Conversing With the Dynamic Nominalist:

Hacking into the Social Sciences

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In 1875, a French woman named Félida X became the first living case of split personality¹ to be classified and studied (Hacking, 1986):

"After Félida came a rush of multiples. The syndrome bloomed in France and later flourished in America, which is still its home. Do I mean that there were no multiples before Félida? Yes. Except for a very few earlier examples, which after 1875 were reinterpreted as classic multiples, there was not such syndrome for a disturbed person to display or adopt."

How is this possible? Hacking introduces a new form of nominalism², called dynamic nominalism, which claims that we make up a new ways of being a person as we label behavior. He refers to this as "making up people", where we classify people and create a new way of be a person. This leads to the looping effect, wherein researchers of human behavior shape the individual's behavior by classifying it, and then use the changed behavior to reclassify individuals. In this paper, I will present Hacking's main argument for dynamic nominalism from 1986, along with the progression of his thought over the next 20 years. I will also argue that the most recent model of the looping effect does not highlight the areas of human behavior that cannot "loop" and does not account for the complexity of human behavior, followed by my own account of how dynamic nominalism affects the work of social scientists.

Hacking's arguments incorporate three main components: making up people, the looping effect of human kinds, and the human kind—natural kind (HK-NK) distinction. While many people focus on arguing against the HK-NK distinction, Hacking has since abandon this distinction. In light of his two most recent papers regarding his three main theses, I will clarify the overall project of dynamic nominalism and in doing so, move forward from his most recent

¹ While this disorder has been updated to dissociative identity disorder, this paper will continue to use the language Hacking applies in each case to avoid confusion and because the terms "split personality" and "multiple personality disorder" pick out contextual concepts of classifications which are essential to Hacking's argument.

² Nominalists argue that our classifications group things arbitrarily, that there are no real distinctions in the world.

papers to argue that the looping effect does not have the implications for the social sciences that Hacking implies in his works, but that his overall concerns with making up people are a real problem for the social sciences.

The Initial Inquiry

Ian Hacking begins his project of understanding the way in which we "make up people" in his 1986 paper *Making Up People*, where he describes dynamic nominalism as falling somewhere in between traditional nominalism and traditional realism. The traditional nominalist would have us believe that classifying objects in the world does not name real similarities of those objects; individual tigers have nothing more in common than our name for them. The traditional realist³ would have us believe that naming objects does name a real distinction; our names for objects carve nature at its joints. The dynamic nominalist view states that our human classifications⁴ will name real differences between the classified objects, but the differences become real at the same time we invent the classification (Hacking, 1986); Hacking states:

"The claim of dynamic nominalism is not that there was a kind of person who came increasingly to be recognized by bureaucrats or by students of human nature but rather that a kind of person came into being at the same time as the kind itself was being invented."

A simplistic example of dynamic nominalism is comparable to what occurs when a new object is invented and classified, substituting humans for those objects. Hacking's claim is that we are inventing a way of being a particular person (a person who expresses several different personalities at different times) as we invent a classification for that person's behavior (multiple

³ Dynamic nominalism does not depend on the success of traditional realist or a nominalist view, at least not as Hacking portrays it. Rather, it should be considered independently.

⁴ In this paper, I use "human classifications" to pick out the particular terms that group people by their behavior under a particular definition formed through methods that Hacking delves into later. Hacking often uses the term "kind" to pick out a set of classification as they fall under a certain category ("self-ascribed kinds," "human kinds," etc.) as well as to refer to a particular classification (a "kind of person"). Outside of direct quotes, I will always use kind to refer specifically to the HK-NK distinction.

personality disorder), like how we invent the term "gloves" as we invent the object it picks out (1986). The classification of "glove" fits its object so well because we created the classification to fit the object we invented. This is not so remarkable when we talk about gloves, but for multiple personality disorder, Hacking argues that this classification limits the possibilities for the self-concept and behavior of that newly labeled person. The "dynamic" part of dynamic nominalism becomes apparent in the way that human classifications are directed by two vectors: from above by those experts who create a reality under which people act, and from below the autonomous behavior of the person so classified which creates a reality that the experts must account for (Hacking, 1986). He believes that as the experts hone the classification to meet the behavior of the individuals, the classified individuals rise to meet the defining characteristics of the classification.

These changes in self-concept during the classification process are fundamental and can change the behavior and beliefs of, and toward, the classified individual. For example, in the case of child abuse, classification could reinvent a person's childhood if she discovers that the way she was treated falls under the current classification of child abuse. Hacking outlines two ways this could be looked at: the way a person was treated as a child was always abusive, whether or not we recognized or intended it as abusive, or it was historically acceptable to treat children that way even if it is not now (Hacking, 1999). Either way, it can be seen through Hacking's example of child abuse that someone who previously accepted her childhood memories in one light can now see them in an entirely new light. On an individual basis, this can raise enormous questions in terms of the knowledge and concept of oneself. Each case of a

⁵ Earlier in the drafting process, questions were asked regarding what kind of reality Hacking intends here. In the 1986 paper, he does not give a full account of what this reality is, so it remains unclear how reality operates in terms of classifications.

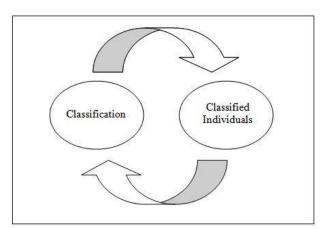
particular classification would operate differently regarding these changes in self-concept, but the general outline remains the same across classifications. Though this is a roughly outlined account⁶, it will set Hacking up for his later work with a form of feedback called looping effect.

Looping Effect

Hacking's next major paper develops the idea of a feedback effect that occurs with people acting under a classification. He states:

"Thus one way in which some human kinds differ from some kind of things is that classifying people works on people, changes them, and can even change their past. The process does not stop there. The people of a kind themselves are changed. Hence 'we', the experts, are forced to rethink our classifications. Moreover, causal relationships between kinds are changed. Sometimes they are confirmed to the point of becoming essential definitional connections (Hacking, 1995)."

In light of the two vectors⁷ mentioned previously, it seems that not only does a Hacking



think that human classifications create new ways of being, but the feedback from the classified people fundamentally changes the defining properties of the classification, such that the possibilities for human action are again changed in light of a changing classification.

Hacking proposes a model by which social scientists make up people and human classifications loop. The social scientist becomes interested in a particular behavior and classifies it under the classification that he creates, named H. The individuals the scientist is studying become aware that they are classified as H. To those individuals, H provides them with a new

⁶ Many questions were raised about this description of Hacking's framework in previous drafts, most of which I hope to answer with further clarification later in the paper.

The figure on this page depicts the way in which human classifications loop.

reality⁸ under which they act, so they change their behavior. Social scientists who are studying human classifications notice the changes occurring in the behavior that characterizes H and adjust the definition of the classification in order to accommodate the changes, and the cycle can start all over again (Hacking, 1995). When these changes in the behavior that characterize the classification change across the entire classification, Hacking argues, they are fundamentally changing the classification itself; this is the looping effect. It does not just occur in individuals; it seems that it must occur across the classification in order for the behavior that defines the classification to be changed.

Is there fixed, scientific knowledge that can be had regarding child abuse, when the defining behavior of classified people changes the classification, which again changes the classified people? Hacking argues no, because humans are responsive to classifications which creates the looping effect within the classification, so we cannot treat our knowledge of child abuse as we treat our knowledge of chemistry (Hacking, 1991). That is, we cannot treat child abuse as a fixed, "natural kind" that is unresponsive to being classified. This will lead us to the human kind—natural kind distinction.

Human Kind—Natural Kind Distinction

Human kinds are classifications of people and their behavior. Hacking models the term "human kinds" after "natural kinds" (Hacking, 1995), as he states:

"By human kinds I mean kinds about which we would like to have systematic, general, and accurate knowledge; classifications that could be used to formulate general truths about people; generalizations sufficiently strong that they seem like laws about people, their actions, or their sentiments. We want laws precise enough to predict what individuals will do, or how they will respond to attempts to help them or to modify their behavior. The model is that of the natural sciences."

⁸ The new reality may be that child abuse is now illegal, or considered a sign of mental illness in need of treatment, or a social stigma that no one wants to be associated with.

While we have modeled human kinds after the natural sciences, Hacking claims human kinds are distinct from natural kinds in the natural sciences in several ways, and that it is misguided to model human kinds after the natural sciences. The main distinction is that human kinds are aware of and responsive to their classifications. Sunrises, mud, quarks and electrons are all natural kinds, whereas MPD, child abuse and suicide are human kinds. Whether natural kinds are naming real differences in the world, whether they carve nature at its joints, or whether some kinds are more fundamentally more natural than others—Hacking wishes to put aside these questions. The only distinction he cares to make here is that the looping effect operates only in human kinds (Hacking, 1995). The human kinds he uses in his examples are ones that he believes are exclusive to humans in social settings. Human kinds are not present in other living organisms; particular organs, enzymes and neurochemicals are all natural kinds.

Hacking also acknowledges that human kinds are typically value-laden and considered in moral terms, rather than being scientifically neutral like natural kinds, however we try to make kinds like child abuse more neutral by medicalizing them (Hacking, 1995). These values and morals attached to the kind are part of what have an effect on our behavior towards and within the classification. Hacking's claims is that medicalizing them does not remove the value or morals attached to the classification, and furthermore that it does not eliminate the looping effect. However, it is not apparent that the looping effect only occurs in human kinds (Ereshefsky, 2002; Cooper, 2004; Tsou, 2007; Khalidi, 2010), as there are many arguments to be made that there is no metaphysical difference between the changes that occur in human classifications compared with other classifications. As mentioned earlier, Hacking has abandoned the distinction.

Revisiting Making Up People and the Looping Effect

In his two most recent papers regarding the three main theses, Hacking regards the HK-NK distinction as failed from the start (Hacking, 2006b; Hacking, 2007) as he claims:

"Some classifications are more natural than others but *there is no such thing as a natural kind*. [...] In the language of classes, there is no well-defined or definable class whose members are all and only natural kinds. Likewise there is no fuzzy, vague or only loosely specified class that is useful for any established philosophical or scientific purpose, and which is worth calling the class of natural kinds (Hacking, 2006b)."

To Hacking, this appears to mean that he can no longer classify what a human kind in opposition to natural kinds. Rather, it seems to be an abstract concept that does not pick out a specific kind as it did before, and Hacking states that he is "especially interested in the ways in which the social, medical and biological sciences create new classifications and new knowledge (Hacking, 2007)." He indicates that he is talking about classifications of people, rather than human kinds as they were previously contrasted with natural kinds.

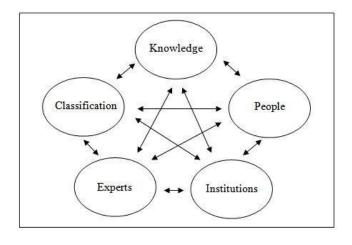
However, his other two projects did not rely on the success of the HK-NK distinction; rather, Hacking seems to imagine the HK-NK distinction as a consequence of the looping effect. Since it is clearly not, Hacking has elaborated upon his proposed mechanisms for the looping effect and making up people in his most recent paper, arguing that they are still problematic for the human sciences.

Building upon his original proposition for the mechanism of looping effects, Hacking increases the level of complexity to accommodate for the influences of other agents within the loop. Previously the loop consisted of the individual and the classification (the real agent of influence is the scientist who manipulates the classification) (Hacking, 1995; Tekin, 2014). Hacking now says there are five agents in the loop. The (a) classification, (b) people, (c) institutions, (d) knowledge, (e) experts. Each of these players acts upon each other which creates the loop. The classification causes behaviors or behavioral change in the people, the institutions

to create laws, the knowledge of the classification to change, and the experts to research different areas and discover different things, and so forth, until every aspect of the loop has causally interacted with the other (Hacking, 2007). This model is exceedingly general and Hacking continues to recognize that each classification has a unique story to be told, so he applies it to as many examples as possible.

In addition to these five agents, there are ten "engines of discovery" that drive the discoveries of social scientists (Hacking, 2007). Most basically, these engines are the way a behavior is grouped into a classification. In order to classify individuals, social scientists use the following general imperatives: (1) count, (2) quantify, (3) create norms, (4) correlate, (5) medicalize, (6) biologize, (7) geneticize,

(8) normalize, (9) bureaucratize, (10) reclaim our identity (Hacking, 2007). The first seven engines are used primarily by social scientist as part of the way they gain knowledge about a kind. The last three represent not only what the social sciences do, but also what the institutions and



people in the particular classification do to account for the existence of the classification itself.

Given this expanded model of the looping effect and making up people, Hacking implies that it is even clearer now that the human sciences are studying an unstable object and that they are the force driving the model that Hacking posits. This idea of an unstable object of study is captured in Hacking's *Kinds of People: Moving Targets*:

"It is part of our scientific attitude that we find out about people using any of the seven engines of discovery, and more, is a fixed target that we hit. Of course we hit! And what we find out is for the most part true, or not far from the truth. Yet the target is often where it is because of the interaction between our five elements, ranging from classifications through people to experts (Hacking, 2007)."

This would mean if Hacking is right, that social scientists are creating the types of people that fill the human classifications that they study. So while social scientists are honing the classification to fit the targeted person, that person is actually molding to fit the classification. From the perspective of the social scientist it looks like progress, but according to Hacking it is the social scientist driving the nail to affix the target.

Conditions for the Looping Effect

In one of the most recent papers concerning Hacking's looping effect, Serife Tekin (2014) characterizes the progression of Hacking's work on dynamic nominalism and how others have objected to it. She regards Hacking's failure to clarify and outline the conditions that are sufficient for the looping effect to take place as the reason his work has become subjected to several successful criticisms. Here I shall attempt to clarify what Hacking presents as the sufficient conditions for the looping effect to occur. It is important to note that though I have not yet fully clarified the implications of the looping effect, these conditions that shall be outlined below are what make the looping effect problematic.

There are several conditions that Hacking indicates must be present for the looping effect to occur. First, I shall discuss the awareness of humans in regards to the classification they are classified under. Secondly, I will discuss Serife Tekin's take on responsiveness in human classifications along with awareness, as they together form a major linchpin in the account. Thirdly, I will discuss the limits of the looping effect in terms of region of influence. Following these clarifications, I will argue for a set of implications of the looping effect that are different from the implications for which Hacking argued.

As Rachel Cooper phrases it, it is not just that the feedback in the looping effect occurs, but that it occurs because the classified individuals are aware (Cooper, 2004). Awareness seems like a clear concept when contrasting electrons with humans, but it is difficult to understand more nuanced versions of human awareness. It seems that Hacking thinks we can be aware in a least two semi-distinct senses; either directly or indirectly. Direct awareness is not required in all cases, as Khalidi (2010) points out. Hacking discusses an example of women refugees who don't know English will still acquire the behavior of the classification because they are classified as such (Khalidi, 2010; Hacking, 1999):

"A woman refugee may learn that she is a certain kind of person and act accordingly. Quarks do not learn that they are a certain kind of entity and act accordingly. But I do not want to overemphasize the awareness of an individual. Women refugees who do not speak English may still, as part of a group, acquire the characteristics of women refugees precisely because they are so classified."

Here, Hacking is saying that the direct, linguistic awareness of the classification is not a necessary condition. But it seems that in order to acquire the characteristics of a particular classification, the classified individual must have at least an indirect awareness of the classification. It seems that for Hacking indirect awareness qualifies as being treated as a particular classified individual, so that it is possible to pick up the characteristics. Women refugees are treated in a particular way because of the classification "women refugees," and because of this they adopt the behavior of "women refugees."

In terms of responsiveness, the looping effect cannot occur if the classified individual is not able to change her behavior and the definition of the classification cannot change with the changing behavior. Hacking does not make this distinction because he is only concerned with the cases where behavioral change does occur. However, Tekin (2014) provides us with a new model of the self, so that we can see how the individual becomes responsive to the classification.

She believes Hacking needs to give an account of the self that explains how the awareness of being classified, the changes in self-concepts and the changes in behavior because Hacking indicates that they are the fundamental generators of the looping effect. Her proposed model takes Ulric Neisser's five separate selves⁹ and combines them into one "multitudinous self." For my purposes only one of the five, the conceptual self, will be highlighted. The conceptual self interacts with the four other selves to create our self concept, which Tekin says is what guides our actions.

For example, a female patient is diagnosed with schizophrenia and classified as schizophrenic frequently experiences distracting voices and hallucinations and she is aware that she is diagnosed. She knows that people look at her strangely so she starts avoiding people more often. She thinks that her medications make her feel better and eliminates the hallucinations. She also knows that there are stereotypes of people with mental illnesses being failures, so she considers dropping out of college. These changes, Tekin says, come out of changes in the woman's self concept, as she picks up on the social cues, react to the difficulties of her illness and to the medication prescribed to her. There are multiple interplays within the patient that result in her being responsive to the classification (Tekin, 2014). However, it seems to me that it is possible for a human to be aware of the classification, but not experience a change in her self concept. Perhaps because the classification of schizophrenia didn't add to or subtract anything from her self concept as she already identified with concepts similar to what are described by the classification of schizophrenia, or because it didn't change the way she was treated as she was already treated in a particular way that aligned with the classification of schizophrenia.

⁹ For more about Neisser's selves and a full account of Tekin's multitudinous self, read *Mental Kinds and Natural Kinds* edited by Kincaid and Sullivan.

Therefore, being aware of a classification does not entail the looping effect, but rather, an individual must also be responsive to the classification.

The final criterion for the looping effect is the way in which an individual comes into contact with the classification. Hacking does not directly address this criterion, but it seems to logically follow from the thesis of dynamic nominalism that the classified individual must come in contact with the classification in order for the looping effect to occur. Looping occurs within the groups of people who have either (i) have primary access to the classification through one of the five causal agents, or (ii) are treated or influenced to treat others in a way that aligns with the values, generalizations and definitions associated with the classification. In the case of depression, (i) represents someone who is diagnosed as depressed, an expert researcher of depression, an institution designed to research the causes of depression, etc. In the case of (ii), a patient may be treated as someone with a diagnosis of depression but is not aware of the overall classification and has not been directly classified. Based on these examples, I make the claim that causal circle of the looping effect can only touch those who interact with it in one of these two ways. Thus it seems that the looping effect has a limited region of influence, because there are only so many agents that come into contact with the classification in one of these two ways.

Hacking believes the implications of the looping effect entail that there is no stable object of study in the human sciences, and that there is no fixed knowledge to be had regarding such classifications. I will argue that this is not the case. Rather, many human classifications do not loop in such a fundamental way, and in the cases where they do Hacking has painted sort of lopsided picture regarding how these classifications actually loop.

First, I must clarify what Hacking means by fixed. I read Hacking as defining a "fixed target" as one that has been affected by the looping effect to a lesser degree, if at all, which he

believes are the most natural of classifications. The most fixed target would be something that is completely unaware, unresponsive, or extremely localized, because just lacking just one of the above conditions for the looping effect would not result in actual looping. It seems that there are degrees of fixedness because there are degrees of looping. There are degrees of looping because Hacking believes that some classifications are more natural than others, and the most natural kinds tend to be the most indifferent to the influence of the looping effect. Why is a fixed target valuable? It seems that for Hacking, social scientists are pushing the target of classification into reality as they study it. If the target was fixed, it would be immovable and stable in the sense that studying it would not change it.

Regarding the fixedness of the object of study, Tsou (2007) points out that it seems in general, psychology is able to discover fixed objects of study due to the more or less uniform presentation of certain disorders. He uses cross-cultural psychology as an example of how certain disorders can be compared across cultures, and that this points to a more fixed object of study. In this way, paranoid schizophrenia presents in a more uniform fashion across cultures (Tsou, 2007), indicating it may be resistant to the looping that because it has presented in much the same way across varying environments. It shall be examined later on as to whether this is sufficient for establishing the fixedness of a particular classification. Tsou believes that Hacking is incorrect to suggest that all classifications of primary interest of the human sciences are those that are unstable, and believes the cross-cultural comparison highlights Hacking's imprecision. Not only that, but disorders like paranoid schizophrenia have a "biological basis" as Tsou calls it and this is believed to be fixed, as we have no evidence for supposing that the looping effect also undermines certain unchangeable biological entities involved in such a disorder.

Hacking admits this much, granting that there are underlying, fixed structures in cases such as autism. There are fundamental cognitive deficits associated with autism spectrum disorder that lead to the behavior displayed by a person with autism (Hacking, 2007). He states:

"There is a deep-seated conviction that retarded children, schizophrenics, and autistic people suffer from [...] fundamental neurological or biochemical problems [...] No one maintains that mental retardation is a single disorder, but many believe that specific types of retardation have clear biological causes, to the extent that we can say these disorders simply are biological in nature [...] We need not argue that nearly all children diagnosed with autism today have exactly one and the same biological disorder. We need only hold possible that there are a few (possibly just one) basic fundamental biological disorders that produce the symptoms currently classified as autistic [...] Let us posit that there is a pathology P, no matter how it will be identified. By hypothesis the pathology P will be an indifferent kind. The neuro-geno-biochemical state P is not aware of what we find out. It is not affected simply by the fact that we have found out about it ... In more traditional jargon, P would be a natural kind. (Hacking, 1999)."

However, autism is still a moving target which Hacking believes is a less fixed, looping kind, as we have come to change our beliefs and expectations of those with autism over time. There are now autistic autobiographies, showing an "inside narrative" of a high functioning person with autism (Hacking, 2009), that give us knowledge and expectations that were not there before people like Temple Grandin wrote such an autobiography. The classification been changed to match the changing behavior of its constituents. So, while each unique case of a classification may have a mostly fixed, biological element, according to Hacking this does not eliminate the looping effect that occurs to the social part of the self, which is much less fixed than the underlying pathology P.

Returning to Tsou's previous cross-cultural psychology example, he believed that it highlighted ways in which psychological classifications are fixed, though Hacking has shown that the classification may still have looping effects even when a portion of what is classified appears mostly fixed by biological or physiological characteristics. Tsou (2007) goes further to suggest that the degree of uniformity across cultures represents the degree to which a

classification is fixed. Here, I will justify this claim through an argument for the fixedness of cross-cultural behavior.

Argument for the Fixedness of Cross-Cultural Behavior

- (1) If the behaviors associated with a given psychological classification present with a high degree of uniformity across cultures, then they should be considered a fixed object of study.
- (2) Certain behaviors appear with a high degree of uniformity across cultures.
- (3) Therefore, certain psychological classifications should be considered a fixed object of study.

Hacking's model of the looping effect is built for a less than global version of the human sciences. For premise (1), the looping effect must be shown to have clear limits that prevent it from occurring on a global scale. This was shown through the regional limits of the looping effect discussed previously. In order for the looping effect to occur, the classified individuals need to come into contact with the classification in one of the two mentioned ways. Premise (2) follows from the examples of behavior that are readily available in the human sciences, along with the example of paranoid schizophrenia that Tsou (2007) gives. The degree of uniformity in the behaviors across cultures will represent the degree of fixedness in the classification.

It may be objected here that the looping effect is already occurring at a global scale in these particular cross-cultural behaviors, or that the behaviors have not had sufficient time to loop in such a way that they would present differently in different cultures. I will consider the former objection first. The looping effect is limited by the two ways that it is possible to come in contact with the classification. It is quite possible that there is a classification that after translating into different languages is treated in a highly uniform manner across cultures, causing

people to adjust their self concepts regarding the classification in a highly uniform manner. This causes experts and the other causal agents to react similarly enough that the classification is adjusted (either wholly or individually) across cultures to result in a still similar classification across cultures. While being highly improbable, there are so many moving parts in the loop (as can be seen in Hacking's updated causal circle) that it seems unlikely each culture would value similar treatments, have access to similar resources, and provide a similar context for an individual to develop a self concept. For example, in the Middle East¹⁰, mental illness is often not acknowledged and can go untreated or unrecognized because of cultural taboo. If paranoid schizophrenia presents in Jordan the same way it presents in every other culture, it seems that the target we are hitting is actually a highly fixed target, not one that was pushed into place by social scientists.

The second objection, that the classifications may not have had time to loop, is a direct challenged to Hacking's original account in the looping effect in that he believes human kinds loop faster than natural kinds. In this sense he means that the changes in the classification brought on by the looping effect happen within a generation whereas natural kinds, if they change in an evolutionary sense, it takes place across several generations. However, this does nothing to provide a time span within which we could see the looping effect occurring or not. In addition to the objection as stated above, it may be added that perhaps there are no differences in uniformity yet because the behavior hasn't been classified in each culture yet. A classified and unclassified set of behaviors are two different beasts for Hacking, because dynamic nominalism states that the particular kind of people comes into being with the classification. If paranoid

 $^{^{\}rm 10}$ Thank you to Sam Kay for this example.

schizophrenia is not classified in Jordan, then it does as good as not exist in that culture. Unless it is classified, it cannot be part of the loop or compared to other actually classified behaviors.

My response to this is that we are always under certain pressures no matter what context and our self concept develops in certain ways. If we are so easily looped in the way Hacking believes we are, then it should be difficult for a particular behavior or set of behaviors to persist under many different pressures, especially if those pressures are different across cultures. What I am saying is that in the US we treat paranoid schizophrenia with counseling and medication, and drive the "engines of discovery" in our own particular way, given our culture. But in the Middle East, and many other areas of the world, the engines are driven differently, and the agents in the causal circle apply different pressures to the classified individual. Thus, if we see a highly uniform classified set of behaviors across cultures, that classification should be regarded as fixed because it is not likely that a behavior that persists under such vastly different pressures would not have begun to show differences that would disqualify it from consideration as a fixed classification.

This argument establishes that if a classification is made up of a set of behaviors that presents with a high degree of uniformity across cultures, then that classification should be regarded as mostly fixed and unaffected by the looping effect. If people with the behaviors that make up the classification of autism present the same behavior under different classifications globally, then we should be able to conclude the target is fixed and immune to the looping effect. However, there are also many parts of human behavior that are not fixed, and can loop. In these cases, it seems Hacking is right to conclude there is not a wholly fixed target.

Tsou believes there are two levels of implications of the looping effect. According to Tsou (2007), the weak implication is that behavior will change due to the looping effect but the

strong implication goes further to say that the behavior changes to the extent that the defining criteria for the classification change as well. It seems as though classifications involving the weak implication are common, and are not problematic. This is manifest in the way behavior constantly changes due to many different kinds of classification pressures, but these changes in behavior do not overturn previously established classifications. These changes may be due to a particular nonprofit raising awareness of a given disorder, such that there is more publicity and common knowledge about it. This may factor into a person's self concept, but it may not change their actions in a way that fundamentally changes the way scientists classify the behavior.

Furthermore, it is acknowledged as a general practice in psychology that using a description of behavior or a label for a behavior is a viable manipulation of a subject's behavior in an experiment. When asking a subject to perform a task is too objectionable or complicated to recreate in the lab, such a task is turned into a situation that the subject is meant to imagine themselves in. A study on the self-efficacy of people who are depressed may begin with a reading that describes depression and how the subject is to imagine herself acting in a given situation. Rather than testing people who are chronically and neuro-chemically depressed, which would be a correlational study due to the lack of manipulation of the disorder itself, we are able to ask someone to add to their self concept for the duration of the study. Whether such studies are accurate psychological measures is another question that will not be answered, but assuming that they are, such studies show that ascribing a classification can modify behavior in the short term, and that social scientists are aware of the great manipulability in human behaviors and beliefs.

However, the strong implication results in fundamental changes in classifications, the kind that Hacking thinks result in moving targets. Tsou believes Hacking tends to over

generalize and hastily conclude the looping effect without making a distinction between these two kinds of implications. The difference is important, because it is clear that the looping effect can occur in some, probably most, human science classifications but not all situations result in the strong implications. Tsou believes Hacking's example of multiple personality disorder falls under the strong implication category. The classification genuinely changed the experience of classified individuals, by creating a new reality for them (Tsou, 2007). The strong implications represent the changes that occur with the classification of child abuse. We may see more people come forward as "victims of child abuse" because the classification changed their self-concept such that they now felt they should seek treatment. Because more people are coming forward, social scientists may come to have more and newer data regarding child abuse, which leads to a change in the classification. It is true that social scientists are not always aware of how the research they are doing is changing the self-concepts of the people they are researching, as is clear in cases of the strong implications of the looping effect.

Lastly, for social sciences the most problematic part of Hacking's three theses is "making up people." Making up people is separate from the looping effect because it only concerns the first arc of the looping effect. It seems that there really is some way that each time behavior is classified, a new possible person emerges. As with Hackings examples, before 1955, having multiple personality disorder was not a way to be; in 1985 it was a way to be, interact and have experiences (Hacking, 2007). But along with the looping effect, it seems that some cases of making up people are entirely trivial. These are most likely outside of the human sciences that Hacking is concerned with, but still we can imagine certain classifications that do not turn your world topsy-turvy, such as many personality traits that are not considered disorders. In fact, it seems that there could be many things a researcher could tell you about particular classifications

concerning yourself that would not, or could not affect your behavior or self-concept regarding them. However, even if being told you have a 100 IQ score does not change your behavior or self-concept in any discernible manner, the issue is that having an Intelligence Quotient at all creates new and different possibilities for behavior.

My point here is that social scientists are not necessarily driving a looping effect for each classification like in Hacking's most paradigmatic examples. Rather, in many cases, there are human classifications that do not lead to changes the classification itself, and there are even some human classifications that are immune to looping. These classifications exist alongside other less fixed, more 'made up' classifications that Hacking is concerned with, which are still problematic if we are going to view them through the natural science model.

One of the difficulties in expanding upon the complexities of Hacking's view is that we do not yet know how to firmly differentiate between classifications that will loop or not; that will have strong implications or weak. It seems that there is no way of knowing this until after the classification is made. We may only know retroactively, if at all, if a classification is fixed. Going forward, I propose that psychology and other human sciences need to acknowledge the possibility of less fixed and more made up classifications. Looking at child abuse through Hacking's lens shows us that child abuse is worthy of consideration not because it is fixed, but rather because it is being driven by the looping effect. We should be extra careful with the way that we direct our institutions and experts, so that we are not manipulating individuals self concepts haphazardly.

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