# Tracing the Routes to Empathy: Association, Simulation, or Appraisal?

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**I. Introduction: The Case of the Struggling Climber**

Empathy has been defined as the capacity to 'feel with' either a target person or film character, to experience emotions which are more appropriate to the situation of the 'other' than the 'self'.[1] In a discussion of empathy, for instance, the philosopher Ian Ravenscroft describes the time he stood at the foot of a mountain and witnessed a rock climber 'struggling with an overhang', about to fall to his death.[2] Ravenscroft states that he 'vividly experienced' what it was like to be in the climber's situation. The closest approximation to a filmic counterpart, perhaps, would be viewing Kevin Macdonald's *Touching the Void* (2003), a documentary about two British men who successfully climbed a mountain in the Peruvian Andes in 1985, before facing a series of equivalent ordeals on their descent. Why is it plausible that we respond emotionally to the fate of the anonymous climber in the first example, and the fate of either Joe Simpson or Simon Yates in the second, as people who exist separately – in physical, kindred, and platonic terms – from ourselves?

*Tracing the Associative and Simulative Routes to Empathy*

Theorists tend to propose two basic routes to empathy.[3] The first proposed route can be described as the 'associative route' (this route is briefly acknowledged by Ravenscroft). In the case in question, both the climber and their situation are possible sources of emotional stimuli. On the one hand, the most obvious examples of personal cues would be provided by the climber's facial, bodily, and vocal expressions of emotion (fear, pain, distress, and the like). On the other hand, potential candidates for situational cues would include the actual causes of the climber's emotion; namely, the overhang and the stomach-churning drop itself. Crucially, the emotional impact of both sets of cues can be explained in broadly associative terms: through a lifetime of experience and the well-known Pavlovian process of classical conditioning, the cues in question become associated with certain types of emotional response – and certain types of emotional memory – to the point where the mere presentation of a cue is capable of eliciting a response in its own right. It should be noted that many commentators also suggest that we have a tendency to 'affectively mimic' the facial expressions and bodily movements of the target person. If we affectively mimicked, say, the climber's facial expression of fear, the resulting 'facial feedback' could be understood as an 'internal' somatic cue which operates in the associative sense described.

The second route to empathy can be described as the 'simulative route' – the focus of both Ravenscroft's and our concern. Traditionally, empathy theorists have appealed to the cognitive activities of 'perspective-taking' and 'role-taking'. Recently, however, our understanding of these activities has been developed by a debate in the philosophy of mind.[4] Advocates of *theory theory* (TT) would propose that we gain an understanding of the climber's mental and emotional states by employing some sort of 'folk psychological theory'; that is, we (tacitly) theorise about how the climber's beliefs and desires

relate to his perceptions and behaviours, and we draw conclusions about the type of emotion that the climber must be experiencing. In contrast, advocates of *simulation theory* (ST) would propose that we achieve the aforementioned understanding by employing our capacity for 'mental simulation'; that is, we simulate the climber's beliefs and desires, feed the resulting states into the appropriate system of the mind – possibly running in an 'offline' fashion – and then see what emotions the system outputs.[5]

The TT-ST debate is a complex one. With respect to behaviour prediction, some sort of 'mixed theory' seems plausible: sometimes we theorise, sometimes we simulate, and sometimes we do both. When it comes to empathy, however, simulation theory seems to have the upper hand on theory theory. Why? Ravenscroft rejects theory theory on the grounds that there is an 'unbridgeable gap between theory and experience'; it seems reasonable to say that we are capable of theorising about the climber's emotions without experiencing those emotions ourselves. Simulation theory is more plausible, for the activity of simulating the climber's emotions would seem to lead to some sort of emotional experience (almost by definition).

*Introducing the Appraisive Route*

In this paper, I will argue that our emotional responses to such a case are perhaps best understood in the context of a multi-level model of the emotion system which postulates two basic routes to emotion (empathetic or otherwise) – the 'SPAARS' approach advanced by psychologists Mick Power and Tim Dalgleish will provide us with a possible framework.[6] The first of these routes is the same as before. It is not my intention to challenge the role of associationism for it seems entirely plausible that emotion cues operate in the associative manner described. The point of contention concerns the nature of the second route. In focusing their energies on simulation theory (or variants thereof), most empathy theorists – including Ravenscroft – overlook what strikes me as being a highly plausible alternative; this alternative can be considered under the rubric of *appraisal theory* (AT).

Imagine being in the place of the unfortunate climber. It seems obvious reasonable to say that if you were really staring death in the face in the manner described, you would not need to rely on either emotion cues in an associative sense or exercises of the imagination in a simulative one. Rather, you would *cognitively appraise* the situational meaning with respect to your goals and concerns, and you would respond fearfully. And we should not think of this appraisal process as being either slow or deliberative in nature. As the appraisal theorist Richard Lazarus states: 'very rapidly, perhaps even simultaneously, we draw on a variety of stored information about the environment, personal variables, and their relational meaning. How this is done remains something of a mystery, but we must indeed do something similar to what I have described, or else the emotion process would not be adaptive.'[7]

For some reason, Ravenscroft does not acknowledge this insight or carry it over into his account of empathy. To return to a third-person perspective, however, what I am suggesting is that as an observer, we would appraise the climber's situation in a similar fashion to the climber himself. Although the climber can be classified as being 'in danger' whereas the observer is 'not in danger', the distinction between the climber's perspective and the observer's perspective is not a question of all-or-nothing. The two perspectives overlap in a perceptual sense at the very least: for instance, the climber may see their arms straining to hold onto the overhang from a distance of a few centimetres, whilst the observer may see this action from a distance of many tens of metres. (In the case of a film such as *Touching the Void*, the perceptual perspectives of the climber and the observer overlap to an even greater extent: not only do we see the climber's arms straining to hold onto the overhang from close up; we are also presented with the vertiginous view from the top of the cliff.) Considering this perceptual overlap, it is plausible that the observer would 'draw on' the personal and environmental variables in the automatic manner described by Lazarus. Of course, the observer's automatic

• *Touching the Void* (2003).

'primary appraisals' would be counter-balanced by the more reflective 'secondary appraisals' which would effectively say something along the lines of 'Fortunately, it's not you up there!' In light of this, the end-result would be a deeply harrowing, though ultimately vicarious, emotional experience.

## II. Filmic Empathy: The Case of the Protective Son

Having concentrated on a case of real world empathy, I would like to turn to a case of filmic empathy. And given that theorists tend to agree on the role of the associative route, I would like to concentrate on emotional appraisal as some sort of alternative to emotional simulation. What type of film sequence, however, should we consider? When considering situations presented by fiction film, it is often difficult, if not impossible, to disentangle the effects of appraisal from those of association on the one hand and simulation on the other. For this reason amongst others, the following discussion will be based on an example of 'pure cinema' from Alfred Hitchcock's classic *Psycho* (1960).

### *A 'Natural Instinct'*

The storyline of Hitchcock's *Psycho* is well-known. Marion Crane (played by Janet Leigh) works in a real estate office in Phoenix, Arizona. In the opening scene, Marion meets her lover Sam Loomis (John Gavin) in a hotel room during her lunch break; through expositional dialogue, we learn that the two are forced to conduct their relationship in secret and that they cannot marry until Sam pays off his father's debts and his ex-wife's alimony. When Marion returns to work later that afternoon, her employer entrusts her to deposit $40,000 at the bank. With visions of a new future, Marion decides to abscond with the money and join Sam at his hardware store in Fairvale, California. After driving for many hours – darkness drawing in and rain lashing against the windscreen – she pulls off the highway and checks into a motel. The proprietor, of course, is Norman Bates (played by Anthony Perkins), a nervous young man who lives with his old and domineering mother. The scene of interest is not, however, the notorious shower scene – in which Marion is unexpectedly murdered by an unknown assailant (apparently Norman's mother) – but a relatively low-key scene which follows soon after. Torben Grodal briefly discusses this scene in order to illustrate his theory of cognitive identification, empathy, and motivation.[8] The following account, though established independently of Grodal, will develop certain aspects of his theory.

After Marion is murdered, Norman discovers her body lying on the bathroom floor. In a celebrated series of interviews with Hitchcock, the French New Wave director François Truffaut makes the following observation:

> One intriguing aspect is the way the picture makes the viewer constantly switch loyalties. At the beginning he hopes that [Marion] won't be caught. The murder is very shocking, but as soon as [Norman] wipes away the traces of the killing, we begin to side with him, to hope that he won't be found out.[9]

After wiping away the traces of the killing and placing Marion's body into the boot of her car, Norman drives to a nearby swamp. In the first shot of the given scene, Norman pushes the car into the water. From this point onwards, we are presented with a series of shot/reverse shot couplets, beginning with a shot of Norman chewing gum whilst nervously clasping his hands in front of his mouth (shot 2), followed by a POV shot of the car slowly sinking (shot 3), and so on. In shot 9, the car stops sinking, a fact which is corroborated by the sudden absence of bubbling noises on the sound track. Norman stops

chewing (shot 10), and after the camera confirms that the car is stationary (11), he looks quickly around to see if anyone is nearby (12). Following Truffaut's previous remark, Hitchcock describes our subsequent emotional response as follows:

> Earlier, we talked about the fact that when a burglar goes into a room, all the time he's going through the drawers, the public is generally anxious for him. When [Norman] is looking at the car sinking in the pond, even though he's burying a body, when the car stops sinking for a moment, the public is thinking, 'I hope it goes all the way down!' It's a natural instinct.[10]

In shot 13, the car begins to go 'all the way down' – this movement is corroborated by the sound track – and in the subsequent reaction shot (14), Bates begins to smile. In shot 15, the car finally disappears; Bates smiles fully (16) and the scene fades out on the image of the still swamp (17). Given our previous anxiety, it is reasonable to assume that the disappearance of the car is accompanied by a feeling of relief.

### *Eliminating Association from the 'Empathy Equation'*

How should we understand the 'natural instinct' which Hitchcock describes? Given that our 'loyalties' have been resolutely with Marion for the first quarter of the film and Norman's attempt to dispose of her body is an example of a criminal act, why do we feel anxious when the car stops sinking and why do we experience a sense of relief when the car 'goes all the way down'?

• *Psycho* (1960)

In order to trace the appraisive route to empathy, our first task will be to 'rule out' the influence of the associative route as far as possible. In order to fully understand the status of the associative route, we need to turn to the SPAARS framework advanced by Power and Dalgleish and introduced previously (see Figure 1). According to this framework, the *analogical level* of the mind comprises our perceptual systems: these systems analyse the visual and auditory stimuli in our environment, thereby producing visual and auditory representations which are 'analogous', in significant respects, to their referents. Significantly, the *associative level* of the mind is capable of connecting these representations to a whole range of emotional responses; some of these associative connections have been 'biologically prepared' over the course of human evolution (as in the well-known cases of snake and spider fear), whilst others are established during the course of an individual's lifetime (through a wealth of personal and sociocultural experience).

The key, then, to ruling out the influence of the associative route is to ascertain that the scene in question does not present any visual and auditory stimuli which (plausibly) could be associatively connected with the emotional response of anxiety. To put it another way, we need to control the independent variables by attempting to remove so-called 'emotion stimuli' from the empathy equation. This is where Hitchcock's status as a master of 'pure cinema' comes into play. To begin with, the scene is devoid of dialogue and potentially emotive elements of film style. In particular, it is a testament to Hitchcock's intuitive understanding of human psychology – and his skill as a film-maker – that he realised that Bernard Herrmann's famous musical score was not required in order to heighten the scene's tension. (Interestingly, in

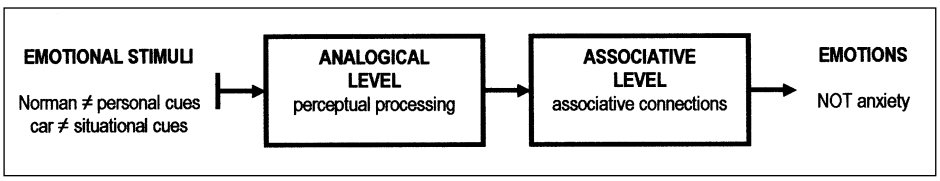
the 1998 remake of *Psycho*, Gus Vant Sant chooses to add an adaptation of Herrmann's musical score written by Danny Elfman.)

More specifically, the scene can be analysed in terms of two types of emotion cue. With respect to the scene's *personal cues*, Norman 'displays' facial and bodily expressions of anxiety. One could argue, however, that our empathetic response is not dependent on these facial and bodily expressions. First, they are not sufficiently accentuated to elicit a strong emotional response in the viewer, either directly as emotional stimuli or indirectly via affective mimicry and facial feedback. Second, there is a five second delay between the sound of the car ceasing to sink in shot 9 and Norman's overt behaviour in shot 12; this delay provides adequate time for an emotion-related appraisal process to go through a sufficient number of 'cycles'. If anything, then, Norman's behaviour in shots 10 and 12 serves merely to confirm that the car has, in fact, stopped sinking, and that this event is, indeed, of emotional significance. What about the scene's *situational cues*? Perhaps the sight of a half-submerged car – with its possible associations with the themes of crashing and drowning – could be classified as an emotional stimulus in its own right. One could argue, however, that this is stretching the notion of an 'emotional stimulus' too far. What would have happened, for instance, if we had *not* known that Marion's body was in the boot of the car?

### III. Appraisal as an 'Alternative' to Simulation

If our natural instinct to feel anxiety 'with' the character of Norman Bates is not due to association, then how does it come about? Significantly, the scene in question seems to leave something to our imagination; unlike Van Sant perhaps, Hitchcock does not tell us how we should feel when the car stops sinking. In light of this, one could argue that in order for us to read Norman's mind, we must 'imaginatively project' ourselves into his shoes. From the perspective of film theory, Gregory Currie argues that imagination can be spelt out in the more precise terms of mental simulation.[11] According to simulation theory (ST), we simulate Norman's belief that he is attempting to dispose of a person's body and we simulate his desire to cover up a crime. Having done this, we 'feed' our pretend beliefs and desires into our decision-making system – running in an offline fashion – and observe the result. Two aspects of simulation theory are of particular significance.[12] First, Currie argues that the claim that 'imagination is simulation' is not an instance of conceptual analysis akin to the claim that 'a bachelor is an unmarried man'; rather, the claim is in line with the essentialist identification that (apparently continuous) water actually consists of (discontinuous) $H_20$ molecules. Second, Currie argues that 'simulation, if it really does help us to understand the minds of others, must be done unintentionally, mostly at a subconscious level'.

Whereas our capacity for mind-reading can be explained in terms of simulation in general, our capacity for empathy must be explained in terms of *emotional simulation* in particular – a type of simulation described by Murray Smith in his model of character engagement.[13] Following this qualification, our response to the scene is less a case of our simulating Norman's decision-making and more a case of our simulating his emotional states (anxiety, concern, and the like). In order to achieve the necessary switch, the decision-making system traditionally referred to by theorists must be replaced with an emotion-




• Figure 1: The SPAARS framework (part A).

producing system of some sort. Crucially, however, we can think of the emotion-producing system as operating in an 'unintentional' and 'subconscious' fashion.

Although the imagination/simulation account of empathy is plausible at first glance, I would argue that we must search for an alternative for at least two possible reasons. First, the notions of 'imagination' and 'simulation' are *imprecise*. Some theorists note that appeals to imagination are often 'a signal that explanation has come to an end', whilst other theorists note that the simulative descriptions of manipulating pretend beliefs and desires operate at a 'metaphorical level'.[14] Second, the notions of 'imagination' and 'simulation' are *unnecessary*. In many cases from the world of film, we do not need to imagine or simulate anything because the appropriate information is already presented to us and can be processed in a relatively direct fashion.[15] In order to fully understand the status of appraisal theory (AT) as a suitable candidate, we must consider the debate between both simulation theory (ST) *and* theory theory (TT): that is, as empathisers, do we simulate other people's mental states, do we theorise about their mental states, or do we appraise their situations (as if they were our own)? As we will see, many of the clear-cut distinctions between simulation theory and theory theory begin to disappear in the light of appraisal theory: appraisal comes somewhere in between simulation and theory, perhaps combining and reconciling the basic elements of both.

*How Does Simulation (Appraisal) 'Begin'?*

How should we understand our capacity to empathise with Norman? In order to answer this question, it makes sense to address the first of three arguments against simulation theory: namely, *How does simulation (appraisal) begin?*[16] Advocates of theory theory would argue that our capacity to simulate Norman's emotions depends on us possessing some sort of folk psychological theory about what those emotions actually are. This type of argument is tackled by simulation theorists Jane Heal and Robert Gordon. According to Heal's *direction-of-gaze argument*, the theory theorist misinterprets the 'direction' of the simulator's 'gaze': the simulator 'is not looking at the subject to be understood but at the world around that subject'.[17] From our perspective, Heal's claim that 'It is what the world makes the replicator think which is the basis for the beliefs he attributes to the subject,' can be translated as follows: 'It is how the replicator *appraises* the world which is the basis for the *emotions* he attributes to the subject.' Gordon makes a distinction between two types of imaginative projection.[18] 'Total projection' is the method we use when we are already in the target person's shoes; by virtue of this fact, it can be classified as 'the *default mode* of simulation'. 'Partial projection', on the other hand, is the method we use when our shoes occupy a slightly different place to those of the target person; it may involve the 'recentring' of our 'egocentric map'.

How should we understand these two arguments with respect to the scene from *Psycho*? First, are we directing our gaze at the character of Norman or his situation? Second, which type of imaginative projection is most appropriate? Starting with the first question, Grodal's theory of cognitive identification suggests that we are directing our gaze at Norman himself. With respect to the scene from *Psycho*, Grodal proposes that: 'The viewer has cognitively identified himself with [Norman] over a longer period of time, and has, during this period, been "forced" to "actualize" the emotions which are presupposed in order to give coherence and meaning to his acts.'[19] It is unclear, however, how such identification actually comes about.

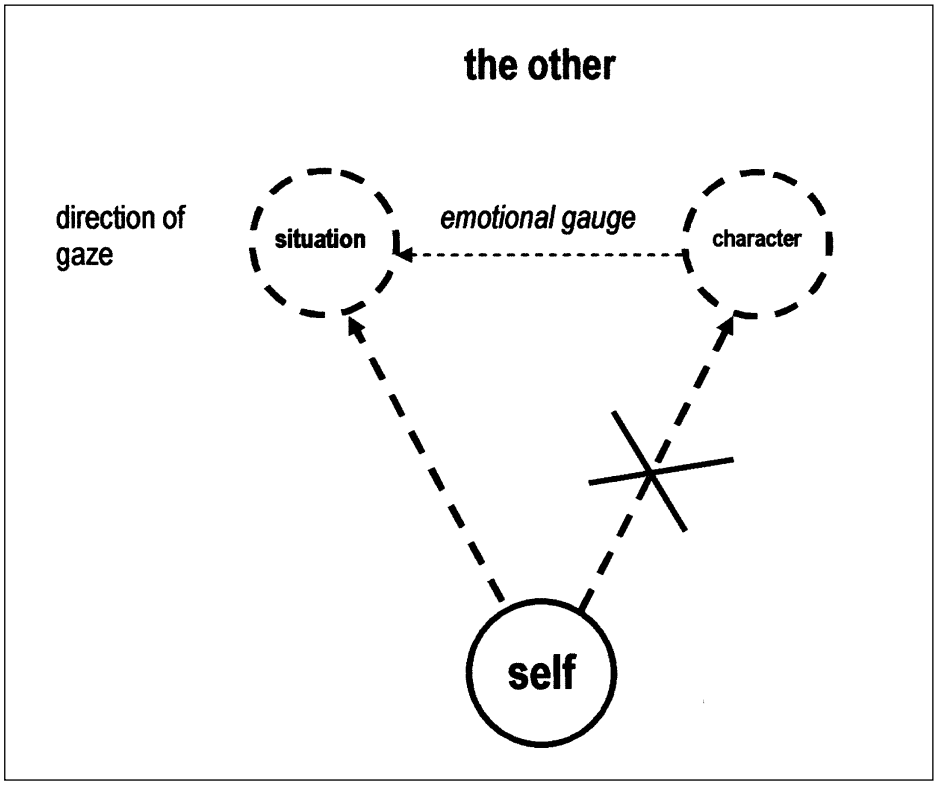
This point brings us to the second question. According to Smith's model of character engagement, total projection is sufficient, for we are already 'aligned' with Norman in terms of two 'interlocking functions'.[20] With respect to the function of 'spatio-temporal attachment', Hitchcock allows us to witness Norman's attempts to 'wipe away the traces of the killing' in a sequence which precedes the scene in question: for instance, we see Norman laying the shower curtain on the bedroom floor as a shroud

• *Psycho* (1960).

for Marion's body, before washing the blood off his hands in the bathroom sink, removing the blood from the bath, walls, and floor with a mop, and drying the tiled surfaces with a towel. Although the camera often keep its distance – framing Norman in tableaux – it occasionally moves in for a better view of the action: notable examples include close shots of Norman washing his hands and Norman mopping the bath. With respect to the function of 'subjective access' – and the role it plays in the scene itself – Hitchcock presents us with a series of shots from Norman's optical perspective; namely, the shots of the car slowly sinking described previously. Smith argues against the popular conception that the POV shot is the 'essence' of subjective access; that is, access to a character's psychology.[21] His argument can be supported, perhaps, by pointing out that if the POV shot gives us (direct) access to anything in the scene under discussion, then it is to the *situation* in which the character of Norman finds himself.

Significantly, a combination of Heal and Gordon's simulation account with Smith's model of character engagement suggests a reversal of the type of explanation which might be offered by Smith (and Grodal) with respect to the scene from *Psycho*. The direction-of-gaze argument implies that we do not primarily engage (identify) with the character of Norman; rather, we primarily engage (identify) with Norman's situation (see Figure 2). Despite the shift from character engagement to *situational engagement*, Smith's structure of alignment serves to clarify that Norman's situation does not end with the environment which immediately surrounds him – the swamp in front or the night-time sky behind – but includes his narrative up to and including the moment when the car stops sinking. In summary, our capacity to empathise with Norman does not begin with us employing a folk psychological theory about what people usually think and feel when they find themselves in the type of situation in question (pro theory theory). Nor does it begin with us making adjustments in our imagination by 'recentring' our 'egocentric map' (pro simulation theory). In the Ptolemaic universe of the cinema, we remain stationary whilst the filmic world revolves around us: Hitchcock, as manipulator of the filmic world, effectively performs the necessary psychological operations on our behalf.

Considering the shift of emphasis, what role does the character of Norman actually play? Noël Carroll would argue that we 'assimilate' the situation as a whole, including both the object of the character's emotions and the character themselves.[22] But how should we understand the notion of 'assimilation' at play here? Ed Tan suggests that '[t]he film viewer tries to construct situational meaning as perceived by the character, cued by the latter's expressive behaviour and by what is known about the situational context'.[23] In light of this suggestion, it is plausible that Norman functions as a kind of 'emotional gauge' for measuring the appropriateness of our simulations (appraisals). If, for instance, he had burst into fits of hysterical laughter when the car stopped sinking, then we would have had cause to *re*appraise the situational meaning in question. (Norman may also serve as a 'target' for our causal attributions – this point will be developed below.)




• Figure 2: Model of situational/character engagement (part A).

*How Does Simulation (Appraisal) Proceed?* Having established that the empathetic process begins with Norman's situation as opposed to his character, how should we understand the process itself? In order to answer this question, we must address the second and third arguments against simulation theory. *Is simulation (appraisal) theory-driven?* Even if a folk psychological theory is not required to 'start' our simulation of Norman's situation, an advocate of theory theory could still argue that a folk psychological theory is required to 'drive' our simulation once it has begun. *Is simulation (appraisal) cognitively penetrable?* In a related fashion, if our empathetic (simulative) capacity is dependent on a folk psychological theory, then it should be cognitively penetrable with respect to any relevant gaps in our beliefs and knowledge about the world.

Both of these arguments can be addressed by returning to the SPAARS framework (see Figure 3). Given that the scene does not present us with obvious examples of emotional stimuli, it does not operate (primarily) via the analogical and associative levels of the mind. Instead, the first stage of the empathetic process would involve the *propositional level* of the mind where, to quote Power and Dalgleish, relevant 'models of the world, self, and other' would be activated. From our perspective, the important question is, do these models make reference to 'theory' in any meaningful sense? Some commentators define theory by drawing literal comparisons with science; if the models in question were to adhere

to the strict logical and empirical standards of scientific theories, then it is likely that the answer would be in the negative.[24] Significantly, however, other commentators offer more modest definitions of theory based on a more realistic conception of human psychology; given that the models in question are equivalent to 'internally represented knowledge structures' which are both 'sentence-based and rule-based', then the answer is more likely to be in the positive.[25] Relevant models of 'the world' include knowledge structures of the judicial system in operation in Western societies, whilst relevant models of 'the self' include knowledge structures of what it is to attempt to cover up either a crime or a misdemeanour. It seems reasonable to say that when these models are centred on 'the other', they constitute some sort of folk psychological theory about how that person's beliefs and desires relate to their perceptions and behaviours.

The activation of these various models or knowledge structures would result in an *interpretation* of the situation's meaning: for instance, 'There is a danger that Marion's body may be discovered.' Although this interpretation would occur in an automatic, mandatory fashion, it would be 'cognitively penetrable' in the sense that it would be sensitive to any changes in our (normally accessible) beliefs and knowledge. This point is best illustrated by a simple thought experiment: if, for some strange reason, you consciously acquired the false belief that half-submerged cars were such a commonplace occurrence in Californian swampland that they never provoked investigation by the police, then your interpretation of the situational meaning would be less likely to result in a negative conclusion. (Crucially, this interpretation would be 'cold' and 'non-emotional' in nature; that is, it would not be capable of generating an emotional response in its own right.)

Given that the empathetic process seems to involve theory in some meaningful sense, we need to address the main argument against theory theory: namely, *How does folk psychology (appraisal) bridge the gap between theory and experience?*[26]

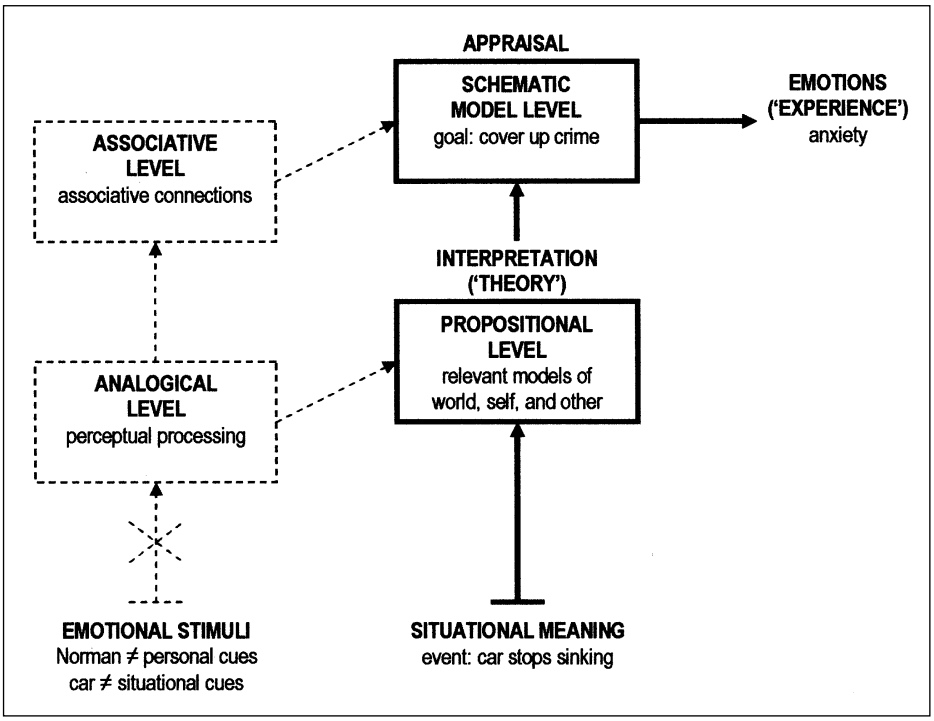
Once again, this argument can be addressed by appealing to the SPAARS framework. According to this framework, the second stage of the process would involve the *schematic model level* of the mind. Keith Oatley and Philip Johnson-Laird's cognitive theory of emotions proposes that emotions occur when there is a 'juncture' (i.e., a critical moment) in either a goal or a plan: for instance, fear occurs when a self-preservation goal is 'threatened', disgust when a gustatory goal is 'violated', anger when an active goal is 'frustrated', sadness when a significant goal is 'lost', and happiness when a significant goal is 'achieved'.[27] In light of this, the 'cold' and 'non-emotional' interpretation would be related to our self-preservation goal to produce a 'hot' and 'emotional' *appraisal* of the situation; we can think of this appraisal as effectively adding an exclamation mark to the statement cited above. The end-result would be the generation of an adaptive emotional response (namely, anxiety) with its associated physiological, behavioural, and subjective components.

The next important issue to consider is how the relevant goal structure comes to be activated in the first place. Significantly, the cleaning sequence described previously lasts for over eight minutes. One can speculate as to why Hitchcock devotes nearly one-tenth of the film's running time (excluding the credits) to a sequence which does not clearly advance the film in terms of either spectacle or narrative: for instance, Greg Smith describes Norman's cleaning efforts as 'an extraordinarily mundane sequence of action'.[28] There are two possible explanations. The first explanation has a degree of historical specificity: it is plausible that Hitchcock wanted to allow the unsuspecting viewer of 1960 to recover, at least partially, from the emotional shock of the shower scene, before introducing new twists and turns in the narrative. The second explanation, however, is more relevant to the project in hand: following Truffaut's remark, it is plausible that Hitchcock wanted to give the viewer, from both then and now, a sufficient opportunity to 'switch' their 'loyalties' from Marion to Norman.

How should we understand this switching of loyalties? Torben Grodal explains the switching in

terms of cognitive identification, proposing that we identify with Norman because there is no other character for us to identify with: he notes that after Marion is murdered, 'a vacuum is created which the young man [Norman] partially fills'.[29] Murray Smith would spell out these identification relationships in the more precise terms of character engagement.

The appraisal account suggests a different explanation. In the real world, we only tend to have (close) perceptual access and (sustained) spatio-temporal attachment to our own emotional narratives. In light of this, when we focus exclusively on, say, a (goal-directed) action for a reasonable period of time, it tends to be an action that *we*, ourselves, are performing. Although the cleaning sequence may be mundane in terms of content, the fact that we are exposed to that content is anything but: the close shots of Norman washing his hands and mopping the bath provide us with an optical approximation of the views we would have if we were washing our own hands or mopping the bath ourselves. First, it is plausible that certain levels of the mind/brain do not make a distinction between the proposition, '*Norman* is wiping away the traces of the killing,' and the proposition, '*I* am wiping away the traces of the killing.' Second, in the way that some psychologists propose that emotional contagion occurs when we are allowed to witness another person's facial expressions, perhaps something like 'goal contagion' occurs when we are allowed to witness another person's actions: this process of contagion results in the activation of the goal structures which correspond to Norman's situation (as a person attempting to cover up a crime), and the de-activation of the goal structures which correspond to Marion's situation (as a person on the run from a crime).

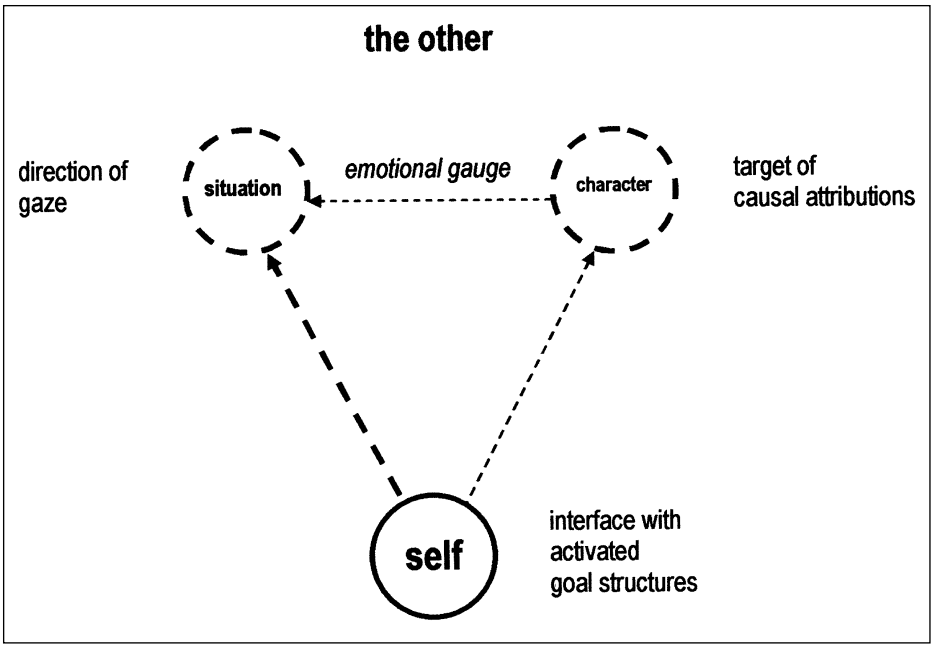



• Figure 3: The SPAARS framework (part B).

*How Does Simulation (Appraisal) 'End'?*

The sceptic could argue that our happening to be in the same emotional state as the character of Norman is not sufficient for either simulation or empathy: somehow, we must *transfer* our emotional states to the man himself.[30] In the case of behaviour prediction, Robert Gordon states that the assumption that such a transferral process is necessary is based on a fallacious argument from analogy which requires that: first, we introspect our mental states; and second, we have theoretical knowledge about which of those mental states are likely to be 'shared' by the target person.[31] Gordon's objections to the first point concern the difficulties of introspecting propositional attitudes; his main objection is to the second point which 'threatens to collapse the simulation theory into a form of theory theory'. In short, Gordon argues that the theorists who assume that a transferral process is necessary do not account for the difference between simulating *oneself* in the target person's situation and simulating the *target person* in that situation: if we 'transform' ourselves into the target person by 'recentring our egocentric map', then a subsequent transferral process – 'from me to you' – is simply not required. (As we have seen, Hitchcock effectively performs the psychological operation of 'recentring' on our behalf.)

Despite these arguments, understanding the potential shift from the type of situational engagement described previously to the type of character engagement originally described by Smith requires us to take the notion of a transferral process seriously (see Figure 4). First, whilst the introspection of our propositional attitudes may or may not be problematic, it is plausible that we have some sort of access to our own emotional responses; this access can be accounted for in terms of bodily feedback, and so forth. Second, according to research on attribution theory, we tend to causally attribute our emotional responses to the most salient objects (or 'targets') in our environment.[32] From a perceptual perspective, it is plausible that these objects are both well-lit and mobile, whilst from an anthropomorphic perspective, it is plausible




• Figure 4: Model of situational/character engagement (part B).

that these objects are fellow human beings. When, therefore, we sit in a dark and static theatre and find ourselves being presented with repeated close-ups of a character, it stands to reason that the character stands out from both their environment and our own. This brings us to the following conclusion with respect to the case of filmic empathy. Even though, as 'appraisers', we are directing our gaze at Norman's situation rather than at his psychology, as 'attributors', we (mis)attribute our feeling of anxiety to Norman's psychology rather than to either his situation as a character or our situation as a viewer. The end-result is that we label our feeling of anxiety as 'feeling with' his character.

## IV. Conclusion

Having described the appraisive route to empathy as a possible 'alternative' to the simulative route, I would like to conclude this paper by showing how the appraisal account relates to, and possibly improves upon, its simulative counterpart.

### *Simulation as Appraisal*

The relationship between simulation and appraisal can be understood by making the type of essentialist identification described by Currie and cited previously. The essentialist claim that 'imagination is simulation' can be taken one step further with respect to *emotional simulation* in particular. If our simulation of Norman's emotional states operates in a largely 'unintentional' and 'subconscious' fashion, begins with the situation itself, and successfully bridges the gap between theory and experience, then it can be spelt out in the more literal and concrete terms of emotion-related appraisal.

According to the appraisal account, it is not necessary for us to say that we 'imaginatively project' ourselves into the place of Norman, thereby simulating the appropriate beliefs and desires. Rather, we need say only that Hitchcock's film presents us with a highly select stream of audiovisual information and we automatically process this information. Generating the 'pretend belief' that one is attempting to dispose of a person's body is equivalent to processing audiovisual information which stipulates that a body is being disposed of. Here, the propositional content of the belief is provided by the given information, whilst the attitudinal element is implicit in the processing of this information. Similarly, generating the 'pretend desire' to, say, cover up a crime is equivalent to processing the information in question with respect to certain goal structures which, through the function of spatio-temporal attachment, are already activated by the time the car stops sinking. Here, the propositional content of the desire is provided by the corresponding goal structure, whilst the attitudinal element is implicit in the activation of this goal structure. Although the appraisal account still leaves us with a potentially intractable problem from an information-processing perspective, it does not burden us with an unreasonable work load; the task of simulating the extraordinary is effectively undertaken by the film itself, whilst the task of appraising the extraordinary is automatically undertaken by psychological mechanisms which are already in place.

### *Simulation Redefined*

The main challenge to the essentialist claim that emotional simulation can be spelt out in terms of emotion-related appraisal can be described as the 'argument from design'. Although in retrospect it seems reasonable for us to refer to our emotional states as isomorphisms of Norman's emotional states, the sceptic might argue that the term 'simulation' implies something altogether stronger: namely, that the emotional states in question have been brought about *in order to* replicate those of Norman. The question, then, is how do we extract the required element of design from the proceedings?

Whether we regard our emotional states as 'simulations' of the target person's emotional states is ultimately dependent, perhaps, on whether we regard the capacity in question as a 'deliberate' design feature or an 'accidental' by-product of human evolution: that is, was the capacity selected primarily to give us an adaptive

understanding of other people's emotional lives (in which case our emotional states can be classified as 'simulations' proper), or is the capacity merely a by-product of an emotion system whose automaticity was selected primarily to give us an adaptive head-start in a competitive environment (in which case the generation of 'isomorphic' emotional states is merely an end-result of non-discriminatory processes)? This is an open question. Given, then, that we cannot extract the required element of design from the evolutionary story with any degree of certainty, we may need to look in a different direction altogether; indeed, we may need to appeal to human intention – and the consciousness that goes with it – after all. The flip-side of Currie's proposal that *most* simulation is done 'unintentionally' and 'at a subconscious level' is that *some* simulation is done 'intentionally' and 'at a conscious level'. Perhaps, then, we should reserve the term 'simulation' for those instances in which we intentionally and consciously attempt to 'imaginatively entertain' perceptions, thoughts, and feelings which are more relevant to the target person's situation than our own; that is (conscious) simulation should be regarded as 'simulation' proper.

## Notes

1 This definition is taken from Alex Neill, 'Empathy and (Film) Fiction', in David Bordwell and Noël Carroll (eds), *Post-Theory: Reconstructing Film Studies* (Madison, University of Wisconsin Press, 1996), p. 175. Empathy is to be contrasted with sympathy, which has been defined as the capacity to 'feel for' a target person or character and where emotional congruity between the self and the other need not occur.

2 Ian Ravenscroft, 'What is it Like to be Someone Else? Simulation and Empathy', *Ratio*, XI (1998), 170–85.

3 For example, see: Martin Hoffman, 'Interaction of Affect and Cognition in Empathy', in C. E. Izard, J. Kagan, and R. B. Zajonc (eds), *Emotions, Cognition, and Behavior* (Cambridge: Cambridge University Press, 1984), pp. 103–31 and Dolf Zillmann, 'Empathy: Affect From Bearing Witness to the Emotions of Others', in Jennings, Bryant, and Dolf Zillmann (eds), *Responding to the Screen: Reception and Reaction Processes* (Hillsdale, NJ: Lawrence Erlbaum Associates, 1991), pp. 135–67.

4 For a discussion of the theory theory versus simulation theory debate see the twin anthologies edited by Martin Davies and Tony Stone, *Folk Psychology: The Theory of Mind Debate* and *Mental Simulation: Evaluations and Applications* (Oxford: Blackwell, 1995). The articles most commonly cited (and included as the first three chapters of the first volume) are as follows: Jane Heal, 'Replication and Functionalism' (pp. 45–59); Robert Gordon, 'Folk Psychology as Simulation' (pp. 60–73); and Alvin Goldman, 'Interpretation Psychologized' (pp. 74–99).

5 In the case of behaviour prediction, pretend beliefs and desires are said to be fed into the 'behaviour predicting and explaining system'. See Stephen Stich and Shaun Nichols, 'Folk Psychology: Simulation or Tacit Theory?', in Davies and Stone (eds), *Folk Psychology*, p. 139. In the case of empathy, such states are said to be fed into a version of the emotion system. See Shaun Nichols, Stephen Stich, Alan Leslie, and David Klein, 'Varieties of Off-Line Simulation', in Peter Carruthers and Peter Smith (eds), *Theories of Theories of Mind* (Cambridge: Cambridge University Press, 1996), p. 61.

6 Mick Power and Tim Dalgleish, *Cognition and Emotion: From Order to Disorder* (Hove: Psychology Press, 1997). SPAARS is short for 'Schematic, Propositional, Analogical, and Associative Representation Systems'.

7 Richard Lazarus, *Emotion and Adaptation* (Oxford: Oxford University Press, 1991), p. 151. Also see Nico Frijda, *The Emotions* (Cambridge, MA: Cambridge University Press, 1986).

8 Torben Grodal, *Moving Pictures: A New Theory of Film Genres, Feelings, and Cognition* (Oxford: Clarendon Press, 1997), pp. 94–5.

9 François Truffaut, *Hitchcock*. Revised Edition (London: Paladin Grafton Books, 1986), p. 417.

10 *Ibid*., pp. 420–1.

11 Gregory Currie, *Image and Mind: Film, Philosophy, and Cognitive Science* (Cambridge: Cambridge University Press, 1995).

12 *Ibid*. Quotes from pp. 151–2 and p. 161.

13 Murray Smith, *Engaging Characters: Fiction, Emotion, and the Cinema* (Oxford: Clarendon Press, 1995).

14 See Neill, 'Empathy and (Film) Fiction', p. 185, and Gregory Currie and Ian Ravenscroft, 'Mental Simulation and Motor Imagery', *Philosophy of Science*, 64 (1997), 177–8.

15 Interestingly, the imagination/simulation theory seems to contradict the folk, or parental, wisdom that reading a book is better for a child than watching television, the reasoning being that the former leaves something to the child's imagination

whereas the latter does not.

16 The three arguments in question are outlined by Davies and Stone in their introduction to *Folk Psychology* (pp. 18–24) under the section headings of 'Getting started', 'Theory-driven or process-driven simulation', and 'Cognitive penetrability'. Some of these arguments have been addressed by Currie and Ravenscroft in *Recreative Minds: Imagination in Philosophy and Psychology* (Oxford: Clarendon Press, 2002).

17 Heal, 'Replication and Functionalism', pp. 48–9.

18 Gordon, 'Folk Psychology as Simulation', pp. 102–5.

19 Grodal, *Moving Pictures*, p. 95.

20 Smith, *Engaging Characters*, pp. 83–4.

21 *Ibid*., pp. 156–65.

22 Noël Carroll, *The Philosophy of Horror, or Paradoxes of the Heart* (New York, Routledge, 1990), pp. 88–96.

23 Ed Tan, 'Film-Induced Affect as a Witness Emotion', *Poetics*, 23 (1994), pp. 14–15.

24 Alison Gopnik and Henry Wellman, 'Why the Child's Theory of Mind Really *Is* a Theory', in Davies and Stone (eds), *Folk Psychology*, pp. 232–58.

25 Stich and Nichols, 'Folk Psychology: Simulation or Tacit Theory?', pp. 132–5.

26 The main argument against theory theory is cited by Ravenscroft, 'What is it Like to be Someone Else?'.

27 Keith Oatley and Philip Johnson-Laird, 'Towards a Cognitive Theory of Emotions', *Cognition and Emotion*, 1:1 (1987), pp. 29–50.

28 Greg M. Smith, *Film Structure and the Emotion System* (Cambridge: Cambridge University Press, 2003), p. 80. The only apparently significant 'unit' of narrative information concerns Norman's discovery of a folded newspaper which, unbeknownst to him, contains the stolen $40,000. This turns out to be something of a red herring, however, for the psychologist's monologue at the film's conclusion reveals that Norman disposes of the money along with Marion's body.

29 Grodal, *Moving Pictures*, p. 95.

30 See Gary Fuller, 'Simulation and Psychological Concepts', and Jane Heal, 'How to Think About Thinking', in Davies and Stone (eds), *Mental Simulation*, pp. 19–32 and pp. 33–52. In a related fashion, Nöel Carroll (personal communication) points out that for the model in question to be classified as a model of empathy in particular – as opposed to a model of the emotions in general – it must propose that we are in a certain emotional state *because* the character of Norman is in that state.

31 Robert Gordon, 'Simulation Without Introspection or Inference from Me to You', in Davies and Stone (eds), *Mental Simulation*, pp. 53–67.

32 For a founding paper on attribution theory, see Stanley Schachter and Jerome Singer, 'Cognitive, Social, and Physiological Determinants of Emotional State', *Psychological Review*, 69:5 (1962), 379–99.