'Descartes's total view is inconsistent: he holds that some facts about God are necessary, yet is forced . . . to maintain that *nothing* is necessary.'[34] If the doctrine is indeed incoherent, then Descartes's arguments from the divine nature to his doctrine of the creation of the eternal truths do not provide us with reason to believe that God created the eternal truths, but instead with a *reductio* of the Cartesian God.[35]

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[34] James Van Cleve, 'Descartes and the Destruction of the Eternal Truths', *Ratio* 7 (1994), 58–62, at 61.

[35] I would like to thank Edwin Curley, Daniel Garber, Louis Loeb, Alan Nelson, and an anonymous reader for their comments and suggestions on much of the content of this essay, along with the audience at the Fall 2001 Midwest Seminar in the History of Early Modern Philosophy at Miami University (Ohio) for their comments on an abbreviated version of it, especially Marleen Rozemond.

3

What Do the Expressions of the Passions Tell Us?

LISA SHAPIRO

1. INTRODUCTION

In this essay I examine Descartes's treatment of the expressions of the passions. Descartes takes our emotions to be made manifest by what he terms 'the external signs of the passions'—that is, 'the actions of the eyes and face, changes in color, trembling, languor, fainting, laughter, tears, groans and sighs' (*Passions* a. 112; AT xi. 411). There is a puzzle in understanding just how these manifestations can be signs of the passions. While it seems clear that our expressions signify our passions in virtue of the body's relation to the soul—they are expressions of the passions *of the soul* after all—what is not clear is *how* our emotive expressions gain content. I aim to work through this puzzle here.

I begin by considering what might seem like the most obvious explanation: our expressions signify what they do because the soul causes them. While this account might seem plausible, I argue that this *causal account* fails to accord with Descartes's claims, in the *Passions of the Soul*, that our expressions are caused simply by the workings of our body. One way of addressing this failure is to explain the significance of our expressions by their sharing a physiological cause with the passions they represent. While this *common causal account* does accord with what Descartes claims about the causes of our expressions, it too fails, for it is not clear how to reconcile it with Descartes's account of the regulation of the passions. I go on to suggest a third possible explanation of

This essay grows out of a paper presented jointly with Annette Baier at the University of Toronto: 'Why do All the Passions of the Cartesian Soul get Expression in the Cartesian Body?' I thank Annette for the opportunity to think about the issue of the expressions. While this essay expands on the discussion we began in that paper, the errors in it are my own. An earlier version of this essay was presented at the Midwest Seminar in Early Modern Philosophy and at the University of New Mexico. It has benefited from the comments of those audiences, as well as those of the editors of this journal.

the significance of our expressions, one that attends to the reasons for the connections between physical and mental states. In so far as these reasons are tied to Descartes's account of human nature, this third explanation might be called a *human naturalist account*. While this account is in many ways more satisfying than the first two, I am not sure it succeeds in the end either. That Descartes may not have a coherent account of our expressions might well be a problem for him, but in this analysis of the possible accounts I hope to make some headway in articulating just where the problem lies, and so in clarifying some sources of tension within Descartes's account of a human being.

2. SOME PRELIMINARY REMARKS: GETTING CLEAR ON THE QUESTION

Before I begin trying to unravel Descartes's account of the expressions of the passions, let me situate my topic here with respect to two related issues. First, I am only concerned to understand what might be called the naive expressions of our passions. Certainly, it is an important part of our passionate lives that we can dissimulate what we feel. We can affect an air of coolness when we are in love or put on a cheerful grin when we are annoyed. And Descartes does recognize this,[1] but it is not his primary concern. I follow him here.

Second, it is perhaps remarkable that Descartes hardly considers how our emotive expressions gain currency as a language. This reticence might be due to his taking the expressions of the passions to be *natural* signs rather than conventional signs.[2] Words, on the one hand, are conventional signs and demand rules governing their usage so that we

[1] He writes: 'And in general all the actions of both the face and the eyes can be changed by the soul, when, willing to conceal its passion, it forcefully imagines one in opposition to it; thus one can use them to dissimulate one's passions as well as to manifest them' (*Passions* a. 113; AT xi. 412–13).

[2] It is hard to know how to cash out this distinction for Descartes. On the one hand we might turn to the Port Royal *Logic*. (Antoine Arnauld and Pierre Nicole, *Logic or the Art of Thinking*, trans. Jill Vance Buroker [*Logic*] (Cambridge, Cambridge University Press, 1996).) There, a natural sign is one which represents what it does independently of human fancy (*Logic*, 36–7); there is an 'obvious connection' between the sign and the object signified, and because of this there are no problems making claims involving them (ibid. 120). Our expressions do seem to be natural signs of our passions in this sense. Conventional signs, on the other hand, are instituted by human beings; they need bear no relation to what they represent, and so they demand rules for proper usage. However, if we probe further, things become more confused. An 'image that appears in a mirror is a natural sign of what it represents' (ibid. 37) and a painting of Caesar is a natural sign of Caesar, a map of Italy a natural sign of Italy (ibid. 120). In these cases, we can without issue identify the sign with its object, and we can do so just because the sign resembles what it refers to. Thus, there does seem to be something distinctive about a Cartesian natural sign: the emotive expressions do not resemble what they might be said to represent. A smile does not resemble the joy we feel, blushing does not resemble the feeling of embarrassment or shame. Though Descartes, in discussing how representation might be possible without resemblance, appeals to the words we use—that is, by the *Logic*'s account, conventional rather than natural signs—it seems to me that here he can be read as pointing to a sort of natural sign which does not involve resemblance. I will not be able to explore this point further here.

[3] Descartes's claims that 'there is no passion which is not manifested by some particular action of the eyes' and that the meaning of these expressions is obvious even to the stupidest of servants (*Passions* a. 113; AT xi, 412) would seem to imply that we naturally recognize the import of emotive expressions.

Moreover, Charles Le Brun, in his *Conférence sur l'Expression des Passions*—a work greatly influenced by, if not largely plagiarized from, Descartes's *Passions*—claims that emotional expressions are natural signs. (Charles LeBrun, *Conférence sur l'Expression des Passions*, trans. and ed. Jennifer Montagu [*Le Brun*] (New Haven: Yale University Press, 1994).) Just as expression in painting 'is a simple and natural image of the thing we wish to represent . . ., indicat[ing] the true character of each object', so too, Le Brun wants to demonstrate, is expression 'that which reflects the movements of the heart and which makes visible the effects of the passions' (*Le Brun*, 126). Montagu, in her outstanding edition of this work and its background and influence, details the precise instances of plagiarism on Le Brun's part.

[4] The significance of our emotive expressions gains prominence in eighteenth-century French thought, both in theories of language and in theories of human understanding which

affirm only true propositions, whereas what expressions signify just seems obvious to us.[3] Yet still, it does seem, from the discussion in the *Passions of the Soul*, that the communicative aspect of our expressions is supposed to follow somehow from the way in which those physical movements express our thoughts. I do take it that any account of the expressiveness of our expressions in the second sense—how our thoughts are able to be signified externally through our body—should be able to support a reasonable account of how our expressions speak to other people, and I will touch on the connection between these two issues in my discussion.[4]

3. A FIRST ATTEMPT TO UNDERSTAND THE EXPRESSION OF THE PASSIONS

It is natural to start to make sense of Descartes's account of the expressions of our passions by looking at the titles of the relevant articles: 'How

joy makes one flush' (*Passions* a.115); 'How *sadness makes one* turn pale' (*Passions* a.116); languor is '*caused by love* and by desire' (*Passions* a.120); 'How *one cries from sadness*' (*Passions* a.131) (emphasis added). They suggest that the passions themselves, thoughts in the soul, cause their particular expressions. And, since a causal account of reference is one that, though flawed, is at least familiar and intelligible, we might well think that, for Descartes, our expressions refer to our passions in virtue of the causal relation between them.

The content of the explanations contained in these articles only seems to confirm such a causal account. Take, for instance, the discussion of the way joy makes us flush. Descartes writes:

> Joy renders the color more vivid and rosy because in opening the heart's sluices, it make blood flow more quickly into all the veins, and, as [the blood] becomes warmer and finer, it gently swells all the parts of the face, rendering its demeanor more smiling and cheerful. (*Passions* a.115; AT xi. 413)

Here it seems that joy, the passion of the soul, causes the heart valves to open, letting in more blood, which in turn leads to our appearing flushed.[5] A similar sort of causal efficacy is lent the passions in the other articles.[6] In all these cases, Descartes talks as if the passions themselves effect the physiological state which leads to our expressions. And it

lend primacy to human discursive abilities. Both Condillac and Diderot, for instance, take human understanding to be a discursive faculty, and they find the origin of our language in our natural gestures or emotive expressions. See Etienne Bonnot de Condillac, *Essay on the Origin of Human Knowledge*, trans. Hans Aarsleff (Cambridge: Cambridge University Press, 2001) and Denis Diderot, *Lettre sur les sourds et les muets*, 1751, ed. Marian Hobson and Simon Harvey (Paris: Garnier Flammarion, 2000).

[5] Joy also has other effects. By opening the cavities of the heart too wide, it causes an excess of blood to flow into it, thereby smothering the fire which is the principle of life and bringing on a fainting spell (*Passions* a.122; AT xi. 418); and laughter (when we are naturally indignant as opposed to feigning indignance) 'seems to spring from the joy one gets from seeing that one cannot be injured by the evil one is indignant about, and along with this, from finding oneself surprised by the novelty of or the unexpected encounter with this evil—so that joy, hatred, and wonder contribute to it' just because these passions send 'blood from the spleen to the heart, where it is rarefied and driven on into the lungs'. This redirection of the blood causes just the sort of physiological motions which lead to our emitting sounds of laughter (*Passions* a.127; AT xi. 422).

[6] Sadness contracts the heart's orifices (*Passions* a.116; AT xi. 414); shame makes the blood flow from internal organs to the heart and then to the face (*Passions* a.117; AT xi. 414–15); and in the case of languor 'love so engrosses the soul with the consideration of the object loved that [the soul] employs all the spirits in the brain to represent its image to it, and stops all the movements of the gland not conducive to this effect' (*Passions* a.120; AT xi. 417); and so on.

seems that they do so just by causing the physiological changes that result in our expressions; we might reasonably presume that they do this by effecting the shift in the pineal gland which sets the appropriate physiological mechanism to work.

This account has a further advantage of seeming to mirror Descartes's account of how bodily states are significant to the mind. Some commentators have tried to explain just how, for Descartes, our sensations can refer to what they do by appealing to the causal interaction between the soul and the body. In doing so they draw on Descartes's explanation in *Meditations* VI of how we feel a pain in our foot. On this view, our sensations have the content they do in virtue of standing in the causal relations they do; Descartes claims that we feel a pain-in-our-foot just in virtue of the fact that a particular bodily state (a tilt of the pineal gland) causes that thought, and that bodily state stands in a causal relation to the object of our thought (the damage to our foot has caused the motion in the nerves that leads to the tilt of the gland which causes the thought).[7] So in general, on this view, our thoughts have the content they do just because of the causal relation in which they figure.[8] It would be a tidy package if we could also understand the expressiveness of emotive expressions to consist simply in the causal relation between soul and body. Just as thoughts have the content they do just because they stand in the causal relations they do, so too, one might think, the movements of our face and eyes, our laughter, have the content they do—signify the passions they do—just because *they* stand in the causal relations *they* do.

There are two serious problems with this account. First, there are the problems inherent in any causal account of how signs are invested with meaning. The standard problem with causal accounts of content concerns a sign's referring to the particular link in the causal chain it does. In the case of sensations, there is nothing in the causal story that

[7] This sort of interpretation starts from this passage: 'when the nerves of the foot are set in motion in a violent and unusual manner, this motion, by way of the spinal cord, reaches the inner parts of the brain, and there gives the mind its signal (*signum*) for having a certain sensation, namely the sensation of pain as occurring in the foot' (AT vii. 88; CSM ii. 60). Other passages support this reading. See for instance *Principles of Philosophy* IV. 189, 197, AT viii. 316, 320; CSM i. 280, 284; *Treatise of Man*, AT xi. 144–5. This account is not the only reading of this passage. Margaret Wilson, for one, wants to distinguish a causal account from a signification account of sensation. See Margaret Wilson, 'Descartes on the Origin of Sensation', in her *Ideas and Mechanism: Essays on Early Modern Philosophy* (Princeton: Princeton University Press, 1999), 41–68.

[8] There still remains the problem of understanding the metaphysics of body–mind interaction. I will not address this concern at all here.

mandates that our thought (a pain-in-our-foot) represent the pain in our foot—motions in the nerves of the foot—rather than the motions of the nerves more proximate to the pineal gland. In the case of the expressions, there seems to be no reason that our being flushed, say, should be expressive of our embarrassment rather than, say, some physiological state along the causal chain leading up to the expression.[9]

There is a second, more immediate, problem with the causal account: it ends up being inconsistent with a large part of the text. Despite Descartes's manner of talking about them, it does not seem that the soul itself causes the expressions of its passions. They are not, after all, voluntary actions. And moreover, Descartes implies that the expressions have a physiological cause. The initial physiological motions that first shift the position of the pineal gland, and thereby engender the passion in the soul, do not terminate at the gland. The gland's shifting orientation redirects the animal spirits in ways that can strengthen and sustain the passion (as the definition of the passions suggests), as well as dispose the body to action. So Descartes writes in a.38:

> Just as the course these spirits take toward the nerves of the heart suffices to impart the movement to the gland by which fear is put in the soul, so too, simply in virtue of the fact that certain spirits proceed at the same time toward the nerves that move the legs to flee, they cause another movement in the same gland by means of which the soul feels and perceives this flight—*which can in this way be excited by the body merely by the disposition of the organs without the soul contributing to it.* (AT xi. 358; emphasis added)

And he continues in the next article, explaining that our responses to emotions differ just because 'all brains are not disposed in the same manner, and the same movement of the gland which in some excites

[9] One might see Descartes as attempting to solve this problem in the case of sensation by appealing to the preservation of the human being: a sensation of pain-in-our-foot signifies damage to the foot, rather than to say, the tilt of the pineal gland which is the proximate cause of that sensation, because its doing so is most conducive to the continued well-being of a healthy man. See AT vii. 87, CSM ii. 60. It is not clear that a similar story can be told about our expressions: Is it most conducive to the preservation of the human being that our blushing signifies shame? Tears, sadness?

Considerations of the place of well-being in this story has led some, for instance Alison Simmons, to take our sensations simply to represent the way things benefit or harm us. While Simmons does not deny the causal interaction of mind and body, she does not link this account of the content of sensation to this causal interaction. See Alison Simmons, 'Are Cartesian Sensations Representational?', ['Cartesian Sensations'] *Nous*, 33/3 (1999), 347–69. I will return to consider this passage from this point of view in Section 5.

> [the move to flee], in others makes the spirits enter the brain's pores that guide part of them into the nerves that move the hands for self-defense'. (ibid.). It only makes sense that our expressions too would have a purely physiological cause, and so that what we take to be external displays of emotion are simply the result of the design of the human body-machine.[10] In so far as they occur independently of the soul, it is not clear what basis we have for claiming these bodily motions are signs of our mental states.

It is also worth pausing to consider what sort of accounts of how our expressions are meaningful to others are available on this line. There are three ways Descartes might go, and none seems particularly satisfactory. First, he might claim that others could understand what our expressions mean only by first understanding their causal history. That is, one would have to work through the *Passions of the Soul, comme physicien*, and then some. Elisabeth, in her letter of 25 April 1646, remarking on a draft of the *Passions*, seems to read Descartes to be suggesting as much. And she none too innocently raises a question of how such detailed knowledge not only of microphysiology but also of its correlation with the different passions is possible (AT iv. 404). Moreover, this demand certainly does not seem to accord with our experience: it just does not take that much to understand a smile or a scowl. And Descartes himself seems to recognize this—after all the stupidest servant would not be able to grasp all this. He might reply to this sort of objection by claiming rather that just as objects affect us in such a way that we naturally feel the passions we do on encountering them, so too do our expressions naturally signify the passions. Malebranche, in *The Search After Truth* seems to take this line. He writes:

> I cannot overemphasize the fact that all the passions excited in us by the sight of some external object mechanically produce their particular facial expression in

[10] Indeed, it is because Descartes understands our expressions as simply the result of the mechanics of physiology in this way that he feels comfortable attributing passions and their expressions to animals (though animal expressions would undoubtedly depend on animal physiology). See Part V of the *Discourse*: 'and we should not confuse speech with the natural movements which express passions and which can be imitated by machines as well as animals' (AT vi. 58); as well the Letter to More, 5 Feb. 1649: 'I am not at all disturbed by the astuteness and cunning of dogs and foxes, or by all the things which animals do for the sake of food, sex, and fear; I claim that I can easily explain all of them as originating from the structure of their bodily parts' (AT v. 276; CSMK 365); and the remarks about the training of animals in the Letter to the Marquess of Newcastle, 23 Nov. 1646: 'If you teach a magpie to say good-day to its mistress when it sees her approach, this can only be by making the utterance of this word the expression of its passions. . . . Similarly all the things which dogs, horses, and monkeys are taught to perform are only expressions of their fear, their hope, or their joy; and consequently can be performed without any thought' (AT iv. 574, CSMK 303).

those struck by them, i.e. an appearance that by its impression mechanically disposes everyone seeing it to those passions and actions useful to the good of society. (*Recherche*, v. 7)[11]

This certainly makes more sense, and indeed seems continuous with many contemporary accounts of how we understand expressions. More, however, needs to be said about the nature of this mechanism. For it is not clear how a mechanism can explain the way in which these expressions engage our moral sensibilities. After all, why should seeing another's tears, say, excite in us compassion rather than simply the belief that the person's eyes are watery. If Descartes wanted to avoid this problem he could, of course, take a behaviorist line and simply explain our facility at understanding others' expressions by our establishing correlations between outward physical appearances and passions. This would certainly explain the facility with which the servant reads his master's face; the servant may be stupid, but he learns quickly how to survive in a household with a demanding master. Although this account would be the more plausible one, there is little evidence that Descartes takes it up. So it is at least unclear on the causal account how Descartes would go on to explain how others are able to understand our expressions.

There are thus at least two core problems with the causal account of the significance of our passionate expressions. The first is endemic to causal accounts of reference: we need a way of picking out the referent from the many elements in the causal chain. The second is one of textual inadequacy. And hovering in the background is a concern about how a causal account of our expressions can be consistent with the way we actually read off those expressions. I want now to consider the second core problem, for one might hope that in getting Descartes right we can avoid the other problems.

4. ADJUSTING THE CAUSAL ACCOUNT: A COMMON CAUSAL ACCOUNT

We might try to resolve the textual problems of the causal account by adjusting the picture a bit. While it may well be the case that the

[11] See also *Recherche*, II. 1. 4, v. 3, as well as other passages in v. 7. Notice, however, that Malebranche here does not suggest that the soul's thoughts cause our passionate expressions: they are produced mechanically by the external object.

physiological motions which constitute our expressions are not *caused* by the soul on Descartes's account, it does seem that these physiological states are still correlated with mental states: in particular, we might think, they share a common cause. The physiological state resulting from our interaction with the world seems to have two parallel effects: a physiological reaction and a mental state. Our outwardly directed bodily states can be understood to be expressive of our passions just because both are caused by a particular way in which the world impacts on us. This too is an intelligible model of reference, for this is sometimes the way a set of symptoms are taken to be signs of a disease.[12]

This account does require that we reread Descartes's discussion of the expressions, but this seems straightforward enough. For one, in saying that joy or sadness or shame or love causes certain physiological changes, Descartes might simply be invoking the thought to refer metonymically to the physiology. Or, perhaps more likely, he might be adopting the way people speak colloquially about the passions and their effects. We just say things like 'I blushed because I was embarrassed' even though we think that our blushing has a physiological aetiology.

And if we go this way, it seems that at least part of the problem with the causal account can be resolved. For on this common causal account, the significance of an expression is not explained through its direct causal relation to the referent. Rather, the common causal account depends simply on the two sets of determinate connections working in concert with one another.[13] That is, the common causal account invokes two things: (1) the causal connection between physiological states; and (2) the causal connection between bodily states and mental states. Our expressions are causally connected to the physiological states that precede them, and one of those states, a tilt of the pineal gland, is directly causally connected to a mental state, a passion. Through that pivotal physiological state, our passions are linked to our expressions, and

[12] The symptoms of muscular sclerosis, for instance, are taken to be signs of the disease, though, on one theory of MS, both the symptoms and the disease are thought to be caused by an as yet unidentified virus.

[13] I am using the word 'determinate' here to avoid the confusions of 'necessary'. While the causal connections between bodies may well be necessary, Descartes is clear that, in the case of body–mind connections, God could have made things otherwise. In this sense body–mind connections are not necessary. On the face of it, however, it does seem that once God institutes body–mind associations the way they are, a bodily state determines a thought in the mind, and vice versa. I will presently call this assumption into question, however.

through this linkage our expressions can be said to signify the passions they do.[14]

But why are we able to turn on that pivotal state? Why are we able to claim that our expressions signify our passions? We are able to do so just because we take the connections both between physiological states and between physiological and mental states to be determinate connections. It must be the case that our being in a certain physiological state *always* leads (1) to the movements constituting our expressions *and* (2) to our having a certain thought, a passion. We can elide the move through their common cause and go directly to the passion just because of these determinate connections.[15]

Both of these assumptions seem to be entirely uncontroversial. Certainly, in so far as Descartes understands the body to function as a machine, he takes the workings of the body to consist in a chain of physiological causes, one state determinately leading to another. Equally, the assumption that the connections between particular physiological states and thoughts are determinate seems unproblematic. Descartes does claim that certain thoughts are joined to certain bodily states by a natural institution,[16] and this natural institution seems to consist in nothing but the establishment of determinate associations between bodily states and mental states.[17]

However, there is a problem. It seems that this account as it stands cannot accommodate a basic feature of our passionate lives, a feature Descartes recognizes: our capacity for emotional development, for changing how we feel about things. In the *Passions of the Soul*, it becomes clear that Descartes

[14] On this view, we might well say that any physiological state on the causal pathway leading up to (or indeed following from) the expression could signify the passion. I don't think this is a problem; there can be multiple signs of the same thing, after all. This is not to say that there aren't other problems with this account. I turn to one of them presently.

[15] In cases of dissimulation, of course, the expression only seems to be a sign of our passion: the physiology thus exists without the passion in the soul. But dissimulation is an intentional act of a sort, and one that depends on there being a connection between the physiology of the expression and the passion in the soul. We willfully direct our body to assume a particular expression so that it seems that we feel a certain way.

[16] With regard to the passions see *Passions* a.36, AT xi. 357, *Passions* a.89, AT xi. 394, *Passions* a.90, AT xi. 395, and *Passions* a.94, AT xi. 399 f.

[17] Most commentators subscribe to the position that body–mind associations are fixed in this way at least tacitly. See for example, Alison Laywine, 'Malebranche, Jansenism and the Sixth Meditation', *Archiv für Geschichte der Philosophie*, 81 (1999), 148–73, at 150, and Margaret Wilson, *Descartes* (New York: Routledge and Kegan Paul, 1978), 217. The textual basis for it comes in *Meditation* VI. See AT vii. 88–9, CSM ii. 61.

does not think that the association between a given physiological state and a thought (or at least a passion) is fixed; that is, Descartes does not think that mind–body associations are determinate in the sense in play here. So the account of the *Passions* challenges the second of the two assumptions of the common causal account, and without that assumption the common causal account of our passionate expressions is inadequate.

This idea that the associations between bodily and mental states are not fixed comes out in Descartes's remarks about the regulation of the passions. First remark that at the end of the *Passions*, Descartes details this remedy for the misuses and excesses of our passions:

> I have included among those remedies the forethought and diligence through which we can correct our natural faults by striving to separate within ourselves the movements of the blood and spirits from the thoughts to which they are usually joined. (*Passions* a.211, AT xi. 486.)

In order to feel the passions we should feel to the degree we should feel them, we are supposed to separate in ourselves the connection between the physiological state and the thought, and then we are, presumably, to institute a new connection—one which conforms to our 'firm and determinate judgements bearing on the knowledge of good and evil' (*Passions* a.48; AT xi.367). Thus, Descartes here avers that we have a capacity for changing our feelings about things by reforming the natural associations between mental and physical states.

What does Descartes mean in proposing this remedy? Consider first *Passions* a.44, an article with the title 'That each volition is naturally joined to some movement of the gland but that *by artifice or habituation one can join it to others*' (AT xi.361; emphasis added). While the title here is certainly suggestive of the remedy he will prescribe later, in the text of the article he does not yet go that far. Rather his focus is on the way we act on our passions, and he rightly notes that we can train ourselves to respond to our occurrent thoughts in new ways.[18] So, for example, although our natural fear of dogs might incline us to run away, we can, through judging that we are in fact in no danger from dogs, make ourselves stay. Indeed, we can train ourselves to react this way reflexively. Nothing in this suggested way of controlling our passions indicates that

[18] It is here where Descartes treats of language learning, whereby we come to associate certain movements of the mouth with meanings of words rather than with the desire to make those movements.

the natural institution between physical and mental states themselves is not fixed. I still feel the fear I am naturally disposed to in the face of dogs. I just no longer react to it in the same way.

However, in a.50 the promise of the title of a.44 is realized. In this article Descartes extends his discussion and suggests that we can change the way we are given to feel in certain situations: he asserts that 'although nature seems to have joined every movement of the gland to certain of our thoughts from the beginning of our life, yet we may join them to others through habit' (AT xi. 368). Thus, Descartes implies that we can change our feelings about things at the most basic level; we can, through a process of rejoining physical and mental states, change the way in which the world affects us so that we have the thoughts we do. To continue with the dog example: we not only can overcome our fear of dogs by controlling our reaction to them, but also we can come to be simply not afraid of dogs any longer.[19] According to the former course of regulating the passions, I will still feel fear upon seeing a dog; my fear will be under control. However, on the latter course of regulating the passions, I will reach a point where I just do not fear dogs; my fear has been overcome not because I am able to control it but because I no longer feel it at all.

That we can reform ourselves in this second way, according to Descartes, poses a problem for the common causal account of our expressions. For on that account our expressions signify our passions just because they share a common cause, a physiological state. But given our capacity to reform ourselves, a physiological state that once led us to feel fear, and also led to an expression of fear, might come to lead us to feel another passion through our efforts to regulate our passions. There is nothing in the common causal account as it stands, however, to lead us to think that anything at all has changed physiologically. We are given no reason to think that those efforts at regulation that involve a reinstitution of mind–body associations should have any effects on the causal mechanisms through which other bodies affect our body and which

[19] I offer a more detailed account of this capacity to reform ourselves in my 'Descartes's *Passions of the Soul* and the Union of Mind and Body' ['Passions and Union'], *Archiv für Geschichte der Philosophie* (forthcoming 2003). That Descartes holds this view might require that we rethink our understanding of what it is for the connections between bodily states and mental states to be instituted by nature. I cannot undertake this here, but I offer a suggestion of how such a story might go in 'The Structure of the *Passions of the Soul*', in *Passion and Virtue in Descartes*, ed. Byron Williston and André Gombay (Buffalo: Prometheus Books, 2003). I intend to develop this suggestion further in future work.

govern the operations of our own body. And with our physiology a constant, our expressions should also remain the same. Our bodies would, on this account, still be affected in the same way by dogs, say, and we would present the same expression when confronted with a dog. But through our efforts to regulate our passions that same physiology would lead to a different thought; we might feel affection rather than fear when faced with a dog. If we are to say that our expressions are expressive of our passions just because they share a physiological cause with them, then it seems we are committed to claiming that our expressions change significance with our efforts at controlling our passions.

Thus, Descartes's account of the regulation of the passions effectively undermines the second of the assumptions of the common causal account, and without that assumption it is unclear just what the basis is for any claim that our expressions signify our passions. Indeed, it is not clear which passion a given expression signifies.

In this way, the common causal account as it stands does not seem to accord with our experience. While changing how we feel about things is not commonplace—we are set in our ways about many things—it is not extraordinary either. We often overcome our fears, likes, and dislikes to such an extent that we can hardly imagine ourselves as we once were. If, with these changes of feeling, our various facial expressions remain constant, we would be effectively inscrutable, or at least very difficult to negotiate. And moreover, it does seem that our expressions *do* change with our feelings. So, now that I am over my fear of dogs, when I see a dog, I will not wear the same expression I did before, when I was afraid of them. Our expressions are consistent in signifying what they do, and the common causal account as it stands would suggest that they are not.[20]

One possible resolution of this problem is to claim that in some cases the significance of our passionate expressions can be explained through the common causal account, while in other cases, that significance is to be explained through the causal involvement of the soul. In particular, we might think that while the common causal account is an adequate explanation of the passions we feel pre-reflectively, the soul is to figure in explaining our expressions when we find our feelings change. The

[20] It is also worth noting that nothing in this common causal account as it stands would seem to resolve the problems surrounding the communication of our passions through our expressions that surfaced with the causal account. Thus it is still less than clear how we are able to read off the expressions of others.

text of the *Passions* might well be consistent with such a reading, though it does not support it directly. However, in order for this sort of resolution to afford a philosophically viable position, more would need to be said about how the soul effects changes of expression with its changes of feeling. For it is not the case, even with these changes of feeling, that our emotive expressions are voluntary actions. In the case of voluntary action, the thought itself is associated with a motion of the pineal gland, and that motion of the gland in turn moves the animal spirits in such a way as to effect the action at issue. In the case of changes of feeling the motion of gland remains constant—what changes is the association between that motion and a thought—but somehow the physiological effects of that motion are different, so that we wear a different expression. If the soul had the power to effect *that* change, it would seem it would challenge Descartes's physics. Descartes, however, does admit that animals can be trained, and indeed retrained. Presumably, this training would involve simply a configuration of bodily dispositions (a tweaking of the body-machine, as it were), and he could appeal to this sort of bodily training to account for how our expressions come to match our change of feeling. This, however, seems to me overly theatrical. For it is not as if we come to inhabit the mask proper to the portrayal of our new feelings. Rather, it seems that our change of feeling and change of expression come together.

We are thus left asking: can any more be said about how the soul might effect a change of expression coordinate with its change of feeling? Is there any other way Descartes can be left making some sense about our emotive expressions?[21]

5. A THIRD ALTERNATIVE: AN APPEAL TO HUMAN NATURE

One thing to note is that both the causal and the common causal account presuppose a thin notion of efficient causation, that is, one in which no further explanation of that efficient causal relation is offered or required.

[21] Spinoza doesn't seem to think so. In EIIIP59S he denies that there are any expressions of the passions, properly speaking: 'As for the external affections of the body, which are observed in the affects —such as trembling, paleness, sobbing, laughter, and the like —I have neglected them because they are related to the body only without any relation to the mind'. One can read this as an acknowledgment that there is no good way of account for the expressiveness of bodily states (after all, for Spinoza, modes of body do not represent).

There is good reason for this: Descartes's rejection of final causes in physics and his rejection of substantial forms would seem to leave him with just that to account for causal relations. Moreover a notion of efficient causation seems just that simple:[22] one thing is the efficient cause of the other if it has the power, or the efficacy, to move the other in some way, and without a notion of formal or final causation to appeal to, it seems there is nothing more to say in this regard. However, in the case of the human being, Descartes does appeal to a thicker notion of efficient causation: that is, he aims to offer an explanation for why bodily states bring about the mental states they do.[23]

What can explain the associations between thoughts and physical states? In *Meditations* VI, Descartes invokes the institution of nature to explain why it is we feel a pain in our foot when our foot is injured. We feel the pain we do, he says, just because 'nature has laid it down that this motion [of the pineal gland] should produce in the mind a sensation of pain, as occurring in the foot' (AT vii. 87; CSM ii. 60). Descartes's explanation, however, does not stop there. Particular mental–physical associations are instituted by nature to be the way they are because:

> the best system that could be devised is that it [the gland] should produce the one sensation which, of all possible sensations, is most especially and most frequently conducive to the preservation of the healthy man. And experience shows that the sensations which nature has given us are all of this kind. (ibid.)

[22] There are, of course, many problems in understanding the details of Descartes's account of causation, and a vast literature that aims to flesh out these details. See for instance Daniel Garber, 'Descartes and Occasionalism', in Steven Nadler (ed.), *Causation in Early Modern Philosophy* (University Park, PA: Penn State University Press, 1993), 9–26; Gary Hatfield, 'Force (God) in Descartes' Philosophy', *Studies in Philosophy of Science*, 10 (1979): 113–40; and Janet Broughton, 'Adequate Causes and Natural Change in Descartes's Philosophy', in Alan Donagan, Anthony Provich, Jr., and Michael Wedin (eds.), *Human Nature and Natural Knowledge* (Dordrecht: D. Reidel, 1986), 107–27. Kenneth Clatterbaugh, *The Causation Debate in Modern Philosophy 1637–1739* (New York: Routledge, 1999) provides a nice overview of the seventeenth-century debates. My claim here is simply that often the notion of efficient causation under discussion is one that comprises only the ability of one thing to effect another, and not any further explanation of that ability.

[23] In n. 9 above, I suggested that in the passage I will consider presently, Descartes attempts to resolve problems with a causal account of the reference of our sensations. Reading the passage in that way does not require taking Descartes to be explaining the causal relation between bodily states and mental states. The discussion that follows takes Descartes to be explaining not only the reference of our body-caused thoughts but also the causal relations themselves. That is, I take the natural institution to be a causal relation and not simply a referential relation. Simmons, 'Cartesian Sensations', has the most detailed discussion of this passage. I cannot here settle the question of which interpretation is preferable.

States of the pineal gland are instituted so as to produce certain thoughts *for our own good*, so that we might better preserve ourselves as human beings. Thus, our good as human beings is meant to explain the natural causal associations between bodily and mental states.

A similar sort of explanation figures in a curious way in the *Passions of the Soul*, aa. 107–11. There Descartes provides a natural history of the primitive passions; he tells a story about the origins of our passions. In the immediately preceding articles (aa. 97–106) Descartes has set out the physical symptoms of each passion, and then considered the physiological causes of these symptoms. It is clear from the order of presentation that the natural history is meant to explain just why that physiology is associated with the particular passion it is. And interestingly, the articles on the expressions of the passions follow immediately from this natural history. It thus seems that the explanation Descartes offers of these associations is meant to contribute to an explanation of how our expressions can signify what they do. Since any further account of our expressions we might arrive at here will emerge out of an understanding of this natural history of the mind–body union, that is, of human beings, I will call this account the *human naturalist account*. Let us look at this natural history further.[24]

According to this natural history, Descartes claims that when our soul 'began to be joined with our body' the heart contained a nutriment particularly well-suited to maintaining the life of the body. The soul then loved these juices in the heart:

> For it seems to me that the first passions that our soul had, when it began to be joined to our body, had to have been at a time when the blood or other juice which entered in the heart, was an aliment more suitable than the usual for maintaining the heat which is the principle of life; this was cause for the soul to join itself willingly with this aliment, that is, to love it. (*Passions* a. 107; AT xi. 407)

Descartes continues, explaining our first feelings of hate, joy, sadness, and desire in a similar way.[25] While the story is a strange one, and not in the least because of its appeal to our feelings towards our blood,[26] the *Passions* is not the only place he tells it. In the letter to Chanut of 1 February 1647, Descartes also tries to explain why we feel the primitive passions when we do, also by appealing to an original moment of the soul's union with the body (AT iv. 604 ff.; CSMK, 307 ff.). In so far as Descartes does seem to be insistent about offering this sort of explanation of primordial associations between mental and physical states, it seems we can take this set of articles in the *Passions* seriously.

According to Descartes's natural history, our passions come to be associated with their proper physiology in so far as that physiological state indicates our state of physical well-being. We feel love when the body is functioning particularly well, sadness when it is functioning poorly, and so on. In feeling the passions it does, the soul has some sort of access to the state of the body, but this access alone is insufficient to explain its passions. That it feels what it does on the occasion it does is also due to the soul's relating itself to its body, to its taking up a certain sort of attitude towards that state. In the case of love, the soul not only is aware that the body is functioning well, it is also pleased at that well-functioning. The soul in a way takes what is good for the body as its own good. This aspect of the soul's first experience of love establishes the association which will guide future feelings of love. It explains the causal efficacy of that bodily state in bringing about a passion.[27]

So this account suggests that there is a thick, rather than a thin, notion of efficient causation in play, at least in the case of body–mind interaction. That is, Descartes thinks there is an explanation of the efficient causal relations between mind and body. Moreover, just as it does in *Meditations* VI, the explanation appeals to our good.

[24] There is much to be said about these very peculiar articles, but here I will only present the general shape of the picture, and draw out some select points. See my 'Passions and Union' for a more thorough discussion.

[25] We first felt hate when there was some bad blood, insufficient for maintaining life, circulating in the body, first felt joy when our blood was so well-nourished that our body had no need to replenish itself, first felt sadness when our body lacked sustenance, and first felt desire to receive things suitable to the body. See *Passions* aa. 108–11; AT xi. 408–11.

[26] It is also strange in virtue of the fact that he is trying to account for the beginnings of a soul–body union he elsewhere attributes to God.

[27] The questions coming out of this story are many: what is the difference between the soul's having access to a bodily state and its assuming an attitude towards it? How does this attitude serve to establish a body–mind association? How is that association related to the causal interaction between body and mind? In addition, there is an important difference between this account and that of the *Meditations*. In the latter, Descartes does not seem to assign the soul any agency in effecting the natural institution between mind and body. In the *Passions* the soul does seem to play an active role. It is an interesting question whether we can read the account of passions back into the *Meditations* VI account. It can certainly seem as if the natural history we are given in the *Passions* constitutes a development in Descartes's view, and if it does we need to ask what prompts him to make this change. I cannot begin to address these questions here.

I want also to note two other elements of this natural history. First, a certain physiological state still causes a thought, but the way in which it does affords the possibility of reforming mind–body associations. The causal efficacy of a bodily state with respect to a thought is due to associations between physiological states and passions. These associations in turn are due to the soul's concern for the body, for through this concern an association is forged between them. We might think that these associations can change in accordance with the changes in the soul's concern for the body. It can thus potentially avoid the problem of the common causal account.

The second point concerns the conception of our physiology. By all accounts our physiology is described mechanistically. However, what Descartes's natural history of the passions makes clear is that what physiological state we are in is not, as is commonly thought, divested of value. It is important on the view I am suggesting here that a physiological state can be either better or worse for the functioning of the machine of the human body. That is to say, it is clear here that Descartes sees the body as having its own good—just its functioning well or preserving the heat that is the principle of life.[28]

We are now in a position to return to the question of Descartes's account of the significance of our emotive expressions. How does an explanation of the associations between bodily states and passions in terms of the human good help us to understand our expressions as signifying our passions? That is, what is the human naturalist account of our emotive expressions?

[28] Standard views of Cartesian efficient causation would have us break down the physiology of the body into discrete causal events linked together in a chain. There is no place for any purpose or end built into these mechanical workings and in light of which we could say that one bodily state is better or worse than another. The standard interpretation does have its justification: for Descartes disavows repeatedly the appropriateness of final causes, and hence of final causal explanations, in physics. Thus, there is a real question as to whether this notion of the 'body's good' is consistent with Descartes's disavowal of teleological explanations in physics. Denis Des Chene, *Spirits and Clocks: Machine and Organism in Descartes* (Ithaca: Cornell University Press, 2001), offers a very clear statement of this concern, and even argues against the suggestion I am advancing here. (See pp. 116–52 in particular.) I do think, however, that there is no inconsistency here. That the body has a good is not what explains the body's physiology—the motions of the body are governed by the laws of motion, just as much as those of any other matter—and so it does not provide us with a final cause in this sense. Rather, the body's good can be explained in terms of the mechanics of the body: it is simply the continued functioning of the body-machine, which is something determined entirely by the interrelation of the body's parts. The body simply strives to maintain its mechanical integrity, an integrity defined internally to the body itself. See my 'The Health of the Body-Machine? Or 17th Century Mechanism and the Concept of Health' (MS) for a further defense of this suggestion.

On this account our expressions are the result of the physiology of our body. Our expressions are just the manifestations on the surface of our body of a particular physiological state. And equally, on this account, our feelings of the passions are caused by the physiological state we are in, in virtue of the established associations between body and mind. But we also have an explanation of these causal associations: they serve the good of a human being.

Through this explanation we can understand our expressions to signify our passions because they both reflect the same thing: our well-being, or the way in which things harm or benefit us. To see this, recall first that our expressions are integrated into the causal nexus constituting our body. And as we have seen, the body on its own functions either well or poorly, depending on how well the machine of our body is maintaining itself. Thus, our expressions can be understood as manifestations of the workings of the body as whole, and as such they present whether the body is functioning well or poorly.[29] And our passions represent how things are affecting our well-being. Indeed, that is just what the passions are. As Descartes indicates in a. 52, our passions represent the way that things 'can harm or profit us or, generally, be important to us' (AT xi. 372). Both our physiology and our thoughts thus reflect the same thing: the effect of things on our well-being.[30]

I have already suggested that this account can accommodate Descartes's account of the regulation of the passions and so avoid the central problem that faced the common causal account. I now want to consider this in more detail. First, on the human naturalist account, the associations

[29] In this regard, I draw attention again to what Descartes includes among our expressions. He is not primarily interested in smiles or frowns, though he does include movements of the eyes and face as expressions; rather his focus is on our coloring, languor, laughter, and tears. And we do associate these expressions with our states of bodily well-being. Thanks to Amy Schmitter for drawing my attention to this point.

[30] On the surface, this human naturalist account of the expressions of our passions has a similar structure to the common causal account. Our expressions signify the passions they do in virtue of their shared aetiology. But what is significant in this aetiology is no longer a discrete element of this physiological state. We have our expressions in virtue of the physiological state the body is in, and as such they might certainly be said to be caused by a preceding event in the causal chain of events leading up to them. But they are *expressions* in virtue of the physiological state of the body as a whole. They figure in a body which is functioning well or poorly. And a particular element (the state of the gland) of this physiological state as a whole gives rise to the passions. The passions and their expressions do have a common cause, but what is salient here is not so much the efficient causal history as the way that causal history pertains to our bodily well-being.

between mental and physical states are explained by the soul's conception of our well-being. As we develop our understanding of our well-being, it makes sense that we would then reinstitute mind–body associations. Can this consistency with Descartes's account of the regulation of the passions resolve the problem the common causal account faced, that of understanding how our expressions might change with our change of feelings?

There are two ways Descartes might go here. First, on this model the body is conceived as a whole which functions better or worse, and our expressions reflect that functioning. One might think that Descartes could claim that mind and body are intertwined with one another such that as the mind gets better understanding of our good, the body adjusts its functioning to conform to that understanding—akin to a symbiotic relationship. He seems to suggest something similar to this in his correspondence with Elisabeth, where his investigation of the passions and their regulation begins in the summer of 1645.[31] And more, it seems that our feeling generosity, that passion which makes us master of our passions and is key to all the virtues, has a real physiological effect, keeping us calm both physically and mentally. So long as our changing the way we are given to feel about things does have this real physiological effect, our expressions should change along with our feelings. But to make good on this promise, more needs to be said about how such a responsiveness might be consistent with the causal interaction of mind and body. Descartes is here not envisioning intentional voluntary action on the part of the soul. And it is not clear that the natural institution model of causal interaction can handle the complexity of our reconception of the good. That model seems tailored to explaining the associations between particular ideas and bodily states rather than that between our overall way of approaching the world and our overall bodily condition.

[31] There Descartes aims to cure Elisabeth's physical troubles by helping her through a difficult period emotionally; in Elisabeth's terms, he aims to cure her body by curing her soul. See the Letter from Elisabeth to Descartes, 24 May 1645, AT iv. 208. Indeed, in this correspondence Descartes suggests that his own efforts in feeling things properly helped him to overcome his own chronic illness in adolescence. See the Letter to Elisabeth, May or June 1645, AT iv. 218 ff.; CSMK 249 ff. These letters are consistent with the line Descartes takes in an earlier one, from 8 July 1644, in which he writes: 'the construction of our body is such that certain movements follow in it naturally from certain thoughts, as one sees that redness of the face follows from shame, tears from compassion, and laughter from joy. And I know of no other thought more proper to the conservation of health than that which consists in a strong persuasion and firm belief that the architecture of our body is so good that, once one is healthy once, one cannot easily fall ill' (AT v. 65: CSMK 237).

The responsiveness of mind and body to one another seems more in keeping with an Aristotelian model of their union, one rooted in formal causation. If Descartes were to appeal to this here, in the case of the human being, he would compromise his more general rejection of formal causation.

There is, however, another way Descartes can go. This second route rests on an alternative way of understanding how we read the signs we send one another. On this view, understanding the expressions of others need not be a matter of mere correlation between outward appearances and inner feelings. Nor need it presuppose a kind of natural mechanism that allows us to read off others' expressions. Rather, if the expressions of the passions are reflections of our nature as human beings, reflections of our good, then in order to understand others we need only have a sense of our good and the ability to recognize that others share the same nature with us. And so, we might think that we revise our conception of our good in light of how others come to rethink their good. That is, our expressions stay the same, but our interpretations of them change along with our changing conception of our good. In a similar way, we might also come to revise our assessments of others' expressions. However, I am not sure whether this model accords with the way our expressions actually go. It does seem to me that our expressions do change as we revise our estimation of things, and not that we revise our interpretations of expressions with those revised estimations. And this second route affords no way of explaining our changing responses to the world.

6. CONCLUSION

So what do the expressions of the passions tell us? I have presented three possible accounts of how our emotive expressions might be external signs for Descartes, all of which present some problems. The straightforward causal account faces the standard problem of a causal theory of reference—how to single out the referent in the causal history of the sign—as well as textual problems. The common causal account can avoid the textual problems of the causal account, as well as the problems of a causal theory of reference, since the meaning of the expression is not explained by a direct causal relation. It, however, faces another problem: it cannot accommodate Descartes's account of the regulation of the

passions. The source of this problem lies in its assumption that the causal relation between body and mind is fixed and determinate and an efficient causal relation requiring no further explanation. Descartes, however, does offer an explanation for these causal connections, and focussing on this explanation affords another account of the expressions of the passions. On this account the expressions signify our passions because both reflect our good as human beings. While this sort of account makes more intuitive sense, it does so by calling into question the nature of the causal relation between mind and body. The changes in expression that go along with changes of feeling seem to be best explained by a kind of mutual responsiveness of mind and body, but this model does not seem to accord with the account of mind–body interaction Descartes has available. Alternatively, the source of the significance of our expressions might come not from the soul but from our sharing a nature with those to whom we express ourselves. But this account too has its shortcomings.

That Descartes's account, whatever it might be, has problems is instructive nonetheless. For one, it is interesting that he devotes so much attention to the expressions of the passions. Descartes recognizes that the way in which our feelings are made manifest is an important part of our passionate lives. Yet the persistence of the problems brings out the difficulty for a dualist like Descartes to account for this very human function. Descartes's dualism might well afford insights for understanding both the natural world and the nature of thought, but in so far as it does not have a clear way of bridging these two realms, it runs into trouble in trying to capture the most commonplace aspect of experience as human beings.

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The First Condemnation of Descartes's *Œuvres*: Some Unpublished Documents from the Vatican Archives

JEAN-ROBERT ARMOGATHE AND VINCENT CARRAUD

It is well known that some of Descartes's Latin writings were placed on the Catholic Church's Index of Prohibited Books in 1663. The condemnation decree has been published many times in the modern era, in particular by Francisque Bouillier, and then (in a corrected version) by Georges Monchamp.[1] The circumstances around the condemnation have been closely studied by Monchamp, working from the archives at the University of Louvain.[2] The opening of the historic archives of the Archives of the Congregation for the Doctrine of Faith (ACDF) has now made possible the discovery of the Church's secret dossier on the condemnation,[3] which in turn allows us to illuminate the motives and circumstances surrounding it.

1. FROM MAY TO AUGUST 1662: THE DEBATES AT LOUVAIN

As Monchamp has shown, it was the University of Louvain that provided the occasional cause for the steps taken in Rome.[4] To be more

[1] Fr. Bouillier, *Histoire de la philosophie cartésienne*, 2 vols. (3rd edn. Paris, 1868), i. 466–7; Monchamp, *Histoire du cartésianisme en Belgique* (Brussels, 1886; henceforth, 'Monchamp'), 389–91. Monchamp published the 'nearly literal transcription' by Plempius.

[2] Henry Alphonse De Vocht, *Inventaire des archives de l'Université de Louvain, 1426–1797, aux Archives générale du Royaume à Bruxelles* (Louvain: Uystpruyst, 1927), no. 70, vol. 24 [3 Jan. 1661–May 6, 1667]). These archives were temporarily inaccessible in 2001–2; we had to content ourselves with reproducing the texts of the documents provided by Monchamp (with the exception of a document also transcribed by L. Ceyssens).

[3] Our thanks to Marta Fattori (Rome) for her invaluable assistance in this research, and to Theo Verbeek (Utrecht), to whom we are grateful for several corrections and clarifications.

[4] Following Monchamp, we reproduce in document 1 the deliberations of the Faculty of Arts at Louvain between 3 July and 28 Aug. 1662.