

**Doctoral School Of
University Of Theatre And Film**

**DEVELOPEMENT OF CAMERA-MOVEMENT IN FILM
AND IT'S INTEGRATION INTO CONTEMPORARY
FILM LANGUAGE**

THESES OF DISSERTATION

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Reviewing the Hungarian film-related literature we find that one of the most specific tools for expression on film, the camera-movement has no comprehensive, interpretive or systematic analysis at all. This void has become even more obvious since the technical revolution of the past few decades, thanks to which the spectrum of appliances for the industry has been thoroughly innovated. This ongoing change is reactively effecting today's film language itself.

This dissertation is an attempt to make up for this deficiency by the viewpoint, experience and observations of a practicing DP.

1.

The first segment deals with the categorizing and characterizing of camera-movements. It exposes them by physical characteristics, the static, (the camera does not move through space) and the dynamic (the camera moves through space) camera-movements, the four archetypes, and the characteristics of each.

After this introduction, the camera-movements will be categorized by wholly different standards. Since other works of film literature have not dealt with this topic to this extent, I had no choice but to make up my own technical terms and categories. According to these I demark the *tracer*, the *bridger*, the *descriptive*, and the *dynamic* motions. I expand on their characteristics, functions in sequence and in storytelling. I examine camera-movement in visual portaroyal, spacial composure, and by their role in inner cuts, creation of rythm and atmosphere, and placement of emphasis.

I examine the relations between camera-movement and the film's viewpoint, the criteria of editing motioned sequences. In this part the chapters usually begin with definitions that aim at objectivity, and then conclude in my personal notes, subjective sights and experiences as a DP.

2.

The second parts enlists all of the above and sums up the technical equipment and develompment angles, that are the results of the past few years of revolutionary breakthroughs in camera-movement. It describes their operation, their field of application. It traces the two main orientations of animating the camera, which have been triggered by the appearance of Steadicam and Louma.

We follow through this evolution from remote-heads through the Techno-crane and the Motion Control to numerous recent innovations. There is a separate chapter for Aerial Photography. This chapter provides insight behind the scenes of filming from a helicopter, partly by the author's experiences as a aerial cinematographer, and experiences as a pilot. The title of the chapter however does not only refer to air-shooting from helicopters, but all filmmaking methods that are dealing with cameras up in the air. Skycam, which works indoors as well, is one of these, so is Flying Cam- the camera attached to a model helicopter. The chapter expands on shooting experience, advantages and disadvantages of these devices.

Hence, this chapter is an overview of the expanding inventory of appliances of the past few decades, various innovational machinery that all serve the purpose of moving the camera in ever new ways.

Many filmmakers, including myself, have felt that we'd rather just take the camera into our own hands, taking on the risk of the haphazardness and technical disadvantages of the final turnout, to be liberated from the slothful technical fixities. There were times when that was the only way to move a camera in those new ways we were starting to come up with, about the placement of the camera in the space of the scene, its role, and a more intimate relationship between it and the actors.

The past few years that have passed since have changed the technical availabilities, and today, taking the camera on one's shoulder is not the only way to go, to alter from classical camera-movements. One of the results of this, is that hand-held camera is now its own device of expression in film, instead of just a substitute for a machine that would work better, but is not yet invented- numerous alternatives have sprung up since.

3.

The opportunities provided by computers have enabled the filmmakers with a variety of tools, the consequences and full potential of which we might not even fully comprehend yet. How do these softwares work, and what aspects of them are those that can be put to use by filmmakers?

Some chapters of the study give insight to computer generated images or image supplements, and to the world of CGI. How can original shots be combined with these, and what are some of the new availabilities in regard to camera-movement? These chapters provide help regarding these issues, and acquaint us with some of the basics of this technology in terms of terminology and mindset, they introduce us to motion capture technology, and outlines on where this technology is headed.

4.

In apropos of a few examples I seek to find an answer to the question of how the film language itself is affected, influenced by these new devices, which direction they are taking the film's way of thinking to.

One particular film, *Alfonso Cuarón: Children of Men* provides a great example to analyse in terms of camerawork, and how the story is narrated merely by how the camera moves. More specifically, there is one certain shot, that by itself could easily be the essence of everything this study is about, it unifies the artistic and technical aspects of camera movement so perfectly.

My last feature film was *Tirza*, a Dutch production, which was chosen nationally in the Netherlands to compete for the Foreign Film Oscar. I thought that in regards to this specific work I could illustrate everything I've rounded up in the theoretic chapters, from a much closer demonstrative view, how all of it translates to the practical fulfillment of a task in a given approach. What problems a DP must face, how creative means can be

turned into everyday work routine. It's not a production journal, it's rather just me trying to recall and introduce the readers to the process which led from the first ideas of the movie to practical realization.

I'm introducing those unorthodox camera moving devices as well (Sider, JIX) on which I based the film's camera movement, besides steadycam and handheld.

5.

Nowadays the technology of the film industry seems to open up into two main orientations, much like a pair of scissors. Big budget American blockbusters still use the most expensive equipment, but concurrently (even within Hungary) a new, lower budgeted technology turned up, pointing towards a perhaps more democratic cinematic world.

Today cameras that can make it to the silver screen are available to the everyman: the average viewer might not even notice the difference. I believe the essence is not technical at all. What *if* everyone is a self-proclaimed photographer or filmmaker now, what *if* everyone has a camera in their hands- we are all still very much able to distinguish the work of a professional at first glance.

In that regard, technology changes nothing: a good movie still requires a good eye, talent, it requires that special ability to express visually.

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