

A Matrix Theory of Cinematic Analysis Domains

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Abstract

Cognitive approaches to cinema comprise several proposals concerning the segmentation of the understanding of the flux of audiovisual stimuli in several conceptual domains. In this paper, we would like to develop a proposal for a cinematographic analysis inspired by the conceptual framework of cognitive linguistic approaches and neurosciences studies. The viewer / film critic can identify and delineate patterns describable as neurological processes or as phenomenological instantiations manifested in various conceptualization domains that can be isolated from other domains. The conceptualizations are determined by top-down schemas in various semantic domains, and by bottom-up cues on screen of semantic purport. The cinematic expressive structures that are formed with the help of cues allow the spectator to recognize and correct conceptual patterns within alternative conceptual domains. Cinematic expressions – diegetic mise-en-scene, frame composition, shot structure, and editing and stylistic patterns– are instantiations of construal, alternative manners of representing aspects of conceptual content.

To the extent that a set of cues is predominately biased towards one domain or another, the viewer will categorize the conceptual content into one or more domains. The claim is that domains are like attractors that warp in a dynamic manner conceptual content towards a domain or another, and, as a consequence will warp and modulate other domains. Cues are not static clues, but represent procedural algorithms that the viewer puts into action in order to gain access to conceptual content. The domains analyzed are the prefigurative, the figurative, the diegetic, the symbolic, the narrative, the conceptualizer, the affective, and the discursive. Describing various bounded conceptual regions of conceptual content sustained by cinematic experience is a description of the brains' projection of an interior living film staged in a "Cartesian theatre" devoid of a secondary conscious homunculus.

Keywords

neuroscience, cognition, film theory, film analysis.

An overview of proposals for cinematic conceptual domains

Cognitive approaches to cinema comprise several proposals concerning the dividing of the flow of audiovisual stimuli in several conceptual domains. The description and analysis of the audiovisual discourse invariably touches on some of those domains. Let us mention some of the recent approaches:

1. The Danish theoretician, Torben Grodal (1997: 57; 279), distinguishes between several neural processes that the cinemagoer undergoes, e.g. **intense** experience (the viewer's focus is oriented towards *perceptual non-figurative processes*), **saturated** experience (the focus is aimed at a *figurative associative*

network), **telic** experience (the viewer's focus is on *mental or motor acts that are goal oriented*), and **emotional** experience (the focus is on *autonomic-rhythmic processes*)

2. For Roger Odin (2000) the viewer carries out a series of operations in the meaning-generating processes, e.g. **figurativization** (pattern recognition), **diegetization** (the elaboration of a possible world and characters that can habit it), **narrativization** (recognizing a narrative sequence), **fictionalization** (the fictionalization of the sender and the receiver of the message), **synchronization of phase** (implies affective tuning) and **discursivization** (the conveying of values through the medium of cinema).¹

3. For Jens Eder (2010: 16) the character can be engaged at the level of **artifact** (the aesthetic mode), as **fictional** entity (the diegetic mode), as **symbol** (the thematic mode), and as **symptom** (the affective and / or pragmatic mode).

4. For Uri Margolin (2010: 400) discourse and character can be presented as **aesthetic**, **semantic** and **pragmatic** constructs. The semantic domain encompasses: 1/ characters as semantic object (*de sensu*) - lexical level; 2/ as objects of thought (*de dicto*) – propositional level; 3/ as entities in alternative worlds (*de re*) – the level of world building and grounding in the depicted world; 4/ as fictional entities in the viewer's world (*de se*) – perlocutionary level. The pragmatic dimension encloses the communicative context of the character's creation and the way the spectator perceives and makes use of it.

5. Arthur P. Shimamura (2012: 3) describes four traditional approaches to art: **mimetic** (art is „a window to the world”), **expressionist** (art is a transmitter and a trigger of feelings), **formalist** (focusing on the sensory experience) and **conceptual** („it is thoughts that matter”).

6. For David Bordwell (2005: 34), the cinematic style fulfills 4 functions: **denotative**, **expressive** (emotional states), **symbolic** and **decorative**. We can translate this classification by using the terms described here: denotative = diegetic; expressive = affective; symbolic = the symbolic and discursive construct and decorative = figurative and prefigurative.

7. For Laurent Jullier (2015: 14), the presence of audiovisual stimuli triggers three types of relevant cognitive responses.

- **Case A:** We see “via the image” an object of a fiction lying within the conditional mood (representation).



- **Case B:** We see a type (a man wearing sunglasses) or a token (Marlon Brando), that is to say the models used in the production of the traces inscribed in the image. Although this operation takes place in our world, it is in the past tense and in a space other than that where I, the spectator, find myself - it is then-and-there (illustration / description).

- **Case C:** What I see, here and now, is a material device (perception) (Fig. 1).

¹ For a more comprehensive presentation of Odin's theory see Deaca (2013).

A/ Representation	B/ Illustration	C/ The image-being
Fiction	Trace	Material
Diegetic referent	Model	Surface
Somewhere	There	Here
The Conditional Mood	The Past	The Present

In a subsequent article (2016), Jullier proposes several cognitive interactions with cinematic audiovisual stimuli: 1/ *understanding* of a diegetic situation and of the mental state of a fictional character, 2/ *description* of a schematic story / situation instantiated, 3/ *analysis* of the expressive component, 4/ *interpretation* of symbolic content, 5/ personal *experience* of film comprehension, 6/ appraisal or *appreciation* of the film-object and 7/ personal *use* of the film experience (perlocutionary effect). In the case of film viewing between the viewer and the cinematic stimuli an interaction is engaged. The viewer, based on his own concerns, will tend use cues idiosyncratically in order to construct conceptualizations and, in contrast, cinematic stimuli are designed such as they will engage automatic neural cognitive processes that sustain the scaffolding of determinate or constrained meaning constructions.

The aim of this article is to propose an articulation of a cinematic analysis on eight conceptual domains connected in a relationship of dynamic associations but which can be nevertheless isolated as autonomous realms of conceptualization for analytic purposes².

2. Introductory Concepts

2.1 Introduction

This preamble will consider some of Ronald W. Langacker's theoretical statements; then it will put forward a model for a cinematographic analysis inspired by the conceptual framework of cognitive linguistics approaches³. In short, according to Langacker's cognitive linguistics, language use is an act which processes information organized as patterns of neural activity. Language is defined as a structural inventory of conventional **linguistic units**. One linguistic unit represents a pattern of processing activity which can be mastered more or less automatically by a human user ("a cognitive routine"). These units interrelate through overlapping, inclusion, symbolization, categorization and integration into larger units. The units are derived from **usage events**, i.e. actual instances of language use. Units are sanctioned – i.e. make manifest inherent schemas - by schemas that outline conceptual content in an abstract manner. Users do not access these schemas consciously during speech production and reception. A structure gains the status of unit by entrenchment, which is the process of gradual conventionalization; i.e. how familiar and repetitive is a structure in a community

² The article is a rewriting of the chapter on the same topic in Deaca (2015: 283)

³ See also a concise introduction to concepts presented here in Langacker (2001, Discourse in Cognitive Grammar, 143-188; 2008; 2009).

of speakers. Therefore, structures can be ordered on a scale that starts from the patterns established as conventional units to spontaneous, new conceptualizations and new pairing or expressions and semantic content (Langacker 2007: 424-425). The usage events are formed through the pairing of a conceptualization, including the decoding of context, with an elaborate expression encompassing the phonetic, gestural and, relevant to the topic at hand, the visual support. Expressive support is also a conceptualization. In the case of visual discourse, the expression consists of the on-screen visual stimuli, which are structured as visual cues necessary in the formation of conceptualizations. **Cues** represent gestalts needed for the processing of information in conceptual domains, i.e. structures of meaning. These cues are the result of top-down and bottom-up perceptual processes and represent procedural guidance algorithms that instantiate as cognitive processes. In short cues are procedural gestalts in semantic domains under construal. The present paper will identify and discuss the relevant domains for film study.

Linguistic meaning is a manifestation of conceptual structure (Evans 2006: 156). Cognitive semantics acknowledge that the nature of conceptual organization is determined by bodily experience (the embodiment thesis). Language refers to the concepts in the mind of the speaker rather than to the objects in the external world. Thus, meaning associated with linguistic units can be equated with **concepts**. Grammatical categories or structures are conceptual in nature and grammatical elements lie within the purview of semantic analysis (2006: 159). Semantic structures are encyclopaedic in nature. Words “serve as ‘points of access’ to vast repositories of knowledge about a particular concept or conceptual domain” (Langacker 1987).” (2006: 160).

2.2 The Conceptualization

Language is about meaning which resides in conceptualization. Conceptualization being both embodied and contextually embedded is a primary means of engaging both the real and constructed worlds and it subsumes any kind of mental experience (sensory, motor, emotive, intellectual) as well as apprehension of the context in all its dimensions (physical, psychological, social, cultural, discourse).

Conceptualization can also contain an encyclopaedic conceptual substrate, i.e. a body of knowledge. It subsumes “(i) the conceptions evoked or created through the previous discourse; (ii) engagement in the speech event itself, as part of the interlocutors’ social interaction; (iii) apprehension of the physical, social, and cultural context; and (iv) any domains of knowledge that might prove relevant” (Langacker 2008: 42). Conceptualization is a “dynamic process whereby linguistic units serve as prompts for an array of conceptual operations and the recruitment of background knowledge” (Evans 2006: 162). Conceptualization is included in the current discursive space and is manifested by means of various **channels** (from the expressive ones to the conceptual ones, the conception of the situation depicted) (Langacker 2008: 461 sq) (see fig 17.2 Langacker 2007: 427) (Fig. 2).

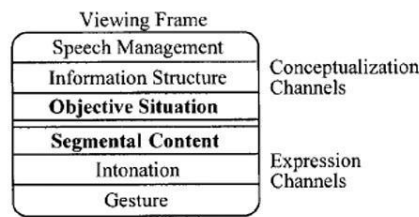


Figure 17.2. Channels

Fig. 2

The two sides of a usage event are conceptualization and expression, i.e. the semantic pole and the phonological pole. Sounds and meanings are apprehended directly and carry an intrinsic content tied to a **domain of experience**. The sounds of speech represent a particular class of auditory phenomena and the linguistic meanings are particular classes of conceptualizations (Langacker 2008: 25).

Conceptualization is manifested at the semantic level and subsumes both expressive sectors and channels taken as aspects of conceptualization (2007: 427; see also Langacker 1987a: 2.2.1). Conceptualization is “the occurrence of neural activity” which can be understood either phenomenological or as processing. It covers a vast range of mental activities such as “(1) both new and stable expressions; (2) not just “intellectual” notions, but also sensitive, motor and emotional experiences; (3) the apprehension of the physical, linguistic, social and cultural contexts; and (4) concepts which develop and unfold during processing (rather than within a simultaneous manifestation)” (Langacker 2008:30).

Meaning is identified as **conceptualization**, or in other words, as “any kind of mental experience” (431): new and old conceptions; not only abstract concepts upholding intellectual ideas, but those experiences which are “immediately sensitive, motor, kinesthetic or emotional” as well; concepts that are not instantaneous, but which change or unfold during processing and the general outline of the physical, linguistic, social and cultural context (Langacker 2007: 431). Conceptualization by itself is not the object of contemplation, as it is always the conceptualization of something, be it either an aspect of the natural / real world experience or a fictional world anchored within the experience of the real world. Conceptualization is a form of engaging the world, our way of interacting with the world (431). An expression instantiates a particular form of accessing a body of knowledge, i.e. a **conceptual domain**. Also a conceptualization of the content or expression channel is subject to categorization and schematization. Conceptualizations differ on the axis of specificity and symbolic complexity. Some symbolic units are conventional, i.e. are learned as conventional units, as routinized “packets” of processing activity (Langacker 2007: 428). New conceptualizations and conventional ones manifested at the levels of channels and sectors instantiate schematic units, i.e. superordinate concepts which specify “the basic outline common to several, or many, more specific concepts”, a core commonality (Tuggy

2007: 83). The specific concepts are called *elaborations* or *instantiations*. In short “any kind of mental experience” can be described as differing at the level of schematization, specificity and complexity of the information provided. In film, conceptualization channel and expressive channel are conceptualizations structured by cues. The channels of conceptualization instantiate schematic concepts but the linkage between the content channels and the expressive channels is not conventional and fixed as symbolic units, i.e. are not learned as conventional units. Put it differently the content and the expressive aspect of a usage event can be separately sanctioned by units and schemas but their connection is not conventionalized as two facets of abstracted linguistic units as in the case of pictograms. A filmic expression manifested in a visual perceptual channel is a configuration of cues that are used to structure a conceptualization, i.e. a conceptual domain. An **expression** is a conceptualization in a conceptual domain.

2.3 Image Schemas and Conceptual Archetypes

Meaning can be characterized in relation to the basic **conceptual archetypes** (gestalts which represent salient aspects of fundamental everyday experiences: the physical object, the moving physical object, the human face, the human body, the physical container, the part and the whole, seeing something, holding something, giving something, exerting force to effect a desired change, speaking, having a face-to-face encounter) (Langacker 2007: 433). Archetypes are also generated by basic cognitive abilities: “our capacity for **grouping**, for **reification**, for **apprehending relationships**, and for **tracking relationships** through time” (104; 107).

As Croft (2004) briefly defines them, image schemas are schematic versions of images. Images are representations of specific, embodied experiences and derive their substance from sensory-perceptual experiences. Domains that give rise to images are described as embodied. Image schemas represent schematic patterns arising from imagistic domains. Image schemas are also not specific to a particular sensory modality; they structure both our bodily and non-bodily experience, the latter accomplished via metaphor. This definition clarifies the seemingly contradictory description of image schemas: “image schemas are ‘abstract’ in one sense of that word – they are schematic – but not ‘abstract’ in another sense of that word – they are embodied” (Croft 2004: 44; see also Bergen 2012; Evans 2006: 178). Image schemas are analogue multimodal representations deriving from experience, i.e. they “mirror the sensory experience being represented” as “summaries of perceptual states which are recorded in memory” (Evans 2006: 184). As they are consciously accessible, they are conceptual in nature rather than purely perceptual. In visual discourse conceptual channels and expressive ones are structured by image schemas.

2.4 Semantic Domains

Any conceptualization or knowledge configuration of an expression – no matter how simple or complex – can be used as a **cognitive domain**. Some domains of experience are fundamental, such as time, space and the domains associated with the senses, e. g. the color space. We may also deem as essential the domains of experience which cannot be reduced to a more basic form. A **fundamental domain** does not represent a concept; it brings forth the experience potential so that a conceptualization can arise. Minimalist concepts which exploit this potential are the angle, the degree of curvature, the focal colors and the temporal precedence (Langacker 2007: 434; Evans 2006: 230; Croft & Cruse 2004: 7; Tuggy 2007: 104). From these elements, other, more elaborate concepts could be constructed, without an evident upper limit in terms of complexity.

Other, more conceptual domains are called **non-fundamental domains**. A non-fundamental domain is “a concept or a conceptual composite of any size at any level of conceptual organization”. These domains make up the conceptual matrix. Thus *red* recalls the fundamental domain of chromatic space and *the arm*, the archetypal image of the human body. The domain for a term such as *the rook* (in chess) is made up of an elaborated body of knowledge on chess rules and strategies (434). An entity to which a conceptual reference is made - the expression profile - manifests in those domains which are not separated but rather overlap.⁴ A linguistic expression evokes a set of fundamental and non-fundamental domains as the basis for its meaning. This stands for its conceptual matrix. A domain representing any level of structure or degree of complexity can be part of an expression’s matrix and is essential for its semantic description. A matrix’ domains are sides of the encyclopedic knowledge on the entity in question. The entity (the expression profile) manifests in all overlapping domains.

2.5 Bounding and Profiling

An expression has a **scope** of coverage in a conceptual domain, i.e. “which portions of these domains it actually evokes and utilizes as the basis for its meaning” (Langacker 2008: 62). This scope – under construal – imposes a boundary, separating a region in that domain. Experientially our visual apparatus, for example, has a restricted “viewing frame” – the visual field – delimiting what we can visually encompass when “looking out” at the world. Scope is “only so much that we can mentally encompass at any one moment” (2008: 62). A scope is always bounded.

Also “an expression’s **profile** stands out as the specific **focus** of attention within its immediate scope. The profile can also be characterized as what the expression is conceived as designating or referring to within its base (its conceptual

⁴ About (non)fundamental domains see Langacker 2008: 44-47, image schemas (Langacker 2008: 32-35; Evans 2006: 42-46, 234, 184-186; Coulson 2000: 182) and conceptual archetypes (Langacker 2008: 34, 355-357; Langacker 2009: 130,148). For an overview see Deaca (2013)

referent)” (66). An expression’s profile is its referent just in the context of its conceptual base - it is the substructure singled out as focus of attention in contrast to other facets of this same conception -, and is described as “conceptual” reference (or “reference within a conception”) (269). Nevertheless an entity’s **active zone**, with respect to a profiled relationship, is a facet of it which most directly and crucially participates in that relationship (Langacker 2008: 331).

An expression can profile either a **thing** or a **relationship** (2008: 67). At a schematic level of conceptual organization a thing is a set of interconnected entities which function as a single entity (107). A thing is bounded when there is some limit to the set of constitutive entities (152). It is a product of grouping and reification, and therefore represents a bounded entity that is otherwise homogeneous, whether the “substance” it comprises is physical or more abstract (like a sound, time, or the absence of something) (105; 136; 141). The thing profiled by an expression is bounded within the immediate scope in the domain of instantiation (145).

On the other hand **events** - relationships unfolding in time - are also conceived as “occurring in bounded episodes” (148). For verbs the archetype implies the conception of participants interacting energetically in a “force-dynamic” event (103), a canonical event model (357).⁵ Therefore “the schema for verbs presupposes two fundamental cognitive abilities: the capacity for apprehending relationships and for tracking relationships through time” (108).

One useful distinction drawn by Langacker highlights the difference between type and instance. “A noun names a **type** of thing and specifies the properties an entity must have to qualify as an **instance** of this type. Usually this **type specification** invokes a number of cognitive domains, collectively referred to as its matrix (§2.2.2). Within the matrix, a particular domain stands out as the one where instances of the type are primarily thought of as residing. It can thus be called the **domain of instantiation**. Conceptually, what distinguishes an instance from a type is that an instance is specifically thought of as occupying a particular location in this domain. Instances of the same type are distinguished from one another by virtue of “occupying different locations” (134).

The proposal, then, is that an **instance** (as opposed to a type) is thought of as having a **particular location in the domain of instantiation** (268). Instantiation is a mental operation, and for linguistic purposes instances are **conceived** instances, which may or may not represent actual objects or events. (268) Linguistic meanings do not just mirror the situations described, but emerge through an interactive process of construing and portraying them for communicative and expressive purposes (269).

2.6 The Construal

The accessed domains compose the conceptual content of an expression. The meaning is not, however, exhausted by this evocation, but rather implies the way in which the content is constructed. The **construal** represents our capacity to

⁵ For a force dynamics semantics see Talmy (2000a; 2000b).

conceive and portray the same situation in various manners (Langacker 2007: 435; Evans 2006: 536; Ungerer 2006: 163; Croft 2004: 40). Attention is differentially focused on a particular aspect of a scene by focal adjustments or imaging systems (Talmy 2000a; 2000b; 2007).

The construal operations represent the conceptualization of the structure's entities in a scene / situation. These operations represent "the most basic level of constituting experience and giving it structure or a gestalt" (Croft 2004: 63). For Croft many of the principles of Gestalt psychology such as "proximity, bounding and good continuation are analyses of how human minds construe a single complex object from seemingly fragmented perceptual sensations" (63). A property such as boundedness is not simply a spatial or material property, but also a matter of construal (64). Even the constitution of linguistic classes as nouns and verbs is a product of construal operations (67).

In film, cinematographic frame / shot design represent a construal. Cinematographic construal is achieved through camera work, i.e. framing (active zone of a profile), focus, the result of anamorphic lenses and depth of field (scalar adjustment obtained through granularity management and reference point in a dominion), camera position and angle of view (vantage point), distance to object and focal length (scope of conceptualization). For Carroll (2008) the cinematographic shots included in the edited sequence of juxtaposed shots communicate through attention management, through its focus on the object, acuity and the rhythm of image succession (Carroll 2008: 119 sq; Carroll & Seeley 2013: 62).⁶ *The size and length of a shot* warns us about the significance of the relevant object within the narrative or argumentative configuration of the entirety (Carroll 2008: 123). **The variable framing** is the guiding tool for cognitive activity (Carroll 2008: 124 sq; Carroll 1996: 85 sq; Carroll 2014: 238). More precisely, the guiding of attention is achieved through the **indexing** process (the indexing or continuous movement of the camera or through the montage cut accomplished by means of an object that changes the position of the camera in order to produce the shift of attention towards something of interest), though **bracketing** (by fixing within brackets what is relevant and leaving outside the frame whatever is not) and through **scaling** (by changing the size of an object). These functions are implemented through editing (by jumping from one camera position to another), camera movement (panning or tracking from one point to another) and focalization movement (zoom in or zoom out). The filmic image is a **moving pictorial representation** while the film gains the ability to catch the spectator's attention by means of its narrative (Carroll 1996: 81; Carroll 2014: 240).

Some other perceptual features of cinematographic stimuli to be classified under the rubric of construal operations are the different patterns of editing constructions, point of view shots, the relationship between the position of the camera and the object viewed (focal distance and depth of field), the degree of iconicity, mise-en-scene features like light and underscoring shadows, camera

⁶ "the moving picture maker articulates her own intentions to the audience by guiding our attention" (Carroll 2008: 122).

movement or object movement (see Jullier 2015). Enunciation markers classified by Christian Metz (1991) are equally belonging to the construal operations which pertain to the grounding system (Langacker 2008: 272). As Langacker states Cognitive Grammar is, in principle, a theory of *énonciation*” (Langacker 2007: 450; see Culioli 1990, 1995).

An important aspect of the construal is due to the way in which the spectator is conditioned to adopt a certain narrative attitude towards what is showed on screen. In an unconscious manner, the perceived stimuli may produce the tendency to act, have specific purposes and find themselves constantly under certain evaluation mechanism (Plantinga 2009: 51-2; Dehaene 2014: 101, 144). Barsalou analyses the filtering role of current purposes and tasks which the human subject may experience during the processing of situational conceptualizations (Barsalou 2004). The narrative roles serve this function of preformatting expectations and of orienting attentional processes. Those spectators who are interested in the narrative’s denouement possess, as attentional and emotional filter, the interest in the search for those clues which can assist their purpose - which structures the perception of pertinent elements in a represented scene (see Plantinga 2009: 52; Bordwell 1985 and 2013 for the guiding of attention and Carroll 1996: 89; 2008:140-144; 2014: 244 for *erotetic narrative*).

2.7 The Concept, the Descriptive System and the Situated Conceptualization

According to Lawrence Barsalou (The Theory of Perceptual Symbols, 1999, apud Evans 240 sq; Barsalou 2003; 2004; 2006; 2008), there is a common representational system which substantiates both perception (the ability to process an input from the external or internal world, like consciousness or the experience of pain) and cognition (the ability to make this experience accessible to the conceptual system by means of representing them as concepts, together with the processing information which operates on these concepts). In other words, the conceptual system contains the same mechanisms as perception and action and it is non-modular. As a result of this theoretical perspective, the conceptual representations are multimodal representations which have been organized into systems meant for specific tasks. Cognition operates off-line and uses mental representations (concepts) which are stored in memory and are not independent from the processes of experiencing a particular phenomenon (Evans 2006: 241). For Barsalou, **the perceptual symbols**, i.e. the concepts, are neural representations which are stored within the sensory and motor areas of the brain. Concepts are multi-modal to the extent that they obtain their information from different streams which are sensory / perceptual and introspective (subjective). They are integrated in systems which have been called by Barsalou **simulators**. A simulator is a skill or a mental representation which integrates and unifies perceptual symbols found in any given relationship (for instance, our relation with a hammer). A mental representation is a simulation of a concept and it is dynamic or situated just prior to an agent’s preparation for an action found in any particular state. Because the purpose of the

conceptual system is to prepare a situated action, it is organized around an interface of contextual action (Barsalou 2003).

A concept generates, within the same perspective, a multitude of situational representations and each **situated conceptualization** contains **the entities** involved as agents, **the behavior** of objects, **the setting, the event** and the relevant **introspective information – interoceptions and mentalizing** – as well as **properties and relations** that describe instances of concepts tailored for an activity that has to be carried out with a certain purpose. A concept is „a collection of situational representations” (Barsalou 2005: 156). Every time attention is focused on a component of experience, the information pertaining to a certain category develops. When attention falls upon a component, the information extracted becomes integrated within past memories of the component; this produces category information about that component (objects, events, locations, time, introspective states, relations, roles, properties etc.). The category information aids perception, supports categorization and produces inferences about the categorical elements and finally contributes to the production of new concepts. Furthermore, these situated conceptualizations take the form of simulations that create the experience of “being there” with category members (Barsalou 2003: 543).

The categories are represented with the aid of certain simulations of motor and sensory states. **A concept**, a conceptual representation, constitutes the capacity to build representations that are tailored to the dimensions of the situated action (2003: 521-522). In order to produce or check the properties of some categories / concepts, the subjects produce a simulation of a member of the category in order to represent that specific category and then examine the simulation in order to produce the necessary information. The subjects scan inside the simulation and produce words for the properties that they seek (2003: 527). The conceptual system is a sort of “user’s manual with instructions which depend on the agent”.

A package of inferences that are typical to a certain situation is called a **situated conceptualization**. They contain information of the following types: contextually relevant properties of the focalized category; information about the setting or the context of occurrence, the possible actions that the agent can perform in order to obtain a certain associated goal and the introspective states which the agent may experience during the interactions with the category (evaluations, emotions, cognitive operations etc.) (2003: 536). The activation of the simulation in the case of these four axes produces the experience of “being there” conceptually. Whenever it is necessary to process a category, the concept of the given category offers a situated conceptualization which creates a multi-modal representation of what it would be like if the subject processed the category in that particular situation (Fig. 3).

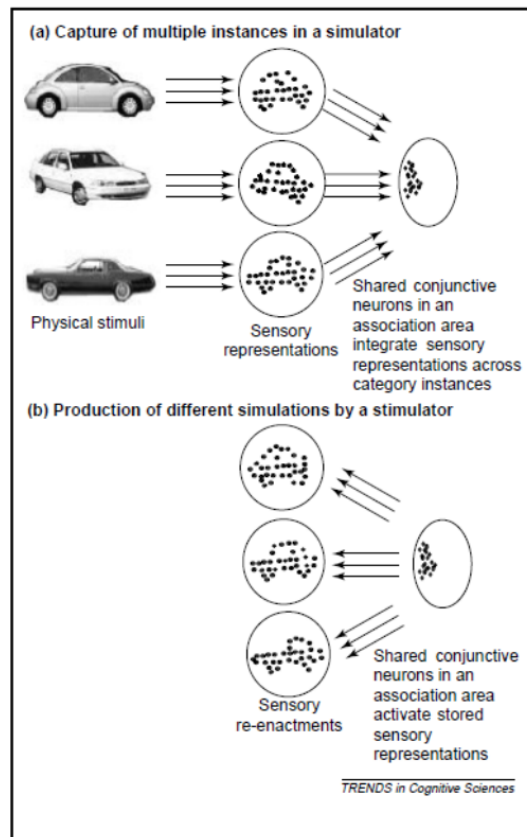


Fig. 3

The **construal** of a concept is, for Barsalou, a simulation or a **situated conceptualization** (Barsalou 2003: 536). The construal represents a filter that modulates the accessibility of the features that make up a concept (Barsalou 2009b: 174-5). Simulations can contain the schematic components which only partially represent the entities instead of their detailed representation. A category can be formed ad hoc if there is a map-making process going on between the schematic role of a simulation and a possible instantiation (2003: 549). The concept is represented in a particular situation.

Concepts are ultimately “grounded in terms of basic domains which represent knowledge arising from foundational aspects of experience relating either to sensory experience of the external world or to subjective (or introspective) states” (Evans 2006: 240). The **cognitive matrix** as defined by Langacker is for Lawrence Barsalou a **concept**. I have used the concept of **descriptive system** to define this notion (Deaca 2015: 169). It represents a linguistic generalization of a concept's structure. The descriptive system defines the procedures that have to be followed, the sequence of events, the roles that have to be carried out by the participants and the expectations (Sharifian 2014: 108). It defines the satisfying conditions required in order to achieve the performative speech acts. A concept evokes a series of **situated conceptualizations**. In opposition to schemas, which

are necessary to categorization (and are operating unconsciously), the descriptive systems can be explored consciously during their manifestation as situated conceptualizations and can assume the features of a construal. The descriptive system is constrained by amodal symbolic constructions (i.e. verbal constructions or “conceptual structures established by linguistic convention – the form which thoughts must assume for purposes of ready linguistic symbolization”) (Langacker 1991: 108-109).

Let us notice that a concept correlates perception – cognition – emotion so that it can either function unconsciously as a descriptive system or be explored consciously as a situated conceptualization through attentional focalization. The descriptive system – unconscious – plays a categorizing schematic role for a particular elaboration / instance. Situated conceptualizations in their turn contain schematic elements, descriptive systems and fragments of modality and embodied related elements (perceptual and motor activations, sensory motor structures) (Damasio 1989).⁷

Concepts are anchored in the terms of semantic domains that represent knowledge generated from the diverse aspects of experience, either described in terms of sensory experience of the outer world or in terms of introspective or subjective states (Evans 2006: 240). They are also anchored in the „sensory and motor system”, and thus „they reactivate past experiences with the help of their referents, aiding us to act in the environment into which we are immersed” (Borghini & Binkofski 2014: 1). For Shimamura, this type of knowledge is linked to the way in which we perceive it. The concepts are not abstract ideas, but rather they are tied to the sensory and motor processes which are activated whenever we encounter them (Shimamura 2013a: 122). This theoretical view is akin to the embodiment and simulation hypothesis (Lakoff and Johnson 1999; Gallese and Guerra 2012; Bergen 2012).

Non-diegetic background sound, emotions, as well as motion represent modifiers in construal expressive configurations. The same musical expression cues two different emotions, depending on their correlation to other modalities and conceptual domains within the situated conceptualization. The exploration of a descriptive system takes place during the perceptual unfolding – with the rhythm and tempo – instilled by a particular film expression. Within the film experience, the spectator seeks particular situated conceptualization brought about by the cinematographic sequences (see Fig. 4).

⁷ “there is no localizable single store for the meaning of a given entity within a cortical region. Rather, meaning is reached by widespread multiregional activation of fragmentary records pertinent to a stimulus, wherever such records may be stored within a large array of sensory and motor structures, according to a combinatorial arrangement specific to the entity. A display of the meaning of an entity does not exist in permanent fashion. It is recreated for each new instantiation. The same stimulus does not produce the same evocations at every instantiation, though many of the same or similar sets of records will be evoked in relation to the same or comparable stimuli” (Damasio 1989: 28).

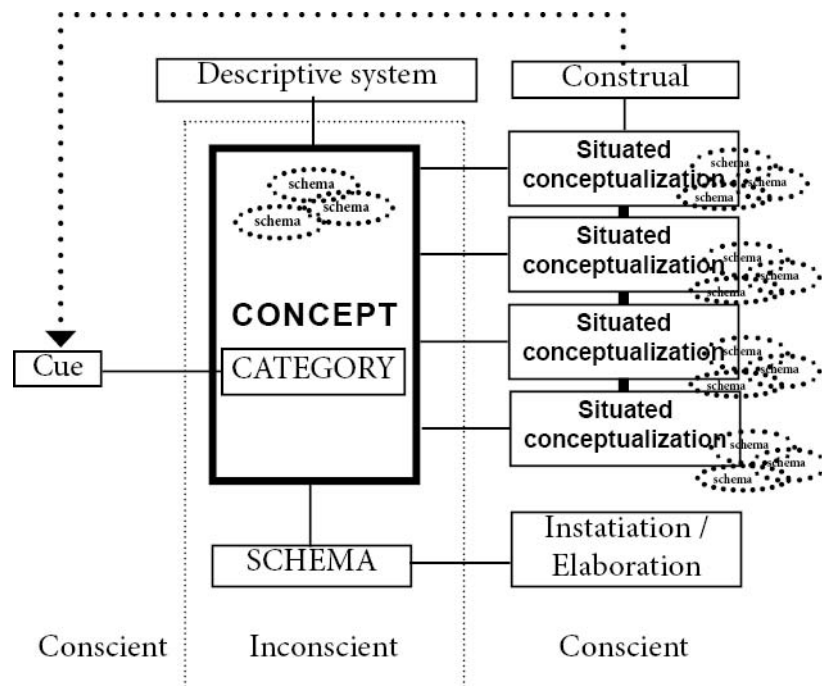


Fig.4

2.8 Halfway Conclusions

The viewer / film critic can identify and build conceptualization patterns manifested in various distinct conceptualization domains. Profiling takes place in different sectors / channels and domains. Those domains are the channels of a usage event. Symbolical units are revealed through automatization, entrenchment and conventionalization residing within the channels / domains of cinematic manifestation. Some schemas and constructional schemas can be derived from the usage event. To put it another way, there are semantic fields which can be identified and isolated from the correlations and the correspondences with other domains; they can be analyzed separately from other domains. A cluster of visual stimuli can be apprehended as a structured array of visual cues in a particular domain of instantiation giving rise to a particular conceptualization.

For example, a visual experience verbally described as *a woman in red* could be an instance, within the chromatic visual domain, of the color red (it's a type of red) or could be, within the diegetic domain, an instance of a female entity (a particular type of woman). The schemas are conceptual units and represent the equivalent of the grammar rules. These rules are abstract symbolical units identified by means of the sanctioning mechanism as categories. The cues of the expressive perceptual support serve in the design / construction of some instances of conceptualization apprehended as category instances. The cues or qualia are present in a domain of experience that in a usage event, in its turn, is associated by means of evocative relationships to another conceptualization domain. The expressive support is generated by cues – gestalt patterns within the domain of

experience under a construal –, and are, in their turn, manifested in a subsequent conceptualization domain that is the content conceptualization: in our case, the chromatic domain or the domain of natural world objects. One domain represents an expressive side and another one, a semantic side. The domains are also reunions of elements under a family resemblance of particular instances, comprising the situated conceptualizations.

Relationships of categorization, correspondence, association, and schematization are posited between domains. Profile correspondence is also posited. The expression's profile has some manifestation in all the domains which are overlapping (Langacker 2007: 465). The construal has as a specific consequence the generation of a particular conceptualization of the expression's evoked conceptual content (see Langacker 2007: 471/440). Conceptual domains have an expressive facet and a content conceptual channel. Cues are expressive prompts that "carry" the channel that is more substantive and autonomous and more salient to attention.

Symbolic assemblies with specific levels of schematicity and categorization are formed inside a particular domain. In discourse some conceptualizing channels are dependent and some are autonomous. For example, in a visual expression of a *red woman in movement*, *red* is an autonomous conceptualization in the chromatic domain, *woman* is an autonomous conceptualization in the domain of things and the feature of *movement* is dependent on the protagonist evolving in time. At a low conceptual level, *woman* is dependent on *red* since without the carrier *red* there would be no conceptualizing of the profiled entity *woman*; on the contrary, at a higher conceptual level, the basic level, *woman* is the head of the symbolic unit and autonomously conceived in the domain of things. Characteristic features like *red* and *movement* are modifiers and dependent on the entity profiled at a basic level of conceptualization. As modifiers those features will categorize the basic level object. Since they can also be envisioned as symbolic units on their own, relationships of association or metaphoric mapping with the basic level can be conceived. Their own profile is mapped on the basic level conceptual domain (the diegetic one) and generates a particular situated conceptualization. Features of expressive import (*red* or *movement* of object / camera), aspects of construal, correspond to a profile on the diegetic (basic level) entity (Langacker 2008: 462-3; Langacker 1991: 293)

An element or a combination of elements occupies simultaneously multiple channels. The integration of visual stimuli in cued gestalt as the image of a *red woman in movement* is an expressive channel for the entity "a woman", and, at the same time, is the conceptual content expressed in the domains of things and objects. The visual channel or domain, in addition to its signaling role, is part of the situation being described. The visual domain thus conceived is cuing the expressive support for a specific content and is the specific content. The perceptual array of cues is indicative and symbolizes itself.

Categorization, profile correspondence and construal mapping hold between different domains. Domains are not processed in a linear sequence. As Langacker states concerning linguistic apprehension, one can consider that

“processing occurs in parallel in multiple domains and on different time scales, allowing hierarchical organization”. In order to describe the phenomenon Langacker uses the notion of **window of attention**, i.e. a “‘working space’ for accomplishing some processing task” (Langacker 2012: 594). Viewers have the capacity to multitask, to decompose a task into subtasks, and to interrupt the current task in order to work on another and subsequently we can resume and complete the current task preserving its structural integrity (595; see for event segmentation Zacks 2007a; 2007 b).

3. The Diagram of Cinematographic Analysis Domains

3.1 Preliminary

In Column B of the explanatory diagram (Fig. 5), I have included cues that allow the spectator to form a construal. There is no one-to-one correspondence between them and the elements in Column A; no element from the left column corresponds directly to an element in the right column. The cues appear in conceptualization domains which can produce auto-symbolization - such as red in the chromatic domain - or they can be elements that invoke various domains of conceptualization. Perceptual stimuli evoke in a bottom-up fashion conceptual domains that, in a top-down manner, select the gestalt perceptual configuration as cues in the relevant conceptual domain.

Whenever I see a red mug on the table, I don't perceive a *red color*, but a *red mug*. The domain of conceptualization summoned through the support of expressive cues is relevant to the visual cinematographic analysis. Association through evocation is consciously felt by the subject as being inherently imbued with meaning. The phenomenon of recognition of a certain pattern could be described as a felt experience and can be consciously explored with the help of the attentional processing mechanisms. Nevertheless, for analytic purposes, the viewer / film critic can isolate one domain or another and describe the phenomenon at the given, specific level.

In column A, I have introduced the conceptual domains in which various expressive configurations can be supported by those schemas which resulted from the generalization process of abstracting common elements pertaining to different occurrences or usage events. The schemas that characterize the visual and the verbal comprise cinematographic expressions. The symbolic units consist of expressive and semantic structures. The expressive structures represent subregions of semantic conceptualization. Some can be instances of self-symbolization. The conceptualizations on screen are determined by schemas in various semantic domains. The expressive structures are formed with the help of cues which allow the spectator to recognize patterns within alternative conceptual domains. These patterns are categorized as instances that contain immanent conceptual schemes - namely, more abstract descriptions. The conceptual domains in Column A represent concepts (in the sense attributed by Barsalou) or conceptual domains (Langacker) which function as attractors for a number of situated conceptualizations. They contain a schematic aspect and a modal simulation aspect. The viewer can conceptualize, with the help of cues – procedural gestalts in

instantiation domains subordinated to the construal - , those conceptual entities which can be deemed as belonging to the conceptual domains.

To the extent that a set of cues is predominantly biased towards one domain or another, the viewer will categorize the conceptual content into one or more domains. When one domain gains predominance over the rest, it either inhibits or modulates them. It will gain the aspect of a figure clearly delineated against the background. Moreover, the attention of the spectator can focus in on one domain or another *irrespective of* the structure of the audiovisual expression. The domains listed below can be abstracted and analyzed independently from all the others and irrespective of the effective experience of a particular viewer.

A. The Conceptual Domains Matrix	B. The Construal (qualia, schematic configurations, cues for processing)
Prefigurative (vital affects) (basic domains: movement, color, shape, size, texture, time) autosymbolic units	Qualitative Temporal Modulation (sequential scanning) visual and auditory modal features, directed motion, edge orientation, temporal structure of neural event
Figurative (graphic frame composition), the 2D domain	Imaginative capacities (mixture, metaphor, metonymy, integrations)
Diegetic (abstract or figurative basic level domains) - the 3D domain (descriptive system = objects, setting-context, actions, agents, mental states, embodied simulations / theory of mind; situated conceptualizations; script scenes and events; introspections) categorization, scanning mode (cumulative or sequential) Effective Level	Frame (attentional frames) (profiling and the construal) Event cues Cues indicative of profiling and construal features of scenes and events
Symbolic (symbolical) concepts based on imaginative capacities) (conceptual integrations, metaphor, metonymy); elaborations of secondary, abstract concepts.	Shot and frame modulation (depth of field, focus, and perspective)
Narrative (narrative schemas, scripts, frames, situation models)	Camera movement (cues for sequential scanning)
Conceptualizer (the organization of narrative information by making use of a reference point and a communication ground, deixis) Epistemic level	Editing constructions (ellipsis, montage cut)
Affective (simulated situations and affective categorization) (emotional appraisals)	E-site schemas

Discourse (speech act grounded on the discursive level of communication about concepts), the typology of cinematographic genres Discourse level	Sound cues
--	------------

Fig. 5

3.2 The Prefigurative Domain

The **prefigurative** domain - as a dynamic domain of conceptualization – is based on the perceptual stimuli of images. The prefigurative represents a separate domain to the extent that the spectator does not experience recognition of objects or figures. A series of parameters of the dynamics of image (directionality, tempo, and rhythm) or qualia of color, shape, texture, light, and scale can be identified and then the patterns of combination can be abstracted. Conceptualization coincides with the perception processes of dynamic forms. Features and dynamic patterns unfolding in time are also categorized as instances of emotions. Also, as autosymbolic units (the expression support is identical with the content expressed), they are integrated in the discursive event created in the interaction between a producer of the filmic artefact and the actual viewer in the cinema theatre.

Daniel Stern in *The Interpersonal World of the Infant* identifies **the amodal perceptive qualities** as forms, temporal patterns, degrees of intensity, motion, number and rhythm (Stern 1998: 53). The amodal affective perceptions are derived from perceptual stimulation, which takes place within particular sensory modalities and can be translated into another sensory modality.

Stern compares the **vitality affects** with the attributes of movement in arts that unfold in time (Stern 2010). The expressiveness of vitality affects is similar to the way in which puppets move (activation outlines which they produce), signaling cues that suggest certain vitality affects. The puppets do not possess the ability to express categorical affects with the help of facial signals and their repertoire of bodily postures is reduced. But the way they move allows us to infer the intended vitality affects; one puppet can be lethargic, with its limbs "hanging" and its head "drooping", another "vigorous", and yet another self-important. Abstract dancing and music are other examples of vitality affects.

The cinemagoer is sensitive to nonverbal expressivity and unconsciously perceptive to vitality affects and to a-modal qualities of audiovisual expressions (the shape, the intensity level, the motion, the number, and the rhythm). They form the abstract substance generated by external stimuli. The spectator is also receptive to the stimuli's intensity variations that, at the same time, work to induce the feeling of continuity between self and other (dynamic and personalized processes on screen). Experimental and abstract films often work on and reshape this non-verbal expressive approach to audiovisual impulses. The domain of cinematographic study is correlated with this domain of conceptualization.

Included in this domain – besides movement, that is - are discussions about basic domains such as the auditory qualities (tone, pitch, tempo, and rhythm) and

color qualia.⁸ These features belong either to modalities (acoustic vs visual) or sub-modalities (within the visual mode there are the shape, the motion or the color). The specialized modular areas are employed in detecting these features. They are processed in parallel through interconnected neural networks. Between these entanglements, there are common areas of congruence for neural activities, i.e. attractors (Fig. 6).

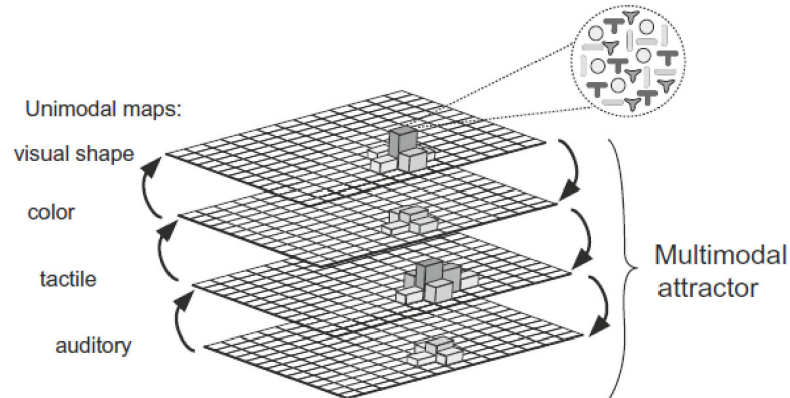


Fig. 6 (Pennartz 2009: 729)

We can envisage such an attractor as the spatial location around the subject where the activation of detectors takes place. For instance, the T-shaped letter, colored in red is located in front of the subject (the spatial network that determines the position of the attractor in the two sub-modal networks) (Pennartz 2009) (Fig. 7).

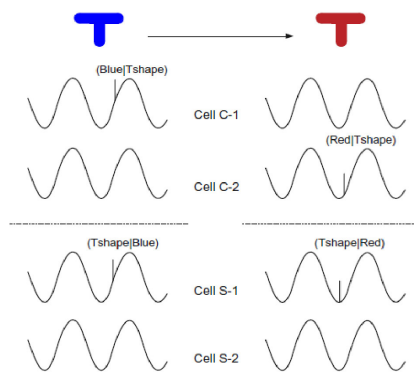


Fig. 7 (Pennartz 2011:730)⁹

⁸ Music profiles and modulates the conceptualization of scenes and entities (Juslin 2013; Boltz 2001). See also Rose 2007; Rutherford 2003; Susan Sontag 2003.

⁹ “unimodal attractors influence each other by affecting the phase relationships among feature detectors of different modalities, possibly also with reference to a common

The simultaneous coactivation of a number of networks can lead to the conscious and integrated perception of experience. The prefigurative features can modulate the activation structures from other domains. They impose attractors and, through interconnectivity, they modulate or warp the content of other patterns of neural activation destined for other fields (Gallant 2013) (Fig. 8).

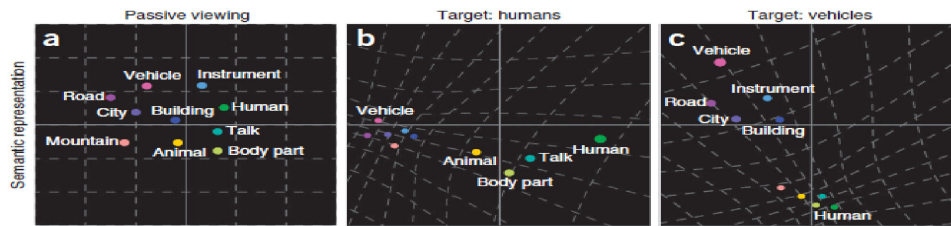


Fig. 8 (Gallant 2013: 2)

Given the construction of neural interconnectivity networks, the features can only be perceived in association with other domains. We cannot have the experience of movement independent from a moving object. Tim Smith's studies about continuity editing bring to our attention the attention-guiding mechanisms which operate over the limit of the montage cut and are organized with the help of some non-figurative and non-diegetic perceptual cues (e.g. movement) situated at the "low" perceptual level (Smith 2012 a; 2012 b; 2013; Brunick et al. 2013).

For a scholar like Poulaki (2015), the hesitation or transition moments between two coherent neural states are exploited by film. The montage discontinuities, the rapid succession of shots (flickering), the morphing of shots or the slow motion sequences prolong the derailing or drifting moments and postpone the formation of the narrative mental patterns (the events). From her perspective, there are narrative-driven films which exploit narrative continuity and experimental films which exploit the mechanisms of neural instability – of chaotic transience – between the neural synergetic networks. In Rose's article (2007), movement is linked to the affect in non-verbal arts. For Rose, the emphasizing of some perceptual characteristics, the use of somatic-kinesthetic tension and the emotional outlet in the artistic expressive support result in the manifestation of some patterns

oscillatory cycle in local field potential. A change in an attractor state for a given modality has the potency to tip over an attractor state of another modality, even though the basic feature-specific tuning of detector cells remains unaltered for both modalities. This is illustrated here by showing a pair of cells for two visual submodalities (cells C-1 and C-2 for color, S-1 and S-2 for visual shape), separated by dotted lines. The left-hand configuration shows how cell C-1, tuned to Blue, and cell S-1, tuned to a T-shape, both respond to the shape presented at the top of the diagram, assuming it falls within their receptive fields. "Blue/Tshape" denotes the situation of a Blue input given the precondition of a T-shape. When the color of the object is changed from blue to red (right-hand panel), cell C-1 no longer responds whereas S-1 still generates a spike in response to the unaltered shape feature, but now in a different phase relative to C-2 and the oscillatory cycle. Cell S-2 remains unresponsive in this situation" (Pennartz 2009: 730).

of „implicit virtual motion” (2007: 34) which shall be translated by the viewer into somatic tensions and emotional reactions.¹⁰

3.3 The Figurative Domain

The figurative domain can be considered a separate domain of cinematographic analysis to the extent that one can identify patterns of graphic composition and formal-perceptual structures. It represents a conceptualization channel as defined by Langacker. Graphic compositions, scenography and framing that operate perceptual integrations can be grouped in recurrent units. Thus, the framing parameters stand for the construal which, in its turn, invokes a particular perception such as a character’s point of view. In this case, what concerns is not a framing type or a graphic object identified by the viewer but rather a type of perception situated in the semantic domain of conceptualizers. Alternatively, the distinction between a naturalistic cartoon or photography / photo print copy of a landscape constitutes the correlative distinction between two types of 2D representations or, at the diegetic 3D level, between two types of landscape. The qualia of the figurative domain constitute simplified modifiers of the 3D objects identified by the viewer. The figurative quality implies focusing attention on the support for representation and not on the object of representation itself.

Framings are representations that embody combinatorial arrangements based on semantic and syntactic rules, i.e. symbolic units. 2D representations are particular situated conceptualizations and instantiate particular combinatorial arrangements of constituents. As such these representations are apprehended as individual cognitive entities and posit a “binding code” of the combinatorial arrangement (see Damasio 1989: 44-45). Framing compositions can have degrees of abstraction and schematicity. As such they are amodal and map topological relations of the constitutive entities.

One layout of cinematographic composition relevant for the discussion is the alternating face-to-face dialogue shots made with a circular camera movement; this layout carries a semantic, conceptual core (even if only a simplified one) and recalls a set of associated situated conceptualizations (construals or simulations) (Højberg 2014). Patterns of framing brought to the foreground through the accumulation of cues, become so significant that they shape the perception of other conceptual domains. They constitute the cinematographic construal (see Carroll & Seeley 2013; Cutting 2004; Smith 2012; Smith, Levin & Cutting 2012; Coëgnarts 2017). For example, static frames which unfold in time as long takes in films by Andrei Tarkovsky, Michelangelo Antonioni or Marguerite Duras conceptually warp the understanding of the diegetic domain. The figurative domain, as construal, imposes a conceptual reading on the diegetic domain. One can also find at this level intertextual cinematographic correspondences such as allusions, pastiche and citations.

¹⁰ See Tan (1996: 96) about cinematic interest and the prospect of return.

As in the case of the prefigurative features, figurative structures cannot be experienced as isolated from the object that displays the qualia. Figurative domain is dependent on the diegetic domain. There are films which draw attention to this conceptual domain by multiplying the stimuli corresponding to the field of inquiry and by eliminating the configurations which would enable the viewer to identify patterns such as 3D objects or narrative structures. It is self-evident that the viewer will not perceive the composition layouts as separated from objects; in other words, the viewer will perceive more strongly the figurative-compositional qualia instantiated by an element in the conceptual foreground which will warp other conceptual domains pushed to the background.

3.4 *The Diegetic Domain*

The diegetic domain contains immanent intelligibility schemes and brings forth clusters of concepts (the **descriptive system** or the **concept** as defined by Barsalou) and **situated conceptualizations** (specific cases of concept instantiation). The same stimuli present on screen can be placed in different categories. At this level the viewer identifies objects, scenes, characters and/or situations. It is at this level that one experiences “immersion” - the strong narrative experience also called “narrative absorption” (see Balint & Tan 2015: 65). Image schemas help with categorizing the on-screen figurative instances. These image schemas structure the perception, motion, action and gestalt characteristics of the perceived objects at the level of bodily experience (see Lakoff 1987; Johnson 1987; Langacker 2008; Coëgnarts & Kravanja 2012). At this level visual representation cues embodied simulations (see Gallese and Guerra 2012; Coëgnarts 2017).

The figurative domain can be considered a subdomain of the diegetic one. For example, the emergence of the letter A on screen can be the cue for a type of letter belonging to the diegetic domain; it is a type of object: a kind of typeset. Letter A has at the same time a specific shape: A vs. A. The graphic illustration of the letter is a token of a style of font. Identical cues at the diegetic level are diversely categorized by top-down mechanisms, and prompt the disclosure of a multitude of descriptive systems (Bar 2004; 2007). For example, Branigan (2006: 67) indicates a series of contexts of use for the image of an *eagle in a tree* which allow different categorizations of the object identified by viewers but not of the material basis for representation - that is, the photograph. Thus, the image of an *eagle in a tree* is, in turn, a **grounded** object: “here is that eagle which I saw perched in a tree with clouds in the background”; a **sample** of a generic eagle; a **type** of a general thing (the eagle belongs to the vertebrates class along with humans and fish); an **emblem** (the symbol of a nation), a **memento** or a fetish (the eagle as remembrance or as something charged with superstitions); the disclosure of a **sentiment** (the eagle is alert and vigilant), something meant to leave an **impression** (the eagle as vivid life form embodying sensory qualities such as texture or aerodynamic balance); the **reification** of something intangible (an eagle’s view from above as an ideal point of overview, thus standing for the attainment of transcendent knowledge - an eagle’s-eye view); a **fiction** (the eagle is a mythical creature such as the griffin); a **narrative** (the eagle as an evil

character in a script/ plot such as the Eaglet and the Gryphon in *Alice in Wonderland*) (Fig. 9).



Fig. 9

Let us notice that diegetization consists of a primary pole where one identifies the pattern which calls forth a type of object (the conceptualization of the object *eagle*) and a secondary conceptual processing of identifying a particular instance in the domain of instantiation (the object *eagle* is a symbol of the concept of nation). The particular instance is embedded in a speech act script (used in an actionist manner) and situated relative to a communication ground. The profiled object is integrated in a situated conceptualization and in an embodied simulation and gains for the viewer a felt living status as a 3D entity.

The object has, in this case, the role of a symbolic unit which gives access, depending on the context, to interrelated *knowledge domains*. The on screen cues allow at an incipient stage the identification of an object in the 3D diegetic domain. For example, 4 lines, when conjoined in a particular way, automatically form a reified gestalt (in the 3D object form) shaped as a *square*. In a sense, the occurrence of the 3D object is a symbolic unit as it results from the association of an expressive conceptualization (the cues/ stimuli) with a conceptualization of meaning (the object). The object is then embedded in the secondary symbolic unit which recalls by association a semantic verbal content, i.e. *a square*. It is categorized as the instance of an expression for a type of object from a more abstract semantic domain. The object's polysemy derives from its use in different contexts which involve different instantiation domains and different categorization relations.

The linguistic unit selects and is schematic for the conceptualization of the perceptual unit the *square*. One could say that the conceptualization of square is inherently semantic and at the same time, it is the expression of a semantic content which in turn classifies it. The visual categorization will be activated in other contexts of use (or it will be differently contextualized altogether) and the categorization will be modified in said contexts.

The diegetic level of analysis concerns, then, at a first stage, the occurrences of symbolic units in the form of 3D objects and, at a second stage, a set of symbolic units which belong to extremely diverse semantic domains and display degrees of generalization (idealized or schematized). In this way the diegetic level of analysis contains not only “objects in the world”, but rather expressive units classified in domains of semantic conceptualization which belong to the symbolic domain. The schemas and the conventional symbolic units sanction various use instances involving understanding and interpretation.

When considered from the perspective of film genres, this model is fractal (i.e. the same structure is repeated at several levels). The dominant film genre - the classic, narrative-driven one - has as its principal conceptual domain the diegesis. The concept of diegetic film - as radial notion - contains a dynamic set of permanently shifting situated conceptualizations which are seemingly familiar and can be classified with the help of the features identified by Barsalou: the western, social science fiction, urban realism, historical.

3.5 The Symbolic domain

Going back to the example with the eagle we could say, for instance, that the object-expression *eagle*, in itself a symbolic unit organised around two poles, an expressive and a semantic one, is recategorized by a new conceptualization as the expressive pole. Thus the object – symbolic unit - *eagle* recalls a semantic content depending on one category. The object-expression *eagle* is a sample of a particular object or feeling, emblem, a cultural symbol, a mythical or fictional entity, an element in a narrative script.¹¹ In other words images first do activate sensorimotor simulations and grounded-embodied multimodal representations, but secondarily, by word level patterns of associations are reinscribed and recategorized in other conceptual domains. As a consequence the first conceptualization is associated with a secondary conceptual content and forms a new symbolic unit.

Following Croft we adopt a dynamic construal approach to conceptual categories. Thus, as Croft states, “the notion of fixed categories with permanent representations is a myth. Among these are Barsalou’s (1983) experiments involving ad hoc categories with no conventional names, such as ‘things on a desk that could be used to pound in a nail,’ or, ‘things to take on a picnic.’ Subjects readily formed new and contextually coherent categories that showed the same characteristics as established categories, including graded centrality and characteristic features” (Croft 2004: 92). In this sense interpretations are dynamic construal pictures of conceptual categories (98). An interpretation resembles a picture in that it is not susceptible of finite characterization in terms of semantic features, or whatever. Any features are themselves construals (100). Therefore

¹¹ About the relationship between embodied simulations vs symbolic representations of conceptual content see Zwaan2014; 2015 and Borghi & Binkofski (2014: 61-63).

Croft's model of comprehension has an indeterminate starting point (a purport) and a determinate end point (100).¹²

The graphic expression of the *eagle* mentioned earlier - the expressive pole -, considered a sample of a graphic expression recalls once again the primary semantic content, *eagle*, but, due to the categorical relation, the cues pertaining to the expressive pole are more prominent - that is to say, brought to attention as a figure clearly outlined against a background - in the semantic domain of graphic figures. It should be noted that identifying the graphic shape as "eagle" 3D entity cannot be ignored. The subject sees not disconnected graphic signs but rather a whole percept representing the object "eagle". In other words it is impossible that one should see some lines drawn on paper rather than the bird. Identifying the object pertains to a **primary symbolic unit** and its categorization to a **secondary symbolic unit**.

In certain usage contexts the cues that enable the primary identification are inhibited so that they cannot reunite in the guise of the basic gestalt - here, the subject cannot see an "eagle". The cluster of cues conjures some other object, a non-figurative shape; the latter is, in this case, still a primary symbolic unit, only, it instantiates a GRAPHIC OBJECT. At other times the screen displays hybrid entities formed out of cues belonging to two entities incompatible in the natural world; they point to two concurrent descriptive systems. For Langacker the resources used in this process of categorizing and establishing new symbolic units are : "general and contextual knowledge, basic cognitive abilities (e.g. memory, attention, planning, aesthetic judgment) as well as such "imaginative" capacities as metaphor, blending, mental space construction, and the evocation of "fictive entities" (Langacker 2007: 428).

The difference between diegesis and symbol unfolds on a gradual continuum. It resides in the difference in complexity between the conceptualization track and specificity. Image schemas are activated when identifying objects or film scenes, but, at the same time, they represent the carrier-structures necessary to emerging metaphors (Coëgnarts & Kravanja 2012). At this level George Lakoff and Mark Johnson's Conceptual Metaphor Theory is applicable in the form of metaphoric mappings from image schemas to conceptualizations (Lakoff and Johnson 1980; 1999).

Diegetic symbolic units are more specific while the proper symbolic ones are more abstract. The lexical and grammatical sides form a continuum of "assemblies of symbolic structures" (Langacker 2007: 438). Assemblies feature

¹² "When we encounter a piece of language in the course of normal communication, there is an instant of comprehension, a kind of crystallization of the perception of meaning – we know what somebody has said (or written etc.). This is similar to our recognition of a familiar face, or when we realize that what we are seeing is a dog and so on. In the case of the face, we do not merely recognize whose face it is, but at the same instant we see perhaps that the person is tired, or worried, and the hair is windblown and so on. On further reflection, we might infer what the person has been doing, or what the cause of worry is. The processing can continue indefinitely, but there is nonetheless a prior moment of recognition" (Croft 2004: 99).

different degrees of symbolic complexity and of specificity (or on the contrary, schematicity) at the semantic and phonological poles. Certain symbolic units are made up of sets of symbolic structures, each with a specific phonological pole. The construction schemas describing their formation consist of symbolic assemblies where some or all of the structures are both semantically and phonologically schematic. Constructional schemas categorize (and are immanent in) instantiating expressions, just as class schemas are. Whether specific or schematic, symbolic structures are connected—and thereby form assemblies—by correspondences and relationships of categorization (2007: 441).

The metaphoric or metonymic modes of lectures belong to this analytic level (Gibbs & Colston 1995; Gibbs 2011; Cienki 2007; Coëgnarts & Kravanja 2012; Coëgnarts 2017; Deaca 2015). It represents either a complex analytic category or the conceptual space where cultural (or, generally speaking, conventional) codes manifest in the interpretation of the concrete visual support of cinema. As one can see at this level the analysis does not take into consideration either the narrative or the fictional/ factual/ emotional/ discursive aspect of the symbolic unit with expressive role but rather it decides its standing in an association based on evoking or classifying. At this level one could apply the theory of *mental spaces* and the typology of *conceptual integration* operations as it was formulated by Gilles Fauconnier (2002; 2007).

3.6 The Narrative Domain

The level of **narrative** analysis is a subdomain of diegesis to the extent that categorical schemata belong to the domain of events and not to that of scene/situation. The objects described are instances of sequences of actions and represent the *narrative* domain which presents recognizable action patterns, scripts, narrative schemata (Branigan 1992: 14-45, 203-217; 2006: 29 sq), event schemata or models (Zacks 2007a; 2007b; 2009; 2011; Balint & Tan 2015). Several pertinent analyses have been done on this topic by James Cutting (Kaitlin, Cutting & DeLong 2013). Event models (in conjunction with prefigurative cues such as motion and attention-guiding strategies) allow for the construction of a continuous experience of a long take (Zacks 2013).

A series of studies concerning image schemas used in films show how “the narrative deployment of image schemas by film makers facilitates embodied comprehension of particular elements of the film’s story-world, such as character subjectivity or emotion” (Balint & Tan 2015: 66). Situated conceptualizations contain characters living in the multimodal realms. Characters – conceived as cognizant agents – serve as access / reference points to the spatiality of a situation. Camera movement, frame composition or points of views are understood – through use of character reference point – as manifestations of mental explorations of a peripersonal space (the space surrounding an experiencer) (Gallese & Guerra 2012).

Characters support agency attribution and viewers use a Theory of Mind in order to interpret and predict narrative and dramatic unfolding of events (Levin et al. 2013; Oatley 2013). It also allows for a simulation of being in a world (Gallese

& Guerra 2012; Zwaan & Fisher 2008). This simulation allows “the impression we are inside the diegetic world, we experience the film from a sensory-motor perspective and we behave “as if” we were experiencing a real life situation” (Gallese 2012: 188). Thus “people re-use their own mental states or processes represented within a bodily format in functionally attributing them to others. Because of a shared format of bodily representation, we map the actions of others onto our own motor representations, as well as others’ emotions and sensations onto our own visceromotor and sensory-motor representations” (206). The viewer has the “the capacity to share meaning of actions, basic motor intentions, feelings and emotion” with characters (193). “The Feeling of the Body consists of the activation within the observer of non-linguistic “representations” of the body-states associated with the observed actions, emotions, and sensations, as if he or she were performing a similar action or experiencing a similar emotion or sensation” (193).

3.7 The domain of conceptualizers

The analysis of **conceptual roles** focuses on the organization of narrative information (either the occurrence construal or the narrative schemata) according to a reference point and a communicative situation in which subjectivity plays the role of reference point. The *conceptualizer* (indicated as C) is a conceptual domain different from the narrative schemata, but connected to narration in that it is a simulation of an epistemic perspective on the effective level¹³. The **conceptualizer** represents the organization of information according to a reference point and a communicative situation (what Langacker referred to as *sectors* in 2007: 425). (Fig. 10)

Conceptualizer_4 experiencer = X, occurrence effective level	4	The Occurrence / Experiencer diegetic in scene, a profiled process : event or situation, the ground is virtual, conceptual reference point of access.
Conceptualizer_3 of the grounding element immediate epistemic construal - real	3	The virtual profiler It grounds the occurrence in the diegetic here and now Basic expression
Conceptualizer_2 of the speech act scenario imaginary - epistemic and interactive level	2	The narrator Extra-diegetic, it anchors the expression on an actual ground, speech act scenario Elaborated expression Introduces the time and modality

¹³ The model presented here starts from the diagram of narrative roles in Edward Branigan (1992) and from the concept of conceptualizer in Ronald W. Langacker (2007; 2008; 2009). See also Deaca 2015.

Conceptualizer_1 of the particular usage event Discursive level	1	The story-teller (a film narrator) extra-fictional (explicit / implicit) who either embraces or assents the reality conception purported by the film
C of the film production	0	The real-life author

Fig. 10

C1, C2, C3 and the experiencer are deictic centres. C2-C3 represent a continuum which introduces the **time** (from immediate to non-immediate), the **modality** (from real to unreal or probable), a **POV** (inside or outside the diegesis) and an illocutionary force (Fig. 11).

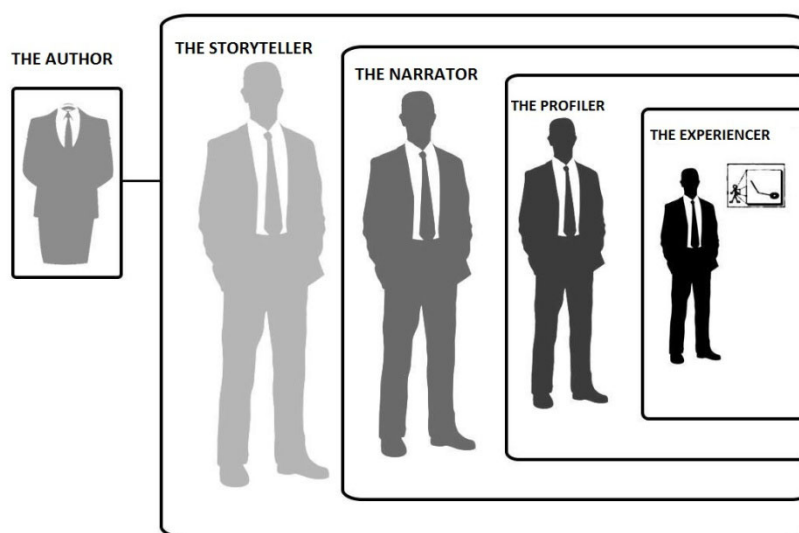


Fig. 11

To sum up, there is a first level of occurrence (written as X or as **p** by Langacker) which stands for the profiled process or object. The occurrence may contain an experiencer - denoted as C4. The construal is configured by the profiler (C3) and narrator (C2). The profiler's construal represents a view attached to the object. The profiling is virtual and determined by a diegetic *now and here*. The narrative construal represents an epistemic assessment of the effective level. This level introduces the scenario for a virtual speech act. Its aim, as reference point in a database - domain matrix or descriptive system - is a basic reality and forms a basic proposition. The storyteller (C1) stands for the discourse level and introduces a new scenario for a secondary speech act oriented towards the previously mentioned proposition. Each conceptualizer has its own conception of reality, from the basic to the complex one (Fig. 12).

$$\{ X1 \leftarrow [C3 \leftarrow C2 = P] \leftarrow C1 \} / C0$$

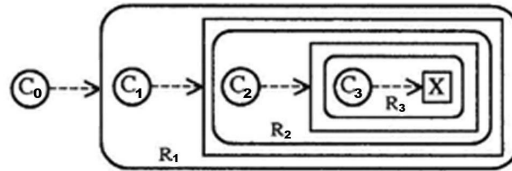


Fig. 12

Often enough the cinematographic narrative is unfolding by making use of shots that represent the visual access of a character (the POV shots). In this case the on-screen image can be assimilated to a subordinate verbal clause (Fig. 13).

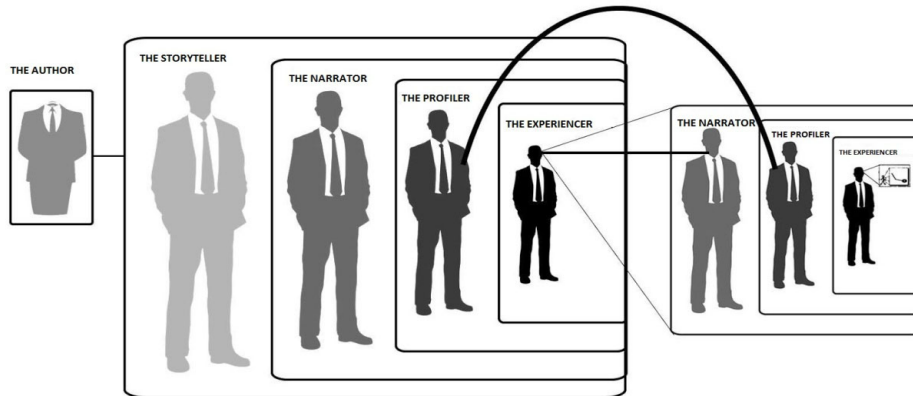


Fig. 13

Narrative roles are deployed in layers. Drawing attention or foregrounding one layer implies toning down the others. The conception of an object situated at the occurrence or experiencer level is warped under the pressure from the narrative role acting as attractor in the foreground. In this way, the spectator perceives and conceptualizes a distinct difference in presenting the picture of a CAR through the filter of a profiler and through the subjective filter of a character, respectively. The web of associations in the descriptive system takes shape differently in the two cases. In the first case, the *car* is an instance of a vehicle (a visual sample of access to the object) and in the second, it is a sample of visualizing the object. The picture (of the *car*) enables access to or provides conception with a subjective view of the object - thus causing two different mental states.

3.8 The Affective domain

Introduction

Affect analysis is focused on cinema construals which evoke affects. This level implies a modal domain different from the epistemic one, but manifests a “family resemblance” since it involves a cognitive assessment of the effective level depending on a series of concerns simulated or lived by the spectator. Assessment and simulation can be grounded in a subjective entity, the conceptualizer or the evoked companion serving as a clutch system for particular emotions. For the theoretical frame used here, the narrative roles or conceptualizers function as anchors or reference frames for emotions (see Pennartz, 2009: 727). To Barsalou, an emotion cannot be understood outside of an agent putting himself in the scene / situated conceptualization (Barsalou 2011: 1108).

At the same time we should take into account the fact that all cerebral processes can be either conscious or unconscious and that there are unconscious emotional memories (Dehaene 2014: 71). The brain structure responsible for computing the fear-inducing stimuli is the amygdala. Its neural networks respond to music, a stranger’s face, pictures of snakes or spiders or “alarming” words - in other words, it is triggered by categorical stimuli (Dehaene 2014: 93).

Barsalou on Affects

To Barsalou **emotional concepts** are abstract (Barsalou 2011: 1107). Within the present theoretical frame, a concept corresponds to the descriptive system and has a corresponding category. The similarity relations between the category members are taking the form of a family resemblance or radial category (Barsalou 2011: 1106). They aggregate diverse information within an instance referring to a whole situation; they are organised in a loose collection of situated conceptualizations and can be accompanied by various forms of limited abstraction. An emotional concept is a relational structure which integrates multiple parts of an experienced situation. An emotional concept contains a large set of situated conceptualizations that produce emotion in many different kinds of situations, with each situated conceptualization producing a different form of the emotion (1107). The concept of *fear* can be represented by a situated conceptualization reuniting concepts for forest, night, animals, thirst, and confusion or by another one made up of written presentation, essay, to talk, audience, supervisor etc. An integrated representation of a set of concepts in a situated conceptualization constitutes one instance of the concept *fear* which includes internal experience and potential actions (1108). It is what Langacker calls a conceptualizer. *Fear* can be instantiated and experienced differently in different circumstances. As there is not one bodily signature for each emotion, the same body state across different situations can be conceptualized as different emotions (depending on the situated conceptualization active while interpretation takes place). Emotions result from the activity of modal circuits in the sub-cortical brain area meant for perception, action, core affect, attention, executive processing, memory, language, reasoning, etc., but there isn’t such a thing as a unique module

meant for a specific emotion. Several brain states work together for a given emotion to arise, each corresponding to a different situated conceptualization (1109). Conceptual acts occur periodically in a subject's cortical area in order to represent and control the situated activity as well as classify patterns of multimodal activity as emotions. The situated conceptualization for an emotion classifies a pattern of activity as an instance, which is then elaborated with situational-relevant information to compose an online conceptualization. The resulting situated conceptualization has the potential to change core affect and other bodily responses associated with the emotion, together with action and perceptual construals (1109). The mechanics of it are taking place unconsciously and are partly automatic. In the concluding section of Barsalou's article the component elements of situated conceptualization come from common neural circuitry distributed throughout the cortex, which produces situated representations of emotions dynamically. Certain parts of the brain play a central role in the representation of the same emotion in different situations and in the representation of different emotions.

The notions illustrated above can be transferred to the cinematographic domain: the cinematographic construal elicits a form of situated emotion - a situated conceptualization - and engages different patterns of activation in the conceptual network to be found within a descriptive system, the situated categorical inferences. The film provides the viewer with a set of cues necessary in projecting a particular construal which, as the source domain of metaphor, will represent a target abstract emotional category.

To a scholar such as Lisa Feldman Barrett (2006; 2014) emotions are mental states making use of the same neural base as perception and cognition and which categorize feelings (determined by the computation of interoceptive and exteroceptive stimuli). Furthermore, emotions are attractors that modulate conceptions formed in other conceptual domains. The categorization is a situated conceptualization to the extent that a conceptual database is used in categorization to tie it to the given situation and, at the same time, it is enactive in the sense that it prepares the subject for a situated action in context (Barrett 2014: 293). The act of seeing, feeling, or thinking is at once a perception, an emotion, and cognition. Emotions are acts of meaning making. An emotion is embodied when the database is used online to give shape to the perception of a physical state - sensory input from inside or outside the body - and to tie this physical state to an event in the world so that the bodily changes undergone are experienced as "relating" to something in the external world (293).

At one level emotions are associated to situated conceptualizations and, in the given model, it is here that they can be associated to the typology of the cinematic analysis domains. Thus there are emotional categories coagulated around the prefigurative, figurative, diegetic, symbolic, narrative schemas, narrative roles and discursive domains.

Plantinga on cinematic affects

Plantinga defines the following sub-categories of emotions:

- Direct (refer to or are experienced in direct relation to the narrative, without any interest in characters: curiosity, suspense, anticipation, surprise);
- Sympathetic/ Antipathetic (experienced in relation to characters' aspirations and concerns: compassion, sympathy, admiration, socio-moral disgust or contempt);
- Artifact (directed towards the film itself seen as artifact: admiration, fascination, amusement, contempt or impatience)
- Meta-emotions (directed towards personal and/or other viewer's response: pride, shame, guilt and contempt) (Plantinga 2009: 242).

In 2013 Plantinga takes up again this typology and distinguishes between (2009: 69; 2013: 96): **global** emotions (anticipation, suspense, curiosity, interest); **local** (short and more intense, such as surprise, disgust, excitement, relaxation); **direct** (tied to narrative content and the development of the plot: curiosity, suspense, surprise); **sympathetic** (revolve around characters' aspirations, concerns and states: compassion, sympathy, admiration or happiness); **meta-emotions** (concern the viewer's -their own or other's - response: pride, guilt, shame, contempt, surprise); **fictional** (directed towards an object in the fictional world) and **artifact** (directed towards the film seen as artifact: admiration, fascination, gratitude, contempt, fury or impatience) (Plantinga 2013: 96). Plantinga's model can be associated with narrative roles which ground one type of emotion or another on a subjectivity connected to one diegetic space or another.

3.9 The Discursive domain

The **discursive** domain concentrates on the communicative act concerning the abstract concepts used by the cinematographic artifact. This is the level of situation assessment (Dehaene 2014: 101); it is also where the difference between fiction and documentary emerges. The elicited narrative role is that of the storyteller mentioned a while ago. The discursive level grounds the cinematic expression in the cinematic interaction between cinema device (the producer) and the here-and-now viewer. The communicative act concerns the values and concepts used by the cinematic artifact. It is only natural that an analysis deploying cinema-specific terminology should occur at this level. The listed domains will serve as cues for categorizing the artefact. There are figurative versus abstract films, narrative or art films or, depending on the 3D identification on the diegetic level, there are action, art and essay, historical, SF, realist films. Comedies and documentaries distinguish themselves at the level of the conceptualizer. The affective level can shape one's perception of a film so as to categorize it as melodrama or comedy; this level has to be corroborated, however, with the perspective of one or several conceptualizers - which accounts for the comic distance which we perceive in a series of situations which may come across as either sad or humorous. Starting from this analysis level one can elaborate a radial typology of cinema genres. It should be clear by now that such a distribution of genres will have at its centre the primacy of the viewer over the film.

3.10 Conclusions

The levels of analysis described here enable the identification of defining features which one genre or another bring to the forefront. Thus the concept of film (as opposed to that of theatre or literature) contains the whole set of discussed analysis domains but, in this case, a particular film imposes a certain construal on the whole set, which stresses one domain while it inhibits others. The model presented here is dynamic to the extent that cinematic experiences cannot be identified by the presence / absence of a domain but by their altogether particular modulation. The modulation process takes place by focusing attention to one domain or another; the modulation / warping brings to the foreground the focal domain while leaving all others in the background. The extent to which the set is being restructured depends on the focused elements being presented as significant and clear - so that they can be consciously explored in detail - and the background one as attenuated and schematic. As Pennartz said - concerning neural mechanisms which manage the stimuli from different sensorial modalities and generate an integrated conscious experience - a network of modal areas are integrated in an associative network formed around an attractor (2011: 718). In other words, a representation in a domain is not invariant, but rather depends on or is warped by the presence of other domains (and their features). Even though stated once already the hypothesis needs to be reformulated starting from Pennartz' observations. Since domains are imbricated and the modal aspects of situated conceptualizations influence one another, it can be stated that different configurations achieve different qualitative levels insofar as the features or cues are re-tuned under the pressure of a foregrounded particular association that is taking place between the selected domains.

Although the cues on screen remain the same (red is still the same red) they are dynamically correlated with different conceptual domains, and, by categorizing them, they are differently interpreted depending on the dominant domain. The newly formed configuration of a dominant domain with others in the background will constitute a particular multidimensional experience with a common attractor. An important **attractor** is the reference frame built as narrative role or simulated conceptualizer or even, conceived by the viewer (simulated on the basis of the essential reference frame focused on the conscious subject's body, the perspective of the first-person conscious experience) (733).¹⁴ There are diegetic

¹⁴ "[...] in addressing first-person ontology it is important to stress the need for further research on a possible common body-centered reference frame in neocortical areas playing a central role in phenomenal consciousness. When interacting uni- and cross-modal maps would obey a common reference, such a framework would provide a natural basis for explaining the first-person perspective in conscious experience. Alternatively, multisensory computational problems may be compatible with non-aligned mapping systems for different modalities. Such an arrangement is compatible with a first-person perspective if it is assumed that phenomenal experience can be dominated by one particular unimodal

representations coagulated around allocentric or egocentric reference frames (2011: 727). An attractor can also be an *interpreter module* which assigns a semantic label to the given concept (Corballis 2003; Baynes & Gazzaniga 2000). As an example Grodal (2017) posits three levels of embodied simulation in film: “three focal points in their film experience: 1. The viewer-I, 2. the character(s), and 3. the I as part of a social community”. For him “the film experience may cue not only first person and third person perspectives, but also a ‘we’ perspective, a 1. person plural perspective”. Those three instances correspond, for me, to the effective level of the **experiencer** (simulation of a first person perspective situated in the event-scene), to the epistemic level of the **narrator** (that adopts a third person perspective on the diegesis), and to the discursive level of the **story-teller** that adopts a shared perspective on the cinematic artifact.

The concept of film can also be defined in terms of the domains presented here. The key features, represented here as the analysis domains of the cinematic audiovisual flow are not necessary and sufficient characteristics, but rather they form a cluster of separate elements which set up the frame for “family resemblances” (Gaut 2000). In this frame only the conspicuousness of some features is sufficient in order to characterize the category of films.

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attractor state set in a body-centered framework (e.g. visual), which however still operates as part of a global-multimodal attractor that is not uniformly set in that same framework.” (Pennartz 2011: 733).

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