



Taking Responsibility for Human Kinds

On Social Scientific Objects and Norms of Discourse

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I. Introduction

“Das Verhältnis des Menschen zur Sprache ist in einer Wandlung begriffen, deren Tragweite wir noch nicht ermessen.”¹

“The relationship of humans to language has entered a state of flux whose momentousness we do not yet comprehend.”

Martin Heidegger

When the above words were written by Martin Heidegger, in the aftermath of the Second World War, the relationship humans had with discursive practices was changing. From new methods of information transmission to new theories of structural linguistics coming out of the United States, Heidegger recognized that both the way language was employed and digested was in rapid transition. Indeed, in recognizing our lack of knowledge on the scope and importance of these changes, Heidegger contended that what our language signifies might change along with it—and indeed our lack of comprehension points, as it often does for him, to a lack of comprehension of meaning, and how meaning functions and is constituted. Indeed, in the nearly 50 years since his death, we have seen major shifts in who and what counts in the making of meaning, resulting in dramatic social conflicts, many of which are raging more fiercely than ever.

Nowhere are these ambiguities more visible or impactful than in questions of self-identificatory practices: when it comes to questions of identity *qua* identity, there has been a remarkable proliferation (and disappearance) of ways and names to conceptualize the self, as exemplified by many prominent but relatively novel descriptors of sexual orientation and gender. These have arisen, at least in part, to supplant older, pejorative labels—‘a queer’ has become Queer— a new, fuller kind of person with new rights, duties, and moral attributes. While sexual orientation and gender along with their attendant labels are particularly hot-button issues in the Western world, they are far from the only new identificatory descriptors that have become contested in public discourse; Michel Foucault, for example, famously analyzed the construction of many social types as methods of control.

¹ Martin Heidegger, *Hebel: Der Hausfreund* (Pfullingen: G. Neske), 1965, 28.

Although the histories of various historical and contemporary ‘types’ were investigated with singular vision by Foucault, there is perhaps no conception of social-scientific objects, especially of how they interact with discursive practices, as enduringly relevant as the late Ian Hacking’s. His insight is exemplified by his discussion of Multiple Personality Disorder (MPD) in *Rewriting the Soul*, wherein Hacking observes that categorizations that have only recently come into existence are often retroactively applied to past experiences and practices. In doing so, he endorses a tentatively linguistic explanation of MPD, claiming that “The soul that we are constantly constructing we construct according to an explanatory model of how we came to be the way we are.”² In this case, at least, the self and identities applied to it are considered historically constructed entities that follow historical explanations.

For Hacking, the explanatory model we use is here influenced by the experience of being such a ‘soul,’ (a term used by Hacking to avoid the values with which modern Psychiatric jargon is laden) wherein “[t]here is the occasioning cause, child abuse. And there is the innate tendency of some children to dissociate to a great degree and thereby have a special way of coping with trauma.”³ In other words, while there are experiences of child abuse *and* experiences of dissociation as a coping mechanism, the coupling of these phenomena as causally bound and productive of the *multiple personality type* is not self-evident or strictly logically necessary; it emerges from the socially and historically-determined processes of psychiatry. Thus, the experientially particular and the broadly social interact with each other’s histories- generating new kinds of knowledge and people and beginning the naming game all over again. Indeed, the experience of the social reality of being tagged a Kind, especially when it is integrated into a subject’s identity, is then an influence on the discourse around that Kind, leading to the mutation of old Kinds and eventually the creation of new Kinds.

In *Rewriting the Soul*, Hacking draws out a model of how classification and behavior shape one another- which he calls, among many other things, dynamic nominalism. Under this theory, the conceptual architecture through which we interpret the objects that humans bring in and out of existence influences that very process of making and unmaking. In the case of psychiatric illness, the objects being created and undone include kinds of selves. This can, in turn, influence the subjective bases upon which naming practices function- beginning the cycle

² Ian Hacking, *Rewriting the Soul: Multiple Personality and the Sciences of Memory* (Princeton, NJ: Princeton University Press, 1995), 95.

³ *Ibid.*

all over again. For example, Hacking claims that “The concept of child abuse may itself be so made and molded by attempts at knowledge and intervention, and social reaction to these studies, that there is no stable object, child abuse, to have knowledge about.”⁴ The general idea, here applied to multiple personality disorder, can apply to all sorts of labels humans give themselves. While Hacking believes that this model of nominalism applies to what he broadly terms ‘Human Kinds’, this model doesn’t apply to so-called ‘Natural Kinds.’

This division is facially intuitive: Hacking’s paradigmatic example of a Human Kind is someone diagnosed with multiple personality disorder, but many others fall under this label. From carjackers to Caucasians, there are certain descriptors that we would and could never apply to the world of nature, but which are distinctly useful in categorizing ourselves, chiefly in the realm of the moral. Natural Kinds are, on the other hand, extant in stable reference to the natural world. For example, Argon may be a name we’ve given to a very stable kind of atom- but the structure we call Argon would exist distinctly from other atoms regardless of the name we give it. So, it seems that we have a tidy theory here; Human Kinds are fundamentally nominally determined, changing with the value-laden descriptions we give them, whereas Natural Kinds are stable- not built by humans on other humans. This distinction explains why the social sciences have such a difficult time pinning down stable subjects of investigation, and why epistemological democratization, or the spreading of social scientific knowledge to popular discourse, has a destabilizing effect on identificatory practices. Hacking calls this destabilization the ‘Looping Effect’ of Human Kinds, and it is perhaps the most defining characteristic of the modern social scientific category as it has entered discourse.

Yet Hacking’s distinction, interesting and useful as it may be, has been justifiably criticized. One particularly interesting critique is raised by Rachel Cooper. She claims that even if Human Kinds include subjective aspects, with moral claims and questions of personal identity bound up in their construction, they are still natural objects that follow a natural explanation. While it is perhaps true that Human Kinds affect behavior and vice-versa, Cooper claims that “...it is also true that only bacteria are affected by antibiotics, and that only domestic animals can be selectively bred. But no one would cite this as evidence that ‘bacterial kinds’ or ‘domestic animal kinds’ are not Natural Kinds.”⁵ Just because Human Kinds are changeable via human

⁴ Hacking, *Rewriting the Soul*, 61.

⁵ Rachel Cooper, “Why Hacking Is Wrong about Human Kinds,” *The British Journal for the Philosophy of Science* 55, no. 1 (March 1, 2004): 73–85, 79.

knowledge and behavior, is not, as Cooper points out, a convincing reason to hold that they are *unnatural*. Much of her paper boils down to the argument that Hacking must find a purely mental characteristic or feature upon which a stable distinction between human and Natural Kinds can be based, and she argues that he cannot. After all, for Human Kinds to be distinct from Natural Kinds, there must be something about their humanness that makes them distinct from everything else in the world, and this cannot be simply assumed.

While Cooper remains agnostic on whether Human Kinds could be constituted differently from Natural Kinds, she argues that the mix between scientific object and social category that Hacking calls the Human Kind does not produce the sort of changes that would distinguish that sort of category from Natural Kinds. She claims that while there are some things that are purely mental, and arguably Human Kinds, but that all Human Kinds surely are not contained to the head. Thus, Hacking's Kinds lack an exclusively subjective grounding, among other issues. Cooper's critique concentrates on a component of Hacking's Kinds, idea-dependence, that is, as she says, not able to produce the distinction that we need for human and Natural Kinds to constitute a constitutionally separate sort of scientific category. Because there is always a real referent for any sort of category in social science, Cooper believes they cannot ultimately be grounded in the world of human relationality. Cooper believes that just because Human Kinds loop, this cannot retroactively be applied as proof of an untenable distinction.

Responding to Cooper's claim, in this paper I claim that Hacking does not need to demonstrate that something like multiple-personality is entirely subjective, and that the criteria that might lead us to classify Hacking's Human Kinds as Natural Kinds can also be used to illustrate their profoundly intersubjective, and thus strongly idea-dependent nature. In other words, I will argue that Cooper has misidentified the characteristically human element of Hacking's theory of Human Kinds, which is the fact that they are not immediately instantiated as real, non-relational changes in the world, but in the intermediate and idea-dependent realm of discourse. In doing so, I attempt to shift the space in which we conceptualize Kind discourse back to an interpretation that I believe is closer to the original concept as it has been historically articulated, but which acknowledges that moral values couple with social-scientific objects in popular discourse along certain normative axes. Cooper argues that the subjective values attached to Human Kinds are simply a derivative process of those fundamentally natural objects passing, like species or sunsets, through human discourse. I disagree, and side with, but also go

beyond Hacking's original position, to claim that the facts of the physical world and our affective responses to them are relationally paired through active human intervention, specifically according to sometimes contested and unstable discursive norms. This, I argue, is what enables the Looping Effect.

This paper is divided into five sections: First, I provide a definition of Hacking's Natural Kinds and an explanation of the tradition that got us to Hacking. Second, I provide an elaboration of Hacking's conception of Human Kinds. I then introduce Cooper's critique and follow it up with a separate section which includes responses to that critique and other scholars' views on the subject. Lastly, I provide my own understanding of the nature of such debates and propose a more ethically and normatively sensitive construct which allows for the expression of the full richness of human subjectivity in morally charged objects, scientific or otherwise.

In putting forth this normative-discursive understanding of Human Kinds, I will argue that the relationship that enables the feedback we see in Human Kinds is most critically if not entirely implemented in discourse. This entails that Human Kinds are composed not only of a real and subjective component but a third, binding discursive norm that sustains them as categories. These Human Kinds are generated by the physical world and a subject's ideas, but also implemented as normatively structured couplings. I conclude by setting out the ideal conditions for addressing looping effects and argue that both Hacking and Cooper fail to recognize that the reason Looping Effects effect Human Kinds is not because they are constitutionally incapable of stability, but because the norms that we use to create and understand them are somehow deficient. Since the coupling of natural objects and moral judgments is normatively governed, the way in which we construct those norms is more responsible for looping effects than any inherent property of either Natural or Human Kinds.

II. Defining Natural Kinds

From Mill to Russell

To distinguish between human and Natural Kinds, it is necessary to have a somewhat stable description of a Natural Kind. Indeed, Hacking proposes the concept of Human Kinds to explain why certain objects of scientific study do not follow the same formative and transformative processes and logic as Natural Kinds. There is, however, no readily available consensus definition thereof upon which we can rely. In fact, there is quite a lively debate as to what Natural Kinds are, how they function, and whether they are a useful concept at all. Furthermore, since as Cooper points out, Hacking works largely by example, he does not supply us with a concrete definition of *his* conception of Natural Kinds and would stop using the term by the turn of the 21st century.⁶ In the following subsections, I will outline four major moments in the philosophical tradition that birthed Natural Kinds as Hacking understands them, arriving finally at his position.

Happily for our project, there are certain characteristics that Natural Kind theories almost always share: they generally purport to theorize about the classifications that humans give to things that are at least *perceived* to be natural, or as objects of natural-scientific study. Although indebted at least historically to the Aristotelian method of categorization, the first scholar to whom the term ‘Kind’ is usually attributed is John Stuart Mill, who although not using the term in conjunction with the qualifier natural, “aimed to explain what it is that constitutes the naturalness of scientific classifications.”⁷ Hacking traces his conception of Natural Kinds back to Mill, explaining in *A Tradition of Natural Kinds* that “J. S. Mill introduced the word ‘Kind’... at the height of debates about the biological species.”⁸ While there are certainly antecedents to Mill’s conception, since Hacking begins here, it is fitting that we too begin our genealogy here too.

In *A System of Logic*, Mill first introduces the term ‘Kind’ in a biological context, stating that “the proximate (or lowest) Kind to which any individual is referrible, is called its species.”⁹ In this text, we see Mill refer to Kinds as a “logical species;” logical objects which include all

⁶ Cooper, “Why Hacking Is Wrong about Human Kinds,” 77, footnote.

⁷ Olivier Lemeire, “The Scientific Classification of Natural and Human Kinds” (thesis, 2015), 24.

⁸ Ian Hacking, “A Tradition of Natural Kinds,” *Philosophical Studies* 61, no. 1–2 (February 1991): 109–26, 111.

⁹ John Stuart Mill, *A System of Logic*, vol. 1, 2 vols. (Project Gutenberg, 2008), 98.

things that share a certain set of properties and exclude none. This picking out of real features is intimately bound up with what Mill believes to physically exist in objects- their features- and how those fit into logical categorization. So, while Mill's Kinds are not generated from nature in the same way we might consider a strict scientific realist might consider atoms to be (had Mill known about atoms), they were constructed with an orientation towards nature and the natural sciences. Furthermore, the emphasis put on their logical roles makes their metaphysical status a question of what one takes logic itself to be. If one is a constructivist about logic, then one is likely to interpret Mill as a constructivist, and so on.

What is clear is that, at least in this work, the logical construct Kind is supposed to be applied to nature, with Mill writing that “[e]very class which is a real Kind, that is, which is distinguished from all other classes by an indeterminate multitude of properties not derivable from one another, is either a genus or a species.”¹⁰ The link between Kinds and Hacking's modern conception of Natural Kinds is thus clear even in Mill's *Logic*. Even in the barest definition of a ‘real Kind’, there is already a great deal of biologizing and naturalizing taking place- and indeed Kinds, as we know them today, cannot be cleanly separated from this naturalist pedigree.

Furthermore, in (re)introducing to philosophical discourse a debate over the categorization of nature, Mill drew both on essentialist arguments- such as the inherent characteristics of specimens and what we might now call a logical-syntactic view that “the regulative principle of all classification...” is to “...enable us to assert true and general propositions.”¹¹ In other words, Mill's view that Kinds are based on materially extant natural properties that allow us to form logical categories is a view that would introduce both essentialist and more idealist tendencies- which are today still in tension with one another. It also means that in tracing back our view of Mill's Kinds, one must be careful not to project their instincts on the metaphysical status of Kinds- because there is significant room for interpretation depending on one's reading of Mill and his successors. The important thing here is that it is not the properties of physical objects themselves that give us answers as to whether they will be projectible, i.e. stably employable, in a scientific system, but rather, Whewell writes that “the condition which regulates the use of language, is that it shall be capable of being used ; that is, that general

¹⁰ Mill, *A System of Logic*, 100.

¹¹ William Whewell, *The Philosophy of the Inductive Sciences: Founded upon their History*, Cambridge Library Collection - Philosophy (Cambridge: Cambridge University Press, 2014), 469.

assertions shall be possible.”¹² It is rather projectibility, or the relevance for systemic stability *for humans*, that determines classification. Thus, the stability of categories is a linguistic issue for Whewell, not a matter of what is being classified *per se*.

One 20th century successor, Bertrand Russell, endorses a view quite similar to that of Mill and Whewell, claiming that “The essence of a ‘Natural Kind’ is that it is a class of objects all of which possess a number of properties that are not known to be logically interconnected.”¹³ In other words, we see that there are certain sets of features exclusive to certain things, and we use those shared feature sets as logical objects, i.e. Natural Kinds. These Kinds are considered coherent because they are projectible, or in other words “predicates... that can be used for inductive inferences.”¹⁴ This is a departure from Mill in that it relies almost entirely on the ‘logical-syntactical’ side of Mill’s argument but is still largely in line with his conception of Kinds on a practical level. However, the locus of Natural Kinds is, in all these thinkers, from Mill to Whewell to Russell, to be found in linguistic or logical practices, variously. Other philosophers such as W.V.O Quine continued in the traditional insistence on the logical character of Kinds, and it was not until the 1970s that a true alternative began to emerge.

Kripke, Putnam, and Essentialism

The next major innovations in the Kind-speak that Hacking considers are more than a hundred years later, produced by Saul Kripke and Hilary Putnam. While their theories differ in some major aspects, rather than focusing on the semantics of kinds these two scholars prioritized their essential nature.¹⁵ Namely, they both introduced influential theories that hold, roughly, that Kinds are common names, and that they derive their meaning and cohesiveness not through a process of reference to the world around us or from their names themselves, but via inherent, essential features. In other words, Natural Kinds are descriptive only *a posteriori*. While a focus on description in Kind-speak is not explicitly scientific, it does lend itself again to application within scientific fields like Biology, which use description to pull out certain sets of features from the natural world as classifications. What Kripke and Putnam claim is that pure descriptivism is naive when it comes to Natural Kinds- and that “membership in Natural Kinds,

¹² Whewell and Parker, *Philosophy of the Inductive Sciences*, 454.

¹³ Bertrand Russell, *Human knowledge, its Scope and Limits* (Simon & Schuster, 1948), 335.

¹⁴ Lemeire, “Scientific Classification of Natural and Human Kinds”, 33.

¹⁵ See “Putnam’s Theory of Natural Kinds and their names is not the same as Kripke’s,” by Ian Hacking for a more in-depth discussion of the differences between these theories.

like gold and water, is not determined by our description but by the essence of these substances themselves.”¹⁶

The process by which natural Kinds are formed is a two-step reference. The first step is the ‘baptism’, wherein an object is labeled. Following this initial referencing, “this reference is then passed on to subsequent users of the term through a causal historical link,”¹⁷ and we can identify all objects that share essential features through this two-step process. It doesn’t matter *how* an object is referenced for Putnam-Kripke style essentialists, but only that an already extant class of objects is identified, and thus rendered into a class for future analysis. This means that there is only one correct taxonomy of scientific objects, and if this holds for fuzzier scientific objects like species or taxa, there are animal essences that determine the way our classificatory patterns will unfold. It also means that these classes will be infinitely, or at least indefinitely projectible. This refers to the property of projectibility, or the degree to which a reference will be stably employable in a system of logical reference.

This position on Kinds has had major consequences for the standard philosophical and scientific views of Kinds. Especially when it comes to ‘pure’ natural sciences such as physics, chemistry, or even mathematics, there is a well-justified tendency to view their objects as the only correct way of classifying that particular subject matter. However, as opposed to Mill’s logical view of these Kinds, Kripke and Putnam style-essentialists would simply claim that these are physically instantiated Kinds; things that exist as Kinds *in nature*. And this has a certain logic- the claim that nature contains prefabricated Kinds seems to work out very well for chemistry and physics, after all.

However, maintaining such a strictly essentialist doctrine is much more difficult in ‘softer’ sciences like Biology, Psychology, and Statistics, wherein categories must sometimes be conjured, if not constructed, from nature- not merely observed. Can we really hold that nature simply has sunsets, as a Kind, already built in? There is also, for example, a certain degree of construction that occurs in the writing of new editions of the DSM, whether one thinks there *should* be. Kripke or Putnam style essentialism would simply term any construction wrong-headed and move on. Thus, this is often not a very convincing or useful view for those who must theorize and work in the fallen world of the ‘softer’ sciences, from Biology to

¹⁶ Lemeire, “Scientific Classification of Natural and Human Kinds”, 38.

¹⁷ *Ibid.*

Sociology. The Kripke-Putnam essentialist view of Kinds also incorporates a particular view of what it is to do science. Namely, converting it into a process whereby one “attempts, by investigating basic structural traits, to find the nature, and thus the essence (in the philosophical sense) of the kind.”¹⁸ In the identification of scientific objects, we are simply calling the world what it is- there is *no* causal power ascribed to human labels in the realm of the scientific beyond our initial baptism, which itself is basically just a formality that cannot alter the logical status of the Kind. On this view, once we have given a Kind an arbitrary label, we can rely on a stable causal relationship that simply goes by an unimportant human name. But this view, as influential as it may be for scientific realists, was challenged by a new generation of theorists, including Hacking.

Boyd's Homeostatic Cluster-Kinds

A third major view, that of Richard Boyd, arose in conversation with the Kripke-Putnam view and with Hacking himself, and can reasonably be called the predominant view of Natural Kinds within the Philosophy of Science today, at least among non-essentialists. In response to the essentialist nature of Kripke and Putnam's theories, Boyd returns to many of the mediating tendencies of Mill and Whewell- allowing for some construction of Kinds based on real natural characteristics. His argument takes the form of a cluster-based conception of Kinds, in which scientifically real features are collated via human value and knowledge structures into (at least seemingly) definite categories.

While still very much a scientific realist, Boyd argues that “the explanatory definitions of such [natural] kinds will reflect the imperfect clustering of relevant properties which underwrites the contribution reference to them makes to accommodation.”¹⁹ In other words, the properties that are given via nature do not, in Boyd's view, necessarily entail any definitive categories. In certain disciplines like Chemistry, the properties that are clustered around a certain Kind's definition are more (or, as far as we can tell, totally) stable, but at least when it comes to other paradigmatic cases such as species of animals this is demonstrably *not* the case. While this is, to a degree, constructivist, the properties that nature gives us are not actually up to us, and thus it is mediatized in a similar manner to the ‘moderate’ tradition. In the case of species, Boyd argues

¹⁸ Saul Kripke, *Naming and necessity* (Cambridge, MA: Harvard University Press, 1972), 138.

¹⁹ Richard Boyd, “Homeostasis, Species, and Higher Taxa,” *Species*, July 9, 1999, 141–86, 7.

that they are “homeostatic property cluster (HPC) Natural Kinds;”²⁰ clusters of properties which can maintain a logical coherence that allows, on the biological metaphor, could be said to compete in a quasi-Darwinian world of Kinds. Those that cluster naturally given properties together in a projectible way maintain homeostasis, and ones that do not cannot survive in the scientific system.

In this vein, we see Boyd is no pure social-constructivist- he views his position as one that “provide[s] us with the descriptive machinery necessary to describe the (typically unobservable) fundamentally important features of natural phenomena and to classify them in ways which reflect the complex causal properties which these phenomena possess.”²¹ In other words, Boyd’s view shifts the essential mechanism responsible for the form Kinds take from the essential characteristics of the Kind back to our (causal) reasoning about them. Boyd is therefore still a qualified scientific realist, and the property that natural Kinds must possess is again a logical coherence which clusters real traits as “causally sustained regularities that go beyond actually available data.”²² Boyd’s property clusters follow the projectible logical model of Russell and Quine, but the content of those logical predicates take on a more organic form in that they are features clustered into clearly heuristic and provisional categories, open to revision and reinvention should our needs or ideas about the world change.

For Boyd, as syntactic objects, Kinds show us that regularities do exist; there are *real* regularities that influence how we categorize. The way we categorize certain things is what gives their names meaning, analytically speaking. He gives the example of characteristic *t* in Homeostatic Property Cluster *F*, wherein “*t* has no analytic definition; rather all or part of the homeostatic cluster *F* together with some or all of the mechanisms which underlie it provide the natural definition of *t*.”²³ The theory of the molecule, in other words, is not intelligible outside of the fact that it refers to something real in the physical world; it is not separable from its natural definition. This is why there are very few molecule-deniers in the chemistry community, and very few people who argue about what ‘molecule’ means. Yet the process of categorization is not a neutral practice, as in the Kripke-Putnam model. For Boyd, the causation upon which Kinds are

²⁰ Boyd, “Homeostasis, Species, and Higher Taxa”, 1.

²¹ Richard Boyd, “Scientific Realism and Naturalistic Epistemology,” *PSA: Proceedings of the Biennial Meeting of the Philosophy of Science Association* 1980, no. 2 (1980): 613–62, 614.

²² Boyd, “Homeostasis, Species, and Higher Taxa,” 6.

²³ Boyd, “Homeostasis, Species, and Higher Taxa”, 2.

built is “co-determined by our human epistemic practices.”²⁴ This nuanced view has a great deal of appeal, in part because it seems to capture various paradigmatic examples of Natural Kinds from the harder and softer scientific disciplines with equal accuracy. In the case of Natural Kinds, Boyd proposes that the homeostatic nature of clusters, the fact that certain properties tend to cluster together in nature, gives our human epistemic practices certain regular categories as natural.

Here we have a realism without essentialism, which recognizes the temporal finitude of the characteristics that might be considered essential in the Kripke-Putnam view. These characteristics are homeostatic, they are stable, but that they may tend to cluster together is not necessary. Boyd does leave room for the causal powers of human interpretation and mediation, and that is of course relevant in any discussion of Human Kinds. The consensus view of Human Kinds seems to have veered in the 20th century towards a headstrong essentialism, but with Boyd the state of discourse had largely course-corrected by the time Hacking introduced his conception of Natural Kinds. After a brief journey into the world of forms, we have arrived in a remarkably similar place to where we started, with an acknowledgement of the co-originality of categorizers and the material being categorized. Much of Boyd’s thought arose in conversation with Hacking, and we can see that their ideas about the interaction of real features and subjective judgments influence one another quite strongly.

Hacking and the State of the Field

When speaking of Kinds, most scholars tend to fall somewhere between hard constructivism, wherein one conceptualizes all scientific facts (and hence classifications and Kinds) as social constructs, and hard realism, wherein one views Kinds as classes that independently exist in nature and are simply cognized and digested by human knowledge processes. Indeed, between these poles, there are several major schools of thought when it comes to what constitutes a Human Kind, all of which have consequences for any view of social science and its objects. We have seen that in mainstream philosophical discourse Natural Kinds are usually conceptualized along realist lines, and that the main area of contention has been around their essential properties or lack thereof. The view Hacking adopts, and how it informs his

²⁴ Lemeire, “Scientific Classification of Natural and Human Kinds”, 49.

conception of Human Kinds is framed in response to these historical norms of Natural Kind speak.

Hacking, departing from both Boyd and Kripke-Putnam style essentialists, seems to subscribe to essentialism about Natural Kinds, but he does not seem to think that the categories we socially construct go beyond their categorical mental existence. For example, he asserts in 1991 that he rejects the realist doctrine which states “there is a unique best taxonomy in terms of Natural Kinds, that represents nature as it is, and reflects the network of causal laws.”²⁵ This is an important distinction, for while accepting that “there are kinds of things, of substances, of organisms and so forth,”²⁶ Hacking asserts here that attempting to array those essences in a universalist framework of one universal taxonomy called science is nonsensical. Our picking out of essential features is given meaning, as P.F. Strawson says, “in a particular context of discourse.”²⁷ This somewhat moderated realism is a relatively stable position in Hacking’s work, and ultimately, he is mostly concerned with Natural Kinds in his investigations of MPD and other social Kinds inasmuch as they provide a conceptual springboard for a distinct, somehow less ‘real,’ Human Kind.

All of this might lead one to believe that Hacking, in his moderated realism, is in some way constructivist about Natural Kinds. Yet, we see that even in his later works this is not the case. For example, he claims in 2002’s *Historical Ontology* that “we cannot help but sort many things as we do: we are, it seems, made to sort things much as we do.”²⁸ This remains a strong endorsement of *some* Natural Kinds, but Hacking is even more expansive in his definition of what counts. Indeed, any category which picks out and stably describes that which is already “...around us, really existing anterior to any thought,”²⁹ is possibly indicative of Natural Kinds. The move Hacking makes, in contrast to other thinkers who seek to assimilate hard scientific fact to social construction, or vice versa, is simply to posit that there are socially constructed Kinds that may purport to be natural or essential, but that they are not. There are things which we clearly can and do decide how to sort- and *these* cannot be Natural Kinds. Therefore, according to Hacking, there must exist a fundamental distinction between Human and Natural Kinds on some level- Human Kinds cannot just be considered a strange Natural Kind. So, unlike Boyd,

²⁵ Hacking, “A tradition of Natural Kinds”, 111.

²⁶ Hacking, “A tradition of Natural Kinds”, 110.

²⁷ Hacking, “A tradition of Natural Kinds”, 111.

²⁸ Ian Hacking, *Historical Ontology* (Cambridge, MA: Harvard University Press, 2002), 98.

²⁹ *Ibid.*

who might claim that this is a question of degree, Hacking sees a qualitative difference between Kinds in the Natural and Human sciences, and that they cannot be explained on the same model. So, while Boyd and Hacking do not seem to disagree vehemently on the structure of Natural Kinds, they disagree on the extent to which that structure is applicable.

Thus, it seems that we have a somewhat stable view of Hacking's Natural Kinds: they are categories that pick out features in nature but are not always dictated exactly by nature in the way they are picked out. This represents a return to the form of Mill's original Kinds, but with the key distinction emphasized that the natural is *not* all-encompassing. The thing, it seems, that makes some Kinds logically projectible is that they are 'Natural,' and if they are not, they are Human. Natural Kinds have a distinct sort of inductive history that gives them the distinct, but not absolute, characteristic of *stability*. However, just because Natural Kinds share this characteristic does not mean that they are functionally identical or equally projectible.

This is why Hacking gives diverse examples of what he considers Natural Kinds, from the "fairly cosmic: quarks, probably genes, possibly cystic fibrosis" to the "mundane: mud, the common cold, headlands, sunsets."³⁰ The structure of atoms of two different elements is not subject to interpretation in any meaningful way, at least not by a layperson. No matter how much you argue with your friend about the chemical composition of water, it will remain H₂O. This can be extended to Hacking's example of mud: it may be debatable whether a particular sample of wet dirt can be called mud, but no matter how many arguments are had over particulars, the fact remains that mud is composed of the essential features of soil and water.

Hacking seems to be fairly agnostic as to debates over essentialism and realism, and in working via example perhaps defaults to a moderated, non-essentialist realism like that of Mill or Boyd. In any case, he identifies his understanding with "a tradition of philosophers who introduced and used the idea of Natural Kinds for modest purposes."³¹ Indeed, he claims in line with "Mill, Venn, Russell, Prine and Quine...[that]...Natural Kinds are useful, but not especially fundamental."³² This stands in direct contrast to strict essentialism but is nonetheless a strongly committed form of scientific realism about Natural Kinds in the traditional vein. According to Hacking, "members of my tradition take for granted that nature has kinds,"³³ and there is very

³⁰ Ian Hacking, "The Looping Effects of Human Kinds," *Causal Cognition*, July 11, 1996, 351–83, 352.

³¹ Ian Hacking, "Word Making by Kind Making" in Douglas and Hull, *How Classification Works*, 185.

³² *Ibid.*

³³ *Ibid.*

little more metaphysical endorsement that one can hope for from his end. Nonetheless, there is a fundamental disagreement with the tradition that Hacking follows on Kind-speak, and it is not about the incontrovertibly real natural things that form natural-scientific objects. What is interesting for Hacking, and indeed for the human sciences in general, are the things which change with our descriptions of them: Human Kinds.

III. Hacking's Human Kinds

Hacking's understanding of Natural Kinds as mediate categories that represent the human ability to recognize patterns of stability in nature as objects of thought and reference is the culmination of a long tradition. The point of departure from Natural Kinds that leads Hacking to conceptualize a metaphysically distinct category, the Human Kind, is to be found in that same tradition of Natural-Kind speak and its deficiencies. These 'deficiencies' appear to be generated when an object constituted in scientific discourse is not sufficiently natural, and hence the realist underpinnings that allow systematic coherence no longer apply. Because he does not believe all Kinds are Natural Kinds in the relevant sense, one could argue Hacking is a sort of Kind pluralist. At the very least, he sees various uses of 'Kinds', which may vary in what they point to in 'nature' as their basis. As stated in the previous section, Hacking tends to reject granular debates about Kind metaphysics, simply stating that "I am not 'for' or 'against' Natural Kinds."³⁴ Instead, he claims that he views them as a part of a "tradition [which] is nominalist by inclination but realist in agreeing that kinds arise in nature."³⁵

But what do we do when Kinds arise somewhere else? What if we pull back and focus on the many areas of human existence that are not 'natural' in a strict sense, like socially constructed racial or gender categories? Following Nelson Goodman, Hacking believes that because Natural Kinds are causally sustained categories that are not grounded in a privileged metaphysical category; they are simply "relevant kinds [sic.] that we find in nature."³⁶ The issue that Hacking has with applying these relevant Kinds to all aspects of life is that there are, at least for those not committed to full-throated essentialism and/or naturalism, other areas of relevance in our lives besides the natural. These other spheres of human life causally sustain other categories: these tend to be the sort of objects found in the social sciences, or in Hacking's words, "kinds that are, at least at first sight, peculiar to people in a social setting."³⁷ Kinds peculiar to people *in a social setting* are therefore not merely 'human,' in a biological sense, but in a qualitative sense- as part of an intangible intersubjective world which is not strictly or causally reducible to the physical mechanics of the bodies we inhabit. The important thing about

³⁴ Hacking, *A Tradition of Natural Kinds*, 110.

³⁵ *Ibid.*

³⁶ Hacking, "The Looping Effect of Human Kinds", 353.

³⁷ *Ibid.*

them is not that they describe something human, but that they describe something not explainable, in Hacking's view, in terms of natural facts and phenomena in the same way as Natural Kinds.

Hacking uses two terms throughout his work to refer to these socially and discursively determined Kinds. When he first conceived of the concept, he called them Human Kinds, and then started using the term 'Interactive Kinds' in *The Social Construction of What?* in 1999. For the purposes of this paper, since I am responding to Rachel Cooper's critique of Hacking, I will follow her lead in simply referring to the two concepts as Human Kinds, as her argument primarily deals with the Human Kinds of the 20th-century Hacking. In any case, Hacking sees Interactive Kinds as an outgrowth of his earlier concept of Human Kinds, and the arguments presented in this paper should apply to both concepts reasonably well.

Human Kinds enable us to "[make] up people", as Hacking puts it, and we are arguably *compelled* to do so by employing them.³⁸ By making up people Hacking does not mean a process of autofiction or other creative imagination, but a socially determined construction, a collective sort of 'making up.' This is, unlike the moderate realist view Hacking takes of Natural Kinds, a clear endorsement of a very particular and socially dependent theory that shows how "[p]eople classified in a certain way tend to conform to or grow into the ways that they are described..."³⁹ For certain categories that are not 'natural' but social, or 'human,' there is a separate logical structure that enables us to change what we think about them, and how those who are identified by them come to behave.

In other words, it is not merely that over time what we think about, for example, juvenile delinquents changes. For Hacking, it is also the case that since what we think about juvenile delinquents changes their role in the process of social scientific investigation, their projectibility value is unstable. The role of classification as a seemingly identity-shaping process is certainly not new- it is arguably as old as human language itself. While historical examples abound as far back as the written record extends, the Middle Ages were, at least according to the classical, Western European view, a famously socially rigid time which provides us with clear categories. During this long period, one's classification based on feudal and religious considerations was generally a great deal more totalizing than an MPD diagnosis, truly dominating all aspects of

³⁸ Ian Hacking, "Making up People," *London Review of Books*, August 17, 2006.

³⁹ Hacking, *Rewriting the Soul*, 21.

one's role in lay and spiritual communities. The value judgments that individuals attach to a category matter, and in this case the values associated with medieval categories were quite severely delineated.

Were medieval serfs and lords Human Kinds, then? The answer is not clear-cut; in many ways, they do correspond to features of the concept. Certainly, they were socially relevant Kinds at that time, and their interpretation and reification in medieval society did in effect allow ecclesiastical and secular authorities to 'make up' people. The heretic, apostate, witch, Saracen and Jew could all be and were often redefined throughout medieval and early modern history, rendering their membership criteria quite diverse throughout the landscape and period of medieval Christendom. However, a medieval, quasi-theological understanding of one's place in the world does not give rise to the specifically *recursive* Kind that Hacking proposes as the Human Kind in modern social-scientific discourse. Indeed, the social construction of identity that gives rise to a modern Human Kind must fulfill more specific criteria to be a Human Kind in the sense relevant to modernity. In any case, it is this narrower set of Kinds that Cooper critiques, and as such the historical 'Human Kind' can be left to one side.

Hacking lays the criteria for a thoroughly modern, social-scientific, Human Kind out in an essay entitled "The Looping Effect of Human Kinds."⁴⁰ The first criterion given for Human Kind membership is "cultural" in that "they are ways of classifying that became possible only in industrial bureaucracies."⁴¹ Human Kinds, as opposed to their natural counterparts, are products of modernity, with all of its cultural baggage and ever-increasing systemic complexity. For Hacking, this also means that as products of industrial bureaucracies, the important differential features of Human Kinds "are the result of a recent democratization of some social sciences."⁴² This is not to say that Human Kinds do not proliferate and mutate in less democratic countries than Hacking's native country of Canada. Few would deny that the Soviet Union, for example, created extensive classificatory bureaucracy to rid their society of perceived antisocial elements, and that these classified people created subcultural looping effects in ways that the nickel and gold these people were often forced to mine never could.⁴³

⁴⁰ Hacking, "The Looping Effects of Human Kinds," 351.

⁴¹ *Ibid.*

⁴² *Ibid.*

⁴³ For an in-depth discussion of social classification and stigmatization in the Soviet Union, see Sheila Fitzpatrick, "Social Parasites: How Tramps, Idle Youth, and Busy Entrepreneurs Impeded the Soviet March to Communism." *Cahiers Du Monde Russe* 47, no. 1/2 (2006): 377–408.

It is rather *epistemological* democracy that is critical here. The democratization of, that is participation of non-experts in, social-scientific discourse enables those who have categories imposed on them by experts to internalize and reinterpret those discursive tags. Indeed, in medieval Europe knowledge production, replication, and reinterpretation was strictly regulated through a hierarchical and reactionary Church structure, and any interpretive dissent could be and often was brutally repressed. The Reformation opened the door to various churches with priesthoods ‘of all believers,’ creating many new orthodoxies, new ways of experiencing Christianity, and in turn new types of souls. *This* proliferation of Kinds is what creates a unique recursive structure, and this has only a weak relationship with political democracy.

The second criterion offered, “cognition,” is less clearly defined, with Hacking simply writing that “...Human Kinds only make sense within a particular conception of knowing and finding out.”⁴⁴ A particular conception of knowing and finding out is not the most useful or definite framework, but Hacking’s particular conception is teased out later in the paper and other works, and he simply means to say that Human Kinds are only relevant within a natural-scientific framework that privileges inductive, causal reasoning. Human Kinds share this feature with their Natural Counterparts, and indeed all Relevant Kinds. Furthermore, Hacking views a scientific understanding of causality as primary in modern systems of knowledge, natural and human. This ties in with the focus Hacking places on modernity; for example, a serf *as conceived by a serf* was not a Human Kind in the scientific sense because it did not occur within a framework that privileged the “one kind of causation [that] is deemed relevant: efficient causation.”⁴⁵ According to Hacking, “[This] model is that of the natural sciences.”⁴⁶ The assimilation of this efficient causal structure as “peculiar to people in a social setting,”⁴⁷ leads us to conceptualize (at least some) human beings as scientific objects, which behave according to the logical models applied to inanimate and non-sapient objects.

Hence, those who use Human Kinds look at human cognition itself through the scientific model of efficient causation- and leave little room for mysticism about its origin or purpose. There is no room for the subjective factors with which the categories of generations past are reconstructed; from a historiographical point of view, we see that Serfs could be justified as a

⁴⁴ Hacking, *Looping Effect of Human Kinds*, 351.

⁴⁵ Hacking, *Looping Effect of Human Kinds*, 352.

⁴⁶ *Ibid.*

⁴⁷ *Ibid.*

social category in Western Europe for theological reasons, because people believed the social order *should* be structured in some way. Now, the categories of people we construct are constructed within, as Hacking says, a “peculiar conception of knowing and finding out,”⁴⁸ one that accepts the scientific model, with all its strictures of causality and objecthood, as the only or best way of knowing and finding out. Human Kinds are only reified into ‘Kinds’ because we *want* to fit human, and possibly even subjective processes into the model of ‘efficient causation’ that governs the physical, ‘natural’ world. We know about these objects, from criminals to crowd-lovers, only in reference to that model.

Hacking’s third criterion is “causality,” but in a more immediate sense. Hacking sees the bureaucratic interventions that serve as the catalysts for Kind formation as activist processes that are not value neutral. Rather, they “are formulated in the hope of immediate or future interventions in the lives of individual human beings.”⁴⁹ This is somewhat different from the instrumental logic of natural sciences and betrays a fundamental difference in Hacking’s understanding of the ontological statuses of natural and Human Kinds. The implicit goal of the social sciences seems to be that “if we change the background conditions we can improve the person, if only we can understand what kind of person we are dealing with.”⁵⁰ Natural science, by contrast, seems definitionally to be little bothered by the background conditions faced by its objects.

In other words, there are *moral* assumptions that motivate the formation of Human Kinds because there are moral assumptions that motivate social-scientific research writ large. But there is a crucial difference in the role that the attachment of value to the process of category formation plays in the Natural and Human sciences. After all, of what relevance are the social conditions of their nonhuman subjects to practitioners of physics or chemistry- and how are they causally related to the results found? In all but the most marginal of cases, these are not concerns. Furthermore, in disciplines such as Epidemiology, which works at the interaction of the social and medical, there is not a great deal of analysis on the fundamental nature of the diseases studied (although this was and is not always the case⁵¹). This means that even while Hacking claims that there is a “built-in metaphysical motivation for biologizing Human Kinds” by, for

⁴⁸ Hacking, *Looping Effect of Human Kinds*, 351.

⁴⁹ *Ibid.*

⁵⁰ *Ibid.*

⁵¹ John Snow’s Map of Cholera in London was instrumental in promoting the Germ theory, for example.

example, “mak[ing] psychology... into biology,”⁵² this does not change the fact that minimizing or eliminating the importance of a subject’s ideas about their own status remains a change in our normative commitments about categories. Thus, one central focus of such efforts is to bring about a shift in our attitudes.

We therefore see that Human Kinds are causally motivated for Hacking in that they are implicitly formulated with a moralizing goal in mind: to understand and therefore improve the circumstances of the people who form these Kinds. This means that Human Kinds, in addition to being thought-dependent, are “laden with values.”⁵³ They contain the assumption that the type of person one is *meaningful*, and as such not reducible to atoms aligning in a particular constellation. For Hacking, there can exist no Human Kind independent of some moral or social value, paired to a physical antecedent. This means that their projectibility, being based in a human value-system, can at least sometimes mutate in line with *that* system, not the more stable system of the natural world.

Thus, Hacking summarizes his definition as follows: “(i) Kinds that are relevant to some of us (ii) Kinds that primarily sort people, their actions. and behaviour, and (iii) kinds that are studied in the human and social sciences, i.e. kinds about which we hope to have knowledge.”⁵⁴ We now have a fairly complete understanding of what Hacking means by a Human Kind, and how he proposes to separate them from their natural counterparts- but this is not the entire point of Hacking’s separation. Human Kinds have a separate ontological history from Natural Kinds, but they also have very different effects on the world they are constructed from.

Indeed, the differentiating effects of Human Kinds extend beyond their formulation and employment in discourse. An integral part of Human Kinds is not merely how they are formulated, but also how human subjectivities cause them to mutate via what Hacking calls the *looping effect*. This is the characteristic productive feature of Human Kinds, and in a sense their most characteristic feature. In *The Looping Effect of Human Kinds*, Hacking defines this as when “new knowledge in turn becomes part of what is to be known about members of the kind, who change again.”⁵⁵ Because Human Kinds are value-laden, carrying qualitative baggage when they are attached to different people as labels, people assume a relationship to them much as with

⁵² Hacking, *Looping Effect of Human Kinds*, 353.

⁵³ Hacking, *Looping Effect of Human Kinds*, 366.

⁵⁴ Hacking, *Looping Effect of Human Kinds*, 354.

⁵⁵ Hacking, *Looping Effect of Human Kinds*, 370.

other, nonscientific social categories. This affects the social-scientific disciplines which constructed these Kinds as useful objects of study- leading to a characteristically rapid mutation of social categories in advanced capitalist economies. This sort of recapitulation requires a public, and a public discourse, that is aware of and interested in the moral valence of Social-Scientific discourse, and Hacking presents it as such. These publics often include psychiatric patients and psychiatrists and are deeply moral in character. Since the categories themselves are imbued with morality from their very inception, this has a degree of sense to it, but the debates that happen around them are, as Hacking points out, rather confused. These are often hot-button issues, and there have been many examples of the politicization and public-facing nature of what would have previously been debates contained to experts. Hacking discusses childhood trauma, among many other examples, in *Rewriting the Soul*:

“Childhood trauma gives a whole new dimension to the morality of [Multiple Personality] disorder. The most sensational trauma of recent times is child abuse. Abuse, as trauma, enters the equations of morality and medicine. It exculpates, or passes the guilt up to the abuser.”⁵⁶

Trauma, here, is clearly not fulfilling the same logical role as an animal species, and the properties clustered here are not natural, at least not all of them. Their introduction into popular discourse changes them, and this too is a departure from the molecule. What we think about a molecule has yet to change what it is, after all. Although Hacking does not explicitly formulate his position as such, the moral valence he ascribes to Human Kinds amounts to a cleavage in the *reality* he ascribes to Kinds: Natural Kinds are ‘real’ in the relevant scientific sense, and Human Kinds are constructed. This construction allows for personal and social reinterpretation of Human Kinds, whereas Natural Kinds simply cannot be modified on this level. Thus, Hacking can be said to espouse a sort of Kind pluralism, wherein Kinds play the same role in our structures of reasoning as categorical predicates, but their histories, and therefore the degree to which they are subject to interpretation, will vary along with the degree to which they are based in nature. Furthermore, Hacking claims that the values attached by social scientists to Human Kinds are usually *abnormal* in the sense that “the kind differs from what is right; it is worse,

⁵⁶ Hacking, *Rewriting the Soul*, 15.

or... possibly better.”⁵⁷ This characteristic difference from normalcy in the social sciences thus gives classification itself a sort of moral value for the humans who get categorized. Because social science studies deviants and deviancy, those categorized by it for analysis are thought of, and begin to think of themselves, as abnormal.

As Hacking says, this deviancy can be for the better, as in the case of genius, but it usually is not. One might respond that there is value-ladenness inherent in all categorizations, and that we always are subjectively interpreting all Kinds. This is because scientific Kinds, both Natural and Human, rely on differentiation from other things for their causal power. This implies that there exist characteristics that, when observed by a human subject, make one class of things different from every other type of thing. Inasmuch as those characteristics are only subjectively accessible to an observer, they will always be assigned some sort of normative value, given a value judgment.

We cannot, for example, attribute to a mammal the categorization of membership in the species *Rattus rattus* without taking a normative view of the meaning of its fuzzy gray ears and hairless tail. One is right or wrong to attribute to these characteristics the power to differentiate species, and the degree to which this is the case is determined by value judgments of fittingness, among other factors. As such, deviance from perceived norms holds a great deal of causal significance as well for Human Kinds, not only moral significance. Hacking puts it thusly: “to acquire and use a name for any kind is... to be willing to make generalizations and form expectations about things of that kind.”⁵⁸ However, the difference between Human and Natural Kinds is that we do not consider rats, for example, to be moral agents, and they are not aware of our value-judgments. Therefore, our subjective judgments generally end at considerations of fittingness. However, what we perceive as moral transgression in humans leads to the creation of self-aware subjects, and therefore Human Kinds, meaning that these categories are ontologically dependent on moral norms, and are thus value-laden on a deeper level than scientific categories that are subjective only in reference to the values we ascribe to independently observable phenomena, like the diameter of a particular rat’s eye. In social science, we are using a model of efficient causation, as in physics, to try and predict conformity with socially constructed behavioral standards that involve moral judgments.

⁵⁷ Hacking, “Looping Effect of Human Kinds”, 372.

⁵⁸ Hacking, “Looping Effect of Human Kinds”, 361.

If, as Hacking claims, this tendency leads us to *biologize* Human Kinds through reducing behavior to brain-function or other biological tendencies, then this also can loop around to affect our ideas about morality itself. Or, as Hacking puts it, “to create new ways of classifying people is to change how we can think of ourselves, to change our sense of self worth...”⁵⁹ This betrays one of the main differences Hacking sees between Natural and Human Kinds, that “Human kinds are the kinds that people may want to be or not to be... because the human kinds have intrinsic moral value.”⁶⁰ In other words, what one believes about the role value judgments play in the construction of Human Kinds tends to affect how one thinks they operate, and where. This can be seen quite clearly in the critique leveled by Rachel Cooper at Hacking’s distinction. Cooper rightly points out that just because there is some value-ladenness in Hacking’s Human Kinds does not mean that they are not natural, and indeed there is a perfectly reasonable essentialist reading of his Human Kinds that renders them not as relevant social Kinds, but as socially relevant Natural Kinds.

In any case, Hacking does provide us, in his roundabout way, with a stable definition of Human Kinds. They are socially relevant and determined classifications which are, in contradistinction to Natural Kinds, not exclusively based on properties present in ‘nature,’ at least not in the way they are employed in everyday discourse. Furthermore, their social relevance is manifested in the fact that they are the types of categories created and analyzed by social sciences, and that they in turn create looping effects, whereby we can “the kind changes, and so there is new causal knowledge to be gained and old causal knowledge to be jettisoned.”⁶¹ While Human Kinds really do perform work in the world and affect our lives, they are unique in that our moral judgments *also* constitute, and hence shape these highly particular categories. In brief, the main difference that Hacking posits between the two is that the values around which Human Kinds are formed make them unstable, because when we become conscious that we are being moralized, even indirectly, we are wont to change our behaviors- meaning that Human Kinds themselves change. While all categories rest on value judgments, Hacking’s Human Kinds are uniquely morally determined, and they do not maintain the same projectibility values in scientific systems or evolve in the same way as Natural Kinds.

⁵⁹ Hacking, “Looping Effect of Human Kinds”, 369.

⁶⁰ Hacking, “Looping Effect of Human Kinds”, 367.

⁶¹ Hacking, “Looping Effect of Human Kinds”, 369.

IV. Cooper's Critique of Human Kinds

Rachel Cooper begins her critique of Hacking by outlining the ways in which she agrees with his conception of Kinds, and we therefore also begin our summary here. After sketching out the state of the field of Kind research, she arrives at a similar definition of Human Kinds as the one I have laid out. In brief: Human Kinds are value-laden, and that this affects the ways in which those labeled act, and thus the categorizations employed themselves. She then uses this peculiar character of Human Kinds to claim that “Hacking claims that the existence of *such* feedback shows that human kinds cannot be Natural Kinds.”⁶² Thus we see that from the outset of her argument, Cooper establishes that Hacking bases the differentiation between Human and Natural Kinds on the ‘looping effects’ discussed in the previous section, and thus provides an effective springboard from which she can dive into argumentation.

The main move Cooper makes is to claim that Hacking (unknowingly) assumes the consequent. Namely, she argues that even if the looping effects that Hacking describes are real and materially significant, “this would be reason, not for claiming that human kinds cannot be Natural Kinds, but rather for claiming that human kinds are not particularly useful Natural Kinds.”⁶³ In other words, there is no reason, Cooper claims, to assume anything about the status of Human Kinds based on the way they behave in the social world. It is true that Human Kinds show looping behavior, but she does not view this as a fact that has any bearing on how natural human categorization is one way or another.

Cooper thus critiques Hacking not for the lack of efficacy or import of Human Kinds, but on the grounds that they cannot be separated from Natural Kinds for any of the reasons Hacking gives. Contrary to the metaphysical distinction drawn by Hacking, they may just be particularly interesting or perhaps even defective Natural Kinds. There are various reasons why she believes Human Kinds are Natural Kinds: firstly, Cooper claims that Human Kinds affect behavior and vice-versa, but that this is also true of a great many Natural Kinds. Indeed, her examples to this effect are rather convincing, as she claims that “...it is also true that only bacteria are affected by antibiotics, and that only domestic animals can be selectively bred.”⁶⁴ In other words, there is

⁶² 1. Rachel Cooper, “Why Hacking Is Wrong about Human Kinds,” *The British Journal for the Philosophy of Science* 55, no. 1 (March 1, 2004): 73–85, 78.

⁶³ Cooper, “Why Hacking is Wrong about Human Kinds”, 79.

⁶⁴ *Ibid.*

nothing particularly subjective or human about looping effects- they seem to happen a great deal in hard scientific categorical structures as well. To simply assume that differential behavior in the physical world is indicative of a metaphysical or subjective difference, Cooper argues, is untenable without serious evidentiary work, which Hacking does not provide.

Indeed, she then continues that, just because there may be Kinds based on certain human-centric categories, they need not be distinctly ‘human,’ as “...no one would cite this as evidence that ‘bacterial kinds’ or ‘domestic animal kinds’ are not Natural Kinds.”⁶⁵ Just because Human Kinds are changeable via human behavior or are characteristically human, is not, as Cooper points out, a convincing reason to hold that they are *unnatural*. Humans are, after all, natural animals, even if we do and create things that are quite strange and arguably ‘un-natural,’ whatever that is supposed to mean. This then brings into question Hacking’s Kind doctrine’s relevancy, and metaphysical Kind-agnosticism in general. If there is no physical thing that can exist that is unnatural, then do Human Kinds point out anything at all?

Cooper does not stop her criticism of Hacking there, though. Because Hacking believes that we see the difference between these categories in the ways they affect and are affected by classification, for a Kind to be separable from nature, and hence not reducible to a Natural Kind, Cooper claims that it must be exclusively subjective in nature. She claims that “it would need to be shown that Human Kinds are idea-dependent in the way that produces relational as opposed to genuine changes.”⁶⁶ In other words, to separate Hacking’s categories in a metaphysical sense, we would need to show that they work on a level that other Natural Kinds are immune to- the level of subjective awareness. So, if there is no possibility that Human Kinds can be brought about on the level of the physical world, Cooper grants that they may be generated in the subjective, non-physically extant dimension of human life and culture.

Cooper examines Hacking’s looping effects, or as she calls them ‘feedback mechanisms,’ on two possible subjective levels: the cultural and conceptual. She begins her treatment of looping effects with the site in which they operate, with a “...description of a kind of person entering popular culture.”⁶⁷ On Cooper’s view, this cultural awareness of a newly-popularized Kind leads people outside of the social sciences to become aware of the fact that they are being scrutinized and categorized, and that Hacking’s claim that Human Kinds are not Natural Kinds

⁶⁵ *Ibid.*

⁶⁶ Cooper, “Why Hacking is Wrong about Human Kinds”, 80.

⁶⁷ Cooper, “Why Hacking is Wrong about Human Kinds”, 78.

rests on the fact that “feedback in human kinds occurs because subjects become aware of the ways in which they are being described and judged.”⁶⁸ This is distinguished from other Kinds of feedback, such as the effect that Marijuana’s (very much culturally-determined) illegality has had on its appearance- it is often optimized to grow in hidden, indoor spaces, altering its physical characteristics in line with our subjective preferences.

Since, at least facially, feedback loops occur in both situations, Cooper has some justification in claiming that these cultural explanations are not sufficient for claiming a distinction between Human and Natural Kinds. Indeed, human culture and subjectivity does affect all sorts of things Hacking finds natural in a characteristically human looping pattern. Cooper argues that this means Hacking’s distinction cannot rest on ‘culture,’ but instead it must be our *awareness* of being judged in a cultural context that drives the particularly human aspect of looping effects. After all, the fact that Marijuana is grown in closets does not lead to a ‘loop’ in the sense that it leads us to reevaluate the meaning of the plant or its effects- and one assumes the plants themselves do not perform this type of meta-analysis. Cooper thinks this sort of subjective feedback can occur in two different ways- in what I will term an instantiated and uninstantiated manner.

Instantiated subjective feedback occurs when our ideas about the world cause us to act, thus altering the world that caused us, via its actual state, to form ideas about it. Cooper gives the example of “a woman, [who,] influenced by images of the 'ideal female form', decides she is too fat and so slims.”⁶⁹ While the phenomenon of the woman losing weight based on her perceptions of her beauty certainly is not devoid of subjective content, for Cooper this sort of change, just like Marijuana’s appearance being altered by our growing it in an attic, is “perfectly compatible with a kind being objective.”⁷⁰ The woman did lose weight, the world changed, and thus the product of this instantiated subjective feedback is therefore simply a Kind created by the actions of an agent acting based on some idea, producing real changes in the world. Almost all modern fruits and vegetables exist because of this sort of instrumental reasoning- but would Hacking go so far as to call them human kinds? Cooper, at least, finds this to be implausible.

This is then contrasted with purely subjective or relational feedback, what I will call uninstantiated subjective feedback. This is when the world appears differently to an agent

⁶⁸ *Ibid.*

⁶⁹ Cooper, “Why Hacking is Wrong about Human Kinds”, 79.

⁷⁰ *Ibid.*

depending on the values and attitudes the agent possesses devoid of any physical alterity, thus producing a change restricted entirely to the realm of the subjective. For this, Cooper gives the example that “Miss World [from decades ago] looks rather plump and short by today's standards.”⁷¹ The Kind ‘attractive woman’ is limited entirely to the head, and its feedback takes place totally in an uninstantiated manner. For Cooper, a relational change is a change in our perceptions, not in the world of referents that provides the input necessary for those constructions. If it is merely our categorical perception that changes, and not the world to which we reference our categorical reasoning, then for Cooper this is not natural in the relevant sense. Thus, all changes that are instantiated in the physical world are *not* productive of Natural Kinds. For Hacking’s Human Kinds not to be Natural, Cooper claims they must be uninstantiated, and she further claims that Hacking has not successfully shown that they are. But in *The Social Construction of What?*, Hacking claims that social construction is a process to do with appearances, giving the following definition of Social Construction: “In the present state of affairs, X is taken for granted; X appears to be inevitable.”⁷² If the process of construction is reliant on to what degree we *think* social processes are inevitable, then is that not an uninstantiated, relational affair? To this Cooper would simply respond that this is nonetheless a natural process, as the changes produced thereby are instantiated in the world. Looping Effects are very much productive of real changes; after all, a strange sort of interaction between relational and real changes is exactly what he seeks to highlight.

Cooper then tests whether feedback on the conceptual level could be said to fit her criterion of non-instantiation. She writes that key to this argument of Hacking’s is the basic idea, as originally articulated by Elizabeth Anscombe, that “intentional actions are actions under a description.”⁷³ Anscombe argues, and Hacking adopts the view, that for a human to act intentionally requires cognitive awareness that one is acting in *X* manner, and this is always generative of a description for any act that is or will be performed intentionally. For a person to act in a predetermined, intentional way, they must have a description to which they can compare their own actions, making such action possible in the first place. Another way of looking at this is as an assertion that humans cognize our actions as descriptions, and since intentional actions are definitionally cognized, they are always in some way ‘under a description.’ Working from

⁷¹ Cooper, “Why Hacking is Wrong about Human Kinds”, 80.

⁷² Hacking, *The Social Construction of What?*, 12.

⁷³ Cooper, “Why Hacking is Wrong about Human Kinds”, 81.

this premise, we see that on Hacking's account, "the creation of new descriptions makes logically possible the creation of new kinds of person."⁷⁴ In other words, Hacking argues that it is not the cultural nature of description that makes Human Kinds metaphysically distinct from Natural Kinds, but rather the simple fact that Human Kinds are logically dependent on description, and therefore human intentionality.

Therefore, while it is possible that while a concept is made relevant and brought to the level of direct awareness and analysis in individuals through culture, or even that culture is the space in which new descriptions are generated, it is the relationship of conceptual dependency, i.e. the ability of some actions to be instantiated, that renders a Human Kind fully subjective. Culture is the medium through which subjective ideas may be transmitted, but the special mode of projectibility of Human Kinds is based on the individual subject's ideas about that Kind and their membership or non-membership in it. In other words, we take an intentional stance on the value-laden categories with which we are described, and this affects those categories in unpredictable ways, and in a manner fundamentally different to Natural Kinds.

Let us take the hypothetical example of lion tamers and lions. Lion tamers, as a class, are subject to various social pressures. They are expected to put on a daring and novel performance, and perhaps if they experience a lot of competition, to up the ante in their performances. We might thus find that the social scientific category of 'professional lion tamer' has taken on varying meanings based on the evolution of social norms, following society's view on what constituted bravery, and the importance given to animal rights. These would cause lion tamers, aware of their professional status, to modify their actions, producing behaviors that do not follow a stable pattern based on a scientific, logical progression. In fact, the behaviors of the lion tamer of old might have basically nothing in common with the lion tamer of today, besides working with lions. Lions, on the other hand, are not aware of their status as a species. Their behavior will be unaffected by their perception of others' subjective preferences, and the only 'stimulus' that the category itself will respond to would be natural pressures, even if they are human caused. The category lion is thus definitionally inaccessible to its subjects, as lions are unable to act under a description- and there can be a looping effect of lion tamers, in Hacking's view, but not of lions themselves.

⁷⁴ *Ibid.*

However, Cooper finds that “Hacking is simply wrong to claim that descriptions are required for intentional action,”⁷⁵ and does not agree that there is *any* level of description necessary for understanding either Human or Natural Kinds. This is primarily based upon Cooper’s argument that there are other possible ways of establishing intention besides description. She writes that “as there are other means of inferring an actor's intentions which do not depend on descriptions, it cannot be concluded that descriptions are essential for intentional actions.”⁷⁶ This is then paired with the example of nonverbal animals or people, who clearly (in Cooper’s view, at least) form intentions to act without describing them or even being able to describe them, as a proof that there is nothing about description that gives it causal power over intentional action *per se*. Cooper argues that because intentional actions are at least logically possible without description, description cannot be central to Human Kinds, at least ontologically speaking. There is nothing about Human Kinds, in other words, that is centrally dependent on descriptions in the same way that Natural Kinds are dependent on physical objects as their referents. In Cooper’s view, it would be logically possible to perform the actions a lion tamer does at the circus without, as an individual, describing them, so there is no reason to believe that all Human Kinds are logically dependent on some contingent description.

But while there may be some actions that *are* only possible under a description, such as marriage, Cooper dismisses these out of hand as too narrow to encapsulate the Human Kinds Hacking discusses. Indeed, these are merely cultural artifacts determined by linguistic constructs like legal categories, whereas Hacking claims a deeper logical dependency for description and human categorization, a dependency based on the cognitive nature of intentional action. There is something that goes beyond formal designations such as ‘husband’ or ‘getting married’ in Hacking’s conceptualization- in his own words, they “affect not only who I am but also my projects, the kind of person that I might hope to be, to value, to trust or to love.”⁷⁷ In other words, human kinds can be central to identity formation processes on a deeper level than sociological descriptors, and Cooper acknowledges this. While social institutions such as marriage and its attendant actions may not be Natural Kinds, Cooper also believes that “no such logical link between actions and descriptions affects kinds such as ‘autistic person’, ‘obese person’ and

⁷⁵ Cooper, “Why Hacking is Wrong about Human Kinds”, 82.

⁷⁶ *Ibid.*

⁷⁷ Ian Hacking, “On Boyd,” *Philosophical Studies* 61, no. 1–2 (February 1991): 149–54, 153.

'homosexual',” which are also classical ‘Human Kinds.’⁷⁸ Thus, the category is split between Natural Kinds and ‘Subjective Kinds.’ Human Kinds would straddle both areas, and thus are not distinct on the level of *naturalness* under a realist conception.

As seen above, Cooper thinks that there are vanishingly few actions for which descriptions are necessary- she accepts that recipes, for example, are descriptions that make it possible to cook something more precisely than we otherwise would. However, this does not mean that these descriptions are logically necessary to certain kinds of action. We could theoretically make a complicated dish if we spent a great deal of time watching and memorizing the actions of a professional baker, for example. Because Cooper believes that Hacking’s human kinds cannot be physically instantiated, but they must also enable the logical possibility of action, it is almost definitionally impossible, under Hacking’s scientific-realist worldview, for Human Kinds to exist as a coherent category independently of Natural Kinds. The class of kinds that do exist in the middle of this Venn-diagram are “a class of pseudo-legal actions that are logically tied to their descriptions, such actions are only a subset of all actions.”⁷⁹ The objects produced by such pseudo-legal actions are clearly not equivalent to the set of all Human Kinds. Indeed, Cooper dismisses these as very specific borderline cases, which may be a separate Kind distinct from Natural Kinds, but in any case, they are not what is meant by Hacking’s Human Kinds.

This is not an indictment of Human Kinds overall, but Cooper does hold that whether Human and Natural Kinds are distinct matters. This is because if Human Kinds are a subset of Natural Kinds, “...this suggests that accounts of laws, explanations, and the basis of sound inductive inferences, developed for the natural sciences, can be carried across into the human sciences.”⁸⁰ In other words, this means that Kripke-Putnam essentialists must be correct, as Hacking does believe that their model of natural science is more-or-less on the mark, at least in a pragmatic sense. However, for Human Kinds a necessary methodological unity is clearly an issue, and in fact it runs contrary to Hacking’s entire project in presenting psychological categories as Human Kinds. If the causal projectibility of Human Kinds is functionally identical to that employed in Natural-Scientific investigation, we would have reason to believe that Looping effects cannot exist in the way that Hacking describes, or at least that they are not as

⁷⁸ *Ibid.*

⁷⁹ Cooper, “Why Hacking is Wrong about Human Kinds”, 83.

⁸⁰ Cooper, “Why Hacking is Wrong about Human Kinds”, 84.

significant as Hacking thinks they are. After all, if Human Kinds are merely a special sort of Natural Kind, the Looping Effect could surely be reduced to some other, more essential or natural logical structure- removing the need for a more subjectively driven interpretation of Looping Effects entirely. If this were the case, then the entire concept of ‘Relevant Kinds’ particular to certain domains would possibly be in danger of collapsing into the purview of natural science.

Yet not all is lost for Hacking. As Cooper says, “People are affected by categories, and categories by people, and the important thing Hacking has done is to draw our attention to this.”⁸¹ Cooper acknowledges that Hacking is highlighting something vital, and he does so in an effective way. So, in a sense, the main argument here is semantic, and perhaps not productive. The main question is not whether human categorization is real (it is happening in the world, after all), but how and on what level of the human experience of the world it is instantiated. Cooper suggests that on a two-level model of instantiation Hacking’s Human Kinds cannot be fully distinct, and it seems that, under a strict scientific-realist model, Cooper is right. But the assumptions upon which this model rests require sometimes controversial commitments. Indeed, the projectibility of psychological kinds, for example, is a matter of public record, and it seems demonstrably true that the type of logical commitments we have in chemistry have sometimes failed quite miserably in the human sciences. Where one goes from here depends on where and via which avenues one thinks subjectivity and interpretation are instantiated, and indeed Cooper’s argument has been subject to critique from various schools of thought on those grounds.

⁸¹ *Ibid.*

V. The Reception of Cooper's Critique and Other Perspectives

Cooper's critique and arguments like it have been taken up from two different angles: Natural Kind eliminativists,⁸² and those who would continue her critique of the moderate tradition of which Hacking considers himself a member. These are by no means mutually exclusive. However, one major thinker who defends Natural Kinds from eliminativist critics while defending metaphysical pluralism is Muhammed Ali Khalidi. In his manuscript entitled "Natural Kinds," Khalidi largely sides with Cooper, claiming that just because certain classes of objects may be mind-dependent, "that alone should not prevent us from taking a realist stance toward them."⁸³ While Khalidi agrees with Cooper that the boundary between Human and Natural Kinds, as she proposes them, is unstable and fundamentally untenable, this does not mean that we should consider Human Kinds as a subset of Natural Kinds, but rather, "what is at issue here are the ways in which some real kinds depend on the mind and others don't."⁸⁴ For Khalidi, the main distinction is not between human and natural, but between real and non-real or 'conventionalist' kinds, which find their basis not in the physical world around us, but only in the subjective processes that Cooper terms 'subjective kinds.'

In any case, I will proceed on the assumption that Cooper and Khalidi are largely in agreement about Human Kinds, and that their main disagreement ends up being terminological. Khalidi assimilated Cooper's critique, and indeed used it to further the elimination of "the term 'natural,'" which "is unfortunate in the expression 'Natural Kind' and has led to some misleading claims and conclusions."⁸⁵ In terms of the story of how Natural Kinds come to be, though Khalidi and Cooper follow similar reasoning, and it seems that to the extent that Hacking's looping effect is instantiated in the physical world, both consider it to be real or natural, respectively. As Khalidi points out:

"Our theorizing and collective actions can instigate changes in the world, which can end up modifying the kinds very significantly, including

⁸² For one prominent example, see Marc Ereshefsky, "Eliminative Pluralism." *Philosophy of Science* 59, no. 4 (1992): 671–90.

⁸³ Muhammad Ali Khalidi, *Natural Kinds*, (Cambridge: Cambridge University Press, 2023), 49.

⁸⁴ *Ibid.*

⁸⁵ Khalidi, *Natural Kinds*, 2.

psychological, social, and biological kinds. But this does not mean that they are entirely at our behest or mere figments of our imagination.”⁸⁶

In other words, for kinds to be unreal, for Khalidi they must be entirely at our behest, imaginary, or otherwise entirely contained to the realm of the subjective. This is important because it means that far from differentiating Human and Natural Kinds, looping effects seem to have drawn them ever closer together, showing that even our categorizations are instantiated in the objective world. It also closely mirrors the point that Cooper makes in her original paper, leaving Human Kinds with a very high bar to clear, ontologically speaking. Any attempt to separate the two, it seems, would fall either into trivia, including a very narrow and unimportant set of unreal kinds on the one hand, and more numerous and important real Kinds on the other, rendering the distinction basically meaningless and certainly not in line with Hacking’s original conception of Human Kinds.

But others contest this view, even if they do not exactly seek to defend Hacking. Jessica Laimann, for example, proposes that while Cooper may be technically correct in pointing out the ontological issues with Hacking’s Interactive Kinds, i.e. that even if a Kind is particularly unstable throughout its history, this is beside the point. On her view, while there exists a tension between Hacking’s account, wherein he claims that “we are not able to acquire knowledge and make inductive inferences about objects that constantly change over time,”⁸⁷ and the Cooper/Khalidi realist view, which argues that “if human interactive kinds are Natural Kinds [-and they are-], we do not need to come up with radically new approaches to understand them.”⁸⁸

This is a surface disagreement which rests on a fundamental agreement: that stability in logical projection is critical for Kindhood writ large, and the fundamental question about Human Kinds is one about the relationship between the referential stability of a Kind and its role in knowledge systems like the human or social sciences. While they may disagree on how stable Human Kinds are, they both seem to agree that Kind stability is desirable. This also means that whether Human Kinds are Natural has some bearing on how stable they should be, at least

⁸⁶ Khalidi, *Natural Kinds*, 48.

⁸⁷ Jessica Laimann, “Capricious Kinds,” *The British Journal for the Philosophy of Science* 71, no. 3 (September 1, 2020): 1043–68, 1049.

⁸⁸ *Ibid.*

inasmuch as they will be consistent logical referents upon which theorists and scientists can build models. So, Hacking claims that since Human Kinds are uniquely influenceable, and hence unstable, they are not projectible in the same way as Natural Kinds, whereas Cooper/Khalidi claim that Human Kinds are not uniquely influenceable, and hence relatively stable. In essence, they are arguing around one another, but agree on the central role of (relatively) stable reference in the construction of Natural Kinds. While stability is not black and white, and Natural Kinds will not be stable into infinity, the stability in question is simply *enough* stability for the purposes of natural science. Thus, we have what seems to be a relatively contained disagreement about the relationship between thought-dependence and stability prosecuted by two camps that agree on almost everything else.

However, both sides, on Laimann's view, fail to acknowledge that rate of change or logical stability is not a sufficient mechanism for categorizing Kinds. Laimann claims that there is nothing particularly special or interesting about the degree of stability in a Kind, and the distinction made by Cooper, and then Khalidi, is largely one of terminology. Cooper claims that the stability of Human Kinds, which seems to be less than that of other natural kinds, is no reason to believe it is metaphysically distinct from Natural Kinds. As she asks, "Do human kinds really change more quickly than bacteria and viruses mutate?"⁸⁹ The answer is almost certainly no, and Laimann indeed agrees and emphasizes the stability that Human Kinds often provide. If this is the case, and thought-dependent Human Kinds are Natural, then there is little reason to expect that Human Kinds would follow significantly more 'natural' explanations.

In other words, if Human Kinds can be subject to the moral vagaries of human value-systems and remain Natural Kinds, does this mean we would expect them to change according to the same mechanisms as non-morally laden Natural Kinds, and to not have to develop new methods for handling wayward and unwieldy Human Kinds? This is a difficult question, and in Laimann's, and indeed my own view, Cooper and Khalidi do not provide convincing answers, and they do not seem to try. Simply claiming that all human thought is natural does not change the fact that natural-scientific and social-scientific objects behave differently, and that we might need new ways of regulating and understanding social-scientific discourse if we want to stop, tame, or even understand the looping effects that Hacking points out. Even if Human Kinds are as natural as quarks or sunsets, this would not necessarily entail

⁸⁹ Cooper, "Why Hacking is Wrong about Human Kinds", 79.

anything about how they or their associated Looping Effects function. While Cooper does claim that where a Kind is instantiated matters (in the physical world vs. purely in relational terms), this matters primarily in relation to a kind's projectibility, and not its ontological history. Thus, Cooper's argument remains subject to Laimann's critique.

Furthermore, Laimann makes the point that labels and Kind membership, far from producing looping effects most of the time, are often highly stabilizing. Laimann gives the example of gender norms, and claims that due to highly value-laden labeling, male and female humans are raised to behave differently, and thus do so. This is then used as scientific evidence that the value-laden kinds we call men and women have standardized sets of behavior- it is naturalized. Thus, "Due to these classificatory feedback effects, scientists came to firmly understand men and women as Natural Kinds that facilitate explanation..."⁹⁰ Laimann uses this value-tagged Kind, which *can* loop as Hacking describes, but which may also artificially induce behavioral or even physical stability in the features of members of a Kind, to argue that:

"[H]uman interactive kinds are often 'hybrid kinds'—they consist of what I call a 'base kind', constituted by the properties that define the category, and an associated 'status kind', constituted by the social position that individuals acquire qua being recognized and treated as members of the specific category."⁹¹

This dual-track system of Human Kinds is quite distinct from Cooper and Khalidi, in that it assigns a causal role both to the physical and mental aspects of Human Kind-hood. This makes intuitive sense; for if it is possible on Cooper's account for subjective kinds to exist and to matter, like in the example given of our perception of Ms. Universe being rather short in an old photo, then there is no reason to believe that even if the Human Kinds which participate in looping effects are physically-instantiated and produce that sort of feedback, they may *also* produce totally uninstantiated, subjective feedback. Thus, a dual track model fits both with Hacking's original model, and with the realist model of Cooper and Khalidi. The key difference is that it does not seek to ground Human Kinds in whether they produce classical looping effects and does not demand that all aspects of the changes among those who identify with kinds are

⁹⁰ Laimann, "Capricious Kinds", 1056.

⁹¹ Laimann, "Capricious Kinds", 1058.

idealized, a patently impossible demand. Rather, Laimann envisions a model wherein real referents and subjective values combine to create Human Kinds. While there may be changes instantiated in real referents, there are also purely relational changes occurring (or not occurring, producing stability) that may more closely resemble Hacking's looping effects.

In constructing this model, Laimann draws on the work of Ron Mallon, from whose book, *The Construction of Human Kinds* she draws various examples. Mallon, for his part, agrees that there is a:

“...prima facie plausibility that similar claims [to Hacking's] about many other features of the world lack precisely because human beings are cultural animals for whom language and other sorts of symbolic expression provide central ways of cooperating and coordinating with others.”⁹²

Here, Mallon claims that the linguistic-cultural nature of humanity is not located in the interaction of the individual subject with the ideas that define them, independent of any cultural feedback. We do not exist in a world of physics and concepts, but in a discursive and intersubjective matrix, and *that* is just as crucial to social construction as purely conceptual or physical considerations. In other words, we are ‘thrown,’ in Heideggerian terms, into a world in which Humans alone seem to have access to a particular reservoir of symbolic meaning and use that reservoir of meaning *to communicate with others*. There is a world of shared symbology and meaning that does not exist purely in the realm of the ideal, but as a communicative construct- in other words, intersubjectively. As a communicative view, this also gels well with Hacking, whose looping effects seem to be caused by discourse, more specifically public, social-scientific discourse.

This ties back to Cooper's, and indeed to Hacking's argument, because it proposes a third sphere in which Hacking's claims about the peculiar nature of Human Kinds is possible. In other words, the debate as to whether Human Kinds are Natural is only relevant within a field of argument that sees Kinds as *objects* of human representation, and not also as representations themselves. Mallon articulates this quite differently and envisions a realist approach to social construction in which “humans and their minds, cultures, decisions, social practices, languages,

⁹² Ron Mallon, *The Construction of Human Kinds* (Oxford: Oxford University Press, 2018), 147.

institutions, and arrangements are simply natural mechanisms among others that can subserve and sustain real categories.”⁹³ According to Mallon’s view, human kinds would presumably be viewed as natural, and Cooper’s argument is correct. However, Cooper does not explain why we sometimes see qualitatively different sorts of scientific categories, such as social vs. natural, emerge from the undoubtedly natural human brain. This is not at all a fault in Cooper’s argument, as it is totally beyond its scope- but it is a logical conflict, pointed to by Cooper’s arguments, that is worthy of investigation. After all, even if social construction is real, that does not mean that constructed categories are fundamentally the same as natural categories, especially the kinds of things studied in the natural sciences.

However, the ‘metaphysically moderate constructionism’ that Mallon advocates for does not, in my view, provide an adequate explanation of social-scientific Kinds either. After all, there is plausibly a trivial reality inherent in *all* things, Kinds included. Everything, from fiction to flowers, is (under this interpretation, at least) real- but as Mallon points out, this does not mean that we live in a qualitatively flat universe of only natural facts. As Laimann argues, this does not resolve the fact that there are unique mechanisms changing Human Kinds, and that these “different mechanisms may pull in different directions, thus amplifying or attenuating their respective effects.”⁹⁴ These mechanisms, for Laimann, mediate the relationship between status and base kinds, and many philosophers and cognitive scientists have sketched the diversity of ways in which classification can lead subjects to modify their behavior. For an example, she draws from Mallon, using his three-track model of intentional change of behavior, automatic change of behavior, and environmental construction as an example of why the social factors shaping the internal dynamics of Human Kinds can result in conflicting, strange results. For example, if a person publicly classified as a criminal decides that they are going to intentionally change their behavior due to the internalization of social stigma, but society is set up so that stigmatized individuals cannot obtain the material and social capital necessary to make that change, there is a social contradiction that follows an entirely different logic, it is claimed, to our construction of Natural Kinds.

This leads to the instability, or at least a different Kind of causal projectibility in what Hacking calls Human Kinds. This layered mechanical structure leads Human Kinds, which are

⁹³ Mallon, *The Construction of Human Kinds*, 158.

⁹⁴ Laimann, “Capricious Kinds”, 1062.

shaped by many factors on multiple levels, to be decomposable into a neutral natural ‘Base Kind,’ and a value-laden ‘Status Kind.’ Laimann gives the example of sex and gender, in which a biological reality, as physically natural as the stars or quarks, is metamorphosed into gender: “a social position or role that individuals occupy in virtue of being recognized as members of a specific sex.”⁹⁵ This basic tenet of feminist social critique is, on Laimann’s account, applicable to various other Natural/Human Kind distinctions, such as race and disability.

For example, there is a natural or real basis for being labeled a disabled person. To live without a leg is, for example, to not have the physical appendage we call a leg, and entails, even without any social intervention, certain consequences for organisms that fit this description. However, as Laimann points out, “members of the base kind come to occupy the social position that characterizes the status kind only if they are recognized as members of the base kind.”⁹⁶ Thus, there is no question that, for example, to be visibly disabled one has to have something that other people *recognize* as hindering one’s ability to traverse or interact with their environment. Other cockroaches, presumably, cannot describe a fellow-Cockroach without a leg as disabled, and without human intervention, this cannot occur.

The intersubjective validation of a status Kind is *not* a physically instantiated phenomenon under Cooper’s criteria, and I argue that it is thus productive of the Kind of ‘purely relational changes’ that Cooper argues are necessary for Human Kinds not to be Natural Kinds. Indeed, the change produced here is *not* in the physical appearance of a person who is considered disabled, but merely in how others perceive that individual. While it *could* be productive of physical changes due to social pressures, and this could loop around to affect our subjective preferences and attitudes, this does not change the fact that our categorization here changes for purely subjective reasons, and that Laimann’s status kinds are always subjectively instantiated.

Considering that finding, the question I want to ask about Human Kinds is not whether they are Natural or not- they clearly have aspects that are natural and are based upon natural categories. The question is whether, if we consider their purely relational status kinds, these Kinds operate on the level of the real, and can thus be used in scientific investigation with the same level of causal projectibility as paradigmatic Natural Kinds. While Khalidi and Cooper argue that it *must* be the case that they are, Hacking, Mallon, and Laimann provide convincing

⁹⁵ Laimann, “Capricious Kinds”, 1058.

⁹⁶ *Ibid.*

arguments that simply assuming this is not sufficient, even if there is something natural about them. This suggests that looking at Human Kinds as Natural or not, categorically, is perhaps naive, and cannot describe the complex array of factors that shape their causal role.

In fact, Khalidi has come around to a similar position in more recent work. In his paper *Natural Kinds as Nodes in a Causal Network*, Khalidi argues that Natural kinds are internally logically-ordered, which “enables us to distinguish [them] from clusters of properties that are conventionally rather than causally related, a feature that applies to some though not all kinds in the social domain.”⁹⁷ In other words, there is a strict internal scientific logic in the construction of all Natural Kinds that is not present in Human Kinds, which are often related due to non-logically or at least non-scientifically structured social practices. Conventions are what structures the cluster of properties that form Human Kinds, and thus a fundamental question that neither Hacking nor Cooper fully answers is what the nature of these conventions is. In this explanation, Khalidi clearly takes inspiration from Richard Boyd’s Homeostatic Cluster Kinds, but leaves the door open for a differing conception of kinds active in the social domain much in the vein of Hacking.

This mirrors the conclusions drawn by Laimann and others which argue along with Khalidi that there are separate ontological stories for Natural and Human Kinds, and that therefore, in terms of causal stability, one is *not* categorically reducible to the other. Even if some bacteria mutate as quickly as memes, this is no reason to assume that the history of their construction followed a similar path, or that we can construct the same kinds of theories and arguments with them. In other words, the rate of change in a Kind is not necessarily related to the sort of change taking place. Even if a criminal is natural in some sense, it simply is not productive to use that as an argument to enforce a view that does not fit with social reality. In focusing on Natural Kinds, Khalidi does not, of course, answer whether the social world upon which Human Kinds are supposedly based is real, and how Human Kinds come to be if not by a logical clustering. However, he does move us closer to the nuance necessary to examine exactly what conventions allow Human Kinds to agglomerate, and how those conventions function.

In the following section, I will argue that a norms-based understanding of Human Kinds is a way to assimilate diverse perspectives on Human Kinds. It acknowledges that the

⁹⁷ Muhammad Ali Khalidi, “Natural Kinds as Nodes in Causal Networks,” *Synthese* 195, no. 4 (August 2, 2015): 1379–96, 1380.

status-aspects of Human Kinds are dependent on real, natural referents, but that these come together according to norms in a discursive terrain that is logically dependent on both real and strictly mind-dependent referents in their separate spheres. In other words, the values attached to base kinds are attached according to widespread, but sometimes contested conventions, and these rules are not naturally extant. This means that Human Kinds cannot simply be assumed to function identically to Natural Kinds, even if they are naturally instantiated to some degree.

In any case, as Hacking points out, the democratization of social scientific debates has given social-scientific objects like the Psychopath a life of their own, and these objects are metabolized as moral objects through scientific vulgarization, which takes place in public discourse. What values can be attached to what kinds of objects is a social process in which norms are tested for their moral as well as scientific value. In other words, the conventions that Khalidi believes separate the ontological stories of Human and Natural Kinds are generated in a public moral discourse involving ought-judgments. As Hacking laid out in his original definition of Human Kinds, these sorts of objects are unique to modern societies with a particular democratization of social science. It is reasonably clear that the site of that democratization, and therefore moralization, is to be found in how the public takes up in discussion, forms judgments of, and acts upon Human Kinds. We therefore need a theory of social-scientific discourse which can adequately explain not only how Human Kinds and the people with whom they are associated come to be judged as moral objects, but also how the pairing of value-judgment and natural-scientific explanation is socially regulated. I argue that it is through the application of normative standards of transformation that these objects are paired in a public discourse. Thus, the reason Human Kinds produce looping effects has nothing to do with how natural they are, and everything to do with the way we take them up and use them.

VI. The Normative Regulation of Human Kinds

A great deal of the power of Ian Hacking's original argument is generated by his insight that the current two-track nature of value in the human sciences leads to wildly differing statuses of Kinds. These 'kinds' of Kinds matter, and there are certain fundamental differences in what they are supposed to categorize that make it difficult to reduce Human to Natural Kinds. For example, it is not very interesting that criminals physically exist in the world, even if it is technically correct. No sociologist wants to prove that lesbian songwriters are wonderful people, even if we do, in our own experiences, find that this is the case. These are judgments not of factual correctness, but of moral status, and thus fundamentally a different type of description. Whether a description holds as a value judgment is a highly relational affair, and it is ultimately governed by the norms we apply to social-scientific discourse.

In light of this categorical distinction, Cooper's argument misses a great deal of structural relationality in trying to show that Hacking's Human Kinds must be Natural. Even if she is right in a narrow sense, it seems Cooper must commit to a scientific realist understanding of purely affective events, which she herself seems to reject in the case of 'purely relational changes.' The moral content inherent to Human kinds is idea-dependent because it is brought together with its referents in a value-laden form via the discursive convention, norm, rule, or whatever one calls it. Certainly, our ideas about whether we are heavy or slim will affect our bodies' real shapes. However, the moral reasons that we derive from the categories 'heavy' and 'slim' are still not physical objects, and they are not clearly physically instantiated. In other words, while Cooper is right that some aspects of Human Kinds are natural, the morality that Hacking sees them as inherently coupled with *is* purely relational, and thus it is difficult to see how this can be reduced into any Natural Kind in the narrow sense of the term. Especially if one adopts Laimann's dualistic framework, there seems to be a great deal of purely relational change involved in the construction of Human Kinds.

To be sure, there is a great deal that is *right* about critiques of Hacking along these lines, and specifically Cooper's critique. It seems clear that Hacking does not have all his ducks in a row on questions concerning the exact relationship between the component parts of Human or Natural Kinds. In fact, he quite conspicuously remains agnostic (or at least claims he does) on questions of Kind realism. Nonetheless, ideas have a life of their own, as Hacking well knows,

and his work does raise these questions. We see that Hacking acknowledges the highly historically contingent nature of Human Kinds, as he theorizes them as only possible in industrial and postindustrial societies, where knowledge of social-science and its goals is widespread in the public. This knowledge is spread and changed through popular conversation in those societies. The norms that govern the wedding of base and status Kinds in social-scientific circles and in the public are products of these societies, and clearly, they are not conducive to stability even *within* social-scientific systems. Both reductionists and anti-reductionists seem to be missing something critical.

In my view, whether Human Kinds are Natural is not a productive debate, and indeed it ignores the more critical issue of normative structuring that more substantially shapes how Hacking's looping effects are brought about. Regardless of whether objects are or are not 'Natural,' in the present era there is very little clarity on what kinds of judgments are appropriate for different categories of knowledge when they do conflict, and without reference to an unquestionable higher authority. We cannot scientifically prove one way or another how the moral valence inherent to Human Kinds should be conceptualized, so how and when we moralize these Kinds is a topic that deserves a great deal of scrutiny. After all, it is the widespread use of Social Scientific categories in popular discussion that has given rise to the Looping Effects that Hacking points out.

If we view both aspects of Laimann's Human Kinds, base and status kinds, as strictly extensions of the natural world (as is-statements), as is understood in the model of natural-scientific causality, then that label loses a great deal of meaning. If Human Kinds are totally Natural Kinds, composed of two 'real' and 'value' categorizations, that provides no explanation as to why these two categories behave differently. This naturalization of Human Kinds is therefore almost a non-issue, pragmatically speaking. This is not a flaw in Cooper's highly contained argument, but it is nonetheless a major issue if one attempts to continue that line of reasoning. After all, just because moral intuitions might bring about real change in the physical world does not mean that they always function along the same causal lines as physical ones. This is why the model proposed by Laimann is, in my view, quite effective- as it does not attempt to derive the existence of affectively instantiated status kinds from the physical antecedents of natural science or its natural world or vice versa.

However, while Laimann points out that there are affective status kinds that accompany base kinds, and this seems to more accurately reflect the structure of how values accompany physical Kinds, she does not explain according to what set of rules or in what conceptual space this occurs. In this section, I will explore the possibility that the medium through which this coupling is made, and in which looping and the like occurs, can be found in between the two, in the intersubjectively constructed norms that govern social-scientific discourse. If this is the case, it would leave us with three, not two composite elements of Human Kinds: Base Kinds, Status Kinds, and a discursive standard, or norm, that shapes the way in which value judgments can be applied to scientific objects. I will call this view the Regulatory Conception, for lack of a better term.

One might reasonably ask what exactly I mean by norm, or what I mean when I say that norms govern our vulgarized social-scientific discourse. Does a norm refer to rules imposed by specific actors, patterns of behavior, or something in the social sciences themselves? I am not writing a paper on the metaphysics of social norms, and thus refer quite simply to the intersubjectively-constructed rules that govern what we should and should not ascribe moral or value-judgments to, and how we do so. This minimal definition works if we want to uncover the conventions that govern the wedding of base and status kinds with as little baggage as possible. As Human Kinds are particular to industrial and post-industrial societies, it is reasonable to expect that the rules we use to construct them are governed by many actors and institutions, namely academic and media ecosystems that generate the cultural knowledge necessary for social-scientific discourse to occur in the first place. This cultural knowledge creates behavioral expectations, including of speech and expression, and these influence the conditions of possibility for discourse in industrial, bureaucratic societies. This much is not particularly controversial- but can we include norms themselves as a constitutive element of Human Kinds?

Norms, as minimally defined in this context, are simply socially determined, and widely adopted standards of behavior and/or communication. If we do value-tag social-scientific objects according to certain shared standards and wish to include these standards as a component of Human Kinds, a third moment of *normative regulation* must be appended to Laimann's two-pronged conception thereof. After all, if Human Kinds are instantiated in and transformed by the way we use them in popular discourse, then certainly the internal relationship between base and status Kinds must be mediated by the norms of moral and scientific discourse. We thus

have an empirical base Kind, a value-laden status Kind, and the constructed matrix of ought-rules through which these two are coupled. This normative base could be understood as political theorists like Juergen Habermas, for example, idealizes it,⁹⁸ as regulatory of social action, primarily speech, but it might equally be understood in a less formalized, descriptive sense. Indeed, it seems reasonably clear that the norms we are using to create Human Kinds are far from ideal and are very much contested. Furthermore, while one might consider discourses physically instantiated, I see no obvious reason to believe that norms of discourse, at least, are not idea dependent.

If norms are in fact a constitutive third aspect in the construction of Human Kinds, their moral character must be explicitly understood as constructed or socially determined, and not simply given through science in popular discourse. We cannot understand the role that Human Kinds play in the hybrid system of social science on purely scientific or material terms. Hacking points to this by referring to Human Kinds as investigating the ‘soul,’ and showing how the model of Natural Kinds does not fully do justice to it. But it seems that we cannot stop there without running into other issues, namely the critiques raised by Cooper. If Human Kinds are not Natural, the processes of construction that enable their differentiation must be explicated in human terms, or they will be vulnerable to a naturalist critique. We need to venture out into the messy world, to discover according to what rules and expectations Human Kinds are instantiated in public discourse, and to discover the conditions under which such discourse can do justice to the origins of Human Kinds as hybrid objects. In essence, under the Regulatory Conception, there is a political or ethical dimension to the Human Kinds, whose construction as a mediation between fact and value-judgment must *also* be investigated. While I will not comment in this paper on whether it is in fact possible to have intersubjectively shared convictions on the proper moral or political status of different Human Kinds, this may nonetheless be a promising ideal for further research to take as a lodestar.

Central to the Regulatory conception is Hacking’s observation that there is a moral judgment at the heart of every Human Kind. As he points out, “When new moral concepts emerge or when old ones acquire new connotations, then our sense of who we are is affected.”⁹⁹

⁹⁸ “Intersubjectively shared convictions *mutually bind* the participants in interaction; the potential of reasons connected with convictions forms a common basis on which, if necessary, one person can appeal to the insight of the other.” from Jürgen Habermas, “Remarks on the Concept of Communicative Action,” essay, in *Social Action*, ed. G. Seebass and R. Tuomela (Springer Dordrecht, 1985), 151–78, 153.

⁹⁹ Hacking, *Rewriting the Soul*, 68.

Normative changes, in other words, change kinds of people. And by extension, if certain moral concepts fall in and out of what is considered appropriate to ascribe to certain categories, this is also productive of change. In Hacking's view, it seems that a qualitative mismatch between our moral regulation and scientific regulation is responsible for Looping Effects: in other words, neither system can handle the kinds of inputs that the other gives it. Our moral intuitions are frazzled by 'objective' scientific moralization, and our scientific systems are thrown out of whack when naturalized social-scientific objects behave as if they are bewildered humans, which they are. But could the Regulatory Conception help ameliorate such a dilemma? Can we regulate the ways in which we apply scientific categories to value systems, and vice versa? In an ideal situation, we might test to see whether the moral values that are associated with delinquency, such as laziness, are considered a valid application of morality by various actors, including delinquents, and come to a new understanding of what values we should attach to delinquency. If there is a better kind of process through which these norms are in fact constructed, then this is an ethical and political question. Perhaps consensual norm-building could then be applied to create stable, fair categories, but prescriptions on how to do so are beyond the remit of this paper.

There are of course many reasons one might not want to accept that scientific objects are at the whims of our moral norms, or that there is nothing about natural kinds that can explain the supposed givenness of the moral facts with which they are imbued. How can natural is-statements be at the mercy of ought-statements without utter chaos ensuing? If our scientific knowledge is based on constructed value-judgments, then how can we ever hope for social-scientific projectibility? Hacking might answer, and I would concur, that there have been far too many ought-statements masquerading as is-statements, and that represents a major epistemological issue. There is a fundamental divide in the knowledge we can have in factual as opposed to moral discourse: subjective values and natural facts do not have the same kind of grounding in the world, and we therefore cannot talk about the truth of a value judgment on objective, natural-scientific terms. We have moral intuitions, and we apply them to subjects in such-and-such manner, depending on which established norms are considered to be valid for such-and-such topics. How these moral intuitions are formed is a valid scientific subject, but whether they are ethically correct is probably not. The Regulatory Conception, by acknowledging the centrality of discursive norms in the construction process of Human Kinds, allows us to discuss whether we *should* be applying such-and-such moral category to

such-and-such base object without attempting to use scientific methods to peer into subjective value-judgments.

Nonetheless, some may object that if we decide that attaching moral value to certain, or even all, Human Kinds is not valid, then there could be deleterious knock-on effects. For example, if everyone decides that murderers should not be negatively stigmatized because they are classified as murderers, then more people would commit murder. There is, however, no reason that the actual content of their *actions* could not be negatively stigmatized. It is, of course, morally reprehensible to kill another human being out of malice. But killing another human being is not a Human Kind, it is an action- and we could well attach moral stigma to that action without agreeing that the category such people are placed into is a valid reason for attaching moral stigma. While this distinction is in this case somewhat absurd, as a murderer is just a categorization of a morally reprehensible action, in more nuanced cases moralization is far more tenuous, like Multiple-Personality Disorder. There is, as Hacking points out in *Rewriting the Soul*, already an activist community that seeks to reshape MPD, and they have done so successfully. But this has been done in a tendentious and extremely emotionally charged manner. The norms that govern its moralization, far from being explicitly understood as moral processes, are subject to all sorts of analysis and popular discourse that seeks to portray that aspect of Kindhood as incontrovertibly natural, totally made-up, and everything in between. This is a popular discourse, but not a well-structured one.

Under a Regulatory Conception, we see that the issue here is, far from the natural-ness of a Kind, the conditions and rules of the discourse around that Kind. Perhaps, in an ideal situation, there could be a recognition of that central issue, and the construction of proper norms to mediate the tensions in MPD discourse could be resolved. If the line between fact and value were subject to intersubjective verification by participants in a discourse, then perhaps this would resolve Looping Effects. However, this is purely hypothetical, and not terribly likely. For this to be the case, the implicit moral content inherent in sociological or psychological construction would have to be made explicit and treated as such. If done in an inclusive and mutually respectful manner, one that makes explicit disagreements without associating scientific authority with moral authority, and seeks to make the implicit moral claims of social-scientific categorization subject to an explicit moral conversation, then perhaps the talking past one another so characteristic of the examples given in *Rewriting the Soul*, like the controversy around Multiple

Personality Disorder, from patients to advocates to practitioners, could be avoided. This is not necessarily the case, and I am no expert on social psychology. However, under the Regulatory Conception, it would at least be *possible* for the moral norms that govern Human Kinds to be discussed and modified in an epistemologically democratic, rational manner.

The reason this is prescient in the human sciences, and applies well to Human Kinds, is that the moral value inherent in these categories is often masked under the objective veneer of science. If hysterics are bad because science says so, then I do not need to feel badly, or indeed perform any reflection or intersubjective engagement at all when I treat someone with a hysteria diagnosis as if they were morally lacking. Perhaps in a psychological context, this can have some validity- there *are* people who are amoral or immoral in a psychiatric context and certainly many outside of it. But to *prima facie* attribute a moral status to someone based on the constructed moral implications of a Kind as if it were proven is a violation of what these categories are supposed to describe. The issue is that we do not have stable discursive norms to regulate these violations. There is no role for intersubjective verification in the moral discourse of the social sciences in modernity, and this is an issue that contributes to looping effects, which Hacking identifies as arising in the internal tension between value and fact in the social sciences. But these looping effects are not a strictly necessary consequence of modern knowledge systems; as Laimann points out, there are also quite stable and stabilizing Human Kinds, who do not exhibit an internal logical tension that drives unpredictable change. What, then, separates the normative content of Human Kinds that loop from those that do not? What is it about some values that conflicts with their being categorized as hybrid scientific objects? Under this norms-driven conception, we have a clear answer: it is that implicit moral claims are not considered as objects of moral discourse, but scientific.

Let us look at the example of Kinds S and U, two socially determined Kinds applied to people. Kind S has moral characteristics which *themselves* have been subject to a public debate (e.g. a discourse on whether we should be able to ascribe a moral valence to the unemployed), and whose moral characteristics are thus understood by most people as intersubjectively constructed. Kind U has moral characteristics, but because they are understood as coming from an authoritative ('scientific') source, the validity of these characteristics is not subject to public debate (e.g. a discourse on the main ways in which the unemployed have been proven to be lazy). Thus, even though the moral content of Kind U is also applied to people, since it is

understood as coming from an authoritative source, the only way of contesting such norms is by discrediting the source or by changing one's behavior to escape Kind U. In the modern world, many Human Kinds are functionally identical to Kind U: they are applied in moral discourse with the understanding that the scientific system has predetermined their moral status, and thus the people who they categorize must either reject the value system of modern science or seek to change themselves, creating looping effects. If, however, the moral content of the Status Kind was understood as being mutually constructed, we might see a more stable, and arguably healthier and less polarizing effect as exemplified by Kind S.

This can, for example, be fruitfully applied to race, one of the most consequential constructed categories of Western science, but one which has lost much of its normative moral force. For example, while the Kind 'black person' has various biological components, principally having relatively dark skin, this is not considered in most Western public discourse to be a reason for normatively ascribing *any* moral judgment, bad or good. We have agreed to the norm that race is not a valid reason to ascribe moral attributes to a person. But this was, of course, not always the case- in the dominant discourses of Western societies, blackness was clearly formulated to enforce and associated with negative moral characteristics (and still is, even if it is often not explicitly so), and whiteness with positive ones. While when exactly race emerged is a matter of some contention,¹⁰⁰ it certainly has been used, in a social (and natural) scientific context, to explain why various Kinds had causally associated moral characteristics.

Furthermore, this usually had *some* physical basis in the world, but from the modern point of view, we usually acknowledge that the real biological referents upon which Race was constructed were not appropriate to attach value to, and that doing so created a racist belief system and ideology. But this was not always an established norm. Rather, there was a complex array of social factors, from the economic reality of slavery to its brutal human cost to neocolonialism, that led dominant participants in public discourse to be able to reify their prejudice into science, and vice versa in the 19th century. As industrialization progressed, race scientists of all stripes leapt from physical difference to moral lassitude by simply assuming that all behavioral differences were reducible to physical ones, ascribing a causal relationship between the physical and moral that simply was not given by physical facts. The people

¹⁰⁰ For an in-depth discussion of this topic and the social construction of race more generally, see Paul C. Taylor, *The Philosophy of Race* (London: Routledge, 2012).

categorized by race were not allowed to participate in that construction, and thus their input was not considered necessary to validate their normative status. While most people in the modern West view the association of race with moral characteristics to be invalid, and the educated public is mostly familiar with the horrors that such an association can enable, we nonetheless make a similar sort of leap in applying social science to moral discourse quite often. Even race has not entirely lost its moral valence and is of course controversial and not entirely stable itself.

While the current drama of looping effects is very different (and thankfully much less severe in consequence) from race science in its heyday, it is nonetheless troubling that the same basic structure of the Human Kind is papered over by similar normative claims, still often justified via reference to the natural-scientific model. How, then, can we move from unjustified, authoritatively derived normative claims to intersubjectively validated normative claims to which people can consent in the social sciences? Does the Regulatory Conception provide a robust enough interpretive mechanism to really capture the complexity of social construction?

While this paper cannot answer such questions definitively, one natural place to look for hermeneutically sensitive conceptions of the social sciences is in the social sciences themselves. Theoretical sociologist Isaac Reed, in his text *Interpretation and Social Knowledge*, seeks to mediate the divide between sociological naturalism and anti-naturalism. In this context, naturalism refers to a similar philosophical position to Kind naturalism: namely the position that all social facts are reducible to natural explanations, and that good explanations of social phenomena therefore follow natural causal laws. Anti-naturalism is a catch-all for diverse positions that seek to undermine that conception, and which seek to ground social facts like Human Kinds either in themselves or some other, non-natural referent.

Reed takes up a qualified anti-naturalist position defined by the interrelation of what he calls ‘epistemic modes.’ In his framework, the realist epistemic mode is the method of knowledge production that is employed by the natural sciences, and in the context of sociology seeks natural explanations for social phenomena. It would thus include Natural Kinds. The interpretive epistemic mode is one in which we seek to uncover the individuated reception of social knowledge, and is thus productive of Human Kinds, or at least Status Kinds. It is hermeneutically significant, as it pays attention to the relationship, in the case of social theory, between an individual and the material they receive (reader and text, in the hermeneutic idiom). Between these modes of knowledge, Reed proposes a Normative epistemic mode, in which

‘maximal interpretations...are the empirical articulation of utopian possibility.’¹⁰¹ In other words, Reed believes that between factual articulations of knowledge and individual receptions, there is also a category of ideally regulated conditions of possibility for social knowledge, which are articulated as norms, in this case utopian norms. Unlike the objectified natural world, unlike subjective judgments and individual perceptions, these norms are utopian because they regulate how we should behave. Whether we do is an empirical matter, but it would not make a great deal of sense to have normative standards that tell us that it is sometimes permissible to commit perjury, for example. Norms are, in Reed's interpretation, always idealized and utopian, because they simply would not be expressible as norms otherwise. The generation of social knowledge is therefore governed by a third category of knowledge, one that by its very definition cannot be actually realizable.

Whether this conception sets out a correct framework for sociological inquiry is not of immediate relevance for this thesis. However, Reed does reach a similar insight about the role of norms in social knowledge, in this case construction, to the Regulatory Conception. Indeed, if we were to conceive of each of Reed's spheres of knowledge as productive of certain categories, and that norms governing the interaction between subjective and objective spheres of knowledge constitute their own sphere, we would see that debates about the naturalness of Human Kinds necessarily ignore the fullness of our society's relationship with knowledge. Furthermore, they ignore the ideal and fundamentally non-real character of the norms that govern their formative discourses, especially moral discourse. In other words, there is a universe of relational, normatively-governed constellations involved in the construction of social knowledge, and this mutually influences both Human and Natural Kinds. Norms in the natural sciences are still constructed with certain values in mind, but without a direct, agential moral valence in their creation or adoption. A disease can surely have a moral valence (in that we may think people who have it are worthy of care), but it is not usually considered or held morally culpable for being disease- a criminal, on the other hand, is. To consider these sorts of categories functionally identical to one another, we would likely need to adopt the sort of moral relational changes that Cooper thinks are purely idea dependent. We would need to interpret them differently, and whether we do so is in fact governed by constructed normative standards.

¹⁰¹ Isaac A. Reed, *Interpretation and Social Knowledge: On the Use of Theory in the Human Sciences* (Chicago: University of Chicago Press, 2011), 81.

Furthermore, as Hacking would probably point out, there does not exist a unidirectional relationship between two qualitative poles of knowledge, the objective and subjective, and a mediating norm which ascribes rules for pairing one with the other. Why we ascribe a moral valence to categories has a historical explanation. Cooper might object that this history, too, is a natural phenomenon, because it is dependent on physical objects moving and being moved. I have attempted not to get stuck in the realm of metaphysics and will not attempt to refute this point. However, the idea of norms as natural objects with natural histories is a strange one, and certainly has not been established in her interaction with Hacking. If Human Kind-reductionists want to claim that discursive norms are natural facts like tigers, then they may, but this is not very convincing *prima facie*.

In the case of Human Kinds, Hacking finds that looping effects are ultimately produced by the fact that we receive the classifications that we are given as moral facts, which leads to changes in real behavior. As he writes in the introduction to *Rewriting the Soul*:

“People classified in a certain way tend to conform to or grow into the ways that they are described; but they also evolve in their own ways, so that the classifications and descriptions have to be constantly revised”¹⁰²

We do indeed evolve in our own ways, and these ways in which we evolve are subject to physical constraints, scientific knowledge, and norms of behavior, including discursive, moral ones. Social science is not able to capture all facets of human existence, and the conceptual tension over its boundaries has generated much confusion. What is needed to produce stable categories of knowledge, then, is at least a model that explains how norms are applied in categorization, and points to the conditions for resolving tensions therein. If we want to resolve Looping Effects, then how and when morality is deemed appropriate to ascribe must seemingly be subject to the will of both moralizer and moralized, analyst and analysand. At the very least, the implicit moral content of categorization should be understood as moral content, and not naturalized away. Whether this is actually possible in the Social Sciences is a question for further research, and ultimately beyond the scope of this thesis. Instead, I only outline the condition of possibility under which Human Kinds can be properly understood and addressed without

¹⁰² Hacking, *Rewriting the Soul*, 21.

attempting to reduce them to morally charged Natural Kinds. Perhaps the Regulatory Conception that I have introduced can serve as a jumping off point for projects of that nature.

In any case, the main point of this paper is that norms determine whether it is appropriate to apply moral language to Human Kinds. In my view, neither Hacking, Cooper, nor any other thinker provides a convincing transcendental property of Human Kinds that will tell us how they *should* be used in discourse. Thus, there exists no final truth about any constructed Social-Scientific category that will put an end to looping effects once it is properly identified and broadcasted by experts. Human Kinds are only fully intelligible as the way in which modern societies, which have democratized social-scientific knowledge, decide as a collective to construct them as objects of popular discourse, and that is not a scientific process, but a question of ethics and politics, a question for human subjects themselves to decide. If we want to stop looping effects, then we must examine how social-scientific categories function not only on the level of scientific or logical systems, but also as morally charged and normatively governed objects.

VII. Conclusion

In this paper, I have laid out Ian Hacking's influential conception of Human Kinds. I outlined the genealogy of Natural Kinds, and contrasted Hacking's dyadic model with an assimilationist argument from Rachel Cooper. Ultimately, I found that both models ignored the norms which govern the coupling of affective tagging with real objects, or as Jessica Laimann calls them, Base and Status kinds. I therefore proposed that since the structure of Human Kinds is more completely understood as a triad of base, status, and norm, with norms the condition of possibility of the collative process that binds Human Kinds, there is seemingly a solid notion of idea-dependence that Hacking can fall back on. To conclude, I articulated how these norms relate to looping effects, and why neither Cooper nor Hacking can address the issues they pose. I argue this means modern societies need to make explicit the intersubjectively-determined norms governing categorical moralization, as discursive norms only work if they are constructed in a participatory manner. We now have a fuller outline of the structure of Human Kinds, the Regulatory Conception: we have seen that they are, contra both Cooper and Hacking, not only constituted via their projectibility in logical scientific systems, but also by how the values imparted by their construction interacts with and is constituted by our norms. When and how we attach moral values to Human Kinds is not always or even often given by their natural features, and until we acknowledge the value judgments inherent to their construction as such and as products of constructed rules of discourse, categorical stability will continue to elude us.

Abstract:

Ian Hacking proposes Human and Natural Kinds to distinguish two kinds of scientific objects on the role of morality in their construction. Natural Kinds, which represent natural-scientific objects, do not have a moral valence, whereas Human Kinds, which represent objects in the social or 'human' sciences do. Hacking proposes that the reason Human Kinds are often unstable is because the people who are categorized often respond to their categorization, internalizing or rejecting it, creating 'looping effects.' Rachel Cooper argues that dividing Kinds like this is untenable, as the value properties in Human Kinds do not make them unnatural. Looping effects may exist, but they are not a sign of not being Natural. I respond, in contrast to Cooper and Hacking, that both authors elide the role of norms in the construction of Human Kinds and the Looping Effects they supposedly generate. It is not the naturalness or unnaturalness of a Kind which determines its stability, but the norms that govern its discursive construction and use. This means that while I side with Hacking in agreeing that Human Kinds are not natural, I think so for different reasons. One implication of this view is that since Human Kinds are morally charged objects, their stability (or lack thereof) is not strictly a logical or taxonomic matter, but also an ethical and political one.

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