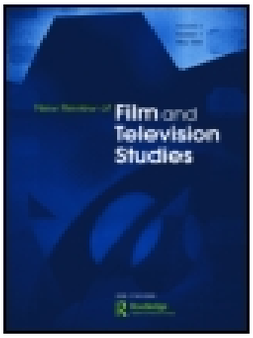

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Perceiving emotional causality in film: a conceptual and formal analysis

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ABSTRACT
This article investigates the conceptual and formal ways in which the cinematic mode of expression prompts the viewer to perceive emotional causality in film, namely the percept that the viewer sees that the character's *perception* of an outer event is *the cause* of an *emotional* state in the character. The structure of our paper is twofold. The first section is theoretical and centres around the answerability of four main questions: What is *emotional causality*? How do we *conceptualise* it? How do we *perceive* it? And how do we perceive it in the *filmic form*? Explanations will be mainly drawn from three different intellectual disciplines: cognitive linguistics, experimental psychology and the philosophy of mind. The second section is practical and aims to show how the proposed theoretical model can be applied by considering its use for the analysis of what has been described by many as the prototypical genre of intense emotions, namely the melodrama genre. Using a scene from Douglas Sirk's *All that Heaven Allows* as an example, we show how film, through its formal articulation of various conceptual mechanisms, stimulates the viewer to infer a causal relationship between (1) the character's visual experience and (2) the character's emotional state.

KEYWORDS Causation; embodied cognition; emotions; image schemas; metaphor; perception

1. Introduction

Since the 1980s, cognitive linguistic research increasingly shows that human language about abstract concepts is structured according to a wide range system of conceptual metaphors that is grounded in our common bodily experiences of spatial movement and vision (e.g. Lakoff and Johnson 1980, 1999). One important strand of research within Conceptual Metaphor Theory (henceforth, CMT) involves the study of language of emotion (e.g. Athanasiadou and Tabakowska 1998; Kövecses 2000; Niemeier and Dirven 1997). Emotions are abstract in the sense that they cannot be observed directly, but only indirectly

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via bodily symptoms and verbal expressions. As research indicates, there are many different ways to study the conceptualisation of emotion. One specific way is to investigate what some scholars call 'the language of emotional causality' (Dirven 1997; Radden 1998). The concept of 'emotional causality' refers to the folk understanding of emotion according to which our experience of emotion is embedded in a larger chain of causation which is usually centred around three events: (a) an outer event (b) an emotional state and (c) a physiological reaction or other response. Cognitive linguists, then, aim to explore how this 'flow-of-emotion scenario' is reflected in language (Heider 1991, 6). This research involves the following questions: How do people talk about emotions? And why do people understand emotions described in a causal sense?

The primary goal of the present study, then, is not so much to investigate how the flow-of-emotion scenario is conceptualised in *language*, but to examine how the same conceptual mechanisms underlying the conceptualisation of emotional causality in language are reflected in the *cinematic mode of expression*. Motivation for this turn towards the non-verbal is instigated by the observational claim of CMT that linguistic expressions of emotional causality (e.g. 'She trembled *in* fear', 'She screamed *in* pain') are not random, but cognitively motivated. They express a way of thinking that is bodily grounded. This entails that the study of emotion concepts cannot be restricted to the study of language alone. Indeed, in order to avoid the criticism of circular reasoning (i.e. CMT tends to prove the validity of conceptual metaphor by referring back to linguistic examples) one has to go beyond the linguistic mode into the sphere of non-verbal modes of expressions such as cinema (see, e.g. Forceville [2009]; or Gibbs and Perlman [2006, 215] for a similar criticism).

Moreover, given that film is a visual medium par excellence, this study is about the *perception of* emotional causality in film. More specifically, our paper is interested in those *conceptual mechanisms* that are manifested in cinema and that prompt the viewer to see the flow-of-emotion scenario. One such conceptual system, we argue, that enables to trigger emotional causality in the viewer is the one that comes together with the cinematic structure of *character perception*. It underlies the visual expression of a character S seeing something O, and it is characterised by having both a *causal* and *metaphorical* component. It is *causal* because the system prompts the viewer to perceive that the object perceived by a character *causes* the character's perception of that object, and it is *metaphorical* because the system relies on sensory-motor knowledge to express this causal component (i.e. it depends on spatial knowledge to satisfy the conditions of perceptual causality). It is through the causal constitution of character perception, elicited metaphorically through the spatial dynamics of cinema, that, we argue, the viewer is able to see that the event perceived by the character is the cause of an emotional state in the character.

The assumptions underlying this claim are complex and depend on insights from various disciplines of cognitive research (cognitive linguistics,

experimental psychology and philosophy of mind). For sake of clarity, we therefore propose to organise our paper around four questions that are vital to our argument, namely:

(1) What is *emotional causality*?
(2) How do we *conceptualise* emotional causality?
(3) When do we *perceive* emotional causality?
(4) How do we perceive emotional causality in *film*?

Once we will have addressed each question, we will show how the proposed theoretical model can be applied to a concise case study taken from Douglas Sirk's melodrama *All That Heaven Allows* (1955).

2. Defining emotional causality

The concept of emotional causality refers to the folk understanding of emotion according to which our experience of emotion is embedded in a larger chain of causation which usually involves the build-up of three events: (a) an outer event, (b) an emotional state and (c) a physiological reaction or other response (Radden 1998, 273). Consider, for example, the following linguistic expression of an emotional experience:

(1) 'Bill bridled with anger at Hillary's remark' (Dirven 1997, 56)

Here one can consider Hillary's remark as the stimulus, which causes the feeling of anger in Bill (emotion as effect), which in turn causes the physiological reaction of bridling (emotion as cause). Thus, the chain of emotional causality in example (1) consists of a linguistic compression of three events which, according to Dirven (1997, 57), can be summarised as follows:

(2) (a) Hillary made a remark (outer event).
(b) This remark angered Bill (emotional state).
(c) Bill bridled with anger (physiological reaction).

Scientific theories of emotional causality usually amount to a debate with regard to the order of (b) and (c). Two theories that are often cited in this regard are the James-Lange physiological theory of emotion according to which the physical response precedes the emotional state (i.e. [c] > [b]: Bill is angered because he bridles) (James 1884), and the Cannon-Bard neurological theory of emotion according to which the outer event leads to nervous activity which simultaneously triggers off an experience of emotion and a bodily response ([b] = [c]: Bill is angry and at the same time he bridles) (Cannon 1927). It would take us beyond the scope of this paper to consider each of these (and other) theories in detail.[1] For present purposes, we therefore would like to restrict ourselves to the uncontroversial notion that, whatever the order of events may be, the two common-sense attributes of emotion (feelings and responses) would not

have occurred without the person's perceptual experience of the environment. For this reason, we would like to extend the linguistic compression of (2) with an additional event that is intrinsically implied in linguistic expression (1), namely the event of Bill *perceiving* Hillary's remark. That is, in order for Bill to be angry at Hillary's remark, Bill needs to have *heard* the remark in the first place. Chronologically, this event occurs between Hillary making the remark, on the one hand, and Bill's feeling of anger and his physiological response of bridling, on the other hand.

(3) (a) Hillary made a remark.
(b) Bill perceived the remark.
(c) The perception of this remark angered Bill.
(d) Bill bridled with anger.

Inserting this perceptual event further entails the presence of a preceding causal relation by which Hillary's remark (outer event) *causes* Bill's perceptual experience of that remark. This condition, also known as the Causal Theory of Perception (Grice 1989; Pears 1976; Searle 2015; Strawson 1974), is crucial in the sense that it precedes the chain of emotional causality as linguistically denoted by the two prepositions 'with' and 'at'. In sum, then, one can schematise the chain of emotional causality as in Figure 1.

By limiting the focus of our paper to the perceptual component of emotional causality (the cause of emotion), rather than emphasising the order of

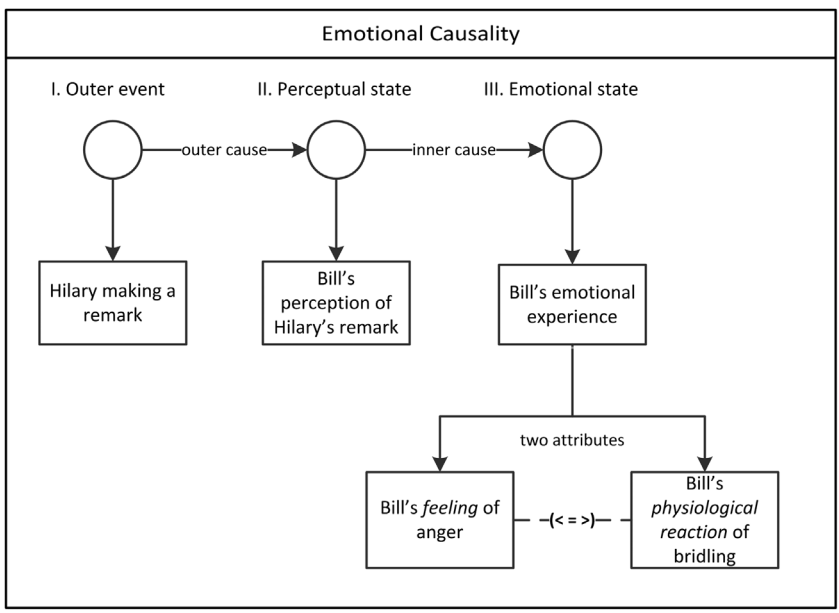

Figure 1. Emotional causality: perception of an event as cause of emotion.

feeling and response within the emotional component of emotional causality (emotion as cause of the bodily response or not), we hope to offer an account that is general enough to surpass the ongoing and controversial discussion of emotional sequence.

Having defined emotional causality as a causal relation between a person's perception of an event and his or her emotional experience (including its attributes feeling and response), we are now able to turn towards the second question: How do humans *conceptualise* emotional causality?

3. Conceptualising emotional causality

In correspondence with the three (abstract) constitutional concepts of emotional causality (perception, emotion and causation), the answer to this question falls apart into three sub-questions and one integrative question:

(1) How do we conceptualise *perception*?
(2) How do we conceptualise *emotions*?
(3) How do we conceptualise *causation*?
(4) How do the answers to questions (1) and (2) relate to the answer to question (3)?

Let's consider each question in turn.

3.1. Metaphors and metonymies of perception

In answering the first question, cognitive linguistics usually stresses the importance of four conceptual structures: the conceptual metonymy PERCEPTUAL ORGAN STANDS FOR PERCEPTION or EYES STAND FOR SEEING (Hilpert 2006; Yamanashi 2010; Yu 2003, 2004, 2008), the conceptual metaphors PERCEPTION IS RECEPTION and PERCEPTION IS TOUCHING (both subsumed under the general metaphor PERCEPTION IS CONTACT BETWEEN PERCEIVER AND OBJECT PERCEIVED) (Lakoff 1995; Yu 2004), and the conceptual metaphor VISUAL FIELD IS A CONTAINER (Lakoff and Johnson 1980). Schematically, these mappings can be summarised as in Figure 2.

(1) In the first conceptual mechanism, perception is understood *metonymically* in terms of conceptual mappings that occur within the *same* experiential domain: one entity in a schema (i.e. the perceptual organ) is taken as standing for the schema as a whole (i.e. the general concept of perception). Consequently, given that seeing and hearing are two of human's core senses, this general mapping further designates two special cases, namely the conceptual metonymy EYES STAND FOR SEEING (e.g. 'Keep an eye on him'; 'Keep your eyes open') and the conceptual metonymy EARS STAND FOR HEARING (e.g. 'I cannot believe my

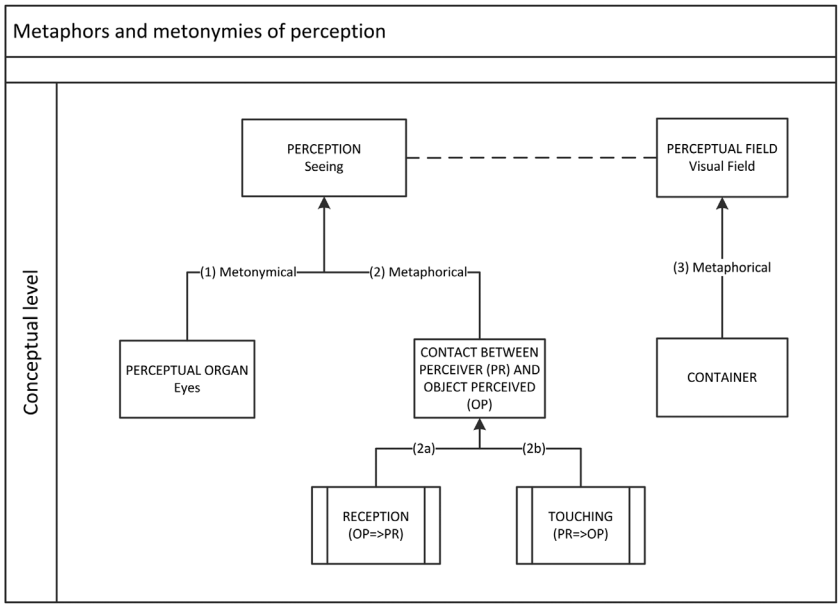

Figure 2. Metaphors and metonymies of perception.

ears'; 'Walls have ears'). Since both organs are directly related to their function, they also adhere to the more general conceptual metonymy THE INSTRUMENT USED IN AN ACTIVITY STANDS FOR THE ACTIVITY or PERCEPTUAL ORGAN FOR FUNCTION OF THE PERCEPTUAL ORGAN (see also, Barcelona 2002, 249).

(2) By contrast, in the second conceptual mechanism, perception is understood *metaphorically* in terms of the *different* experiential domain of contact. It considers a distinction made by Lakoff (1995, 139) between two special cases: (2a) PERCEPTION IS RECEPTION and (2b) PERCEIVING IS TOUCHING (see also Yu 2004, 676). In the first conceptual metaphor, there is a mapping from the source domain of reception onto the target domain of perceiving. In this metaphor, perception occurs 'when the thing perceived moves to the perceiver's organs of perception' (Lakoff 1995, 139). Examples include such expressions as 'A comet *came into* my sight' or 'The noise *came through* the walls' (Lakoff 1995, 139). In both sentences, perception is construed in terms of perceptual sense impressions which reach the perceptual organs. By contrast, in the second conceptual metaphor there is a mapping from the source domain of touching onto the target domain of perceiving. In this metaphor, perception occurs 'when the perceiver moves his organs of perception to the thing perceived and touches it' (Lakoff 1995, 139). Examples include such expressions as 'My eyes *picked out* every detail of the

pattern' or 'My gaze *is* out *over* the bay' (Lakoff 1995, 133). As Lakoff points out, the words 'gaze' and 'eyes' are conceived metaphorically as visual limbs that can reach out and touch things.

(3) The third and last conceptual mechanism relates to the perceptual mode of vision and states that we conceptualise human visual fields *metaphorically* in terms of containers, that is, when we look at some object or entity, we conceptualise what we see as being something inside it. As Lakoff and Johnson (1980, 30) argue, this metaphorical concept, which they verbalize as VISUAL FIELDS ARE CONTAINERS, emerges naturally in that when we look at some territory, our field of vision automatically defines a bounded physical space (i.e. the part that we can see). Examples include such English expressions as 'The ship *is coming into* view', 'That's *in the centre of* my field of vision' or 'There's nothing *in* sight' (Lakoff and Johnson 1980, 30).

3.2. Metaphors and metonymies of emotion

As with perception, emotions are usually conceptualised in two ways: metonymically and metaphorically. It would take us too far to consider both mechanisms for each specific case of emotion (e.g. love, anger, happiness etc.). Therefore, we will limit ourselves to two general conceptual patterns that apply to most emotion concepts, namely the conceptual metonymy THE PHYSIOLOGICAL AND EXPRESSIVE RESPONSES OF AN EMOTION STAND FOR THE EMOTION (Kövecses 2000, 134) and the conceptual metaphor EMOTIONS ARE CONTAINERS (Kövecses 2000, 37). Schematically, these mappings can be summarised as in Figure 3.

(1) The first conceptual mechanism describes the very general *metonymic* principle according to which physiological and expressive responses of emotions are taken as standing for the concept of emotion as a whole. Some specific cases of this metaphor that are mentioned by Kövecses (2000, 134) are: BODY HEAT FOR EMOTION (as in 'He did it in the heat of passion'), CHANGE IN HEART RATE FOR EMOTION (as in 'He entered the room with his heart in his mouth'), CHANGE IN RESPIRATION FOR EMOTION (as in 'She was heaving with emotion'), CHANGE IN THE COLOUR OF THE FACE FOR EMOTION (as in 'She colored with emotion'), FACIAL EXPRESSIONS FOR EMOTION (as in 'His emotions were written all over his face').

(2) By contrast, in the second conceptual mechanism, emotion is understood *metaphorically* in terms of the different experiential domain of CONTAINMENT. As Radden (1998, 275) argues, this source domain is particularly relevant to our folk understanding of intense and predominantly negative emotions. Consider, for example, the following expression:

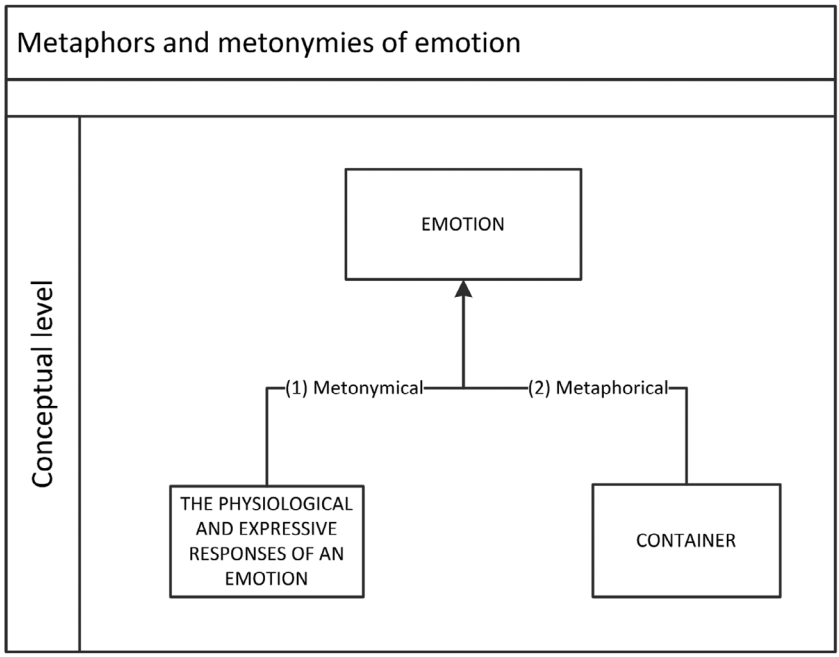

Figure 3. Metaphors and metonymies of emotion.

(1) 'She trembled in fear'.

Here, the emotion of fear is metaphorically understood in terms of a container which causes the person's physiological reaction of trembling. As to the reason why intense emotions are conceptualised by means of 'in' and not by means of other prepositions (e.g. 'with', 'for') Radden (1998, 276) refers to the basic spatial sense of the CONTAINER schema itself. A container is characterised by having boundaries. As such it exhibits the property of maintaining whatever is inside it. In the case of living beings, this entails that the borders of a container prevent them from moving around freely. Hence, the motivation to use such expressions as 'to be held in chains' or 'to be kept in suspense'. In both cases 'chains' and 'suspense' are not conceived as physical containers, but as a means to restrain a person's movements. Since motion can be metonymically linked to the general concept of action (MOTION STANDS FOR ACTION), this further entails the conceptual metonymy INABILITY TO MOVE STANDS FOR INABILITY TO ACT. 'Being held in a container' thus more generally means 'being unable to act' (Radden 1998, 276). As Radden argues, this is exactly how people feel when they are delivered over to intense emotions. As he writes:

> The container schema conceptualises intense emotions which overpower a person to the extent that he is no longer in control of his free actions. As a result, the preposition 'in' is used in expressions that denote very intense states. These may

> be emotions as well as intense physical states such as pain or mental states such as puzzlement, all of which qualify as containers which may constrain the free will of a human being: thus, one may be *in fear*, *in anger*, *in distress*, *in terror*, *in sorrow*, *in despair* or *in desperation*, but one may not, for example, be in less intense emotional states such as *in worry, in sadness*, *in shame* or *in disappointment*. (1998, 276)

3.3. Metaphors of causation: The EVENT-STRUCTURE metaphor

To address the third question, we would like to draw upon the work of Lakoff and Johnson (1999). In their book *Philosophy in the Flesh*, they developed the argument that there are at least two important metaphorical systems by way of which certain types of causation are conceptualised, namely the LOCATION EVENT-STRUCTURE metaphor and the OBJECT EVENT-STRUCTURE metaphor (1999, 196) (see also Johnson 2008). For the purpose of our argument, we limit ourselves to a discussion of the first structure. The LOCATION EVENT-STRUCTURE metaphor involves the metaphorical conception of events in terms of motion in space and can be structured according to a vast complex system of several submappings (see Table 1), one of them being the metaphorical concept of causation, namely that of CAUSATION AS A PHYSICAL FORCE.

Each of these submappings underlies a large number of linguistic expressions whose metaphorical constitution goes largely unnoticed in our ordinary day-to-day conversations. For example, the conceptual metaphor CHANGE OF STATE IS MOVEMENT supports expressions such as 'The water *went* from hot to cold', or 'The system *is moving* toward homeostasis' (Johnson 2008, 41). The submapping CAUSATION IS FORCED MOVEMENT becomes manifest in such sentences as 'The fire *brought* the soup to a boil', or 'The candidate's speech *threw* the crowd into a frenzy' (Johnson 2008, 41). In all these linguistic examples, then, causation is not conceptualised literally – it does not represent an objective feature of the world – but metaphorically by way of extending knowledge from various everyday bodily experiences such as *bringing*, *throwing*, *driving*, *pulling*, *pushing*, *propelling* and *moving*. Thereby,

Table 1. The LOCATION EVENT-STRUCTURE metaphor (after Lakoff and Johnson 1999, 179).

Source domain [MOTION IN SPACE]	*Target domain* [EVENTS]
Locations in Space	States
Movements from one location to another	Changes of states
Physical forces	Causes
Forced movement	Causation
Self-propelled movements	Actions
Destinations	Purposes
Paths to destinations	Means to ends
Impediments to motion	Difficulties

inferential evidence is provided by systematic correlations between the concrete source domain of forced movement and the abstract target domain of causation, some of which have been summarised by Lakoff and Johnson (1999, 185) as in Table 2.

3.4. Pairing perception and emotions to events

Having discussed how the three elements of emotional causality can be conceptualised, we can now address the question of their intersection. Where do emotions and perception fit into the event structure metaphor? As to the degree of overlap between events and emotions, Kövecses (2000, 55) has pointed out that emotions coincide with the 'state' part of the event structure in three important ways, that is: (1) the emotional state of a person corresponds to the bounded region (EMOTION AS CONTAINER), (2) the change of state of a person from a non-emotional state to an emotional state corresponds to the change of location or motion (CHANGE OF EMOTIONAL STATE IS CHANGE OF LOCATION), (3) The event or entity that causes this change of state corresponds to the physical force. Perception, then, can be embedded in the latter mapping. As we have seen earlier, it is the *perception* of an event, and not so much the event in itself, that causes the emotion. The perception of an event is seen as a physical force that causes a change from a non-emotional state to an emotional state. Thus, Kövecses' formulation can be schematically rephrased as follows (where the double-line arrow indicates 'causes, leads to'): Perception (Entity/event) = >Change [Entity, $State_1$; Entity, $State_2$]). See Table 3.

Table 2. The CAUSATION IS FORCED MOVEMENT metaphor (after Lakoff and Johnson 1999, 185).

Source domain [FORCED MOVEMENT]	*Target domain* [CAUSATION]
The application of the force precedes or accompanies the movement	The occurrence of the cause precedes or accompanies the change of state
The movement would not have occurred without the application of a force	The change of state would not have occurred without a cause
The force impinges on the entity that moves	The cause impinges on the entity that changes state

Table 3. The degree of overlap between events and emotional causality.

Source domain [MOTION IN SPACE]	*Target domain* [EVENTS]	*Target domain* [EMOTIONAL CAUSALITY]	*Examples*
Bounded region	State (Entity)	The emotional state	'I'm in love', 'She trembled in fear'
Motion	Change (Entity, $State_1$; Entity, $State_2$)	Change from a non-emotional state to an emotional one	'Falling in love', 'Flying into a rage'
Force	Cause (Change [Entity, $State_1$; Entity, $State_2$])	Perception of an event	'The news sent the crowd into a frenzy'

4. Perceiving emotional causality

The previous section dealt with the question of *conceptualisation*. How do people conceptualise the three constitutive elements of emotional causality (perception, emotions, causation)? By contrast, this section discusses the question of *perception*: How do people perceive emotional causality? Likewise, the answer to this question first entails that we look into the more general question of perceptual causality itself.

4.1. Perceiving causality

The concept of perceptual causality can be situated within the field of experimental psychology and suggests that certain simple visual displays consisting of moving 2-D geometric shapes can give rise to percepts with high-level properties such as causality. Seminal in this regard is the work of the Belgian psychologist Albert Michotte (1946). In his pioneering experiments on the perception of causality, Michotte tried to show how very simple displays give rise to surprisingly high-level percepts. One of these demonstrations is known as the 'launching effect' which can be visualized as in Figure 4. Imagine a naïve observer viewing a simple film of two small triangles that are drawn on a line, separated by several inches. (I) The first triangle A moves in a straight line until (II) it approaches the second triangle B, whereupon (III) A stays in its place and B starts moving away in the same direction. Objectively speaking, the film has nothing to do with causation. All that is happening are the events described above. Perceptually, however, something remarkable occurs: the naïve observer tends to perceive a succession of events in terms of a cause–effect relationship, that is, the naïve observer sees triangle A *cause* the motion of triangle B (see also Radden 1985, 186; Scholl and Tremoulet 2000, 299).

From this simple experiment, then, it is possible to infer, following Radden (1985, 187), three sufficient conditions of perceptual causality, that is,

(P1) Two events are perceived as being respectively a cause and its effect if:

(a) one of the events temporally precedes the other event,
(b) the two events interact and,

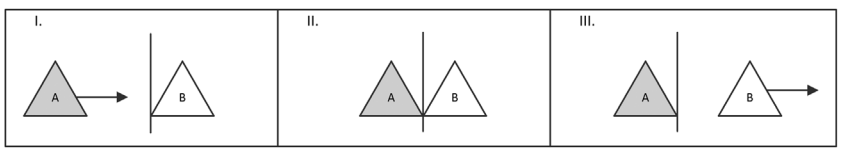

Figure 4. The launching effect.

(c) there is a noticeable change in the second event, immediately following its interaction with the first one.[2]

4.2. Connecting emotions to perceptual causality: the pairing problem

In the first part of our article, we have defined the chain of emotional causality by emphasising the importance of two causal relations, namely (1) the relation between an outer event O and a person S's perception of O and (2) the relation between S's perception of O and S's emotion. Hence, given the basic conditions of perceptual causality, as outlined in the previous section, we can now articulate their overlap as follows:

(1) An outer event O as cause of S's perception of O

(P2) An observer X will likely perceive an outer event O and a person S's [perceptual] experience of O as being, respectively, a cause and its effect if,

(a) the appearance of O temporally precedes S's perceptual experience of O;
(b) the appearance of O and S's perception of O interact; and
(c) there is a noticeable change in S, immediately following its interaction with O (i.e. S's perceptual change from a state of not seeing O to a state of seeing O).

(2) S's perception of O as cause of S's emotional state

(P3) An observer X will likely perceive S's [perceptual] experience of O and S's emotional state as being, respectively, a cause and its effect if,

(a) S's perception of O temporally precedes S's emotional state;
(b) S's perception of O and S's emotional state interact; and
(c) there is a noticeable change in S, immediately following its interaction with S's perception of O (i.e. S's emotional change from a state of not experiencing the intense emotion to a state of experiencing the intense emotion).

Relating the concept of emotional causality to the spatial conditions of perceptual causality, however, confronts us with a further metaphysical problem, namely that S's perception of O and S's emotional state are two *non-spatial* entities. They both describe two inner mental events of a person S. Hence, in virtue of what, then, can (1) S's perception of O interact with the outer event O, and (2) S's perception of O interact with S's emotional state? Indeed, if both entities were spatially constrained (like the two triangles A and B in the launching effect), causal interaction could be achieved by the relative spatial locations of the substances. But if both entities are non-spatial, relative spatial locations are unavailable to attain interaction. Consequently, in order to overcome this

problem (which in the philosophy of mind is known as the 'pairing problem' [Kim 1973, 2005, 2006][3]), both entities have to be spatialised. It is here that we can rely on the conceptual mechanisms of metaphor and metonymy to fulfil this task. As outlined in the previous part of our paper, both entities can be grounded spatially by conceptually linking them to concrete source domains. Once the spatial locations of S's perception of O and S's emotional state are metaphorically or/and metonymically satisfied, the observer is able to pair them perceptually. For instance, S's perception can be spatialised by pairing an outer perceptual organ with an outer event. Once S's perception is spatially grounded, it can then, in turn, be paired with an outer physical response (as spatial metonymy for emotion). How, then, can these conceptual metaphors and conceptual metonymies manifest themselves cinematically? Addressing this issue will be our goal in the next section.

5. Perceiving emotional causality in film

Having defined emotional causality as well as its *conceptualisation* and *perception*, we can now move towards the fourth and last question of our paper: how does the *cinematic mode of expression* prompt the viewer to perceive that the character S's perception of an event O causes an emotional state in S. As indicated in the previous section, answering this question depends on the answerability of the following two questions:

(1) How does film express the metonymical and metaphorical conceptualisation of perception as outlined in Section 3.1 of this paper?
(2) How does film express the metonymical and metaphorical conceptualisation of emotion as outlined in Section 3.2 of this paper?

5.1. Embodying character perception in film

To explore the first question, we would like to draw upon our earlier work on cinematic subjectivity (Coëgnarts and Kravanja 2014, 2015a, 2015b). In these publications, we argued that the character's visual experience (i.e. the idea of a character S seeing an outer event O) can be elicited cinematically by relating the three conceptual structures, as outlined in Figure 2 of this paper, to the visual content of the filmic frame.

(1) The conceptual metonymy EYES STAND FOR SEEING can manifest itself on screen in a relatively uncomplicated manner by showing enough distinctive bodily features of the character so as to enable the viewer to recognise or infer the eyes of the character. Consequently, achieving this goal primarily requires a mode of representation that serves the purpose of what Noël Carroll's (2007) labels the 'visible intelligibility

of physical processes': the idea that a theme or concept is successfully initiated to the audience insofar the viewer is capable of grasping it visually. One parameter in particular presents itself as the ideal means by which the concept of the eyes can be elicited or inferred in film, namely shot size: the distance between the camera and the character's bodily features in front of the camera. However, showing the character's locus of perception in a clear manner is not sufficient to evoke the idea in the viewer that a character S is seeing something X. Indeed, the character's body in front of the camera has to be *intentionally* directed at X, namely the object of his perception, which is located either inside or outside the frame that contains the perceiving character.[4] This evocation of a directedness towards X can be gestured in front of the camera by the bodily behaviour of the character (e.g. the direction of eyes, head, etc.) (see Figure 5).

(2) To address the manifestation of the conceptual metaphor PERCEPTION IS CONTACT BETWEEN PERCEIVER AND OBJECT PERCEIVED in film, we distinguished between four major strategies (see Table 4). Depending on the choice of cinematic technique, a filmmaker can *force* an interaction between S and O either on the level of the individual shot or on the level of two shots. In addition, we divided each level further into two sub-strategies. On the level of the single shot, the pairing of S with O can be elicited homospatially or not. In the former case, S and O are

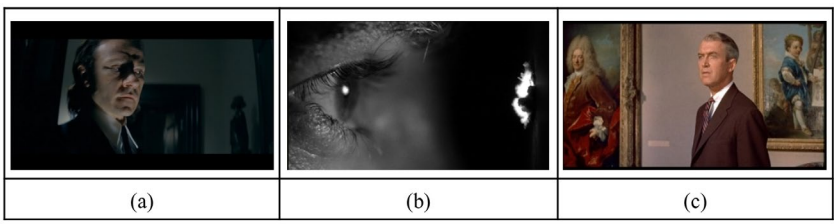

Figure 5. The conceptual metonymy EYES STAND FOR SEEING as elicited in Nicolas Roeg's *Bad Timing* (1980) (a); Alfred Hitchcock's *Psycho* (1960) (b) and Alfred Hitchcock's *Vertigo* (1958) (c).

Table 4. Overview of cinematic strategies to elicit contact between S and O.

	Homospatiality (HS)	Non-homospatiality (NHS)
Single shot (SS)	By showing S and O together in one shot (e.g. framing or *mise-en-scène*)	By moving from S to O (e.g. tracking, panning, tilting, zoom-function)
Two shots (TS)	By presenting S and O, each occupying a different shot, as co-present or homospatial entities in the same frame (e.g. superimposition, split screen)	By cutting from S to O (e.g. editing)

shown simultaneously on-screen through the strategy of framing. By contrast, in the latter case, both elements are not established as two co-present entities in the same larger frame of the screen. Similarly, on the level of two shots, character perception can be imposed on the viewer homospatially via split screen or superimposition (i.e. each entity occupies a different space in a different shot, albeit in the same larger frame) or non-homospatially via editing, the latter including the POV structure (Coëgnarts and Kravanja 2015a, 231).[5]

In each case, a skeletal, pre-linguistic pattern of human sensory-motor experience – what Lakoff (1987) and Johnson (1987) have defined an 'image schema' – can be extended metaphorically to express the perceptual relationship between S and O. For instance, camera movement expresses the underlying SOURCE-PATH-GOAL image schema (see Figure 6(d)) in that the camera moves from a starting point (i.e. the character position) (see Figure 6(e)) via a pathway towards an ending point (i.e. the object position) (see Figure 6(f)). Other schemas that are physically instantiated in the filmic frame to capture the contact between S and O visually are LEFT-RIGHT (see Figure 7(b)) and DOWN-UNDER in the case of split-screen (horizontal division vs. vertical division, respectively) or framing and FRONT-BACK (see Figure 7(a)) in the case of superimposition or framing (see Figure 7(c)).

(3) Lastly, the conceptual metaphor VISUAL FIELD IS A CONTAINER can be elicited cinematically by the perception shot or the point-of-view shot (henceforth, POV shot). Embedded in the level of two shots (cf. editing), it involves a relation between an objective shot of a character

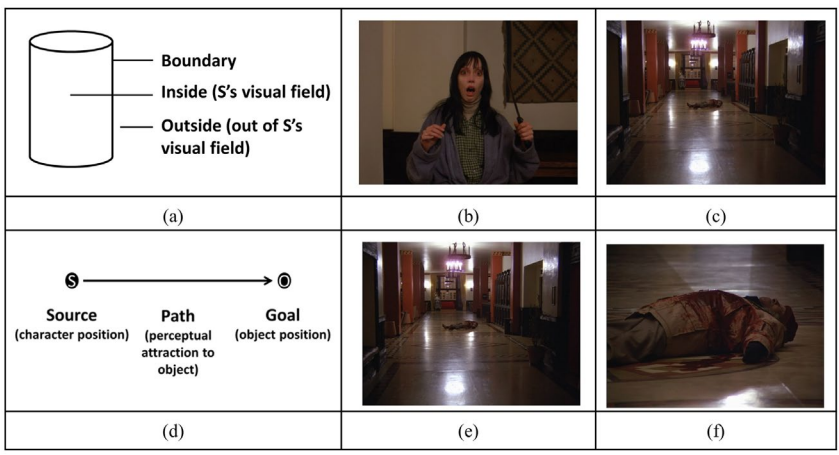

Figure 6. The CONTAINER schema and the SOURCE-PATH-GOAL schema as elicited by, respectively, editing (non-homospatiality, two shots) and zoom-in camera movement (non-homospatiality, single shot). Source: *The Shining* (Stanley Kubrick, 1980).

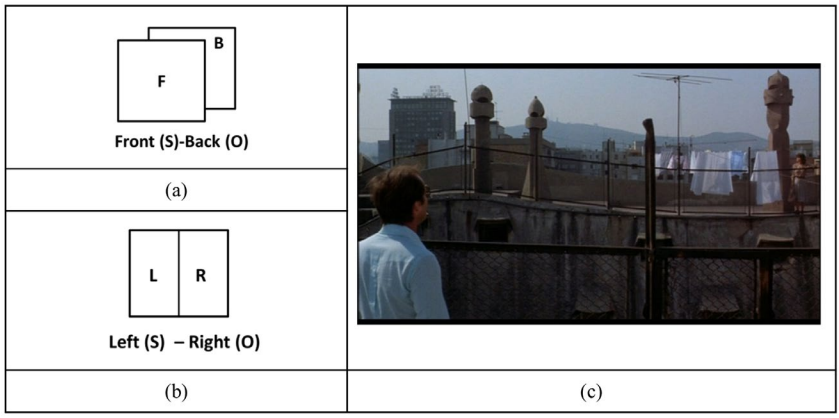

Figure 7. The FRONT-BACK schema (a) and the LEFT-RIGHT schema (b) as elicited by framing (homospatiality, single shot) (c). Source: *The Passenger* (Michelangelo Antonioni, 1975).

(the subject) looking at something, and the actual subjective POV shot showing what the character is looking at (represented through the camera). Similarly, the POV shot is spatially grounded in that the inside of the CONTAINMENT schema (see Figure 6(a)), physically instigated in the filmic frame, is mapped onto the visual content of the character's visual experience (i.e. the character's visual field) (see Figure 6(c)), and the outside is mapped onto the part in space that the character cannot see (e.g. the space that coincides with the character's own eyes) (see Figure 6(b)). The various properties of the POV shot (the container), then, become, as Branigan already pointed out, 'metaphors for vision'. As he writes:

> The condition of being drugged supposedly results in a blurred vision which is *like* that of a change in focus or change in light intensity. A zoom would be analogous to a character's sudden discovery and heightened interest in an object; and a zoom which rapidly alternates in and out may be analogous, in the proper context, to a character's simultaneous attraction to and repulsion from an object. In all these cases (1) a perceptual state is signified and (2) camera position is that of character position – an optical POV. (1984, 81)

5.2. Embodying character emotions in film

The answer to the second question can be structured in a similar twofold way.

(1) The conceptual metonymy PHYSIOLOGICAL AND EXPRESSIVE RESPONSES OF AN EMOTION FOR THE EMOTION can be elicited in film by providing the viewer with a vivid representation of the physiological and

expressive responses of the character. Likewise, the concept of visible intelligibility is the core condition here. That is, in order for a film to draw attention to the responses of the character, the spatial features of those responses have to be shown in a clear manner. There are many tools to achieve this goal, albeit shot size and lighting probably come up as the most important ones. As with perception, the visibility of facial expressions can be augmented primarily by decreasing the distance between the camera and the character. Examples can be found, for example, in the work of Ingmar Bergman, Carl Theodor Dreyer and John Cassavetes, three filmmakers who frequently used the technique of close-ups in combination with lighting to convey the characters' emotional states in a metonymical way (see Figure 8).

(2) The conceptual metonymy EMOTION IS A CONTAINER can be elicited in film by relating the image schema of CONTAINMENT to two kinds of frames: (a) the filmic frame and (b) the (second) frame within the filmic frame.

(a) The first frame can be considered a container in its own right in that the physical edges of the filmic frame designate a boundary with an inside, containing the characters and the fictional story world, and an outside, containing, among others, the viewer (see also Branigan 2003, 2006; Buckland 2000, 2015). Elsewhere (Coëgnarts and Kravanja 2016) we have argued that the filmic frame can be analysed as a merger of two basic experiential patters, namely, ENTRY and ENCLOSURE (Dewell 2005). On the one hand, the filmic frame can be related to the experiential pattern of ENTRY in that it involves activities and paths, with things going *in* frame and *out of* frame. Consider, for example, a static shot in which a character appears on-screen by coming into view from the right side of the frame. In this sense, the frame defines a static location (LM), with an entity (i.e. the character) going into that basis location. The ENTRY path, then, coincides with the movement of the character (TR) from the outside of the frame (a source or starting point) over a sequence of locations towards the inside of the frame (a destination or end point). On the other hand, given the

Figure 8. FACIAL EXPRESSIONS STAND FOR EMOTION in Carl Theodor Dreyer's *La passion de Jeanne d'Arc* (1928) (a), John Cassavetes' *Faces* (1968) (b), and Ingmar Bergman's *Persona* (1966) (c).

camera's potential to move, the filmic frame can also be understood in terms of ENCLOSURE in that the filmic frame actively determines what will be visible on-screen. That is, the edges of the frame are used to select and to compose the inside content of the container (i.e. the notion of framing). In this case, the frame serves as the mobile container with the character in front of the screen as the relatively stationary entity.

It is especially the latter ontological property of the filmic frame that offers filmmakers with an interesting means to heighten the character's feeling of containment. For instance, by reducing the space between the edges of the filmic frame in relation to the front side of the stationary character's facial expression of emotion (e.g. by moving or cutting from medium shot to close-up), the camera can restrain the character's freedom to move, thus giving expression to the character's intense negative emotional state. The underlying metaphor at work here is that of CHANGE OF EMOTIONAL STATE IS MOTION or its lesser variant INCREASE IN EMOTIONAL INTENSITY IS MOTION in which the starting point (e.g. long shot, medium shot) can be mapped onto the non- or less intense emotional state of the character ('there is still space for the character to move freely in the frame') and the ending point (e.g. close-up) can be mapped onto the intense emotional state ('less space: the character's face is hooked in the frame'). Exemplary cases of emotional

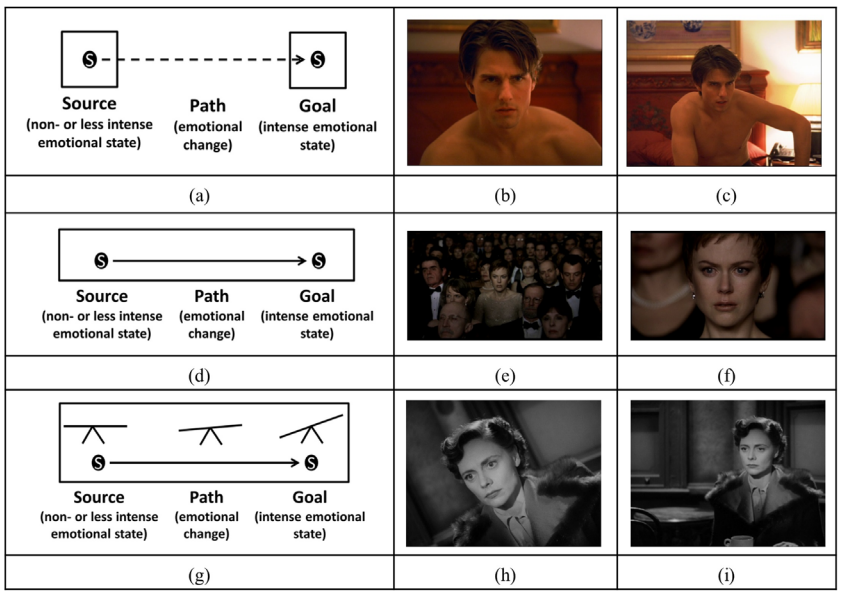

Figure 9. INCREASE IN EMOTIONAL INTENSITY IS DECREASE IN SPATIAL DISTANCE BETWEEN CAMERA AND CHARACTER, as elicited by editing in Stanley Kubrick's *Eyes Wide Shut* (1999) (a–c), by zoom-in camera movement in Jonathan Glazer's *Birth* (2004) (d–f), and by camera movement in David Lean's *Brief Encounter* (1945) (g–i).

intensification by means of narrowing the edges of the filmic frame, either by editing or camera movement, can be found, for example, in such emotionally driven scenes as the confession scene from Stanley Kubrick's *Eyes Wide Shut* (1999) (editing) (see Figure 9(a–c)), the opera scene from Jonathan Glazer's *Birth* (2004) (zoom-in) (see Figure 9(d–f)) or the final scene from David Lean's *Brief Encounter* (1945) (camera movement) (see Figure 9(g–i)) in which the emotional 'imbalance' of the main character is not only expressed by extending the logic of the SOURCE-PATH-GOAL image schema in relation to the CONTAINER schema, but also by extending the spatial logic of the BALANCE image schema.[6]

(b) Furthermore, the CONTAINER schema can be physically instigated in a second frame within the first, filmic frame. For instance, the character's negative feeling of imprisonment can be heightened by placing the character's body inside a window frame or a door frame, as if the character is framed (contained) twice. Examples can be found, for instance, in the works of Rainer Werner Fassbinder and Michelangelo Antonioni (see Figure 10). The frame-within-frame configuration serves as an interesting alternative to the filmic frame in that the space inside the second frame, containing the character (partly or as a whole), and the space outside the second frame, albeit inside the filmic frame, are visually confronted with each other.

Figure 10. EMOTIONS AS CONTAINERS as elicited by frame-within-frame configuration in Rainer Werner Fassbinder's *Angst essen Seele auf* (1974) (b) and Michelangelo Antonioni's *L'eclisse* (1962) (c).

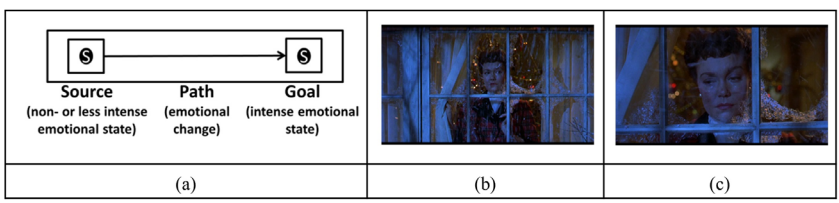

Figure 11. EMOTIONS AS CONTAINERS as elicited by camera movement and frame-within-frame configuration in Douglas Sirk's *All That Heaven Allows* (1955).

Combined, one could argue, then, that a scene of great metaphorical intensity involves both moving the camera towards the character's facial expression (as standing for the emotion), as well as blocking the character's facial expression in a second frame, as, for example, in Douglas Sirk's *All That Heaven Allows* (1955) (see Figure 11).

5.3. Embodying emotional causality in film

Having analysed how both inner faculties of the character can be spatially grounded in film, either metonymically or metaphorically, we are now able to address the question of perceptual emotional causality in film by retaining proposition (P3) and combining it with the arguments elucidated in Section 5 of this paper, that is:

(P4) An observer X will likely perceive a character S's [perceptual] experience of O and S's emotional state as being, respectively, a cause and its effect if,

(a) S's perception of O temporally precedes S's emotional state;
(b) S's perception of O and S's emotional state interact whereby

(i) S's perception of O is spatially grounded in film either metaphorically or/and metonymically according to Section 5.1 of this paper.
(ii) S's emotional state is spatially grounded in film either metaphorically or/and metonymically according to Section 5.2 of this paper.

(c) and there is a noticeable change in S, immediately following its interaction with S's perception of O (i.e. S's change of state from not experiencing the emotion to that of experiencing the emotion).

It is of further importance to note that the temporal condition relates to what Bordwell and Thompson (2004, 70–71) call the *story*, and not to what they label the *plot*. That is, while the temporal order of S's perception of O and S's emotional state can alter with respect to the *plot*, i.e. the film's actual presentation of the emotional event in the story, S's perception of O always temporally precedes S's emotional state with respect to the *story*, i.e. the viewer's imaginary construction of the emotional event in its presumed chronological order.

In order to illustrate our argument, we now analyse a concrete case study taken from the genre of melodrama.

6. Case study: *All That Heaven Allows* (1955)

In their characterisation of the Hollywood melodrama, film scholars often stress two key attributes, namely the genre's heavy reliance on intense character emotions, on the one hand, and its excessive style and excessive behaviours, on the other hand (Mercer and Shingler 2004). Moreover, their relation is such that

the latter to some extent substitutes for the former. As Nowell-Smith (1977) argues, melodrama characters often distinguish themselves from protagonists of other genres in their inability to take action to resolve their problems: they are inherently passive rather than active. Consequently, because emotions cannot be turned into action, they manifest themselves as symptoms through such other means as performance, music and *mise en scène*. The result, according to Elsaesser (1987), is an 'intensified symbolization of everyday actions' (178), 'a sublimation of dramatic conflict into décor, colour, gesture and composition, which in the best melodramas is perfectly thematised in terms of the characters' emotional and psychological predicaments' (174). It is for this reason, then, that the melodrama genre provides us with an interesting site for exploring the concept of emotional causality. It is interesting because it combines CMT's two central levels of analysis: the level of conceptual meaning and the level of formal articulation.

The scene that we intend to analyse involves one of the most iconic scenes from classical American melodrama: the scene from Douglas Sirk's *All that Heaven Allows* (1955) in which the two children of the female protagonist Cary Scott (Jane Wyman) present their mother with a Christmas gift of a new television (see Figure 12). At this point in the movie, Carrie has scarified her own happiness by calling off her relationship with Ron Kirby (Rock Hudson). The television is intended to fill the new void in her life. As the television salesman in the scene utters to Cary: 'All you have to do is turn that dial and you have all the company you want right there on the screen'. The scene ends with what

Figure 12. Emotional causality in *All That Heaven Allows* (Douglas Sirk, 1955).

is perhaps the film's most celebrated image: a shot of a sombre Carrie staring at her own reflection in the switched-off television screen. The scene can be considered as an interesting case of emotional causality in that Cary's perception of the television can be analysed as the *cause* of her intense negative emotional state. To put it schematically by recalling our earlier formulation: Cary's perception (television) = >Change [less emotional state; intense emotional state]).

How, then, does the scene prompt the viewer to see this chain of emotional causality (i.e. perception as cause of emotion)? As our theoretical model suggests, addressing this question amounts to solving two pairing problems:

(1) the pairing of the television with Cary's perception of the television; and
(2) the pairing of Cary's perception of the television with her emotional state.

As we have seen in the theoretical part of our paper, both problems depend on the answerability of two additional questions. The first pairing problem entails that we find an answer to the question how Cary's perception of the television is cinematically grounded. The second pairing problem entails the additional task of finding an answer to the question how Cary's emotional state is cinematically grounded.

(1) The first question can be answered by analysing the shot in which the television appears. As can be seen in Figure 12 (a), Cary's perception of the television is structured homospatially by means of framing. In one static long shot, both entities (Cary and her daughter, on the one hand, and the television, on the other hand) are visually connected to each other by extending the spatial meaning of two image schemas: the spatial notions of LEFT-RIGHT and BACK-FRONT are, respectively, mapped onto the location of the object perceived by the characters (the television) and the perceiving characters (Cary and her daughter). Thus, Cary's inner visual experience is spatialised. Moreover, the viewer is prompted to perceive that the television is the *cause* of her visual experience. Inferential evidence for this claim is provided by the systematic correlations between the logic of forced interaction and the logic of causation. For instance, as the application of the force (i.e. framing) accompanies the interaction between Cary's perception of the television and the television, the occurrence of the cause (i.e. the appearance of the television) accompanies the change of state (i.e. Cary's change of state from not seeing the television to seeing the television). Similarly, as the interaction would not have occurred without the application of framing, Cary's visual experience of the television would not have occurred without the appearance of the television.

(2) The film, then, reduces the distance between the camera and Cary and her daughter by capturing them both in a medium shot (Figure 12 (b)). Hence Cary's facial features are now clearly visible, resulting in the spatial grounding of both concepts (perception and emotion) by the activation of two conceptual metonymies: EYES FOR SEEING and FACIAL EXPRESSIONS FOR EMOTION. Consequently, given that both concepts are now spatialised, further interaction (pairing) is possible. In the scene, this condition of perceptual causality is formalised by the force of editing that 'brings' Cary's perception of the television, as metaphorically grounded in Figure 12 (a), in direct relation to Cary's emotional state, as metonymically grounded in Figure 12 (b). As such, the viewer is instigated to perceive both entities as, respectively, cause and effect. Likewise, inferential evidence for this claim can be found in the inferential mapping structure of the conceptual metaphor CAUSATION IS FORCED MOVEMENT. For instance, as one can say that the occurrence of the cause precedes or accompanies the change of state, one can similarly state that the application of editing (i.e. the force) accompanies the juxtaposition of Cary's perception of the television (Figure 12 (a)) to Cary's emotional state (Figure 12 (b)). Equally, as one can say that the change of state would not have occurred without a cause, one can argue that the interaction between Cary's perception of the television and Cary's intense emotional state would not have occurred without the application of editing.

The scene culminates in what is perhaps the most iconic shot of the film: the camera moves slowly towards the television, from a long shot to a medium shot, until Cary is entirely reflected (captured) in the second frame of the television (Figure 12 (c) and (d)). The shot is remarkable for it combines all the conceptual metonymies and metaphors of perception and emotion as discussed so far in the theoretical section of our paper. On the one hand, Cary's perception and her emotional state are triggered metonymically by the medium frontal shot of Cary's eyes and facial expression. In addition, both inner experiences are also elicited metaphorically. Through the cinematic device of framing the spatial sense of the FRONT-BACK image schema is extended in order to structure the perceptual relationship between the object perceived, the television (front), and the perceiving character, Cary (back). Thus, both entities are connected to each other in one single image without the intervention of editing. Similarly, the spatial sense of the CONTAINMENT schema is extended to give expression to Cary's intense negative emotional state. On the one hand, the feeling of 'being contained' is intensified by gradually narrowing the edges of the filmic frame in relation to her facial expression (i.e. camera movement). On the other hand, Cary's freedom to move is constrained by the frame-within-frame configuration of the television.

7. Conclusion

This paper shows how film, through its various formal features, prompts the viewer to perceive that the character's perception of an event causes an emotional change in the perceiving character. In order to discuss the filmic expression level of emotional causality, we have first examined how the flow-of-emotion scenario articulates itself at the conceptual level. Borrowing insights from cognitive linguistics, in particular CMT, we claimed that the three core abstract concepts of emotional causality (emotions, perception, causation) can be conceptualised by means of two conceptual mechanisms, namely metaphor and metonymy. Both mechanisms, we have argued, are vital for the perception of emotional causality in that they ground the abstract concepts spatially by linking them to concrete concepts. This spatial grounding is necessary, we have argued, in order to attain one of the core conditions of perceptual causality, namely spatial interaction. Having resolved the problem of pairing conceptually, we have been able to discuss how the conceptual metaphors and metonymies underlying emotional causality manifest themselves at the filmic level. It is through the formal articulation of these conceptual structures, which involve the use of various cinematic devices (e.g. shot size, editing, camera movement, frame-within-frame configuration, etc.), that, we have concluded, the viewer is instigated to see a causal relationship between (1) the character's visual experience and (2) the character's emotional state. As such our study indicates that emotional causality in film is embodied: the images are cognitively motivated by the same embodied conceptual structures that lie at the heart of our collective meaning-making processes in language.

Notes

1. For a good schematic overview of these theories, see Radden (1998). For recent discussions on the topic, see Laird and Lacasse (2014), or Lang (1994).
2. Perceiving causality, however, does not always guarantee causality *an sich*. Consider, for example, the following succession of events: (a) a person is waiting for a bus, (b) the person sees the bus moving towards him, (c) the person waves with his arm, (d) the bus stops. Can we speak of causality with respect to the relation between (c) and (d)? Did the bus stop due to the person's waving hand, or did the bus stop because the bus driver was planning to stop anyhow notwithstanding the person's waving hand? This is undecidable.
3. Kim (2006, 44–45) illustrates the 'pairing problem' as follows: 'A gun, call it *A*, is fired, and this causes the death of a person, *X*. Another gun, *B*, is fired at the same time, and this results in the death of another person, *Y*. What makes it the case that the firing of *A* caused *X*'s death and the firing of *B* caused *Y*'s death, and not the other way around? That is, why did *A*'s firing not cause *Y*'s death and *B*'s firing not cause *X*'s death? What principle governs the "pairing" of the right cause with the right effect? There must be a relation *R* that grounds and explains the cause–effect pairings, a relation that holds between *A*'s firing and *X*'s death and also between *B*'s firing and *Y*'s death, but not between *A*'s firing

and *Y*'s death or between *B*'s firing and *X*'s death. What is this *R*, the "pairing relation," as we might call it?'.

4. The American philosopher John Searle (2015, 13) defines intentionality as 'that feature of the mind by which it is directed *at* or *about* or *of* objects and states of affairs in the world'. Perceptual experiences describe just one instance of intentional states. Other examples that Searle mentions are hunger, thirst, beliefs, intentions, desires, hopes and fears.
5. For a discussion of filmic examples within each category, we refer to Coëgnarts and Kravanja (2015a).
6. In all three scenes, the *spatial* building up of the character's intense (negative) emotional state via editing and/or camera movement is paralleled by an *aural* building up via music and/or sound. For a good metaphorical analysis of film music in terms of image schema theory, see Chattah (2015).

References

Athanasiadou, Angeliki, and Elzbieta Tabakowska, eds. 1998. *Speaking of Emotions: Conceptualisation and Expression*. Vol. 10 of *Cognitive Linguistics Research*. Berlin: Mouton de Gruyter.

Barcelona, Antonio. 2002. "Clarifying and Applying the Notions of Metaphor and Metonymy Within Cognitive Linguistics: An Update." In *Metaphor and Metonymy in Comparison and Contrast*, edited by René Dirven and Ralf Pörings, 207–278. Berlin: Mouton de Gruyter.

Bordwell, David, and Kristin Thompson. 2004. *Film Art: An Introduction*. Vol. 7. New York: McGraw-Hill.

Branigan, Edward. 1984. *Point of View in the Cinema*. Berlin: Mouton de Gruyter.

Branigan, Edward. 2003. "How Frame Lines (and Film Theory) Figure." In *Film Style and Story: A Tribute to Torben Grodal*, edited by Lennard Hojbjerg and Peter Schepelern, 59–86. Copenhagen: Museum Tusculanum Press.

Branigan, Edward. 2006. *Projecting a Camera: Language-games in Film Theory*. New York: Routledge.

Buckland, Warren. 2000. *The Cognitive Semiotics of Film*. Cambridge: Cambridge University Press.

Buckland, Warren. 2015. "Cognitive Semiotics Revisited: Reframing the Frame." In *Embodied Cognition and Cinema*, edited by Maarten Coëgnarts and Peter Kravanja, 295–308. Leuven: Leuven University Press.

Cannon, Walter Bradford. 1927. "The James-Lange Theory of Emotion: A Critical Examination and an Alternative Theory." *American Journal of Psychology* 39: 10–124.

Carroll, Noël. 2007. *Comedy Incarnate*. Malden, MA: Blackwell.

Chattah, Juan. 2015. "Film Music as Embodiment." In *Embodied Cognition and Cinema*, edited by Maarten Coëgnarts and Peter Kravanja, 81–114. Leuven: Leuven University Press.

Coëgnarts, Maarten, and Peter Kravanja. 2014. "A Study in Cinematic Subjectivity: Metaphors of Perception in Film." *Metaphor and the Social World* 4 (2): 149–173.

Coëgnarts, Maarten, and Peter Kravanja. 2015a. "Embodied Cinematic Subjectivity: Metaphorical and Metonymical Modes of Character Perception in Film." In *Embodied Cognition and Cinema*, edited by Maarten Coëgnarts and Peter Kravanja, 221–243. Leuven: Leuven University Press.

Coëgnarts, Maarten, and Peter Kravanja. 2015b. "With the Past in Front of the Character: Evidence for Spatial-temporal Metaphors in Cinema." *Metaphor and Symbol* 30 (3): 218–239.

Coëgnarts, Maarten, and Peter Kravanja. 2016. "The Eyes for Mind in Cinema: A Metaphorical Study of the Viewer's Experience." In *Embodied Metaphors in Film, Television, and Video Games: Cognitive Approaches*, edited by Kathrin Fahlenbrach, 129–144. London: Taylor & Francis.

Dewell, Robert. 2005. "Dynamic Patterns of Containment." In *From Perception to Meaning: Image Schemas in Cognitive Linguistics*, edited by Beate Hampe, 369–394. Berlin: Mouton De Gruyter.

Dirven, René. 1997. "Emotions as Cause and the Cause of Emotions." In *The Language of Emotions*, edited by Susanne Niemeier and René Dirven, 55–86. Amsterdam: John Benjamins.

Elsaesser, Thomas. 1987. "Tales of Sound and Fury: Observations on the Family Melodrama." In *Home Is Where the Heart Is: Studies in Melodrama and the Woman's Film*, edited by Christine Gledhill, 165–189. London: British Film Institute.

Forceville, Charles. 2009. "Non-verbal and Multimodal Metaphor in a Cognitivist Framework: Agendas for Research." In *Multimodal Metaphor*, edited by Charles Forceville and Eduardo Urios-Aparisi, 19–42. Berlin: Mouton de Gruyter.

Gibbs Jr., Raymond W., and Marcus Perlman. 2006. "The Contested Impact of Cognitive Linguistic Research on Psycholinguistic Theories of Metaphor Understanding." In *Cognitive Linguistics: Current Applications and Future Perspectives*, edited by Michel Achard, René Dirven, and F. Ruiz de Mendoza Ibañez, 211–228. Berlin: Mouton de Gruyter.

Grice, Herbert Paul. 1989. "The Causal Theory of Perception." Chap. 15 in *Studies in the Way of Words*. Cambridge, MA: Harvard University Press.

Heider, Karl G. 1991. *Landscapes of Emotion*. Cambridge: Cambridge University Press.

Hilpert, Martin. 2006. "Keeping an Eye on the Data: Metonymies and Their Patterns." In *Corpus-based Approaches to Metaphor and Metonymy*, edited by Anatol Stefanowitsch and Stefan Th. Gries, 123–152. Berlin: Mouton de Gruyter.

James, William. 1884. "What Is an Emotion?" *Mind* 9: 188–205.

Johnson, Mark. 1987. *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason*. Chicago, IL: University of Chicago Press.

Johnson, Mark. 2008. "Philosophy's Debt to Metaphor." In *The Cambridge Handbook of Metaphor and Thought*, edited by Raymond W. Gibbs Jr. and Stefan Th. Gries, 39–52. New York: Cambridge University Press.

Kim, Jaegwon. 1973. "Causation, Nomic Subsumption, and the Concept of Event." *The Journal of Philosophy* 70: 217–236.

Kim, Jaegwon. 2005. *Physicalism, or Something Near Enough*. Princeton, NJ: Princeton University Press.

Kim, Jaegwon. 2006. *Philosophy of Mind*. Cambridge: Westview Press.

Kövecses, Zoltán. 2000. *Metaphor and Emotion: Language, Culture, and Body in Human Feeling*. Cambridge: Cambridge University Press.

Laird, James D., and Katherine Lacasse. 2014. "Bodily Influences on Emotional Feelings: Accumulating Evidence and Extensions of William James's Theory of Emotion." *Emotion Review* 6 (1): 27–34.

Lakoff, George, and Mark Johnson. 1980. *Metaphors We Live By*. Chicago, IL: University of Chicago Press.

Lakoff, George, and Mark Johnson. 1999. *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought*. New York: Basic Books.

Lakoff, George. 1987. *Women, Fire, and Dangerous Things*. Chicago, IL: University of Chicago Press.

Lakoff, George. 1995. 'Reflections on Metaphor and Grammar'. In *Essays in Semantics and Pragmatics: In Honor of Charles J. Fillmore*, edited by Masayoshi Shibatani and Sandra A. Thompson, 133–144. Amsterdam: John Benjamins.

Lang, Peter J. 1994. "The Varieties of Emotional Experience: A Meditation on James-lange Theory." *Psychological Review* 101 (2): 211–221.

Mercer, John, and Martin Shingler. 2004. *Melodrama: Genre, Style, Sensibility*. London: Wallflower.

Michotte, Albert. 1946. *La perception de la causalité* [The Perception of Causality]. Louvain: Institut Supérieur de Philosophie.

Niemeier, Susanne, and René Dirven, eds. 1997. *The Language of Emotions: Conceptualization, Expression, and Theoretical Foundation*. Amsterdam: John Benjamins.

Nowell-Smith, Geoffrey. 1977. "Dossier on Melodrama: Minnelli and Melodrama." *Screen* 18 (2): 113–118.

Pears, David Francis. 1976. "The Causal Conditions of Perception." *Synthese* 33 (2): 25–40.

Radden, Günter. 1985. 'Spatial Metaphors Underlying Prepositions of Causality'. In *The Ubiquity of Metaphor: Metaphor in Language and Thought*, edited by Wolf Paprotté and René Dirven, 177–205. Amsterdam: John Benjamins.

Radden, Günter. 1998. "The Conceptualisation of Emotional Causality by Means of Prepositional Phrases." In *Speaking of Emotions: Conceptualisation and Expression*, edited by Angeliki Athanasiadou and Elzbieta Tabakowska, 273–294. Berlin: Mouton de Gruyter.

Scholl, Brian J., and Patrice D. Tremoulet. 2000. "Perceptual Causality and Animacy." *Trends in Cognitive Sciences* 4 (8): 299–309.

Searle, John Rogers. 2015. *Seeing Things as They Are*. New York: Oxford University Press.

Strawson, Peter Frederick. 1974. "Causation in Perception." Chap. 4 in *Freedom and Resentment and Other Essays*. London: Methuen.

Yamanashi, Masa-aki. 2010. "Metaphorical Modes of Perception and Scanning." In *Tropical Truth(s): The Epistemology of Metaphor and Other Tropes*, edited by Armin Burkhardt and Brigitte Nerlich, 157–175. Berlin: Walter de Gruyter.

Yu, Ning. 2003. "Chinese Metaphors of Thinking." *Cognitive Linguistics* 14 (2/3): 141–165.

Yu, Ning. 2004. "The Eyes for Sight and Mind." *Journal of Pragmatics* 36: 663–686.

Yu, Ning. 2008. "The Relationship Between Metaphor, Body and Culture." In Vol. 2 of *Body, Language and Mind*, edited by Roslyn M. Frank, René Dirven, Tom Ziemke, and Enrique Bernárdez, 387–408. Berlin: Mouton de Gruyter.