Historical Kinds and Conflicting Functions: An Ontological Framework for the Study of Intersectionality

Abstract: If intersectionality – the important but opaque concept describing the complex interplay of social categories – is a general phenomenon that obtains in non-social contexts, then an account which codifies this general phenomenon will have a number of explanatory merits. This essay resources recent work in naturalistic approaches to ontology, epistemology, and the philosophy of science in order to provide a sketch of such a general account. The core feature of the account is the claim that intersectionality describes the status of an item that participates simultaneously in multiple natural kinds. The types of natural kinds to which an item might belong are many, but the types of kinds that will be of particular interest here are historical kinds, or natural kinds with historical essences. This is because social kinds such as gender and race are plausibly historical kinds (Bach, 2012). The essay argues that biological items, artifactual items, and social individuals can each exemplify the same type of historically-based ontological intersectionality, and that the investigation of this general ontology can illuminate the more contested and oppressive forms of intersectionality.

1. Introduction

Intersectionality has been a central concept in feminist and critical race theory, and it is now gaining importance in the social sciences. However, and as reflected in recent articles on the topic, the concept continues to be both conceptually and empirically remote. It resists clear definition, and it has not been amenable to standard investigative methods (Shields 2008, Nash 2008, Cole 2009, Choo and Ferree 2010). Indeed, the opaque nature of intersectionality may help explain some of its theoretical allure (Davis, 2008). Conceding the complexity of intersectionality, several authors have sought to distinguish between types of intersectionality (see especially McCall 2005, Choo and Ferree 2009). While this is an important project, it remains unclear how one should adjudicate between, or theorize the relationships of, the proposed types of intersectionality.

One way for philosophers to contribute to the study of intersectionality is to step back and investigate whether intersectionality is a general type of phenomena. If intersectionality is a general
phenomenon, then an account which codified its underlying logic and structure would achieve explanatory unification (in the sense of Kitcher, 1989). Moreover, such an account would permit researchers to project information from well understood exemplifications of intersectionality to poorly understood exemplifications. For example, if inferentially grounded by a shared ontological structure, basic and non-social forms of intersectionality might illuminate the oppressive features of social intersectionality.

The goal of this essay is to sketch such a general account of intersectionality. The essay advances a theoretical framework informed by recent work in naturalistic approaches to ontology, epistemology, and the philosophy of science. The core feature of the account is the claim that intersectionality describes the status of an item that participates simultaneously in multiple natural kinds. The types of natural kinds to which an item might belong are many, but the types of kinds that will be of particular interest for our purposes are historical kinds, or natural kinds with historical essences. These kinds are particularly important for a theory of intersectionality because, plausibly, social kinds such as gender and race are historical kinds (see Bach, 2012). The essay argues that biological items, artifactual items, and social individuals can exemplify the same type of ontological intersectionality, and that comparisons between these cases will reveal informative similarities and differences.

The resulting account has several important implications. First, it offers a principled way to distinguish between as well as theorize the relationships between the ontology of intersectionality, on the one hand, and related phenomenon such as intersectional identities and the folk-psychology/folk-sociology of intersectionality. Second, it explains the nature of a type of conflict – one involving conflicting teleological norms – for individuals who participate in multiple historical kinds. Third, the account explains why intersectionality has been difficult to study empirically. Finally, the account nonetheless provides a clear methodological direction for empirical researchers.

2. The problem of Intersectionality

The concept of intersectionality begins with a clear intuition. One’s social position and identity – for example being a Latino Catholic Woman or a Black Male Homosexual – is not a compositional aggregate of the constituent social positions and identities. As Spellman (1985) put it, social/identity categories are not beads that get added to a string. Very likely, being a Latino
Catholic Woman or a Black Male Homosexual – particularly the oppressive aspects of these social positions and identities – is more relationally complex and emergent.

Positive accounts of intersectionality are far less clear. McCall (2005), Davis (2008), and Nash (2008) each point out that, despite the fundamental role of intersectionality in feminist theory and critical race theory, there remains considerable confusion among researchers regarding the nature and dynamics of intersectionality. Many accounts advance metaphors – “intersecting roads”, “reinforcing vectors”, and “anchor points” – but one wonders whether such metaphors succeed primarily in shifting the explanatory burden.

Some researchers have responded to this confusion by making distinctions. McCall distinguishes between three approaches to intersectionality. “Anticategorical complexity” approaches problematize the very categories (e.g., race and gender) that purportedly intersect. “Intracategorical approaches” do not reject the reality of social categories but investigate their intersection through narrative while carefully monitoring the social effects of categorization. “Intercategorical complexity” approaches (which are defined vaguely) make inequality primary and analyze the complex and changing relations between categories. Along similar lines, the sociologists Choo and Ferree (2010) distinguish between “inclusion-centered”, “process-centered”, and “systemic” methodologies for the study of intersectionality.

The above distinctions are important for progress in the study of intersectionality. However, it remains unclear how one should understand the interrelationships between these processes and methods. One danger is that intersectionality’s conceptual opacity has been reified at a more abstract level. Part of the problem, I suggest, is a tacit commitment to the conceptual analysis of intersectionality. If theories are generated and tested by something like introspection, and if the concept of intersectionality is multivocal and unclear to begin with, then we should expect unwieldy theoretical discussion and debate.

One way to get out of this conceptual thicket is to theorize intersectionality within a broader ontological framework. Such an investigation would achieve explanatory unification (in the sense of Kitcher, 1989), but it may also ground inferences from well understood exemplifications of intersectionality to poorly understood and more contested exemplifications. Moreover, a general theoretical framework can offer more principled suggestions for how to understand the relationship between, say, “process-centered” and “systemic” investigations of intersectionality.
3. Historical Kinds and Teleofunctions

The general account of intersectionality that I will sketch in section (4) relies on the notions of natural kind, historical kind, and teleofunction. In this section I develop these notions. In section (3.1) I draw from Bach (2012) in order to explain how these concepts have application in the social domain.

It is because properties consistently cluster together throughout nature that explanatory and inductive practices are successful. “Natural kinds” are the mind-independent property-packets that support successful induction and explanation. In other words, a natural kind is a stable set of correlated properties that can be fruitfully studied. Instances of water reliably exhibit similar color, boiling point, and potential to quench thirst. By observing these properties in a few samples of water, and on account of water’s status as a natural kind, scientists can accurately generalize these properties to unencountered samples. Theoretical categories that do not yield reliable predictions and explanations do not track natural kinds. The “superlunary” category of Aristotelian physics groups together all of the objects outside of the moon’s orbit, but “nothing follows from the fact that an object is superlunary other than the fact that it is superlunary and trivial transformations of this (e.g., it is not sublunary). There is no epistemic pay-off to be had by using this category” (Griffiths, 1999, 171).

On this view, the essence of a natural kind is the organizing source of property correlations – the property(s) that explains why one instance of the kind is non-accidentally like another instance. In the familiar case of water, the source of property correlation is the microstructure H2O: the reason that two samples of water share a similar boiling point is their intrinsic microstructure. But importantly, not all sources of property correlation are intrinsic features of kind-members. Specifically, kinds often manifest property-regularity because of their relational properties. Generalizations that range over such kinds are more exception-prone, and yet they make important

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explanatory contributions. The economic category money, for example, allows for (exception-prone) inductions that would not be available on explanatory schemes restricted to intrinsic properties.

An important class of relational properties around which other properties can cluster are historical properties. Guided by developments in the study of biological species and categories, Millikan, Griffiths, Elder and several other researchers now emphasize the role that historical properties can play in supporting inductive practices. Historical facts about genetic replication and past selective pressures explain why the members of a species, for example, share a phenotypic profile. We can call natural kinds whose members are similar to one another on account of their historical relations to one another “historical kinds”, or “natural kinds with historical essences.”

The primary relations that bind historical kind-members and explain their likenesses are replication and reproduction. If B is copied from A, then B and A share similarities because B is copied from A. Because copying and reproduction are general processes, non-biological kinds such as artifactual kinds can also be historical kinds. Replication refers to processes through which tokens are directly copied from one another, for example, when a genetic segment is copied from another genetic segment. Reproduction refers to a form of indirect replication. This occurs when items are (re)produced from a (historical) model or blueprint. For example, contemporary Honda Accords are like one another because they are produced from a common historical prototype. Or, biological items such as Homo sapiens’ rotator cuffs are like one another and form a historical kind if they are produced from the “instructions” encoded in a segment of the human genome.

Items replicated from lineages that resulted from selective processes possess a teleological function. According to etiological theories of function, a particular trait T is selected for replication, over and against historical alternatives, because of a past favorable effect that T caused for ancestors that possessed T. Once selected, T has the function of causing this effect. For example, human hearts are reproduced from ancestral hearts because ancestral hearts, more so than historical alternatives, had the favorable effect of pumping human blood. “Pumping blood” is thus the

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teleological function of hearts, and we can say of a token heart that was reproduced from ancestral hearts that it is “supposed to” pump blood.

3.1 Social historical kinds

Bach (2012) claims that social kinds – specifically the gender categories men and women – are historical kinds with teleological gender functions. On this view, to be a man or woman is to have the right sort of historical relation to an even more fundamental historical kind – a replicating gender-system.4 Gender systems are homeostatic. They feature components and processes that are stable and support induction (but they are not impervious to change). These components plausibly include binary sexual categories, conceptual gender-dualism, gender-identity, binary gender socialization practices, social and legal institutions, binary gendered artifacts, and binary gender roles for individuals.

But in what sense is this system historical or teleological? Bach claims that cultural reproductive and selective processes (as opposed to biological reproduction and natural selection) account for the historical and teleological aspects of gender:

“We can determine the teleological function of a gender-kind by its past favorable effect towards the stabilization of the gender-system, this favorable effect accounting for the reproduction of members of that kind. For example, the binary structure of sexual categories was culturally favored over other structures (ternary, quaternary, etc.) because it better comported with other gender dualisms, thereby stabilizing the gender-system. On the other hand, a structure of five sexual categories that is inclusive of (biologically real) intersexual categories does not contribute to, and in fact destabilizes, the structure of interdependencies within a gender-system. For this reason, intersexual categories have been culturally selected-against. Various institutions, including the family and medical professions, carry out this selective process by marginalizing intersexuals and in many cases surgically re-assigning intersexuals as either male or female. This makes clear one sense in which sex is “socially constructed”. The sexual categories male and female are to play specific roles within a historical, replicating system. Calling a baby “female” is prescriptive because it indicates, in reference to historically defined norms, how this individual is supposed to interact with other components of a socially replicated system. There is no such historical role for intersexuals. (Bach 2012, p. 252)

4 Compare: For the biological essentialist, to be a man/woman is just to have certain sexual properties. For Haslanger’s social objectivism, to be a man or a woman is to be privileged/subordinated on the basis of perceived or imagined possession of sexual properties. See Bach (2012, Section VI.) for a comparison between gender qua historical kind and competing views.
Applying this approach to the selection of gender-roles, Bach maintains that differences in social hierarchy, division of labor, personal and interpersonal characteristics, and body management explain the historical contribution of men and women to the historical gender system:

We can assume that ancestral males and ancestral females exhibited a range of social and behavioral traits. Among these competing gender-role cultural variants, sexed-individuals who exemplified [gender] properties in conformity to the dualisms that structure a gender system acted to stabilize that system more than individuals who did not exemplify these properties. If these gender-roles were culturally reproduced on account of this stabilizing effect, we can conclude that they were culturally selected-for. On the etiological account of functions …the binary sets of [gender] properties constitute the teleological functions of men and women.

Various cultural mechanisms favored these gender-roles and explain their frequency in a population. Mackinnon, Lerner, Acker and others have made clear that many institutions are inherently structured so as to exclude women in the allocation of status and power; gendered individuals – specifically women – often exemplify gender-role properties under coercive conditions. Coercion can also be more subtle. Women are looked at more often than men. The objectifying effect of the male gaze often leads to self-objectification, which in turn causes women to adopt a stricter regimen of bodily-presentation. More generally, institutions socially reward sexed individuals who conform to gender-role properties and punish individuals who fail to conform. (Bach 2012, pp. 255-256)

An important question for this view concerns the process through which individuals become members of these historical gender kinds – how they come to have a participatory relation to a historical lineage of men or women and thereby acquire a teleological gender function. Consider that deposits of steel come to participate in the historical kind Honda Accord Transmission if they are pounded and molded according to a historical design. Analogously, individuals gain a participatory relation to a historical lineage of men or women if they are recruited and trained primarily through social conditioning to play a historical gender role:

While biological sex marks an individual as target for particular ontogenetic processes, membership in a gender lineage does not require membership in any particular sexual category. It is possible, and perhaps actual, that males have been made reproductions of women and females made reproductions of men, provided they underwent the relevant ontogenetic processes. For example, David Reimer – a
biological male socialized as a woman – might be construed as a woman on this analysis.

But here is where the importance of the historical-kind approach comes into focus. For an individual to be a woman is not for her to exemplify the four properties that constitute women’s historical gender role – to be subordinated, tender-minded, present her body according to the norms of the fashion-beauty complex, and perform more housework. To be a woman, rather, is to be a reproduction of a historical lineage, in which case one is only supposed to exemplify the features of the historical gender-role. If a particular female has undergone the ontogenetic process through which one exemplifies a participatory relation to a lineage of women, then even if she fails to exemplify any of the properties of women’s historical gender role she is still a woman because she has the right history. The converse of this point is that an individual who exemplifies all of the properties of women’s historical role but who does not descend from women is not, in fact, a woman. This is true of “swamp-woman”, a gender variant on the familiar thought experiment. If a lightning storm were to strike a swamp and create a being that perfectly exemplified the properties that define women’s historical gender role, swamp-woman would not be a member of the historical kind woman because swamp-woman does not have the correct history. (Bach, 2012, pp. 260-261)

The resulting view of gender offers a realist ontology while preserving the intuition that gender has a core social rather than biological component. Moreover, the account theorizes changing gender roles (and gender egalitarianism) as compatible with the preservation of the kinds men and women.

We should also view this account as a general schema for social kinds. The core explanatory features – cultural reproduction and selection, teleofunction, historical social systems, and historical social roles – are general and plausibly apply to other social kinds such as race and class.

4. Ontological Intersectionality as a General Phenomenon

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5 For an account like this it is important to distinguish between etiological and evaluative senses of normativity. As Bach notes, “The type of normativity that attaches to an item in virtue of its teleological function is not equivalent to, and often in opposition to, evaluative and prescriptive norms. The teleological function of a virus is to spread and infect, and the teleological function of a Cruise Missile is to deliver a warhead. But we would not say that a virulent virus satisfies the evaluative and prescriptive norms of human health, and it is debatable whether Cruise Missiles satisfy evaluative and prescriptive norms. Similarly, the statement that women, on account of their teleological function, are “supposed to” perform a historical gender role is neither evaluative nor prescriptive. The semantic sense of normativity that follows from the historical analysis of gender is elliptical for a description of the causal relationship between an individual, with a certain ontogenetic history, and a system of social interdependencies, with a certain phylogenetic history. This is an empirical norm, discoverable through investigating historical relations, although it is likely explanatory of many of the felt pressures of everyday gendered life.” (2012, pp. 257-258)
The above discussion of natural historical kinds makes possible a general ontological account of intersectionality. On the account I will sketch here, “ontological intersectionality” will describe the status of any item or token that participates simultaneously in multiple natural kinds. By “participation” I mean an item’s occurrent membership in a natural kind.

Depending on the domain and one’s explanatory interests, there are often several induction-supporting but cross-classifying taxonomies. For example, functional biologists use a morphological concept to explain the structural development of the bivalve mollusk’s hinge, and evolutionary biologists use a phylogenetic concept to explain historically the adaptive purpose of the same hinge. Kitcher reports that “neither mode of explanation is more fundamental than the other” (Kitcher 1984, p. 321). Recognizing both structural and historical kinds, the mollusk’s hinge belongs to at least two natural kinds and thus exhibits ontological intersectionality.

There are more interesting types of ontological intersectionality, however. Consider biological tokens that have distinct teleological functions. Jeffery (1999) discusses “moonlighting proteins” that have multiple functions (e.g., the function to sense change in the organism and the function to produce a certain reaction). Or more prosaic, the hair atop a human head has both the function to regulate temperature and to protect the head from ultraviolet rays. It is debatable whether such tokens – a certain protein, or a strand of hair – would be members of distinct historical kinds. However, they are members of distinct teleological natural kinds (for a discussion of the relation between historical kinds and teleological kinds see Griffiths 1997, pp. 213-216, and Bach 2012, pp. 261-262).

Ascending in intersectional ontological complexity, now consider artifactual kinds. I will assume that artifacts such as egg-beaters and Honda Accords are members of historical kinds and acquire their teleological functions according to the processes sketched in section (3). Now, an interesting form of ontological intersectionality occurs when a biological historical kind becomes, in addition, an artifactual historical kind. There are many examples: aloe, tobacco, the flight behavior of carrier pigeons, sturgeon roe, and so on. In addition to belonging to distinct historical kinds, these items also possess distinct, often conflicting, teleological functions. For example, the biological function of sturgeon roe is to become fertilized and develop into sturgeon larvae, and the cultural-artifactual function of sturgeon roe is to symbolize class and luxury and feed fine-diners. Is there a “conflict” between these functions? At a minimum, there can be conflict in the sense that the item – in this case the sturgeon roe – cannot perform both its bio-function and its artifactual/cultural
function: sturgeon roe cannot become sturgeon larvae if they are ingested by humans at fancy restaurants! When we consider animals that are more cognitively sophisticated, the nature of this type of conflict may have an experiential and/ or social component as well.

Yet another type of ontological intersectionality occurs when artifacts have several cultural functions. This is true of tires that are swings and purposive items (books or bowls) that acquire decorative functions. We should also investigate here whether nested artifacts and more generally nested historical kinds count as intersectional. On a liberal view of natural and historical kinds, 2012 Honda Accord Coups form a historical kind which is nested in the more general historical kind 2012 Honda Accords. As several philosophers have noted, this type of ontological overlapping creates metaphysical problems (for example, the problem of coinciding objects – see Rea 1997 and Elder 2004). Future research might investigate whether such problems echo, or have interesting analogues in, the problems of social intersectionality.

4.1 Social Intersectionality.

I hope that the above discussion is sufficient to show that ontological intersectionality is widespread. I now argue that this same type of ontological intersectionality is found throughout the social domain as well. Putting the matter simply, each of us is a member of very many social historical kinds. In the same way that an artifact can be recruited to play multiple historical roles, individual persons can be recruited to play multiple historical social roles. In the same way that an intersectional token artifact has multiple (perhaps conflicting) teleological functions, a socially intersectional person has multiple (perhaps conflicting) teleological social functions. For example, if there are historical race, religion, and gender systems, then someone’s ontological status as a Latino Catholic Woman refers to that person’s (three) ontogenetic relations to (three) historical social systems.

A theory of intersectionality should address the interaction between social variables, and it should also suggest a methodology for the study of the interaction between social variables. The account on offer describes interacting variables at an ontological level (although it has important implications for the oppressive and experiential components of intersectional identity which are discussed below). For any person who is socially intersectional, there is a fact of the matter as to the histories of the systems to which one was recruited to play social roles. There is also a fact of the
matter as to the historical interactions between these systems. Of course, these facts may be difficult to uncover. Nonetheless, the recommended methodology would be a historical study of interacting social systems (systems that are likely structurally analogous to the gender system described in section 3.). A distinct but related methodology would involve the study of the relationships between teleological norms that result from ontological intersectionality. The nature and types of conflicting teleofunctions for biological and artifactual items is currently not well understood. The nature of conflicting social teleofunctions is even less well understood. A codification of the different types of incompatibilities between teleofunctions may shed light on the oppressive features of social intersectionality. This in turn could shed light on the nature of intersectional identities.

I suspect that incompatibilities between the teleofunctions of historical roles are routinely misunderstood or ignored by folk-psychologists and folk-sociologists. For example, it is far from clear that attitudes towards Black Men appreciate the incompatibility between the historical racial role of social subordination and the historical gender role of social privileging. Given the proposed ontology, we can say that the folk’s normative expectations for intersectional behavior are unlikely to correspond to actual norms as grounded by actual social histories, and where intersectionality is recognized it is likely perceived as “additive” rather than relationally complex. Widening the scope of our analysis, the institutional processes through which social systems slot individuals to play historical roles are premised on the identification of superficial markers such as skin color or sexual properties. As such, they are also generally insensitive to the intersectional and conflicting nature of social teleological norms. This disconnect between the ontology of intersectionality, on the one hand, and the confused folk-psychology and sociology of intersectionality, on the other hand, likely informs certain aspects of intersectionality identity and is also one way that intersectionality is oppressive.

5. Conclusion

Intersectionality is a pervasive and general ontological phenomenon that involves an item’s simultaneous participation in multiple natural kinds. Understanding social intersectionality in the context of this broader ontological framework may help address persistent confusions that frustrate current debates in feminist and critical race theory. The account offered here is only a sketch, but if it is successful it will indicate fruitful directions for future research.
In conclusion, I want to remark briefly on how the historical kinds approach explains why social scientists are mostly unsuccessful in the empirical investigation of intersectionality. The special sciences admit of more exception-prone generalization than the so-called hard sciences. According to Millikan (1999, 2000), this is because the special sciences target historical kinds, and generalizations that range over historical kinds are more exception-prone than generalizations that range over non-historical (“eternal”) kinds. The exception-proneness of historical kinds occurs because “the copying processes that generate [historical kinds] are not perfect, nor are the historical environments that sustain them steady in all relevant respects” (Millikan 2000, p. 24). But what makes these copying processes so imperfect and these historical environments so unsteady? I suggest that a primary reason for imperfect copying is the intersectional status of the individuals that are subject to multiple copying and reproduction processes. An item that participates simultaneously in several historical kinds cannot be faithful to the reproductive machinery of any particular kind. This is especially the case in the social domain. For example, if all philosophers were members of no other social kinds, then the institutional processes that reproduce philosophers would be more effective, in which case generalizations about philosophers would be more reliable. Or, if all philosophers were members of the same set of additional social historical kinds, then the cultural processes that reproduce philosophers would be more consistent, in which case generalizations about philosophers would be more reliable. Of course, neither of the antecedents of the above conditionals is true. While the institutional processes that reproduce philosophers do so with enough precision to ground rough generalizations, it is the ontological intersectionality of philosophers that ensures the unreliability of these generalizations. It is in the nature of intersectionality to be difficult to study empirically.
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