

What a Loaded Generalization: Generics and Social Cognition¹

Daniel Wodak^{1*}, Dr. Sarah-Jane Leslie¹ and Dr. Marjorie Rhodes²

¹Princeton University, United States

²New York University, United States

Abstract

This paper explores the role of generics in social cognition. First, we explore the nature and effects of the most common form of generics about social kinds (descriptive generics). Second, we discuss the nature and effects of a less common but equally important form of generics about social kinds (normative generics). Finally, we consider the implications of this discussion for how we ought to use language about the social world.

In his 1949 *New Yorker* article ‘What a Lovely Generalization’, James Thurber described his ‘newest hobby’: after having previously collected ‘derringers, snowstorm paperweights, and china and porcelain dogs’, he moved on to collecting ‘a certain sort of Broad Generalizations, or Sweeping Statement.’ One of the most ‘cherished pieces’ of this new collection was the following gem: ‘Generals are afraid of their daughters.’ This generalization was, Thurber assured his readers, ‘vouchsafed by a lady’ after she heard a single anecdote about how a particular General, General Wavell, reacted when he was admonished by his three daughters.

Most of Thurber’s Broad Generalizations are what we would now call *generics*. Generic generalizations lack explicit quantification—Thurber’s interlocutor did not assert that *all*, *most* or *some* Generals are afraid of their daughters—yet they are nonetheless truth-evaluable. Thurber offers ‘Women don’t sleep very well’ as a paradigm example of a true generic; contemporary collectors provide plenty of better examples, such as ‘Tigers are striped’, ‘Ducks lay eggs’ and ‘Mosquitos carry West Nile virus.’

Generics warrant philosophical attention for at least three interrelated reasons. The first is that it is difficult to provide an adequate truth-conditional semantics for generics (Leslie 2012). Why is it that ‘Tigers are striped’ is true even though there are albino tigers? Why is it true that ‘Ducks lay eggs’, but not true that ‘Ducks are female’, even though there are more female ducks than egg-laying ducks? Why is ‘Mosquitos carry West Nile virus’ true even though fewer than 1% of mosquitos do so? Answering these questions helps clarify why Thurber’s interlocutor was inclined to ‘vouchsafe’ a generic claim about Generals on the basis of an anecdote about *one* General.

The second is that generics play a significant role in cognition. Recently, several researchers in philosophy and psychology have argued that ‘a variety of philosophical, linguistic and psychological considerations suggest that generic sentences may be language’s way of letting us give voice to cognitively primitive generalizations’ (Leslie Forthcomingc). That generics give voice to such cognitively primitive or fundamental generalizations has a range of interesting implications for, among other things, the philosophical analysis of concepts (See Johnston and Leslie 2012). Generics involve the attribution of a common, a characteristic or a striking property to a kind whose members are disposed to manifest that property (Leslie 2008). We paradigmatically attribute such properties to *essentialized* kinds, by which we mean kinds whose members

we implicitly take to share some hidden, non-obvious and persistent property or underlying nature that causally grounds their common properties and dispositions.² Our conception of tigers, then, might involve the tacit belief that there is some intrinsic nature associated with tigerhood which grounds properties like *having stripes*.

The third reason that generics warrant philosophical attention concerns their role in *social* cognition. Not all uses of generics concern biological kinds like tigers, ducks and mosquitos. We also use generics to attribute common, characteristic or striking properties to *social* kinds; in doing so, we give voice to and transmit generalizations that are often socially prejudiced. Generics structure our social cognition, with profound and sometimes unpleasant implications for how we see others, and for how we see ourselves.

The role of generics in social cognition is the primary subject of this paper. First, we explore the nature and effects of the most common form of generics about social kinds (descriptive generics). Second, we discuss the nature and effects of a less common but equally important form of generics about social kinds (normative generics). Finally, we consider the implications of this discussion for how we *ought* to use language about the social world.

I

First, let us follow Thurber in showcasing a collection of generics about social kinds. These are, to be clear, not generics that we endorse; in fact, even if they *were* true, we believe that they ought not be asserted.³ Rather, we take them to warrant attention because they are all too often accepted, and socially harmful.

Muslims are terrorists. Women are submissive. Mexicans are lazy. Asians are good at math. Gays are pedophiles. Rich people are selfish. Republicans hate women.

Second, let us consider what is involved in the assertion of these generics.

By default,⁴ these generics involve the attribution of properties to essentialized social kinds. Like the biological kind *tiger*, *Muslims*, *women*, *Mexicans* and *Asians* are taken to have distinctive intrinsic natures that causally ground their (respective) putative common properties.

There is striking cross-cultural convergence in how we categorize biological kinds.⁵ So called 'basic-level' kinds like *tigers* are highly essentialized (see Gelman 2003). 'Superordinate' kinds like *mammals* and 'subordinate' kinds like *Bengal tigers* may be less essentialized, for different reasons: the former is taken to lack an intrinsic nature that grounds a sufficiently wide-range of properties (the class of mammals is too diverse), and the latter is taken to lack an intrinsic nature that is sufficiently distinctive (the essence of *Bengal tigers* is taken to be shared with comparable kinds, namely other tigers).

Social kinds can be essentialized in much the same way as animal kinds: *Muslims*, *women*, *Mexicans* and *Blacks* may be treated as akin to basic-level kinds (Rothbart and Taylor 1992).⁶ As Allport noted in 1954, there is a prevalent belief in an

inherent 'Jewishness' in every Jew. The 'soul of the Oriental,' 'Negro Blood,' ... 'the passionate Latin'—all represent a belief in essence. A mysterious mana (for good or evil) resides in a group, all of its members partaking thereof (Allport. 1954, pp. 173–174).

Of course, these 'essences' or 'inherent natures' are not always taken to be biologically grounded. After all, some of these social kinds are formed around the boundaries of religions, nationalities, sexualities, socio-economic statuses and political ideologies.⁷ Nor are these natures taken to be immutable or necessary for membership in the relevant kind. Rich people might *become* selfish, and given a serious windfall you might become a member of that kind without (yet) being taken to have changed your intrinsic nature.⁸

In comparison to animal kinds, there is much cross-cultural and historical divergence in *which* social kinds we essentialize. The essentialization of race, religion, nationality and socio-economic status is not innate; it is socially transmitted.⁹ Recent evidence suggests that generics are an important mechanism for transmitting such essentialist beliefs across generations (Rhodes, Leslie & Tworek 2012). Four-year-old children and adults were shown depictions of an imaginary social group—Zarpies—who could not be mapped on to any familiar essentialized group. The use of generics in describing Zarpies resulted in a marked increase in the tendency of children and adults to essentialize Zarpies. That is, it increased the tendency of children and adults to implicitly believe that Zarpies share some hidden property or properties that causally ground their common dispositions. And the inculcation of essentialist beliefs about Zarpies in a separate group of adults resulted in a marked increase in the use of generic language in describing Zarpies to children. These findings suggest that hearing generics results in the essentialization of novel social groups; and further that the essentialization of social groups increases the use of generics to describe those groups.

So far, we have seen that these generics involve the attribution of properties to essentialized social kinds, and can transmit essentialist beliefs about such kinds. To complete our account of what is involved in the assertion of these generics, we must ask: What properties do such generics attribute to essentialized social kinds?

Some generics involve the attribution of common properties: properties possessed by most members of the relevant kind, perhaps because of extrinsic circumstances. Yet evidence suggests that such generics are by default understood as *characteristic property generics*—that is, as being true in virtue of the intrinsic nature of the kind (Cimpian and Markman 2009, 2011; Haslanger 2011, and Leslie Forthcoming). Not all of such properties are negative; *being good at math* need not be pejoratively attributed to Asians. And *being submissive* can be taken to be characteristic of women whilst being seen as a desirable trait amongst women (more on this below).

Other generics involve the attribution of *striking properties* to a kind. These properties are negative: indeed, they are taken to be dangerous and harmful.¹⁰ Importantly, striking property generics can be true of a kind despite the very low prevalence of that property amongst members of the kind: ‘Mosquitos carry the West Nile virus’ is true even though fewer than 1% of mosquitos do so.

Given this, generics about an essentialized social kind are often accepted on the basis of limited evidence regarding a single member of the relevant kind—just like Thurber’s interlocutor, who asserted a generic about Generals on the basis of an anecdote about one General. On the basis of a single terrorist attack by a few people who happen to be Muslims, individuals who essentialize that group may come to believe that Muslims are terrorists.¹¹ The UK newspaper *The Sun* once asserted a generic about asylum seekers—‘Callous asylum seekers are barbecuing the Queen’s swans!’—on the basis of (false) information about a single incident of someone (possibly an asylum seeker) pushing a swan in a shopping trolley.¹²

Third, let us consider the harmful effects of these generics on social cognition.

Some of the harmful effects of these generics concern the essentialization of social kinds. As we have seen, such generics transmit essentialist beliefs about social kinds, be they Muslims, women, Mexicans, Asians, homosexuals, Republicans or rich people.

Why is the essentialization of social kinds harmful? Part of the answer concerns how we see others. When a social kind is highly essentialized, its members are more likely to have diminished social status, and be subjected to prejudiced attitudes (Haslam et al 2000, 2002).¹³ This stands to reason: whoever *they* are, they are implicitly or explicitly believed to be fundamentally different from *us*. After all, *they* have a distinctive inherent nature.

The other part of the answer concerns how we see ourselves. It may well be easier to essentialize others (especially others with whom we are less familiar). But members of a social kind are not immune to the effects of essentialist beliefs about that kind. Indeed, the prevalence of such

essentialist beliefs significantly affects individuals' representation and performance in a variety of areas and activities. Essentialist beliefs seem to undergird a *fixed* or *entity theoretic* conception of abilities:¹⁴ the conception of certain demanding tasks as requiring inherent, natural talents, rather than hard work and incrementally acquired traits. When individuals adopt a fixed conception of abilities they are more likely to underperform in, or just avoid, challenging activities; failures are taken to be evidence of immutable shortcomings (Dweck 1999, 2006).

Relatedly, if an individual's membership in a social kind that is highly essentialized is made salient, this can impair that individual's performance in certain activities. This robustly documented phenomenon is known as *stereotype threat*.¹⁵ For example, where the cultural stereotype 'Women are bad at math' is known to be commonly held, women are likely to underperform at mathematical activities when their gender is made salient. Experimental evidence suggests that such effects can be produced in children via the use of generics in describing social kinds' relative abilities. Interestingly, this held regardless of whether the kind is described as good or bad at the relevant activity. That is, both boys and girls who heard generics such as 'Boys are good at this game' showed impaired performance, lowered motivation and reduced interest in playing the game, especially after challenges or negative feedback (Cimpian et al 2012).¹⁶

Other harmful effects of generics concern the properties attributed to kinds.

Recall the primitiveness of the cognitive mechanism to which generics give voice. When a kind is highly essentialized—tigers; mosquitos—and some of its members have a striking property—eat people; carry the West Nile virus—we rapidly generalize that property to the kind as a whole. Hence 'Tigers eat people' and 'Mosquitos carry the West Nile virus.' It matters here that the properties in question are threatening, vile, horrific or dangerous. Intuitive generalizations will be formed on the basis of limited evidence of limited prevalence of the striking property in question.

This cognitive mechanism may carry some evolutionary benefit with regard to animal kinds—e.g. by helping us avoid animals that may be dangerous to us—but it is extremely harmful with regard to social kinds. The more distant and marginalized the social kind, the more likely we may be to accept striking property generics about them. And once we form such generics, we may make poor probabilistic inferences about the likelihood of arbitrary members of the kind to have the striking property in question.¹⁷ Despite the limited prevalence required for their acceptance, once accepted striking property generics 'appear to be commonly taken in a rather strong sense, as though the quantifier *always* had implicitly crept into their interpretation' (Abelson and Kanouse 1996, p. 172). In other words, the cognitive mechanism to which generics give voice may rapidly move from 'That Muslim is a terrorist' to 'Muslims are terrorists', which is then interpreted as having inferential power more akin to that of a universal statement; hence, perhaps, the extraordinarily high prevalence of hate crimes perpetrated against Muslims after September 11, 2001. As Mrs. Scott—the Ingalls' neighbor in Laura Ingalls Wilder's *Little House on the Prairie*—puts it: 'The only good Indian is a dead Indian, and to anyone who says otherwise, I say remember the Minnesota Massacre'. The Scotts and the Ingalls are in Kansas at the time, and Mrs. Scott does not suppose that the local Native Americans were personally involved in the Minnesota Massacre; yet she believes that only someone who had *forgotten* about this distant and localized incident could disagree that 'The only good Indian is a dead Indian.'

II

Let us shift focus from descriptive to normative generics about social kinds. Once again, let us first showcase a collection of normative generics about social kinds.

Boys don't cry. Women place their families before their careers. Friends don't let friends drink and drive. Scientists care about truth.

Second, let us consider what is involved in the assertion of these generics.

What, exactly, make them *normative* generics? This issue is subtle, in part because normative generics may have true descriptive counterparts—though they need not. Hence, one can coherently accept that ‘Boys cry’ and ‘Boys don’t cry’. The former *describes*—as before—how crying is common among boys. The latter *proscribes* crying by boys. Telling Timmy ‘Boys don’t cry’ is not imparting descriptive information, but admonishing Timmy for wailing in public, and encouraging or exhorting him to develop a stiff upper lip.

Why do normative generics possess hortatory force which descriptive generics lack? Crucially, we do not need to understand the difference between normative generics and descriptive generics either by proposing that the two have different logical forms,¹⁸ or by via an appeal to pragmatic implicature.¹⁹ Instead, we can understand the difference between normative and descriptive generics in terms of the different concepts picked out by the noun phrase in the generics themselves.

This proposal builds on work by Knobe, Prasada and Newman (2013). On their view, many concepts, including some social kind concepts, exhibit a ‘dual character’. One way of modeling their proposal would be to take a word like ‘scientist’ to be polysemous: ‘a physics professor who spends her days writing out equations but who clings dogmatically to a certain theoretical perspective against all empirical evidence’ is ‘clearly a scientist’ in one sense, but in another sense ‘is not a scientist at all.’ The former sense of ‘scientist’ centrally involves meeting (descriptive) membership criteria. The second sense of ‘scientist’ centrally involves exemplifying (normative) ideals.

Hence, normative generics do not essentialize social kinds in quite the same way as descriptive generics. *Not crying* is not, or not necessarily, taken to be grounded in some inherent nature of boy-ness. Rather, it is taken to be part of the *ideal* of boy-ness.²⁰

This proposal explains how one can coherently assert both that ‘Scientists care about truth’ and ‘Scientists dogmatically cling to their own cherished theories’. The noun ‘scientist’ is used in its normative sense in the first generic and in its descriptive sense in the second. The latter generic is sensitive to the distribution of dogmatism among actually existing scientists (in the descriptive sense); that is, among the people with PhDs who work in laboratories, and so forth. The former generic is not. Even if *all* such actually existing people are dogmatic, the normative generic can still be coherently asserted (and true).²¹

This proposal also explains the relationship between normative generics and what we might call *normatively shifted particular predications*, such as ‘Hillary Clinton is the only man in the Obama administration’. Such utterances rely on normative generics such as ‘Women are submissive’ and ‘Men are assertive’. When a *woman* (in the descriptive sense) exemplifies the ideal of *men* (in the normative sense), it licenses the otherwise paradoxical-sounding normatively shifted predication ‘That woman is a (real) man’. When the *men* (in the descriptive sense) in some domain fail to exemplify that same ideal but are instead submissive, this licenses the further claim ‘That woman is the *only* man in this domain’.²² These predications serve to both admonish a particular individual (Hillary does not exemplify the ideals for *women*) and the individuals to whom they are compared (Obama and his administration do not exemplify the ideals for *men*).

Third, let us consider the harmful effects of normative generics on social cognition.

Some of these harmful effects concern the association of an ideal with social kinds. Generics like ‘Boys don’t cry’ and particular predications like ‘Hillary Clinton is the only man in the Obama administration’ presuppose that there are distinctive gender roles: that is, distinctive ideals for men and women, boys and girls.

Other harmful effects of normative generics concern the ideals attributed to social kinds. Normative generics can make ‘ready to hand an effective tool for creating a sense of obligation

among members of a group, an obligation to possess features that no one would otherwise feel any obligation or desire to possess' (Leslie Forthcomingb). Some normative generics lead individuals to perform actions that they know to be immoral: an episode of *This American Life* features an interview with Kevin, a pimp, who beats a prostitute called Lois, despite knowing that this is morally wrong, because 'that's what pimps do.' Other normative generics lead individuals to perform actions that they know to be imprudent: for a woman to be submissive is by no means immoral, but it will often result in her interests and abilities being overlooked. Of course, for a woman to be assertive also carries costs. While conforming to gender role may prop up a sexist system, by not conforming to that role a woman risks being labeled 'mannish'.

III

We have discussed the ways in which the use of generic language about the social world affects our social cognition. Now let us consider the implications of this discussion for how we *ought* to use language about the social world.

If generics are the primary vehicle for transmitting beliefs about the different essential natures and ideals of social kinds, then ceasing to use such generics would, presumably, reduce the prevalence of such beliefs.

Given this insight, some might be drawn to a simple view we can call 'Abstinence Only': we should eschew descriptive and normative generics about social kinds entirely. This is a crude policy. Not all generics about social kinds are harmful. Some are innocuous, such as the descriptive generic 'Surgeons wear scrubs.' Others are beneficial, such as the normative generic 'Friends don't let friends drive drunk.'

Moreover, even with regard to harmful generics about social kinds, *abstinence is not enough*. If you restricted yourself to quantified generalizations about social kinds, the information communicated will often be *recalled* by others in generic form (Leslie and Gelman 2012).

Also, deciding that *you* will eschew generics entirely leaves a further important decision to be made: how you will *respond* to others who continue to assert that 'Blacks are criminals' or 'Boys don't cry'? Finding an adequate response to utterances of such harmful generics about social kinds is extremely difficult.

Partly, this is because generics cannot be negated by appealing to counterexamples. Descriptive generics remain true in the face of counterexamples: just as 'Tigers are striped' is true even if there are some albino tigers, some will continue to assert that 'Blacks are criminals' even though many African Americans have perfectly clean records. And the existence of counterexamples does not undermine normative generics at all, insofar as such counterexamples invoke the descriptive sense of the relevant kind. So these generics are easy to accept but difficult to refute: this is, as (Langton, Haslanger and Anderson 2012) write, 'not an epistemically or politically promising combination.'

Indeed, the availability of different interpretations of the same surface form ('Latinos are lazy', or 'Women are submissive') makes negating the assertion of a generic especially difficult. Why? Because it allows for slippage. Sometimes the slippage is between a striking and characteristic property generic: here '[e]xtreme and aberrant actions on behalf of the few can thus lead to conclusions concerning the group at large' (Leslie Forthcomingc). Sometimes the slippage is between a common and characteristic property generic. Say a speaker asserts that 'Latinos are lazy.' You could respond by presenting an onslaught of counterexamples, but then the speaker can accept that 'although many Latinos aren't lazy, they tend to be—thus embracing the characteristic generic' (Langton, Haslanger and Anderson 2012). Alternatively, you could respond by arguing that 'Latinos show no greater tendency towards laziness than any other group. The speaker can then suggest that, although it is not part of the nature or essence of Latinos

to be lazy, most are' (Langton, Haslanger and Anderson 2012). Or say a speaker asserts that 'Women are submissive.' This could be intended as a descriptive generic; but even if one shows that submissiveness is not a common, striking or characteristic property of women, the speaker could accept this and suggest it is an ideal of womanhood. 'This slide back and forth between different interpretations of the utterance allows speakers to avoid taking responsibility for the implications of their claims' (Langton, Haslanger and Anderson 2012).

Responding to harmful generics about social kinds is also difficult because even if the generic is negated, the presupposition that *the relevant kind has a distinctive nature or ideal* is not. To reject that presupposition requires an awkward meta-commentary on the conversation, which is unlikely to win friends and influence people, especially because what is presupposed by descriptive and normative generics is rarely consciously thought, and often difficult to consciously articulate. Indeed, it is unlikely that children have the resources to explicitly articulate the more implicit essentialist beliefs that are imparted to them via generics.

Finally, responding to harmful generics is difficult because even if the generic is not spoken or accepted, empirical evidence suggests that it still fosters essentialist beliefs *by merely being considered*.²³ That is, if a speaker says 'Women are submissive' or 'Boys don't cry', the mere consideration of these generics imparts beliefs about the distinctive natures or ideals of men and women and boys and girls.

In short, generics raise interesting and important questions about how we ought to communicate with others about the social world; such questions require a more sophisticated policy than Abstinence Only, and we are not sure what that policy should be. Moreover, generics raise interesting and important questions about how such communication ought to be socially regulated. Adequately engaging with such questions, however, would take us too far from the purposes of this survey essay.

Here, however, is one suggestion. In serious discussion, one thing you might try is asking the utterer of a social generic of the form 'K's are F' what he or she takes the probability is of being an F, given that you are a K. In the case of descriptive generics this helps to change the subject from a shifty generic association, 'Muslims are terrorists' to a clear statistical question 'What percentage of Muslims commit terrorist acts?'. In the case of normative generics such as 'Boys don't cry' it may serve to highlight the unreasonableness of insisting on norms that are more honored in the breach rather than the observance.

IV

Thurber's 1949 article concludes with advice that is at once good, bad and deeply strange:

If you are going to start collecting Sweeping Statements on your own, I must warn you that certain drawbacks are involved. You will be inclined to miss the meaning of conversations while lying in wait for generalizations. Your mouth will hang open slightly, your posture will grow rigid, and your eyes will take on the rapt expression of a person listening for the faint sound of distant sleigh bells. People will avoid your company and whisper that you are probably an old rewrite man yourself or, at best, a finger tapper who is a long way from being all right. But your collection will be a source of comfort in your declining years, when you can sit in the chimney corner cackling the evening away.

Here, as before, Thurber treats generics as a curiosity to be cherished. But generics are much more interesting and important than snowstorm paperweights or porcelain dogs. The simplicity of their surface form notwithstanding, generics are a prevalent and potent linguistic device for transmitting complicated, objectionable and typically false views about social kinds; views which

are difficult to articulate consciously or rebut in conversation; views that have profound and unpleasant implications for how we see others and how we see ourselves.

Still, Thurber is right that paying close attention to generic language in everyday conversation alienates one from one's interlocutors. To notice all instances of objectionable generics about social kinds, including those that issue from our own lips, would require one to miss the meanings of conversations. To even try to adequately respond to such generics, as we have seen, can sometimes be even worse: lying in wait to interject with obscure and off-putting conversational meta-commentary.

At very least, we can say this: the increased understanding of the psychological and social significance of generics helps dispel the myth that eschewing some linguistic forms and adopting others is 'merely symbolic' or 'political correctness gone mad'. Rather, it is a crucial albeit difficult step in changing the way we categorize our social world.

Short Biographies

Daniel Wodak is a PhD candidate in the Philosophy Department at Princeton University. He works on meta-ethics, ethics and philosophy of law. His current research focuses on the varieties of normative standards and the issues they pose in metaphysics, semantics and practical ethics.

Dr. Sarah-Jane Leslie is the Class of 1943 Professor of Philosophy at Princeton University, where she directs both the Program in Linguistics, and the Cognitive Science Initiative. She is also affiliated faculty in the Department of Psychology and the University Center for Human Values. She works at the intersection of philosophy, psychology, and linguistics, studying how we make generalizations about the world around us, how we express these generalizations in language, and how these generalizations relate to stereotyping and prejudice. Her most recent work has focused on the question of why some academic disciplines have much larger gender gaps than others. She is the author of numerous articles in philosophy and psychology and has been a publisher in journals such as *Science*, *Proceedings of the National Academy of Sciences (PNAS)*, *Philosophical Review* and *Journal of Philosophy*. Leslie is the recipient of multiple grants, including that from the National Science Foundation. Her work has been covered extensively in the media, including by outlets such as *The Washington Post*, *NPR*, *NBC* and *The Economist*.

Dr. Marjorie Rhodes is an Assistant Professor of Psychology at New York University, where she directs the Conceptual Development and Social Cognition Lab. Her research examines how people develop abstract conceptual frameworks that underlie their representations of the world. She addresses this question primarily via experimental studies of early childhood development. Rhodes's research is supported by two grants from the National Science Foundation and the Templeton Foundation, and has been published in major outlets including *Proceedings of the National Academy of Sciences*, *Psychological Science*, *Child Development* and *Cognitive Psychology*. Rhodes serves on the editorial boards of *Psychological Science*, *Child Development*, *Developmental Psychology* and the *Journal of Cognition and Development*.

Notes

* Correspondence: Daniel Wodak, Princeton University, United States. E-mail: dwodak@princeton.edu

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² See (Leslie 2013) for a detailed discussion of the concept of psychological essentialism and how it relates to philosophical essentialism.

- ³ As (Sally Haslanger 2011) argues, even if claims like ‘women are submissive’ were true (due to external sociological factors), they are still objectionable because they presuppose and/or implicate a false essentialist view of, in this case, women.
- ⁴ This is particularly true of characteristic and striking property generics; there is less evidence linking essentialism about a kind to the use of generics that attribute common properties to that kind. However, it does seem that *by default* generics about social kinds are understood to ‘hold because of common, inherent features of the members of the kind’ (Leslie 2014).
- ⁵ See, among others, (Atran, Medin, Lynch, Vapnarsky, Ek’ and Sousa, 2001; Sousa, Atran, and Medin, 2002; Waxman, Medin and Ross, 2007; and Gelman 2003). But see also (Olivola and Machery 2014).
- ⁶ For further references, see (Leslie Forthcomingc) *supra* note 32.
- ⁷ For a fascinating discussion of the relationship between biological explanations of homosexuality, essentialism and homophobia, see (Haslam and Levy 2006). And for further interesting discussion of the relation between folk biology and social categories, see (Gil-White 2001; Machery and Faucher 2005).
- ⁸ For our purposes, it does not matter whether traits like selfishness are parts of or manifestations of one’s intrinsic nature.
- ⁹ Of course, this social transmission may involve cues that exploit predispositions. See (Gil-White 2001; Machery and Faucher 2005).
- ¹⁰ It is an open question whether exceptionally strikingly positive properties ever figure in comparable generics; a potential example may be ‘oysters have pearls’. However, the overwhelming majority of examples of striking property generics involve properties that are dangerous or harmful, and so this is where we focus our discussion.
- ¹¹ For historical examples of this phenomenon, see (Leslie Forthcomingc).
- ¹² ‘Swan Bake: Asylum seekers steal the Queen’s birds for barbecues’, *The Sun*, July 4 2003. This example was brought to our attention by Rae Langton.
- ¹³ Haslam (2002) describes essentialist thinking as involving ‘an *ontological* belief that ‘imputes an inherent, identity-determining essence that is shared by all category members and has explanatory force, underlying and accounting for their perceived properties’ (p. 88). It is also worth noting that not all essentialized groups are subjected to prejudiced attitudes, and not all non-essentialized groups are immune from prejudiced attitudes. See also (Haslam and Levy 2006).
- ¹⁴ This is not idle speculation. Presenting children with generics about an activity makes them more likely to downplay the importance of hard work rather than natural ‘gifts’ or talents in explaining success at that activity: see (Cimpian and Markman 2011; Cimpian et al 2007).
- ¹⁵ See, among many others, (Steele & Aronson 1995, Steele 2010, Shih et al 2002). A reviewer noted that some, such as (Stoet and Geary 2012), question the prevalence and magnitude of this phenomenon, at least for gender. However, a meta-analysis, by (Nguyen and Ryan 2008), used 72 studies with almost 5000 participants to find a reliable stereotype threat effect for gender; to undermine this evidence would require 222 new studies with null effects. This is consistent with the results of earlier meta-analyses, such as by (Walter and Cohen 2003).
- ¹⁶ The finding that performance was impaired even after hearing a positive characterization of one’s own group was surprising, but not without precedent. In particular, previous work suggests that highlighting membership in a positively stereotyped group can impair performance, provided that the stereotype is activated in a particularly blatant manner; see (Cheryan and Bodenhausen 2000).
- ¹⁷ Despite their judgments about the relevant prevalence of Lyme disease amongst ticks (33%) and right-handedness among Canadians (60%), individuals who accept the generic ‘ticks carry Lyme disease’ and reject the generic that ‘Canadians are right-handed’ are just as confident that ‘Jumpy the tick carries Lyme disease’ as they are that ‘Joe the Canadian is right-handed’ (Khemlani, Leslie, Glucksburg, 2009).
- ¹⁸ Cohen (2001) proposes that normative generics like ‘Women are submissive’ and ‘Men are assertive’ are explained in terms of a rule (‘if *x* is a woman/man, *x* is submissive/assertive’) and an unpronounced predicate (‘is in effect’). Cohen proposes a radically different logical form for descriptive generics like ‘Tigers are striped.’ To propose that sentences with the same surface form have radically different logical forms is generally a theoretical cost. There are also particular problems with Cohen’s proposal, which are discussed in (Leslie Forthcominga, Forthcomingb).
- ¹⁹ Leslie (2013) considers and rejects several pragmatic accounts.
- ²⁰ For a proposal concerning what the notion of *ideal* might come to here, see (Leslie Forthcomingb).
- ²¹ See also (Machery and Seppälä 2009/2010, and Machery 2009).
- ²² There are also related but more complicated shifted predications that rely on comparisons between the *degrees* to which individuals exemplify ideals. For instance: ‘Margaret Thatcher is twice the man of any Member of Parliament’. Despite being a woman (in the descriptive sense), Thatcher is taken to exemplify the ideals associated with men (in the normative sense) twice as well as any man or woman (in the descriptive sense of either noun) who is a Member of Parliament.
- ²³ See Cimpian et al, ‘The origins of children’s beliefs about achievement: Thinking about the abilities of groups causes 4-year-olds to devalue effort.’

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