## Interactivity, Performance, and Emotion

## Abstract:

Audiences usually consider emotional responses to be the most important part of their experience of art, particularly popular arts. Emotional responses are largely based on the audience's observations of the artwork's formal elements; in the case of the visual arts, these elements are primarily images. Narrative visual artworks, such as film, present images that can be observed by the audience using three frameworks to interpret their perception into meaningful observations. One image can be perceived as a represented object, a representation in itself, or an aspect of reality. Traditional artworks invite the audience to observe their images in the role of observer, and the audience's emotional responses are based on their observations. In contrast, interactive artworks invite the audience to additionally perform the role of interactor, who co-creates the artwork with the initial artist. Thus, while traditional artworks generate emotional responses based on the audience's observation of another artist's work, interactive artworks can generate emotional responses based on the audience's observation of their own authorized performances during engagement with an artwork.

## Paper:

We sometimes refer to artforms as "media" in recognition of the fact that they mediate between artists and audiences. An artwork acts as a means through which an artist provides an audience with an aesthetic experience, often with the intention of communicating specific ideas. One consequence of describing art as mediating between artists and audiences is implying a dichotomy between these groups—that is, calling an artwork a medium suggests that it mediates from one group to a different, distinct group. This implication typically holds for what I will call traditional visual arts: those that are intended to be experienced by the audience primarily through observation. These arts include painting, calligraphy, sculpture, theater, and film, among others. The audiences for artworks in these categories understands that, with few exceptions, the artist intends the audience to experience the work as observers, not creators. Interactive media are distinct from traditional media in this aspect of audience experience. Interactive media allow audiences, during the time they are experiencing the work, to change and thus create, to some degree, these artworks. Interactive works are created with the intention that audiences will take the role of artists, performers, or creators as well as observers.

The basic idea that interactive artworks allow audiences to contribute to the artwork as artists do has several interesting consequences regarding an audience's emotional response to artworks, which is the topic I will discuss in this paper. The primary reason we create and engage with art is the emotions they generate in us. Almost all research on art, regardless of disciplinary approach, engages with emotion in some way. Since emotion is so central to our lives, it is unsurprising that there is a vast amount of emotion research and, consequently, many different ways of discussing and characterizing the troublesome term "emotion." Examples include Paul Ekman's work on facial expressions, which has popularized what are sometimes called the basic

emotions of joy, sadness, disgust, fear, anger, surprise, interest, and contempt. 1 Ortony, Clore, and Collins propose a taxonomy that turns on the distinction between self-directed and otherdirected emotions.<sup>2</sup> Another common framework distinguishes emotions based on intensity and valence. Emotions are sometimes defined as as composed of judgments about a person's relation to the world, as a series of physiological changes, or as culturally-specific language concepts. I follow Damasio in considering emotions extremely broadly. In essence, I think of emotion as an interative process that begins as a response to something in our environment, such as an artwork. Our initial response can lead to feelings, thoughts (conscious or not), and/or bodily changes, and these outcomes can themselves then act as new stimuli to further emotions. Since I aim to describe some interactions between image, performance, and emotion, I propose emotion categories that distinguish emotion types based not on properties of the emotions themselves, nor on our natural-language use of the term "emotion", but on what formal aspects of art artwork prompt emotions—including aspects such as image and performance. The categories I propose identify some important differences in the types of emotions that traditional and interactive artworks can elicit, and I will argue that it is the ability of interactive artworks to allow audiences to perform during their engagement with an artwork that underlies these differences.

In my discussion, I will focus on two specific artforms as representative: film and videogames. Film is a traditional visual artform, whose audience members, viewers, have emotional responses based on their observation of a film. Videogames are an interactive visual artform, whose audience members, players, have emotional responses based on both their observation of a game and their observation of their own performance while playing the game. I will specifically focus on mainstream, narrative films and videogames. (Many of my conclusions, however, apply equally to other arts.) Some may object to characterizing videogames as an artform. Such a concern is presumably based on understanding "art" as an evaluative concept with criteria that only few instances of media fulfill. Although it seems obvious to me that videogames have at least the potential to meet most definitions of art, in this paper, I am not using the term "art" in in this manner. I use the terms "art" and "artwork" in a broad sense, not to indicate aesthetic quality, but simply to indicate that a work was created with the intention to, at least in part, solicit aesthetic engagement from audiences.

In a concrete sense, artworks elicit emotions based on their form—that is, the particular content and structure of the formal elements that constitute them. In the case of the visual arts, the primary formal elements used are images, although films and videogames often use sounds as well, and videogames often include proprioceptive and/or haptic feedback. Since I am focusing on visual arts that are also narrative, most of these images are also representations of various elements of the world described by the artwork. Of course, these formal elements do not exist in a vacuum; they are created and processed in complex social contexts, but here I will concentrate on the elements rather than their contexts (this omission does not affect my central claims).

Artistic representations are always instantiated in a concrete physical form, such as paint on a canvas or a filmstrip from which a film is projected. Yet, any one aspect of this physical form may be perceived through various cognitive frameworks, leading to varied

emotional responses. Consider an analogy. A meal at a restaurant can be thought of as sustenance, a business transaction, or an illustration of cultural norms. In other words, we may respond to the same physical thing differently based on the framework that we use to categorize it. Similarly, a single formal element of an artwork may be perceived different based on how we attend to and process it. We might see an image of an actor in a film and see them as a character reacting to a film event, or we might see them as an actor performing a role. Wittgenstein's notion of *seeing-as* is a useful way of thinking about this process. Wittgenstein notes that the famous "rabbit-duck" image can be *seen-as* a rabbit or *seen-as* a duck, although the image itself is unchanged:<sup>4</sup>

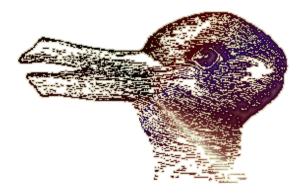


Figure 1: The rabbit-duck

These are not exclusive; we may see the image first one way and then another way. Similarly, an image of an actor can be *seen-as* a character or *seen-as* an actor giving a performance. The image is *seen-as* based on the cognitive framework through we observe the image. (The notion of observing an image in a film or videogame should be understood to include listening to any sounds also presented by those artworks.)

There are three cognitive frameworks used to process the formal elements of a film. I propose three categories of emotional response to film, each corresponding to one of these frameworks. The first is a narrative framework, whose elements can cause *narrative emotions*. Narrative emotions are those prompted by interpreting a film's formal elements as representations of aspects of elements of the film's world. These aspects include characters, settings, and narrative events. Narrative emotions are the primary type of emotions non-academic film audiences experience in response to mainstream films. In the film *Titanic* (Cameron, 1997), for example, an image of the actor Leonardo DiCaprio does not narratively represent Leonardo DiCaprio, who does not exist in the world of the film. Instead, it represents Jack Dawson, a fictional character that *is* part of the film's world. Our emotional responses to Jack and the situations he faces are narrative emotions. If we find the film *Titanic* sad, it is likely because we feel sympathy for Jack when he dies at the end of the film.

Yet, we might see the image in another way. We might see the image as something with an aesthetic purpose or effect—that is, we might see a formal element as a crafted aspect of the artwork itself. Under this framework, the image is seen not in terms of what it represents in the film world, but it terms of how it represents it. Aesthetic emotions are those prompted by our evaluation of the image according to aesthetic criteria. Artifact emotions might include delight at the amazing special effects in *Titanic*, admiration for director James Cameron's ability to craft a film that appeals to so many people, or disappointment at the film's overly sentimental ending.

A second framework for observing a film's formal elements is to see them as aesthetic artifacts, or crafted art object. They then lead to *aesthetic emotions*, which are emotions prompted by our aesthetic evaluation of these formal elements. Although most audiences experience artifact emotions, they are particularly salient for academic critics, film reviewers, and aficionados of a genre, all of whom make evaluation of artworks *qua* artworks a regular part of their viewing practices. Although many people might mention admiration as one emotional response to *Titanic*, I believe this approach conflates two distinct emotional responses. An aesthetic admiration of Leonardo DiCaprio's acting is distinct of the narrative admiration of Jack Dawson's indomitable spirit.

The third framework through which audiences observe a film's images interprets those images as aspects of reality. Despite our understanding that a film may be fictional, viewers often have paradoxical responses to films that can only be satisfactorily explained in this way. Consider a horror movie in which a monster suddenly appears on the screen with a loud yell. A viewer may scream and jump in fright, but they do not run in fright and call the police about a monster in their living room.<sup>5</sup> Why do we engage in some of the actions associated with the emotion of fear, but not others? Why do we jump at the sight of a dangerous monster, even though we know the monster does not exist? Our response is a reflex emotion of surprise. Psychologist Joseph LeDoux has demonstrated that when confronted with potential dangers in our environment, we make an extremely fast judgment that can cause an emotional reaction, followed by a very slightly slower judgment (roughly 1/100<sup>th</sup> of a second) that is cognitively much more complex and accurate. Our initial response to the image is so fast and basic that it is not capable of distinguishing between real and fictional images—or, in the case of documentary films, between recorded images of previous events and perception of contemporaneous events in front of us. In this case, we jump upon observing the image of the monster as if it were a real thing in front of us that is actually dangerous. This reflex emotion is quickly followed by a more accurate interpretation, which inhibits us from taking the further action of running from the room in fear.

To summarize, for narrative visual arts, the same image can be perceived in three ways, causing three types of emotions. Narrative emotions are those caused by responding to what an image represents in the world of the film. Aesthetic emotions are those caused by responding to the image as a representation that can be aesthetically evaluated. Reflex emotions are those caused by responding to the image as if it were reality. This taxonomy, however, is more than a description of emotion types. It is also a framework that allows us to understand differences in

emotional response between traditional arts, such as film, and interactive arts, such as videogames.

Interactive narrative artworks, such as videogames, can also prompt narrative, aesthetic, and reflex emotions. They do this in the same way traditional artworks do: they present images as formal elements that audiences observe. We might think of the audience performing the role of observer as the method through which they engage with the artwork. In contrast to traditional artworks such as film, however, videogames also allow players to perform a role other than observer; they also not only provide but invite players to act as artists while they experience the artwork through gameplay. In videogames, players co-create any particular play session of a game by taking actions that affect the game's form, which is the essence of interactivity in this context. For example, videogame players manipulate controllers during gameplay, which changes the images on the game screen. In doing this, players perform two roles; they are artists or creators who contribute to the game's form, and they are observers who perceive the game's formal elements, both the ones they affect and those that they do not. We can see that players perform the role of artist during gameplay by noting that, had the player used the controller differently, a different combination of formal elements would have appeared. The player's activity directly changes the artwork's form. Note that the player affects the artwork's form significantly, not just in the details. Players can often determine character's clothing, facial appearance, gender, body type, and race, among other things. Players determine or at minimum greatly affect the narrative events of the game, including the timing between those events. The player is not the sole artist, of course, because the parameters within which the player can affect the videogame's form are determined by the game's creators.

The emotions created by videogames or other interactive artworks are based not just on narrative, aesthetic, and reflex frameworks. Each of these types of emotions includes also can be divided by whether the emotion is prompted by the audience taking the role of observer or of interactor. Thus, while traditional artworks generate emotional responses based on the audience's observation of another artist's work, interactive artworks can generate emotional responses based on the audience's observation of their own authorized performances during engagement with an artwork.

As observers, players have narrative emotions based on the narrative elements of the videogame's story-world. As interactors, players have narrative emotions based on how they themselves contribute to the narrative elements of the videogame's story-world. For example, a videogame player might have emotions in regards to the narrative events that they themselves contribute, whether it be based on a character they control or an event that they cause in the game.

As observers, players have aesthetic emotions based on their aesthetic evaluation of formal elements of an artwork. As interactors, players have aesthetic emotions based on how they themselves contribute to the aesthetic elements of the game. For example, a player may be frustrated by their inability to generate dialogue appropriate to their character, or might feel joy that they have achieved one of the game's uplifting endings rather than one that suggests that there is no hope for the future.

As observers, players have reflex emotions based on reacting to formal elements of an artwork as if they were real. As interactors, players have reflex emotions based on real or real-seeming elements they contribute during gameplay. The player may physically move (or perform) in certain ways while playing a motion-controlled game, such as those on the Nintendo Wii; the player's own sense of proprioception provides stimuli that result in reflex emotions. The body movements are real movements, but in relation to the game, the movements may seem real to a player in a way that they are not. For example, a player swinging a controller to play Wii Tennis may be hopeful because they sense that their own motion, perceived proprioceptively, was a good serve. The motion, of course, was not a serve at all, because the player did not actually hit a tennis ball. Yet it may momentarily seem real to a player in the same way that a player may jump upon seeing a zombie appear on the screen.

In sum, both traditional artworks (films) and interactive artworks (videogames) create emotions based on audiences playing the role of observer during their engagement with the work. However, since interactive artworks also require the audience to fulfill the role of interactor during their engagement with the work, new aspects of art appear as possible contributors to emotional response. Further research may reveal ways that these new aspects allow interactive artworks to elicit different emotions than traditional artworks.

<sup>&</sup>lt;sup>1</sup> Paul Ekman, "Facial Expression and Emotion," American Psychologist 48 (1993): 384–392.

<sup>&</sup>lt;sup>2</sup> Andrew Ortony, Gerald L. Clore, and Allan Collins, *The Cognitive Structure of Emotions* (New York: Cambridge University Press, 1988).

<sup>&</sup>lt;sup>3</sup> Antonio Damasio, *Descartes' Error: Emotion, Reason, and the Human Brain* (New York: Putnam, 1994); Antonio Damasio, *Looking for Spinoza: Joy, Sorrow, and the Feeling Brain* (Mariner Books, 2003).

<sup>&</sup>lt;sup>4</sup> Wittgenstein, *Philosophical investigations*; also Turvey, "Seeing Theory: On Perception and Emotional Response in Current Film Theory" for an application of this theory to film.

<sup>&</sup>lt;sup>5</sup> Noël Carroll, *The Philosophy of Horror* (New York: Routledge, 1990), 60–88.

<sup>&</sup>lt;sup>6</sup> Joseph LeDoux, *The Emotional Brain: The Mysterious Underpinnings of Emotional Life* (New York: Simon & Schuster, 1996).

<sup>&</sup>lt;sup>7</sup> Jonathan Frome, "The Ontology of Interactivity," in *Proceedings of The Philosophy of Computer Games Conference 2009*, ed. John Richard Sageng (Oslo, Norway: University of Oslo, 2009)