Looking for Genres

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SUMMARY

This dissertation presents three experimental studies on film genre categorisation based on genre theory and cognitive categorisation theory. In short, the experiments presented demonstrate that regular viewers can easily be cued by specific movements to form specific genre and emotion impressions. The cue validity of filmic realisation cues was shown to be at least as strong as event cues. Moreover, the experiments show that viewers possess very detailed genre knowledge that they use to classify and differentiate between four basic genres: nonfiction, comedy, drama and action. The results also indicate that the viewer's knowledge of fiction genres is organized according to their specific deviation from realistic nonfiction genre knowledge. The following summary briefly addresses Chapters 1 through 7.

Introduction and Theoretical Context: Genre and Genre Recognition: - Chapters 1 and 2

Categorisation of sensory data is of fundamental importance in order to understand events in the world that we are dealing with. Categorisation enables us to understand our perception by connecting the incoming sensory data to meanings and memories. Categorisation is indispensable for the formation of inferences and expectations, and for the planning of future actions. For instance, when seeing a dog running towards you, the object is categorised as a running dog that might play or bite, which forms the basis for deciding on actions like running away or playing. In media perception, and especially in film and television viewing, the main categorisation people make is as to which genre the production belongs: for instance, is it a nonfiction production that may have consequences for our daily life, such as weather reports or starting wars, or is it a favourite fiction genre? As is noted Chapter 2, the theoretical introduction, genre classification has a number of functions in film viewing, including priming the

viewer's interest, affecting his viewing style, arousing emotional moods, and generating narrative and emotional expectations.

Although genre classification is fundamental for the perception of film and television, there is surprisingly little research on how viewers arrive at genre categorisations. In most cases the genre category to which a film belongs is known beforehand, by information from friends, critics, program guides, the production's title, or by knowledge about its director. However, in some situations such as channel zapping the viewer has to rely on genre cues provided by the current film sequence. Moreover, it seems likely that even when watching an already classified genre film, viewers continuously rely on film cues to check the genre status and to adjust and refine their categorisations. The present dissertation examines what filmic features cue the viewer to a specific genre categorisation and how the viewer's genre knowledge is organised.

In instant classification tasks, many cues are expected to affect the viewer's genre recognition. Among these are: camera handling, sound, editing, actors, dialogue, plots, settings and props. These and other cues can be divided into two main cue families: cues belonging to the presented event, and cues belonging to the filmic realisation of that event. In other words, cues that reside in the story and cues that reside in the image. As discussed in Chapter 2, classical genre theory usually discriminates genres according to typicality of events. This is due to the reliance of genres on mythological stories: e.g. happy reunions are considered to be typical for the drama genre, whereas chases are considered to be typical for the action genre. However, similar events are often presented in each genre by very different specific filmic realisations. An informal analysis of such genre typical filmic realisation differences of a chase is presented in Chapter 1. Differences were found, amongst others, in setting, body movements and camera handling. These differences add to each genre a specific character, and it seems plausible that they are used by the viewer for genre recognition purposes, just as genre-typical events are. Recent developments in cognition theory render the cue validity of such surface characteristics even more theoretically plausible, as is argued in Chapter 2. Simulation theory (Barsalou, 1999) in particular grounds conceptual and categorical knowledge in perception and thus increases the validity of surface cues for genre categorisation and our understanding of the world in general.

This dissertation tested the cue validity for genre recognition of a specific group of filmic realisation cues: actor movements. Testing the effects of movements on genre recognition not only provides insight into the different movement cues for each genre impression, but also addresses more general questions about the existence and organisation of the viewer's genre knowledge (see also Chapter 1, section 1.2).

The Experiments – Chapter 3

Testing of genre cues was performed in three experiments, each of them using between 44 and 70 participants, reported in Chapters 4 to 6. In the first experiment, the effect of filmic realisation cues versus event cues on the viewer's genre recognition was tested. The second experiment aimed at testing the genre classification effect of one particular filmic realisation cue: movement. Velocity was chosen as the parameter of movement to be tested first. Subsequently, the third experiment tested the cueing effect of velocity and an additional set of four specific movement parameters on the viewer's genre, aesthetic, and emotion impression. The rationale behind the choice of these five movement parameters can be found in Chapter 3, section 3.1.

Filmic Realisation Cues versus Event Cues – Chapter 4

This experiment tested whether genre typical filmic realisation cues of a filmic scene are as strong as event cues in their effect on the viewer genre classification of that scene. In this experiment, existing film scenes were used as stimuli. Image quality was impoverished to prevent direct recognition of the original films. Four genre prototypical events were taken, a *stumble* for comedy, a *happy reunion* for drama, a *running chase* for action and *waiting for the elevator* for nonfiction. For each of these four events, eight genre prototypical filmic realisations were taken – two from each genre. For example, the stimuli set contained a happy reunion scene taken from an action film (i.e. a typical drama event in an action realisation) and also a running chase from a drama film (i.e. a typical action event in a drama realisation). The results showed that (a) filmic realisation was the stronger cue in viewer's genre recognition, except for drama recognition; (b) the influence of a genre-typical event on genre recognition decreased stepwise from drama to action to comic to

nonfiction - see Figure 2, Chapter 4, section 4.4. In other words, (a) people are influenced in their genre categorisation as much by image cues as by story cues; (b) a typical story is most important for drama recognition, than for action, than for comic, and nonfiction is recognized less by a typical story (reality varies most in its events). The results of this experiment suggest that viewers do possess a specific knowledge embodied in visual simulators that, in most cases, is dominant over knowledge embodied in event simulators, at least in a task requiring classification of film fragments lasting up to 24 seconds.

Velocity Cues – Chapter 5

Having demonstrated that filmic realisation cues affect the viewer's genre classification I then tested whether movement cues, as a group of cues singled out of the larger set of filmic realisation cues, affect genre classification. There are numerous potential movement parameters that may be candidates to test. However, to test if movements do have the expected cue validity, I tested the effect of the parameter *velocity.* If it could be demonstrated that velocity, as the parent of all movements, affects the viewer's genre classification, more detailed experiments on other movement parameters could follow. In this experiment 'Happy reunion' film scenes were taken from comic, action, drama and nonfiction films. Their projection speed was varied at three levels: original velocity, acceleration by one third, and deceleration by one third. Velocity proved to be an effective parameter in the recognition of the comical and dramatic genre, but not of the action and nonfiction genres (see Figure 2, Chapter 5, section 5.4): acceleration of a scene led to a significant increase of the comical genre fittingness, whereas deceleration led to a decrease of the comical genre fittingness and an increase of the dramatic genre fittingness.

Effects of four more movement parameters – Chapter 6

In the previous experiment the velocity of a movement was manipulated indirectly by varying the film speed of a scene. As a consequence, movement variation was confounded with the velocity variation of the scene as a whole. To test if the object's velocity, as well as other movement parameters, contributes independently to genre recognition, a more detailed experiment was performed. In this

experiment computer animations of two abstract blocks involved in a chase served as stimuli. In the animations, the movements of the chaser block were varied in five parameters: velocity, efficiency, fluency, detail and deformation. For each of the five parameters, separate animations were created with the following five levels (--, -, 0, +, ++). Viewers were asked to rate the genre fittingness of each scene (in comic, drama, action, nonfiction), the aesthetic impression (fascination, beautiful, surprising) and the emotional impression (funny, sad, impressive, scary). Results showed that all of these dependent variables were influenced by specific movements. Moreover, the data showed which specific movements were judged to be prototypical and optimal for a specific genre, emotion and aesthetic viewer impression (see Table 1 in Appendix B for an overview). In addition, it was shown that the viewer's genre impressions are closely bound to specific emotion and aesthetic impressions. The four genre categories appeared to be organized in three underlying affective dimensions: *excitement* (containing the action genre and the following impressions: scary, surprising, impressive, fascinating and beautiful), *realism* (nonfiction genre (having positive loading), the comic genre (-), funny (-) and surprising (-)), and *sentiment* (drama genre; sad; beautiful).

General Discussion – Chapter 7

In this chapter the findings of the experiments are integrated within the genre and cognitive theoretical framework presented in Chapter 2. Concerning the organisation of genre knowledge, it was predicted that fiction movements are perceived as transformations of nonfiction movements. Experiment 2 (Chapter 5) showed that nonfiction scenes were judged to fit better in a fiction genre than fiction scenes fitted in nonfiction genres; i.e. nonfiction can export its scenes better to fiction than it can import fiction scenes. Experiment 1 (Chapter 4) showed this asymmetrical import-export relation between nonfiction and fiction for filmic realisation but not for event: nonfiction exported its filmic realisation to fiction but not its events. Experiment 3 (Chapter 6) revealed one possible cause of the export potential of nonfiction: neutral movements were recognized as prototypical for nonfiction. Moreover, Experiment 3 showed that the size of the deviations from neutral movements determined in what particular fiction category the scenes were judged to fit: small and

moderate deviations resulted in categorisation as drama and action, large deviations in categorisation as comedy – see Figure 5, Chapter 6, section 6.4. The results of all three experiments suggest that the distinction between fiction and nonfiction genres is mentally represented as a deviation from realistic simulators.

All experiments showed that regular viewers do possess a very detailed knowledge of genres. Their knowledge was shown to correspond to expert notions of genre, in use by professional critics and scholars, and as more or less canonised in the theory and history of genre (see Chapter 2). Although none of the participants were informed about genre definitions before an experiment, all of them knew exactly how to apply the genre categories. Average viewers were shown to accurately categorise film fragments into the correct genres, even when the visual quality of the fragments was severely impoverished and presentation times were short (see Table 1, Chapter 4, section 4.4). The sophistication of the genre knowledge system is striking when taking into consideration that it deals with transformations, that is, higher order characteristics of filmic realisations. Moreover, the experiments showed that the basic genres are not separate mental categories but are precisely organised as to their deviation from nonfiction.

As noted in the Discussion, Chapter 7, a number of questions remain for future study. The first is whether the found organisation of the viewer's genre knowledge can also be measured in online experiments. A second question concerns the generality of the findings: (a) are the found genre and emotional effects of movement cues indeed invariant to the nature of the event? and (b) are the found effects of movements invariant to the particular nature of the object that performs them? Research to this latter question is enabled by an NWO grant allowing me to perform a number of studies in the next two years with the Geneva Emotion Research Group led by Klaus Scherer. The project will test how emotional and aesthetic viewer impressions of expressive movements are influenced by the degree of abstraction of the object that performs the movements. It is hypothesized that the emotional response to perceiving typical expressive movements, e.g. swarming or bouncing, is invariant to the degree of abstraction of the object that moves.

The results of this dissertation are applicable to both genre theory and to cognitive psychology. On the one hand, this work

presents one of the first empirical findings in the traditionally theoretical and historical domain of genre, and film studies. On the other hand, these studies are one of the first to introduce a cultural and artistic subject, like genre, into recent cognitive psychology. Apart from contributing to theory, the findings may also stimulate practical applications, such as the production of animations, films and commercials, improvement of media literacy, and the results may inspire the design of products that involve movements, such as digital interfaces, robots, toys or playgrounds. In general, this dissertation presents raw empirically-based insights into the underlying processes of our appreciation of the complex phenomenon of film and fiction. It is a start that hopefully will be extended and elaborated upon in the future.