



ELSEVIER

Poetics 23 (1994) 177–188

---

---

POETICS

---

---

## Emotion in aesthetics: Reactive and reflective models <sup>☆</sup>

Gerald C. Cupchik

Scarborough College, Life Science Division, University of Toronto, Scarborough, Ontario,  
Canada M1C 1A4

---

### Abstract

This paper explores the promise of William James's distinction between primary (*subtle feelings* like pleasure) and secondary (*coarse emotions* like sadness) layers of emotional responses to aesthetic stimuli. Two principles from pragmatic and emotional processing in everyday life are generalized to the aesthetic realm. In everyday processing, ecologically important stimulus *configurations* are linked with *bodily feelings* of pleasure and arousal. On the other hand, *meanings* which are contingent on specific *contexts* are associated with *blends* of *primary emotions*. In aesthetic processing, the *reactive model* accounts for responses in which pleasure and arousal are of primary importance. Thus, the features of sentimentalized artworks evoke feelings of warmth and keep arousal at a safe moderate level. The *reflective model* describes how emotional responses contribute to the generating of polyvalent meanings in multilevel art and literary works. Past emotional experiences help readers and viewers construe possible meanings of unfolding aesthetic events. Data are introduced which are consistent with predictions from the reactive and reflective models.

---

### 1. Introduction

William James (1890) offered an insightful perspective on the role of emotion in the aesthetic process. He distinguished primary and secondary layers of emotional responses to aesthetic stimuli. The primary layer consists of 'subtle feelings', 'pure and simple' pleasures elicited by harmonious combinations of lines, colours, and sounds. He associated these 'subtle', 'cognitive' feelings with classical preferences in art. Secondary and 'coarser' feelings are produced when memories and associations evoked by aesthetic stimuli, 'reverberate' through the muscles and organs of

---

<sup>☆</sup> The author would like to thank Peter Vorderer, Ute Ritterfeld, and Andrew Winston for their helpful comments about the paper, as well as the Special Issue editors, who raised important questions about the ideas presented.

the body. Coarser feelings, which are associated with romantic preferences in art, may be ‘grafted’ onto the subtle ones during the unfolding of aesthetic episodes.

James’s distinction between subtle feelings and coarse emotions remains in modern emotion theory as the contrast between dimensions (e.g., pleasure and arousal) and primary emotions (e.g., happiness and sadness), respectively. However, James did not fully define the stimulus properties which elicit the two kinds of emotional responses. While, ‘simple properties’ and ‘harmonious relations’ are related to subtle feelings, the stimulus conditions that give rise to coarse emotions are not specified. The model proposed here seeks to fulfil the promise of James’s seminal ideas.

It is first essential to realize that recipients are selective when they decode or interpret stimuli. This holds in everyday life, but is particularly appropriate for aesthetic stimuli which pose an interpretive challenge to recipients. Everyday stimuli denote objects, people or events in the world which possess practical utility. Aesthetic stimuli, such as paintings, are distinguished by the quality ‘*unity in diversity*’ (Cupchik and Winston, in press), originally referred to as ‘uniformity amidst variety’ (Hutcheson, 1725).

Aesthetic stimuli possess greater qualitative *diversity* than do everyday stimuli, incorporating syntactic (i.e., stylistic) as well as semantic (i.e., subject matter) information (Berlyne, 1971, 1974; Moles, 1968). Subject matter is easily discerned because semantic identification is performed all the time in daily life. However, an appreciation of stylistic qualities requires attention to patterns of physical/sensory qualities (such as colours, textures, tones, composition, etc.) which can be hard to discriminate. For this reason, naive viewers generally focus on subject matter because it is easier to discern than style (Cupchik and Gebotys, 1988; Winston and Cupchik, 1992).

The concept of *unity* implies internal coherence among the diverse semantic and syntactic domains in the art or literary work. The *multilevel* nature of the aesthetic object has been a centrepiece in the gestalt-oriented theorizing of Arnheim (1971) as well as Kreitler and Kreitler (1972). For Arnheim (1971), interrelations among semantic and stylistic qualities create the foundations for dynamic, expressive effects. This affords the potential for ‘polyvalent’ or diversified personal interpretations (Schmidt, 1982) of aesthetic works and contrasts with the singular or ‘monovalent’ meaning attached to utilitarian messages in everyday life.

Viewers or readers can selectively focus on *diverse* qualities of aesthetic objects in isolation or explore the *unity* which interrelates them. An emphasis on isolated properties can be applied both to semantic and syntactic information. Thus, a recipient can focus on subject matter, iconographic allusions, or genre (i.e., semantic information) and separately apply schemas (Neperud, 1988) which identify stylistic properties (i.e., syntactic information). Alternatively, the viewer or reader can address the problem of unity, examining contextual relations which lend coherence to the overall piece. The distinction between isolated and contextualized stimulus properties has received in-depth scholarly attention.

The everyday tendency to identify objects semantically can indeed interfere with an appreciation of artistic style (Cupchik et al., 1992). In a recent study, subjects

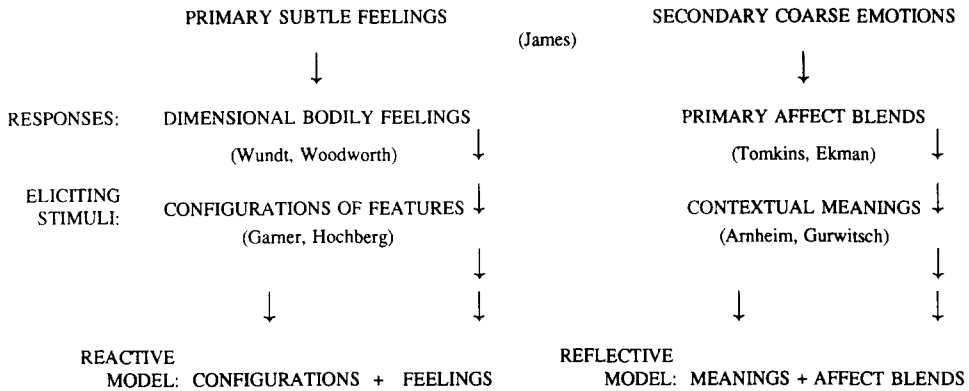


Fig. 1. Emotion in aesthetics.

were presented with pairs of paintings and instructed to indicate whether they were similar or different either in subject matter or style. The results showed that viewers had difficulty discerning similar style (e.g., both impressionist or cubist paintings) when the subject matter of two paintings differed in a salient way (e.g., group portrait versus still-life). Naive viewers, in particular, must learn to attend to the stylistic properties of artworks because they are too readily distracted by literal or narrative information (Cupchik and Gebotys, 1988).

## 2. Stimulus decoding in everyday processing

### 2.1. Configurations

Mainstream psychologists interested in perception and cognition have formally defined the informative qualities of everyday stimuli. In essence, their pragmatic approach to perception emphasizes *configurations of features* (Garner, 1978) which combine to form *emergent objects* (Pomerantz, 1981). Objects which are important for the realization of practical goals are discriminated against (i.e., abstracted from) irrelevant or distracting backgrounds; in this sense they are *isolated*. In the discrimination process, elementary physical/sensory cues are decoded first and *redundancies* or internal correlations (Garner, 1962) are discerned. This information makes it possible to 'cue-forward' semantic categories which identify the stimuli (Triesman, 1964). In everyday perception, physical/sensory cues are not consciously attended to and are discarded as deeper levels of semantic processing are undertaken (Lockhart and Craik, 1990). As a result, sensations which figure so prominently in aesthetic processing (as syntactic information) are left by the wayside.

From an ecological approach to perception, the physical world imposes patterns of information (e.g., the *depth* cues of linear perspective and interposition) which

control the visual scanning process through expectations and hypotheses (Hochberg, 1978, 1979). The constraining effects of these information patterns account for local visual effects, such as shadows, associated with *parts* (i.e., micro-areas) of figures (Hochberg, 1981) as well as perceptual illusions (Hochberg, 1986). These implicit constraints are applied automatically (i.e., overlearned) and make the viewer “conscious of the world, but not conscious of the sensations or the intervening psychological processes” (1986: 287). In the end, a stable world of objects with invariant properties (Gibson, 1971) is perceived.

## 2.2. Contexts

The alternative (Gestalt) view holds that meaning is *contingent* on the situation or context within which an object or event is perceived. Arnheim’s (1986) rebuttal to Hochberg’s (1986) account of visual illusions offers a formal expression of this idea. He argues against the isolation of parts from the overall stimulus context, emphasizing instead ‘structural unity’ and the idea that one should be sensitive to the contexts within which configurations are embedded. Generally speaking, it is essential to determine the ‘stepwise dependencies’ or interrelations (Arnheim, 1986) between parts and wholes.

How does one decide which context is appropriate for the interpretation of meaning? The phenomenologist Gurwitsch (1964), a student of Husserl, undertook this problem of determining figure/ground or theme/horizon relations. He describes figures as *coherent structures* which are viewed in relation to a *thematic field*. A coherent structure refers to an event which is perceived to possess internal organization. The shifting of thematic fields or backgrounds can radically change the meaning attributed to an event. The important point is that thematic fields or contexts are adduced in accordance with their *relevance* to a sender or receiver’s goals and intentions.

## 3. Emotional responses in everyday processing

### 3.1. Bodily feelings

One approach to the problem of emotional response has a decidedly mechanistic flavour, focusing on bodily responses of pleasure and excitement or arousal. In a review of eighteenth- and nineteenth-century theories of emotion, Gardiner et al. (1970) described *peripheral* theories which emphasized the experience of bodily states and treated them much like other kinds of sensations to which a person might attend. Cabanis (1757–1808), like Bain (1818–1903) after him, focused on feelings such as pleasantness and unpleasantness, relating them to events in the peripheral nervous system.

Izard (1971) similarly described *dimensional* theories of emotion which share fundamental qualities in common with the *peripheral* theories. He states that “early work on ‘emotion’ was confined to the study of feelings or elementary

affective processes (simple reactions to simple stimuli of sounds, odors, colors) and was more sensory psychology than the study of emotion” (1971: 87). Wundt’s (1896) tridimensional model (pleasant–unpleasant, relaxation–tension, and calm–excitement) eventually gave way to a two-dimensional model involving pleasure and arousal (or activation). Woodworth (1938) defined feelings of pleasantness (versus unpleasantness) or excitement (versus depression) as *reactive attitudes* of acceptance (versus rejection) and preparedness for action. Duffy (1941, 1962) has argued that emotional phenomena can be explained in terms of extreme states of bodily arousal, thereby eliminating any need to talk about ‘emotions’ at all.

*Harmony* and *stability* figure prominently in peripheral and dimensional theories. Bain, for example, argued that *harmony* among feelings yields pleasure, particularly in the case of aesthetic emotions (in Gardiner et al., 1970). An emphasis on equilibrium in relation to pleasure in general, and aesthetic pleasure in particular, was also expressed by Fechner (1978 [1876]). He proposed a general principle (cited in Gardiner et al., 1970) to the effect that all material systems progress in the direction of greater *stability*, this representing both a physical and a psychological tendency. Thus, conscious experience will be pleasant to the extent that it approximates stability and unpleasant to the extent that it departs from stability. These ideas share much in common with James’s notion of harmonious relations eliciting ‘pure and simple’ pleasures.

### 3.2. Primary emotion blends

Izard (1971) has contrasted the *dimensional* approach with a *typological* approach to emotion. William James (1884) argued that specific emotions are shaped by distinct patterns of physiological responses and bodily expressions that give emotion its feeling tone. Fundamental or primary emotions (Tomkins, 1962, 1963; Ekman et al., 1972; Izard, 1971), such as happiness, sadness, anger, and their blends (Tomkins and McCarter, 1964), constitute the core of emotional experience and are more specific than gross dimensionalized affects. Even Wundt (1896) acknowledged that emotion derives from a “series of feelings united into an interconnected process and having as a rule a more intense effect on the subject than a single feeling” (Gardiner et al., 1970: 324).

While agreeing with the general idea that primary emotions have a physiological basis, I propose that in real life, people experience refined nuances of the primary affects, some of which are blends. Consider an observational experiment. If you watch someone (at a distance) engaging in social interaction and displaying facial expressions, it is not easy to determine where one emotion ends and another begins. They appear to be melded into a coherent whole both hierarchically in the moment and over time. The meaning of this complex blend is elusive. One can, of course, observe that someone is angry or sad, but this represents an *abstraction* of familiar expressive features in order to label the emotion. The reduction of emotional states to abstracted (i.e., isolated) primary emotions provides a convenient way of labelling emotional states; convenient, but lacking in subtlety. It all depends on the perceiver’s goals; assimilation to an a priori hypothesis about a

person's emotional state versus an accommodation to the distinctive structure of the person's experience.

#### 4. Stimulus decoding and emotional responses: Two models

Thus far a contrast has been drawn between two modes of stimulus decoding or interpretation and two kinds of emotional responses. From a perceptual viewpoint, stimulus configurations determine local visual effects, while contexts create coherent groupings of cues (in a Gestalt sense). Cognitively, the comparison is between isolated and identifiable stimulus configurations and contextually contingent meanings. The contrast across these stimulus domains is between precise but narrow (i.e., closed) reference and global (i.e., open) interrelations. The opposing emotional processes emphasize bodily dimensions of response, such as pleasure and arousal, and the experience of emotion blends. I propose that: (1) local analyses of specific configurations are linked with bodily response dimensions, while (2) global contextual analyses are related to the experience of emotion blends.

##### 4.1. Configurations and bodily feelings

The linkage between specific stimulus properties and bodily reactions on the pain–pleasure and arousal dimensions can be made readily. Gardiner et al. (1970) have pointed out the *associationist* relations between perceptions of specific sensations from external objects and internal states or ‘movements’ of the viscera. Thus, impressions of external stimuli account for the production of “cheerful or sombre ideas, kindly or harmful sentiments” (Gardiner et al., 1970: 278).

Berlyne (1971) has underscored the significance of *ecological variables* which, through association with beneficial or noxious consequences (i.e., bodily states), have taken on biological importance to the person. Arnold's (1960) discussion of the evocation of ‘feelings’ similarly classes stimuli in terms of their relative acceptability. Thus, an ‘awareness of autonomic arousal’ (Frijda, 1986) might be linked with evocative cues which are ecologically meaningful to the individual. This is consistent with Duffy's (1962) analysis of emotion as having one component in arousal and another in a directional cue. Schachter's (1966) cognitivist version of this behavioural position similarly maintains that emotion reduces to arousal plus a directing cognition. Accordingly, situational cues reduce the uncertainty that perceived bodily arousal creates (Schachter and Singer, 1962). In sum, bodily states of activation can take on meaning by being associated with specific external cues.

*Structural properties* of stimuli can also evoke bodily reactions, generally on the arousal dimension. For example, ‘interruptions’, broadly understood as disconfirmations of expectations or distractions from goal attainment (Mandler, 1984), can heighten arousal level. According to Berlyne's (1971, 1974) psychobiology, stimulus uncertainty affects pleasure through the mediation of arousal processes in the body. Thus, *collative stimulus properties*, such as novelty, complexity, and orderliness, can affect cortical arousal level, and thereby pleasure and interest. The *mere*

*presence* of novelty in Sokolov's (1963) sense (i.e., a mismatch between operational neuronal networks and incoming stimulation) is sufficient to affect bodily arousal states.

In sum, bodily states of pleasure and excitement or arousal can be induced by specific ecologically relevant cues or structural properties of information such as uncertainty. The associationist aspect of the linkage has interesting implications. If particular stimuli automatically elicit bodily responses, then mechanisms such as stimulus generalization, reinforcement, and habituation should modulate the process. The notion of a conditioned emotional response (CER) is predicated on this.

#### 4.2. Contexts and emotions blends

William James maintained that the experience of emotion is *perceptual* in nature involving a *total situation*, not isolated objects (James, 1894). The *immediacy* and *projective* aspect of this process was affirmed by Lipps's (1903) notion of *Einfühlung* or empathy (as translated by Titchener, 1910), "the objectivation of myself in an object distinguished from myself" (cited in Gardiner et al., 1970: 305).

Frijda has similarly described an "awareness of situational meaning structure" in relation to "irreflexive [in the sense of nonreflective] emotional experience". According to this view, the process is essentially " 'projective': The properties are out there. These properties contain the relationship to the subject: Emotional experience is perception of horrible objects, insupportable people, oppressive events" (1986: 188). This account affirms the distinctive nature of the individual's viewpoint and lends itself to the characterization of emotional experience in descriptive (i.e., phenomenological) as well as emotional terms (e.g., feeling depressed and closed in).

Rather than focusing on isolated features or configurations, there is much greater sensitivity to the overall context and its *distinctive* quality. The evocative episode, as an unfolding event, is centre stage and the focus is on its complex meaning for the individual. This implies that the evocation of blends of emotions is best described (idiographically) as a complex sequence rather than in terms of an abstracted list of primary emotions. Complex evocative situations give rise to blends and nuances of emotion which are associated with distinctive meanings. The role of expressive behaviour is not be underestimated because it can 'cue-backward', grafting emotional tone onto the unfolding meaning of the event. In this way, expressive behaviour associated with coarse emotions can lend internal coherence to subjective emotional experiences.

## 5. Aesthetics and emotion

### 5.1. Configurations and feelings: The reactive model

*Reactive* processing (Cupchik and Winston, 1992) represents an extension of the *configuration-feeling model*. It applies best if the goal of a recipient in an aesthetic

episode is to experience pleasure or excitement. The recipient will focus on stimulus qualities that evoke pleasure or arousal. Specific semantic configurations may be sought based on past experience or, alternatively, the recipient might monitor collative properties such as familiarity. Through a learning process, recipients associate stimulus configurations with pleasure and excitement.

The evocation of excitement or arousal is a centrepiece of theorizing in scientific aesthetics. Gustav Fechner (1876), the founder of experimental aesthetics, related arousal state to aesthetic preference. According to the “principle of the aesthetic middle”, people “tolerate most often and for the longest time a certain medium degree of arousal, which makes them feel neither overstimulated nor dissatisfied by a lack of sufficient occupation” (in Arnheim, 1985: 862; and Fechner, 1978, Vol. II: 17 and 260). Berlyne’s (1971, 1974) inverted U-shaped curve is founded on Fechner’s principle, and relates stimulus complexity to arousal and pleasure. Changes in level of arousal, such as ‘arousal boost’ or ‘arousal moderation’, account for preferences which lie in the middle range of stimulus complexity.

Winston’s discussion of sentimentality in *kitsch* art shows how specific stimulus features can evoke moderate feelings of pleasure. Sentimental paintings produce “idealized thoughts about the goodness and purity of the subject matter” (1992: 121) and do so by using conventional devices (e.g., smooth surface, soft-edged haziness). Thus, elements of an artwork that yield the perception of sweetness and innocence imply “a rosy view of the world and a denial of unpleasant things” (ibid.: 127). Sentimental art, in its simplicity and idealization, is arousal-moderating (Berlyne, 1971) and evokes responses of warmth in unsophisticated audiences (Winston, 1992; Winston and Cupchik, 1992).

Sentimental works enable viewers to avoid the intense emotions which natural life situations might generate. Naive (no art courses) viewers have been shown (Winston and Cupchik, 1992) to prefer Popular (i.e., sentimentalized) over High Art (i.e., museum) paintings, rating the former as warmer and more pleasant than High Art. They also believe that, generally speaking, art should provide warm feelings to a broad audience.

This analysis suggests that the depth of interpretive activity is limited when affective response is of primary interest. Thus, if a viewer or reader ‘tunes-in’ to an art or literary work in search of particular qualities, then the degree of elaboration and depth of analysis will be restricted (Craik and Lockhart, 1972; Lockhart and Craik, 1990). A behaviour pattern consistent with this was observed in a recent study of reading activity (Cupchik and László, 1994). Subjects read excerpts from two action-oriented and two experience-oriented short stories. They read more quickly as they progressed through the *action* stories. Story segments that were judged (by pretest ratings) to be ‘suspenseful’ or ‘surprising’ were also read more quickly. Thus, the resolution of uncertainty, rather than a search for profound meaning, governed the reading process.

This model holds that stimulus configurations are closely *linked* to bodily *reactions* lying along pain–pleasure and arousal dimensions. Since linkage implies *association*, this in turns opens the door to other learning mechanisms such as



conditioning, habituation, and stimulus generalization. Thus, if conditioning serves to make a particular stimulus feature familiar and pleasurable, then repeated exposure to the stimulus should reduce its reward value through habituation. In this manner, bodily mechanisms can modulate both everyday and aesthetic experiences.

### 5.2. Meaning and emotion blends: The reflective model

*Reflective* processing (Cupchik and Winston, 1992) generalizes the *contextual meaning-emotion* model to aesthetic activity. The multilevel nature of the aesthetic work is of central importance. Meaning is therefore contingent on the unity or relations among the different levels of organization in the work. In German Expressionism, for example, appreciating the ‘meaning’ of a painting by Otto Dix involves integrating the depicted characters and themes together with a distorted (i.e., expressive) treatment of the painting’s surface, colour, etc. Together they convey and recreate an emotional sense for the decadence and instability of Berlin early on in the twentieth century.

Iser (1978) was very sensitive to the role of contexts in literary communication and examined their effects on interpretive processes. According to Iser, “each textual segment does not carry its own determinacy within itself, but will gain this in relation to other segments” (1978: 195). Segments reflecting the perspectives of characters, narrator, or plot take on new meaning when related to each others in a ‘referential field’. He productively applied Gurwitsch’s (1964) analysis of the ‘referential field’ and this analysis shares fundamental principles in common with Arnheim’s (1986) discussion of ‘stepwise dependencies’ between parts and wholes.

Iser contrasted ‘continuously patterned’ and ‘impeded’ texts. ‘Continuously patterned’ texts unfold in a logical manner and provide an element of ‘stability’ which characterize affective responses according to the *reactive model*. However, “the vivid complexity of the ‘impeded’ text” (1978: 189) challenges the gestalt principle of *good continuation* because the segments run counter to the process of consistency building. Breaks in *good continuation*, which authors embed in texts through “fragmented, counterfactual, contrastive or telescoped sequence” (ibid.: 186), mobilize a reader’s constitutive activity. This “suspension of *good continuation*” impedes habitual acts of comprehension resulting in the “diversification of innovative gestalten of meaning” (ibid.: 188).

The production of new interpretive structures is central to modern reception theory (Schmidt, 1982), which holds that aesthetic pleasure is a direct product of interpretive activity (Cupchik and Gebotys, 1990). The ‘effort after meaning’ (Bartlett, 1932) entails a reconciliation of interpretive contexts chosen by the author and by the readers. According to the *reflective mode*, readers approach artworks and texts as layered structures and accommodate to their distinctive meaning. The challenge is to bring to bear an appropriate context which renders an event coherent and meaningful. Accordingly, experienced viewers emphasized challenging, objective properties of artworks when explaining preferences (Winston

and Cupchik, 1992) for High Art paintings, which they rated as more complex than Popular artworks. They also subscribed to the philosophy that, in general, art should be challenging.

Another aspect of the reading study described earlier (Cupchik and László, 1994) fits nicely with the reflective model. Story segments that were judged (by a pretest group) to focus on the 'experiences of the characters' (and that were also rich in emotional significance) were read more slowly. Stories which were judged by recipients to be 'rich in meaning about life' or to have 'evoked images' were read more slowly. Subjects who found the *experience* stories to be 'personally relevant' also read them more slowly. The slowness of reading is assumed to reflect absorption or deeper processing of the stimulus events, a reflective process.

There are at least two ways that 'coarse' emotions fit into this search for multilevel meaning. First, readers can spontaneously experience patterns of emotions in response to subject matter and style of a text or artwork. Second, to the extent that the aesthetic stimulus poses an interpretive challenge, past emotional experiences can help readers construe the possible meanings and implications of unfolding events. According to this analysis, readers do not simply apply prototypes of abstract emotions to interpretive process. Rather, they use their experiences with the many nuances of individual emotions and emotion blends to construct combinations which are appropriate to the situation in question. In this manner, female subjects who were culturally 'proximate' to a story about World War II events (Larson and László, 1990) had more 'vivid' reading experiences.

Let us pause to summarize the implications that the reflective model has regarding relations between appraisal and response. First, complex interpretive activity requires effort on the part of the individual and this should slow the tendency to an immediate emotional reaction; *deliberation hinders spontaneity*. Second, the active generation of meaning runs counter to the operation of automatic mechanisms (e.g., conditioning) which might link appraisal with reaction; *the constraints of convention and the 'canon' are minimized*. Finally, when subtle combinations of emotion are generated to interpret an event, and pleasure or excitement are not given priority, more complex emotions are experienced and these take time to form.

## 6. Summary

This paper has adopted the position that fundamental processes linking stimulus appraisal and response in everyday life can be generalized to the aesthetic realm. These processes are revealed in perceptual/cognitive activity, as well as in traditional models of emotion. A narrow discrimination of specific stimulus configurations was linked through association (and related conditioning mechanisms) with affective responses on pleasure and arousal dimensions: CONFIGURATIONS ELICIT FEELINGS. In contrast, the contextualized interpretation of specific evocative situations was achieved through the flexible application of emotional knowledge: CONTEXTUALIZED MEANINGS ELICIT EMOTIONS.

In the end, this argument is as relevant to the theory of emotional processes as it is to aesthetics.

## References

- Arnheim, R., 1971. *Art and visual perception*. Berkeley, CA: University of California Press.
- Arnheim, R., 1985. The other Gustav Theodor Fechner. In: S. Koch and D.E. Leary (eds.), *A century of psychology as science*, 856–865. New York: McGraw-Hill.
- Arnheim, R., 1986. The trouble with wholes and parts. *New Ideas in Psychology* 4, 281–284.
- Arnold, M.B., 1960. *Emotion and personality*. New York: Columbia University Press.
- Bartlett, F.C., 1932. *Remembering: A study in experimental and social psychology*. Cambridge: Cambridge University Press.
- Berlyne, D.E., 1971. *Aesthetics and psychobiology*. New York: Appleton-Century-Crofts.
- Berlyne, D.E., 1974. *The new experimental aesthetics: Steps toward an objective psychology of aesthetic appreciation*. Washington: Hemisphere.
- Craik, F.I.M. and R.S. Lockhart, 1972. Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior* 2, 671–684.
- Cupchik, G.C. and R.J. Gebotys, 1988. The search for meaning in art: Interpretive styles and judgments of quality. *Visual Arts Research* 14, 38–50.
- Cupchik, G.C. and R.J. Gebotys, 1990. Interest and pleasure as dimensions of aesthetic response. *Empirical Studies of the Arts* 8(1), 1–14.
- Cupchik, G. and J. László, 1994. The landscape of time in literary reception: Character experience and narrative action. *Cognition and Emotion* 8(4), 297–312.
- Cupchik, G.C. and A.S. Winston, 1992. Reflection and reaction: A dual-process analysis of emotional responses to art. In: L. Ya. Dorfman, D.A. Leontiev, V.M. Petrov and V.A. Sozinov (eds.), *Art and emotions*, Vol. 2: 65–72. Perm, CIS: The Perm State Institute of Culture.
- Cupchik, G.C. and A.S. Winston, in press. Confluence and divergence in empirical aesthetics, philosophy, and mainstream psychology. *Handbook of perception and cognition* 16, Cognitive ecology. San Diego, CA: Academic Press.
- Cupchik, G.C., A.S. Winston and R.S. Herz, 1992. Judgments of similarity and difference between paintings. *Visual Arts Research* 18, 36–49.
- Duffy, E., 1941. An explanation of 'emotional' phenomena without the use of the concept 'emotion'. *Journal of General Psychology* 25, 283–293.
- Duffy, E., 1962. *Activation and behavior*. New York: Wiley.
- Ekman, P., W.V. Friesen and P. Ellsworth, 1972. *Emotion in the human face*. New York: Pergamon.
- Fechner, G., 1978 [1876]. *Vorschule der Ästhetik* (2 vols.). Hildesheim: Georg Olms.
- Frijda, N.H., 1986. *The emotions*. New York: Cambridge.
- Gardiner, H.M., R.C. Metcalf and J.G. Beebe-Center, 1970 [1937]. *Feeling and emotion: A history of theories*. Westport, CT: Greenwood.
- Garner, W.R., 1962. Uncertainty and structure as psychological concepts. New York: Wiley.
- Garner, W.R., 1978. Aspects of a stimulus: Features, dimensions, and configurations. In: E. Rosch and B.B. Lloyd (eds.), *Cognition and categorization*, 99–133. Hillsdale, NJ: Erlbaum.
- Gibson, J.J., 1971. The information available in pictures. *Leonardo* 4, 27–35.
- Gurwitsch, A., 1964. *The field of consciousness*. Pittsburgh, PA: Duquesne University Press.
- Hochberg, J., 1978. Art and perception. In: E.C. Carterette and M.P. Friedman (eds.), *Handbook of perception*, Vol. 10: 225–258. New York: Academic Press.
- Hochberg, J., 1979. Some of the things that paintings are. In: C.F. Nodine and D.F. Fisher (eds.), *Perception and pictorial representation*, 17–41. New York: Praeger.
- Hochberg, J., 1981. Levels of perceptual organization. In: M. Kubovy and J.R. Pomerantz (eds.), *Perceptual organization*, 255–278. Hillsdale: Erlbaum.
- Hochberg, J., 1986. Parts and wholes: A response to Arnheim. *New Ideas in Psychology* 4, 285–293.

- Hutcheson, F., 1725. *An inquiry into the original of our ideas of beauty and virtue*. London: D. Midwinter and others.
- Iser, W., 1978 [1976]. *The act of reading*. Baltimore, MD: Johns Hopkins University.
- Izard, C., 1971. *The face of emotion*. New York: Appleton-Century-Crofts.
- James, W., 1884. What is emotion? *Mind* 9, 188–204.
- James, W., 1894. The physical basis of emotion. *Psychological Review* 1, 516–529.
- James, W., 1890. *The principles of psychology*, Vol. 2. New York: Dover. (Reissued, 1950.)
- Kreitler, H. and S. Kreitler, 1972. *The psychology of the arts*. Durham, NC: Duke University Press.
- Larson, S.F. and J. László, 1990. Cultural-historical knowledge and personal experience in appreciation of literature. *European Journal of Social Psychology* 20, 425–440.
- Lipps, T., 1903–1906. *Asthetik*, Vols. I and II. Hamburg and Leipzig: Voss.
- Lockhart, R.S. and F.I.M. Craik, 1990. Levels of processing: A retrospective commentary on a framework for memory research. *Canadian Journal of Psychology* 44, 87–112.
- Mandler, G., 1984. *Mind and body: The psychology of emotion and stress*. New York: Norton.
- Moles, A., 1968 [1958]. *Information theory and esthetic perception* (Trans. J.E. Cohen). Urbana, IL: University of Illinois Press.
- Neperud, R.W., 1988. A propositional view of aesthetic experiencing for research and teaching in art education. In: F. Farley and R.W. Neperud (eds.), *The foundations of aesthetics, art and art education*, 273–319. New York: Praeger.
- Pomerantz, J.R., 1981. Perceptual organization in information processing. In: M. Kubovy and J.R. Pomerantz (eds.), *Perceptual organization*, 141–179. Hillsdale, NJ: Erlbaum.
- Schachter, S., 1966. The interaction of cognitive and physiological determinants of emotional state. In: C.D. Spielberger (ed.), *Anxiety and behaviour*, 193–224. New York: Academic Press.
- Schachter, S. and J.E. Singer, 1962. Cognitive, social, and physiological determinants of emotional state. *Psychological Review* 69, 379–399.
- Schmidt, S.J., 1982. *Foundations for the empirical science of literature* (Trans. R. de Beaugrande). Hamburg: Buske.
- Sokolov, E.N., 1963. A probabilistic model of perception. *Soviet Psychology and Psychiatry* 1, 28–36.
- Titchener, E.B., 1910. *A textbook of psychology*. New York: Macmillan.
- Tomkins, S.S., 1962. *Affect, imagery, consciousness*, Vol. 1: *The positive affects*. New York: Springer.
- Tomkins, S.S., 1963. *Affect, imagery, consciousness*, Vol. 2: *The negative affects*. New York: Springer.
- Tomkins, S.S. and R. McCarter, 1964. What and where are the primary affects? Some evidence for a theory. *Perceptual and Motor Skills* 18, 119–158.
- Triesman, A., 1964. Monitoring and storage of irrelevant messages in selective attention. *Journal of Verbal Learning and Verbal Behavior* 3, 449–459.
- Winston, A.S., 1992. Sweetness and light: Psychological aesthetics and sentimental art. In: G.C. Cupchik and J. László (eds.), *Emerging visions: Contemporary approaches to the aesthetic process*, 118–136. New York: Cambridge University Press.
- Winston, A.S. and G.C. Cupchik, 1992. The evaluation of high art and popular art by naive and experienced viewers. *Visual Arts Research* 18(1), 1–14.
- Woodworth, R.S., 1938. *Experimental psychology*. New York: Holt.
- Wundt, W., 1896. *Grundriss der psychologie*. Stuttgart: Engelmann.