

TYPICALITY AND NEGATION ARE RELATED  
Evidence from Discourse on Transgender Identity

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This paper outlines an approach to the study of social categorization from a cognitive perspective. I argue that negative constructions in discourse can serve as a context-specific indicator of the underlying typicality structure in play. Using evidence from personal narratives of transgender identity, negative constructions are proposed as a tool through which a speaker can maintain the typical as a point of reference to describe the atypical, in line with Rosch (1975)'s definition of a *cognitive reference point* as a stimulus other stimuli are seen "in relation to." The implications of these findings, and areas for future research, are discussed.

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## 1. Introduction

The study of categorization is fundamental to describing a human perspective of life. The shape of our mental categories take has a profound effect on the shape our realities take. Decades of research has shown that typicality is a construct of central importance to theories of categorization. In seminal work, Rosch (1975) operationalized typicality in terms of asymmetry of reference, with a typical stimulus serving as a reference points for less typical stimuli. The idea that categories are structured internally around a member who represents the “best example” of the concept (Mervis, Catlin & Rosch, 1976, Sloman, Ahn & Love, 1998), and that the underlying relationship between this prototypical member and other, less typical members, is asymmetrical in terms of reference (Minda & Smith, 2011; Lakoff, 1990) has remained influential to this day. However, understanding of the mechanisms that give rise to typicality has progressed since Rosch’s era, when it was often oversimplified as synonymous with statistical prominence. To the contrary, it has been shown that notions of typicality are not purely perception based, but are sensitive to other contextual phenomenon, like the specific goals associated with the discourse context, and the functional world knowledge of the reasoner. This implies the importance of assessing notions of typicality in context, and by extension, implies the need for methodology that can provide in-context indicators of typicality structure.

It is my claim that such an indicator can be found in specific aspects of the shared semantic structure of the narratives presented in this study. Negative constructions, by virtue of their activation of alternative, incompatible mental spaces (Dancygier, 2012), will be shown to provide a vehicle through which speakers can maintain the typical as a point of reference, even when the characteristics associated with typicality are objectively absent from the experience being described. Atypicality is indicated in discourse through the negation of typicality, as we will see in the examples that follow. This suggests that attention to distributions of negative constructions in discourse can provide evidence of the specific structures of typicality in play in a given context.

The data in this study is drawn from the domain of social categorization. In video narratives of personal identity, young-adult, transgender men describe their self-categorization in the context of their lives and the transgender community. An analysis based on speakers' functional descriptions of typicality will point to the semantic feature +KNOWLEDGE OF GENDER AT A YOUNG AGE (+KGYA), as a point of cognitive reference in this context, with speakers' descriptions suggesting that early knowledge of one's transgender identity is an immutable characteristic of a typical transgender narrative. An alternative analysis of the discourse, founded in the relationship between negative linguistic constructions and typicality structure, will yield a similar outcome, again highlight the salience of +KGYA in judgments of typicality in this context. Across the twenty-two narratives that form the corpus from which the data in this study is drawn,

people describe their experience either as knowing, or alternatively, as not knowing, that they were transgender at a young age. I will argue that this supports negative constructions as an indicator of typicality structure.

The implications of this research therefore might be felt in whatever realm might concern itself with typicality, cutting across a broad swath of social and cognitive sciences. This research also raises the question of the nature of the relationship between negation and typicality. One conclusion is that typicality structure is leading people to represent their experiences either via positive or negative constructions, depending on their own status, an interesting finding in its own right. But, it could also be the case that the use of negation will lead people to infer typicality structure in an otherwise neutral context, a question that warrants further investigation.

Following a discussion of these findings, I will conclude.

## 2. Literature Review

### 2.1 Introduction

This section will provide background on negation and typicality, as they have been described within the literature of cognitive linguistics and cognitive psychology. Section 2.2 will review literature describing asymmetry of reference, as applied to both negation and typicality. Asymmetry of reference can be exemplified in the idea that the typical, by definition, serves as the point which the atypical is understood to be “in relation to.”

Stated another way, this means that typical stimuli are asymmetrically referential as compared to atypical stimuli. To demonstrate why negation is an appropriate linguistic device to index relationships marked by asymmetry of reference, I will adopt the framework of Mental Spaces Theory, in which negation is described in terms of *alternativity*, or the simultaneous activation of multiple mental spaces. Alternativity will be shown to provide a vehicle through which the speaker can register their *epistemic stance*, or their knowledge and beliefs about the world.

Section 2.2 will also review literature describing a similarly asymmetrical structure, that of *cognitive reference points*, indicative of relationships based on typicality. As is the case with negation, typicality structure (and the cognitive reference points that define it), have also been shown to be sensitive to the reasoner's functional knowledge of the world. The literature reviewed here will provide the reader with the relevant background knowledge to interpret the claim that negation is serving as an indicator of the typicality structure operating in the given discourse context.

## 2.2 Asymmetry of reference

### 2.2.1 Negation

It is a widely held view that a primary function of negation in discourse is to make salient some contextually relevant presupposition (Givon, 1978; Faucionner, 1994; Payne, 1997; Dancygier, 2012). Through negation, the salience of the positive alternative is highlighted even though it is not objectively present. As Sweetser (2006) writes: “*Joe left*

*at six* does not necessarily indicate any presupposition that things might have been otherwise, but *Joe didn't leave at six* certainly suggests that someone had a mental scenario involving him leaving at six.” (313). In this way, a negative statement is referentially tied to its affirmative counterpart, while the same inherently referential relationship does not exist in the opposite direction. This asymmetry of reference is a characteristic of negation that has caught the attention of scholars dating back to the time of Aristotle (Horn, 1989). However, an equally long-standing and well-established view holds that, while negative sentences might be somehow built out of their more primitive, affirmative counterparts, there is no reason to believe that an abstract proposition works the same way. Evidence to the contrary demonstrates that it is possible to represent the same idea using either positive or negative constructions, as the examples from Frege (1919) below illustrate:

- (a) Christ is immortal
- (b) Christ lives forever
- (c) Christ is not immortal
- (d) Christ is mortal
- (e) Christ does not live forever

(ver. 150)

In the examples above, it is unclear which sentence expresses a positive idea as opposed to a negative idea. Taking this line of thinking to the extreme, some have even rejected the existence of negative propositions altogether (Royce, 1917). However, while it may not be fruitful to make claims about the inherence of affirmation and negation in an

objective sense, we might, within a given context, be able to answer (or at least ask) questions about the speaker’s motives in choosing a negative versus a positive construction, and the pragmatic outcomes of that choice. Given the documented relationship between negation and negative sentiment (see Potts, 2011), the pragmatic implications of systematic distributions of negation in the context of social categorization could be significant from both a methodological and applied perspective.

#### *2.2.1.1 Alternativity*

Within the framework of Mental Spaces Theory (MST) (Fauconnier, 1997; Fauconnier & Sweetser, 1996), the asymmetry of reference inherent to negation has been conceptualized in terms of alternativity, or the semantics that accompanying the simultaneous activation of two alternative, incompatible mental spaces (Dancygier & Sweetser, 2012; Dancygier & Sweetser, 2014).

Dancygier (2012) defines negation in terms of alternativity as follows:

“The negative particle *not* is...said to set up two alternative spaces, rather than just one: the negative space described in the sentence and its positive alternative.” (69)

To illustrate, consider Fauconnier’s example (1994[1985], (as cited in Dancygier, 2012)):

- (1) There is no milk in the fridge.

(69)

By virtue of the negative construction, (1) presupposes the relevance of a context in which there is milk in the fridge. It would be odd to utter (1) in reference to a broken and abandoned fridge that one had come across on a hike across some rarely accessed pastures on the edge of town. For the negative construction to make sense, the positive “alternative” must hold some kind of relevance in the discourse context. How the speaker interacts with these two alternative spaces in discourse lends negation its function as an indicator of *epistemic stance*.

#### 2.2.1.2 *Epistemic stance*

Dancygier (2012) argues that alternativity gives negation the function of indexing information about the speaker’s knowledge and beliefs about the world, by expressing their *epistemic stance* in discourse. Alternativity is fundamentally linked to subjectivity, and thus provides a mechanism through which the speaker’s viewpoint can be implicitly encoded into the structure of the statement. As Dancygier notes: “When the alternatives are signaled in the discourse, the argumentative function of negation prevails” (87).

Through negation, a speaker can indicate to their listener that which is considered relevant within a given discourse context, even when it is not objectively present. Relevance that persists even in absence provides evidence as to the knowledge and beliefs of the speaker. This provides a context in which formal aspects of discourse can provide information about underlying cognitive structure.

### 2.2.2 Typicality

Similar semantic structure to that of negation has been used to describe typicality, a fundamental cognitive component. We all rely on our sense of what is typical to interpret the world and to make predictions about what is likely to happen. However, the role of typicality long went unnoticed in the theoretical study of categorization, with categories traditionally being defined by a set of necessary and sufficient conditions, equally representative of all members (see Smith & Medin, 1981). The “classical view” of categories is so named because of its origins in the writings of Aristotle (Ackrill, 1963). It forms the foundation of a long tradition of describing categories via the set of features that characterize their members, a tradition that continues to this day.

Scholars in the 20<sup>th</sup> century began questioning the idea that every member could be considered equally representative of the category to which they belonged. A category is, after all, a cognitive tool that makes it possible to treat as the same, a set of entities that are in fact, different (Mervis & Rosch, 1981) In an often-quoted section of *Philosophical Investigations* (1953), Wittgenstein asks the reader to consider the category *games* but to “*look and see* whether there is anything common to all,” i.e. a set of necessary and sufficient conditions shared by all members. “—For if you look at them you will not see something that is common to *all*, but similarities, relationships, and a whole series of them at that.” (section 66, pg. 27). Rather than a set of necessary and sufficient conditions amounting to a mental checklist of requirements for category membership, Wittgenstein

proposes a *family of resemblances* (see also Rosch & Mervis, 1975) as the structure organizing human categories. He suggests that category members are like family members: some share the same hair color, others share the same nose, while others share a particular disposition, but no two members need be (nor are likely to be) exactly alike. The family of resemblances is coherent because all category members are in effect marked by their relative similarity to an abstract representation of the category: the prototype. Measuring similarity in terms of metaphorical space (Pothos & Wills, 2011; Voorspoels, Vanpaemel, & Storms, 2011) the prototype occupies a central position within the category, defining where other members lie as well.

#### 2.2.2.1 Cognitive Reference Points

This prototypical member can be thought of as serving as a point of cognitive reference, structuring the category both internally, in terms of its own members, and in relation to other categories. (Davis & Love, 2010). Rosch (1975) defines a *cognitive reference point* as follows (emphasis mine):

“To be a ‘reference point’ within a category, **a stimulus must be shown to be one which other stimulus are seen in relation to.”** (532)

Rosch operationalizes this definition via two seemingly disparate tasks, one linguistic and the other involving spatial judgments. She demonstrates that people have a tendency to

place members who represent “best examples<sup>1</sup>” of their categories in the reference position in a sentence completion task and thus are more likely to produce a sentence like “52 is essentially 50” rather than “50 is essentially 52” (with decimal integers serving as “best examples” within the categorical domain of decimals). Additionally, she demonstrates that when asked to represent “psychological distance” as physical distance between a prototypical member and a less-typical co-member, people will systematically judge the less-typical member to be “psychologically” (and thus physically) “closer” to a typical member than the typical member is to the less-typical member. This means that people are likely to judge 52 to be “closer” to 50 than 50 is to 52. Together these results suggest that prototypical members are more strongly associated with atypical members than the reverse, illustrating the asymmetry that characterizes the basic nature of the relationship between the typical and the atypical.

Rosch and colleagues present convincing evidence to support the relevance of *similarity to a prototype* as a mechanism defining human categorization. This, however, fails to address the question of how a feature or combination of features comes to represent the categorical “best example” in the first place. To this point, Mervis & Rosch (1981) argue that human natural categories are non-arbitrary, or perception-based. To illustrate their point, they provide eight potential classes of creatures on Earth, based on binary variation in “coat,” “oral opening,” and “primary mode of locomotion”:

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<sup>1</sup> The “best example” of a category has been widely used to operationalize typicality.

- (a) those with fur and mouths, which move about primarily on foot.;
- (b) those with fur and mouths, which move about primarily by flying;
- (c) those with fur and beaks, which move about primarily on foot;
- (d) those with fur and beaks, which move about primarily by flying;
- (e) those with feathers and mouths, which move about primarily on foot;
- (f) those with feathers and mouths, which move about primarily by flying;
- (g) those with feathers and beaks, which move about primarily on foot;
- (h) those with feather and beaks, which move about primarily by flying;

(page 91)

They point to the obvious: that this even distribution of traits does not occur in the real world. To the contrary, just two categories, (a) representing mammals, and (h) representing birds, can account for the vast majority of the total data set meeting the above parameters. The idea that human categorization is arbitrary only makes sense, they argue, in a world of evenly distributed features. In our world, our categories pick out perceived “clusters of features,” with prototypical members located at the center of these clusters. Prototypical members are thus selected because they are instantiations of a mean distribution of the perceived features associated with the category. This view can be labeled *category centrality* (Sloman, Love, & Ahn, 1998), because the prototypical member represents an average of the salient features of all known category members.

#### 2.2.2.2 Functional knowledge

At issue with the claim that human categories are perception-based is the fact that categorical centrality is not always predictive of what is considered typical (Rips, 1989; Atran (1999)). Rather, contextual factors, like culturally relevant goals and ideals, the reasoner’s familiarity with the category (Barsalou, 1985), and their beliefs about

causation (Ahn, Kim, Lassaline, & Dennis, 2000; Lagnado & Sloman, 2004; Rehder & Burnett, 2005), can have a significant effect on judgments of typicality. For example, given the right context, an extreme value on an ideal dimension (in the ideal direction) can predict typicality better than central tendency (Barsalou, 1985; Voorspoels et al. 2011). Illustrating this point, Lynch, Coley, & Medin (2000) found that within the domain of trees, human populations with expert knowledge differed in their judgments of what was typical, as compared to novice populations. For expert populations, best examples of the category were selected based on extreme values (considered ideal by the expert population) on two dimensions: (+) height and (-) weediness. These results provide an example of factors that contribute to typicality, but that are not accounted for in Rosch et al.'s perception-based description. Rather, this effect has been explained as arising from culturally-specific ideals that form part of the speakers' functional knowledge of the world (Medin and Atran, 1999, Barsalou 1985). Similar results have been reported within the domain of birds (Atran, 1999) and fish (Burnett, Medin, Ross, & Blok, 2005).

Another example of the link between functional knowledge and typicality is Sloman et al. (1998)'s explicit connection between the speakers' beliefs about the mutability of a feature, and that feature's perceived typicality. They describe a feature's salience in typicality judgments as negatively correlated with people's willingness to transform the concept to remove the feature or change its values, while still maintaining the overall

coherence of the concept. At the heart of this claim is the idea that coherence is based on *dependency structure*, and that features that form the foundations of logical dependencies are less mutable than features that do not, analogous to the fact that it is easier to remove a book from the top of a stack than the bottom of a stack. A prototypical example of dependency structure is causal relationships, in the sense that effects are dependent upon their causes. Temporal dependency structure, a defining structural characteristic of narrative (Labov & Waletzky, 1967) represents another example.

Sloman et. al (1998) operationalized mutability via judgments along four dimensions: surprise, ease-of-imagining, goodness of example, and similarity-to-an-ideal. The mutability of the feature *grows on trees* within the category *apples* is thus measured in terms of answers to the questions:

- How surprised would you be to encounter a real apple that does not grow on trees?
- How easily can you imagine a real apple that does not grow on trees?
- How good an example of an apple would you consider an apple that does not ever grow on trees?
- How similar is an apple that doesn't grow on trees to an ideal apple?

In contrast, *category centrality* indicative of the “cluster of features” approach is measured in terms of questions such as:

- What percentage of apples grow on trees?

Implicit in the differentiation of typicality and categorical centrality is the acknowledgement that it is not simple to identify the parameters constraining the judgments of similarity that produce typicality structure (Medin & Murphy, 1985). To the contrary, the criteria upon which judgments of similarity are based is much more context-dependent than the perception based view suggests (Barsalou, 1987). Empirically documented variability in the criteria by which typicality is assigned has given rise to questions as to whether a description of a uniform cognitive structure, applicable to all concepts regardless of context, is worth pursuing (Weiskopf, 2009; Machery, 2005). Rather, perhaps a theoretical flaw lies in the assumption that, to be valid, theories elaborating on the mechanisms that produce typicality must be able to account for every instance of typicality effects in every situation, as compared to the performance of competing theories. Weiskopf argues instead for the “plurality of concepts,” maintaining that concepts can potentially be represented via a variety of different structures, depending on the context. But this raises the question of how, outside of an experimental paradigm like Rosch’s (1975), can the factors contributing to typicality in a given context be identified? My claim is that, in the context of the discourse presented in this study, negative constructions can serve as a tool towards this end.

## 2.3 Summary

Section 2 has provided a structural description of both negation and typicality in terms of asymmetry of reference. In both cases, one element of the binary (affirmation and typicality respectively) is described as asymmetrically referential in relation to the other element (negation and atypicality). Additionally, in both cases, this structure is considered sensitive to functional knowledge about the world. The analysis that follows will support the claim that there is a correlation between negative constructions and typicality structure, allowing the distribution of negative constructions to serve as a source of evidence as to the context-specific notions of typicality that are at play.

## 3. Methodology

### 3.1 Introduction

In this paper, I argue for a methodological approach to discourse that connects linguistic phenomenon to psychological theory. Using cognitive psychology as a basis for describing the semantics of natural language is not a recent innovation. Rather, Rosch's work prefigured the most important developments in the study of linguistics from a cognitive perspective (Lakoff, 1990). Also well-established is the recognition within the field of discourse analysis of the relevance of cognitive theory. For example, Teun van Dijk has devoted much attention to the greater descriptive potential of Critical Discourse Analysis (van Dijk, 1993) when combined with cognitive theory (van Dijk, 1976, 1977).

He describes a triangle that connects discourse, cognition, and society, suggesting that one cannot be fully understood without attending to the others.

### 3.2 Description of the data

The data used in this study consists of a corpus of 22 videos narratives of personal transgender identity, uploaded to YouTube between 2011 and 2015 and transcribed between the fall of 2014 to the spring of 2016. The examples presented here are excerpted from the personal narratives of individuals who self-identifying as transgender men. Line numbers reference the complete transcript. For the complete transcript, see Appendix A.

### 3.3. Control of Topic

Within the field of discourse analysis, researcher seek to describe the underlying structure of talk and text, with the ultimate aim of explicating aspects of human society and human cognition. Within this tradition, it is useful to look not only at what is said but what is not said, and how the topic is selected (van Dijk, 1993). It is the nature of negation that many more negative descriptions will correctly apply to any given situation than affirmation descriptions. Thus, if many speakers are describing their experience via the stated absence of a particular feature, it raised the question of how that topic is being selected as relevant to the discourse context.

### 3.3 Summary

This section has provided the necessary background to the analyses presented in the following section. A basic assumption upon which this study relies, namely that the data is an appropriate source of evidence to support the claims, itself implies a particular methodological perspective that maintains linguistic data, and the semantics of natural language, as intricately linked with the theories of cognitive psychology (Jackendoff, 1983). It is from this perspective that the current study was undertaken.

## 4. Data Analysis and Presentation

### 4.1 Introduction

The data presented in this section will provide evidence that a relationship exists between negation and typicality, allowing negation to serve as an indicator of the typicality structure that is at play in this discourse context. Section 4.2 presents an analysis based upon people's descriptions of their functional understanding of what is typical in this context. It will make use of Sloman et al.'s measures of immutability (surprise, ease-of-imagining, goodness of example, and similarity-to-an-ideal), along with speakers' explicit descriptions of typicality in this context, to illustrate the salience of the semantic feature +/-KGYA.

Section 4.3 will provide an alternative analysis of typicality in this context, operationalized in terms of asymmetry of reference. The asymmetry of reference associated with typicality will be shown to be indexed in the form of negative

constructions, used primarily by speakers who represent themselves as -KGYA. The data will illustrate how this use of negation allows the speaker to maintain the typical as a point of reference, whether or not typical features are representative of the speaker's experience. In this way, typical features remain consistently salient across narratives in the discourse context. This supports Dancygier (2012)'s analysis of negation as indexing the speaker's *epistemic stance*, as it is through knowledge of the context-specific typicality structure of the category *transgender* that speakers select salient features of the typical narrative for description, leading speakers who are not "typical" to describe themselves in terms of what is absent.

#### 4.2: Typicality: a functional approach

The examples presented here will support the claim that people within this speech community perceive +KGYA to be a highly salient feature in typicality judgments surrounding the *transgender* social category. This claim is based on evidence of +KGYA's immutability (Sloman et al., 1998) in the context of the typical narrative of transgender identity. Example 1 is an excerpt from a 2014 video "How I did NOT know I was trans:)," narrated by a young-adult, self-identifying transgender man. In it, he describes his understanding of what constitutes a "typical trans storyline" (line 1750).

##### **Example 1**

- 1745 What I wanted to talk about in this video is
- 1746 um
- 1747 I guess

1748   uhh  
 1749   the idea of a trans narrative  
 1750   um that sort of typical trans storyline we all  
 1751   we all come across  
 1752   at one point or the other  
 ...  
 1762   you know  
 1763   I knew I was trans when I was two  
 1764   and I've just always been a boy  
 1765   and that's who I am  
 ...  
 1903   that sort of like  
 1904   yeah I knew when I was very young  
 1905   yes I was  
 1906   um puberty was a shock  
 1907   I feel intense dysphoria about my entire body  
 1908   and whatever

The speaker acknowledges the existence of a “typical trans narrative” (line 1750), and defines it as containing the following semantic points: “I knew I was trans when I was two” (line 1763), “I’ve just always been a boy” (line 1764), “I knew when I was very young” (line 1904), “puberty was a shock” (line 1906), and “I feel intense dysphoria about my entire body” (line 1907). Of these five points, three relate directly to +KGYA (“I knew...when I was two,” “I’ve always been a boy,” and “I knew when I was very young”), and one relates indirectly to +KGYA (“puberty was a shock”).

Also compelling is the speaker’s description of what, in his view, assigns his own personal narrative its atypical status. After a description of his atypical (-KGYA) personal narrative (see example 7B), the speaker continues with an assessment of the relationship between the two narratives:

**Example 1 (cont.)**

2069 as you can see with my  
 2070 my story  
 2071 there is some overlap  
 2072 to the traditional trans narrative  
 2073 if you add in  
 2074 like a little bit more clarity  
 2075 or a little bit more confidence  
 2076 about the gender that I felt I should have been  
 2077 like  
 2078 if I'd been like  
 2079 and this is all because I thought I should be a boy  
 2080 then it sounds like the traditional  
 2081 sort of  
 2082 transgender narrative  
 2083 um I mean  
 2084 to be perfectly honestly  
 2085 like  
 2086 I had no idea where any of this was coming from

The speaker acknowledges “overlap” (line 2071) between his personal narrative and the “traditional trans narrative” as he has defined it. In his view, what *would* make his narrative typical is if “you add in like, a bit more clarity, or a bit more confidence about the gender I felt I should have been...if I’d been like, ‘and this is all because I thought I should be a boy,’ then it sounds like the traditional sort of transgender narrative” (line 2073-2082). In other words, the thing differentiating the speaker’s narrative from a typical one is the absence of KGYA, highlighting the features immutability in a typical transgender narrative. The speaker goes on to describe how the absence of the feature +KGYA in his personal narrative has affected his self-categorization:

**Example 1 (cont.)**

2167 like even when I started testosterone  
 2168 I identified as trans  
 2169 but I think  
 2170 because I didn’t have that trans-narrative  
 2171 um I guess  
 2172 I almost

2173                    didn't allow myself to believe I was legitimately trans  
2174                    um  
2175                    and that caused a lot of confusion

While the speaker “identified as trans,” (line 2168), he struggled to see himself as “legitimately trans” (line 2173), specifically because of his –KGYA personal narrative (“because I don’t have that trans-narrative” (line 2170). Framing +KGYA as a legitimizing feature of transgender identity highlights its immutability within this context. Recall that Sloman et al. define immutability as the extent to which a concept cannot be transformed to remove a particular feature while still maintaining overall coherence, as indicative of typicality. In the excerpt above, the speaker seems to struggle with this very operation, or how to reconcile his concept of himself as a transgender person with the lack of a feature (+KGYA) that seems integral to the coherence of the concept, and thus to its legitimacy. The description offered by the speaker above seems to suggest that a transgender person who is –KGYA is difficult to imagine, dissimilar to the ideal, and a poor example of the category. In the context of Sloman et. al’s measures of typicality, this provides strong support for +KGYA as typical in this context.

Example 2 is an excerpt from a 2011 YouTube video titled “Fake Transgender,” (see also Example 6A) narrated by young-adult, self-identifying transgender man. In it, the speaker describes his perceptions of a “typical story of someone who’s transgendered” (lines 4787-4789).

#### **Example 2**

4786 it's a really  
 4787 typical story of  
 4788 um  
 4789 someone who's transgendered  
 4790 it seems like  
 4791 based on other videos I've watched  
 4792 and research I've done  
 4793 its like  
 4794 when you are  
 4795 a transgendered F to M  
 4796 it's just something that's with you your entire life  
 4797 you're born that way  
 4798 you know every step along the way that you're different  
 4799 something's weird

The speaker identifies a “typical story” as containing the following points: “it’s just something that’s with you your entire life” (line 4796), “you’re born that way” (line 4797), “you know every step along the way you’re different” (line 4798), and “[you know] something’s weird” (line 4799). Of these four point, two relate directly to +KGYA (“you know every step along the way you’re different,” “[you know] something’s weird”) and two relate indirectly to +KGYA (“It’s just something that’s with you your entire life,” “you’re born that way”). The speaker goes on to consider narratives that are –KGYA, describing how they have led him to question the coherence of his concept of transgenderism as he described it above.

### **Example 2 (cont.)**

4813 and sometimes I hear stories  
 4814 from other trans guys  
 4815 that's like  
 4816 or just from people who watch my videos  
 4817 that are like  
 4818 I'm exploring the possibility that I might be trans  
 4819 or

4820 I'm trans  
4821 but I didn't know like all my life  
4822 as you did  
4823 like  
4824 I was kind of a normal  
4825 more like normal little girl  
4826 and then I just think  
4827 um  
4828 you know  
4829 how much variability is there  
4830 like what is  
4831 what do you think is  
4832 more common  
4833 and why do you think  
4834 there's such  
4835 a diversity of different experiences within the trans thing  
4836 because  
4837 to me it seems like  
4838 I don't know  
4839 it seems like  
4840 there's just this typical way  
4841 and then there's these non-typical ways  
...  
4864 so I was just kind of curious  
4865 if you can answer that question  
4866 down below  
4867 about  
4868 like uh  
4869 if you had a typical-experience  
4870 a non-typical experience  
4871 um  
4872 and you know  
4873 when you figured out that you were trans  
4874 because  
4875 it's not  
4876 it's like  
4877 there's a question in the human life  
4878 which is  
4879 who am I  
4880 but everybody knows  
4881 what they are  
4882 it's like you're discovering who you are  
4883 but what you are  
4884 you kinda of know  
4885 you know you're trans

4886 not like  
4887 I think I'm trans  
4888 how does that work  
4889 how does that happen  
4890 please help me understand

In spite of his previous confidence in his concept of transgenderism, the speaker acknowledges that hearing of –KGYA narratives of transgender identity has made him question “how much variability is there” (line 4829), and “what...is more common” (line 4831-4832). His overall sense of confusion (“please help me understand” (line 4890)) suggests that he has difficulty maintaining coherence in his concept of transgenderism in the absence of +KGYA as a feature, again pointing to the immutability, and by extension typicality, of +KGYA. The speaker seems to be asking the same question that Sloman et al. (1998) asked to measure categorical centrality: “What percentage of transgender people are +KGYA?” although his question of “why there’s such a diversity of different experiences within the trans thing” (line 4833-4835) seems to already assume that variability exists. Despite his explicit uncertainty as to the categorical centrality of +KGYA, he seems nevertheless confident that +KGYA characterizes the “typical” (line 4840, 4869) as opposed to the “non-typical” (line 4841, 4870), again providing evidence of its weight in judgments of typicality.

Example 3 is an excerpt from a 2015 YouTube video titled “I didn’t know I was transgender,” narrated by a young-adult, self-identifying transgender man. In it, the speaker describes his perception of typicality in this context.

### Example 3

5818 The whole transgender thing  
 5819 there's so many trans men out there  
 5820 that talk about their journey  
 5821 to discovering who they were  
 5822 well  
 5823 a lot of them say like  
 5824 they knew  
 5825 from a very young age  
 5826 like even before they knew what transgender was  
 5827 and for the longest time  
 5828 whenever I watched those videos  
 5829 for the longest time  
 5830 I thought I didn't  
 5831 because I didn't relate to that  
 5832 that it was invalid  
 5833 that I was invalid  
 5834 and that  
 5835 I couldn't be transgender because  
 5836 I didn't feel how they felt  
 5837 even though every person's different  
 5838 it's just so many trans men said  
 5839 I knew since I was from a young age  
 5840 that I was different  
 5841 that I couldn't live as a girl  
 5842 blah blah  
 5843 but that was not the case for me

Unlike the speaker in the previous two examples, the speaker in Example 8 does not refer directly to the structure of typicality in the transgender context. However, he alludes to it as he highlights his perception of +KGYA as categorically central (“there's so many trans men out there” (line 5819), “a lot of them say they knew from a very young age” (lines 5823-5825), “it's just so many trans men said I knew since I was from a young age” (lines 5838-5839)). He also reports a similar experience to the speaker in Example 1, of struggling with feelings of illegitimacy specifically because of his –KGYA status (“I thought...that I was invalid and that I couldn't be transgender” (lines 5833-5835). His

statements indicate immutability as defined by Sloman et al.'s measure, ease-of-imagining, reflected in his initial difficulty imagining himself as legitimately transgender man, given that +KGYA is not a feature of his personal narrative. This again points to the to +KGYA as indicative of a typical experience.

Example 4 provides another example of +KGYA being referenced as typical within the current context. It is an excerpt from a 2015 video title “Transgender Today: I Didn’t Always Know,” (see also Example 10B) narrated by a young-adult, self-identifying transgender man.

#### **Example 4**

5764 not all trans people are the same  
 5765 and not all trans narratives are the same  
 5766 the media today  
 5767 tends to paint this  
 5768 portrait of trans people  
 5769 and it tends to paint  
 5770 every trans person as being the same  
 5771 and having the same story  
 5772 and thinking the same thoughts  
 ...  
 5794 I get the question all the time  
 5795 did you always know  
 5796 and when I answer that question with no  
 5797 people are floored  
 5798 because the narrative that they have in their heads is that  
 5799 I always knew I was in the “wrong body”  
 5800 and I always had a feeling that I was “different”  
 5801 but really that’s not true

As in the previous three examples, in the excerpt above, the speaker highlights +KGYA as particularly salient to the transgender concept in this context. He refers to “the narrative that [people] have in their heads,” (line 5798) a description that is reminiscent

of the abstract instantiation of the concept, or the “best-example”. The speaker describes the narrative as containing two points “I always knew I was in the ‘wrong body’” (line 5799), and “I always has a feeling that I was ‘different,’” both directly related to +KGYA. The speaker describes the reaction when he shares his –KGYA narrative, as “people are floored” (line 5797), implying that people are surprised to encounter a transgender person who is not +KGYA, in line with what we expect of a typical feature based on the measures provided by Sloman et al. The presumption of a +KGYA narrative (“...the narrative that they have in their heads” (line 5798)) also implies that in the speaker’s view, it is easier for people to imagine a transgender person who is +KGYA as compared to one who is -KGYA, again indicating the immutability of that feature, and its typical status in this context.

Example 5 provides a final example of a functional description of typicality within the category transgender. It is an excerpt from a 2011 video titled “Traditional vs. Non-Traditional Trans Narrative (video response to Forest),” narrated by a young-adult, self identifying transgender man, who is responding directly to the questions posed by the speaker in Example 2.

#### **Example 5**

- 4891 you brought up the point that
- 4892 there seems to be so much variance between
- 4893 trans guys and when they start identifying as trans
- 4894 and why there are some trans men like yourself
- 4895 who know from
- 4896 the time they’re a little kid that

4897 they're trans  
4898 and then they're  
4899 that they are trans  
4900 and then there's  
4901 other trans guys who  
4902 go through a period  
4903 much later in life  
4904 in their early twenties  
4905 thirties  
4906 fifties  
4907 what have you  
4908 and are questioning it and saying  
4909 I think I might be trans  
4910 or  
4911 they come to terms with  
4912 their trans identity  
4913 and are confident that they're trans  
4914 but  
4915 acknowledge that  
4916 they did not know that  
4917 from the time they were a little kid  
4918 which is where I fall  
4919 on the spectrum  
4920 um  
4921 and  
4922 it's something that  
4923 I really struggled with  
4924 when I first realized that  
4925 I was struggling with my gender identity  
4926 I  
4927 I think I was under the impression  
4928 that the traditional trans story  
4929 was the only trans story  
4930 and so  
4931 because that did not  
4932 immediately resonate with me  
4933 um  
4934 it made it really hard for me to  
4935 make sense of  
4936 who I really am  
4937 and to  
4938 um  
4939 feel sure and confident  
4940 um, I was terrified that  
4941 I would be viewed as  
4942 fake

- 4943 or  
 4944 um  
 4945 not the real deal

The speaker in Example 10 refers to the “traditional trans story,” (line 4928) in which the person “knows from the time they’re a little kid that they’re trans” (line 4895-4896), (+KGYA) something that he once thought “was the only trans story” (line 4929), suggesting its perceived typicality. Again, there is evidence of the perception of +KGYA as an immutable feature of transgender narrative, with the speaker reporting that a – KGYA experience led to confusion about his identity (“it made it it really hard for me to make sense of who I am” (line 4934-4936)), and fear that he would be seen as illegitimate (“I was terrified that I would be viewed as fake, or not the real deal” (lines 4940-4945)).

The examples presented in this section have provided a functional description of typicality this context of transgender identity. Together they point to +KGYA as a feature of particular prominence. The section that follows will produce a similar conclusion, but via an alternative hypothesis, which relies on negative constructions as an indicator of the underlying typicality structure of the discourse context.

#### 4.3 Typicality: a formal approach

The following examples will provide evidence of asymmetry of reference in discourse, and argue that it marks a cognitive reference point, as defined by Rosch (1975), with negation indexing typicality structure. Through the alternativity of negation (Dancygier, 2012), this pattern satisfies the formal definition of a cognitive reference point as a

stimulus that other stimuli are seen “in relation to.” Each of the following examples will present a narrative (Narrative A), in which a person describes their experience using affirmation, along side a second narrative (Narrative B) in which a person describes their experience as the negative counterpart of Narrative A. In each case, this contrast is drawn along the dimension (+/-)KGYA. On the basis of this formal criteria, it is possible to classify narratives that are +KGYA as cognitive reference points, providing evidence about typicality in this context and the functional knowledge underlying those beliefs. This analysis produces a result in alignment with the analysis presented in the previous section.

Example 6 presents data illustrating the asymmetry of reference that will characterize every example presented in this section. Example 6A is an excerpt from a 2011 YouTube video titled “Fake Transgender,” narrated by young-adult, self-identifying transgender man. Example 6B is an excerpt from a 2015 YouTube video titled “FTM Edition: How I “Knew” I Was Trans,” narrated by a different young-adult, self-identifying transgender man.

#### **Example 6A**

4770 um  
 4771 when I think of my experience  
 4772 as a transgendered  
 4773 female to male  
 4774 it was something  
 4775 that was very weird to know  
 4776 that I had  
 4777 inside of me

#### **Example 6B**

5748 so  
 5749 this is my experience  
 5750 you wanna know how I knew  
 5751 I'll tell you  
 5752 I **didn't**  
 5753 I **didn't** know  
 5754 I was trans  
 5755 I am **not** one of those

4778	when I was little	5756	lucky people
4779	you know	5757	who knew since they were
4780	I knew I was a boy	5758	very young
		5759	that something was different
		5760	that they were special
		5761	that something was wrong
		5762	<b>no</b>
		5763	so I <b>didn't</b> know

In Example 6A, the speaker describes the experience of knowing since he was “little” (line 4778) that he “was a boy” (line 4780), elaborating that it was “something that was very weird to know that I had inside of me,” (lines 4774-4777). Compare this to Example 6B, in which the speaker also references a similar experience of having knowledge “since they were very young that something was different, that they were special,” (lines 5757-5760). However, the speaker in 6B makes it clear that the narrative he is referencing in these lines is not representative of his own, as he is “not one of those lucky people” (line 5755-5756) who can claim this experience. Though not representative, the speaker nevertheless describes his personal narrative “in relation to” the narrative presented in 6A.

Examples 6A and 6B illustrate the asymmetry of reference characteristic of the relationship between typical and atypical category members: both speakers reference a “typical” narrative in order to describe themselves, in spite of the fact that the “typical” narrative, is only claimed to be representative of the speaker in Example 6A. Within the semantic structure of negation, +KGYA is being “placed” by the speaker in the reference position, much like the “best examples” were placed in the reference position of Rosch’s

linguistic and spatial tasks. While in Example 6A, the speaker responds to the question of how he knew he was transgender by affirming what he knew (“I knew I was a boy” (line 4780), the speaker in Example 6B, atypical in this context, responds to the question of how he knew by describing what he *didn’t* know (“I didn’t, I didn’t know I was trans. I’m not one of those lucky people...no I didn’t know” (lines 5752-5763)) and what he is *not* (“I’m not one of those lucky people “ line 5755). The speaker’s use of negation, allows him to reference the typical, even in its absence.

The two speakers in Example 6 are able to use similar language to describe their differing experiences, because one is describing what happened, and the other is describing what did not happen. In this way, as predicted by Dancygier (2012), negation is being used to reflect the speakers’ epistemic knowledge that KGYA is relevant within the broader discourse context, whether it is characteristic of the experience being described in the local context or not.

The data in Example 7 will illustrate the same pattern as Example 6 above. Example 7A is an excerpt from a 2014 YouTube video titled “FTM-How I knew I was Trans,” narrated by a young-adult, self-identifying transgender man. Example 7B is an excerpt from a 2014 video “How I did NOT know I was trans:)” narrated by a different, young-adult, self-identifying transgender man.

**Example 7A**

6123 yeah  
 6124 how I knew I was trans  
 ...  
 6131 I like to say that I  
 6132 always knew  
 6133 when I was little  
 6134 like  
 6135 when I was a little boy  
 6136 I was a little boy

**Example 7B**

5025 I  
 5026 have been thinking so much  
 5027 about um  
 5028 not only how I know I'm trans  
 5029 but  
 5030 why I did **not** know before  
 5031 so for that reason  
 5032 I'm making this video  
 5033 how I  
 5034 did **not** know  
 5035 that I was trans  
 5036 before  
 ...  
 5043 so  
 5044 why did I **not**  
 5045 realize I was trans earlier  
 ...  
 5062 when I was younger  
 5063 like a kid  
 5064 or  
 5065 a teenager  
 5066 I **didn't** think about  
 5067 being a boy  
 5068 I'm **not** one of those people  
 5069 who from a young age  
 5070 was like  
 5071 oh  
 5072 I'm actually a boy  
 5073 that **didn't** happen for me

In Example 7A, the speaker affirms that he “always knew” (line 6132) from the time he “was little” (line 6133) that he was transgender. He describes himself in childhood by stating: “I was a little boy” (line 6136). In Example 7B, the speaker references a similar experience, here attributed to “those people, who from a young age was like ‘oh, I’m

actually a boy”” (lines 5068-5072). However, as was the case in the Example 6B, the speaker in Example 7B makes it clear that the experience of “those people” is not representative of his personal experience. Although it is not representative, he nevertheless characterizes his own narrative “in relation to” it.

As in Example 6, Examples 7 illustrates negation’s role in indexing typicality in the discourse. While the speaker in example 7A represents his experience through affirmation, the speaker in 7B instead describes what he did *not* know (line 5030, 5034), what he did *not* realize (line 5044-5045), what he did *not* think about (line 5066-5067), what his is *not* (line 5068) and what *didn’t* happen for him (line 5073). It is possible for very similar language to be used to describe different experiences, precisely because one speaker is describing what was, and one speaker is describing what was not. The speaker in Example 7B acknowledges, as he concludes his video, that the narrative he has produced contains little positive description of his actual experience:

**Example 7B (cont.)**

5682 um  
 5683 anyway  
 5684 I think that  
 5685 that’s all that I wanted to say  
 5686 I’ll make another video about  
 5687 sort of  
 5688 the more positive aspect of it  
 5689 like  
 5690 not why I didn’t realize I was trans  
 5691 but how I do  
 5692 know I’m trans  
 5693 so stay tuned  
 5694 thanks for watching

5695 bye

In the excerpt above, the speaker expresses an awareness of two different “aspect[s]” (line 5688) of personal transgender identity that he could potentially describe, the “why I didn’t realize I was trans” (line 5690) aspect, and the “more positive” (line 5688) “how I do know I’m trans” (line 5691-5692) aspect. His representation of his personal narrative via the former, rather than the latter again highlights the to a tendency to negate the typical, rather than affirm the atypical, or stated another way, it points to a relationship between typicality structure and negative constructions.

The data presented in Example 8 will provide another illustration of the pattern documented in Examples 6 and 7. Example 8A is an excerpt from a 2013 YouTube video titled “How I knew I was transgender,” narrated by a young-adult, self-identifying transgender man. Example 8B is an excerpt from a 2011 YouTube video title “How I knew I was trans: My Story and the Trans Narrative,” narrated by a different young adult, self-identifying transgender man.

#### Example 8A

952 um  
 953 from about age four  
 954 I think  
 955 I can remember  
 956 having this awareness of being a boy  
 957 and just not understanding  
 958 why people were treating me differently

#### Example 8B

1916 when I was a kid  
 1917 I mean  
 1918 I **didn't**  
 1919 I **didn't** think I was a boy  
 1920 you know  
 1921 like I **didn't** have any sort of  
 1922 confusion growing up

959 to other boys	1923 where I was like
	1924 no I'm a boy
	1925 why is everybody calling me a girl
	1926 or <b>any</b> experiences like that

The speaker in example 8A reports an “awareness of being a boy,” along with a sense of confusion at not being treated like one (lines 956-959). The speaker in 8B references a similar experience of “confusion growing up, where I was like no I’m a boy, why is everybody calling me a girl” (lines 1922-1925). However, as was the case in the previous example, the similarity in language does not point to similar experiences. Rather, as in the previous examples, the speaker in Example 8A refers to what happened, while the speaker in Example 8B refers to similar events, but only to note that in his personal experience, they did not happen. In this way, Example 8A again demonstrates that the semantic feature +KGYA satisfies the definition of a cognitive reference point, because other stimuli are being described “in relation to” this characteristic.

As was the case in the previous example, Example 8B again shows negation being used as a means through which the typical is referenced in both typical and atypical cases. While the speaker in Example 8A affirms his “awareness” (line 956), the speaker in 8B describes himself in terms of what he didn’t think (line 1918-1919) and experiences he didn’t have (lines 1921-1926), again referencing the typical by negating it in its absence. Example 9A is an excerpt from a 2014 video titled “FTM how I knew I was transgender,” narrated by a young adult, self-identifying transgender man. Narrative 9B is an excerpt

from a 2013 YouTube video titled “I Didn’t Know I Was Trans!” narrated by a different young adult, self-identifying transgender man.

**Example 9A**

780 ok so  
 781 its best to start at the beginning  
 782 when I was four years old  
 783 um  
 784 was when I had my  
 785 sort of  
 786 earliest memory of  
 787 knowing I was male

**Example 9B**

2351 so  
 2352 how did I know I was transgender  
 2353 pretty much  
 2354 I decided to go about this topic  
 2355 in a way that might be a little different  
 2356 umm  
 2357 its  
 2358 really going to be called  
 2359 I **didn’t** know I was transgender  
 2360 ok  
 2361 I was **not** one of the  
 2362 umm  
 2363 I’m gonna say  
 2364 I consider lucky or  
 2365 I guess  
 2366 well-knowledged  
 2367 people  
 2368 who knew at the age of three  
 2369 or four  
 2370 or five or six  
 2371 that they were not  
 2372 the gender that they were born at

As in the previous three examples, in Example 9A, the speaker’s “earliest memory of knowing” (line 786-787) is represented with affirmative constructions. And as before, the speaker in 9B offers a similar description of knowing very early in childhood that “that they were not the gender they were born at,” (line 2371-2372). As was the case in Example 6B, 7B, and 8B, the so-described experience in 9B is represented as explicitly not characteristic of the speaker’s experience. The same correlation can be seen between

negation and asymmetry in lines (2359) and (2361). Once again, we see the speakers understanding of typicality in this context indexed in the discourse with negative constructions.

Example 10 will provide a final example of a formal approach to typicality within this context, defined by asymmetry of reference, and marked by the relationship between negation and typicality structure. Example 10A is an excerpt from a 2012 YouTube Video titled “How I knew I was Trans,” narrated by a young-adult, self-identifying transgender man. Example 10B is an excerpt from a 2015 YouTube video “Transgender Today: I Didn’t Always Know,” narrated by a different young-adult, self-identifying transgender man.

#### Example 10A

4678 being trans its like  
 4679 well you  
 4680 you're in the wrong body  
 4681 you're gonna know that from a young age  
 4682 and I guess  
 4683 I like  
 4684 I didn't really realize that  
 4685 I was so different  
 4686 I just thought  
 4687 I was one of the lads

#### Example 10B

5802 and um  
 5803 as a five-year-old  
 5804 I **didn't** look inside myself and think  
 5805 I am in the wrong body  
 5806 because  
 5807 I was five  
 5808 I just **didn't** have  
 5809 that self awareness  
 5810 and I **wasn't** growing up in a place that  
 5811 I was able to have that self awareness  
 5812 and its great when people do have that  
 5813 but it's also important to know  
 5814 that **not** all trans people have that  
 5815 and **not** every trans person  
 5816 has to be this way  
 5817 in order to be trans

Example 10A and 10B, show a pattern similar to that of Examples 6-9. While the speaker in Example 10A affirms that “being trans, it’s like, you’re in the wrong body, you’re going to know that from a young age” (lines 4678-4681), the speaker in 10B uses very similar language to communicate that this was not his experience (“I didn’t look inside myself and think ‘I am in the wrong body’ (lines 5804-5805)).

#### 4.4 Summary

The analysis in this section supports the claim of negation serving as an indicator of context-specific knowledge about typicality. Section 4.2 demonstrated the typicality of +KGYA narratives via speaker’s descriptions of their functional understanding of what is typical in this context. Section 4.3 demonstrated that the structure of negation provides a vehicle through which the speaker can index this asymmetry of reference that characterizes relationships based on typicality structure, maintaining the typical as a point of reference to describe the atypical. Together, the analysis presented here suggests alignment between the outcomes of these two modes of inquiry: they both point to +KGYA as particularly salient to typicality decisions in this context. This supports the claim that negative constructions can serve as an indicator of the typicality structure that underlies the semantics of discourse.

The implications of these results are discussed below.

## 5. Discussion

### 5.1 Introduction

Rosch called the conclusions of her 1975 study “simultaneously substantive and methodological,” (544) and the same can be said about the current study. The results offer insight into the context-specific structure of typicality as it relates to the concept of transgenderism, as well as providing support for negation, and more broadly for analysis of discourse in the study of cognitive categorization. The findings, their implications, and future directions are discussed below, followed by a summary.

### 5.2 Discussion of findings

Section 4.2 provides descriptions of people’s functional understanding of what is typical in this context, highlighting +KGYA as a highly salient feature. The examples illustrate the perceived typicality of +KGYA via the features immutability, or people’s apparent difficulty in transforming their concept of transgenderism to represent this feature with an atypical (-) value, while maintaining the overall coherence.

The analysis in section 4.3 supports the claim that the distribution of negative vs. affirmative constructions relating to the semantic dimension KGYA is serving as an indicator of +KGYA narratives’ status as a cognitive reference point within the category transgender. Furthermore, the examples demonstrated that negation is serving as a vehicle for the asymmetry of reference that defines a cognitive reference point, and by extension, describes typicality in this context. Typical speakers tended to describe their

experience in terms of what did happen, and atypical speakers tended to describe their experience in terms of what did not happen. It is precisely because of this tendency to negate the typical, rather than affirm the atypical, that typical and atypical speakers are able to use very similar language to describe different experiences, thereby maintaining the typical as a point of reference that other narratives are described “in relation to.”

### 5.3 Implications for practice

This research suggests that negation may be able to serve as an indicator of asymmetry of reference as it relates to typicality, providing researchers and clinicians with evidence about the underlying typicality structure in specific discourse contexts. This is particularly valuable given evidence that concepts are not uniform in structure, implying the need to evaluate them in context, and not only in controlled lab settings. Although typicality is openly discussed in this context, it is likely that in other contexts, notions about what is typical may not be so explicitly spelled out. In such a situation, other indicators of typicality within discourse could be valuable.

However, the uncontrolled nature of this study means that certain ambiguities remain, like the exact nature of the mechanisms connecting negation and typicality. One plausible possibility is that socially-shared notions about typicality are prompting people toward semantic structures that favor negative constructions to describe –KGYA narratives. However, there is also the possibility that the relationship could function in the other direction as well, and that negative constructions in the right context could lead people to

make inferences about the underlying typicality structure. If this is the case, it could provide insight into a mechanism through which typicality is socially communicated and maintained, by creating a discourse environment in which the typical will always exceed the atypical in its frequency of instantiation (Barsalou, 1985), leading to the perception of greater and greater typicality for the already typical, regardless of the central tendency of the category. Given the qualitative and correlational nature of this study, it is impossible to say if this is the case, but if it is, it could have implications for critical theory, public policy, marketing, pedagogy, and clinical practice.

#### 5.4 Areas for future research

The current study suggests several paths of relevant future inquiry. The first, while theoretically plausible that the same pragmatic tendencies described here might exist in other contexts, it is necessary to undertake work to demonstrate the correlation between negation and typicality structure in other contexts before making claims as to the generalizability of these results.

Furthermore, the result of this study could additionally be clarified and elaborated upon through careful empirical testing of the exact nature of the relationship between negation and typicality. An experimental paradigm could help clarify the direction of the relationship and thus, the implications of the results. This is generally in keeping with an approach to research in the social realm that involves an interplay between contextual data, and theoretically related, manipulated data produced in a lab environment.

## 5.5 Conclusion

To understand the nature of human categorization is to shed light on the cognitive landscape in which we dwell. The data presented here has shown that Rosch (1975)'s definition of a cognitive reference point as "a stimulus that other stimuli are seen in relation to," is applicable to +KGYA narratives in the context of the data presented here. What's more, the data has demonstrated that, in this context, negation serves as a tool through which typicality is indexed in the discourse.

As stated before, the implications of the findings presented here are both substantive and methodological. On the one hand, they offer empirical support to claims about typicality and transgenderism, and highlight +KGYA's status in governing typicality judgments in the context of social gender categorization. On the other hand, the results also implicate negation as an indicator of the structure of typicality that forms the semantic backdrop of the discourse context. These finding could thus be of interest to a broad range of social and cognitive scientists and critical theorists. Ultimately the findings are interesting in their own right because of the insight they provide, and the questions they raise, as to the complex and fascinating relationship between language and thought.

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