What Difference Does It Make? Science, Sentiment, and Film

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Abstract: Skepticism, even hostility, about the relevance of the natural sciences to the humanities has been the orthodoxy for several decades—a position finding support from otherwise disparate traditions and philosophies, including that of the late Wittgenstein, and post-structuralism. What, then, of the ambitions of those counter-movements within the humanities, like cognitive film theory, which have actively turned to scientific knowledge as a resource in exploring certain aspects of the arts and culture? This article examines emotional expression and experience in relation to film, testing the hypothesis that different theories of emotion, and in particular scientifically grounded theories of emotion, will yield different implications about both emotional expression in film, and our emotional response to films. To concretize the argument, this article offers an analysis of a sequence from *Heimat 3*, contextualized by a consideration of various factors that make the series as a whole a particularly illuminating case study.

Keywords: biocultural, culture, Darwin, Ekman, emotion, *Heimat*, natural science, naturalized aesthetics, two cultures

Wittgenstein once derided the "science of aesthetics," ascribing to it the absurd goal of telling us "what coffee tastes good" (1966: 11). Wittgenstein's remark condenses a number of attitudes that will be significant to this discussion—chief among them the idea that the field of aesthetics is or might, in some sense, be defined as a *science*; that the business of the field of aesthetics is mainly or exclusively the phenomenon of "taste" or evaluation; and that the matter of taste is intrinsically elusive, unpredictable, and idiosyncratic—and for that reason beyond the reach of any method that might be described as "scientific." Skepticism about aesthetics as a science, and of the relevance of scientific knowledge more widely to aesthetics, has, of course, been widespread since Wittgenstein dropped this pearl of wisdom. Writing during the heyday of Wittgenstein's influence on Anglo-American aesthetics, George Dickie (1962) argued that scientific, empirical knowledge, whatever its value elsewhere, simply had no role to play in our thinking about art and the aes-



thetic. And C.P. Snow's well-known critique (1963; originally 1959) of the deepening schism between the "two cultures"—the humanistic and the scientific—existing as largely independent bodies of thought and debate, received short shrift from F.R. Leavis (1962), who was, like Wittgenstein, confident of the conceptual and methodological autonomy of the humanities. In the German philosophical tradition, the same split is recognized in the distinction, perhaps most famously associated with Wilhelm Dilthey, between *Geisteswissenschaften* and *Naturwissenschaften*. More immediately connected with our domain, Greg

Currie has asked whether cognitive film theory might be better off sticking with folk psychology when considering questions of cinematic meaning, thereby suggesting that film theory might have little or nothing to gain by enlisting the big guns of scientific psychology (Currie 2004: 158–59, 164). Other fronts have been opened on the authority of science by post-structuralism, science studies, and

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by some strands of "post-analytic" philosophy. Overall, skepticism regarding the relevance of science to aesthetics, and the status of aesthetics as a science, has been the orthodoxy since at least the time of Wittgenstein.

The tide may not have turned, but the waters are now much choppier. Running against the currents of skepticism, the last thirty years have seen the emergence of what we might call cognitive aesthetics and evolutionary aesthetics—the study of the creation and perception of art in the light of cognitive psychology, and evolutionary biology and psychology, along with various precursors and tributaries, like empirical aesthetics and neuroaesthetics. Although none of these research programs might purport to tell us exactly which kind of coffee tastes best, they are all fundamentally engaged in the process of situating—understanding and explaining—our experience of art in the context of human experience conceived naturalistically; that is, the experience of a particular species under particular environmental conditions. Moreover, the idea that we do have certain evolved preferences and predispositions is central to such a naturalistic approach. Far from seeing art as a phenomenon that transcends such material conditions, the ambition of cognitive and evolutionary aesthetics is to embed our understanding of art within them; to explain how distinctive aesthetic and artistic phenomena emerge from the general features of evolved human behavior and cognition. In short, the overarching goal is to develop and articulate a naturalized aesthetics.

Emotions are of particular significance in this context for several reasons. They are an integral feature of ordinary existence—to live a normal human life is to live a life permeated with emotion. The emotions we experience ebb and flow in their intensity, but the complete absence of emotion is probably rather rare. Perhaps not surprisingly, emotions are widely regarded as integral

to most forms of art, though the nature and place of emotion in relation to art is the subject of much debate. Thus, emotions provide a central case study for the wider project of cognitive and evolutionary aesthetics. Moreover, the study of emotions over the past 150 years provides in microcosm a picture of one of the fundamental controversies in the study of human behavior to which I've already alluded. On the one hand, there is the view that the emotions are, wholly or largely, universal, biological adaptations, apt to be explained by the methods of the natural sciences—to be treated as material phenomena with neural and physiological underpinnings, amenable to objective examination, dissection into distinct dimensions and variables, and thus controlled experimentation. On the other hand, there is the view that emotions are wholly or largely culturally varied phenomena, apt to be explored and understood by the methods of the human sciences—that is, by the detailed exploration of cultural self-understanding as evidenced by the practices and artifacts of a culture, including the use of and debates around the concepts and language of emotion. In other words, the study of emotions, in general and in relation to art in particular, has been and is a key site for the conflict between scientism (the idea that nothing is beyond the purview of science) and culturalism (the idea that nothing human lies outside the scope of culture).

The Emotions in Biocultural Perspective

The "culturalist" account of emotion treats emotions as "culturally constructed." The emotions we feel and to which we ascribe meaning are so thoroughly embedded within the particularities of culture that little in the way of emotional experience, beyond perhaps generic physiological arousal, can be said to be held in common across cultures. On this view, to borrow J.L. Mackie's characterization of moral codes, emotions "reflect people's adherence to and participation in different ways of life" (Mackie 1977: 36; see also Harré 1986, and G. Smith 2003: 18, 34–36, for similar formulations on emotion). Standing in strong contrast to this account is the theory of emotions as hard-wired "affect programs," in which emotions are largely defined by specific neural and physiological architecture. Emotions—or at least, the "basic" and most significant emotions—are universally evident, with little or no significant variation in their expression or meaning across cultures, and are thus almost certainly part of our genetic inheritance. Where the strong biological account regards the experience of an emotion as akin to the perception of "basic" (focal) colors—the perception of which appears not to vary across cultures (Berlin and Kay 1969) —the culturalist account regards an emotional experience as more like the assumption and enacting of a socially prescribed "role" (Averill 1980). Each of these radical views recommends that we need to study the emotions through quite different methods—the methods of humanistic interpretation, in the case of culturalism; and the methods of natural science, in the case of the biogenetic account. I will argue here that neither position—at least in their most extreme forms—is very plausible, or adequate to the task of providing a rich understanding of the emotions and their role in the arts. I will also argue against the idea that a single "method," characterizable in traditional terms as scientific/explanatory or humanistic/interpretive, is sufficient for this goal. Instead I will argue for a biocultural view that rejects the dichotomous views of both emotion itself and the study of emotion.

What do the emotions look like when viewed from a biocultural perspective? An emotion is a dynamic somatic and cognitive apprehension of the significance of some phenomenon—an object, a person, an event, a situation by an agent. The target or object of an emotion may be real or imagined; thus an event eliciting an emotion may be actual or fictional. Emotions are dynamic in that they are best characterized as processes rather than simple states; somatic in that they typically enlist various bodily systems, like the viscera and the peripheral nervous system, as well as the neural systems on which our cognitive states primarily depend. An emotion begins with what Jenefer Robinson terms an affective appraisal, characterized by its speed and relative coarseness (2005: 41–47)—it is, as we say, a "quick and dirty" or "gut" reaction. In this respect, emotions are more like perceptions than beliefs: they register events in the environment in a direct fashion, they are fast (thus prone to similar sorts of error as perception), and perhaps, in some respects, they are cognitively impenetrable. The startle response might be regarded as prototypical of this initial stage of emotion—a dramatic, reflex physiological reaction that stops us in our tracks and redirects our attention. This initial appraisal is affective—"non-cognitive"—in the specific sense that it occurs, neurally, via particular pathways that bypass the frontal cortex (the brain region responsible for cognition) (LeDoux 1996: 163-65). Recognizing and characterizing the first stage of the emotional process in this way marks off the account of emotions presented here, informed by evidence from neuroscience and evolutionary theory, from more purely "cognitivist" or "judgementalist" accounts (e.g. Nussbaum 2001).

An affective appraisal sets in motion a subsequent process of cognitive monitoring, where "cognitive" is again specifically defined in terms of cognition correlated with activity in the frontal cortex. Such cognitive monitoring begins rapidly and it is only a matter of fractions of a second before we might judge that, for example, what we took for a snake on the path is in fact a stick. But though it begins quickly, the process of cognitive monitoring may persist for much longer periods, through a series of cognitive reappraisals. How long it lasts will depend on the nature of the emotion episode—"the emotional transaction between a person and his or her environment," a transaction which may be "composed of several subevents but that is perceived to have an internal

consistency" (G. Smith 2003: 39, drawing on Frijda 1993). Once I am certain that the stick is not a snake, no further appraisal is necessary (though the fright of the initial affective appraisal will keep me alert to further snakeshaped items that I might encounter on the path). But where, say, I have had an argument with a colleague over what I took to be a slight regarding the quality of my research, my initial cognitive evaluation of the triggering remark ("yes, he really did mean to offend me") might give way to a whole series of reevaluations ("perhaps I offended him with that earlier remark"; "he didn't mean to offend me, even if he did"; and so on). At the extreme, entire relationships can be characterized by the ambivalence of such a modulating series of appraisals. Note also, as this second example suggests, that the initial rapid and coarse-grained affective appraisals characteristic of emotions can be triggered not only by simple physical events—the sight of a snake-shaped object, a loud noise—but also by complex cognitions (Robinson 2005: 61–75), where we might speak of an emotional response to an 'internal environment.' Recently, for example, I was combing through several months' worth of bank statements when it dawned on me that I had been charged large amounts of interest on payments I had forgotten to make. The moment of realization was an emotional one—from virtual somnabulence, a rush of adrenalin woke me up and focussed my attention on the penalty charges and their causes. In other words, I was alarmed by the charges and, once cognitive appraisal had been achieved, aghast at my own forgetfulness. It is not a coincidence that we sometimes describe such complex but sudden realizations with simpler physical models—"I felt the ground go from beneath me"; "I felt like I'd been slapped in the face"—because such realizations can trigger affective appraisals of the same type and intensity as purely physical perceptions. Upheavals of Thought, the title of Martha Nussbaum's major work on emotion (2001), provides another example of the casting of complex evaluative judgments in physical terms.

The "front end" of the emotion process—the initial affective appraisal—seems to be characterized by the limited but universal range of reactions associated with the notion of "basic emotions" (perhaps better thought of as "affects"): surprise, fear, happiness, anger, disgust, sadness, and possibly shame. These emotions include characteristic facial expressions (examples of which I discuss in the final part of this article). Subsequent cognitive monitoring, however, allows for the more fine-grained distinctions that give rise to complex emotions and it is here that cultural and personal background will come to play an important role. Note, however, that according to this theory, the complex emotions arise from the cruder, more basic, hard-wired, universal appraisals, and "cluster" around them. This picture of the emotions—as falling into families, each of which is defined by basic, primal affects, shading into more subtle, complex, cognitively differentiated and culturally informed

emotions—dates back to Darwin's The Expression of the Emotions in Man and Animals (1998/1872), which is largely organized around emotions clustered in this way. Perhaps not suprisingly, this is also the view of the prime contemporary neo-Darwinist theorist of emotion, Paul Ekman, who recognizes within the family of "happiness" (to take one case) at least twelve emotional subtypes. These include amusement, wonderment, and excitement, along with states most economically captured by terms in other languages, such as the Italian "fiero," naming a feeling of intense satisfaction derived from the accomplishment of a sustained and difficult task (Ekman 1994, 2003, ch. 9).

Note how much space is allowed for cultural variation here, even given the biological constraints on culture implicit in the biocultural model of the emotions. The complex emotions that admit of significant cultural variation, however, are not summoned up out of thin air—or drawn on a blank slate—but are built from and operate within a terrain defined and circumscribed by our evolutionary inheritance, as manifested in the basic emotions. There is indefinite scope for the elaboration, blending and nuancing of such basic emotions within "different ways of life," but the emotions defined by specific cultures, and thus the ones that we regard ourselves as feeling, do not float free of biology.

Finally, while we can for analytic or experimental purposes discriminate distinct emotion episodes, in reality our emotional experience is characterized by feedback, overlap, and considerable flux: emotions often change their hue and sometimes their color through cognitive monitoring, and various "streams" of the overall emotional process will flow into one another, creating more or less complex "blends" of the basic and the more subtle, cognitively differentiated emotions. Thus, for example, anger at some perceived slight may transform into embarrassment or regret at having reacted with anger, not because one ceases to believe that the anger was justified but because one comes to believe that the display of anger in a particular social context was inappropriate. We should also note that because much of the appraisal process—cognitive as well as affective—occurs beneath consciousness, and because it is so complex and mutable, the words we use to describe our emotions are best thought of as "summary judgements" (Robinson 2005: 81). The fluid complexity of emotional experience—with its varied degrees of consciousness and the interplay between immediate reaction and subsequent rounds of cognitive assessment—is exquisitely captured in the novel Thinks . . . by David Lodge. Ralph Messenger has just discovered that his wife has been having an affair, and he has been turning over in his mind various arguments and counterarguments about his situation and what he should do:

Ralph did not formulate these arguments in quite such explicit terms, but they were, as we say, at the back of his mind, as he raged inwardly at Carrie's treachery, her appalling choice of a lover, and the insult to his pride and self-esteem. Gradually they exerted a cooling influence on his

thoughts of retribution and revenge. He grew calmer and more contemplative; his driving, dangerously fast at the beginning of the journey, had become more controlled by the time he reached the outskirts of Cheltenham; his mood, when he entered the house on Pitville Lawn, was surly rather than angry. (2002: 338)

Note the significance of *mood* in the fictional action that Lodge narrates here. His use of the term roughly accords with the widely accepted distinction in the philosophy and psychology of emotion between strict emotions, and their affective cousins, moods: while an emotion is an affective state directed toward a particular object (grief, for example, at the loss of a loved one), a mood is a more diffuse affective state lacking an object in this sense. One can simply feel more or less gloomy, or upbeat, or anxious, without this feeling being directed toward any particular object. In *Thinks*..., Ralph's anger—an emotion with a clear object, his wife's clandestine affair—gradually dissipates into a "surly" mood. As Greg Smith has argued, these objectless affective states play an important role in orienting and priming us for more specific emotions, not least in our experience of fiction films (Smith 2003).

An Example: Heimat and Emotion

With this theory of the emotions in place, we can now ask: of what relevance is such an account—one informed in detail by evolutionary and neurological research on the emotions—to our experience and understanding of a work of film art? I want to take as my example the epic German film cycle *Heimat* (Edgar Reitz 1984, 1992 and 2004). My reasons for doing so are worth spelling out explicitly.

First, as a sophisticated and critically revered work of art, *Heimat* might be regarded as the natural possession of the culturalist. To understand and appreciate such a work it is surely necessary to embed oneself in the culture from which the work arose. A corollary of this view is that only those educated and immersed in the relevant culture can hope to experience the work fully. Where does leave those without such intimate cultural understanding? As a British person with only indirect knowledge of German culture and history, and almost entirely ignorant of the German language, I am at least a partial outsider. What sense then can I make of this work, and on what basis? What answer would culturalism and bioculturalism, respectively, give to this question?

Second, *Heimat* is not a Hollywood film. According to one line of argument, because Hollywood films—or at least, Hollywood blockbusters—are made with the ambition of succeeding in the widest possible range of international markets, they tend to ground themselves in universal situations and psychological capacities to a greater extent than do non-Hollywood films. This second motivation for choosing *Heimat* is, then, the flip side of the first. Perhaps

blockbusters, with their emphasis on primal thrills and spills, can be illuminated by evolutionary psychology, but what about works directed toward narrower audiences possessing specific sorts of cultural knowledge? My final reason pertains to a particular cultural tradition of considerable significance to the background and style of Heimat: the tradition of European artistic modernism. Heimat is a work of late modernism, one might say; it wears its air of self-consciousness and experimentalism lightly but persistently. To the modernist sensibility, the easy cross-cultural accessibility of Hollywood fare is an intellectually nutritionless gruel, or worse, a con trick, claiming to find universal interests where it in fact imposes culturally specific ones. In the most extreme cases, modernist artists have even set themselves "against nature." Modernist filmmaking, then, promises to pose a different and more severe challenge to bioculturalism than the style of international popular filmmaking embodied by Hollywood product. I choose Heimat precisely as a difficult test for the biocultural account of the emotions that I want to advance.

For reasons of space, I will restrict my discussion here to a single scene from the final installment of Heimat 3, 'Goodbye to Schabbach'—a scene of modest dramatic and emotional scale, which I nevertheless take to exemplify the emotion-laden interaction that constitutes the fabric of the fiction film. Moreover, as the scene occurs in the last film of the third series, after roughly fifty hours of drama, it carries considerably more dramatic weight than it might appear to, taken in isolation. The scene is concerned with two of Heimat's central characters, Hermann Simon and Clarissa Lichtblau. The Simon family constitute the dramatic centre of gravity across all three series of Heimat. Hermann is the third son of Maria Simon, the figure around whom much of the first Heimat revolves. Hermann makes his appearance during the first series, and becomes the closest thing in the show to a protagonist within the second and third series. In the second series, which focusses on Hermann's early adulthood in Munich, Hermann enters into an intense, romantic relationship with Clarissa—a fellow music student—but they split up. In Heimat 3, they meet by coincidence, some twenty-five years later, and become romantically involved once more.

The scene is significant in that it is woven into the storyline concerning Clarissa's strong sense of autonomy and independence, and her ambivalent relationship with her mother, Frau Lichtblau. Clarissa shares an intense bond with her mother, who raised her as a single parent. Advancing into middle age, however, Clarissa often finds her mother a domineering and suffocating presence. In the scene, Hermann and Clarissa are clearing Hermann's apartment, which has become redundant now that they have consolidated their life as a couple around the restored house overlooking the Rhine, close to the village of Schabbach. The mood of the scene—its broad, orienting affective tone—is nostalgic, relaxed and reflective, as the sale of the apartment reminds them

of times past. A note of deep anxiety sounds in the scene, however, when Hermann's buoyant enthusiasm regarding the future elicits Clarissa's admission that, following the cancer which afflicts her earlier in series 3, such feelings of unbounded optimism are no longer within her grasp. Hermann, Clarissa, and the real estate agent assisting them move toward the exit of the apartment, discussing the business of some missing keys. As Clarissa exits smiling, her eyes follow a pair of movers carrying boxes down the stairs. Clarissa's eyes are thereby led to the sight of her mother who is ascending the stairs. This is the point at which the more marked "emotional action" in the scene begins.

We can break down the emotional episode that the scene will dramatize into three phases or "subevents." The first of these begins as Clarissa catches sight of her mother. The smile on her face—expressing the generally easygoing and convivial mood of the scene thus far—suddenly disappears at this moment of recognition. Her face literally drops (Figure 1). This is the moment

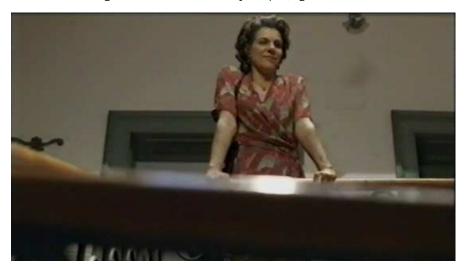




Figure 1a and 1b. The emotion episode begins—Clarissa catches sight of her mother.

of affective appraisal—the initiating moment in a new cycle of emotion, marking the break with the previous mood and its associated emotions. The emotion Clarissa experiences is surprise, or some variant thereof; notably, however, her face does not manifest the characteristic expression of surprise (other than, perhaps, in the most attenuated fashion). The disappearance of her smile, however, along with the immediate and larger context, makes it quite plain that her response is one of surprise. The initial affective appraisal is very quickly succeeded by the process of cognitive monitoring, evident in Clarissa's movement toward her mother and the restoration of a smile, albeit of a more tentative sort (Figure 2). Having digested the surprise and its cause—the unexpected appearance of her mother—Clarissa is now puzzling over its significance.

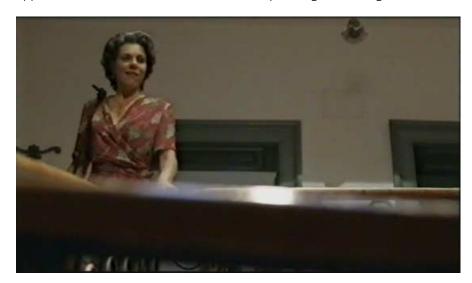


Figure 2. Clarissa recovers and smiles.

As Clarissa moves down the stairs to greet and assist her mother, who is struggling up the last of what appear to be several flights, a cut to a new shot reveals Hermann and the real estate agent moving out into the stairwell. Hermann's happy expression has disappeared as well, but where Clarissa regains her composure quickly and smiles again, if only mildly, as she approaches her mother, a look of troubled concern or consternation persists on his face (his knitted brows suggesting irritation, even a hint of anger) (Figure 3). The agent standing alongside Hermann, meanwhile, continues to smile blandly, as if there has been no fundamental change in the emotional tenor of the action. Not only does she fail to grasp that the unheralded arrival of Clarissa's mother might be worrisome rather than an occasion for joy, throughout the scene she appears to be oblivious to Clarissa's and Hermann's expressions of concern.

A cut takes us back to a medium shot of the mother ascending the final flight of stairs, facing us, while Clarissa, with her back to the camera, descends them. During this action, Clarissa's mother reveals that she has not merely made her way from her retirement home in Wasserburg to visit her daughter

Figure 3. Hermann frowns, but the estate agent remains oblivious.



and son-in-law, she has run away from the home, which she has come to loathe. This revelation initiates the second phase of the emotion episode, for it is at this moment that the deeper implications of her appearance at the apartment start to become apparent. The contrast between the first and second phases of the emotion episode shows how emotions may be initiated by complex cognitions as well as relatively simple physical events: where the initial surprise is triggered by the mother's appearance, the alarm of the second phase is elicited by the cognitive apprehension that Frau Lichtblau has fled the retirement home. The triggering of a new affective appraisal, and thus a new "subevent" in the emotion episode, becomes evident when Clarissa turns back toward Hermann, her face now showing an expression of deep concern or alarm, most evident in Clarissa's frown (resembling Hermann's expression from the moment of the mother's arrival) (Figure 4). Here it is not merely a



Figure 4. Clarissa expresses her anxiety.

case of her smile disappearing, as in the case of the initial emotional response, but rather of a new expression taking its place. A reverse shot of Hermann and the agent dwells on Hermann's continuing anxiety over the situation, compounded in his case by an evident disquiet with the presence of the agent, his eyes nervously flicking in her direction as he tries to maintain his composure.

Now sitting with her mother on the stairs, while Hermann and the agent look down on them from the landing above, Clarissa talks through the situation with her mother. We might mark the beginning of the third phase of the emotion episode at the point when Clarissa's mother declares her desire to move in with Clarissa and Hermann. I suggest this moment might mark a fresh affective appraisal because Clarissa reacts, immediately and physically, to this new twist: her face drops as she recoils, literally pulling away from her mother. But Clarissa is now well into the business of *managing* her emotion. She is not merely cognitively monitoring it—thinking through what it is that she has reacted to affectively, what it means for her, for her mother, and for her relationship with Hermann (or so we can reasonably surmise); she is also considering what it is appropriate and strategically wise for her to express or mask. Thus, very soon after the affective "jolt" carried by her mother's excited grasp of the idea of moving into the house on the Rhine, Clarissa produces the most palpable example in the sequence of a *social smile* (Figure 5)—a smile

adopted by her in order to offer reassurance to her mother, but one cutting against the grain of her own felt emotion. Such a smile has distinctive, tell-tale features arising from this combination of feeling and foresight, the underlying feeling "leaking" through the strategically adopted expression (Ekman 2003: 15, 206).

The scene concludes with the various "spikes" of emotional intensity leveling off, leaving us with a new, sober mood, distinct from the one that dominates the first half of



Figure 5. Clarissa adopts a social smile.

the scene. This disparity in mood is a qualified one: as I noted earlier, the gloomier mood is adumbrated through Clarissa's expression of anxiety over her health; and the new mood is not entirely downbeat (witness the genuine relief evident in the faces of both Clarissa and Hermann as the scene concludes [Figure 6]). Even Hermann's frown has dissipated. Nevertheless the mood we are left with contrasts palpably with the mood at the outset of the scene.

Figure 6. The emotion episode draws to a conclusion.



Ironically, the agent, still lagging behind the emotional pace, looks rather forlorn as Clarissa and Hermann relax at the end of the scene. One might wonder about the purpose of this character and her incongruous expressions: what did Reitz hope to achieve by making her so salient in the scene? A more straightforward treatment of this character would, I think, have involved blocking and framing her as part of the background, or perhaps providing some ruse for her exit. Instead, she remains an active presence in the scene, drawing Hermann's attention along with ours. The agent complicates and, to a degree, interferes with the main emotional axes of the drama: those running between Clarissa and her mother, Clarissa and Hermann, and Hermann and his mother-in-law. The agent's obtuseness is both puzzling and faintly comic; the main effect is to qualify the melodramatic intensity of the scene. In this sense, we can understand the agent as a manifestation of Heimat's modernism. To be sure it is a small and subtle example; but this sublety is part of the distinctive character of the work's modernism. The agent's presence disrupts the flow of the central emotional drama, creating a few eddies and whirlpools in the course of its movement; a miniature Verfremsdungseffekt. This will seem like a less surprising claim if we remind ourselves of the more overtly modernist aspects of Heimat: its mutating use of color and monochrome footage; its narrative disjunctions between and within episodes, redolent of the "leaps" and "curves" Brecht advocated in place of narrative continuity; and its focus on modernist musical aesthetics through the figure of Hermann Simon. It is also significant in this context that the first Heimat was conceived by Reitz in part as a rejoinder to the U.S. television series Holocaust (Marvin J. Chomsky 1978). The handling of the incongruous minor character in this scene is symptomatic of Reitz's refusal of the full-bloodied, "Manichean" melodrama of Holocaust, along with his commitment to an alternative but still emotional

form of drama: a kind of synthesis of Brecht's "epic" and "dramatic" modes (Brecht, 1964).

What of the cultural dimensions of the situation that this scene dramatizes? Is there nothing here that demands explanation in less than universal terms? Compared with much of the action of the first Heimat series—which encompasses the period of Nazi rule—the action here looks pretty 'generic.' But the culturalist is not only, or even primarily, concerned with cases of such spectacularly distinctive social and political history. The culturalist is at least as interested in cultural particularity as it is manifest in the ordinary and everyday (and of course, one of the most remarkable features of the first Heimat is its representation of the period of National Socialism as a string of mostly everyday events). And at this level, two or three items do stand out. First and most obviously there is language. Fluent comprehension of a given language gives us direct access to a world of expressive and normative subleties that we would otherwise struggle to grasp. But the culturalist tradition vastly overinflates the extent to which ignorance of a language bars us from comprehending actions undertaken by native speakers of that language. Subtitles, and more extended critical commentary, do the work here. Comprehension of interactions conducted in languages with which we are unfamiliar will be relatively indirect and difficult, but not impossible, as the more radical strains of culturalism would have us believe. Many languages possess simple terms for emotions that can only be translated into other languages with more elaborate phrases, taking emotions or attitudes embodied by simple terms in that language and then qualifying them. Yiddish, for example, contains the word naches, which expresses the idea of pride in the achievements of one's children (Ekman 2003; Goldie 2000: 90–91 for further examples). The act of translation forces us through a process of semantic unpacking of the single term, teasing out the implications and associations of the emotion term. The meaning available through translation is thus less concise, less direct, and less automatic; but there is no reason to believe that it does not enable robust understanding of the initially unfamiliar emotion concept. Indeed, were this not the case, we would not be able to incorporate individual words from other languages into the lexicon of our primary language; there would be no schmucks or schmolls, and we would have nothing to kvetch about. Lack of fluency in a language obviously throws up practical difficulties in comprehension, but it does not erect a metaphysical barrier. Radical skepticism is no more warranted here than it is in any other practical domain of communication.

In addition to language, at the most basic level, there is "local" knowledge of geography. Few non-German viewers will have a sense of where Wasserburg is located in Germany; this makes it difficult to gauge just how far Clarissa's mother has traveled, how much effort was involved and what risks

taken. But it is easy to gain this knowledge and, once gained, we have no difficulty in working it into the stock of knowledge we draw upon to interpret the scene. A good many Germans are also probably ignorant of the exact location of Wasserburg as well; there seems to be no difference in principle between the way a German, and a non-German, viewer would plug, or cope with, this gap in their cultural knowledge. Then there is knowledge of more intangible factors, like social norms; one such norm that impinges directly on the action here concerns attitudes toward parents and older people. What obligations would children be expected to fulfill toward their parents in this culture? Is the housing of parents in retirement institutions accepted or frowned upon?

Here the picture is more complicated. The very existence of retirement homes indicates their legality and respectability, but attitudes to such institutions are likely to vary considerably among different social groups and individuals (just as attitudes toward, say, abortion or euthanasia would vary). Much of the tension of the scene derives from the very fact that it touches directly on this delicate matter. But how do we, as cultural outsiders, access all of this? The simple answer is: it is just the fact that these issues are dramatized in the scene that allows us, gradually, to understand them. To dramatize something is to make it salient, to bring it to the surface, to scrutinize it, to make apparent aspects of the phenomenon in question that would normally be implicit. Drawing upon our more basic capacities for grasping social interactions, including our knowledge of emotions through their expression, we come to understand the ambivalence that Clarissa feels toward her mother: a mix of fear, concern, and duty. Ageing, and the care of parents and the elderly, are themselves universal, biologically given problems, and this provides any viewer with a starting point from which he or she can begin to discern the specific attitudes toward an aged and vulnerable parent in the scene, and to gauge the relationship of these attitudes to prevailing social norms.

Consideration of this example—of attitudes and obligations towards the elderly—raises a further important point. The scope of cultural norms and assumptions varies enormously. On the one hand, there are a multitude of assumptions which are shared by Western Europeans; others that are shared by Europeans more generally; still others that are common currency for some Europeans and north Americans. These facts motivate and license our use of such vague concepts as 'the West,' or 'Anglo-American' culture. On the other hand, the concepts of class, subculture, and their ilk, arose in recognition of the fact that, at least in large-scale societies, there is likely to be significant variation and conflict among the groups comprising such a society. For this reason there are few, if any, sharp boundaries between cultures. Cultures overlap and interconnect with one another in much more complex ways, and cannot be modelled on the geographical boundedness of nation states, nor even

the more fluid form of language communities. Thus in thinking about many social norms, like norms pertaining to the treatment of the elderly, our assumptions about who will be 'inside' and who 'outside' the culture may need to be drastically revised. Granting the earlier point about the variation that is likely to exist within a large, modern society towards an issue such as care of the elderly, a British and German viewer are likely to share preconceptions about the issue and the range of attitudes it elicits, precisely because both are modern European liberal democracies. Thus the ways and the extent to which one is an 'insider' or an 'outsider' to a culture may vary considerably depending on the specific dimension of culture at stake.

Where, then, does all this leave us with respect to the question I ask in the title of this article: what difference does the array of scientific research on emotion that I have drawn on and alluded to make to what we might say about a film and our experience of it? First, it provides us with a keener understanding of what an emotion is, and allows us to propose critical descriptions and interpretations that are sensitive to features of the emotions of characters and spectators that might otherwise go unnoticed. Second, the fact that the scientifically-informed theory of emotion advanced here proves to be sensitive to many of the expressions and gestures we witness in Heimat lends credence to the idea that most filmmaking, indeed most depictive art, works from a mimetic basis, adopting and adjusting the everyday forms of emotional expression—many of the them universal or widely-dispersed across numerous cultures—for particular artistic ends, rather than ignoring or rejecting them (M. Smith 2003). Heimat is hardly a work of unalloyed aesthetic realism; and yet its performance style answers to many of the standards we encounter in reality. Third, and leading on from this second point, when we ascribe broad and basic emotion types to ourselves and others, in engaging with life and with movies, we are latching on to real features of the world—of the embodied agents we refer to as people or characters—rather than projecting or imposing 'assorted contemporary Western ideas . . . onto the experience of others,' as Catherine Lutz would have it (1988: 225). Our understanding will be incomplete without a proper understanding of cultural (and local) context, but it is not false in principle. Our apprehensions of the affective states of others through facial and other forms of expression may constitute rudimentary interpretations, but they are not intrinsic misinterpretations.

Thus the biocultural account of the emotions advanced here suggests that, in engaging with works from cultures more or less distant from our own, our knowledge of emotion and emotional expression is one of the more important factors that allows us to navigate such works. Emotional expressions provide a kind of foothold for viewers which, when combined with other such footholds arising from other cross-cultural constants as well as other kinds of

knowledge spectators glean from films, allows them to understand even highly complex, and culturally specific, ideas and representations. Basic emotion expressions are not hermeneutically self-sufficient because any such expression can only be fully understood in context. By the same token, the meaning of an image or sequence cannot be a matter of context "all the way down," as we would then face the problem of an infinite regress of contexts; indeed the very distinction between "text" and "context" would be lost. Thus basic emotion expressions perform a vital role as expressive or semantic "primitives," enabling the search for meaning to begin, in media res, irrespective of context.

When examined from the biocultural perspective, then, the interdependence of the universal and cultural dimensions of emotional experience comes to the fore, sharply contrasting with the unitary emphasis placed on culture by culturalists, for whom, in the words of Greg Smith, "emotions cannot be understood outside of culture and the shaping forces of society" (2003: 18). If we construe this statement to mean "a given emotional episode cannot be understood fully outside of its context, including pertinent cultural norms" then it would seem that the biocultural position developed here is not irreconcilable with culturalism. But the statement may be just as reasonably construed as "emotions in general cannot be understood at all outside of culture." Taken to such an extreme, the culturalist position leaves us with a mystery, for it is unclear how a developing child or a visiting adult could ever begin to understand a specific culture if there are no such footholds beyond or beneath or threading through culture. But this is a feat that we all perform at least once in a lifetime. It is not the least of the virtues of the biocultural theory presented here that it explains this rather central fact about human existence.

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