The Argument from Slips

Santiago Amaya
Universidad de los Andes

Between perception and action there are close parallels.

Perception, for example, is said to have a *success* element. If a person sees an object, then the object must be in front of her. Something similar seems to hold in the domain of action. If someone acts for a reason, then her action must be reasonable in the light of what the person intends.

In both domains there are *illusions*. In perception, these refer to episodes where things don't appear to normal subjects the way they are. In action, they refer to situations in which competent and willful agents fall short of acting as intended. Further, from the perspective of subjects and agents, illusions are indistinguishable relative to their successful counterparts.

To account for their indistinguishability, perception theorists have introduced perceptual experiences. These are supposed to be the *common factor* shared by perception and illusion. The idea constitutes the core claim behind the argument from illusion, which Hume famously proposed to challenge a naïve form of realism in perception. This parallelism also extends to the domain of action. Or so I argue in what follows.

The focus of this paper is slips. A slip is a common kind of mistake, which is like an illusion, but in the domain of action. As we shall see, between the slip and the successful action there is also a common element. Briefly, both involve a *competent attempt to execute an intention*. Thus, in the domain of action an argument similar to the argument from illusion can be given. The argument challenges a widespread view about action inspired by Wittgenstein, which by analogy, I shall call "naïve rationalism."

The paper begins by recounting Hume's argument. Then, I present the main ideas behind the naïve rationalist view, sketching one prominent version of it originally due to G. E. M. Anscombe. With this in mind, I introduce slips and present the argument based on them. In the end, I discuss a pair of objections analogous to some common objections raised in the perceptual case. Their discussion helps sharpen some of the main points of the debate and illuminates the general picture of action that emerges from it.

1. The argument from illusion

Philosophers of perception are familiar with the argument from illusion, at least since Hume's formulation of it in the last pages of the *Enquiry* (1748/1975: XII, 1. 118). Hume introduced the argument to criticize what he took to be a naïve form of realism about perception and to suggest how awareness of the problems intrinsic to such realism would raise skeptical worries:

> The mind has never anything present to it but its perceptions, and cannot possibly reach any experience of their connection with their objects. The supposition of such a connection is, therefore, without any foundation in reasoning (XII, 1. 119).

Ever since, different versions of the argument have been propounded, mostly to defend a variety of positive conclusions regarding the nature of perception—for instance, to defend sense-datum theories (Ayer 1969; Robinson 1994). Here, however, the argument will be taken in its purely *negative form*. As such, it is meant to show that, contrary to the kind of realism Hume was criticizing, objects and state of affairs are *not* directly perceived.[1]

The argument starts from the existence of illusions. An illusion is a perceptual episode that involves error, in the sense that the perceived object appears different from what it really is. The error is not due to the perceiver having false beliefs; it is a perceptual, not a doxastic error. Further, from the subject's perspective, illusions and genuine perceptions are supposed to be *indistinguishable*. In the absence of background information, the person under the illusion is not normally in a position to know of her being subject to it.

Now, to the extent that illusions are indistinguishable, perception is supposed to involve two elements. This, at least, is the core of the argument. First, there is a perceptual experience, which is the *common factor* with perception and which accounts for the indistinguishability of illusions. Second, there is the correct determination of that experience by a mind-independent object or state of affairs. It is by virtue of that

[1] I cannot do justice to the many versions of the argument here. Many of them are, in fact, stronger than the one intended here. For recent examples, see Robinson (1994), Smith (2002) and Crane (2011). In what follows, I shall be mainly concerned with the "negative" portion of the argument, for instance, as Fish discusses it (2009: 29-33)

determination that having the experience counts as a genuine episode of perception and not as an illusion.

Given this, the challenge to naïve realism follows. In holding that perception is direct, the naïve realist is claiming that the things perceived are *constitutive* of the kind of mental state that perception is.[2] In their absence, one would be in an altogether different mental state. Yet, if the above proposal goes through, this doesn't seem to be the case. According to it, perception essentially involves having some kind of experience. But, as illusions seem to suggest, an experience of that kind can occur, even if those properties or state of affairs do not obtain.

As I said, the argument from illusion might be taken to help establish various conclusions about perception. But, strictly speaking, these do not follow from it (at least, not from the version of the argument considered here). In particular, to conclude that perception is not direct is *not* to state that one perceives the external world by virtue of *perceiving* an experience, or to postulate an *inner object* with the perceived characteristics. Both of these theses, which are admittedly suggested in Hume's quotation above, evidently require additional argumentation.[3]

By contrast, the claim that perception is indirect is more modest. Briefly put, it amounts to saying that perception involves having experiences that are *world involving* and yet not *settled by world*.[4] They are world involving, in the sense that they involve an encounter with objects and state of affairs in the world. But they are not settled by it because the objects and state of affairs encountered need not be those that would make the experience veridical.

2. Naïve rationalism

According to naïve realists, perceptual episodes are *constituted* by mind-independent objects and states of affairs. In this respect, their view contrasts with other realist views in perception, most notably, with

[2] For explications of the directness of perception in terms of constitution, see Langsam (1997), Martin (2006: 273) and Fish (2009: 5-16).

[3] Millar (2007: 182-184) discusses various ways in which advocates of the argument from illusion can develop their views without committing themselves to these claims

[4] Antony (2011) draws a similar contrast between an experience being world involving but not world-determined. As she puts it, an experience is not world determined in that its character is not *entirely* determined by the objects encountered.

standard causal accounts. For the latter, perception involves a causal relation between an experience and the things perceived. And whereas that relation makes the experience count as perception (as opposed to, say, a hallucination), being extrinsic it is not one of constitution.

Many philosophers have endorsed an analogous position in relation to action. Although it has never been explicitly characterized as such, one can find versions of it in some contemporary accounts of action inspired by Wittgenstein. The view, which can be called *naïve rationalism*, is centered on the role reasons play in the determination of action.[5] Ultimately, it boils down to the claim that in so far as actions are done for reasons, those reasons are constitutive of them. As in perception, the view is about constitution and success: the successful episode (action) is held to be constituted by those things in terms of which its success is defined (the reasons).

Naïve rationalism contrasts with causal approaches to action. The latter typically characterize actions (to be precise, intentional actions) as events or behaviors appropriately caused by reasons. To be sure, the causal aspect of these accounts can be and has been developed in different ways.[6] For the present comparison, however, what is essential to note is that in so far as causal approaches take reasons and actions to be *metaphysically separate existences*, the constitution claim that defines the naïve rationalist point of view clearly diverges from them.[7]

Historically speaking, traces of naïve rationalism can be found behind the *logical connection* argument defended by philosophers of action of the 1950-60s. This is the argument that explanations by reasons are not causal because actions and reasons are logically connected. A. I. Melden (1961), one of its most vocal supporters, was emphatic to deny that intentions and motives existed independently of the actions they explained.

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[5] By "reasons," one can understand here the considerations that motivate the agent to perform the action, or the agent's attitudes towards those considerations. Either way, the intended parallelism with naïve realism holds.

[6] See, for instance, the essays in Aguilar and Buckareff (2010).

[7] Some "componential" theories of action are hybrid in this regard (for example, Searle 1983 and Dretske 1988). In them, reasons and intentions are causes, and actions are processes constituted by these causal elements. These positions, however, are closer in spirit to the causal approach, so I do not count them as versions of naïve rationalism. Obviously, there are tricky issues here, but sorting them out would require a detailed discussion of the specifics of these views.

Rather, he thought they were aspects of the action, whose mention made explicit its connection to the context in which it happened and to agent performing it. This is why he thought reason explanations were not causal. For him, the logical connection between reasons and actions was a manifestation of their metaphysical non-distinctness.

More recently, action theorists following G. E. M. Anscombe have proposed a more sophisticated version of the view.[8] The cornerstone of their account is her famous dictum that practical knowledge is the cause of what it understands (Anscombe 1963: §48). As with many other key passages of *Intention*, much could be said about this one. What is important here though is Anscombe's idea that the relation between practical knowledge and its objects, which are the agent's intentional actions, is exactly *the opposite* of what that relation is like in the case of speculative knowledge. Whereas to count as knowledge speculation must match its objects, in the practical case the onus of the match is supposed to be on the action.

Let me explain. As Anscombe's interpreters have pointed out, it would be a mistake to understand "cause" in her dictum as causal theorists of perception or action use the term (Hursthouse 2001, Paul 2011, Ford et al 2011: 18). Instead, the appeal to causation is meant to invoke what is sometimes referred to as *Aristotelian formal causation*. Roughly speaking, a thing's formal cause is not something that exists independently of it. It is something that constitutes it in the sense of being a part or an aspect of it, which makes it the thing it is. Think, for example, of the way the form of the statue and the statue itself are related. The former is not a separate existence (as Platonists would say). It is an aspect of it that determines the kind of object the statue is.

According to Anscombe, practical knowledge bears precisely this kind of relationship to the actions of which it is about. In this regard, it is very much unlike speculative knowledge, which is supposed to be *derived* from its objects. To the extent that practical knowledge shapes what the agent does, her intentional actions do not exist independently of it. They are not, say, events waiting to be know by her. Rather, her actions have a teleological structure, which is essential to them—it always makes sense to ask *why* and *how* they are performed. And that structure is not given to them by something extrinsic or external. Instead, it is *built into them* by virtue of being displays of the agent's practical knowledge.

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[8] For versions of this Neo-Anscombean view, see Hursthouse (2000), Vogler (2001), and Ford (2015). For discussion, see Paul (2011) and Milgram (2012), who calls this *the calculative view of action*.

It is here where naïve rationalism comes in. For Anscombe, as for the action theorists following her, intentional actions are not always done for reasons. Also, one can do things basically in the sense that one can do them and not be able to say how one does them. Yet, whenever an action is either done for a reason or is not basic, the action has a *rich teleological structure*. In virtue of it, some descriptions apply to it and some do not apply. Importantly for present purposes, such structure is supposed to be constituted by the agent's reasons, as embodied in the *considerations* that she would invoke were she asked to explain *why* she does the action or *how* she does it.[9]

As an illustration, consider Anscombe's famous pumping example. As she notes, what the man does there can be correctly described in various ways: "pumping water into the house," "poisoning the inhabitants," etc., According to the view under discussion, however, those descriptions only count as correct descriptions of what the man did to the extent that they articulate the reasons for which he acts. That is, setting aside the movements of the man's body or their mere consequences in the world, there is no available description of his action *except by introducing his reasons*. He does what he does *in order* to poison the inhabitants; he does it *by* pumping water into the house, etc.

With this, we can go back to Anscombe's dictum. To claim that in the domain of practical knowledge the onus of the match lies on the agent's actions is *not*, in the light of what has been said, merely to define a condition for successful action, say that one's actions ought to match one's reasons for doing them. It is, further, to build its success conditions into the very nature of the action. In short, in so far as actions have essentially a teleological structure of means and ends, this structure is given to them by the way the agent's reasons are articulated. It is the latter that makes actions what they are, namely, doings about which it makes sense to ask why and how they are done.

3. Slips

[9] Candace Vogler, who develops a Neo-Anscombean account along these lines, puts it as follows: "*Getting* an accurate description of the event in question, *of* the intentional action *as* an intentional action, *is* (at least) getting a description of its rational articulation, of the intended end and the means or parts done in order to attain, or make it possible to attain, the end (2001: 445)."

Whereas illusions have played a major role in philosophical discussions about perception, in action theory they have hardly been discussed. For the most part, theorists have focused on successful episodes of agency. Whenever they have discussed errors, the cases discussed tend to involve mistakes due to ignorance or *akrasia*. Or they tend to refer to mistakes that occur because of the agent's lack of ability. In other words, the mistakes discussed tend to be those that we make as believers or desirers, or that prevent us from acting as agents. There are not the mistakes that we make *qua* agents.[10]

Illusions, however, are common in the domain of action too. One can easily recognize this, thinking back on one's own experience. By illusions, I refer here to situations in which well informed, willful, and competent agents fall short of acting as intended. Their lack of success is not necessarily traceable to their having false beliefs or lacking the relevant information. And their mistakes are inadvertent in the sense that to realize what they did wrong, agents need to step back and reflect on the larger context.

Consider, as prime examples, slips.[11] These are familiar occurrences. You call your partner by the name of your child. Or, heading home, you wind driving up by habit to your old place. Surely, you know the name of every family member. You know as well that you just moved to a different neighborhood. Yet, without even noticing it, you end up acting contrary to what you intended then.

Some slips are caught almost as soon as they happen. You realize that you just blurt out the wrong name. Often, however, it takes a while to notice them. As you sit behind the wheel approaching the wrong driveway, it slowly dawns on you that you are not where you were supposed to be. Either way, until the mistake is caught, everything *seems to go seamlessly*. From your perspective as the agent making the mistake, it is action as usual.

In general, slips can be characterized as a type of *performance mistake*. In them, the error does not lie with the judgment or the decision of the

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[10] Some exceptions can be found in Ruben-Hillel (1992) who discusses attentive miscalculations, Mele (2006) on lost intentions, and Peabody (2005) who uses slips to argue against Davidson's theory of action

[11] For discussion of slips in everyday life and slip corpora, see Amaya (2013), Jónsdóttir et al (2007), Norman (1981), Reason and Mycielska (1982), Reason (1984); Sellen (1990). For a review of verbal slips and findings from corpora, see Baars (1992) and Poulisse (1999).

agent but with the way these are carried out. In the slip, in fact, you normally intend to do things that would be judged acceptable all things considered, say, to get home after a hard day's work. And you normally act motivated by those things without an inkling of hesitation. In those respects, the mistake does not impugn your judgment or the quality or strength of your will.

Further, slips are errors of *competent agents*. As such, they differ from other kinds of performance mistakes, for instance, those that occur because one lacks the required abilities, or because one is forced to act in circumstances where one cannot exercise them well. Think about the verbal slip. Calling your partner by the right name was not something difficult to accomplish for you in either of these respects. It was not like calling someone you just met by the right name or like trying to find the appropriate wording for a sentence when nervously speaking in front of a crowd.

Finally, slips also differ from behaviors that are beyond the agent's *direct control*, for instance, the kind of compulsions observed in OCD patients or the tics characteristic of Tourette's syndrome.[12] In fact, a distinguishing mark of the slip is that it is a mistake with *a quick and easy cure*. That is, noticing the mismatch between intention and behavior is often enough to correct the mistake. One does need to make an effort, to fight an urge, or to try to get oneself in the right frame of mind. Normally, all one needs to do to get things right is to have another go at it.

In sum, slips can be defined as *actions contrary to a governing intention*. At the time of the mistake, you form an intention to do something that is typically well within your power. And although you wind up not acting as intended (at least, given your beliefs), the intention sustains what you do. You set to act motivated by it. And what you do can easily be aligned with it. In fact, had you not acted on that intention or had you changed your mind midway, the slip would have not occurred.[13]

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[12] For reviews of the phenomenology of OCD and related pathologies, see Abramowitz and Houts (2005). See Cohen and Leckman (1992) and Schroeder (2007) for a description of Tourette's syndrome.

[13] In claiming that slips are actions I do not mean to imply that they are intentional actions—or intentional under a description. Elsewhere, I argue that under a certain plausible understanding of what "intentional" means they are, in fact, intentional (Amaya, in prep). But this further claim is not necessary for present purposes. For what matters here, slips could be non-intentional actions of the sort David Chan (1995) discusses.

4. The argument

Hume's challenge to naïve realism was not so much that illusions were inconsistent with it but that certain salient features of them were better accounted for once the position was given up. In particular, taking their subjective indistinguishability at face value, he thought that one could better explain the similarities between illusions and perceptions by positing perceptual experiences that were world involving without being constituted by the world.[14]

In the domain of action, a structurally similar argument can be put forward. It starts from the existence of slips. A slip, as I said before, is an action contrary to a governing intention. That is, it involves acting on an intention but not acting as intended. Further, the behavior in the slip is normally *indistinguishable* from a successful performance. Not only from the agent's perspective, the mistake typically unfolds without notice. Also, from a third person's perspective, the mistake tends to look like a success. In the absence of background information about what the agent intended, observers normally do not recognize the performance as a slip.

This, in fact, is one of the signatures of the mistake. Unlike other form of error in the execution of intentions, slips tend not to result in clumsy or inept performances but quite the opposite. Which means that, rather than being signs of incompetence, they are actually signs of a *misplaced competence*. Thus, even if you wind up not acting as intended, the resulting action is one that could easily pass for a success. Indeed, it would have been the correct thing to do had you intended something slightly different.[15]

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[14] Crane (2011: §2) presents a stronger version of the Humean argument. For him the crux of the argument is given by the fact that illusions seem *incompatible* with "the manifest nature of perception." Partly because I doubt that there is something like *the* manifest nature of perception, I prefer the "weaker" version that only presupposes subjective indistinguishability between veridical and non-veridical experiences.

[15] This is, in fact, one of the main intuitions guiding Freud's interpretation of slips as signs of a troubled conscience in his *Psychopathology of Everyday Life*. It should be noted, however, that Freud might have been ambivalent about this interpretation. See Timpanaro (1976: 128-132) for discussion of the passages evidencing the ambivalence. But see Grünbaum (1984) for a

Imagine, for example, that you had decided to go back to your old place to fetch something you left behind when you moved. Or, suppose that you had meant to get your child's attention, instead of your partner's. If this had been the case, what you did when you slipped would have been a success.

Here is where the parallel with Hume's argument comes in. To the extent that slips are indistinguishable from successful performances, successful action would seem to involve two distinct elements. First, there is an attempt to execute an intention, which is the *common factor* with slips and which accounts for their indistinguishability. Second, there is the correct determination of that attempt by the agent's reasons. It is by virtue of that determination that the execution of the intention counts as a successful action and not merely as a slip.

From this, the challenge to naïve rationalism follows. As mentioned earlier, for the naïve rationalist, the agent's reasons are supposed to be constitutive of what she does. But the argument from slips, if sound, shows that this is not the case. Acting for a reason essentially involves an attempt to execute an intention. And whereas that attempt can be successfully shaped by the reasons behind the agent's intention, it does *not* seem to be constituted by them. As the possibility of slipping suggests, an attempt of that kind can occur even if the agent does not have reasons that correctly align with it.

Take again the Neo-Anscombean view outlined above. According to it, when an agent acts for a reason the structure of her action is *one and the same* with the structure of her reasons. Therefore, one can always read the agent's reasons, what she intends and believes, off the structure of what she does. The slip, however, raises a problem in this regard. In it, the agent attempts to execute an intention. The attempt has a teleological structure. But in so far as the mistake is characterized by a mismatch between actions and reasons, such structure *cannot* be taken as a reflection of the agent's reasons. Doing it would make the agent look irrational, which she is not, or would make the slip a kind of mistake that it is not.

Consider the driving slip. It would certainly be wrong to say that you drove to your old place intentionally. Among others, you were probably surprised when you came to the realization of having done it. Yet, by contrast, there are many descriptions of what you did that capture what you took yourself to be doing at the time and that, in addition, display the kind of *teleological structure* characteristic of actions done for reasons: you

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stricter reading of these passages and Sachs (1989) for a criticism of that reading.

walked to your car, drove out the parking lot, made a left turn, took the freeway, etc. You did some of these things as *means* for others. You did all of them *in order to* get home after a hard day's work. Indeed, it is by virtue of having this teleological structure that your performance counts as a mistake.

The problem for the Neo-Anscombean arises because this structure *cannot* be taken as a reflection of your intentions and beliefs at the time. In particular, it does not reflect the answers you would give to the how and why questions, which, according to this view, embody one's reasons for action. To wit, had you been asked then how to get home, you would have probably described an alternate series of actions. Had you been asked why you were taking the freeway south given that you wanted to go your new place up north, you would have probably drawn a blank stare.

In general, trying to read the agent's reasons off the slip results in a distorted image of the agent. Acting on reasons that run contrary to what one knows is normally considered a hallmark of *irrationality*. Yet, the slip does not seem to be traceable to an irrational mind. Rather than involving agents who reason contrary to what they know, slips seem to involve agents who do not reason much at all. And whereas not reasoning enough is in some situations a sign of irrationality, say, if one reasons less than one ought to, the situations where slips happen tend not to be like this. For one thing, the slip normally happens in situations when not much reasoning is required.

On the other hand, trying to read the agent's reasons off the slip runs the risk of making the mistake *more reasonable* than what it really is. Hence, it tends to result as well in a distorted image of the mistake. Typically, what is puzzling about any given slip is not how the agent came to act for poor reasons but rather why, given that it was so easy for her, she failed to act in line with reasons she already accepted. It is symptomatic, in this regard, that as soon as the mistake is pointed out to them, slipsters tend to recognize it as such. They do not attempt to explain what they did appealing to reasons that would otherwise justify their actions.[16]

Now, I said earlier that the argument from illusion should not be taken to establish positive conclusions about perception, for instance, that perceiving the world requires perceiving inner objects. Likewise, the argument from slips should not be asked to do more work than it actually does. In particular, to say that acting for a reason essentially involves an attempt to implement an intention is *not* to say that such actions involve a

[16] For detailed discussions of the claims in the last two paragraphs, see Amaya (2013) and Amaya & Doris (2014).

further inner act of attempting or trying, or that they are preceded by one of such acts.[17] As in the perceptual case, making this kind of claims requires further argumentation.

In comparison, the main claim behind the argument from slips is substantially more modest. Although the argument presupposes that behind every action there is an attempt to execute an intention, it is mostly silent on the nature of that attempt. By analogy with the perceptual case, all it says about it is that such attempts are *reason involving* and yet not *settled by one's reasons*. They are reason involving in the sense that they suppose an agent acting for certain reasons. But they are not settled by them because the resulting attempt need not be successful in the light of what those reasons recommend.

5. Is it action?

Various philosophers, most notably, those who favor a *disjunctive* account of perception, have expressed skepticism about the argument from illusion.[18] One of their main reasons is *metaphysical*. Not trusting the deliverances of introspection, disjunctivists think that successful and illusory episodes are not, appearances to the contrary, mental states of the same kind. Hence, for them, there is no need to posit a factor common to both cases.[19]

An analogous criticism could be leveled against the present argument. I have claimed that the slip involves an agent attempting to execute an intention. This is meant to explain why the mistake looks like a successful action. Yet, as in the perceptual case, one might insist here that appearances are misleading. Despite how things seem to the agent or to the external observer, one could argue that the "attempt" behind the slip is significantly different from the kind of attempt involved in successful

[17] Hornsby (1980) and O'Shaughnessy (1980), for instance, seek to arrive to these claims by drawing on arguments that also parallel the argument from illusion. For cogent criticism of these arguments, see Dancy (1995)

[18] Different versions of the disjunctivist position can be found in Hinton (1973), McDowell (1982, 1986), Martin (2004). For general surveys of disjunctivism in perception, see the introduction of Haddock & McPherson (2008) and Crane (2011).

[19] Jonathan Dancy puts it as follows: "[T]he appeal to the deliverances of introspection is not generally allowed to be conclusive elsewhere, and there seems to be nothing special about the present case to warrant any more respectful attitude to introspection here." (1995: 422)

action. Not only does it fall short of being in line with the agent's reasons. Not being sensitive to those reasons, it falls short of counting at all as the *execution of an intention*.

I disagree. Clearly, some performances fit this mold. A person forms an intention, for instance, to let his climbing partner go off, which causes him to behave in certain ways that would otherwise seem intended: he gets so nervous that he lets his partner go off. As discussions of the causal theory of action have made it clear, such *deviant* cases ought not to count as instances of action (Davidson 1973; Bishop 1989). Even though the man is behaving according to his reasons, his behavior is not a *rational response* to them. Rather than being an execution of his intentions, it is a brute offshoot of them.

The problem with the objection is that slips are only superficially like this sort of cases. In them, the resulting behavior falls short of being in line with one's reasons, which gives the appearance of it being insensitive to them. The reality, however, is that things are quite different in this respect. What one does in the slip *makes considerable sense* in the light of one's intentions and beliefs. In fact, the mistake normally comes close to being the *right* response to them. Consider this. You drove to *your* old place, not to your uncle's house or to your friend's living next door. And even if you called your partner by the wrong name, it is not as though you called her, say, by the name of the president or, more dramatically, by your own name.

Crucially, these kinds of results are *not* due to happenstance. In fact, the patterns can be *systematically* observed. Whenever the slip is such that a new routine gets substituted by an inappropriate one, the substituting routine normally betrays an old habit. One does something that used to work in the past (Reason & Mycielska 1982; Reason 1984; Jónsdóttir et al 2007). Likewise, in verbal slips lexical substitutions invariably involve words of the same syntactic categories and typically occur among semantically related items. Only rarely, the substitutions result in ungrammatical utterances or involve semantically distant words. (For a review of verbal slip corpora, see Poulisse 1999, ch. 1.)

There is a sound and relatively simple explanation for this. In outline, slips can be viewed as instances of *cognitive under-determination*. What the agent does at the time is a response to her intentions and beliefs, although it is not fully shaped by them. Under-determination is common in everyday life. It happens when the need to act outstrips one's readiness to deliberate, for instance, if one is driving tiredly after a hard day's work, or if one is trying to catch one's partner's attention while keeping an eye on a fidgety

child. In such circumstances, not all the information one has is available for use. Only a portion of it actively comes to mind.

It is at this point that habits and familiar associations come in. In short, they play a role supplementing deliberation in structuring action. In particular, they help agents settle on ways of executing their intentions that are *reasonable* in the light of whatever information they are actively holding in mind. Thus, if you intend to get back home, but you are not thinking about your recent move, taking the freeway south can seem a reasonable course of action. Plenty of times, following it that has taken you home alright. Similarly, if your intention is to alert your partner about the spill on the kitchen floor, it might be reasonable to blurt the first name that comes to mind. If you pause to think about the right name, you might not speak in time to prevent him from stepping on the spill.

From this, the response to the objection follows. The slip, as I mentioned earlier, involves an execution of an intention. The execution is incorrect but is, nevertheless, *a rational approximation* to what the agent intended. Hence, it is *not* a case of a brute response, as deviant performances are supposed to be. In brief, the mistake not only results in behavior that is approximately correct. But whatever is right in it is not merely the result of an accident. It is, instead, the result of some of the routines by which habits and semantic familiarity reasonably shape what one does and what one says.

6. Is it a glitch?

Some philosophers have opposed the argument from illusion for *epistemological* reasons. Their criticism is that the argument gets the order of explanation wrong. It tries to draw basic conclusions about the nature of perception, overlooking the fact that the successful case has *explanatory priority* over the unsuccessful one. For these philosophers, one cannot understand the nature of perception by reflecting on *defective* perceptual experiences.

The criticism could be extended to the argument from slips. In it, conclusions about the nature of action are derived from cases where things do not go as they should. That might seem problematic. The slip, one could argue, is a *glitch* or *lapse* in an otherwise successful endeavor. It happens because something interferes with the normal course of events. Thus, even if in it actions are not constituted by reasons, this does not reflect on the

nature of action proper. From a glitch or a lapse, one cannot infer how things normally work.[20]

I disagree with this objection, too. To see why, begin by distinguishing two things that are relevant to conceptualize a mistake. First, there are the standards by which the *performance* can be evaluated, that is, by which it can be said to be a success or a mistake. In the case of perception and action, such standards are relatively easy to state (or let's assume here that they are easy to state). Perception ought be veridical; action is supposed to reveal the agent's intentions and beliefs (Amaya 2013).

On the other hand, there are the standards by which one can evaluate *the processes* that lead to those performances. It is, typically, in terms of these that normal and impaired processing get distinguished, whether the impairment is pathological, or due to a temporary glitch. To illustrate, some of the ways in which perception can fail to be veridical are, in addition, evidence of shortcomings in this regard. Think, for instance, about hallucinations.

Considered from a purely abstract point of view, it is clear that these standards can come apart. An unsuccessful performance may, in principle, result from an otherwise impeccable process. Moreover, there is evidence that in some human tasks this is actually the case. To take one famous example, in their landmark studies of inductive reasoning, Daniel Kahneman and Amos Tversky observed how their subjects' intuitive judgments violated basic probabilistic principles.[21] The violations, however, did not seem to result from misapplications of the probability calculus. It looked, instead, as if their subjects were tacitly relying on a limited number

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[20] Although he is not thinking about slips, Anton Ford (2011: 96) comes very close to stating this objection: "The anatomist who seeks a general theory of the human body does not concern herself indifferently with *all* bodies—the living and the dead alike—but exclusively with the living ones, and among the living, primarily with the healthy ones. Just so, a philosopher who aims at a general theory of action does not concern herself indifferently with *all* actions—the intentional and the unintentional alike—but exclusively with the intentional ones, and among the intentional, primarily with the ones that are undeformed."

[21] The original research was presented in Kahneman and Tversky (1973), and discussed in Tversky and Kahneman (1982). Gigerenzer (1996) and Herwtick and Gigerenzer (1999) have forcefully criticized their interpretation, although the point illustrated in the text above still holds.

of familiar heuristics that, in more naturalistic scenarios, would be a reasonable guide to making likelihood estimates.

In the case of the slip, the situation is analogous. In it, performances and processes also dissociate.[22] Obviously, the slip is a mistake: the standard by which the performance counts as such are the agent's intentions and beliefs. Even so, it is not as though the slip is the result of a glitch or a lapse in an otherwise *foolproof process of intention execution*. Indeed, it is doubtful that that process even exists. For every slip there might be some abstract practical syllogism recommending the right performance. But this is not to say that there is a procedure available to human agents for always coming up with it or for applying its conclusions correctly. In fact, to the extent that reasoning and applying conclusions are actions, it would seem that one could always make mistakes in doing either of these things.

In general, human agents have clear processing limits. Our ability to store information vastly outstrips our ability to bring that information to mind. This is why cognitive under-determination can be so pervasive and why, on the face of it, our reliance on habits and familiar associations is something reasonable. It is a way of compensating for our limitations. What should be noticed, however, is that relying on them comes at a cost. It forces us to make *trade-offs* between our capacity to attend to various things, behave in flexible ways, and act in a timely manner. Think about it this way. You can follow an old habit mindlessly, which is a good thing if you are tired. But, in following it, you loose some flexibility. Likewise, you can decide on the fly what to say and say it. But you cannot attend to the all the words you utter then.[23]

Overall, this is a strategy that works. It is typically sufficient to keep one afloat. Yet, to the extent that it forces us to make some compromises, there are situations in which the results are less than desirable. That is, like the use of heuristics in inductive judgment, what we have here is a piece of *efficient psychology*, whose advantages come at a performance cost.

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[22] In drawing the distinction between evaluating the reasonableness of performances and processes/mechanisms, I borrow from Michael Bratman (1987: 5.2), who distinguishes habits and general policies for (not) reconsidering plans from episodes of (non) reconsiderations. A precursor of Bratman's treatment can be found is Herbert Simon's (1957, 1983) distinction between *substantive* and *procedural rationality*. By analogy, we talk here of substantive and procedural success in action.

[23] For discussions of how these trade-offs manifest in detail in slip generated experimentally and naturalistically, see MacKay (1987), Reason (1983), and Baars (1992).

Internalized routines, such as habits, are past-dependent and, hence, yield the wrong solutions in novel conditions. Familiar associations are semantically speaking too coarse, which means that they might not be discriminative enough to convey an exact message. Hence, the strategy of relying on them, even if perfectly implemented, can result in a mistaken performance.

To conclude, the objector is right to insist that one cannot infer conclusions about how things normally work from glitches or lapses. The problem is that slips are *not* glitches or lapses in normal functioning. Instead, they are *side-effects* of a psychology that allows humans agents to implement their intentions in an efficient way. Thanks to it, in normal life one can act successfully without having to pause and think too much.

7. Conclusion

In this paper, I have introduced the argument from slips. Based on the idea that these mistakes are analogous to illusions but in the domain of action, I have shown how a parallel to Hume's argument can be constructed. Whereas the latter was meant to challenge naïve realism in perception, the argument from slips targets some naïve views about the relation between reasons and actions inspired by Wittgenstein.

I have also discussed how the argument from slips can be defended from objections similar to some raised in the perceptual case. Obviously, these are not the only possible objections to it. It remains to be seen as well whether my replies can be adapted to strengthen the parallel argument in the domain of perception.

Ultimately, from the discussion of these objections a less naïve yet, I believe, a more realistic conception of human agency emerges. It is a view that recognizes that an important part of our being successful agents is our responsiveness to reasons. However, unlike the rationalist view challenged by the present argument, it seeks to do justice to the fact that human beings are limited creatures. Accordingly, it claims that our success also depends on relying on less than perfect habitual routines and associations. It is a view that makes our errors, as much as our successes, a mark of the kind of agents we are.

8. References

Abramowitz, J. & Houts, A. (2005) *Concepts and Controversies in Obsessive-Compulsive Disorder* (Springer).

Aguilar, J. & Buckareff, A. (2010) *Causing Human Action: New Perspectives on the Causal Theory of Action* (Cambridge: Bradford/MIT Press).

Amaya, S. (2013) 'Slips', *Noûs*, 47, 559–576.

Amaya, S. (in prep) ´Without belief´.

Amaya, S. & Doris, J (2014), 'No Excuses: Performance mistakes and responsibility' in J. Clausen & N. Levy (eds.), *Springer Handbook of Neuroethics* (Dordrecht: Netherlands).

Anscombe, G. E. M. (1963) *Intention* (Ithaca: Cornell University Press).

Anthony, L. (2011) 'The Openness of Illusions', *Philosophical Issues*, 21, 25-44.

Ayer, A. J. (1969) *Metaphysics and Common Sense* (London: Macmillan).

Baars, B. (1992) 'The many uses of error' in B. Baars (ed.), *Experimental slips and human error* (New York: Plenum Press).

Bishop, J. (1989) *Natural Agency* (Cambridge: Cambridge University Press).

Bratman, M. (1987) *Intention, plans, and practical reason* (Cambridge, Mass.: Harvard University Press).

Brewer, B. (2008) 'How to Account for Illusion' in F. Macpherson & A Haddock (eds.) *Disjunctivism* (Oxford: Oxford University Press).

Chan, D. (1995) 'Non-intentional Actions', *American Philosophical Quarterly*, 32, 139-151.

Cohen, A. J. & Leckman, J. F. (1992) 'Sensory phenomena associated with Gilles de la Tourette's syndrome', *Journal of Clinical Psychiatry*, 53, 1350-7.

Crane, T. (2011) 'The Problem of Perception' in E. Zalta (ed.), *Stanford Encyclopedia of Philosophy*. Available from: <http://plato.stanford.edu/archives/win2014/entries/perception-problem/>.

Dancy, J. (1995) 'Arguments From Illusion', *The Philosophical Quarterly*, 45, 421-438.

Davidson, D. (1973) 'Freedom to Act,' Reprinted in D. Davidson (1980) *Essays on Actions and Events* (Oxford: Clarendon Press).

Dretske, F. (1988) *Explaining Behavior. Reasons in a World of Causes* (Cambridge: MIT Press).

Fish, W. (2009) *Perception, Hallucination, and Illusion* (New York: Oxford University Press).

Ford, A. (2015) 'The Arithmetic of Intention', *American Philosophical Quarterly*, 52(2), 129-143.

Ford, A. (2011) 'Action and Generality' in A. Ford, J. Hornsby & F. Stoutland (eds.), *Essays on Anscombe's Intention* (Cambridge: Harvard University Press).

Ford, A., Hornsby, J., & Stoutland, F. (2011) (eds.), *Essays on Anscombe's Intention* (Cambridge: Harvard University Press).

Freud, S. (1901/1963) *The psychoptahology of everyday life*. Trans. J. Strachey (London: Hogarth Press Limited).

Gigerenzer, G. (1996) 'On Narrow Norms and Vague Heuristics', *Psychological Review*, 103, 592-596.

Grünbaum, A. (1984) *The foundations of psychoanalysis: A philosophical critique* (Berkeley: University of California Press).

Haddock, A. & Macpherson, F. (2008) *Disjunctivism: Perception, Action, Knowledge* (New York: Oxford University Press).

Hertwig, R. & Gigerenzer, G. (1999) 'The 'Conjunction Fallacy' Revisited: How Intelligent Inferences Look Like Reasoning Errors', *Journal of Behavioral Decision Making*, 12, 275-305.

Hinton, J. M. (1973) *Experiences: An Inquiry into Some Ambiguities* (Oxford: Oxford University Press).

Ruben-Hillel, D. (1992) 'Simple Attentive Miscalculation', *Analysis*, 52, 184-190.

Hornsby, J. (1980) *Actions* (London: Routledge & Kegan Paul).

Hursthouse, R. (2000) 'Intention', *Royal Institute of Philosophy Supplement*, 46, 83-105.

Jónsdóttir, M., Adólfsdóttir, S., Cortez, R. D., Gunnarsdóttir, M., & Gústafsdóttir, H. (2007) 'A diary study of action slips in healthy individuals', *The Clinical Neuropsychologist*, 21, 875-883.

Kahneman, D. & Tversky, A. (1973) 'On the psychology of prediction', *Psychological Review*, 80, 237-251.

Langsam, H. (1997) 'The Theory of Appearing Defended', *Philosophical Studies*, 87, 33-59.

MacKay, D. G. (1987) *The organization of perception and action: A theory for language and other cognitive skills* (New York: Springer-Verlag).

Martin, M. G. F. (2004) 'The limits of self-awareness', *Philosophical Studies*, 120, 37-89.

Martin, M. G. F. (2006) 'On Being Alienated' in T. S. Gendler & J. Hawthorne (eds.) *Perceptual Experience* (Oxford: Oxford University Press).

McDowell, J.(1982) 'Criteria, Defeasibilty, and Knowledge', *Proceedings of the British Academy*, 68: 455–79.

McDowell, J (1986) 'Singular Thought and the Extent of Inner Space', in P. Petit and J. McDowell (eds.) *Subject, Thought, and Context* (Oxford: Clarendon Press).

Milgram. E. (2012) 'Practical Reason and the Structure of Action' in E. Zalta (ed.), *Stanford Encyclopedia of Philosophy*. Available from: http://plato.stanford.edu/entries/practical-reason-action/

Millar, A. (2007) 'What the Disjunctivist is Right About', *Philosophy and Phenomenological Research*, 74, 176-198.

Mele, A. R. (2006) 'Practical mistakes and intentional actions', *American Philosophical Quarterly*, 43, 249-260.

Melden, A. (1961) *Free Action* (London: Routledge and Kegan Paul).

O'Shaughnessy, B. (1980) *The Will* (Cambridge: Cambridge University Press).

Paul, S. (2011) 'Deviant Formal Causation', *Journal of Ethics and Social Philosophy*, 5, 1-23.

Peabody, K. (2005) 'Trying slips: Can Davidson and Hornsby account for mistakes and slips?', *Philosophia*, 33, 173-216.

Poulisse, N. (1999) *Slips of the tongue: Speech errors in first and second language production* (Amsterdam: Benjamins).

Reason, J. (1983) 'Absent-mindedness and cognitive control' in J. Harris, & P. Morris (eds.), *Everyday memory, actions, and absent-mindedness* (New York: Academic Press).

Reason, J. (1984) 'Lapses of attention in everyday life' in R. Parasuraman, & D. Davies (eds.), *Varieties of attention* (New York: Academic Press).

Reason, J. & Mycielska, K. (1982) *Absent-minded? The psychology of mental lapses and everyday errors* (Englewood Cliffs: Prentice-Hall).

Robinson, H. (1994) *Perception* (London: Routledge).

Sachs, D. (1989) 'In fairness to Freud: A critical notice of the foundations of psychoanalysis', *The Philosophical Review*, 98, 349-378.

Searle, J. (1983) *Intentionality. An Essay in the Philosophy of Mind* (Cambridge: Cambridge University Press).

Schroeder, T. (2005) 'Moral Responsibility and Tourette Syndrome', *Philosophy and Phenomenological Research*, 71, pp. 106-23

Sellen, A. J. (1990) *Mechanisms of human error and human error detection*. Ph.D Thesis, (University of California San Diego).

Simon, H. (1957) *Models of Man* (New York: John Wiley).

Simon, H. (1983) Reason in Human Affairs (Stanford: Stanford University Press).

Smith, A. D. (2002) *The Problem of Perception* (Cambridge: Harvard University Press).

Timpanaro, S. (1976) *The Freudian slip: Psychoanalysis and textual criticism* (London: NLB).

Tversky, A. & Kahneman, D. (1982) 'Judgments of and by representativeness' in D. Kahneman, P. Slovic & A. Tversky (eds.), *Judgment under uncertainty: Heuristics and biases* (Cambridge: Cambridge University Press).

Vogler, C. (2001) 'Anscombe on Practical Inference' in E. Millgram (ed.) *Varieties of practical reasoning* (Cambridge: MIT University Press).