WHAT'S VOLUNTARY IN STANCE VOLUNTARISM?

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Abstract: Stance voluntarism highlights the role of the will in epistemic agency, claiming that agents can control the epistemic stances they assume in forming beliefs. It claims that radical belief changes are not compelled by the evidence; they are rationally permitted *choices* about which *epistemic stances* to adopt. However, terms like "will", "choice", and "stance" play a crucial role while being left as vague notions. This paper investigates what kind of control rational agents can have over epistemic stances. I argue that whether epistemic stances are voluntary depends on what kind of stance is being assessed. Sometimes epistemic stances are taken to be evaluative attitudes about how to produce knowledge. This kind of stance is not directly controllable, since it is essentially connected to beliefs, and believing is not voluntary. But sometimes epistemic stances are taken to be styles of reasoning and modes of engagement, expressing ways of approaching the world in order to produce knowledge, which can be voluntary. Overall, this supports

a formulation of stance voluntarism as a dual-systems theory of epistemic agency, where epistemic rationality is compounded by a dynamic interplay between involuntary processes of belief formation and voluntary processes of cognitive guidance.

1. Introduction:

There is a feeling that all the main arguments in the scientific realism debate are somehow question-begging. Scientific realists, in order to defend the belief in scientific theories, appeal mainly to the no miracles argument, according to which the realist position is justified because it is the best explanation for the success of science (e.g. Putnam 1975; Psillos 1999). But anti-realists object that this argument is circular, since it employs the rule of inference to the best explanation, which is rejected by anti-realists (e.g. Fine 1996; Kukla 1998). On the other side, many anti-realists appeal to historical inductions from the failures of past science in order to defend skepticism about current scientific theories (Laudan 1981; Stanford 2006), but realists complain that it is not reasonable to assess conjointly the reliability of current and past science (e.g. Devitt 2011; Fahrbach 2017). Although there are other influential arguments for scientific anti-realism, they have been targets of similar criticisms (see Chakravartty 2017b). As a result, many share the impression that the arguments of the debate do not offer dialectically compelling evidence. Instead, they offer considerations that seem probative only to those already committed to their conclusions (e.g. Fine 1984; Magnus and Callender 2003; Psillos 2011; Chakravartty 2017). Alison Wylie (1986) exposed that, in the scientific realism debate, sophisticated versions of each position adopt different standards of inference which are internal to the positions themselves, implying that the positions are "essentially incommensurable modes of philosophical practice" (1986, p. 287). This kind

persistent stale-mate and methodological incommensurability is not unique to the scientific realism debate, but can also be found in the clash of many philosophical traditions as well as on typical scientific revolutions (Feyerabend 1993; Kuhn 1962). The existence of this kind of deep disagreement in rational inquiries, such as science and philosophical debates, motivates the claim that rational agents do not determine their views *solely* on the basis of arguments, but also on some sort of primitive judgment about what fundamental beliefs and methods are epistemically preferable. This view of the matter is nicely captured by William James:

> The history of philosophy is to a great extent that of a certain clash of human temperaments. … Of whatever temperament a professional philosopher is, he tries when philosophizing to sink the fact of his temperament. Temperament is no conventionally recognized reason, so he urges impersonal reasons only for his conclusions. Yet his temperament really gives him a stronger bias than any of his more strictly objective premises. It loads the evidence for him one way or the other, making for a more sentimental or a more hard-hearted view of the universe, just as this fact or that principle would. He *trusts* his temperament. Wanting a universe that suits it, he believes in any representation of the universe that does suit it. (James, William; *apud.* Chakravartty 2017, 1)

More recently, van Fraassen (2002) defended a *voluntarist* epistemology in order to legitimize the role of the will in

scientific revolutions and other radical belief changes. Crucially, he appeals to the notion of an *epistemic stance* in order to express the soul of a philosophical position, which can then be used to clarify how philosophical traditions are fundamentally opposed, and maybe help us deal with this kind of disagreement. Very roughly, an epistemic stance is a cluster of evaluative attitudes about how to attain knowledge. Some recurrent examples are the attitude of attributing/denying evidential power to explanatory considerations; the attitude of being more/less open-minded; or the commitment to be more engaged/contemplative in an enquiry. Identifying how two positions rely on different epistemic stances is useful because the way we discuss evaluative attitudes is different from the way we discuss factual claims about the world. So, understanding the epistemic stances behind each position clarifies how to move on with the debate, shifting the focus from factual doxastic claims to the evaluative attitudes connected to epistemic stances. Then, the next question to wonder is: how are we supposed to rationally assess epistemic stances in order to choose them? Similarly, how can we debate with someone who adopts a different stance than ours?

In this context, van Fraassen (2002) defends the position called *voluntarism*, according to which "what is rational is whatever is rationally permitted, and only incoherence is rationally forbidden" (van Fraassen 2004, p. 129; see also 2002, p. 97; 1985, p. 248; 1989, p. 157). This is a permissive account of rationality, which does not impose a unique course of action to a given agent, but tolerates divergent epistemic decisions to be both treated as rational. Rationality is only limited by incoherence, which is rationally forbidden. By this account, deep disagreements – like the one between scientific realists and anti-realists, or between empiricism and metaphysically oriented traditions – are hard to deal with

because each side adopts a different epistemic stance in their fundamental assumptions. Since stances are matters of commitments and values, this divergence of stances is not a matter of rationality, but a matter of (equally rational) value-choices. And if the debate is about this kind of divergence, then we have to face the fact that settling it will be as hard as settling religious or political-ideological divergences. But that's the way it is. In van Frassen's words:

> Being or becoming an empiricist will then be similar or analogous to conversion to a cause, a religion, an ideology, to capitalism or to socialism, to a worldview such as Dawkins's selfish gene view or the view Russel expressed in "Why I Am Not a Christian." That is so, and not perhaps a prospect to everyone's liking. But let us no color the project with guilt by association. If I am right, all the great philosophical movements have really been of this sort, at heart, even if different in purport; what I favor is that we should do what we do without false purport (van Fraassen 2002, p. 61).

Van Fraassen's work is followed by discussions on stance voluntarism, the nature of empiricism and the nature of epistemic stances. However, a lot of questions remain controversial. The most recurrent criticism is to argue that voluntarism is *too* permissive and ends up legitimating irrationality, since it allows flat-landers and all sorts of epistemically vicious decisions to be treated as rational (as long as they are internally coherent); this permissiveness also implies that voluntarism legitimizes the rationality of those who disagree with it (cf. Ladyman 2004, p. 142; 2007, p. 50; Ho 2007; Jauernig 2007; Psillos 2007, p. 158; Dicken 2010,

p. 79; Baumann 2011; Steup 2011; Alspector-Kelly 2012, p. 189; Bozzo 2016). And indeed, van Fraassen's main motivation is to build an empiricist epistemology that accounts for the rationality of scientific revolutions and radical belief changes (see 2002, chpt. 4). So, the point of voluntarism is a pledge for tolerance indeed. But, along with van Fraassen (2004b; 2004a; 2007; 2011), many replied that voluntarism does not imply an "anything goes" relativism, since we can still criticize absurd views by *relying* on our accepted epistemic stances and background knowledge, and the fact that our assessment is *internal* to our epistemic stances does not undermine its normativity for us (see Teller 2011; Schoenfield 2014; Chakravartty 2015; 2017; Boucher 2018; Elder 2019). Debating with others, then, becomes a matter of dialectically finding a common ground to argue from, and indeed there is no guarantee that there will *always* be sufficient common ground to develop a persuading argument. But once again, that's the way it is.

The voluntarist account states that our stance choices are determined by coherence constrains (incoherency implies irrationality) and value preferences (which are permitted, but not obliged). This picture is intended to highlight the role of *the will* in our cognitive lives, rejecting epistemologies which picture cognitive agents as merely passive processors of information; hence it's called *voluntarist*. However, terms like "will", "choice", and "values" are playing a crucial role while being left as vague and obscure notions (cf. Chakravartty 2011; 2015; 2017; van Fraassen 2011, p. 265). In this paper I investigate one main point which I take to have been considerably neglected in these discussions: what kind of voluntary control do we really have over our epistemic stances? Van Fraassen treats epistemic stances as if we have direct voluntary control over them. But believing is not voluntary, and epistemic stances seem to be essentially connected with what we believe. So, the discussion of

epistemic stances still lacks a clear picture on how we should balance, on the one hand, an agent's responsibility and control over his epistemic stances, and on the other, the involuntary doxastic constrains which are imposed by our epistemic rationality.

I think that we can at least begin to comprehend this puzzle by attending to the literature on epistemic agency and doxastic voluntarism. Thus, I will use Pamela Hieronymi's account of doxastic involuntarism to investigate the question: Can one make direct doxastic involuntarism and direct stance voluntarism compatible? I argue that it depends on how we connect epistemic stances with beliefs. Some elements associated to epistemic stances are essentially connected to beliefs. In these cases, doxastic involuntarism implies a stance involuntarism. But other elements associated to epistemic stances can be framed as modes of *action* instead of beliefs. In these cases, stance-elements become voluntary controllable. Overall, this suggests that stance voluntarism can be comprehended as a sort of dual-systems account of rationality, where epistemic rationality is constituted by an interplay between two cognitive dimensions: on one level, epistemic rationality consists in the passive processing of information into involuntary attitudes and beliefs; on another level, epistemic rationality operates voluntarily throw actions which interfere in the further gathering of information. Both levels are in constant interaction.

To fully comprehend how epistemic stances are controllable, we need a better understanding of what epistemic stances are, how they are connected to beliefs, and what kind of control we can exercise over beliefs. Thus, I'll proceed as follows: Section 2 analyses the notion of an epistemic stance and decompound its elements; Section 3 introduces the matter of doxastic voluntarism. Sections 4-5

analyze how doxastic involuntarism connects with stance voluntarism. Section 6 concludes stating the results.

2. What is an Epistemic Stance?

Van Fraassen proposes that philosophical traditions can be better identified by a certain "attitude, commitment, approach (a cluster of such)", instead of being defined by a certain factual claim about how the world is like (2002, p. 47). In this fashion, the notion of a *stance* is introduced to capture these essential non-doxastic aspects of a philosophical position. In van Fraassen's account, a stance consists of "a cluster of attitudes, including propositional attitudes (which may include some factual beliefs) as well as others, and especially certain intentions, commitments, and values". (2002, p. 128). In some places he also adds 'goals' (2002, p. 48). What is central here is that, although a stance may require some factual beliefs in order to remain coherent or to be adopted by an agent, the stance itself is a specified set of values and commitments (or the like) which is conceptually independent of these beliefs (cf. 2002, p. 62). One can identify the same stance being embodied by different sets of beliefs, which explains how a philosophical tradition defined by a stance can have different formulations throughout history, or different formulations when maintained by different agents.

As his main example, van Fraassen identifies the empirical stance as a sort of soul of empiricism, which survives time after time while each specific formulation of empiricism is historically abandoned. The typical approach is to define empiricism by the claim that "knowledge starts with experience", which can be interpreted in several ways. But understood as a factual claim, this thesis does not apply to all the empiricist tradition, and originates some

incoherence issues to any defense of empiricism (cf. 2002, chpts. 3 and 2, respectively). As an alternative characterization of empiricism, van Fraassen proposes the empirical stance. Its main components are an opposition to metaphysics expressed by:

(E1) a "rejection of explanation demands" (2002, p. 47), and

(E2) a "dissatisfaction with and disvaluing of explanation by postulate" (2002, p. 47).

Other elements of the empirical stance are (E3) "the empiricists' calling us back to experience", (E4) an admiration for science, not for its content but for its practice and ways of investigation; and (E5) a valorization of the idea that rationality does not bar disagreement (2002, pp. 47–48; 2004, p. 128). By contrast, the materialist stance is presented as the attitude behind scientific realism, materialism, physicalism, and a whole tradition of metaphysics (2002, p. 59):

(M1) materialists give absolute primacy to demands for explanation, and

(M2) materialists are satisfied with explanations-by-postulate of certain entities or aspects of the world which are not already evident in experience. (2002, p. 128)

The materialist attitude also includes: (M3) "strong deference to the content of science in matters of opinion about what there is" (2002, p. 59); and (M4) "an inclination to accept (approximative) completeness claims for science as actually constituted at any given time" (2002, p. 59). This is

clearly exemplified by the explanationist defense of scientific realism, according to which truth explains the empirical success of science (cf. Psillos 1999). But it is also encountered in a wide range of arguments within metaphysics, such as the explanatory role of natural laws and natural kinds postulated to explain regularities (van Fraassen 1989).

Once again, what is essential to van Fraassen is that none of these elements are equivalent to beliefs. They are evaluative attitudes, such as dissatisfactions, pledges, admirations, valorizations, priorities, inclinations, and likewise. Notice that the notion of *stance* introduced as above could be applied widely to all sorts of evaluative attitudes and commitments. But the focus here is on *epistemic* stances, which concerns the commitments and evaluative attitudes one has about how to produce knowledge and how to be engaged in a cognitive enterprise.

Van Fraassen general characterization of epistemic stances has been understood in different ways. For our purposes, it will be useful to distinguish between two formulations of the notion of epistemic stance. I will call them the *Evaluative Attitudes Account*, and the *Mode of Engagement Account*.

Adopting an epistemic stance is similar to adopting a certain strategy on how to behave epistemically. Following this clue, van Fraassen account of stances has been notoriously developed by Paul Teller (2004), in what I call the Evaluative Attitudes Account. He proposes that a stance can be understood as a commitment to an epistemic policy. Roughly, epistemic policies are normative guidelines about how to form and evaluate beliefs. Thus, the general features of a stance can be understood by comparing them to how we treat typical policies. As a result, Teller characterizes epistemic stances (and policies) with the following features:

(1) A stance involves a *commitment* to make decisions according to its guideline statements and evaluative prescriptions;

(2) A stance is not true or false, but good or bad for achieving a specified set of goals or standards; Hence, debating stances will be a matter of debating values and goals, including both the adequacy of one's goals as well as the better strategies to achieve them.

(3) A stance has some flexibility about its commitments. The idea here is that, since we have simultaneously many policies and values, they may conflict in some applications. E.g. a policy to never break promises may conflict with a policy to never lie. So, both policies can become flexible in that we may eventually accept exceptions to them. The same applies to stances as guidelines.

(4) Stances are open-ended in interpretation. They have ambiguities or vague or indeterminate aspects. Even if we try to reduce these by supplementing the stance with interpretation rules, those interpretation rules themselves will have ambiguities or vague or indeterminate aspects.

(5) Stances are open-ended in how to be applied in new cases, because of their ambiguous/vague/indeterminate components.

(6) Stances are expressions or implementations of values;

(7) One may argue for or against stances, however, such arguments cannot appeal *only* to matters of fact.

It is important to stress that, in the Evaluative Attitudes Account, a stance is not literally a policy, but a *commitment* to a policy as an expression of values. A stance is not an abstract set of norms or guidelines. Instead, it is a psychological property of a concrete agent: it is a *commitment* to behave according to the policy's prescriptions. Formulating this commitment as a policy is just a way to express how the agent orient its behavior.

The Evaluative Attitudes Account can be contrasted with what I will call the *Mode of Engagement Account*. This view is developed conjointly by Rowbottom & Bueno (2011; cf. also Rowbottom 2005; Rowbottom 2011). On this account, epistemic stances are composed by three elements:

(1) a Mode of Engagement: "roughly, a way of approaching the world (or a given situation)". For example, one can be more active or more contemplative in dealing with a situation; one can be more investigative or more dogmatic; more thorough or less systematic. (cf. Rowbottom 2005; Rowbottom & Bueno 2011, p. 9).

(2) Styles of reasoning: by adopting an epistemic stance, one incorporates patterns of "inference, diagrams, templates, and other useful devices" that are invoked when reasoning about a given situation (Rowbottom & Bueno 2011, p. 9). E.g. Mathematical constructivists employ certain rules of inference and avoid others. Theoretical physicists employ symmetry principles particular to their theoretical stance.

(3) Propositional Attitudes: particular propositional attitudes (such as beliefs, desires, hopes) are *not*

necessary for the individuation of a stance, but they are typical components of them. Accordingly, changes of belief do not provoke changes of stance, except by indirectly provoking changes to the adopted modes of engagement and styles of reasoning (Rowbottom & Bueno 2011, p. 9).

The Evaluative Attitudes Account treats a stance as a commitment to guidelines that express a set of evaluative attitudes. Thus, it puts evaluative attitudes at the core of what constitutes a stance. By contrast, in the Mode of Engagement Account, propositional attitudes (including evaluative ones, such as hopes and desires) are confined to element (3) as an unessential and derivative element of the stance. Instead of focusing on evaluative attitudes, the Mode of Engagement Account puts emphasis on what styles of reasoning one adopts and how one engages himself with an epistemic enterprise.

The distinction between the two accounts is generally neglected in the discussion of stance voluntarism. I will show that the distinction is crucial to understand in what senses epistemic stances are voluntarily controllable, which in turn, is relevant to understand how stance voluntarism interacts with epistemic rationality. But first, let's approach doxastic voluntarism by itself.

3. Direct Doxastic Involuntarism

Direct doxastic involuntarism claims that believing is not voluntary. Van Fraassen's voluntarism is sometimes interpreted as if it implies direct doxastic voluntarism, as if an agent could "believe at will", directly controlling his believes on the basis of pragmatic reasons (i.e. reasons for *having* the belief, instead of reasons for the truth of the belief)

(e.g. Ladyman 2004; 2007). However, there are known problems with direct doxastic voluntarism. One classical problem is that believing that *P* by pragmatic reasons seems to put the agent in a state of moorean paradox: if the agent recognizes that he has no sufficient epistemic reasons for *P,* then, by believing *P* on the basis of pragmatics reasons, he simultaneously endorses *P* and "I recognize that *P* is no more likely than ¬*P* to be true". So, the only coherent way to believe by pragmatic reasons is by somehow doing so while forgetting that the believe was motivated by non-epistemic reasons (cf. Williams 1973; O'Shaughnessy 1980, p. 25; Engel 1999, p. 19; Owens 2002, pp. 382–85; Kelly 2002).

However, to defend *stance* voluntarism we don't need to defend *doxastic* voluntarism. Van Fraassen explicitly rejects the idea of doxastic control based on pragmatic reasons to believe: "it is not possible (not pragmatically coherent!) to think that one believes something *and* believes it for any reasons that do not make it more likely to be true" (2000, p. 277; see also 2001, p. 167; 2002, p. 89; 2007, p. 351). Furthermore, he recognizes that experience constrains immediately an agent's beliefs: "we can and do see the truth about many things: ourselves, others, trees and animals, clouds and rivers – in the immediacy of experience" (1989, p. 178; see also 2000, p. 278). And since every agent has beliefs and incoherence is rationally forbidden, the *previous* opinions of an agent will constrain the set of beliefs rationally allowed to him: "my opinion is that all coherent states of opinion are rationally permissible, but that *given one's extant state of opinion*, very few changes […] are live options" (2000, p. 278, emphasis added). The process of revising beliefs is constrained by our previous beliefs, and it is not humanly possible to revise all our beliefs at once. So, stance voluntarism puts us in Neurath's coherentist ship which has to repair his pieces gradually without ever losing its ability to navigate.

I take these passages to show that (if we want to interpret van Fraassen more carefully) we should strive to somehow make sense of *stance* voluntarism while rejecting direct *doxastic* voluntarism.[1] This requires a better comprehension of the connection between beliefs and stance choices. I'll analyze this matter by relying on Hieronymi's account of doxastic involuntarism.

On Pamela Hieronymi's account (2005; 2009), believing is not voluntary because it is not an intentional action in its own right. Off course, we can voluntarily perform *actions* that *indirectly* produce an envisaged belief. To believe that the light is on, I can act and turn the light on. So, there is a sense of voluntariness according to which one can voluntarily produce the belief that the light is on. But discussions about doxastic voluntarism are mainly concerned with whether one can believe "at will", in the sense of producing beliefs merely by making a mental decision, and not through intermediate actions. To capture this sense, Hieronymi adopts a definition of voluntariness as intentional acting: "an activity is voluntary just in case one engages in the activity by forming

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[1] Some passages do suggest that van Fraassen endorses the importance of non-epistemic factors in justifying an epistemic inquiry, which seems to have caused a lot of misinterpretations of him as a doxastic voluntarist (especially the passages where he presents the Jamesian arguments and the Pascal Wager, 2002, chapters 3 and 4). One must bear in mind, however, that van Fraassen warns us in these passages that he is discussing the rationality of theory *acceptance* in scientific inquiry. And for van Fraassen, *accepting* a scientific theory is not equivalent to believing in it. Acceptance implies only the acceptance of a theory's empirical adequacy, along with a pragmatic commitment to support the theory's research program and to answer questions by appealing to the theory. Since these are pragmatic commitments, the use of pragmatic reasons for them become coherently appliable without violating doxastic voluntarism.

and executing an intention to do so" (Hieronymi 2009, p. 366). This raises the question of what is to form an *intention* of doing something, so Hieronymi also provides a definition of intentionality: "one forms an intention to engage in the activity in settling the question of whether to engage in it" (Hieronymi 2009, p. 366). Or, as she also puts it: "One intends to raise one's right hand in settling the question of whether to raise it" (Hieronymi 2009, p. 367).

So, voluntary actions are those that can be done intentionally, and that amounts to settling the question of whether to engage in it. How this applies to beliefs? In order to believe voluntarily, we would need to settle the question of whether to engage in believing. Hieronymi claims, however, that this cannot be done, because believing is an attitude settled by a different kind of question: believing *P* is (or implies) settling the question of "whether *P*", and not the question of "whether *to engage* in believing in *P*" (or whether this engagement would be good or desirable). Hieronymi (2005) captures nicely this point by distinguishing between two ways in which a reason may count in favor of believing *P*. They express what is usually understood as a distinction between epistemic and pragmatic reasons:

Right Kind of Reason (RKR): a reason *R* counts in favor of believing *P* by supporting that *P* is true, hence concerning the question of whether *P*.

Wrong Kind of Reason (WKR): a reason *R* counts in favor of believing *P* by showing that believing *P* would be good or desirable, hence concerning the question of whether believing *P* would be good or desirable.

Hieronymi's account of belief as settling the question of whether *P*, together with the distinction between the right and wrong kinds of reason, implies an evidentialist constrain on what reasons can base a belief. This is shown by the following argument:

(1) Believing that *P* is settling the question of whether *P* (or whether *P* is true).

(2) WKRs do not bear on the question of whether *P* (but rather on the question of whether to believe *P* is itself good or desirable)

(3) You cannot settle the question of whether *P* on the basis of considerations that do not bear on that question.

∴ (4) So, you cannot believe that *P* for the wrong kind of reason.

Finally, given conclusion (4), and given the initial definitions of voluntariness (as intentional action) and intentionality (as settling the question of whether to engage in an action), we can see that treating a belief as voluntary would be equivalent to treat it as settled by the wrong question:

(1) *A*-ing intentionally is (or is the manifestation of) settling the question of whether to do *A*.

(2) For believing that *P* to be voluntary it would have to be an intentional action: i.e., it would have to be possible to believe that *P* by settling the question of whether believing *P* is itself good or desirable. This would be tantamount to believing that *P* for the WKR.

(3) Believing that *P* for the WKR is impossible (*vide* above argument).

∴ (4) So, believing that *P* is not voluntary.

Finally, one may notice that, of course, doxastic involuntarism has opponents (cf. Vitz 2019), and Hieronymi's account is far from consensual (cf. Reisner 2018). But I believe it's fair to say that direct doxastic involuntarism is the traditional view on the matter. And as far as I can tell, the conclusions I'll develop by relying on Hieronymi's account could be similarly developed with other versions of doxastic involuntarism. This is because (as I'll show) what really matters in the context of stance voluntarism is how stances are related to beliefs and whether these beliefs are voluntary. As long as the beliefs connected to stances are not voluntary controllable, neither will be stances. Hieronymi's account of voluntarism is one account which can help us see these connections. Other accounts may do as well. My predilection for Hieronymi's account is simply based on the presumption that, methodologically, we have to start from *some* account, and Hienorymi's account is a clear and influential one.

4. Direct Stance Involuntarism: **Evaluative Epistemic Stances**

Now, let's return to the question of whether epistemic stances can be voluntarily controllable. My contention is that the answer depends on which account of stance we assume, because the relation between beliefs and stances will change in each account, such that doxastic involuntarism has different impacts for each account of stance. I will begin by focusing on the Evaluative Attitudes Account of stances. Remember that on this account, stances are composed by evaluative attitudes (e.g. valuing, admiring, being dissatisfied) that express a *commitment* to behave according to certain values and norms.

The main point to begin this analysis is to notice that Hieronymi's argument for involuntarism does not apply only to beliefs, but also to other sorts of mental attitudes. As she says:

> Importantly, believing is not the only attitude that is in this way not voluntary. Resenting, caring, fearing, being grateful, being angry, are none of them voluntary, in this sense – and all for the same reason. Each of these attitudes, like belief, expresses its subject's take on, opinion about, or orientation to, some object. When one resents, or is grateful, or cares, or is angry, one is understood to have a certain take on the object of one's resentment, gratitude, care, or anger, a take for which one is answerable. One is understood, we might say, to have settled for oneself some range of questions about that object. But, just as we could not understand you as answering for yourself a question about whether *p* for reasons that you take only to show believing good to do, so we cannot understand you as answering the range of questions involved in resenting or being grateful or caring or being jealous or angry, for reasons that you take to bear only on whether the attitude is good to have. (Hieronymi 2009, p. 367)

Hieronymi calls this group of attitudes as *commitment-constituted attitudes*, given that they express an opinion or orientation of their agent, which amounts *to having settled a question in a certain way*. By resenting someone, we have settled some opinion or some impression about the resented

subject. So, just as one cannot believe voluntarily by settling an epistemic question with the wrong kind of reason, one also cannot resent voluntarily by settling an opinion by the wrong kind of reason. I cannot directly believe that *P* just because someone offered me a million dollars to do it, and in the same way, I cannot truly resent something just because someone offered me a million dollars. Because commitment-constituted attitudes are essentially connected to an opinion (or impression), they are not voluntary.

One can better understand the evaluative attitudes surrounding epistemic stances by considering them to be commitment-constituted attitudes as well. These evaluative attitudes are called epistemic because they express an opinion or orientation about whether their object (which can be an activity or a theoretical property) is truth-conductive (or knowledge-conductive, or understanding-conductive, or "insert your favorite fundamental-epistemic-aim here"). Using van Fraassen's main example, to negatively evaluate explanations by postulate amounts to settle skeptically the question of whether explanatory considerations are reliably truth-conductive, or at least to have an orientation to settle the question in this way. Equally, to have and "admiration for scientific practices and ideals of rationality" seems essentially connected to a commitment or orientation towards settling the question of whether scientific practices are a reliable way of pursuing knowledge (even if we are only talking about *observable* knowledge, as anti-realists would). I cannot see how to comprehend these epistemic evaluative attitudes if they are to be completely dissociated from these commitments and orientations (see Mohler 2007 and Jauernig 2007 for similar criticisms about van Fraassen's idea that stances can be completely dissociated from beliefs).

On the Evaluative Attitudes Account, epistemic stances are essentially constituted by evaluative attitudes (e.g. valorizing, disregarding). If we interpret epistemic evaluative

attitudes as commitment-constituted attitudes, then we will also have an application of the distinction between the right and wrong kinds of reason to count in favor of these attitudes. Specifically, the wrong kind of reasons will be the reasons that motivate these evaluative attitudes, but which don't concern the question of whether the relevant attitude is truth-conductive (e.g. I pay you a million dollars if you become an empiricist). That being so, we can recreate Hieronymi's argument for evidentialism applying it to epistemic stances. Consider P to capture any specific theoretical property taken to be evidentially relevant (e.g. explanatory power, theoretical simplicity, predictive scope, external coherence, unificatory power, and so on), or any activity taken to be cognitively relevant (e.g. any scientific experimental practice; reflecting about a topic while presupposing certain theoretical premises). Then we have:

(1) Commitment Constituted Account of Epistemic Stances: Epistemically valuing P is settling the question of whether P is truth-conductive (or understanding-conductive, etc).

(2) WKRs do not bear on the question of whether P is truth-conductive, but rather on the question of whether treating P as truth-conductive is good or desirable to me.

(3) You cannot settle the question of whether P is truth-conductive on the basis of considerations that do not bear on that question.

∴ (4) Therefore, you cannot epistemically value P for the wrong kind of reason.

From conclusion (4), if we assume Hieronymi's definitions of voluntariness and intentionality, we can

recreate the argument for involuntarism in the scope of evaluative epistemic attitudes:

Why Evaluative Epistemic Stances Are Not Voluntary:

(1) *A*-ing intentionally is (or is the manifestation of) settling the question of whether to do *A*.

(2) For epistemically valuing *P* to be voluntary it would have to be an intentional action: i.e., it would have to be possible to epistemically value *P* by settling the question of whether *P* being truth-conductive is itself good or desirable. This would be tantamount to epistemically valuing *P* for the WKR.

(3) Epistemically valuing *P* for the WKR is impossible. (*vide* above argument).

∴ (4) So, epistemically valuing *P* is not voluntary.

Notice that there is a sense in which this involuntarism about evaluative stances is a consequence from doxastic involuntarism: if one could voluntary control one's beliefs at will, then one could believe in anything necessary to settle the question of "whether *P* is truth-conductive". In this way, the voluntary control over beliefs would imply a voluntary control over evaluative stances. Seeing this connection is interesting because it suggests that, if a pragmatist about reasons can sustain a case where a belief is voluntary by being legitimately based on the WKR (which would require rejecting Hieronymi's account in some extent, of course), then there will be a parallel case for a voluntary defense of an evaluative stance based on the WKR. This can be relevant to further determine whether voluntarism about evaluative stances becomes possible for some specific contexts, since

some arguments against doxastic voluntarism are confined to specific kinds of belief, such as auto-alethic beliefs (i.e. beliefs that secure their own truth, cf. Reisner 2018).

5. Indirect Stance Voluntarism: Reasoning Styles and Modes of Engagement

Epistemic stances are typically discussed as things that one can "exercise a considerable degree of control over." (Rowbottom 2005, p. 214; cf. also Rowbottom & Bueno 2011 pp. 12-16). The above argument sustained that, unless we have a clear explanation about how evaluative attitudes can be completely dissociated from beliefs and opinions, doxastic involuntarism implies a stance involuntarism for evaluative attitudes. However, aside from evaluative attitudes, epistemic stances are also frequently associated to reasoning styles and modes of engagement, as expressed by the Mode of Engagement Account. So, to determine whether stances are voluntary, we must also look at these two elements. This dimension of stances is nicely captured by Rowbottom's & Bueno's exemplification of stances as dispositional states that adapt to the environment:[2]

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[2] Rowbottom & Bueno defend that epistemic stances are controllable to some *degree* (2011, p.12), supporting this claim by providing some examples of how this can be done (2011, pp.10-12; see also Rowbottom 2005, pp. 214-6). I agree with their main point, and I consider my approach to be a development of their Mode of Engagement account. Specifically, I take my proposal to advance in understanding *how* the control over epistemic stances is constrained by an agent's previous beliefs (namely, throw the constrains putted by epistemic stances *qua* evaluative attitudes, which are commitment-constituted attitudes essentially connected to beliefs and doxastic inclinations). This advancement also empowers us to understand the relations between the Mode of

> … one is often able to change one's behavior in different contexts. When visiting a new partner's family for the first time, or talking to a police officer, one is (often) able to behave in a polite and measured fashion that one would not—on pain of ridicule—adopt when conversing with one's closest friends. Sometimes, the change can be remarkably swift and seamless. Consider how you change your way of thinking when listening to a (stimulating) philosophy paper; the way that you choose, mentally, to *engage* with what is being said. This is quite different than listening to the talk only with a view to finding something appropriate to say in order to impress the crowd (Rowbottom & Bueno 2011, p. 12)

Do we have voluntary control of the modes of engagement and reasoning styles we adopt? To some extent yes, since modes of engagement and reasoning styles can express *actions* instead of mental *states* (unlike evaluative attitudes). But to some extent no, since reasoning styles and modes of engagement can sometimes express cognitive processes related to belief formation, and belief formation suffers involuntary epistemic constrains.

Consider reasoning styles. The voluntariness of reasoning styles will depend on what we consider them to be. In some cases, what we call reasoning is not an intentional action, but a matter of reactively processing information to

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Engagement account and Paul Teller's Evaluative Attitudes account, allowing us to treat both accounts as complementary: each one emphasizes a different dimension of our cognitive life.

automatically form beliefs (cf. Kahneman 2011; Kornblith 2012). For example, imagine that, being alone, you hear the entrance door being abruptly opened. Arguably, you perceived the door being opened, but in a sense, you did not *perceive* anyone crossing it, since it is possible that whoever opened the door hasn't crossed it. Still, in the appropriate circumstances, you quickly and automatically infer that there is good chance someone entered the house. In cases like this, since forming beliefs is not voluntary or intentional, neither is the reasoning involved. But in another cases, reasoning is a matter of performing certain actions (manipulating mental models) that enables one to form a belief (cf. Kahneman 2011; Kornblith 2012). E.g. by engaging in an act of deliberation, or in a mathematical calculus which leads to an inference. If we take these actions to be part of the reasoning, then there is a sense in which these reasonings are voluntary: the actions that led to them were voluntary. One can consider whether it is relevant to engage in the deliberation, or to perform the calculus, and intentionally make the decision of reasoning about something. By extension, one can decide to adopt a reasoning *style* by engaging in the *appropriate* actions which characterize the reasoning style. E.g. one can decide to apply constructivist inferential rules in one's logical calculus instead of classical one's; one can choose to employ different statistical tools within a given analysis (Crombie 1994); or one can choose to pursue one question under *one* theoretical approach among a pluralism of other theoretical perspectives for the same domain (Boucher 2014).

Notice that on the presented account of evaluative attitudes, the evaluative attitudes will be the ones to determine what kind of reasoning styles one can pursue. Since (as we saw in the above account) epistemic values are the expression of one's opinion about whether an activity (or a theoretical property) is truth-conductive, ultimately, one

can only reason *and form beliefs* by using reasoning styles supported by his adopted epistemic values. If one acts trying to employ a reasoning style completely dissociated from his epistemic evaluative attitudes, there will be no inference and no belief formation. Or else one will be recreating the problem of the wrong kind of reasons, trying to settle the question of whether *P* on the basis of reasons that do not concern on whether *P* is true, according to the reasoner himself.

The same applies to modes of engagement, such as being more dogmatic or open-minded, or being more active or contemplative in an enquiry. They are ways of acting, and surely, we can voluntarily choose how we act. In this case, intentionally adopting a way of engagement amounts to settle whether adopting it would be desirable or good. Here, there is no distinction between the right and wrong kinds of reasons. For example, one can reason whether it will be good to engage in a deliberation. This reasoning can consider whether the topic of deliberation is an information relevant to the agent (there are things we don't care enough to know about), or whether deliberating can produce some relevant knowledge (there are things that would be futile to try knowing by pure deliberation, e.g. how many grains of sand exist?), or even whether deliberating can be good in any non-epistemic way (perhaps I have a love for contemplation, perhaps I am just bored). By extension, one can decide *how* to engage in such deliberations. One can decide whether to employ a more open-minded stance by acting in order to consider opposing ideas more carefully, or to employ a more dogmatic stance by actively searching for reasons that challenge one's opponent view, or by refusing to deliberate at all.

Overall, the control exercised on reasoning styles and modes of engagement can count as an *indirect* control over our beliefs. Since they can determine the information which

will be accessible to us, they can be just as crucial as evaluative attitudes in the determination of our belief formation, and deserve to be considered as just as important for epistemology. In this way, the Modes of Engagement Account of stances complements the Evaluative Attitudes Account by highlighting a different dimension of epistemic rationality. The Modes of Engagement Account captures the active and controllable dimension of epistemic stances, through which we guide our cognitive practices. The importance of this kind of indirect doxastic control is nicely presented by Levy & Mandelbaum in their discussion of epistemic obligations:

> Suppose you want to watch *Fox News* because you are interested in seeing how certain types of media portray certain events. Even though this is a benign enough endeavor, you are putting yourself at risk of catching certain beliefs not because the beliefs are worth acquiring epistemically speaking, but rather simply because you encounter them; you run the risk of catching these beliefs in a similar way in which one catches a cold. And just as you can control whether or not you catch a cold to a certain degree — for example, by not kissing someone who has a cold — so too can you control whether or not you encounter, and hence believe, certain propositions. (Levy & Mandelbaum 2014, p. 28).

The actions we do in interacting with our *environment* can modify the information to which we will be exposed, and thus indirectly control the beliefs we form. Employing certain reasoning styles and cognitive modes of engagement

can have the same role. Thus, they remind us that *mental* actions such as reflection, paying attention, remembering, and calculating, are also on the sphere of voluntary cognitive agency capable of exercising indirect doxastic control, even without actively changing our environment in any way. Stances as modes of engagement help to express the mental and internalist dimension of indirect doxastic control.

6. Conclusion

Stance voluntarism is meant to account for the rationality of scientific revolutions. One of the main problems regarding scientific revolutions is the one from methodological incommensurability, according to which scientists from different paradigms employ different methodological standards to assess which theory to accept: methodology is theory laden, and there is no neutral algorithm for theory choice. In this context, the transition between paradigms becomes harder to explain because there is no set of arguments which is sufficient to *compel* the transition (Kuhn 1962). Voluntarism highlights the role of *the will* in epistemic agency, rejecting epistemologies which picture cognitive agents as merely passive processors of information. The voluntarist account of rationality solves the problem, since its permissive dimension implies that scientists can *choose* to make the transition even though it is not rationally compelling (i.e. not obligatory). The transition between paradigms is not forced by the evidence upon a scientist, it is a *choice* of changing one's epistemic stances. However, terms like "will", "choice", and "values" are playing a crucial role while being left as vague and obscure notions. Thus, one might be suspicious about whether the voluntarist explanatory task is done (a problem which van

Fraassen was very aware of), and to what extent epistemic stances can really be voluntary.

The problem is aggravated by the tension between stance voluntariness and belief involuntariness. Saying that stances are chosen implies that they are voluntary. But voluntary acts are done intentionally. And intentional acts are essentially connected to settling the question of whether to do it. In order for stances to be voluntary, they must be connectable to settling the question about whether to adopt them. But this seems not to be the case when epistemic stances express evaluative attitudes, only when they express reasoning styles and modes of engagement. Thus, discussing stance voluntarism requires distinguishing between stances on the Evaluative Attitudes Account and on the Modes of Engagement Account.

On the Evaluative Attitudes Account, epistemic stances are evaluative attitudes (such as dissatisfactions, pledges, admirations, valorizations, priorities, inclinations, and likewise) about how to produce knowledge and how to be engaged on an epistemic enterprise. These evaluative attitudes express a *commitment* to behave according to certain strategic and open-ended norms. As such, they are commitment-constituted attitudes, which require its subject to have a certain take on how to settle a certain question. Specifically, given their epistemic nature these evaluative attitudes are constituted by settling questions regarding the truth-conductivity of certain cognitive acts (or theoretical properties). Since the settlement of these questions is made on the basis of one's background beliefs, this comprehension of epistemic evaluative attitudes connects them to the beliefs of its subject, and make evaluative-stance involuntarism a consequence of doxastic involuntarism. We do not have voluntary control over these epistemic evaluative attitudes, because we cannot settle the questions approached by epistemic stances with the wrong kind of reasons. We cannot

voluntarily become empiricists or materialists (in van Fraassen's definitions), because we cannot settle the question of whether explanations are truth-conductive by reasons which do not bear on this question. While this goes against the voluntariness that van Fraassen wanted to attribute to epistemic stances, we still lack an alternative interpretation which could clearly dissociate epistemic evaluative attitudes from beliefs. Thus, stance voluntarists get stuck in the dilemma of adopting a very obscure notion of epistemic evaluative attitudes, or accepting the proposed one and abandon the voluntariness of any stances captured by the evaluative attitudes account.

On the Mode of Engagement Account, epistemic stances are styles of reasoning and modes of engagement, expressing ways of approaching the world or a given situation in order to produce knowledge or some epistemic fruit. This kind of stances is controllable as long as it expresses ways of *acting,* instead of expressing doxastic mental *states*. One can choose to deliberate upon a certain framework of logical principles, statistical tools, of theoretical perspectives. One can choose to engage in an inquiry with more attention and predilection to opposing views or to the defense of one's already accepted views. One can choose to inquire some question with experimental methods or a priori deliberation. As long as the stances can be expressed as actions, they will be voluntary: the question of whether to employ them can be settled by reasons about whether employing them is good or desirable, and so Hieronymi's argument from the wrong kind of reasons won't apply.

Overall, the fusion of the Modes of Engagement and the Evaluative Attitudes accounts supports the interpretation of stance voluntarism as a kind of dual-system theory of epistemic agency (in the lines of Kahneman 2011; Kornblith 2012). On one level, epistemic evaluative attitudes express the agent's evidential standards which will constrain his

involuntary epistemic response to an evidence. But at the higher level, one agent's modes of engagement and reasoning styles can be controlled to engage in an inquiry in different ways. Conjointly, the two levels make epistemic rationality a dynamic interplay between, on one hand, involuntary forming beliefs in response to the evidence, and on the other, acting in ways to affect the posterior gathering of information which will be presented to the agent. Thus, this dual-system interpretation of stance voluntarism still fulfills one of van Fraassen's main intentions: to develop a voluntarist epistemology which does not picture epistemic agents as mere passive processors of information, but as ones that exercise their will and responsibility in conducting their epistemic lives.

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