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# Regulation, Normativity and Folk Psychology

Victor Fernandez Castro[1]

**Abstract** Recently, several scholars have argued in support of the idea that folk psychology involves a primary capacity for regulating our mental states and patterns of behavior in accordance with a bunch of shared social norms and routines (Andrews, Do Apes Read Minds? Toward a new folk psychology, MIT Press, Cambridge, 2012; Andrews, Southern Journal of Philosophy 53:50–67, 2015; McGeer, Folk psychology re-assessed, Springer Press, Dordrecht, 2007; McGeer, Philosophical Explorations 18(2):259–281, 2015; Zawidzki, Philosophical Explorations 11(3):193–210, 2008; Zawidzki, Mindshaping: A new framework for understanding human social cognition, MIT Press, Cambridge, 2013). This *regulative view* shares with the classical Dennettian intentional stance (Dennett, Brainstorms: Philosophical essays on mind and psychology, Harvester Press, Brighton Sussex, 1981, 1987) its emphasis on the normative character of human socio-cognitive capacities. Given those similarities, it makes sense to assess the regulative view by considering some of the classical arguments against the normative nature of the intentional stance (Goldman 2006; Fodor, Mind 94(373):76–100, 1985; Stich, Philosophical Topics 12(1):39–62, 1981; Stich, The fragmentation of reason: Preface to a pragmatic theory of cognitive evaluation, MIT Press, Cambridge, 1990). The aim of this paper is to argue that the priority that the regulative view lays on the pluralistic and regulative character of folk psychology leaves the theory well-placed to resist these arguments. In this sense, the regulative view possesses better theoretical options to defend the normative character of human social cognition.

✉ Victor Fernandez Castro
  vfernandezcastro@gmail.com

1 Departamento de Filosofía I, Universidad de Granada,
  Granada, Spain

## 1 Introduction

Folk psychology is understood as the capacity to predict and explain behavior in order to navigate social situations. This capacity is bound to the ability to attribute perceptual states, desires or beliefs to other agents. The primary focus of debate concerning folk psychology has been the nature of the mechanism underlying these abilities. On the one hand, the theory–theory claims that mental state attribution is produced by tacit knowledge of a theory of the human mind (Nichols and Stich 2003). On the other hand, simulation theory claims that the process is carried out by a simulation mechanism based on introspection (Goldman 2006). In spite of the disagreement, both contenders assume that attributing mental states consists in postulating some non-observable inner states that cause behavior and enable its explanation and prediction.

A discordant voice in the debate is Dennett's. On Dennett's view, which he calls *the intentional stance*, our folk psychology is a normative practice. Rather than theorizing about the internal causes of an agent's behavior, folk psychology is a strategy to understand behavior on the basis of what the agent *ought to do* according to norms of rationality. This strategy follows a simple heuristic: consider what the agent ought to believe and desire according to the situation in which they are involved; then calculate what is the most rational thing for them to do according to those stipulations; and finally, predict that that is what the agent will do. The intentional stance has a remarkable implication: the application of those standards of rationality to an agent do not have implications concerning their internal states; that is,

the rational idealization is neutral regarding the agent's inner architecture. In this sense, the intentional stance is not committed to any ontological position regarding the psychological states of the agent.

Reactions to the intentional stance immediately followed (Fodor 1985; Goldman 2006; Stich 1981, 1990). Criticisms have typically indicated its empirical inaccuracy and its incoherence with empirical psychology. Furthermore, the rejection of Dennett's view is generally accompanied by an accusation of fictionalism (see Tanney 2013: 162–164; Hutto 2013: 591–594), which is the idea that propositional attitude ascriptions are useful fictions or cultural constructs that help us to predict and explain behaviors while they do not carry any ontological commitment. In spite of these criticisms, however, some scholars such as Andrews (2012, 2015), McGeer (2007, 2015), and Zawidzki (2008, 2013) have defended more contemporary versions of this normative approach to folk psychology.[1] These new versions, referred to collectively as the *regulative view*, share a basic feature of the intentional stance: folk psychological understanding does not rely on accurate descriptions of internal states but on normative structures that generate expectations about how the agents ought to behave. Nonetheless, the regulative view differs in some significant respects from Dennett's version. For instance, it emphasizes not only the explanatory/predictive role of folk psychology, but also its regulative character. On this account, folk psychology has a regulative and developmental dimension consisting of learning, teaching and urging others to behave according to a normative standard. In spite of the differences between Dennett's view and the regulative approach, given the centrality of normativity in both approaches, it makes sense to evaluate the regulative view by considering some of the critical arguments posed against Dennett's position—in particular, those directed against the normative assumptions of the intentional stance.

I proceed as follows. First, I present the regulative view and its similarities with the intentional stance (Sect. 2). Second, I present the three arguments that Stich and Goldman have given against the intentional stance, and I claim that that those arguments are applicable to the regulative view (Sect. 3). Finally, third, I address these challenges and illustrate that the regulative view can deal with each of them (Sect. 4–6).

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[1] Although I place Andrews, McGeer and Zawidzki under the same label, they emphasize different aspects of the approach. While Zawidzki concentrates on the evolutionary and developmental plausibility of the view, McGeer provides a more descriptive approximation of everyday regulative practices, and Andrews emphasizes the plurality of strategies we deploy for predicting and explaining. In spite of this, the different versions are similar enough to be regarded as the same kind of approach.

## 2 Normativity, Regulation and Explanation

The regulative view is a recent approach to dealing with folk psychology (Andrews 2009, 2012, 2015; McGeer 2007, 2015; Zawidzki 2008, 2013), according to which the primary function of folk psychology is to form and acquire norms and patterns of behavior that regulate our social interactions. McGeer (2015, p. 260) introduces the view in this way:

> The regulative view rejects the standard idea that folk psychology involves a primary capacity for discovering or detecting (pre-existing) mental states; rather it argues that folk psychology involves a primary capacity for forming and regulating our mental states in accordance with a rich array of socially shared and socially maintained sense-making norms.

Acquiring these norms and patterns of behavior facilitates cooperation and makes behavior more transparent for others; thus, social agents can predict each other's behavior because they fulfil normative expectations by regulating their behavior through those expectations.

The regulative view shares a fundamental aspect with Dennett's view: folk psychology is a normative practice that requires intentional agents to behave and understand others' behavior according to normative standards. According to Dennett, our capacity to predict and explain other agents' behavior, our intentional stance, relies on the assumption that those agents should behave as idealized rational agents: "Folk psychology, then, is idealized in that it produces its predictions and explanations by calculating in a normative system; it predicts what we will believe, desire, and do, by determining what we ought to believe, desire, and do" (Dennett 1987, p. 52). Adopting the intentional stance requires assuming that the system is rational, and that it behaves rationally and possesses the appropriate mental states given the surrounding circumstances. In contrast with assuming that the system will behave according to natural laws (the physical stance) or a designed purpose (the design stance), the intentional stance assumes what rational agents ought to desire and believe given their behavior, and conversely, what actions they should take given the desires and beliefs we attribute to them.

In spite of the similarities, there are several differences between the intentional stance and the regulative view. Firstly, the regulative view questions an underlying assumption that the intentional stance shares with simulation theory and the theory–theory: that prediction and explanation are both subsumed under the same process.[2] According to the

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[2] Andrews (2012) dubs this aspect *the symmetry thesis*. She argues that the symmetry thesis is problematic because it has obvious counterexamples. For instance, our mental state attributions are required to explain actions we are not able to predict. We can explain our friend's behavior of quitting his job because he was under too much stress

defenders of the regulative view, our predictive and explanatory capacities do not necessarily rely on the same process. Secondly, while Dennett considers that the normative structure behind our anticipatory and sense-making practices are norms of rationality, the regulative view claims these normative structures are far richer and more diverse than Dennett has supposed, including, in particular, social roles, stereotypes, cultural rules or generalizations. These claims are based on solid empirical evidence in social and developmental psychology. Categorizing people according to social roles, ethnicity or gender helps us to exploit these categories in order to produce expectations (Birnbaum et al. 2010; Clement and Krueger 2002; Golombok and Fivush 1994; Greenwald et al. 2009; Locksley et al. 1980; Olivola and Todorov 2010). For instance, a substantial body of research in developmental psychology concerning gender labelling has shown that identifying an infant as male or female elicits sex-stereotypic responses from adults (see Stern and Karraker 1989 for a review): for example, female infants are expected to be more vulnerable in some situations than male infants; and thus, adults exhibit more protective behavior towards them. Furthermore, these anticipatory capacities are not only based on categorization; they also exploit generalizations of past behaviors (Kalish 2002; Povinelli 2001) or social norms (Maibom 2007). Finally, this evidence is coherent with neuroimaging studies which point out that the brain areas involved in perceptual animacy and goal-directed behavior differ from those involved in representing mental states (Heberlein and Adolphs 2004; Saxe 2006). In this sense, the regulative view holds that our anticipatory skills rely on an assumption, not of rationality, but of 'normalized behavior'. That is, the attributor presupposes that the target is going to behave according to a culturally normalized standard of behavior.

Furthermore, the intentional stance is understood in terms of propositional attitude attribution. Considering a system as intentional implies attributing to it certain mental states depending on the circumstances in which it is involved. However, anticipating others' actions by means of norms of rationality does not require appealing to mental states. As Zawidzki says: "It requires only a sensitivity to certain abstract properties of bouts of behavior, namely, that they aim at specific goals and constitute the most rational means to those goals given environmental constraints" (Zawidzki 2013, p. 15). Humans predict behaviors regarding the situations and goals of agents without assuming that those

behaviors are brought about by mental states (see also Gegerly and Csibra 2003). Andrews (2015) emphasizes the same point as follows: "rather than relying on hidden mental states to close the gap between same circumstance and different behavior, folk psychologists can rely on their social knowledge about norms of behavior. In any particular situation, there is a range of acceptable and unacceptable behaviors" (p. 52). In other words, actions are predicted because they are part of our normalized social practices; but, generally, making mental states explicit is not necessary for anticipating others' behavior.

On the other hand, the main contribution of the regulative view is to propose that the primary function of folk psychology is to promote norms that regulate our social practices: "folk psychology operates as a *regulative* practice, molding the way individuals act, think and operate so that they become well-behaved folk-psychological agents: agents that can be well-predicted and explained using both the concepts and the rationalizing narrative structure of folk psychology" (McGeer 2007, p. 139). Our folk-psychological practices are not only a tool for prediction and explanation but also a tool for regulation. Part of our folk-psychological competences rely on deploying some *restorative strategies* when our target violates our expectations: sanctioning counter-normative behavior, asking for reasons, or excusing the behavior of the target. McGeer explains these strategies in these terms:

> ... folk psychologists have, as part of their overall competence, myriad techniques for identifying, excusing, blaming, accepting responsibility, apologizing and otherwise restoring confidence in the efficacy of the normative structures that govern the behaviour of individuals who ought to be explicable and predictable using the techniques of folk psychology, even though sometimes they are not. In other words, folk psychologists treat lapses of rationality, not just as "surd spots" in an explanatory/predictive theory, but as reasons to take some kind of remedial or restorative action. (McGeer 2007, p. 142)

Part of our social competence consists in deploying strategies to urge others to behave according to expectations generated by normative standards. Notice that the centrality of those restorative strategies for folk psychological practices contrasts with the view of Dennett, who maintains that the violations of our behavioral expectations require changing our interpretative stance, typically from the intentional plane to the design or physical plane. This is tantamount to abandoning folk psychological interpretation. In principle, the regulative view seems to be more empirically adequate than the intentional stance at this point, because we do not necessarily replace our folk-psychological interpretation when someone violates our expectations. For instance, if one's friend acts

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Footnote 2 (continued)

even though we were not able to predict he would quit. On the other hand, we can predict that our neighbor is going to be back home at 4.00 p.m. because he always comes back home at that time, but still, we do not know why he does it.

inappropriately in an institutional event, paradigmatic reactions are to ask her why she is acting like that, to encourage her to behave properly, or to blame her for her behavior. None of these reactions involves abandoning the intentional folk-psychological viewpoint.

Furthermore, these regulative strategies serve to adjust our social interactions; but they also drive socialization processes. In fact, Zawidzki proposes that evolution equipped us with *mindshaping mechanisms* that help us to learn and teach patterns and norms of behavior. These mechanisms of socialization are an easy solution to coordination problems; they shape our behavior so as to make us more predictable, and thus our coordinated actions do not have to rely on accurate predictions based on ascriptions of mental states (Zawidzki 2008, p. 199). Mindshaping mechanisms and restorative strategies facilitate human cooperation by making agents behave according to the expectations norms generate.

On this account, the explanation of behavior is a *regulative or restorative strategy*. When the ability to recognize and sanction counter-normative behavior appears, explanations are required to avoid those possible sanctions. Propositional attitude ascriptions emerge in contexts where our normative expectations are violated:

> Our understanding of others' beliefs and desires derives from a more basic understanding of others as intentional agents. We think about beliefs in particular kinds of situations, such as when a person deviates from expected behavior or violates the norms of society, but we don't need to appeal to beliefs to predict quotidian behavior. (Andrews 2012, p. 10)

Propositional attitude ascriptions are tools to elucidate counter-normative behavior. In other words, explanations are required to justify a course of action that contravenes social norms (Bruner 1990; Gallagher and Hutto 2008; Zawidzki 2013). Contrary to the intentional stance, simulation theory and the theory–theory, defenders of the regulative view hold that propositional attitude ascriptions are not pervasive; their use is bound to contexts where our anticipatory strategies fail.

In conclusion, the regulative view presents a new understanding of folk psychology. It moves the focus from the traditional assumption of explanation and prediction to the regulative dimension of our social practices. Furthermore, it opens the possibility of a plurality of normative strategies for prediction (social norms, situations, stereotypes, generalizations, and so on) and regulation (explanation, sanctioning, excusing). In spite of the differences, the regulative view shares a basic assumption of the intentional stance: folk psychology is a normative practice that requires intentional agents to behave and understand others' behavior according to certain normative standards.

## 3 Three Problems for the Intentional Stance

Given the emphasis of both the intentional stance and the regulative view on the normative dimension of folk psychology, it makes sense to consider whether the regulative view can withstand some of the classical arguments presented against Dennett's approach. I will devote this section to summarizing the main criticisms (Stich 1981, 1990; Goldman 2006) against the intentional stance, not to the discussion of Dennett's replies. The criticism concentrates on indicating the problems of the normative character of the view. On Dennett's account, the normative character is manifested in the rational idealization. However, as the section will make clear, the arguments may be applied to other normative standards, and thus, to the regulative view as well.

The criticism consists of three arguments. The first argument, which I shall call *the inaccuracy challenge*, is based on various empirical findings that demonstrate human beings are irrational in various situations. Given these results, if the intentional stance were right, folk psychologists would produce systematic failures of explanation and prediction. However, folk psychologists efficiently explain and predict others' actions; thus, the intentional stance cannot be right (Stich 1981, p. 79–80). The second argument attempts to show the *limited scope* of the intentional stance. Stich (1981, p. 80–81) and Goldman (2006, p. 54–58) argue that human beings predict and explain irrational or inconsistent behaviors in many circumstances. Thus, the intentional stance cannot cover the full range of human explanatory capacities. Finally, even if the intentional stance is empirically adequate, there is *no explanation* at hand to account for how it functions. That is, what is called the 'If it isn't true, why does it work?' argument (Fodor 1985, p. 79–80; Michael 2015, p. 164). One might object that these three criticisms only apply to the intentional stance in as much as this relies on a notion of ideal rationality and that, as the regulative view drops the ideality assumption, it is not relevant to discuss those criticisms with respect to them. However, we must notice that even if Stich and Goldman endorse different theories to explain folk psychological capacities (theory–theory vs. simulation theory), they share a similar non-normative approach that starts from the idea that our interpretative skills are based on descriptions of psychological states. This idea contrasts with the normative assumption that the intentional stance and the regulative view share: folk psychological anticipation and understanding rely on what the targets *ought* to do according to normative structures governing our social situations. That is the reason why the criticism below is applicable to both the intentional stance and the regulative view.

According to the first argument, human beings are not entirely rational; empirical psychology has demonstrated that humans systematically tend to show failures of rationality

(Tversky and Kahneman 1983; Johnson-Laird and Wason 1970). Stich has used this empirical evidence to attack Dennett's approach. The intentional stance has predictive power only when the target of the stance behaves according to rational standards. However, given the experimental results in social psychology from the last four decades, it seems hard to maintain that human beings typically respect these standards. Thus, assuming our targets are ideally rational should produce systematic errors in prediction. Humans exhibit quite efficient socio-cognitive skills in prediction. However, if the intentional stance were right, humans would show systematic errors in prediction because of the irrationalities empirical psychology has revealed. Stich presents different findings demonstrating how our social heuristics lead us to perform different irrational judgments or behaviors, for example, the conjunction fallacy bias (Tversky and Kahneman 1983). Notice that this argument also applies to the regulative view. Despite the fact that the regulative view augments the type of normative structures governing our social situations, Stich's argument still has force. For instance, given that the stereotypical associations generated by normative structures do not necessarily reflect real features, one may argue, following Stich, that we should expect systematic predictive failures.

The second strategy for criticizing the intentional stance attempts to demonstrate that even assuming that the intentional stance has some explanatory power, such power is limited. Stich (1981) and Goldman (2006) present several examples we encounter in our everyday life that nonetheless are hard to explain from the intentional stance viewpoint. For instance, Goldman (2006) envisages a writer, George, who publishes a book in which he inconsistently asserts that the book surely contains some falsehood, although he was very careful and believes everything asserted in the text. The challenge, according to Goldman, is that while it is obvious that George is simply using a rhetorical trick, the intentional stance should interpret his claims as a case of inconsistency. Thus, the intentional stance has limitations: it cannot account for cases where folk psychologists do not apply the rationality assumption.

On his part, Stich (1981) presents cases of desires that seem irrational from the intentional stance, while they are easily understandable for a normal folk psychologist. Consider Jones, a successful writer in good health with many friends and admirers, who has an uncontrollable desire to kill himself. Or consider Brown, who collects spiders with no economic value and spends his vacations hunting them in unpleasant places. The intentional stance would deem those desires irrational; after all, these subjects seem to have desires which, in their situations, they should not possess. However, as Stich puts it: "Idealized intentional systems have all and only the desires they ought to have. Thus, if we trade the common-sense notion of want for

Dennett's [intentional stance] want, we simply will not be able to say that Brown wants the spider or that Jones wants to die" (Stich 1981, p. 81). As in the case of George, the folk psychologist can interpret the agents in these cases in spite of their being overtly irrational. However, one may expect the intentional stance to fail in making sense of Jones's and Brown's desires. Notice that while the previous argument points out to the failures of prediction the intentional stance would produce, these cases of irrationality indicate something different. Namely, the intentional stance cannot capture the normal strategy of folk psychologists to make sense of these everyday actions. From Dennett's view, these cases would force the agent to abandon the intentional stance and replace it with the design stance; however, folk psychologists seem to deal with these situations using a regular interpretative strategy. Therefore, the intentional stance cannot account for them.

Again, this argument is applicable to the regulative view. Once anticipatory skills are understood regarding normative standards, any explicit counter-normative behavior would produce anticipatory failures. However, Goldman and Stich would argue, human anticipatory capacities are able to tackle these violations. Thus, the regulative view cannot be an accurate picture of folk-psychological skills.

Finally, a pressing question for the intentional stance has to do with the mechanisms explaining its empirical adequacy. Even if the assumption of rationality were empirically adequate, how this is possible would remain unexplained. According to Dennett, the intentional stance remains neutral about the mental mechanisms producing the target's behavior. Thus, an explanation of how the attribution of belief and desire can predict/explain behaviors is required. In other words, if our mental vocabulary is not anchored to internal states of the subject that cause her behavior, then we cannot explain why it works (Fodor 1985). The question of the ontological status of the intentional stance is a controversial issue. In fact, Dennett's position seems to be open to two interpretations: a logical behaviorism according to which mental states are abstract patterns of behavior; or an instrumentalism according to which they are useful fictions or theoretical tools. However, treatment of these issues would take us too far afield.

The 'if it isn't true, why does it work?' argument presents a challenge for the regulative view as well. On one hand, if we accept the accuracy of normative standards for anticipating others' behavior, we need to give an account of why the targets of our folk-psychological skills fulfill these expectations. In other words, we need to explain why humans behave according to those stereotypes, social statuses or social rules. On the other hand, although several defenders of the regulative view restrict the role of belief/desire attribution to justificatory contexts (Zawidzki 2013, p. 214–219) and to question that those ascriptions are a kind of causal

explanation (Andrews 2015, p. 52–53), the question of the ontological commitments of the ascriptions remains open.

## 4 Confronting the Inaccuracy Challenge

The aim of this section and the next is to explore the possible replies the regulative view could provide to arguments against the intentional stance. The primary motivation for providing these responses is that the regulative view shares an underlying assumption with the intentional stance: that our approach to others' behaviors relies on normative standards. Thus, it makes sense to reply to the attempts of Stich and Goldman to attack the normative assumption on behalf of the regulative view. The first argument against the intentional stance emphasizes the irrationality of human beings to undermine the idea that the rationality assumption could generate accurate predictions.

From the regulative view, several ideas deserve mention in reply this argument. Firstly, certain irrationalities can be predicted for the regulative view as soon as we take into account the plurality of norms which humans use to anticipate behavior. The social norms and patterns of behavior we learn in our social niche are not only related to general rational norms, but also to other normative structures such as stereotypes, social rules and identities, or person-specific identities (Fiebich and Coltheart 2015; Maibom 2007; Mameli 2001; Kalish 2002). Our anticipatory strategies are based on normative structures concerning personalities, social statuses, social rules, and so on. We can predict that the agent will behave according to those standards and make judgments based on them. Thus, a course of behavior violating rational norms is not a counter-example to the regulative view. As a matter of fact, certain pro-social behaviors can be considered irrational.[3] However, the regulative view can explain why those actions do not violate our expectations.

Secondly, Stich's challenge is based on the assumption that human socio cognitive capacities are highly efficient. This is a common assumption in the debates concerning social cognition. After all, our social life could not be comprehended without assuming we are skilled in anticipating and understanding others. However, if humans are as irrational as empirical evidence demonstrates, then the intentional stance would be highly inefficient in predicting others. Stich is probably exaggerating the efficiency of humans'

capacity to understand each other. In many contexts, we fail to predict or make sense of other agents. However, he is right to point out that the intentional stance does not seem to have resources to explain what happens when our expectations are violated, apart from assuming there is something malfunctioning (requiring that we descend to Dennett's design stance). The central strategy of the regulative view relies on assuming that those interpretative spots frequently appear in our social interactions. In fact, they play a central role in our social expertise, because counter-normative behaviors trigger regulative and explanatory strategies that help us to restore our confidence in the set of norms that govern interactions. Others' behaviors demand explanation when we perceive them as erroneous. Thus, paradigmatic cases of explanation are those which arise when a generated expectation about another's behavior is not fulfilled. Consider an every-day case of irrationality. For instance, imagine someone who, after saying 'it is raining a lot,' leaves home without bringing her umbrella. According to Stich, situations like this are problematic for normative accounts because they rely on norms—in the case of the intentional stance, the assumption of rationality—that should predict the outcome. However, it is not difficult to come out with examples like that where we cannot predict these kinds of behaviors. Our expectations are constantly violated. Our natural reactions to this case are to ask for reasons to our target: Why didn't you bring your umbrella? From the regulative view, these everyday contexts are not problematic for a normative approach to the anticipatory skills. On the contrary, our regulative strategies reveal that we ask for reasons, blame others, provide excuses and so on because the violation of certain normative standards makes us interpret an agent's behavior in those situations as anomalous. In other words, we do not react to these counter-normative actions by updating our making-sense strategy, but rather by displaying strategies that alter or regulate the target's action or force her to elucidate the anomalous action.

In sum, the regulative view has two strategies to avoid the inaccuracy challenge. Firstly, it holds that the normative standard we use to anticipate behavior includes a plurality of norms and rules. This implies that certain irrational behaviors can be perceived as normalized, and thus we can predict them. Secondly, those failures are not demonstrations of the empirical inadequacy of the normative assumption. On the contrary, interpretative failures are frequent in natural interactions and they reveal the type of regulative strategies one expects from the regulative view. Regulative strategies only make sense under the assumption that attributees violate normative standards, and that the attributor needs to restore the confidence in the normative structures that regulate our social interactions.

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[3] Different studies in empirical economics, anthropology and evolutionary biology emphasize a strong human tendency to punish counter-normative behavior (Richerson and Boyd 2005; Fehr and Gätcher 2002; Henrich 2004). Those studies confirm the existence of a human tendency to punish in spite of the cost. This behavior could be considered irrational. However, this is entirely understandable from a framework where the maintenance of social norms is crucial.

## 5 Accommodating Irrationalities

The second argument against the intentional stance attempts to show its explanatory limits. According to the argument, there are certain actions or behavioral tendencies that do not pose interpretative problems to a typical interpreter but, nevertheless, they are counter-normative. In Sect. 3, I presented two examples by Stich and Goldman: the inconsistent writer George; and irrational desires (suicidal tendencies and hobbies). This section is devoted to making the case that those counter-examples do not present a challenge for the regulative view.

Consider the example of the writer. As Goldman observes, the contradiction that George displays is understandable because we assume George makes a rhetorical move in order to exhibit modesty. There are several replies the defenders of the regulative view could present against this counter-example. Firstly, the reason why an ordinary interpreter would assume the contradiction is an example of modesty rather than an apparent irrationality is due to the context of attribution. The attributer is interpreting George's words in a very specific and norm-regulated practice: scientific and philosophical literature. When reading a scientific or philosophical work, one expects to find a range of stylistic, rhetorical and figurative tricks and resources. In fact, it is not easy to find a typical case where someone would openly assert a flagrant contradiction without meaning something else, that is, where the target is not attempting to use a figure of speech. Secondly, imagine a natural reaction in a parallel situation in which George, in a regular conversation, makes similar claims. Our natural response to George's claims would be to draw his attention to the inconsistency. A natural response to a deviation is to display the type of regulative strategies we discussed in Sect. 2. If our competence in folk psychology relied on theorizing about mental states causing certain behavior, then we would stop our interpretative process once we found a coherent interpretation of the situation. However, we do not only expect to explain the behavior; we demand that our targets do what they ought to do.

The second set of counter examples comprises the cases of Jones (the man with suicidal thoughts) and Brown (the spider collector). Approaching those cases again requires noticing the asymmetry between explanation and prediction. As Stich rightly notes, those cases are normalized in our everyday life; that is, we can explain what happens in each situation. However, this does not entail that we can make accurate predictions about the behaviors. Suicide victims are usually hard to predict, especially given Jones's circumstances (his charming family, great job, etc). When a course of action violates our expectations, we tend to respond by deploying restorative strategies, for instance, an alternative explanation. Our natural response to a suicide is to wonder why a beloved, affluent person would do something like that. We

are inclined to understand the action as anomalous, a case of mental illness. Indeed, the concept of suicidal tendency is one that accommodates a psychological proclivity that we consider irrational, but in a sense, normalized. Rather than challenging the regulative view, Jones's case exemplifies the kind of restorative strategy one may expect from the regulative point of view. When there is a course of action that violates our expectations but otherwise is persistent, we deploy certain explanatory concepts for accommodating the phenomenon.[4] In other words, we normalize certain behaviors even though they are openly irrational. Notice that we cannot account for those types of phenomenon without the theoretical source that the regulative view provides: the primary function of folk psychology is to generate, teach, and learn norms.

In a sense, the collector example is interpretable in the same terms. Having a hobby explains certain non-rational courses of behavior because the concept itself is related to certain irrational but normalized tendencies. A hobby is an enduring preference, a tendency to seek the object of the choice, to talk about it and so on. However, the concept of a hobby plays the explanatory role it does because its normative profile implies that the person who has a hobby has a sort of obsession, that is, some irrational tendency that violates certain expectations. When someone says 'Brown went to the Sahara on summer vacation although he hates the heat', our first reaction is to ask why, because we feel puzzled. Attributing a hobby to Brown satisfies our explanatory demands because having it involves satisfying one's desires at the expense of other rational desires. Those examples are readily explainable in ordinary circumstances because, in spite of their irrationality, they are highly normalized. However, Stich denies that our attribution of beliefs and desires are precluded by normative standards. Yet he must admit that we must deploy some normative structures to classify these cases as instances of irrational desires. Of course, a theory of folk psychology must explain how folk psychologists interpret these behaviors; and the intentional stance may have a problem insofar as it assumes that we must abandon our folk-psychological interpretation. The greatest strength of the regulative view is that it does not need to make sense of actions in terms of beliefs and desires in the first instance. Folk psychologists may find the actions of Jones and Brown puzzling on the basis that they violate rationality. But they do not need to speculate about the internal causes of these actions. After that, they need some explanation that normalizes the action, justifies it or makes it

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[4] Arguably, character traits, habits and other folk psychological concepts work in a similar manner. For instance, we say of someone that she is irascible when she overreacts in certain contexts one wouldn't expect from certain normalized patterns of action.

meaningful. It is precisely when behavior seems anomalous that ascribing desires or beliefs (rational or not) is required. From the regulative view point, the main function of mental state attribution is not to find causal explanations. Instead, it is to justify, normalize or make sense of the action.[5]

## 6 Why Do Normative Standards Work?

The last argument I discussed in Sect. 3 concerns the inability of the intentional stance to explain why the rationality assumption works: as Fodor puts it, "It's hard to explain why belief/desire psychology works so well if belief/desire psychology is, as a matter of fact, not true" (Fodor 1985, p. 79). If to ascribe a belief or a desire to a target is not to describe a real internal state causing behavior, how does the intentional stance work? Why does others' behavior make sense when we attribute them beliefs and desires? This argument presents a challenge to the regulative view as well. Insofar as predictions are not based on real causes, an explanation of the efficacy of the normative standards is required.

Now, the regulative view's answer has to do with the mindshaping mechanisms presented above. The reason normative standards are good predictive strategies is that we humans are trained to regulate our mind and behavior according to those very standards; in other words, we are easily predictable because we have been trained to be so. Zawidzki claims that natural selection has endowed human beings with a myriad of mental mechanisms to teach and learn norms and patterns of behavior. Folk psychology is a norm-governed practice that facilitates social interactions; it bears some resemb with the practice of driving a vehicle (Zawidzki 2008, p. 199). We anticipate other drivers' behavior because we presuppose they will follow traffic norms, and such predictions work because drivers have been trained to regulate their behavior according to those norms. Thus, we do not need to make predictions on the basis of accurate descriptions of mental states. Once we see folk psychology from this perspective, Fodor's argument loses its strength. Our regulative practices and mindshaping mechanisms explain why our interpretative stance works. Humans learn to regulate their behavior according to socially created normative standards that make them predictable.

Notice that one might exploit this strategy to save the intentional stance. One might appeal to cultural learning mechanisms to explain how humans learn to predict and regulate behaviors according to the rationality standards the intentional stance presupposes (Michael 2015). Cultural learning devices would ensure the reliability of

the intentional stance because they make children behave according to the rational assumptions we use to interpret their behavior. However, there are two problems with this improved version of the intentional stance. Firstly, as I argued before, our anticipatory strategies are normative in nature—but, in general, they do not rely on rationality assumptions. Rather, they rely on an array of different standards of normalized behavior. Cultural learning mechanisms could explain how children regulate their own behavior to fulfill expectations, but the intentional stance is not enough to account for the predictions, because our anticipations rely on non-rational norms concerning social status, stereotypes or social rules. Secondly, although the appeal to learning mechanisms can account for the developmental patterns of folk-psychological competencies during infancy, it does not account for our regulative responses in adulthood. As the regulative view emphasizes, counter-normative behavior is a frequent phenomenon in our social practices. In order to deal with it, we not only display learning mechanisms but also regulative social responses such as giving and asking for reasons, blaming and so on. In other words, regulative strategies are not only developmental, but also social strategies that humans apply during their adulthood.

One may accept that the regulative view solves the "If it isn't true, why does it work?" problem but, nevertheless, maintain the accusation of fictionalism. Defenders of the regulative view restrict the use of propositional attitude ascriptions to justificatory/explanatory contexts. However, this does not dispel the worry about the ontological commitments behind them. At this point, there are several possible answers to this problem. Firstly, we can opt for taking one of the standard positions in the classical debate concerning folk psychology: intentional realism, eliminativism or instrumentalism. For instance, Zawidzki (2013) seems to favor a realist interpretation. Although he defends the view that ascriptions are bound to justificatory and regulative contexts, he still maintains that ascriptions refer to real non-observable entities causing behavior. According to him, in a population where individuals have both the capacity to express behavioral commitments that rationalize their behavior (first-person interpretation) and anticipate others' behavior through rational/social norms (third-person interpretation), both interpretations may conflict at some point:

> When the interpreters are surrounded by interpretive targets that are constantly making discursive commitments of various kinds and, at the same time, engaging in behavior that may or may not be rationalizable in terms of those commitments, interpreters must inevitably grapple the question: *what do they really think*? (Zawidzki 2013, p. 218)

Once first-person interpretation may conflict with third person interpretation of behavior, a distinction between

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behavioral appearance and mental reality appears on the scene.[6] As a result, one may make the claim that belief/desire ascriptions serve as exculpatory tools but still maintain some non-fictionalist ontological commitments.

A second strategy could be to reject the claim that our ascriptions carry ontological commitments of any type. Andrews seems to favor this option when she refuses to equate folk-psychological explanation with causal explanation:

> [The regulative view] recognizes that the gap between observable behavior and environmental features and future behavior can be filled with normative reasoning, or expectations of what someone should do. When someone does what they should do, they can do it for various reasons, and with normative reasoning there is no need to determine the causal sequence that leads to the next behavior. (Andrews 2015, p. 56)

However, Andrews does not explicitly say whether or not propositional attitude ascriptions are a type of *normative reasoning* rather than causal reasoning. One way to explore this possibility is to reject the claim that the truth (or falsehood) of our ascriptions of propositional attitudes have direct ontological implications for our theories about their natures. De Brigard (2015) presents several arguments in favor of this claim, which he attributes to Dennett (1969). A similar idea was explored critically in Boghossian (1990), who presents this view as an heir to the *expressivist view* in metaethics.[7] An expressivist strategy would consider that belief and desire ascriptions are not descriptive expressions. Accordingly, mental concepts do not refer to internal states of the subject. Now, the question is: if mental concepts do not describe, what is their function? A possible answer is that the mental expressions such as 'believe' 'think' or 'desire' have an *evaluative function*: they provide prescriptions to the speaker about how to evaluate a statement. When we use ascriptions of the form S verb P, we are providing to our interlocutor injunctions about how to interpret P.

Let me clarify the view with an example in the context of behavioral explanation. Consider person A, who has promised her friend B that she will accompany her to a new exhibition of contemporary art at the museum. A promises to be at the museum at 5 o'clock. Now, suppose B sees A entering his gym at 4.50, and imagine the following conversation taking place:

B: Are you going to the gym? We have a meeting in 10 min.
A: I thought our meeting was tomorrow.

According to the expressivist reading, the expression 'I thought our meeting was tomorrow' indicates to A that she should evaluate the statement 'our meeting was tomorrow' in a particular manner: (1) A is indicating to B that she must understand A's behavior as if the meeting was tomorrow; (2) she is not certain about it (she is probably wrong). In order to appreciate the point, imagine that A's answer was 'our meeting is tomorrow'. The contribution to the conversation would be similar; however, in the first case, A seems to anticipate an excuse by noticing she is probably wrong, but she is still providing an explanation of her behavior. Propositional attitude expressions function as modal operators such as 'it will be the case that', where they do not change the content of the expression in scope but the circumstances under which we must evaluate them. Notice that the expressivist view does not endorse any ontological position regarding propositional attitude ascriptions. Rather than facing the problem, it attempts to dissolve it by considering that mental ascription is not in the business of describing the world. Explaining someone's behavior is not describing what she does or what she believes; explaining is evaluating what she must do or believe in accordance with normative standards (Heras-Escribano et al. 2015; Heras-Escribano and Pinedo 2016). Mental concepts' appearance is bound to justificatory contexts, when we need to provide a fine-grained prescription to our interlocutors about how they must evaluate reasons.

Although providing a detailed account of propositional attitude attribution is beyond the scope of this paper, I think that the expressivist account is the best strategy available for the regulative view. After all, the expressivist maneuver opens the possibility of avoiding, at least prima facie, the ontological problem of ascriptions associated to the alternative presented above. At any rate, choosing one option or another does not affect the answer to the main challenge of the 'If it isn't true, why does it work?' problem: our anticipatory strategies work because we are generating expectations based on social norms that our targets are following to regulate their behavior.

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[6] Certainly, one may claim that the distinction between behavioral appearance and mental reality is neutral on the ontological debate because the distinction reflects what the interpreters take themselves to be attributing instead of what ascriptions really refer to. However, even if the work of Zawidzki can be interpreted in this way, the accusation of fictionalism remains.

[7] Expressivism in metaethics distinguishes between descriptive and expressive concepts in order to explain the disanalogy between purely descriptive expression (the phone is on the table) and expressive expressions (eating meat is wrong). According to them, expressions such as 'eating meat is wrong' express two ideas: (1) that certain behavior (eating meat) is not permitted for a set of standards N and (2) the speaker accepts N (Gibbard 1990). Similar expressivist ideas can be found in semantics (Lance and O'leary-Hawthrone 1997) meta-epistemology (Chrisman 2012) and philosophy of logics (Brandom 2000).

## 7 Conclusions

According to the intentional stance, we are able to explain and predict others' behavior by assuming they behave and think according to a normative standard. Contemporary versions of those approaches share with the intentional stance the normative character of folk psychology. However, contrary to Dennett's view, those approaches consider that folk psychology has a regulative dimension that consists in urging others to behave according to this standard. Moreover, they emphasize the plurality of strategies humans use to predict and regulate others and themselves in the light of those standards. These strategies offer a different conception of social cognition, equipping the regulative view with argumentative tools to avoid classical criticisms of the intentional stance. Firstly, the cases of counter-normative behavior are not problematic for the regulative view as long as we understand that violations of expectations trigger regulative practices to restore normative standards. Thus, we are able to deploy accurate regulative responses and alternative explanations, which account for our ability to deal with such violations. Secondly, the normative assumption works as a strategy for predicting and explaining the actions of others, because human beings are subject to a process of development and regulation that makes them behave and think according to the same standards that the interpreter presupposes. Thirdly, I offer two possible answers to the ontological problem. One is to accept that our propositional attitude ascriptions, when required, commit the interpreter to seeing the target as being in certain mental states, but to mitigate that commitment by restricting the cases to justificatory contexts. The other is to argue for an expressivist position about belief and desire ascriptions according to which propositional attitude concepts are not descriptive, and therefore not committal. That is, our ascriptions do not describe internal states of the target; rather, the function of a propositional attitude ascription is to provide an indication to the speakers about how they must take a particular reason to normalize behavior.

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