ERC Advanced Grant 2023 Research proposal [Part B1]

Valence asymmetries: the positive, the negative, the good and the bad in language, mind and morality

VALENCE ASYMMETRIES

ISIDORA STOJANOVIC (PI) UNIVERSITAT POMPEU FABRA 60 months

An asymmetric behavior between the positive and the negative has been evidenced in psychology, for information processing, attention, recognition and decision making, in philosophy, for judgments about morality and intentionality, and in linguistics, for a range of lexical, syntactic, semantic and pragmatic phenomena. Negative information grabs our attention, we process it more carefully, we recall it with greater precision. We easily blame others for the negative side-effects of their actions, but do not praise them for the positive ones. It takes many nice words to overthrow one nasty remark. When we say that something is "not good", we usually imply that it is bad, but by saying "not bad" we do not imply that it is good.

Valence asymmetries have arisen on many horizons but have seldom been brought into correspondence, and are at odds with most theories of value. The present project is a pioneering attempt to secure the premises for a cross-fertilization between the different accounts of valence asymmetries. It will deploy methods from philosophy (argumentation and conceptual analysis), formal semantic and value-theoretic models, and experimental methodology from psycholinguistics and moral psychology.

It has three main objectives:

- highlight the fundamental role that valence plays beyond emotion, in particular, in value judgments and language:
- examine what the different asymmetries have in common, and whether they call for a unified explanation;
- show that valence asymmetries are not necessarily irrational, but often derive from a fundamental asymmetry between positive and negative value, and, as such, are a key component of our cognitive and linguistic architecture.

Furthermore, we will (a) articulate the relationship among the notions of valence, value and polarity; (b) put forward a novel account of the asymmetry of negation; (c) unearth new asymmetries in the realm of morality, virtue and vice; and (d) provide an account of valence reversals.

<u>Keywords</u>: evaluative language; affective meaning; value judgments; positive and negative valence; semantics of antonyms; polarity; moral theory

Section a: Extended Synopsis of the scientific proposal

"All happy families are alike. Every unhappy family is unhappy in its own way."

The opening line of Leo Tostoy's Anna Karenina

1. Introduction and general aims

Valence - that is, the property of being (perceived as) either positive or negative - is increasingly recognized as fundamental to even the most basic cognitive processes. Seeing something positively or negatively can shape perception. Whether an expression is associated with a positive or a negative emotional response can impact linguistic interpretation. Valence is also fundamental to morality - the capacity of distinguishing what is right from what is wrong, of performing and praising actions that are morally good while avoiding and condemning those that are bad. Despite being a core notion to the understanding of the human mind, valence, and its relationship to the notions of value and polarity, still leave us with many open questions. VALENCE ASYMMETRIES is a philosophy-driven interdisciplinary project that will allow for a cross-fertilization among the different accounts of the different asymmetries. Its aim is threefold: underscore the **fundamentality of valence** across disciplines, determine whether there may be a **common cause** to the different asymmetries, and show that many such asymmetries do **not** constitute irrational **biases** but derive from a more fundamental asymmetry between positive and negative value and, as such, are an **essential component** of the functioning of the human mind.

Most traditional and contemporary theories of value (see e.g. Hansson 2001, Rast 2022) see the positive and the negative as symmetric opposites. Classical logic and theory of rationality similarly endorse the symmetry hypothesis (see Fig. 1a). And many folk representations of the good and the bad tend to depict them as reversed images of each other (see Fig. 1b). At the same time, more than half a century of research in psychology has amply demonstrated that we humans do not always follow the (traditional) principles of rationality, and that many of our cognitive processes are sensitive to valence in ways that depart from the predictions of logic or value theory. Tversky and Kahneman (1982) famously showed that if asked to hypothetically decide what procedure to take to cure a disease, most people opt for a procedure that *saves* 80 percent of people to one that *kills* 20 percent, even when the two turn out to be logically equivalent. Whether an issue is framed in positive or negative terms can crucially impact one's thoughts and actions. Kahneman and Tversky (1979) proposed the Prospect Theory, in which the symmetry breaks down, the drop in negative value being steeper than the rise in positive value (see Fig. 2). But while it has received interest in economics, this theory has hardly had any impact on philosophical theories of value, or any notable applications in ethical theory or in aesthetics, the two fields most directly concerned with values.

Some valence asymmetries have been long known and discussed (e.g. Boucher & Osgood 1969, Peeters 1971), but there has been a recent emergence of empirical findings that show that the phenomenon is **pervasive** in language, cognition, and even areas that have only recently come under empirical scrutiny, such as moral judgments. The asymmetric nature of valence is a topic ripe for a systematic, theoretically well-founded interdisciplinary approach, in which foundational **philosophical** issues (*what is valence? what is value? what is the relationship between the two?*) become tightly intertwined with **empirical** observations coming from linguistics and psychology.

The project will provide the premises for a novel **cross-fertilization**: it will apply tools from value theory and formal semantics to model descriptive empirical data, offer a new theoretical framework to account for the variety of valence asymmetries observed in separate areas, and solidify philosophical theories with rigorous empirical research. Its **impact** will go well **beyond scientific research**, reaching into areas such as applied ethics or public policy analysis and development.

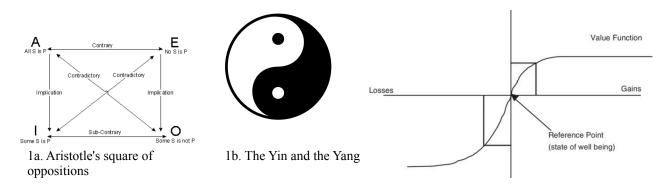


Fig. 1. Representations of opposites as symmetrical Valence asymmetries - ${f B1}$

Fig. 2: The asymmetry of value functions in Kahneman and Tversky's Prospect Theory

2. Work packages

WP1: Value, valence and polarity: conceptual groundwork

This work package extends throughout the duration of the project. Its aim is twofold. At an initial stage, we hope to provide the necessary theoretical and conceptual tools that will help addressing the specific empirical issues with which the three other work packages are concerned. At a final stage, informed by the advances and results made in the more empirical parts of the project, we aim to put forward a novel, theoretically sound proposal that articulates the relationship between valence and value. Furthermore, we will emphasize the effects of valence in language and show how it differs from the notion of polarity.

Both valence and polarity are part of the contemporary linguistic toolkit. Even if they are sometimes used interchangeably, they are associated with distinct traditions. Theories of polarity (e.g. Löbner 2000, Rett 2015) are primarily interested in how different expressions behave in different syntactic environments (e.g. "Clarissa (*did/didn't) *sleep a wink* that night"; Israel 2004: p. 710). Valence, on the other hand, was developed by psycholinguists (Osgood, Suci & Tannenbaum 1957; Warriner, Kuperman & Brysbaert 2013; Mohammad 2018) and tracks the emotional experiences in language users. Positively valenced expressions are those that evoke pleasant feelings, negatively valenced one, unpleasant feelings. Valence and polarity often align, but not always: for instance, "death" and "leukemia" are some among the most negatively valenced items in Warriner, Kuperman & Brysbaert (2013) but have no interesting polarity features, such as, say, licensing negative polarity items (NPIs) like "any". Conversely, antecedents of conditionals are well known as environments that license such items, yet they are not associated with any peculiar emotional response. Still, it is no coincidence that the two notions are related, and we want to understand what that relationship is.

In philosophy, it is valence and value that are usually tied together, as the recent research on evaluative language nicely illustrates. In the last twenty years, philosophers and linguists have become increasingly interested in subjective and evaluative terms such as "tasty" or "fun" (see Umbach 2021 for overview). However, there appears to be an important divide in how to understand the very notion of evaluativity (see Stojanovic, forthcoming). One approach relies on the notion of valence: to say about someone that they are beautiful, good, or generous, is to say something positive about them, to praise them; whereas to say that they are ugly, bad, or selfish, is to say something negative, to criticize or blame them. The other approach relies on the notion of value: to say about someone that they are beautiful is to rank them above some relevant threshold on the scale of aesthetic value, to say that they are generous, to so rank them on the scale of generosity, to say that they are ugly or selfish, again, to rank them, but below some corresponding threshold; it is the very same mechanism as mapping objects along a scale of commercial value by declaring them expensive or cheap. While valence is primarily a binary notion that aligns with the division between pro and con attitudes (acceptance vs. rejection, praise vs. blame), value scales are intrinsically gradable. Understanding how value and valence relate to each other seems crucial to understanding evaluativity, which in turn may have a major impact on the study of value judgments, opening new venues for research in ethics and aesthetics. When it comes to the present project, the theoretical advances that will be made in this work package will pave the way to a clearer theorizing about the positive-negative asymmetries that have been observed across the different domains. While some of them may be driven by valence alone, we hypothesize that a proper understanding of the relationship between value, valence and polarity will shed new light on the study of these phenomena.

WP2: Valence asymmetries in linguistic interpretation and communication

The phenomena that we will study in this work package involve antonym pairs that are polar opposites, but also exhibit strong valence effects, such as "good"/"bad" or "generous"/"selfish", and it is therefore important to have a clear picture of the relationship between polarity and valence (see WP1). The first phenomenon is "the asymmetry of negation" (Colston 1999) or "negative strengthening" (Horn 1972, 1989; Gotzner, Solt & Benz 2018), which has recently come under scrutiny in experimental pragmatics (Ruytenbeek, Verheyen & Spector 2017; Mazzarella & Gotzner 2021, i.a.). It consists in the observation that negating a positively valenced adjective is more likely to implicate its contrary than it is for a negatively valenced adjective:

The food was not good. --> The food was bad. vs. The food was not bad. -/-> The food was good.

The second phenomenon that we will address is an asymmetry recently reported in Willemsen & Reuter (2021). They investigated whether the evaluative implication carried by thick moral terms (Väyrynen 2019) could be cancelled. They presented participants with sentences such as: Amy's behavior last week was egoistic/generous, but by that I am not saying something negative / positive about Amy's behavior that day. Then they asked them to rate on a 1 to 9 scale whether the speaker contradicts herself. The results show that cancellation is deemed significantly more acceptable for positive than negative terms.

The third phenomenon shows resemblance to negative strengthening but has largely gone unnoticed. It consists in observing a similar valence effect with respect to so called *scalar* inferences (Horn 1972):

The food was good. --> The food was not excellent. vs. The food was bad. -/-> The food was not horrible.

We hypothesize that the three asymmetries may be driven by similar mechanisms. In particular, we will explore a novel solution, based on the semantic account of antonyms outlined in Sassoon (2013). Her idea was that positive multidimensional adjectives are *conjunctive* while negative adjectives are *disjunctive*, in the following sense: for something to qualify as "good" it needs to meets the relevant threshold on *every* relevant dimension, whereas for it to be "bad", it is enough that it sits significantly below the threshold on *at least one* dimension. Our idea is that a listener told that an object does not satisfy a positive property can easily make an *inferential leap* to the conclusion that it satisfies the contrary: "not good" means that there is a dimension on which the threshold is not met, which (defeasibly) suggests that the object sits significantly below the threshold on that dimension. On the other hand, "not bad" means that there is no dimension on which the object is significantly below the threshold, but for it to become "good", it needs to reach the threshold on each and every dimension! The inferential leap becomes much harder, hence the negation asymmetry.

WP3: Asymmetries between the Good and the Evil: a viewpoint from moral psychology

Experimental philosophy, a field still in its infancy, arose from the urge of testing the plausibility of philosophical theories against empirical data, and became most buoyant in the area of moral theory. Most of that research, however, is concerned with general questions such as whether folk judgments about morality are in line with moral realism (roughly, the view that moral properties are objective) or alternative views such as expressivism (Camp 2017) or relativism (Stojanovic 2017); see e.g. Sarkissian (2016) for an overview of the experimental literature. It is fair to say that the effects of valence on moral judgments have been understudied. One exception is the research on intentional action. In a pioneering study, Knobe (2003) investigated whether people are inclined to say that the side-effects of an action are intended by the agent, and showed that negative side-effect are more likely to be considered so than the positive ones. This mirrors an asymmetry is moral judgments: people are much more likely to blame others for the harmful side-effects of their actions than to praise them for the good ones (4.8 vs. 1.2 on a 6 point scale). Another valence asymmetry noted in the literature, but not investigated deeper, is that positive moral judgments seem to be perceived as more subjective than the negative ones. According to Goodwin and Darley (2012: 254), "the valence of moral beliefs is a robust predictor of their objectivity. Beliefs about the wrongness or badness of negative moral actions (e.g., stealing, robbing, cheating) were seen as reliably more objective than beliefs about the rightness or goodness of positive moral actions (e.g., donating money to charity, performing a swim rescue, contributing to environmental causes)."

Interestingly, a line of thinking in virtue theory that goes all the way back to Diogenes (4th century BC) also sees an asymmetry: a *virtuous* person must possess all the virtues, whereas a single vice is enough to make a person *vicious* - even just living in a society that tolerates oppression (see Tessman 2005: 56).

We will approach these asymmetries in the light of the Density Hypothesis (Unkelbach, et al. 2008; Alves et al. 2015; Koch et al. 2016), which proposes, in a nutshell, that positive information tends to be homogenous (hence dense) whereas negative information is more differentiated. In other words, people see positive things as being more alike - as in Tolstoy's all happy families are alike - whereas negative features tend to stand out - ...every unhappy family is unhappy in its own way. We plan to test the density hypothesis with respect to moral judgments (regarding both the rightness or wrongness of actions and moral properties of individuals). The hypothesis nicely aligns with the virtue-vice asymmetry: virtuous people are alike in that they are virtuous in every respect, whereas vicious people are more divergent: one is greedy, another corrupt, one is lazy, another revengeful, and so on. Similarly when it comes to what makes people praise- or blameworthy: acting always right is what brings one praise, while acting wrong even just once is enough for blame, which matches the Knobe asymmetry. We will also examine alternative explanations that rely on valence asymmetries in emotion, namely, on the emotional strength of negative stimuli, captured by the slogan that bad is stronger than good (Baumeister et al. 2001).

WP4: Valence reversals

While WP1 is transversal in that its theoretical account of valence, value and polarity will provide a roadmap for the study of the empirical phenomena in the other work packages, WP4 is transversal in that it focuses on a specific phenomenon, but one that brings together value theory, philosophy of language, semantics, pragmatics, theory of emotions, and even aesthetics. This phenomenon is *valence reversal*: something that is normally positive acquires a negative value, and conversely, something that we normally see as negative acquires a positive value. Valence reversal can be illustrated by three *prima facie* quite different phenomena: (i) irony; (ii) slur appropriation; (iii) the paradox of negative emotions.

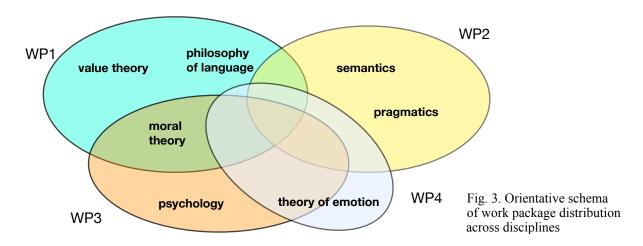
- (i) While **irony** covers a range of diverse phenomena (see e.g. Kapogianni 2022 for overview), a typical example is one in which you say something positive to convey something negative: "What a beautiful weather!" as you arrive at a picnic spot and it is pouring rain. Although "What a horrible weather!" can conversely be used to convey that the weather is nice, the positive-to-negative direction is much more widespread than negative-to-positive (Clark & Gerrig 1984), hence there is a valence asymmetry.
- (ii) Slurs are pejorative terms, such as racial epithets, that derogate their target on the basis of their race, nationality, gender, sexual orientation. In the rich philosophical literature on the topic (see e.g. Hess 2022 for overview), growing attention is being paid to the notion of **appropriation** (e.g. Jeshion 2013): the target group starts using the slur, but in a positive sense. This phenomenon of valence reversal is also largely unidirectional, but this time in the the negative to positive direction.
- (iii) The so called paradox of negative emotions (see Levinson 2014 or Smuts 2009) refers to the idea that our positive appreciations of artworks are often motivated by properties that would normally be considered negative: for example, the *sad* lyrics of a song, the *tragic* story of Anna Karenina, the *haunting* atmosphere of Elden Ring, the *shocking* ending of Park Chan-wook's *Oldboy*. How can something be apparently both negative and positive? This is what gives the impression of a paradox.

While all three topics have received considerable attention in their respective fields, we aim to shed new light on each, by looking at these three phenomena of valence reversals from a broader perspective that relies on an empirically informed and theoretically sound account of valence and value. We will also critically examine whether these phenomena call for a unified account (Bianchi 2014, Cepollaro 2017).

The focus of the work package will be on the paradox of negative emotions. While the appreciation of art is a long standing topic in aesthetics, the question of how we *express* it has received less attention. How do we interpret a statement such as "*Oldboy* is a shocking movie"? Does "shocking" stand for a negative property, and the statement expresses something negative about the movie, but pragmatically conveys something positive? Or does it express, in that context, a positive property (as suggested in Stojanovic 2016)? Or is "shocking" an ambivalent term, expressing a property with both positive and negative aspects? We will address such very basic but at the same time fundamental semantic questions.

3. Interdisciplinary aspects, team structure and research environment

The project's main anchor lies in philosophy, at the intersection of philosophy of language and value theory. We aim to propose a theoretical account of the notion of valence and articulate its relationship to value, yet one that is capable of accounting for a range of empirical phenomena that we have united under the label of *valence asymmetries*. The phenomena concern first and foremost language and cognition, calling for some crucial inputs from linguistics as well as psychology. The project's first three work packages have as their primary fields respectively philosophy, linguistics (namely, semantics and pragmatics), and moral psychology, while the fourth work package is transversal (see Fig. 3).



The PI has a very strong interdisciplinary background (MA in Mathematical logic, MA and PhD in Cognitive Science, PhD in Philosophy) and a long and rich history of collaborations with theoretical and experimental linguists; this makes her an excellent leader for a project of this magnitude. The team will consist of three postdocs, two PhDs, Laia Mayol as a senior member from the host institution (15% research time dedication), and Louise McNally, also from the host institution, as a consultant. Postdoc 1 will have a strong background in value theory, from both a philosophical and a broader perspective (e.g. Prospect Theory), and will work primarily in WP1 but will interact with all the project members.

Postdoc 2 will have an interdisciplinary profile (philosophy of language and linguistics or psychology) and will work in WP2 and WP4. Postdoc 3 will have a background in moral psychology (theoretical and experimental) and will work in WP3. PhD 1 will be a philosopher of language, supervised by the PI, and will work at the intersection between WP1 and WP4. PhD 2 will be a theoretical linguist willing to develop experimental skills, and will work in WP2, co-supervised by Laia Mayol and the PI. Mayol and McNally are experts in semantics and formal pragmatics and will contribute to WP2 and WP4.

The Department of Translation and Language Sciences at the Pompeu Fabra University is an excellent host institution for the present project. Home to a vibrant research community, it will provide the PI and her team with optimal conditions to conduct their research. The PI's 11-year affiliation with the Group of Formal Linguistics (www.upf.edu/web/glif/), as a full member in 2012-14 and an external member since then, has led to a very productive research dynamics among the PI, Mayol and McNally, guaranteeing a swift and smooth integration into the research environment of the host institution.

4. Methodology and risk assessment

The project will use a four-pronged methodological approach:

- (m₁) Since our core research questions are first and foremost philosophical, our main methodology will be that of contemporary **analytic philosophy**, which emphasizes soundness in argumentation, clarity and precision, logical and conceptual analysis, and responsiveness to empirical evidence.
- (m₂) **Formal models** will be developed for several theoretical proposals. Comparative and non-standard models of value will be investigated in WP1 and applied to the virtue-vice asymmetry in WP3. In WP2, a formal semantics of antonyms and formal pragmatic models of presupposition and implicature will be devised for negative strengthening, scalar asymmetries, and the Willemsen-Reuter asymmetry.
- (m₃) The project includes five sets of **experimental studies**, all of questionnaire types with participants recruited on platforms such as *Prolific*. In WP2, we will conduct a study to investigate the scope of the Willemsen-Reuter asymmetry. A second set of studies will probe the positive-negative asymmetries in continuation with studies such as Ruytenbeek, Verheyen & Spector (2017), Mazzarella & Gotzner (2021) or van Tiel and Pankratz (2021), but focusing on scalar effects. In WP3, we will conduct a study with a design similar to Goodwin & Darley (2012) but one that has a balanced distribution between positive and negative stimuli, allowing for a better control of valence effects. The fourth set of studies, inspired by Koch et al. (2016) and Jablonska, Falkowski & Mackiewicz (2022), will test the density hypothesis on moral judgments. The fifth study will investigate experimentally the asymmetry between praise- and blameworthiness, in continuation with the research on the Knobe effect.
- (m₄) Although the use of corpus methodology is not habitual for philosophical research, the PI's recent collaboration with the project consultant, namely, Stojanovic & McNally (2023), has led to some very interesting results, showing that moral statements show hallmarks of subjectivity but at the same time largely differ from paradigmatic subjective statements. Sytsma et al. (2019) and Reuter, Baumgarten & Willemsen (forthcoming) are other examples of applications of corpus methodology in philosophy, to causality attributions and moral concepts respectively. This has motivated us to include **a corpus study** in WP4, in which we will investigate how different linguistic constructions can serve as indicators or triggers of valence reversals in adjectives such as "tragic" and "harrowing". Specifically, we will look at negative adjectives in contrastive constructions ("but") and track the valence of conjuncts.

VALENCE ASYMMETRIES is a low risk - high impact project. The PI's interdisciplinary background and fruitful collaborations with semanticists and psycholinguists, and her confirmed career status as 1st class Research Director at the CNRS, minimize all potential risks related to project leadership. To ensure the highest quality of the research team, the PhD- and postdoc positions will be widely advertised and recruitment committees will be constituted from experts in the corresponding fields. Specific risks related to the different methodologies will be anticipated. Most of the formal models that we will use (m₂) are well-studied and computationally simple, which makes their use virtually risk-free. Similarly, there is no computational complexity to the corpus study (m₄); however, one risk is that we may end up with data that are interesting from a qualitative point of view, but have little quantitative impact. This will be remedied by extending the study to larger corpora (e.g. social media platforms). The known risks of online questionnaire studies (m₃), such as the sampling bias or lack of control over participants' environment (that is, inaccurate responses due to distraction or multitasking), will be mitigated by using appropriate sampling techniques and incorporating attention-check questions to verify participants' attentiveness. A more serious risk with (m₃) are possible flaws in the study design. All our studies will be designed jointly between the PI and other team members (mostly Postdoc 2 and Postdoc 3) who have been trained in experimental techniques. The major risk of (m_1) are possible flaws in argumentation. The PI's background in mathematical logic and philosophy is a good warrant against such risks. A further mitigation strategy will consist in a systematic exposure of our research to peer-criticism by submitting it to peer-reviewed venues and presenting it in conferences and workshops.

Section b: Curriculum vitae

STOJANOVIC, Isidora

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Date of birth: 11/11/1973

Nationality: French

URL for web site: https://www.isidorastojanovic.com

•EDUCATION

| 2014 | Habilitation à diriger les recherches), EHESS, France |
|------|--|
| 2007 | PhD in Philosophy, Stanford University, USA |
| 2002 | PhD in Cognitive Science, Ecole Polytechnique, France |
| 1998 | Master (a.k.a. <i>DEA</i>) in Cognitive Science, Ecole Polytechnique, France |
| 1997 | Master (a.k.a. DEA) in Mathematical Logic and Foundations of Computer Science, |
| | University Paris 7 - Denis Diderot, France |
| 1996 | Master (a.k.a. Maîtrise) in Logic, Univ. Paris 1 - Panthéon Sorbonne, France |

•CURRENT & PREVIOUS POSITIONS

| Since 2023 | Research Director 1st class (DR1), Institut Jean Nicod, CNRS, France |
|-------------|--|
| 2015 - 2023 | Research Director 2nd class (DR2), Institut Jean Nicod, CNRS, France |
| 2009 - 2015 | Researcher 1st class (CR1), Institut Jean Nicod, CNRS, France |
| 2004 - 2009 | Researcher 2nd class (CR2), Institut Jean Nicod, CNRS, France |

•FELLOWSHIPS AND AWARDS

| 2012 - 2014 | Marie Curie Intra-European Career Development Grant (ERC), hosted by the Dept. of |
|-------------|---|
| | Translation and Language Sciences, Universitat Pompeu Fabra, Spain |
| 2001 - 2006 | PhD Fellowship, Department of Philosophy, Stanford University, USA |
| 1998 - 2001 | Allocation de recherche (3 year research fellowship), Ministry of Education, Research and |
| | Technology, France, hosted by the Ecole Polytechnique, France |

•SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

| 2021 - 2022 | Constant Bonard, postdoc, Fonds National Suisse / Institut Jean Nicod |
|-------------|--|
| 2016 - 2019 | Andrés Soria Ruiz, PhD, Ecole Normale Supérieure |
| 2016 | Julia Zakkou, postdoc, University of Hamburg / Institut Jean Nicod |
| 2013 - 2017 | Bianca Cepollaro, PhD, Ecole Normale Supérieure |
| 2010 - | member of 18 PhD committees (in France, Spain, Italy, Poland, Portugal, Belgium, |
| | Holland, and Sweden) and one HDR committee (France) |

•ORGANISATION OF SCIENTIFIC MEETINGS (selection)

| 2023 | Conference Slurring Terms Across Languages, organizer and program chair, Paris, France |
|-----------|--|
| 2021 | Symposium on Expressives, 10th SLMFCE Congress, Salamanca, Spain |
| 2019 | Workshop on Evaluative Language (EvalLang-2019), program chair, Paris, France |
| 2015 | CONTEXT-2015: Interdisciplinary Conference on Modeling and Using Context, program |
| | co-chair, Larnaca, Cyprus |
| 2014 | Workshop on Modeling Experiences in Natural Language Semantics, Tezpur, India |
| 2013 | Workshop on Lexical Meaning, Semantic Invariance and Logicality, Barcelona, Spain |
| 2005-2012 | Co-founder, organizer and chair of PALMYR: Paris-Amsterdam Logic Meetings of Young |
| | Researchers, Paris, France and Amsterdam, Holland |

•INSTITUTIONAL RESPONSIBILITIES (selection)

| 2022 | Member of the hiring committee for the position of Associate Professor (Maître de |
|-------------|---|
| | conférences) in Philosophy of language and epistemology, University Paris Nanterre |
| 2022 | Member of the expert committee for the Agencia Estatal de Investigacion, calls Ramón y |
| | Cajal and Juan de la Cierva, Spain |
| 2016 - 2019 | Member of the Pedagical and Scientific Council of the Doctoral School in Human Sciences |
| | and Literature, Ecole Normale Supérieure, France |

| 2018 - 2019 | Member of the external expert committee for the position of Senior Lecturer in Theoretical |
|-------------|--|
| | Philosophy, Phil. Of Language, Stockholm University, Sweden |
| 2017 | Member of the hiring committee for the position of Professor in Philosophy of mind and |
| | language, University of Grenoble, France |
| 2008 - 2012 | Member of the National Committee for Scientific Research (CoNRS), France |
| 2009 – | Member of the scientific committee for the LINGUAE Lectures, France |
| 2005 - 2009 | Responsible for the Jean Nicod Colloquium Series, Institut Jean Nicod, France |

•EXPERTISE IN SERVICE TO THE PROFESSION (selection)

Semantics; Thought; Intercultural Pragmatics

| 2017 - 2023 | External reviewer for fellowships and career promotions for the University of Konstanz |
|-------------|--|
| | and University of Bayreuth (Germany) and the Nova University of Lisbon (Portugal) |
| 2017 - 2021 | Reviewer for Fonds National Suisse (Switzerland), Deutsche Forschungsgemeinschaft |
| | (Germany), Fonds Wetenschappelijk Onderzoek (Belgium), ERC Starting Grants |
| 2021 | Advisory board member for the Rolf Schock Prize in Logic and Philosophy, the Royal |
| | Swedish Academy of Sciences, Sweden |
| 2019 | Expert reviewer for Prize the Foundation of Polish Science, Poland |

•EDITORIAL ACTIVITIES

| 2019 – | Associate Editor for Linguistics and Philosophy |
|-------------|---|
| 2019 – | Area Editor for <i>Ergo</i> ; Consulting Editor for <i>Theoria</i> (Wiley-Blackwell) |
| 2017 - 2021 | Subject Editor for Thought: a Journal of Philosophy |
| 2011 - | Editorial Boards: Topoi: An International Review of Philosophy; Cambridge Elements in |

•REVIEWING ACTIVITIES

Analysis; Australasian Journal of Philosophy; Cognition; Daimon; Dialectica; Dialogue; Disputatio; Ergo; Erkenntnis; Ethical Theory and Moral Practice; Glossa; Grazer Philosophische Studien; Journal of Ethics and Social Practice; Journal of Logic, Language and Information (JoLLI); Journal of Pragmatics; Journal of Semantics; Kriterion; Language; Language and Cognition; Lingua; Linguistic Inquiry; Linguistics and Philosophy; Mind; Noûs; Pacific Philosophic Quarterly; Phenomenology and Mind; Philosopher's Imprint; Philosophia: Philosophical Quarterly of Israel; Philosophical Quarterly; Philosophical Studies; Philosophy and Phenomenological Research; Review of Philosophy and Psychology; Semantics and Pragmatics; Studia Semiotyczne; Synthese; Theoria: a Swedish journal for Philosophy and Psychology; Theoria: an International Journal for Theory, History, and Foundations of Science

•MEMBERSHIPS OF SCIENTIFIC NETWORKS (selection)

| | , |
|-------------|---|
| 2019 - 2023 | Member and MC substitute, COST Action APPLY: European Network for Argumentation |
| | and Public Policy Analysis, CA17132, Horizon 2020 Framework |
| 2016 - 2019 | Member, DIAPHORA: Philosophical Problems, Resilience and Persistent Disagreements, |
| | FP7 Marie Curie European Philosophy Training Network (grant n° 675415) |
| 2010 - 2013 | Member and work package coordinator, PETAF: The FP7 Marie Curie European Philosophy |
| | Training Network on Perspectival Thoughts and Facts (grant n° 238128) |

MAJOR COLLABORATIONS

- Louise McNally, semantics, Dept. traducció i ciencies del llenguatge, Univ. Pompeu Fabra, Spain
- Elsi Kaiser, psycholinguistics, Dept. of linguistics, University of South California, USA
- Filippo Domaneschi, psycholinguistics, Dept. of linguistics, University of Genoa, Italy

LANGUAGES

- Serbian, French, English, Spanish, Catalan, Croatian: native to proficiency level
- Japanese, Italian, Latin, Ancient Greek: intermediate to advanced beginner level

•CAREER BREAKS

01/11/2019-28/02/2020 Maternity leave

•COVID-19 IMPACT TO SCIENTIFIC PRODUCTIVITY

♦ Increased caring responsibility for dependent person, including home schooling of children; ♦ Physical and/or mental health issues;

Valence asymmetries - B1 8

01/11/2019 20/02/202

Appendix: All on-going grants and submitted grants applications of the PI (Funding ID)

<u>Mandatory information</u> (not counted towards page limits)

No on-going grants.

Submitted grant applications:

| Project Title | Funding source | Amount (Euros) | Period | Role of the PI | Relation to current ERC proposal |
|--|--|-------------------------------------|-----------|----------------|--|
| Bias and Strategies in Meaning (BaStra) | Agence Nationale de Recherche (ANR), France | 350000€ No funding for the PI | 2023-2025 | Consultant | None |
| Re-evaluate Valence | Sorbonne Université, France | 100000€ No funding for the PI | 2023-2024 | Consultant | None |

•UP TO TEN REPRESENTATIVE PUBLICATIONS AS FIRST OR CO-FIRST AUTHOR IN MAJOR INTERNATIONAL PEER-REVIEWED JOURNALS (reverse chronological order)

- 1. Cepollaro, Bianca, Filippo Domaneschi and Isidora Stojanovic (2021) When is it ok to call someone a jerk? An experimental investigation of expressives, *Synthese* 198: 9273–9292. https://doi.org/10.1007/s11229-020-02633-z
- 2. Soria Ruiz, Andrés and Isidora Stojanovic (2019) On Linguistic Evidence for Expressivism, *Philosophy* 86: 155-180. https://doi.org/10.1017/S1358246119000110
- 3. Stojanovic, Isidora (2019) Disagreements about Taste vs. Disagreements about Moral Issues, *American Philosophical Quarterly* 56: 29-41. https://doi.org/10.2307/45128641
- 4. Stojanovic, Isidora (2016) Expressing Aesthetic Judgments in Context, *Inquiry* 59: 663-685. https://doi.org/10.1080/0020174X.2016.1208922
- 5. Cepollaro, Bianca and Isidora Stojanovic (2016) Hybrid Evaluatives: in Defense of a Presuppositional Account, *Grazer Philosophiesche Studien* 93: 458-488. https://doi.org/10.1163/18756735-09303007
- 6. Stojanovic, Isidora and Neftalí Villanueva (2015) Mental Files, Blown Up by Indexed Files, *Inquiry* 58: 393-407. https://doi.org/10.1080/0020174X.2014.883746
- 7. Stojanovic, Isidora (2012a) Value-Attributions: Semantics and Beyond. *The Southern Journal of Philosophy* 50: 621-38. https://doi.org/10.1111/j.2041-6962.2012.00137.x
- 8. Stojanovic, Isidora (2012b) Emotional Disagreement. *Dialogue* 51: 99-117. https://doi.org/10.1017/S001221731200025X
- 9. Stojanovic, Isidora (2012c) The Problem of *De Se* Assertion. *Erkenntnis* 76: 49-58. DOI:10.1007/s10670-011-9350-7
- 10. Stojanovic, Isidora (2012d) Domain-Sensitivity. *Synthese* 184: 137-155. https://doi.org/10.1007/s11229-010-9729-z

In addition to these ten, the PI has published in this period **seventeen book chapters** in peer-reviewed collective volumes, of which twelve as a solo author, and four as co-first authors, six published by Oxford University Press, three by Springer, two by Routledge; one more journal article, two book reviews, three peer-reviewed conference proceedings, and has co-edited **one book** (published by Springer). For details, see CV with complete publications, available at https://www.isidorastojanovic.com/research.

•INVITED PRESENTATIONS TO INTERNATIONALLY ESTABLISHED CONFERENCES AND/ OR INTERNATIONAL ADVANCED SCHOOLS (selection)

- 1. "Are Moral Predicates Subjective?", North American Summer School in Logic, Language and Information (NASSLLI) University of Southern California, 23 June 2022 (online)
- 2. "Valence asymmetries in thick (moral) concepts", Naturalism and its Challenges, Iranian Institute for Philosophy, Tehran, Iran, 7 March 2022 (online)
- 3. "Exploring Valence in Judgments of Taste", PhilLang 2021, Lodz, Poland 14 May 2021 (online)
- 4. "Derogatory Terms in Free Indirect Discourse", keynote address at the 10th European Congress of Analytic Philosophy, Utrecht University, 26 August 2020 (online)
- 5. "'Difficult' is Difficult: Metasemantics and Context-Sensitivity", American Philosophical Association (APA) Pacific Division Meeting, San Francisco, USA, 31 March 2016
- 6. "Le langage des valeurs morales", 4è Journées de métaéthique, Rennes, France, 11 May 2015
- 7. "Will this be worthwhile?", The Night of Philosophy, New York, USA, 25 April 2015
- 8. "Relativism and Polyadic Truth", Philosophers' Rally. Warsaw, Poland, 3 July 2014
- 9. "The experiential and the evaluative aspects of aesthetic judgments", London Aesthetics Forum, London, UK, 14 March 2014
- 10. "Disagreement and Retraction in Dialogue", SemDial, Paris, France, 18 September 2012

Videos of 1, 2 and 4 are available at https://www.youtube.com/@isidorastojanovic/featured

7 was written about in a New York Times article by Willian Grimes, available here:

https://www.nytimes.com/2015/04/27/arts/a-night-of-philosophy-12-hours-of-a-mental-marathon.html

In this period, the PI has given a total of **35** invited talks in international conferences, two series of invited lectures (in Iran and Brazil), **42** invited talks in seminars or workshops, **16** refereed talks, **6** outreach talks.

•ORGANISATION OF MAJOR INTERNATIONAL CONFERENCES (selection)

- 2015 Program co-chair of **CONTEXT-2015: Interdisciplinary Conference on Modeling and Using Context**, Larnaca, Cyprus
- Member of the PC and organizing and steering committee for SPE 7: Semantics and Philosophy in Europe, Berlin, Germany
- Since 2012 Member of the reviewer panel for **SALT: Semantics and Linguistic Theory** (main international North-American based semantics conference) and for **Sinn und Bedeutung** (main international European based semantics and philosophy of language conference)

•GRANTS, RESEARCH NETWORKS

| 2019 - 2023 | Member and MC substitute, COST Action APPLY: European Network for Argumentation |
|-------------|---|
| | and Public Policy Analysis (grant n° CA17132), Horizon 2020 Framework |
| 2016 - 2019 | Member, DIAPHORA: Philosophical Problems, Resilience and Persistent Disagreements, |
| | FP7 Marie Curie European Philosophy Training Network (grant n° 675415) |
| 2017 - 2019 | Member, SiGGRAM: Significado y Gramatica; MINECO FFI2016-81750-REDT |
| 2017 - 2019 | Member, Semantic Content and Conversational Dynamics; MINECO FFI2012-37658 |
| 2012 - 2014 | Marie Curie Career Development Grant Award (ERC), project LexMean (grant n° 302596) |

•MAJOR CONTRIBUTIONS TO THE EARLY CAREERS OF EXCELLENT RESEARCHERS

The PI has contributed to the excellent early careers of the following researchers (i.a.):

- **Bianca Cepollaro**, now tenured research fellow at Univ. San Raffaele (Milan, Italy) actions: PhD supervision (2013-2017), co-authorship of publications, ongoing collaboration
- Andrés Soria Ruiz, now Juan de la Cierva research fellow at the University of Barcelona (Spain) actions: PhD supervision (2016-2019), co-authorship of publications, ongoing collaboration
- Julia Zakkou, now Assistant professor at Bielefield University (Germany) actions: postdoc supervision (IJN, 2016), co-authorship of a forthcoming publication
- Nils Franzén, now Assistant professor at Umeå University (Sweden) actions: supervision of a PhD stay at IJN (2018), ongoing collaboration
- Markus Kneer, now research fellow at the University of Zurich (Switzerland)
 actions: informal participation in PhD supervision, PhD jury (2015), ongoing collaboration
- Natalia Karczewska, now Assistant professor at the University of Warsaw (Poland) actions: supervision of a PhD stay at IJN (2015), PhD jury (2019), feedback and recommendations
- **Eduardo Pérez Navarro**, now Juan de la Cierva research fellow at the University of Barcelona (Spain) actions: supervision of a PhD stay at IJN (2017)

•EXAMPLES OF INNOVATION LEADERSHIP

The PI was invited to write articles for major **handbooks** ranging over several disciplines, including philosophy of language (2,5,6,7), semantics (4,5), metaethics (1,3) and epistemology (2,7):

- 1. Metaethical Relativism, in McPherson, Tristram and David Plunkett (Eds.), The Routledge Handbook of Metaethics, Routledge 2017. pp. 119-132
- 2. *De Se* Assertion, in Goldberg, Sanford (Ed.), *The Oxford Handbook of Assertion*, Oxford: OUP. 2020. pp. 459-479. First published online in December 2018.
- 3. Les jugements moraux sont-ils relatifs?, in Desmons, Ophélie, Stéphane Lemaire and Patrick Turmel (Eds.) Manuel de méta-éthique. Paris: Hermann 2019. pp. 63-92.
- 4. Indexicality: I, Here, Now, in Gutzmann, Daniel, Lisa Matthewson, Cecile Meier, Hotze Rullmann, and Thomas E. Zimmerman (Eds.), The Wiley Blackwell Companion to Semantics, Wiley's. 2021. DOI: 10.1002/9781118788516.sem123
- 5. The Semantics and Pragmatics of Value Judgments, with Andrés Soria Ruiz and Bianca Cepollaro, in Stalmaszczyk, Piotr (Ed.) The Cambridge Handbook of the Philosophy of Language, Cambridge University Press. 2022. 434-449.
- 6. Evaluativity, to appear in the Oxford Handbook of Contemporary Philosophy of Language, Ernie Lepore and Una Stojnic (Eds.), Oxford University Press.
- 7. Disagreements about Taste, with Julia Zakkou, to appear in the Routledge Handbook of Philosophy of Disagreement, Maria Baghramian, Adam Carter and Richard Rowland (Eds.), Routledge.

Section d: References

- Alves, H., Unkelbach, C., Burghardt, J., Koch, A. S., Krüger, T., and Becker, V. D. 2015. A density explanation of valence asymmetries in recognition memory. *Memory & Cognition*, 43, 896–909.
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., and Vohs, K. D. 2001. Bad is stronger than good. *Review of General Psychology* 5, 323–370. doi: 10.1037//1089-2680.5.4.323
- Bianchi, C. 2014. Slurs and appropriation: an echoic account. *Journal of Pragmatics* 66: 35–44. doi: 10.1016/j.pragma.2014.02.009
- Boucher, J. and Osgood, C. E. 1969. The pollyanna hypothesis. *Journal of Verbal Learning and Verbal Behaviour* 8(1): 1-8.
- Camp, E. 2017. Metaethical expressivism. In Tristram McPherson and David Plunkett (eds.), *The Routledge Handbook of metaethics*. Routledge. pp. 87-101.
- Cepollaro, B. 2017. When evaluation changes. An echoic account of appropriation and variability. *Journal of Pragmatics* 117: 29–40.
- Clark, H. and Gerrig, R. 1984. On the pretense theory of irony. *Journal of Experimental Psychology* 113: 121-126.
- Colston, H. L. 1999. "Not good" is "bad", but "not bad" is not "good": An analysis of three accounts of negation asymmetry. *Discourse Processes* 28(3): 237-256.
- Goodwin, G. and Darley, J. M. 2012. Why are some moral beliefs perceived to be more objective than others. *Journal of Experimental Social Psychology* 48 (1): 250-256.
- Gotzner, N., Solt, S. and Benz, A. 2018. Scalar diversity, negative strengthening, and adjectival semantics. *Frontiers in Psychology* 9.
- Hansson, S. O. 2001. The Structure of Values and Norms. New York: Cambridge University Press.
- Hess, L. 2022. Slurs: semantic and pragmatic theories of meaning. In Stalmaszczyk, P. (Ed.) *The Cambridge Handbook of the Philosophy of Language*, Cambridge University Press. 450-466.
- Horn, L. R. 1972. On the semantic properties of logical operators in English. PhD dissertation, UCLA.
- Horn, L. R. 1989. A Natural History of Negation. Chicago University Press.
- Israel, Michael. 2004. The Pragmatics of polarity. In Horn, Laurence and Ward, Gregory (eds.) *The Handbook of Pragmatics*, Blackwell. pp. 701-723.
- Jablonska, M., Falkowski, A. and Mackiewicz, R. 2022. Is good more alike than bad? Positive-negative asymmetry in the differentiation between options. A study on the evaluation of fictitious political profiles. *Frontiers of Psychology* 13:923027. http://doi: 10.3389/fpsyg.2022.923027
- Jeshion, R. 2013. Expressivism and the offensiveness of slurs. *Philosophical Perspectives* 27: 307-335.
- Kahneman, D. and Tversky, A. 1979. Prospect theory: An analysis of decision under risk. *Econometrica* 47(2): 263–292. http://dx.doi.org/10.2307/1914185.
- Kapogianni, E. 2022. Types and definitions of irony. In Stalmaszczyk, P. (Ed.) *The Cambridge Handbook of the Philosophy of Language*, Cambridge University Press. 622-638.
- Koch, A., Alves, H., Krüger, T., and Unkelbach, C. 2016. A general valence asymmetry in similarity: good is more alike than bad. J. Exp. Psychol. Learn. Mem. Cogn. 42, 1171–1192. doi: 10.1037/xlm0000243
- Knobe, J. 2003. Intentional action and side effects in ordinary language. *Analysis* 63 (3):190-194.
- Levinson, J. (Ed.) 2014. Suffering Art Gladly: The Paradox of Negative Emotions in Art. Palgrave Macmillan.
- Löbner, S. 2000. Polarity in Natural Language: Predication, Quantification and Negation in Particular and Characterizing Sentences. *Linguistics and Philosophy* 23 (3):213-308.
- Mazzarella, D. and Gotzner, N. 2021. The polarity asymmetry of negative strengthening: Dissociating adjectival polarity from face-threatening potential. *Glossa: A Journal of General Linguistics*, 6: 47. DOI: http://doi.org/10.5334/gjgl.1342
- Mohammad, S. 2018. The NRC Valence, Arousal and Dominance (NRC-VAD) Lexicon. http://saifmohammad.com/WebPages/nrc-vad.html

- Osgood, C. E., Suci, G. J., and Tannenbaum, P. H. 1957. The measurement of meaning. Urbana, IL: University of Illinois Press.
- Peeters, G. 1971. The positive-negative asymmetry: On cognitive consistency and positivity bias. *European Journal of Social Psychology* 1: 455-479.
- Rast, E. 2022. Theories of Value Structure. The Rowman & Littlefied: Lexington Books.
- Reuter, K., Baumgarten, L. and Willemsen, P. Forthcoming. Tracing thin and thick terms through corpora. *Language & Cognition*.
- Ruytenbeek, N., Verheyen, S., and Spector, B. 2017. Asymmetric inference towards the antonym: Experiments into the polarity and morphology of negated adjectives. *Glossa: A Journal of General Linguistics* 2: 92.
- Sarkissian, H. 2016. Aspects of folk morality: Objectivism and relativism. In *A companion to experimental philosophy*, ed. Buckwalter, W. and Systma, J, 212–224. Oxford: Wiley Blackwell. https://doi.org/10.1002/9781118661666.ch14
- Sassoon, G. W. 2013. A typology of multidimensional adjectives. *Journal of Semantics* 30: 335-380.
- Smuts, A. 2009. Art and Negative Affect. *Philosophy Compass* 4: 39–55.
- Stojanovic, I. 2016. Expressing Aesthetic Judgments in Context. *Inquiry* 59: 663-685.
- Stojanovic, I. 2017. Metaethical relativism. In McPherson, T. and Plunkett, D. (eds.), *The Routledge Handbook of metaethics*. Routledge. pp. 119-132.
- Stojanovic, I. Forthcoming. Evaluativity. In Lepore, E. And Stojnic, U. (eds.) *The Oxford Handbook of Contemporary Philosophy of Language*, Oxford University Press.
- Stojanovic, I. and McNally, L. 2023. Are Moral Predicates Subjective? A Corpus Study, in Bordonaba, D. (Ed.) *Experimental Philosophy of Language: Perspectives, Methods and Prospects*. Springer.
- Sytsma, J., Bluhm, R., Willemsen, P. and Reuter, K. 2019. Causal attributions and corpus analysis. In Fischer, E. and Curtis, M. (Eds.), *Methodological Advances in Experimental Philosophy*. Bloomsbury. pp. 209-238.
- van Tiel, B. and Pankratz, E. 2021. Adjectival polarity and the processing of scalar inferences. *Glossa: a journal of general linguistics* 6: 32. 1–21. https://doi.org/10.5334/gjgl.1457
- Tversky, A. and Kahneman, D. 1981. The framing of decisions and the psychology of choice. *Science* 211(4481): 453–458.
- Umbach, C. 2021. Evaluative predicates beyond 'fun' and 'tasty'. In Gutzmann, D. et al. (Eds.) *The Wiley Blackwell Companion to Semantics*.
- Unkelbach, C., Fiedler, K., Bayer, M., Stegmüller, M., and Danner, D. 2008. Why positive information is processed faster: The density hypothesis. *Journal of Personality and Social Psychology* 95: 36–49.
- Väyrynen, P. 2019. Thick Ethical Concepts. In Zalta, E. (Ed.), The Stanford Encyclopedia of Philosophy. https://plato.stanford.edu/archives/sum2019/entrieshickethical-concepts/
- Warriner, A. B., Kuperman, V., and Brysbaert, M. 2013. Norms of valence, arousal, and dominance for 13,915 English lemmas. *Behavior Research Methods*, 45(4)
- Willemsen, P. and Reuter, K. 2021. Separating the evaluative from the descriptive: An empirical study of thick concepts. *Thought: A Journal of Philosophy* 10 (2):135-146.