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Social cognition of negative emotion

Abstract

Emotions can have considerable epistemic value for individuals. But there are social-epistemic benefits of emotion as well, and these have been much less discussed in the literature. This is unfortunate, both because social-epistemic aspects generate questions of independent interest – such as how to balance potential benefits to individuals and benefits to groups when these are in conflict – and because a full picture of the individual benefits of emotion would seem to require an understanding of the role social cognition of emotion plays in bringing about these benefits. As a result, those interested in the benefits that emotion can bring had better concern themselves with social cognition of emotion. Or so, at least, I want to argue in this paper. I want to make the case for the importance of social cognition by focusing on a particular class of negative emotions, namely those related to suffering. After explaining the value of suffering for individuals, I then turn to consider facial expression of suffering, and present an account of the value that such expression can have, focusing in particular of the benefits of social cognition of suffering via experience of facial expression.

Keywords

Pain, Suffering, Social cognition

Those of us who think that emotions can have significant epistemic value have focused on the benefits emotion can bring to the individual who experiences them. This is not surprising, given that researchers are interested in emotions, understood as subjective experiences that are generated in response to things that have an affect on the individual – such as dangers, insults, public image, the possibilities of romantic liaisons, and so forth. But the relative lack of work on the social-epistemic aspects of emotion is unfortunate, both because social-epistemic aspects generate questions of independent interest – such as how to balance potential benefits to individuals and benefits to groups when these are in conflict – and because a full picture of

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the individual benefits of emotion would seem to *require* an understanding of the role social cognition of emotion plays in bringing about these benefits. As a result, those interested in the benefits that emotion can bring had better concern themselves with social cognition of emotion. Or so, at least, I want to argue in this paper.

I want to make the case for the importance of social cognition by focusing on a particular class of negative emotions, namely those related to *suffering*. This narrow focus will be helpful, both from the standpoint of organising the paper, and because it will enable us to look in detail at the benefits of social cognition of a particular emotion. It is an interesting question whether the picture I paint here can be extended to cover social cognition of all emotions, both positive and negative. That is a question for another time and place, however.

The structure of the paper is as follows. I begin by saying a little about what suffering is, and then describing one account of the value that suffering can have for an individual. This account is reasonably standard in the case of the forms of bodily suffering that constitute pain; but I'll propose a novel extension of this account to cover forms of emotional suffering. Central to this (extended) account is the idea that suffering is, to a very large extent, beyond our control. We'll see that this feature is that which enables suffering to have value for an individual. Suffering brings benefits, that is, because it is not subject to our voluntary choice: it is something that happens to us, that we cannot ignore.

I will then turn to consider facial expression of pain and suffering, and present an account of the value that such expression can have, focusing in particular of the benefits of social cognition of pain and suffering *via* experience of facial expression. As we will see, it is important for this picture too that facial expression of suffering is, at least to an extent, beyond our control. Moreover, I'll then explain the important role that social cognition of suffering can play in bringing about the benefits to the individual that pain and suffering on the more individualistic account are held to bring. I'll argue that many of these benefits will not occur unless others become aware, through facial expression, that the individual is suffering. An account of the value of suffering for an individual that ignores social cognition will be, to this extent, impoverished.

I'll close by discussing a number of ways in which social cognition of suffering can be of value for groups, rather than the individual who

suffers, and show how this highlights a possible tension between value to the sufferer, and the value to the group of which she is a part.

1.

What is suffering? Perhaps the best way to answer this is to highlight some of the central features of the concept, and give examples of different kinds of suffering.

“Suffering” refers to the state or condition of one who suffers; and this is to be understood as a state in which someone experiences pain, misery, distress, loss, or some other form of hardship, some other thing that is bad or unpleasant. There are different senses of suffering, since there are different ways in which something can suffer. We might suffer from something in the sense of being affected by something bad, as when we suffer an illness or an injury or heart attack, or when a team suffers a defeat, or a nation suffers deprivation during wartime, or a believer suffers martyrdom. Something might suffer when it deteriorates or becomes lower quality: the relationship, the building, the coastline might all suffer in this way. We might suffer something, on the other hand, when we are forced to endure or to tolerate something, as when we suffer someone’s bad manners or political views. Although these senses can be related to experience, they are not essentially experiential: I can, for instance, suffer someone’s bad manners over a period of time, including times when I am not experiencing any display of them. My focus is suffering in this experiential sense: the state in which one experiences pain, misery, loss, distress, discomfort.

Although this will be somewhat artificial, I want to distinguish four kinds of suffering: pain, emotion, physical, and mental. Let us take these in turn.

(i) *Pain*. Perhaps the most obvious case of suffering is provided by states of physical pain. Pain is ubiquitous and varied: all normal humans experience pain, as do many non-human animals, and there are many different kinds and dimensions of pain. There are, for instance, pains associated with different parts of the body: there are pains in the neck, literally as well as metaphorically; we suffer back pain, earaches, chest pains, headaches, and so on. Pains can have different timescales: some are acute and temporary, whilst others – often the most worrying and problematic class – are chronic and long-lasting.

There are different causes of pain: nerve damage, broken bones, dental work, childbirth, burns, swollen glands, surgery, arthritis. There are pains associated with diseases and conditions, such as cancer or fibromyalgia. There are pains of different intensity and modes, captured by different adjectives: pains can be agonizing, burning, dull, gnawing, raw, sore, sharp, severe, tender, jarring.

(ii) There is *emotional suffering*. This consists of a class of negative emotional states: they include, to quote David Hume, “remorse, shame, anguish, rage, disappointment, anxiety, fear, dejection, despair” (Hume 1776/1947: 240-1). As with physical suffering, there are a wide variety of states which ground emotional suffering. Some are directed at the self – guilt and shame are prime examples – while others are more outward-looking – such as the grief at the death of a loved one – and some look in both directions: disappointment can be both self- and other-directed. Negative emotions can also have different timescales – disappointment is typically short-lived, whilst grief and despair are longer-lasting. Related to this is the fact that negative emotions differ in intensity – despair is more intense than disappointment, fear more intense than anxiety – and in value, with shame generally thought to be worse than embarrassment.

(iii) Suffering includes forms of *physical suffering*. Pain doesn’t exhaust the category of physical suffering, since there are many ways in which we can suffer physically without being in pain. Other forms of physical suffering are grounded in states such as tiredness, coldness, heat, nausea, hunger, thirst, sexual frustration, dizziness, bodily irritation or itchiness. Although these can be extremely unpleasant, and some, such as hunger and thirst, are amongst the greatest forms of suffering that we seek to alleviate, we misspeak if we call these forms of pain. Fatigue and irritation can feel extremely bad, but it doesn’t seem appropriate to call them kinds of pain: they don’t *hurt*, we might say.

(iv) Finally there are forms of *psychological or mental suffering*. Emotional suffering doesn’t exhaust the category of mental suffering, since there are many ways in which we suffer mentally, but without being in a state that is standardly taken to be an emotion. These include states such as frustration, depression, loss of a sense of self, spiritual pain, loneliness, stress, anxiety, social rejection, lovesickness, boredom, homesickness, an experience of a lack of meaning. Although some of these are emotion-like – for instance, anxiety seems akin to fear – we might think that there are nevertheless differences.

Forms of mental but non-emotional suffering seem to have a broader target or object, such as the person's whole life in the case of the loss of a sense of self or depression, or indeed no target at all, in the case of some forms of anxiety. Moreover, unlike standard emotions, these negative mental states seem to lack a clear "motivational" or "actional" element. Loneliness, boredom, and spiritual pain are typically characterized by lack of motivation, and in this way they seem rather different from negative emotions like fear and guilt.

These distinctions are not hard and fast. Forms of psychological pain might be forms of or akin to emotional suffering; moods like anxiety or depression, for instance, are close to emotional phenomena. And forms of physical suffering, such as extreme coldness, might develop into forms physical pain. Still, I think that the examples are sufficiently clear to support the idea that there are some general differences between the kinds of things that make up the class of states of suffering.

A second question arises at this point, however: in virtue of what do all of these count as forms of suffering? My simple answer here is that all such states involve an element of negative feeling or affect, a negative phenomenal feature: basically, there is something that it is like to be in these states, and what it is like is to be bad. Of course, this raises a further, important, and difficult question: how are we to understand negative affect, phenomenal badness, unpleasantness? Unfortunately, I have nothing much to say on this question, at least not here. Instead, my focus will be on the value, and in particular the epistemic value, that this negative affect can have for an individual. Let us turn, then, to consider the value of suffering, understood in this way.

Most of the work in this area has focused on the value of pain to individuals; here I'll look at what Nikola Grahek has to say on the biological nature and function of our pain system. Grahek notes that, when not in pain, we are very grateful that we have the capacity to feel pain, since our pain system serves vital needs. He writes: "This system normally serves as a reliable alarm mechanism that warns the organism about harmful or potentially harmful features of its environment. This system also monitors the extent of the damage inflicted. Finally it induces the organism to take evasive action, or to refrain from doing anything that might exacerbate the damage" (Grahek 2007: 9). There is, Grahek continues, biological evidence that "the pain system actually consists of two subsystems: (1) the avoidance

system and (2) the restorative or repair system” (Grahek 2007: 9). And

although both subsystems function as alarm or warning systems, they differ markedly in their functions, targets, and underlying neural structures and mechanisms, as well as in the characteristic behaviour that they induce. In order to survive and preserve their vital physical and mental capacities, organisms must avoid threats and protect themselves from destructive stimuli. Finally, when they are hurt, they must be able to guard their injuries against further insult. The first two protective systems are carried out by the avoidance system, while the third is performed by the restorative or repair system. (Grahek 2007: 10)

Negative affect – in this case, painfulness – is central to the proper functioning of the pain system. For the painfulness of certain stimuli – namely, those which are or threaten to be dangerous or damaging – leaves memory traces, and in this way we learn what to avoid. Moreover, it is the painfulness of some existing noxious stimulus that motivates us to get away from the noxious stimuli when we encounter them: as Grahek writes, “acute, cutaneous pain evokes [...] motor withdrawal and/or flight reaction, protective responses intended to discontinue exposure to the noxious stimulus and, thereby, to terminate the pain” (Grahek 2007: 12). We are thus motivated to act *because* this is a way of getting the painful experience to stop. In other words, painful experience quickly and automatically generates a strong desire that a bodily sensation ceases. Since the most effective way of getting the sensation to cease is to deal with the source of bodily disturbance, painfulness has clear motivational force in generating an appropriate behavioural response to potential bodily damage.

By the same token, painfulness is vital to the operation of the third system, that responsible for restoration or repair. This system responds to actual bodily damage or harm “by inhibiting movement and manipulation of the affected areas”, and this “prevents the organism from inflicting further insults to the already damaged areas of the body” (Grahek 2007: 13). The restorative system operates by making the area around the damaged part of the body tender and thereby sensitive to further manipulation: as a result, movement is restricted and diminished, as a way of avoiding further pain caused by such sensitivity, and recovery facilitated. Again, it is *because* further movement or manipulation is painful that the subject avoids doing

this, and thus avoids bringing about further damage to the area in question.

It is important to note that the effectiveness of the pain system in avoiding and repairing harm depends upon the fact that painfulness is *not under our voluntary control*. This means that we cannot simply choose for our pain to stop, or wish it away, or decide no longer to feel it, however much we'd like it to stop. Pain is not, in this sense, up to us. And that is a good thing, of course. For painfulness is typically much more effective at generating avoidance and restorative behaviour than a system that *is* under our voluntary control, namely a system that operates via non-affective evaluative judgement or thought. The mere judgement or even mere knowledge that our body is being or has been damaged often, notoriously, fails to move us, especially in light of competing motivations: a fact which is obvious from the behaviour of smokers or drinkers or gluttons. And the reason is that non-affective judgements about bodily damage are easy to ignore: we just purposely choose to think about something else, or act on some other judgement, or focus on the advantages of smoking, and the like. It is easy, in other words, to ignore such evaluative judgements, to render them not a priority, to choose to act on something else. It is considerably more difficult to ignore a painful signal that your body has been damaged, to choose not to act on this but in a way that prolongs the pain, to purposely choose to think about something else while the pain persists. Pain, in particular, *prioritises* bodily damage, insists that we deal with them, or removes the option of not dealing with them. It provides, in other words, a motive that in very many cases trumps other motives that are in play².

Grahek has a nice illustration of the ineffectiveness of an avoidance and restorative system that operates with elements that are, in the relevant sense, under our control. Grahek describes a project "to build a prosthetic pain system", which "was devised and executed by Paul Brand to compensate for the defective pain perception of leprosy patients, congenital painlessness, diabetic neuropathy, and other

² See Williams on the role that painfulness has in grabbing attention: "Experimental work on attention and pain (Eccleston, Crombez 1999), which includes methodologies that sample unconscious processes, complements the motivational model: pain grabs attention, interrupts associated behaviour, and urges action toward mitigating it; the more intense and threatening the pain, the more disruptive of attention to anything else" (Williams 2002: 440).

nerve disorders” (Grahek 2007: 83). Brand describes the project’s goal as follows:

We planned, in effect, to duplicate the human nervous system on a very small scale. We would need a substitute “nerve sensor” to generate signals at the extremity, a “nerve axon” or wiring system to convey the warning message, and a response device to inform the brain of the danger. One of the engineers [...] joked about the potential for profit: “If our idea works, we’ll have a pain system that warns of danger but doesn’t hurt. In other words, we’ll have the good parts of pain without the bad!”. (Brand and Yancey 1997: 192)

Grahek continues: “A team of electrical engineers developed transducers, slim metal disks smaller than a shirt button, to measure temperature and pressure. Sufficient pressure on these transducers would alter their electrical resistance, triggering an electrical current”, which would then be experienced by the patient (Grahek 2007: 83). But there was a serious problem. Brand again:

Even when the transducers worked correctly, the entire system was contingent on the free will of the patients. We had grandly talked of retaining “the good parts of pain without the bad”, which meant designing a warning system that would not hurt. First we tried a device like a hearing aid that would hum when the sensors were receiving normal pressures, buzz when they were in slight danger, and emit a piercing sound when they perceived an actual damage. But when a patient with a damaged hand turned a screwdriver too hard, and the loud warning signal went off, he would simply override it – this glove is always sending out false signals – and turn the screwdriver anyway. Blinking lights failed for the same reason. (Brand and Yancey 1997: 194)

Brand reports that other substitute signals were unsuccessful, and he concluded that the only way that the system could operate successfully would be if the signal was unpleasant – if it hurt, in other words.

The idea that pain has value because it motivates avoidance and restoration is widely accepted. Much less discussed is the idea that suffering in general can be seen to have value along these dimensions. However, the fact that negative affect has avoidance and restorative value is also apparent when we consider emotional suffering. The story here is rather more complicated – as befits the additional complication of emotional experience when compared with painful experience. But it is the same kind of story nevertheless.

Emotional suffering can have value in the three ways described above; as we saw, two of these involve avoidance behaviour, and one involves restoration or repair. As with pain, the negative affect that is part of shame, guilt, disappointment, and other negatively valenced emotions can leave memory traces – or “tag” certain ideas or images or concepts – and as a result can play an important preventative role in making one averse to acting in ways that are shameful, morally wrong, or likely to result in failure. Here negative affect has value, since the prospect that my behaviour will result in negative feelings moves me to avoid acting in certain ways. Unlike pain, these are not ways to avoid bodily damage; instead, negative affect prevents me from acting in ways that threaten to harm the core or underlying values that govern the negative emotions in question, and which constitute the “formal objects” of the emotions. Thus shame is grounded in concern for public image or standing, guilt in concern for moral norms, disappointment in a desire for some important goal or end. The negative affect involved in these emotions that makes them forms of suffering has value in helping us to avoid doing things that threaten our public image, the well-being of others, and our important goals.

Emotional suffering can also have value insofar as it plays an important motivational role: suffering can motivate withdrawal or flight reactions from things that threaten objects of our cares and concerns. For instance, fear and disgust typically move us quickly, automatically, and efficiently away from sources of danger and contamination. Here suffering is central to the motivational story: we act *because* this is a way to get the unpleasant experience involved in these emotions to cease. And as with pain, negative affect will in most cases be more effective in generating the appropriate behavioural response than non-affective judgement or belief. Recall earlier our claim that mere judgements that we are harming our bodies in various ways are, notoriously, ineffective in moving us to stop harmful behaviour. Painfulness is considerably more effective on this score. But this is true of unpleasantness in general – which is why treatments for smoking and overeating and alcoholism that make the subject feel nauseous are considerably more effective in getting them to do what they ought to do than if they were to rely on “strength of will” alone. Similar things are true of emotional suffering. The mere thought that one is in danger can, of course, motivate us to remove ourselves from the source of that danger; but this way of motivating

behaviour will be (i) slower, and (ii) less reliable, than the feeling of fear generated by some object or event. By the same token, the judgement that one has done something shameful will typically be less effective in getting us to move out of the public gaze than a feeling of shame. Here, as before, we are motivated *because* acting is a way to lessen the negative feelings – feelings which are, unlike judgements and beliefs, not easy to ignore or dismiss.

Emotional suffering also has restorative value – although here the story we tell is considerably more complex than that for painfulness and, as we'll see, involves a considerable element of social interaction and cognition. But the basic line is that emotional suffering can help to prevent further damage to the objects of concern that underlie our emotional systems – and indeed, can mitigate and alleviate such harms – by motivating behaviour that displays our awareness of the badness of what we have done. A good illustration of the restorative value of emotional suffering is provided by the negative emotion of guilt. If I have done something morally wrong, an appropriate response is to apologize and in other ways make reparations. Such a response is in part restorative: they aim to make things better for the person wronged, in part because apologies involve the recognition of the wrong done and the recognition of the harm caused, in part a recognition that the other is someone to whom respectful treatment was owed and yet not given; and in part by bringing them back to the position they were in before I acted in the way that I did. Behaviour that is morally wrong therefore *calls for* apologies and reparations, and indeed sometimes forms of punishment. But such behaviour is restorative in another way: it tends to make things better for the person apologizing and making reparations. At the very least, it prevents things becoming worse, both for the person harmed (a morally wrong that is not recognized or that does not generate an apology is, it would seem, worse than a moral wrong which generates apologies and reparations), and for the person who committed the wrong (if I don't apologise or make reparations, I am liable to further punishment, ostracism, and the like). Something similar can be said when I do something shameful.

However, and as we know all too well, apologizing and making reparations is often costly and difficult: facing up to what one has done, acknowledging this to oneself, acknowledging this to others, saying the words, putting oneself in their power, making it up to them – all of these are psychologically onerous, time-consuming, potential-

ly dangerous. And because of this, merely believing or thinking that we have done something wrong, that we ought to apologize, make reparations, submit ourselves to their judgement and possible punishment, will often, because of the cost, be ineffective in moving us to do what we should do. Again, as with mere knowledge that we are damaging our bodies or mere knowledge that we are engaging in a dangerous activity like unsafe sex, it is relatively easy to ignore the knowledge that we have done something wrong, up to us to choose to look elsewhere and do other things – especially, as in all of these cases, when there are other and powerful motives to ignore what we think is the right thing to do.

The negative affective quality of guilt provides a powerful motive to atone for our bad behaviour. One thing that feelings of guilt do is to keep attention focused on what we did, making it difficult to ignore; and one of the results of this close attentional focus is that guilt can make us face up to what we have done and the harm we have caused. In this way feelings of guilt have epistemic value in getting us to understand the wrongness of what we did. But the main effect of such feelings is motivational: guilt motivates us to overcome the costs and difficulties and make apologies and reparations, precisely because doing these things is a way of dampening negative affect. This is why we typically feel better when we make apologies, reparations, and suffer punishment for what we have done. As a result, emotional suffering has restorative value because it plays a central role in motivating behaviour that helps to restore others, and ourselves, to the place we were prior to our immoral actions. In this way emotional suffering helps to restore and repair the values that underlie or ground guilt: the welfare of others, and our own moral standing in the eyes of others.

Similar stories can be told about other forms of emotional suffering. Thus, shame can motivate us to atone, pity to comfort. The former helps to restore our own standing, the latter to heal and repair another. Of course, not all forms of suffering can have value in this way: despair and anxiety don't seem to have obvious motivational force, and hate is rarely in the business of restoring and repairing anything. But the same, of course, can be said about many cases of physical pain: headaches are, notoriously, not associated with nerve or physical damage, and so it is impossible to think that painfulness here has value in restoring or repairing such damage. Many other forms of chronic pain appear to serve no avoidance or restorative

function. Nevertheless, some forms of physical and emotional suffering clearly do, and so have value along these lines. With this in mind, is time to turn our thoughts to the relation between and benefits of the social cognition of suffering.

2.

The account of the protective and restorative value of pain and suffering given above is incomplete, however, insofar as it focuses only on the individual who suffers and what *she* is motivated to do. But pain and suffering promise to have protective and restorative value as a result of social cognition of these phenomena and what *others* are thereby motivated to do, and any complete story of the value of suffering ought to take these into account. The practical benefits to the individual thus depend upon the *epistemic uptake* of information about negative emotion. What is more, social cognition of pain and suffering can have value in a way that goes beyond the value for an individual, and indeed in a different way can threaten the well-being of the individual who suffers. The value of suffering for a group can conflict with the value of suffering for an individual, in other words. In what follows I'll look at these social-epistemic aspects, outline the conditions in which pain and suffering have value *via* social cognition, and show how the feature which enables suffering to have motivational value is equally the feature which enables suffering to have value in these other ways. So that which makes suffering motivationally effective enhances epistemic links with other people, and allows suffering to have value along these other dimensions.

There are a number of important ways in which social cognition of pain and suffering can have value, both for the individual who suffers, and for others who become aware of this suffering. Let us take these in turn. In one sense, the idea that pain and suffering have value for the individual *via* social cognition should be readily apparent, if we consider that others can help us to attain the goals of avoidance and restoration. In order for this to occur, then those who are suffering have a need to communicate the fact that they are suffering to others. Now a simple way in which communication of the fact that we are suffering can have value is if others are the source of threat or danger: here an individual might communicate to another that she is hurting him, physically or emotionally, and thereby make the threat

cease. Another way that this can happen is when others intervene to remove the source of threat to the individual, as a result of becoming aware that the individual is in pain: one everyday case is where the people rendering assistance are the parents of a child who is suffering. In these cases, although the individual is in some sense motivated by being in pain, they are incapable of the appropriate behaviour – in the case of the infant, say – and so must rely upon others to remove the source of the noxious stimuli. Social cognition of pain, and the epistemic uptake of the information that someone is in pain, is important, therefore, in situations where the subject cannot herself (easily) do needs to be done.

Pain also has restorative value *via* social cognition, since others can recognize injury as a result of an individual's pain and suffering, and as a result help the individual to heal and recover. As Amanda C. De C. Williams writes,

for the individual in pain and under threat, or during recovery, who expressed pain in the presence of observant allies, help and protection rendered could be crucial for survival. The skeletons of Neanderthals (200,000 years ago) and those of *Homo erectus* and early *Homo sapiens* (around 100,000 years ago) showed healed major bone fractures (Hamilton 1971, Mithen 1996, Pinker 1994), compatible with receiving help from other humans while the injured party could not fend for him- or herself. (Williams 2002: 444)

What is true for pain is also true for emotional suffering. Earlier I described how guilt can have restorative value, by motivating apologies and reparations – things which, because difficult, a subject might be less inclined to do in the absence of feelings of guilt. But of course apologies and reparations will only be effective if the injured party or parties believe a number of specific things about the subject: for instance, that he is aware and acknowledges the wrongness of what he did; that he is truly sorry for what he has done; that, therefore, his apologies and attempts at reparation are sincere; and the injured party or parties will only believe this if they believe that he feels bad about or suffers over what he did. Suffering here is taken for a condition of recognition and remorse. And the communication of suffering and epistemic uptake of the relevant information is therefore essential for moral repair and restoration: it is only if others believe these kinds of things that the apology and reparations can be accepted and the subject forgiven; and the acceptance of the apology and the for-

giveness of the subject are necessary for the injured party to be restored to where they were before they were wronged, and the subject to have his moral standing in the eyes of others restored. Social cognition of emotional suffering is therefore vital, in this case, for suffering to have restorative value.

How are pain and suffering communicated so that they might have value for the individual in these ways? One method of communication is verbal. However, verbal communication is of no use for pre-linguistic creatures; and verbal communication is less effective, because slower and less reliable, than communication *via* facial expression³. In what follows I'll say a little about facial expression of pain and suffering, comment on the reliability of facial expression for securing protective and restorative benefits for the individual who suffers, and then show how the reliability of facial expression in communicating pain and suffering has benefits for social groups, and possibly in ways that threaten the well-being of the individual. This suggests that the value of pain and suffering depends, to a large extent, on the fact that it is involuntary and beyond a subject's control, but that the capacity to amplify or suppress facial expression of pain and suffering under certain conditions is also important for the subject.

In her survey paper from 2002, Amanda Williams maintains that there is "a distinct and specific facial expression of pain from infancy to old age, consistent across stimuli, and recognizable as pain by observers"⁴. A classic description of the distinctive facial pain expression is given by Darwin: "the mouth may be closely compressed, or more commonly the lips are retracted, with the teeth clenched or ground together [...]. The eyes stare wildly as in horrified astonishment, or the brows are heavily contracted" (Darwin 1872: 70). Williams reports, however, that

the morphology of facial expression in relation to pain does not correspond well to this description. Several studies using FACS (Facial Action Coding Sys-

³ On the first point, Williams writes: "Observers generally trust nonverbal expression more than self-report" (Williams 2002: 442).

⁴ Williams: "The major issues [of the paper] are the extent to which facial pain expression, wittingly or unwittingly, constitutes a reliable communication of pain; the factors influencing suppression and amplification; the issue of simulation of pain expression; and detection and biases affecting observer judgement" (Williams 2002: 441).

tem, Craig 1980; *Craig et al.* 1992; Prkachin 1992b) identify a combination of facial actions that appear to be specific to pain [...]. Core action units (AUs) in adults are brow lowering, cheek raise and lid tighten [...] nose wrinkle and upper lip raise [...] and eye closing. It is better described as a fuzzy set than a prototype. (Williams 2002: 446)

There is consistency of such facial actions across timespan: “Craig (1980) noted strong consistencies in the morphology of facial pain expression from birth through old age, but sensitive to sociocultural norms and immediate social context”. Similarly, “expression appears largely constant across the different experimental pain stimuli of electric shock, cold, pressure, and ischaemic pain” (Williams 2002: 447).

Williams cites evidence that observers rely upon such features when coming to judge that someone is in pain:

The counterpart of a distinctive and specific expression in the individual is its detection and correct interpretation by observers. Judgement of pain in another person relies heavily on facial cues: brow lowering, eye blinking, cheek raise, and upper lip raise account for more than half the variance in ratings. These are used consistently by observers to judge pain in adults and in children (Craig *et al.* 1991; Watt-Watson *et al.* 1990) [...]. There is evidence of reasonably accurate identification of pain expression in adults and infants using the specific facial movements described above.

This is, moreover, a capacity that even young children have: “children too young to use verbal and numerical pain scales are able reliably to use cartoon faces or photographed faces to indicate their own severity of pain, where severity is indicated by eye and mouth shape and depth of nasolabial furrow. The capacity of humans, from a young age, to interpret the pain face seems adequately established” (Williams 2002: 449).

There is, therefore, evidence of a distinctive facial pain expression, and evidence that we can reliably identify this *as* a pain expression. However, a further and important question is whether we can rely upon facial pain expression in order to accurately judge *that* someone is in pain. For of course, the fact that a person is displaying a distinctive pain expression does not mean that she is in pain, since she could be simulating. And by the same token, the fact that someone is in pain does not mean that she will display a pain expression; she could always be suppressing this. There is, nevertheless, some evidence that facial expression is a reliable guide to someone’s pain and suffering; in particular, there is some evidence that if a person is in pain,

then others can tell that this is the case. Suffering can therefore help to secure protection and assistance by being reliably communicated to others via facial expression; in this way the fact that someone suffers facilitates belief that she is suffering, and as a result convinces others that help is needed and that her apologies and reparations are genuine.

The evidence in question is that facial expression of pain is to a large extent involuntary. This can be seen from facial expression of pain in infants. But it is difficult for adults to suppress pain. Moreover, well-known evidence of underestimation of pain on the basis of facial expression is not evidence that people fail to judge that a subject is in pain when she isn't, and in any case balanced by evidence that groups not subject to various sorts of judgement pressures and biases accurately estimate the pain that subjects are in. Let us take these in turn.

The occurrence of pain expression in very young children is suggestive of its involuntary nature. As Williams points out,

Infants from 25 weeks' gestation, despite considerable individual variation, show a characteristic pain face [...] consisting of eyes squeezed shut, brows lowered/bulging, deepening of the nasolabial furrow, and open lips, occurring together, with mouth stretched vertically and horizontally and taut tongue [...]. Facial expression provides the most reliable indicator of pain in the first few months [...]. In children and adolescents whose cognitive impairment precludes the reliable use of verbal or pictorial pain measures, facial expression appears consistent with painful procedures. (Williams 2002: 447)

Pain expression would seem to be similarly involuntary in infants when it comes to particularly intense pain. But even at lower levels of intensity, adults have limited ability to suppress pain expression. Williams writes: "Several studies have used pain patients undergoing clinical examination or executing movements likely to exacerbate pain. In these circumstances, facial expression of pain is detectable despite the instruction to subjects to try to conceal it" (Williams 2002: 449-50). She continues: "In summary, the FACs data are reasonably consistent on the appearance of pain FAUs when subjects attempt to suppress pain, with reduced frequency of FAUs in the upper and lower parts of the face, and of reduced intensity mainly in the lower part" (Williams 2002: 450). Similarly, there was some, although not conclusive, evidence that adults can detect when pain is being

amplified “at better than chance level, in a clinical population (Hadjistavropoulos *et al.* 1996) and in a volunteer population instructed to exaggerate pain (Lanzetta *et al.* 1976)” (Williams 2002: 450). This gives us some reason to think that observers are capable of telling when expression of pain is being moderated, either up or down.

There are, nevertheless, some grounds for scepticism about our ability as observers to accurately gauge pain and suffering. Williams notes that “most judgement studies show ‘underestimation’ of pain in relation to FAUs and the subject’s own pain estimate and this is particularly marked where the judges are clinicians. Underestimation of pain by reference to the sufferer’s rating is widespread among health professionals and staff who care for elderly people” (Williams 2002: 450). But there are reasons for such underestimation, given that health professionals have an interest in not expending valuable resources, which can generate a tendency to think that those displaying facial pain expressions are exaggerating, especially when there is lack of confirming medical evidence of injury. For other groups are not prone to underestimation: “In a study by Prkachin *et al.* (2001), students with family experience of chronic pain showed a closer approximation to stranger-patients’ estimates of their own affective rating of pain than did students with no such experience. This would seem to suggest that exposure to pain improved accuracy, undermining the hypothesis of developed insensitivity. [...] [Moreover] all groups were more accurate at higher levels of pain” (Williams 2002: 451). Moreover, even if there was a general tendency to underestimate pain and suffering on the basis of facial expression, this doesn’t show that facial expression is an unreliable guide to the fact that someone is suffering. And it is this fact, we might think, that is essential to ensuring that the person who suffers gets *some* benefit due to social cognition of their suffering. Many other factors are relevant, of course. All I am concerned with here is the thought that suffering raises the likelihood of help and assistance through being communicated by facial expression, and where others are in general reliable at judging that someone is suffering as a result. That, in my view, is all that is needed to show that the protective and restorative value of suffering is facilitated through social cognition and epistemic uptake of this information, and that suffering has an important social-epistemic element.

In the final section I’ll explore additional ways in which suffering can be valuable in a social context. One of these is potentially benefi-

cial to the person who suffers; the other, however, is potentially damaging to their interests.

3.

I have explained how suffering can have value for the person who suffers, *via* facial expression which communicates this suffering to others, and which under certain conditions – in particular, where there is epistemic uptake of this information – facilitates protection, avoidance, and repair. But the suffering of an individual can also have value to the group itself, especially if the suffering is caused by objects or events that pose a threat to the wider community. Social cognition of individual suffering can thus have group or social value. Williams writes: “group-living allies need to detect pain in any one of their members when survival of all depends on the effectiveness of each” (Williams 2002: 445). Information that one of the group is suffering is therefore of protective and survival value for the group as a whole. Insofar as facial expression of suffering communicates this information, then whilst the suffering of the individual is potentially damaging to the individual and therefore the group, social cognition of the individual’s suffering is of significant value to the group. This is an example of a particular, specific value to some group. But the point is not confined to groups of humans that are so closely-knit that the survival of all depends upon the welfare of each. Instead, suffering has more general communicative value. Williams continues:

The benefit to allies who receive information about potential danger is exemplified by the countless examples across species of alarm calls; and in humans and some primates, vicarious learning from fear signals of conspecifics has been well demonstrated (Mineka, Cook 1993; Vaughan, Lanzetta 1980) [...]. Although there are exceptions, where information about painful danger is not specific enough for subsequent avoidance (e.g., slow-developing inflammatory responses), attention to cues associated with pain would generally be advantageous. (Williams 2002: 444)

Once again we can see that suffering’s value would seem to be a function of the involuntary nature and reliability of facial expression: it is clearly important for vicarious learning, the reliability of alarms, and the group survival that the group can trust in the information received from the individual who (apparently) suffers. And the more fa-

cial expression of suffering is outwith the subject's control, the more the group can rely upon the relevant cues as good evidence of threats and danger. So not only is the involuntariness of expressions of suffering important for the individual to receive help; it is important for the group to benefit by gaining important information. The fact that our pain systems are, to a large extent, not under our voluntary control would therefore seem to be vital for securing a number of valuable ends. As we have seen, our pain system provides us with strong, insistent, and irruptive motivations to act so as to protect and repair ourselves. But our pain system, through generating distinctive facial expression, communicates with others and enlists their help and protection in a way that is also, to a large degree, beyond our control (completely when we are infants; partially when adults). This benefits the individual. It also benefits those who help, at least to the extent that they are not cheated out of resources. And it provides an additional benefit to others, since they now get information about their evaluative landscape – for instance, about potential threats and dangers – that might have been unavailable in the absence of the individual suffering. The involuntariness of pain and suffering ensure that they are effective motivators and efficient communicators.

However, it is this feature – the fact that pain and its facial expression are involuntary and outwith, to a large extent, our control – which indicates that suffering can have value due to social cognition but in a way that is potentially damaging to the person who suffers. For there are, as Williams puts it, “likely benefits to an antagonist competitor or predator in detecting pain in the other” (Williams 2002: 444). Insofar as such pain and suffering partially incapacitates the sufferer, then a competitor or predator is at an advantage: and finding out about this advantage, via facial expression of pain and suffering, can therefore have considerable value to the rival, since she is now enabled to press advantage by a variety of means. Communication of pain to others, via facial expression, is a signal for help and assistance; but it is also, by the same token, a signal of vulnerability.

This fact highlights a tension between the need to express, and the need to suppress, pain and suffering, depending upon the context. There are strong pressures for observers to be able to accurately gauge another person's pain and suffering. If they are part of the subject's group and non-competitive and non-predatory, then a capacity to tell when someone is suffering is valuable because it enables them

to know when assistance is needed, and renders them at the same time less susceptible to cheating and exploitation. If, on the other hand, an observer is antagonistic and seeking to prey on and exploit others, then a capacity to tell when someone is suffering and to this extent weakened provides a competitive advantage. At the same time, the individual who suffers faces pressures that pull in different directions: insofar as help and assistance require or are helped by sincere expression on suffering, then there is good reason for the subject not to suppress his suffering; for this would lessen the likelihood that he gets the assistance he needs. But at the same time, there is pressure for him not to advertise the fact that he is suffering and to this extent vulnerable: for then he opens himself up to potential exploitation by competitors.

This raises important and interesting theoretical practical questions about the extent to which a subject can control expression of pain and suffering, about the extent to which observers can accurately judge when someone else is suffering, and about the kind of skills and understanding someone who suffers must have in order to know when to control, suppress, or amplify their feelings. But it also illustrates what I want to be my main point here: that any attempt to understand the value of suffering must be, to a large degree, an attempt to understand the interplay of personal and social values, and the extent to which the suffering of an individual and the social cognition of that suffering interact.

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