoken language, cortical tracking refers to the temporal alignment between the speech envelope and brain activity, a phenomenon modulated by language knowledge. In sign language, the visual signal is conveyed through multiple articulators, including the face. Here, we investigated cortical tracking of facial kinematics in deaf signers, comparing a known language (Spanish Sign Language, LSE) with an unknown one (Russian Sign Language, RSL). We quantified cortical tracking by computing coherence between magnetoencephalography (MEG) activity and the time series of several kinematic features: head speed, mouth aperture, and head pitch and yaw rotations. These features were derived from motion-tracking data obtained using a Kinect v2 system and MediaPipe.

Head speed showed significant tracking in the delta band for both languages, with stronger tracking for LSE than for RSL in right parietal channels. This pattern suggests that head movements conveying prosodic or syntactic information are more robustly integrated when the language is known. In contrast, head pitch rotation showed significant tracking only for RSL, with stronger tracking for RSL than LSE in occipital channels, possibly reflecting increased reliance on prosodic cues when lexical information cannot be accessed. No differences between languages were observed for yaw rotation. Finally, mouth aperture was not significantly tracked in either language, which may indicate that this measure is not sufficiently sensitive to capture linguistically relevant mouth movements in sign language.

Overall, these findings highlight the contribution of non-manual articulators to (sign) language processing and show that language knowledge modulates how facial kinematics are tracked.

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Poster Session**Asymmetric Neural Processing of Emotional Valence in Naturalistic Narratives**

Li-Chuan Ku

Basque Center on Cognition, Brain and Language (BCBL)

Abstract

Negative meanings usually attract more attention than positive ones during language processing [1-3]. However, most evidence comes from controlled single word studies to maximize emotion effects, leaving open how emotional information is represented during naturalistic speech: Is emotionality of a word lexical-driven or contextual-driven, and if latter, does the span of contextual information matter? Here we investigated whether emotional representations are tracked in the brain during a story comprehension task, by comparing lexical vs. contextual models of emotional valence.

We analyzed the Alice dataset in which 33 participants listened passively to the first chapter of Alice's Adventures in Wonderland in English (2129 words, ~12 minutes) during EEG recording [4]. Static and contextual valence features were modelled by the Affective Norms for English Words (ANEW) and the RoBERTa-base-sentiment model with the prior 10-, 50-, 200-, and 1024-word tokens, respectively. To predict the EEG activity, multivariate temporal response functions (mTRFs) were modelled using emotional (positive/negative valence) features [5], along with acoustic (envelope/onset), lexical (log frequency/length/surprisal), and semantic (word-by-word dissimilarity) predictors as the baseline.

We found cortical tracking of negative contextual valence across all contextual spans (all p s < .02; Fig 1A), whereas positive contextual valence emerged only at the 50-token span ($p = .024$), yet with a longer sustained negativity (Fig 1B). This suggests that negative meanings generally undergo stronger context-based modulation than positive ones. No static valence effects were found. Overall, our study indicates that our brain exhibits a stable negativity bias in tracking contextually derived emotional salience during narrative comprehension.

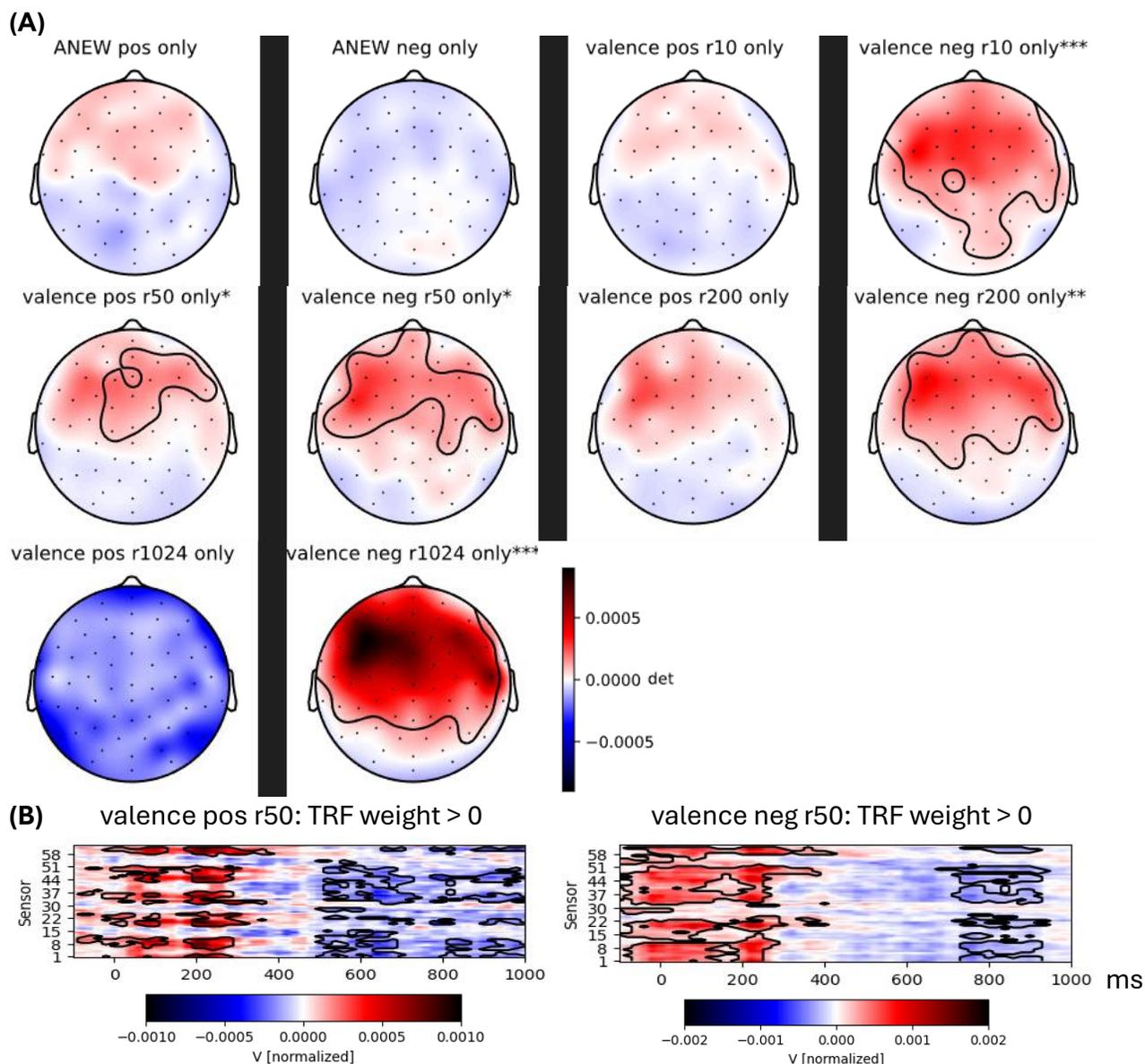


Figure 1. (A) Model comparisons of predictive power (det = proportion of explained variance) against zero for each static (ANEW positive valence, ANEW negative valence) and contextual valence (r10/r50/r200/r1024 = with a context window of 10/50/200/1024 tokens) across the scalp. Each plot shows a head-map of the change in predictive power. Significant results were marked on the title (* $p < .05$; ** $p < .01$; *** $p < .001$). Black outlines mark significant clusters, $p \leq 0.05$, family-wise error corrected for the whole head map. **(B)** Topoplots of TRF weights significantly different from zero, using positive (left panel) and negative (right panel) contextual valence.

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Poster Session**Making sense of nonsense: Cognitive conflict and its value in oxymoronic language**Iria Nieto Rebollo^{1,2}, Manuela Ruzzoli^{1,3}, Nicola Molinaro^{1,3}, Marta La Pietra^{1,2}¹ Basque Center on Cognition Brain and Language (BCBL), ² University of the Basque Country (UPV/EHU), ³ Ikerbasque, Basque Foundation for Science**Abstract**

In language, semantically violating words can be combined to create a novel meaning (1–3). This is the case with oxymorons. To solve the semantic conflict conveyed by oxymorons, a reader must engage cognitive control. In these studies, we asked first if the conflict conveyed by high-order language stimuli is felt as in the classic stimulus-response conflict tasks; second, if conflicting stimuli are remembered more and preferred compared to controls. Indeed, cognitive conflict has been traditionally deemed as an aversive, effortful and affectively negative (4–6), while conflict resolution mitigates its negative evaluation (7,8). Only recently (9), it has been shown that the experience of conflict can also be positively valued and intrinsically rewarding, at least when adopting basic stimulus-response conflict tasks, such as the Stroop and the Simon tasks.

In the present work, we examined how cognitive conflict is experienced in language. Specifically, we explored how oxymorons are processed and evaluated in terms of violation of expectations, effort, valence and arousal in contrast with neutral control (exp 1 and 2) and anomalous expressions (exp 3). Across three experiments (N = 283), oxymorons were considered more effortful and conflicting than neutral expressions, yet less emotionally positive. When contrasted with anomalous constructions, however, oxymorons were less effortful to comprehend, less violating, yet more remembered and highly preferred, suggesting that the lack of semantic plausibility of anomalous expressions had a detrimental effect on memory and preferences.

Table: Illustrative examples of experimental stimuli across conditions (exp 3)

Stimulus	Condition	Structure	Antonymous Pair	Target Feature	Concreteness
<i>Acidez dulce</i>	Oxymoron	Adj–N	sweet–bitter	sweet	High
<i>La lentitud acelera</i>	Oxymoron	N–V	slowness–speed	speed	High
<i>Claridad visible</i>	Neutral	Adj–N	light–dark	dark	Low
<i>La pasividad vuelve</i>	Neutral	N–V	activity–passivity	activity	Low
<i>Acidez cuadrada</i>	Anomalous	Adj–N	sweet–bitter	sweet	High
<i>El silencio abrocha</i>	Anomalous	N–V	silence-noise	silence	High

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Poster Session**Analysing Emotional Facial Expressions in English-Spanish Bilingual Speakers:
FaceReader**

Dimas Cintas

Universidad de Alcalá

Abstract

This study explores the use of FaceReader, an automated facial expression recognition software, to analyze emotional discourse in English-Spanish bilingual speakers. Twenty native English speakers, aged 20–35, who were immersed in Salamanca, Spain, participated in two interview sessions. The first session was conducted in Spanish (L2) and the second, approximately 10 days later, in their native English (L1). During the interviews, participants recounted personal experiences of intense anger, with follow-up prompts designed to elicit detailed, visceral, and emotionally authentic responses. Both audio and video recordings were collected for analysis. FaceReader was used to quantify (i) dominant emotions, (ii) intensity of seven basic emotions and (iii) valence and arousal averages of the narratives. Preliminary descriptive results indicate that neutral and happy expressions were most frequently detected, with minor differences between L1 and L2 in emotional intensity and valence. While FaceReader provides rapid, objective, and reproducible measures of facial expressions, subtle emotional nuances may be underrepresented, highlighting the complementarity of human-coded observation and perception questionnaires. Overall, this study provides insights into the interplay between facial expression of emotion and the bilingual mind and offers methodological guidance for future studies integrating automated facial coding with human observation.

Poster Session**The Impact of Translation Directionality on the Translation of Emotional Words**Ioanna Arampatzi ^{1,2}, Mikel Sanstesteban ², Anna Hatzidaki ¹¹ National and Kapodistrian University of Athens, ² University of the Basque Country (UPV/EHU)**Abstract**

For the past three decades, the cognitive basis of translation has attracted growing scholarly interest, with research focusing on the “emotional brain” and the relationship between emotions and translation (Rojo López & Muñoz, 2022). A central line of research concerns translation directionality, i.e. translating from the native language (L1) into the second language (L2) and vice versa (Wang et al., 2025). Previous evidence supports that L2-L1 translation is less cognitive demanding than the L1-L2 translation, resulting in faster and more accurate output (Basnight-Brown & Altarriba, 2015; Chang & Chen, 2023; Chou et al., 2021; Marmaridou, 1996). However, it remains unclear whether this asymmetry persists when emotionally valenced words are involved. Bilinguals typically process emotional content more intensely in the L1 (Pavlenko, 2012) and more weakly in the L2 (Champoux-Larsson & Nook, 2024). While most studies in directionality and emotion rely on comprehension tasks, fewer studies on production suggest that negative words are processed differently, eliciting slower responses and higher error rates than neutral or positive words (Jończyk et al. 2024; Rohr and Abdel Rahman, 2018). The present study examines whether translation directionality affects the oral translation of emotional words. Forty-one Spanish-English bilinguals participated in a bidirectional (L1-L2 and L2-L1) oral word translation task. Target words varied in emotional valence, including negative, neutral and positive words. Oral responses were analyzed for accuracy and reaction times. The results showed a clear translation direction effect, with faster and more accurate performance in the L2-L1 translation direction, regardless of the emotional valence. Across both directions, negative words led to slower and less accurate translations than positive and neutral words, which showed comparable performance. Overall, the findings support the cognitive asymmetry of translation and show that emotional content adds an additional cognitive and affective load influencing bilingual language production.

Keywords: cognition, bilingualism, translation direction, emotional words, oral translation

Poster Session**How Emotional Valence Shapes Lexical Access in Healthy Aging: A Multi-level Study**

María de las Nieves Iglesias Rodríguez

University of the Basque Country (UPV/EHU)

Abstract

Research on emotional aging suggests that age-related changes in emotional processing are better described as strategic and task-dependent adjustments rather than as a global decline. These changes can be understood within the framework of Socioemotional Selectivity Theory (Carstensen et al., 1999), which emphasizes age-related shifts in motivational priorities and emotional goals. In language processing, previous studies report preserved accuracy but slower reaction times in older adults during emotional word recognition and lexical access, together with valence-related modulation effects (Dupuis & Pichora-Fuller, 2008; Kensinger, 2008). While earlier research debated whether these effects arise at early perceptual stages or during later semantic and lexical processing (Schacht & Sommer, 2009; Scott et al., 2009), more recent evidence suggests that emotional modulation primarily emerges at post-perceptual stages related to lexical access (Trauer et al., 2022).

The present project primarily investigates age-related differences in emotional lexical access using a visual lexical decision task with emotional and neutral words. Based on previous evidence, older adults are expected to show slower reaction times, enhanced facilitation for positive words, and increased processing costs for negative stimuli (Blackett et al., 2018; Dupart et al., 2016; Thomas & Hasher, 2006). Moreover, prior studies indicate that older adults rely more strongly on contextual information and display distinct patterns of attention and emotional regulation during emotional word processing (Ku et al., 2021). Together, these findings suggest that age-related differences in lexical decision reflect strategic and compensatory mechanisms rather than early perceptual deficits.

By focusing first on lexical access and then extending the analysis to prosodic and integrative processes, this project aims to isolate different levels of processing and examine how they are modulated by age in healthy older adults. Data collection is ongoing, and feedback on the experimental design and stimuli is welcome.

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