



Motivating a Pragmatic Approach to Naturalized Social Ontology

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Abstract

Recent contributions to the philosophy of the social sciences have motivated ontological commitments using appeals to the social sciences (*naturalized* social ontologies). These arguments rely on social scientific realism about the social sciences, the view that our social scientific theories are approximately true. I apply a distinction formulated in metaontology between ontologically loaded and unloaded meanings of existential quantification to argue that there is a pragmatic approach to naturalized social ontology that is minimally realist (it treats existence claims as true or false) but that is ontologically austere. I argue that the extant arguments may be construed in terms of this pragmatic approach. The result is an approach to social ontology that is deflationist about naturalized social ontology.

Keywords Scientific metaphysics · Metametaphysics · Social ontology · Scientific realism · Meta-social ontology

1 Introduction

There is a lively discussion about the plausibility of inferring ontological commitments from our best science (Chakravartty 2017; Ladyman et al. 2007; Ney 2012; Ross et al. 2013), or what we might call *naturalized* or *scientific* ontology. However, these debates focus largely on ontological commitments that come from the natural sciences. Apart from these debates, there is a burgeoning discussion about whether we can extract ontological commitments about the social world from our best social science, i.e. the prospects for a naturalized or scientific *social* ontology (Hawley 2018; Kincaid 2015; 2018; Saunders 2019).

The project of naturalized social ontology aims to constrain ontological commitments about the social world to the posits of our best social science. Hawley characterizes naturalizers of social metaphysics as on a quest for “scientifically determined – or at least scientifically informed” metaphysics (2018, 188). Saunders characterizes naturalism as the view that science can serve as evidence for ontological or metaphysical claims (2019, 139). In line with these definitions, should we want to know whether there are group agents,

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social structures, or other social entities, we should appeal to the posits of our most successful social scientific theories. Naturalized social ontology appeals to the social sciences to determine what furnishes the social world.

However, as a part of the project of naturalized ontology, the social sciences are suspect. First, it is unclear to what extent they are as successful as the natural sciences.¹ Second, they often deal in large scale and ontologically controversial entities—markets, social structures and collective agents appear in some form in the theories and hypotheses of the social sciences.² Thus, given these concerns and controversies, there would seem to be reason for pessimism or at least conservatism about naturalizing social ontology.

Nevertheless, some are optimistic about naturalized social ontology.³ Kincaid (2015; 2018) argues that we can infer ontological claims about race, caste and class from sociological theories about those entities. Saunders (2019) argues that we may infer ontological conclusions from epidemiological studies. Kincaid (2008) argues for realism about structures. Little (2016) argues that we may infer ontological claims about a wide range of social entities by appealing to the explanatory roles of entities in social scientific theories. Thus, several philosophers have defended social scientific realism (SSR).

In this paper, I use these arguments as a foil to motivate a pragmatic approach to naturalized social ontology. Some non-realist accounts of the social sciences have already addressed and negatively appraised the use of abductive strategies to motivate ontological inferences from social science (Hawley 2018). This paper instead brings *metaontological* considerations to bear on these arguments. I argue that even granting that social scientific theories can deploy successful abductive strategies for motivating *existential* claims (statements that use existential quantifiers), we need not infer *ontological commitments* (a commitment to the inquirer-independent reality of a thing) to the posits of social scientific theories, hypotheses and models. My analysis of SSR places me in similar terrain as Hawley. We agree that the role of ontology seems to be concerned with which concepts it would be *useful* to deploy given our goals. Where we differ is in whether we should use the empirical achievements of the social sciences to justify existential claims. While Hawley is pessimistic about drawing ontological conclusions from the social sciences, I believe we can, albeit using a deflationary approach.

The main resource I use is a distinction between different interpretations of existential quantification. Existential quantification may be thought of so that it does not require ontological commitment. By contrast, proponents of scientific social ontology are working with the assumption that if one can infer an existential claim from a theory or model, then we may say that the entity in question *is real*. While this seems like an innocent assumption, there is much debate among metaontologists about the interpretations of existential

¹ The degree of empirical success in the social sciences and its implications for the ontology and scientific status of the social sciences has been a large point of contention. See Elster (2009), Epstein (2015), Guala (2007), Hawley (2018), Kincaid (1996), Northcott (2015), Taagepera (2008) and Harp and Khalifa (2017).

² These entities are ontologically dubious because they depend on the minds of agents and so need not have existence unto themselves. This arises in the debate between methodological (and ontological) individualists and holists. See Zahle and Collin (2013) for an overview of the history of this debate as well as recent innovations.

³ SSR assumes a definition of scientific realism as the thesis that our best scientific theories are true or approximately true. This differs from other approaches to the question about realism about social science and social ontology. For example, Guala (2016) and Ruben (2014), who are concerned with questions about the dependence of the social on the mental and Bunge (1993) who takes realism about social science to be the view that the social sciences can be objective. Moreover, it differs from the realism defined by Currie (1988), which is about the aims of science.

quantification and when and whether it is appropriate to use ‘loaded’ quantification (which comes with ontological commitment) or ‘unloaded’ quantification (which does not).

The distinction between loaded and unloaded quantification allows me to motivate an underdetermination thesis about arguments for SSR. This thesis, which, in Sect. 3, I term ‘pragmatic realism’ (PRAGR), suggests that we may replace any use of a loaded existential quantification with unloaded existential quantification. This has the implication that social scientific cases by themselves, even when they seem empirically successful, cannot motivate ontological commitments to social entities.

My paper proceeds as follows. Section 2 presents proponents of SSR (Sect. 2.1) and introduces some ideas from metaontology (Sect. 2.2). Section 3 then turns to highlight how each of the strategies described in 2.1 may be recast using unloaded existential quantification. It is in this section that I introduce PRAGR and motivate it with an analysis of the existing strategies. Section 4 presents two arguments that highlight favorable features of the pragmatic approach to naturalized social ontology.

2 Scientific Success and Existential Quantification

The focus of discussion about scientific ontology, whether social scientific or natural scientific, is on the central role of theoretical or explanatory posits in epistemically successful sciences. In the social scientific case, we can use these concepts to answer social ontological questions. Social ontological questions can ask about the *nature* of a social entity (is race biological or a social construction?) as well as ask *whether* it exists at all (are there races at all?). These questions are often directed at genders, social structures, social classes and collective or group agents. These are objects of both social ontological and social scientific interest (Epstein 2017; 2018). The pattern of argument I discuss here concerns the latter question. I shall assume it is at least sufficient for pursuing the project of naturalized social ontology to arrive at answers to the question “are there Fs?” by appeal to our best social science.

The question “are there Fs?” may concern different objects. Some social scientifically relevant posits are particulars and some are classes or categories. William Domhoff’s US Ruling Class seems to be a particular. Kincaid (2015) uses this case study to identify a ruling class that operates in a certain time and place. On the other hand, we may also read the question so that it is asking about the existence of predicates rather than particulars. For example, someone concerned with gender might ask “are there women?” and not mean to pick out particulars that satisfy the predicate “women”, but instead intend to identify whether there are properties individuals have that make them a part of a certain grouping.

The following argument presents the naturalizing strategy:

P1. If a working posit P plays a central role in successful science, then there are Ps.

P2. For some working social scientific posit P, P plays a central role in successful social science.

∴ There are Ps.⁴

⁴ Note that this argument stands in contrast to the one examined by Harp and Khalifa (2017), which emphasizes appeals to best explanations.

I focus on “posits” to highlight the components of the theories or hypotheses to which we commit. Specifically, some scientific realists are *selective* realists and argue that we ought to be realists about the *working* posits of a theory or hypothesis (Kitcher 1993; Vickers 2013). There are various ‘central roles’ for posits. For example, ‘central role’ might be understood as relevance or indispensability to a scientific community (Ney 2012). Another might concern successful intertheoretic unifications (Ladyman et al. 2007). ‘Successful science’ hearkens to the miracle argument (Putnam 1975). The first premise seems to suppress the reasoning of the miracle argument, where the success of our best theories is best explained by their truth (so, if a theory or hypothesis is successful, then it is approximately true). However, P1 may be read without a general appeal to abduction and as stated is consistent with Kincaid (2000; 2008), where realism can be settled by details of scientific practice.

Indispensability and unification have appeared largely in discussions about the natural sciences (unification with physics, indispensability for the physics community). I will instead focus on instantiations of this argument in discussions about ontological commitment in the social sciences. I focus on two aspects of this argument. First, I focus on the ‘central roles’ described by proponents of SSR (2.1). Second, I consider how these claims might license inferences to existential claims and discuss existential quantification (2.2).

2.1 Central Roles in Social Science

Let us focus on three ‘central roles’ some have deployed. My goal is to challenge these arguments by highlighting that they underdetermine their conclusions. My thesis is this: for any instance where it seems that we form an ontological commitment to an entity, we may instead avoid ontological commitment. Later (Sect. 3), I formulate this claim in more precise terms. I call it ‘pragmatic realism’ (PRAGR). It relies on a specific interpretation of existential quantification.

Before that, we should consider more carefully ‘successful science’ in the argument for SSR. Some discussions of the social sciences have suggested that some of the social sciences have been sufficiently successful to support the existence of certain posits. The union of a working posit with a central role in that success is what characterizes the different arguments for SSR. While in the traditional scientific realism debate the focus is often on predictive success, many philosophers have felt compelled to use different criteria in the social sciences. This is because the social sciences are perceived as having little in the way of predictive success. So, there are different conceptions of what counts as ‘successful’ that proponents of SSR have deployed.

Here are three roles philosophers have used:

1. Novel predictive success—Some working posits of the theories or models or hypotheses of the social sciences generate novel predictions and so we may infer that their working posits exist (Saunders 2019).
2. Explanatory Power—Some social scientific posits have a great degree of explanatory power. (Little 2016)
3. Measurement—Some social scientific posits are valid constructs (are valid measures). So, we may conclude that those posits exist (Kincaid 2015; 2018).⁵

⁵ Kincaid uses Chronbach and Meehl (1955). On their view, constructs are embedded in nomological nets—or collections of lawlike generalizations that describe the way in which the construct relates to other variables. Hence, Kincaid seems to focus on both converging evidence and causal explanation.

These approaches differ in their emphasis but do not form discrete, non-overlapping categories. Our estimation of the goodness or power of an explanation may be bound up with considerations about prediction (Douglas 2009) and construct validation is bound up with issues related to both prediction and explanation. Nevertheless, each provides a distinct and philosophically important emphasis on aspects of scientific practice that may license ontological inferences.

The appeal to novel predictive success relies on the idea that there are predictions we can generate using models or theories in a non-ad hoc way. An ‘ad hoc’ prediction accommodates the predicted phenomenon into the theory or model (Psillos 1999). Saunders’ argument presents the possibility that some epidemiological results (‘the income inequality hypothesis’) satisfy the conditions for novel predictive success. The core idea, drawn from Wilkinson and Pickett’s (2006) work is that social status structure might play a role in causing health outcomes through individual psychological states.⁶ The income inequality hypothesis posits a set of seemingly unobservable entities, e.g. psychological states and social structures, that provide novel predictions about health outcomes.⁷ Along with the requirement that predictions not be ad hoc, Saunders argues that the two following conditions for novel predictive success are also satisfied by the income inequality hypothesis: the phenomena (data) predicted are a priori improbable (in light of the background beliefs of the scientists) and the phenomenon or data predicted are heterogeneous (new, or unexplained by the current theory or hypothesis).⁸ This, for Saunders, is suggestive of the possibility that “population-level properties can stand in causal relations to individual properties” (p. 154). This may be valuable from the standpoint of social ontology *both* as a challenge to reductionist (individualist) approaches to social ontology and as a basis for a possible ontological commitment. Thus, in answer to the question of whether there are causally efficacious population-level properties, Saunders concludes that there are.

The second central role, explanatory power, focuses only on the ability of a posit to account for a phenomenon. A posit may account well for a phenomenon even if all of the criteria for novel predictive success are not satisfied. One clear proponent of this view is Little (2016),

If we believe that class conflict is a key factor in explaining political outcomes, we can do further sociological research to further articulate what we mean by class and class conflict and we can investigate specific social and political processes to piece together the presence or absence of these kinds of factors. These investigations may give us confidence that “class” exists. (p. 224)

Little earlier expresses concern about predictive success in social science compared to natural science but suggests explanatory power as a basis for realism. Little’s approach has two components: our ability to support hypotheses about class through empirically grounded conceptual explorations and attention to surrounding social and political processes. This approach bears similarities to probabilistic accounts of the logic

⁶ The income inequality hypothesis posits social status structure as a cause of poor health among the poor. Levels of inequality are measured using the Gini Coefficient and epidemiologic data (stress, obesity, rates of diseases, etc.).

⁷ The strict ‘unobservability’ of these entities might be contested—in economic theory, unobservability of preferences has been a point of contention. One might launch similar arguments here. See Hausman (1998).

⁸ The data here are used to predict more data. Using old data, we should expect new data points to fit along a line predicted by the old data. There are difficult issues associated with novel prediction in these contexts that go beyond the purview of this paper. See Forster (2007) for a discussion of data and novel prediction.

of explanatory power (Schupbach and Sprenger 2011). On such approaches, powerful explanations are those that have the capacity to render a phenomenon less surprising. If we equate less surprise with greater confidence in our conclusions, we could derive the following: we ought to infer that there are classes if the existence of classes makes the sociologist's phenomenon of interest less surprising (leaving us more confident). The answer to the questions of whether there are classes would then be that there are.

The appeal to measurement focuses on the production of *valid* measures. Valid measures track what they are intended to measure. Kincaid uses construct validation to argue that there are ruling classes.

... we have reason to think that a system of classification or a specific construct *picks out something real* if it (a) admits of multiple independent measures producing consistent results and (b) the category so measured allows us to identify causal influences and causal effects involving that category ... (p. 197, emphasis added).

Condition (b) bears similarity to the demand for explanatory power, so I will not dwell on that here. Instead, the 'central role' I will emphasize is the possibility of having a *successful measure* of a social entity, where this is determined by identifying evidence that seems to converge on the entity the construct should measure. These conditions, Kincaid writes, "are more concrete instantiations of the Quinean idea that to be is to be [the value of a] bound variable." (p. 197).

Consider Kincaid's case study: Domhoff's (2014) argument for the existence of an American ruling class, a part of which is the existence of an upper class. Several indicators support the existence of an upper class, e.g. evidence drawn from historical case studies, quantitative studies of biographical directories, open-ended surveys of knowledgeable observers and interview studies with members of the upper-middle and upper classes (Domhoff 2014, 7). These data converge and point to the existence of an American upper class. So, there are classes.

2.2 Existence and the Existential Quantifier

Recall: I presented the assumption that social ontology is often concerned with answering, "Are there Fs?" questions about the social world. SSR (social scientific realism) answers this question by appealing to those things quantified over in different social sciences.

Often, it is taken for granted that "There are Fs", when true, expresses the proposition that something is *real*, or that we are ontologically committed to it. Considering this, the conclusion of the argument for SSR would seem amenable to philosophical analyses of existential quantification. I grant that existential claims are licensed by the premises of the argument for SSR, but there remains an issue of how to *interpret* these existential claims.

Let us consider the ways we could interpret existential claims in the argument for SSR. There are at least two candidate meanings for 'there are',

1. 'There are' picks out something *real* (the thing in question has *inquirer*-independent reality). ['loaded' quantification]
2. 'There are' picks out something that plays a role in our conceptual or linguistic framework (we may withhold judgment regarding its ontological status of objects in the domain of the quantifier). ['unloaded' quantification]

These two ways of understanding ‘there are’ present different conditions under which an existential claim is true. If we use the first definition, then the existential claim is true if and only if the value of the individual or predicate variable is something *real*. Using the second definition, the existential claim would be true even in situations where the entities in question were not real. We could infer, for example, that from the fact that I love Sherlock Holmes that I love something. By the first definition, it would seem to be false that I love something, while we could maintain its truth using the second.

These uses of ‘there are’ are tied to metaontological debates about quantifier variance. Those who believe that there is one privileged meaning of ‘there are’ are ‘univocalists’, whereas those who believe that there are multiple candidate meanings (along the lines of the two above) are ‘equivocalists’.

Univocalism is often tied to the Quinean view of ontological commitment (Quine 1948; 1969). The Quinean view assumes that the existential or particular quantifier of first-order logic captures the univocal sense of ‘exists’, i.e. the meaning of ‘exists’ in natural languages. On the Quinean view, we establish what exists by determining what falls under the domain of the existential quantifier. Once we have done this, we have determined what our existential commitments are. The Quinean view is naturalistic in that Quine promotes a picture of philosophy concerned with assisting in scientific theory choice. So, the relevant domains concern those domains of discourse that are of concern to the sciences. When we conclude that something exists, we ontologically commit to a thing in the domain of the relevant scientific theory. Further, Quine (1986) is skeptical of second-order quantification, but a broadly Quinean strategy for second-order quantification is feasible (Bricker 2016). So, a univocalist position might, contrary to Quine’s approach, opt for a univocal sense of ‘exists’ for use in both first- and second-order quantification. On this approach, the values of bound second-order variables (ranging over predicates) also yield ontological commitments. My later discussion, where I reconstruct the reasoning for SSR, accounts for the possibility of second-order quantification as a way of generating social ontological commitments.

Equivocalism has its origins in Carnap’s distinction between internal and external existence questions (Carnap 1950). For Carnap, when we ask internal existence questions, we can ask questions about entities from within our linguistic framework and determine whether they exist according to that framework. When we ask external existence questions, we ask questions about the existence of those entities independently of our linguistic framework. Internal questions about our linguistic frameworks are factual questions, whereas external questions are better understood as questions about the pragmatic benefits of having one linguistic framework over another. Thus, unlike in the Quinean approach, the mere fact that something serves as the value of a bound variable is no guarantee of its *reality* (in anything other than a deflationary sense relativized to our linguistic framework). This opens the possibility for internal and external readings of ‘exist’.

There are multiple equivocalist positions one could imagine. Equivocalists might think that we should, like Quine, pursue answers to ontological questions by way of first-order quantification but remain ontologically neutral about universals and so opt for the unloaded quantifier in the second-order case. One could favor using the unloaded quantifier in the first-order case, but the loaded quantifier in the second-order case—this might be a kind of Platonism or structural realism. There are other possibilities, too. Hofweber (2009; 2016) formulates the distinction between *inferential role* and *domain conditions* quantifiers, which reflect two ways of thinking about ordinary language quantifiers. The former is deployed in those cases where the aim is to enable inferential relationships without necessarily positing the existence of something. Hofweber defends an anti-realism about

numbers by showing that their function in language does not involve committing to their existence. There are still other positions, but I refer the reader to the large literature in metaontology.⁹

I will not follow any of these approaches. My goal is dialectical—I aim to place pressure on proponents of SSR to begin pursuing these questions for naturalized social ontology. To the extent that I assume equivocalism, I do it weakly. I assume only that it is possible to interpret existential quantification used by scientists as loaded or unloaded for either of the first- or second-order cases. My strategy is to offer these readings of existential quantification as logical possibilities that open the arguments for SSR to a deflationary re-interpretation. So, I leave univocalism as a live possibility. It may be the case that, as Thomasson (2015) argues, to say that there are Ps is just to say that the term denoting P has its application conditions satisfied (I favor this as an interpretation of the unloaded quantifier). This would suggest that a Carnapian use of ‘exists’ is the one we should use. Alternatively, it may be that the sense of ‘exists’ we should use corresponds to the loaded quantifier.¹⁰

Before moving on, I want to give an illustration of how the unloaded quantification might apply to a case in the sciences. Scientists frequently deal in entities that they are hesitant to say exist and yet still have theoretical significance. In these cases, existentially unloaded quantification might be a good tool for characterizing this attitude. Consider the caloric theory of heat. Caloric was a material substance posited to be the cause of heat. Because it was posited as a material substance, one would have expected things that were heated to gain weight because they were heated, but numerous experiments went against this prediction.¹¹ Still, scientists maintained a preference for caloric theory. They maintained this preference even though they had the dynamical theory as a competing hypothesis: the dynamical theory of heat described heat in terms of the motion of particles rather than as constituting a substance unto itself. While this hypothesis would have better accounted for experimental phenomena, it had less evidence in its favor and was not as mathematically developed as the caloric theory.

Consequently, the caloric theory maintained its adherents. However, it seems strange to say that they believed the caloric theory is true despite the experimental evidence that suggested that the only way heat could be a physical substance was if it was ‘infinitely rare’ (Psillos 1999, 117). While it certainly seemed meaningful to talk about caloric, scientists maintained a skeptical view about its existence. This hedged view regarding the existence of caloric did not undercut holding onto it for other theoretical purposes, e.g., saving the phenomenon. To capture this, we can appeal to the use unloaded existential quantification—certainly, scientists were skeptical about the caloric theory, in particular its apparent commitment to caloric, but it still played an important inferential role, i.e., it predicted or explained important phenomena. So, even if scientists suggested that they took seriously the reality of caloric, their attitudes do not need to be explained in terms loaded existential quantification.

⁹ For example, Kris McDaniel’s chapter in Chalmers et al. (2009) invokes a Heideggerian equivocalist, Tahko (2015) provides an overview of the discussion, particularly its connection to the Quine-Carnap debate. For treatments of these issues in touch with Carnap’s significance, see Blatti and Lapointe (2016).

¹⁰ Even if there are multiple senses of ‘exist’ we might disagree about their relative importance. Equivocalists may give arguments for thinking that there is a privileged meaning of ‘exists’. Univocalists may instead argue that there is one sense of ‘exists’.

¹¹ I follow Psillos (1999).

In fact, if we interpret scientists’ attitudes exclusively in terms of loaded existential quantification, their attitudes seem less intuitive. Their acceptance of the caloric theory given the range of theoretical alternatives should not entail that they were willing to accept the reality of caloric. If we interpret them in this way, then their acceptance seems puzzling. It seems like saying that caloric was the most probable hypothesis about the material nature of heat, but it is not the case that they believe that caloric exists. If we only have loaded existential quantification at our disposal, then we lack the means of expressing the existential claims about caloric in ontologically less committal terms. One way to capture the greater nuance that we want from our existential commitments would be to allow that scientific statements can, under certain circumstances, be interpreted in the unloaded sense. Scientists could pursue their work but simultaneously maintain a distance from what seemed like the most probable hypothesis regarding the material nature of heat at the time.¹²

3 Pragmatic and Realist Social Ontology

The distinction between the two meanings of the existential quantifier will admit of two philosophically distinct arguments. I shall use ‘ \exists_{prag} ’ to denote the use of existential quantification in the unloaded sense and ‘ \exists_{real} ’ to denote the use of existential quantification in the loaded sense. I refer to these as ‘pragmatic’ and ‘realist’ interpretations of existential quantification, respectively. I allow for versions of these arguments that use first- and second-order quantification. In allowing for second-order quantification, I extend the Quinean strategy of searching for the values of bound variables to the case of bound predicate-variables. This is to capture that social scientists sometimes quantify over individual things and sometimes quantify over classes or attributes. I will consider first- and second-order interpretations when I discuss specific arguments.

There are at least two flavors of argument for SSR we arrive at when we use the loaded and unloaded quantifiers:

Realist argument	Pragmatic argument
P1. If a working posit P plays a central role in successful science, $\exists_{\text{real}}x[Px]$ (or $\exists_{\text{real}}P[Px]$) P2. For some working social scientific posit P, P plays a central role in successful social science $\therefore \exists_{\text{real}} x[Px]$ (or $\exists_{\text{real}}P[Px]$)	P1. If a working posit P plays a central role in successful science, $\exists_{\text{prag}}x[Px]$ (or $\exists_{\text{prag}}P[Px]$) P2. For some working social scientific posit P, P plays a central role in successful social science $\therefore \exists_{\text{prag}} x[Px]$ (or $\exists_{\text{prag}}P[Px]$)

The left-hand argument is the one intended by the proponents of SSR. In the usual discussion, like that of the afore-cited Hawley (2018), we might explore the notions of centrality and success and assess whether cases presented satisfy the antecedent of P1. The first- and second-order existential statements might be read as either “there is an x and it is a P” or “there is a P and x is a member of P”. For the case of second-order quantification, I restrict my interpretation so that ‘x’ is an individual person and ‘P’ as a grouping, structure or attribute that x is a member of, belongs to, or has. Social structures or races are prime candidates for these predicates. Because the arguments discussed here use social classes, races

¹² One could appeal to “acceptance” as discussed by van Fraassen. My proposal suggests a way of positing acceptance but enabling talk about the truth of scientific claims (by giving a deflated reading of their truth).

and social structures as the possible objects of ontological commitment, it is important to disambiguate the first- and second-order cases.

My strategy is to undercut this straightforward scientific realist interpretation of the existence claims presented in the left-hand argument. I grant that the cases discussed in Sect. 2.1 might be relevantly successful, but this may license no more than a pragmatic existential claim. Consider the right-hand argument for SSR, which spells out the same reasoning but uses \exists_{prag} instead. This is broadly Carnapian in spirit: in second-order quantification, we may instead appeal to the use of a concept in our language (those conditions under which it applies). In the context of the arguments for SSR, there is no need to commit to the inquirer-independent reality of races and social structures. In the first order case, if social scientists identify something that seems to satisfy a predicate, we include it in the domain of the quantifier not because it is real, but instead because we have use for it—it applies in appropriate social scientific research contexts. In either case, we may avoid ontological commitment.

Let us consider \exists_{prag} 's deflationary character in greater detail. I will follow Thomasson's account of application conditions. Application conditions are mastered semantic rules of use that do not constitute exact necessary and sufficient conditions, but nevertheless may be applied *correctly* or *incorrectly*. The application conditions for a term do not demand that the referent is fixed by the entity in question, only that the circumstances of its application navigate when the term is successfully applied.¹³ For example, we might say that we can apply the term 'White American' or 'African American' to describe an individual when they give responses on the census, though this is not fixed by the condition that there are such things as White Americans or African Americans. Moreover, being a white American or an African American is not identical with giving a certain survey response—it may only inform when we correctly or incorrectly apply a term.

While Thomasson's view is not equivocalist, her account of application conditions is instructive and provides a basis for thinking about the use of \exists_{prag} . To answer ontological questions using \exists_{prag} is not to posit the reality of a thing independently of our language or conceptual framework. Rather, it is to ground existence claims in our application of terms in our language. So, the important difference between the interpretations of the argument is that the existential claims made *need not* imply ontological commitment in the sense of positing something that goes beyond our linguistic or conceptual frameworks. The appeal to existence need not involve any more than a commitment to the successful application of a concept in the social sciences. We can see this as a kind of conditional acceptance of a posit P given the successful application of P, particularly where the success of an application is a matter of its having played a central role in successful social science.

This suggests the following claim, which I call Pragmatic Realism (PRAGR):

PRAGR: Whenever the argument for SSR concludes in \exists_{real} , we may substitute \exists_{prag} . The resulting ontology is realist in the sense that existential claims can be true (conditional on their assumptions). This allows that we may interpret our theories, models, or hypotheses literally, but they do not imply ontological commitment.

¹³ Thomasson's account prohibits defining the application conditions for F in terms of the existence of F. See Thomasson (2015, 96).

3.1 Novel Prediction and Explanatory Power

Recall, playing a central role in successful social science justifies the inference to statements using \exists_{prag} . Because statements using \exists_{prag} do not require ontological commitment, we would need further premises to justify the inference to \exists_{real} since the same premises are available in each instance. Let us turn to see how this affects the arguments I mentioned in 2.1.

Consider the novel predictive success experienced by the income inequality hypothesis. This hypothesis states that income inequality is a population level factor that plays a causal role in producing health outcomes. The working posit, social status structure, is an important component in the prediction of these outcomes. One's position in a social hierarchy will determine the experiences they have e.g., stress, worry, anxiety, etc. and will then play a role in mechanisms causing health outcomes. The key social scientific posit, social status structure, would seem to be vindicated by its ability to enable novel predictions about other social phenomena. So, we might conclude, social status structure exists. Saunders, in this case, writes, "For naturalistic metaphysicians, the fact that our best scientific theory quantifies over a population-level property (a social status structure) provides prima facie evidence that it *exists*." (p. 153).

While it seems that the existential inference might be justified, it is unclear what motivates the key premise of the argument: that if a working posit generates novel predictions, then $\exists_{\text{real}}S[Sx]$ (there is a social status structure such that those studied belong to it)—it is possible that "exist" should be read as $\exists_{\text{prag}}S[Sx]$. These are *both* senses of "exist", after all, but the argument as written does not rule out $\exists_{\text{prag}}S[Sx]$. So, one might accept the link to \exists_{real} only if there are arguments for believing that \exists_{prag} can be ruled out. But in this case, we lack such arguments. So, we may accept the premise that social status structure is a part of our best social scientific theory but accept $\sim\exists_{\text{real}}S[Sx] \& \exists_{\text{prag}}S[Sx]$. This is because we might say that 'social status structure' *applies*, where the application conditions might incorporate appeals to novel predictive success. For example, it is possible that 'social status structure' applies in part when it can be used for the purposes of generating novel predictions and those predictions are successfully borne out by the evidence.

We may treat the argument from explanatory power for the existence of social classes in the same way. The psychological vocabulary notwithstanding, understanding the logic of explanatory power probabilistically allows for a natural interpretation of the argument in pragmatic terms. To introduce a posit that allows for greater explanatory power allows for stronger inductive inferences to the conclusion that the phenomenon in question would occur.¹⁴ If a posit renders a phenomenon less (or the least) surprising (relative to the alternatives), we may accept that posit as a part of our shared linguistic or conceptual framework *because* it applies in the right way (a part of its application conditions might include how well it is supported as an explanation by the evidence). So, we may concede with Little that investigation of "specific social and political processes" may give us more confidence that "class" exists, but this allows, again, for \exists_{prag} —we can say instead that "class" applies and so we may existentially generalize over it to say $\exists_{\text{prag}}C[Cx]$. That is, if Little intends \exists_{real} , this is not necessitated by the argument as written—we can accept $\sim\exists_{\text{real}}C[Cx] \& \exists_{\text{prag}}C[Cx]$.

¹⁴ These inferences might be understood in Bayesian terms.

The result so far may seem attractive to those who favor minimalist ontologies because it does not require reification theoretical posits, whether they are individuals, classes, social structures, or attributes. But one could argue that \exists_{real} is theoretically useful in the case of measurement. Measures are measures *of* something. If something is a measure *of* something then there is something the measure represents. Finally, if there is something our measure represents, then if our measures are *good* or *successful*, then our that something is represented by our measure. If this objection is sound and existential statements in the argument should be interpreted using \exists_{real} , then there is an exception to PRAGR.

I will respond to this concern, but the arguments about measurement are more subtle and so they will occupy more space in this paper, so I devote the next section to them.

3.2 Valid Measures

The third role I identified earlier (Sect. 2.1) appeals to the role of a posit in measurement—this is the case of metrological success. Recall: Kincaid (2015; 2018) appeals to construct validity as a criterion for the reality of social classes and races.¹⁵ “Validity” in this context refers to whether a construct measures what it is intended to measure. The process of validating a construct involves operationalizing a theoretical concept for use empirical research. The validity of a measure is determined by its corroboration with other measures as well as its consistency with background knowledge and theory. This is determined by means of a holistic assessment of how the measure fits with other measurement results (‘nomological nets’ in which the construct is caught up) (Cronbach and Meehl 1955).

I noted earlier (Sect. 2.2) that a range of evidence seems to converge on the existence of an American upper class and that Kincaid argues the same for the case of the American ruling class. These considerations also appear elsewhere in the social sciences. The existence of race as a social construction seems to be supported by its use in several studies that offer mechanisms that mediate the relationship between race and differences in educational attainment and economic inequality (Ainsworth-Darnell and Downey 1998; Diamond and Lewis 2015; Gradin 2014; Entwisle et al. 2005).¹⁶ Social scientists not only cite inequality as a cause of a variety of health outcomes, but as a cause of homicide, too. In discussions of the validity of the constructs behind measures of poverty, inequality and homicide, there are attempts to determine whether ‘absolute deprivation’ or ‘relative deprivation’ are preferable for representing the relationship between homicide and inequality (Messner et al. 2010).

In cases where we have converging evidence like this, Kincaid argues we can infer something is *real* in the Quinean sense of ‘exists’. But as we saw, there is a deflationary interpretation of existence claims. So, this argument seems to be subject to the same kind of concern I presented before. Why are these quantifiers interpreted in their *loaded* sense right from the start? This is better motivated in the case of measurement, but we need to supplement Kincaid’s argument to see this.

One reason we might infer the reality of the objects of our measures is because scientists might have certain aims, e.g., the measurement of certain quantities (or the detection of certain entities) or to *correct* or *improve* their measures. But if, strictly, there are no such quantities, then scientists would seem to be acting in an epistemically irrational way

¹⁵ See Markus and Borsboom (2013) and Strauss and Smith (2009) for discussions of construct validation.

¹⁶ See Kincaid (2018) for a defense of the reality of race along these lines.

when they structure research practices around the measurement of those very entities or the improvement of their measures of them. For example, Hood (2013) argues that to say that someone possesses an ability assumes that they really do fall somewhere on a scale that reflects their unobservable (latent) ability (p. 755). Moreover, realism may make intelligible how it is possible to be *wrong* about a subject's position in relation to a latent variable (Borsboom 2003a; b). Measures of intelligence locate an individual somewhere along a scale and can be wrong about an individual's placement on that scale. If, strictly, there is nothing being measured, it is unclear how we could be correct or incorrect about where someone is on the scale, so "It would seem that the only natural way of expressing the incorrectness of a measurement is in terms of its difference from a correct measurement" (Trout 1998, 57).

The argument for the theoretical value of \exists_{real} amounts to this: for the putative object of some measure M , if we have a good measure of M , then $\exists_{\text{real}}M[Mx]$ (or $\exists_{\text{real}}x[Mx]$), on pain of rendering research practices unintelligible. Let us apply this argument to social scientific studies about race because they are cases relevant to my main targets: social scientists use measures of race to measure the relationship race has to economic variables like income. Under these circumstances, scientists seem to have an explicitly realist attitude—that there are races and they are causes inequality.¹⁷ However, if race does not exist, it would seem strange to assert that we ever measure race or that it can be a cause. Moreover, if there are no races, then we cannot infer that there really is a causal relationship between race and educational or economic variables. If social scientists denied the reality of race (were anti-realists about race), then they could not take their measures to be *of* race and could not recognize causal relationships between *race* and other variables. This would seem to render their attempts at operationalizing these notions unintelligible. So, the same arguments as those described above might apply to measures of race.

I am not persuaded by this, at least not for the primary cases the argument from measurement for SSR is directed at and so I believe PRAGR survives. Let us consider the case of race again; "There are races" is naturally understood as a second order claim that there exists some grouping R (a racial grouping) to which individuals belong, so $\exists_{\text{prag}}R[Rx]$ or $\exists_{\text{real}}R[Rx]$. The truth of the pragmatic existential claim would not require that we ontologically commit to races, socially constructed or otherwise. Instead, we could say that measures of race allow for the *application* of race concepts. This is intuitive given how social scientific studies involving race are handled. For example, many such studies deploy US Census data where individuals self-identify as a member of a racial group. Intuitively, that an individual identifies as a member of a racial group is not sufficient to conclude that there are races since, presumably, they could identify as a member of a race even if there are no such things (just as someone could identify as a witch even if there are no witches). That is: while measures of race might *apply*, their application does not presuppose their reality.

This result seems natural given puzzling empirical findings. Saperstein (2006) shows that empirical results about socioeconomic status and race differ when social scientists measure race based on self-identification and when social scientists measure race through observation.¹⁸ Rather than commit to the reality of different, potentially competing, race concepts, we could treat these as separate applications of 'race'. So, not only may we

¹⁷ These are not *biological* realist attitudes, but *constructionist* ones. Constructionists argue that race is constructed but real. See Haslanger (2000).

¹⁸ To clarify: the race assigned to an individual by a researcher or interviewer. Saperstein observed differences in reported incomes depending on which measure was used. See p. 65 Fig. 1.

replace $\exists_{\text{real}}R[Rx]$ with $\exists_{\text{prag}}R[Rx]$, the ontological austerity allows us to avoid imputing reality to potentially competing social scientific concepts.

From this point, the same sorts of considerations apply as in the cases of novel prediction and explanatory power. PRAGR suggests that we can substitute \exists_{real} with \exists_{prag} in the case of measurement. We need a reason beyond the role of the concept in successful measurement to add the reality of the thing in question because inferences to statements using \exists_{prag} would already be justified using empirical success. The result is that without a reason to infer the reality of the thing, we may opt for an austere position that avoids reifying social abstracta or committing to the reality of theoretical entities.¹⁹

4 Why Be a Pragmatic Social Ontologist?

In sum, if PRAGR is true, then the project of naturalized social ontology could proceed without ontological commitment (as expressed using \exists_{real}). One might find this view attractive for two reasons. First, it yields an austere ontology that treats existential claims as true. Second, it ties existential claims to our best science, a touted benefit of naturalistic ontologies. To see how these concerns play into broader discussions about scientific ontology consider two arguments I label the ‘argument from robustness’ and the ‘argument from epistemic risk’.

According to Bryant (2020), the robustness of a constraint on an ontology is the degree to which it admits theoretical content into an ontology. To use Bryant’s language, robust constraints are like bouncers at an exclusive club. If our constraints are structured so that only existential statements in the sense of \exists_{prag} are permitted, then it seems like we are barring a significant amount of theoretical content without giving up on the ability to engage in existence talk about the entities in question. Rather, the admissible theoretical content only extends so far as what serves our immediate interest in scientific goals like explanation, prediction and intervention. Consequently, even if the social sciences are much less empirically successful than the natural sciences, the pragmatic ontologist could accept existential claims based on social scientific theorizing.

The argument from epistemic risk appeals to one’s degree of aversion to risky ontological claims (Chakravartty 2017). Statements with lower degrees of epistemic risk are statements that we are more confident that we can test and prove false. Statements invoking the working posits that generate novel predictive successes seem to be less risky in this sense. This is because novel predictive success is not considered mere accidental success. Rather, these successes are systematic and induced by empirical testing. On the other hand, statements invoking posits that we accept for their explanatory power are *more* risky because they may invoke entities for which we have no rigorous tests, but which seem to accommodate phenomena well.

Two considerations about the use of \exists_{prag} are relevant here. First, pragmatic ontology, because it avoids ontological commitment, expresses the highest degree of aversion to epistemically risky statements one can have before denying the truth of existential claims about

¹⁹ The pragmatic approach *might* generalize beyond the social and behavioral sciences to the natural sciences. However, there may be epistemic considerations that justify the traditional realist interpretation of existential claims about the natural sciences. Both the concerns over empirical success and ontological dubiousness mentioned at the beginning might press us to be more cautious in the case of the social sciences.

the posits of scientific theories (this would amount to a blanket anti-realism). Second, pragmatic ontologists seem only to accept statements for their predictive and explanatory power. In this respect, pragmatic ontology offers what is perhaps the key benefit of a naturalistic ontology: the basis of our ontological claims on the results of science.

In sum, pragmatic ontology avoids ontological commitment to a posit and simultaneously constrains the existential claims we accept only to those that serve epistemic interests facilitated by scientific activity, e.g., explanation, prediction and intervention. In evading ontological commitment, it offers a more parsimonious view than the strict interpretation of SSR. This also places emphasis on the good or bad inferential contributions of social scientific concepts directs us to focus more on the details of how a concept promotes what is of epistemic value in social science.

5 Conclusion

In this paper, I propose that SSR may be construed in pragmatic terms, where this entails the use of existential quantification so that it *does not* entail ontological commitment. This suggests that the project of naturalized social ontology should be directed at answering questions about what furnishes the social world not through a concern for what there really is, but instead for what facilitates scientific interests (where this is reflected in the inferential roles of the posits quantified over).

There are paths for future research. First, we should ask: are there justified uses of loaded quantification in the social sciences? Or can PRAGR always undercut an inference to a realist conclusion? Moreover, are there areas of the social sciences more amenable to a pragmatic approach? Recent discussions, like Kincaid (2021) suggest that in economics, in particular the theory of revealed preference, ontological commitment may be beside the point. The unloaded quantifier may better characterize commitment in this case. However, this treatment does not guarantee conclusions for other social sciences and so further investigation may reveal greater variety in naturalistic social ontological commitments.

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