

The underrepresentation of Women as Cinematographers

What hinders a woman on her way to become a
cinematographer?

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<p>Sammandrag:</p> <p>Det finns inte många kvinnliga filmfotografer som arbetar med långfilmer inom den finska filmindustrin. Det är ett världsomfattande problem att kvinnor har svårt att nå de ledande chefspositionerna inom olika typer av branscher. Problemet diskuteras och tas ständigt upp inom politiken, trots detta har det endast skett små förändringar.</p> <p>Syftet med denna uppsats är att undersöka vad som hindrar kvinnor på deras väg att bli filmfotografer. Examensarbetet undersöker vilket stadium som är det mest utmanande för en kvinnas karriär och identifierar var de största hindren äger rum.</p> <p>Den valda forskningsmetoden är den kvalitativa metoden eftersom denna avhandling undersöker varför kvinnor väljer att bli filmfotografer, vad deras motivation är och hur det tror att deras kön påverkar deras framgång. För min uppsats har jag genomfört intervjuer med fyra kvinnliga filmfotografstuderanden. Temaintervju valdes som intervjuteknik. Tekniken används för att samla in kvalitativ data och är ett lämplig sätt eftersom den ger respondenten friheten att tala öppet och oavbrutet om ämnet.</p> <p>Examensarbetets resultat identifierar steget från skolan till filmindustrin som det skede på karriären där kvinnliga filmfotografer stöter på sina första hinder. Kvinnliga filmfotografer har svårt att få anställning, vilket leder till svårigheter med att få erfarenhet och möjligheten att bygga upp ett namn för sig. Skolor ger däremot samma möjligheter för både män och kvinnor och kan inte anklagas för att hindra kvinnor på deras väg att bli filmfotografer.</p> <p>Diskriminering av kvinnor på arbetsmarknaden och på arbetsplatser är ett mycket komplext och utbrett fenomen. Detta examensarbete undersöker endast kvinnliga filmfotografstuderanden inom filmindustrin och kan inte förklara de djupt rotade motiven för fenomenet på en sociologisk eller psykologisk nivå.</p>	
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<p>Abstract:</p> <p>There are not many women working as cinematographers with feature films in the Finnish film industry. It is a worldwide problem that women in general are not able to reach top positions in their line of work because of their gender. Politicians are aware of the problem and it is often brought up in discussions. So far though only minor changes have occurred.</p> <p>The purpose of this thesis is to research what hinders women on their way to become cinematographers. The thesis researches which stage is the most difficult for women on their career path and identifies the major barriers.</p> <p>The chosen research method is the qualitative method because this thesis researches why women choose to become cinematographers, what their motivation is and how they think their gender affects their success. For my thesis I conducted interviews with four female cinematography students. For the interviews the focused interview technique was chosen. This technique is used to collect qualitative data and is highly suitable because it allows a respondent to talk about the topic openly and without time pressure.</p> <p>The findings identify the step from school into the film industry as the stage on the career path where female cinematographers face the first great barriers. Female cinematographers have trouble with getting employment to gain experience and to build up reputation. Schools provide the same opportunities for both men and women and cannot be blamed for the unsuccessful attempts of women to become cinematographers.</p> <p>The discrimination of women in the labour market and in jobs is a very complex and widespread phenomenon. This thesis is only investigating the discrimination of female cinematographer students in the film industry and cannot explain the deeply rooted rationales for the phenomenon on a sociological and psychological level.</p>	
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1 INTRODUCTION

When I started my studies of cinematography at Arcada I was unaware of the situation of females in the film industry. It was during my studies that I became more and more aware of the issue and the problems women face when becoming a cinematographer. My understanding and picture of the situation was influenced by experiences I made myself while working in the industry. I mainly made positive experiences, however, the media was writing about the inequality in the business. One main issue covered was the underrepresentation of women in leading positions of film crews. One focus was on the small number of female directors and female cinematographers. I consider the topic important because it will affect me personally. I am a female cinematographer and the media is informing me that there won't be a too bright future for me. This was alarming news for me and I wanted to know more about what problems women face and what obstacles I have to overcome after my graduation.

I know that my thesis deals with a delicate topic and many persons take sides quickly. I knew I would have to deal with personal experiences in a careful matter and would have to respect everyone. I was aware of the fact that my thesis might offend some people because it could hurt their way of thinking. However, I do not intend to provoke with this thesis. My main goal is to analyze today's situation of women becoming cinematographers and maybe create more awareness of their current situation. This thesis should help young female cinematographers to get a better understanding of what they face to make them better prepared. Now, when there is a new generation growing into the industry to which it is normal that men and women are working together rather than necessarily working under the old-fashioned stereotypes. It is interesting to see where the opportunities lie for upcoming and younger generation of female cinematographers. I hope that the industry will change and that there will be jobs open to both men and women.

1.1 Question

What hinders a woman on her way to become a cinematographer?

The purpose of this thesis is to research what hinders female cinematography students on their way to become cinematographers. The thesis researches which stage is the most difficult for women on their career path and identifies the major barriers. There is extensive data available on the experiences of women working in the media and film industry. Research in the past generally focused on how women survive in the male dominated industry. Successful female individuals are picked to illustrate how hard it is for women to establish themselves. In general the focus is on the discrimination of women in the film industry. This phenomenon is witnessed in other industries as well and is also geographically wide spread. In my qualitative research I focused on experience prior to education and professional studies. The goal was to get a picture of what girls think about the profession before they make any experience themselves. The interviews were designed to get qualitative answers about how young girls perceive the profession and what motivates them to become a cinematographer. The other important part of the research was how females, who are in the middle of their education, perceive and understand the situation and environment in which they will be working. I needed to know how well aware the girls are of what they are about to face.

1.2 Delimitation

The four cinematography students that I have interviewed are in their early 20s and are studying in the city of Helsinki. In my thesis I am focusing on women in the film industry especially women becoming cinematographers. I will only be dealing with the issues of young female students and their way into the film industry, including experiences prior to education and professional studies. I will not be researching the basic reasons for the discrimination of women in general. I cannot cover major political discussion dealing with the status of women. My focus lies on the barriers and obstacles young females have to overcome from the day they chose to become a cinematographer to the day they are making their first steps on their own. The film industry offers many different jobs with which I cannot deal all. Therefore, I am only focusing on the cinematography profession in feature films. Because I am a cinematographer myself I am focusing

singularly on cinematographers. Furthermore I am focusing on the obstacles females are facing which might overlap with those male cinematographers have to deal with, nevertheless will I not cover cinematographer problems in general.

1.3 Terminology

35mm film

In most instances the term format is used to refer to the size of the film stock being used for shooting. The two primary film formats used for shooting filmed productions are 16mm and 35mm. 35mm film contains four perforations per frame on each side of the film, and there are 16 frames per foot.

Art House film

An art film (also known as art house film, or in the collective sense as art cinema) is the result of filmmaking which is typically a serious, independent film aimed at a niche market rather than a mass market audience.

Camera Operator

The primary job of the Camera Operator is to make smooth pan and tilt moves to maintain the composition of the subject. The Camera Operator keeps the action within the frame lines to tell the story. The 1st AC works most closely with the Camera Operator during rehearsals and the actual shooting.

Cinematographer

The Cinematographer or DP is the head of the camera department, and he or she is directly responsible to the Director. The DP is the head of all technical departments on a film crew and is responsible for establishing how the script is translated into visual images based on the Director's request. The DP decides which camera, lenses and film stock will be used for the production. The DP hires or recommends the Camera Operator and often also hires or recommends the 1st AC. Sometimes the same person as DP.

Conglomerate

A corporation made up of a number of different companies that operate in diversified fields.

Culture-Gates

An ERICarts Report in partnership with FinnEkvit, Mediacult, the Observatorio das Atividades Culturais. *Culture-Gates: Exposing Gate-keeping Processes in Classical Music and New Media Arts*. Bonn: 2003.

Digital Cinematography

Is the process of capturing motion pictures as digital images, rather than on film. Digital capture may occur on video tape, hard disks, flash memory, or other media which can record digital data.

Editor

Is the person who is in charge of the creative post-production process of filmmaking. On its most fundamental level, film editing is the art, technique, and practice of assembling shots into a coherent whole. A film editor is a person who practices film editing by assembling the footage.

EEG

European Employment Guidelines.

EES

European Employment Strategy.

ERICarts

ERICarts = European Institute for Comparative Cultural Research.

Film jam

If the magazine is not threaded properly, it can cause the camera motor to work harder to move the film through the camera, which results in the film becoming jammed. The cause of this could be that the film loop could be the wrong size.

Filmography

A comprehensive list of movies in a particular category, as of those by a given director or in a specific genre.

First Camera Assistant

A person who knows and understands all professional motion picture camera equipment and accessories currently used in the industry and cares for and maintains all camera equipment during production. The position of 1st AC requires great attention to detail. The 1st AC should stay as close as possible to the DP during shooting and be prepared for any number of requests. Keeping your eyes and ears open at all times and never being too far from the DP or the camera is a sign of a good 1st AC. The 1st AC must perform the camera prep, which is when all of the camera equipment is checked and tested to be sure that it is in proper working order before production. The camera prep is perhaps the most important job of the 1st AC during preproduction stage.

Second Camera Assistant

2nd ACs assist the Camera Operator in positioning and moving the camera, and is responsible for loading and unloading film magazines, changing and charging camera batteries, changing lenses, operating the clapper board, filling out and filing all camera sheets, liaising with film labs, and ordering the correct amount and type of film stock. 2nd ACs work closely with 1st ACs (Focus Pullers), and supervise any Camera Trainees.

HD-high definition

High-definition video or HD video refers to any video system of higher resolution than standard-definition (SD) video, and most commonly involves display resolutions of 1,280×720 pixels (720p) or 1,920×1,080 pixels (1080i/1080p).

Loader

Loads and unloads all film magazines during the course of filming. Maintains an inventory of all film stock initially received from the production company.

Resolution 5K

It would take seven or eight of the newest 1080p hi-def TVs to show an entire 5K image, and even then it wouldn't be the whole thing because Red shoots to a special raw format with more color depth than your TV can display.

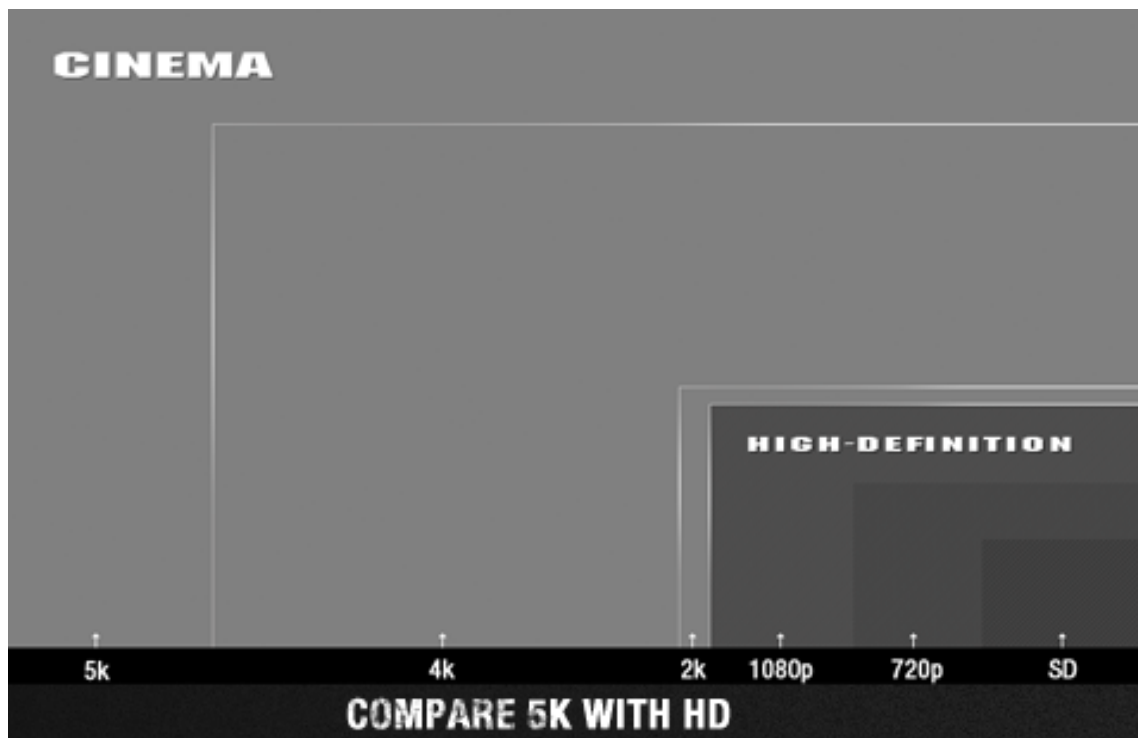


Figure 1: 5K resolution compared with HD 1080p resolution.

SME

Small and medium enterprises or small and medium-sized enterprises. The abbreviation "SME" occurs commonly in the European Union.

2 METHODOLOGY

For my thesis I interviewed four female cinematography students. By exploring and coding the interviews that were made in March-April 2012, I uncovered themes concerning camerawoman's experiences with choosing and becoming a cinematographer, breaking into the film industry and attempting to work their way up through the system.

“A more conventional way of presenting and analysing interview data than crafting profiles is to organize excerpts from the transcript into categories. The researcher then searches for connecting threads and patterns among the excerpts within those categories and for connections between the various categories that might be called themes.” [Seidman 2006 p. 125]

To analyze the material, the interview data, I will go through my transcribed recordings and look for connecting threads and patterns among the answers that I get from my interviewees. By finding connections between the various questions and categories, I will present my findings by arranging the answers into so-called themes.

“Qualitative researchers are interested in understanding how people interpret their experiences, how they construct their words, and what meaning they attribute to their experiences.” [Merriam 2009 p. 5]

I chose the qualitative research method because I am interested in the personal experience of the interviewed persons as well as how they value their experience. The qualitative research method is a suitable means of research for this topic because each path to success is unique and dependent on individual encounters and experiences. Furthermore I want to research why women choose to become a cinematographer, what is their motivation and how they think their gender affects their success. The qualitative research seeks therefore primarily for the phenomenon, purpose or meaning, while the quantitative research is primarily looking after its occurrence or frequency. The qualitative research method helps to understand connections between people, things and characteristics concerning certain complex historical events.

As interview technique I chose the focused interview technique. This technique is used to collect qualitative data and is highly suitable because it allows a respondent to talk about the topic openly and without time pressure. The researcher chooses the focus because the focus covers the themes the researcher is interested in. Open-ended questions

are used to understand the respondent's point of view instead of making generalizations. The focused interview also allows going into detail and depth about something. The researcher can fit in questions that come up out of the context at any time. (cf. Hirsjärvi and Hurme 1980 pp. 49-51)

2.1 Material Description

The material that I analyzed for my thesis was mainly structured by previously published research about the topic. I will also be supporting my analysis with news- and web articles published by the media. Furthermore, by conducting an interview with young female cinematography students, I wanted to explore the attitudes and thoughts of the female students, what they are thinking about the cinematography education and the industry in the city of Helsinki, Finland. For the interview I made a framework of questions, which I followed during the interview sessions. I recorded all the interviews and then transcribed the material into a word document. During the interview, I asked the same key questions to my interviewee, but let the discussion run open to get a deeper insight of whether there are shared views or not.

3 ANALYSIS

3.1 Women and the Finnish Film History

The time between 1904, when the first film sequence was shot in Finland, Helsinki, and the early 1930s was important for establishing the basis for the Finnish Cinema Industry. This time produced a few studio companies and a city-based cinema network. Not even World War II or the two post-war decades could shake the young industry. In 1955 the interest in cinema peaked with 37 million visits. The industry wasn't meant to be successful for very long. In the 1960s the TV arrived in the homes of the broad public. This was the end of the studio system in Finland. In 1963 the Finnish Film Industry Ltd. went bankrupt and sold its films to the Finnish Broadcasting Company. (Mitchell 2005 p. 257)

With the establishment of the Finnish Film Foundation in 1969 a long process of economic transformation started. The audiovisual sector was modernized and the broadcasting liberalized. This period was influenced by the work of the Kaurismäki brothers, e.g. *Apinan vuosi* (1983), *Arvottomat* (1982), which gave art house films a new direction. (Mitchell 2005 p. 258)

In these difficult times for the industry, Pirjo Honkasalo was the first female Director of Photography in Finland, in the domestic narrative feature film *Pilvilinna*, directed by Sakari Rimminen in 1970. (Sundström 2012)

The Finnish domestic feature film made a comeback in respect to audience popularity in the late 1990s. This was made possible by the process of dividing film production into "art house" and "larger audience" films. The division was recognized and institutionalized in decisions made regarding public support for feature films. Rational financing brought new multiplex theatres to Finland, which had their share in the comeback.

Celebrating its hundredth anniversary in 2004, the Finnish film industry still hadn't overcome the gender relations in the market. 1100 feature films and 12 000 documentary and short films produced, clearly shaped the Finnish identity, contributed to the intellectual and social life of the country and its economic and labour market development. (Mitchell 2005 p. 258) How is it possible that such an industry, on the one hand, had such a major influence on one country and on the other hand neglected gender relations?

When talking about women and the Finnish film industry another woman who is not from Finland has to be mentioned nevertheless. Her name is Alice Guy Blaché.

”If we go back in time to the late 1800s a new form of art emerged, one that influenced our world in ways no other art form had done before or has done since. The birth of narrative filmmaking reportedly took place at the hands of a woman, Alice Guy Blaché.” (Shimkus 2006 p.1)

Alice Guy Blaché was a pioneer in the motion picture industry and started her career amongst other influential filmmakers like the Lumière brothers, Georges Méliès and Edison in 1896. Different than her male contemporaries her career lasted much longer. The Lumière brothers were active till 1905, George Méliès settled down by 1912 and Edison ceased working by 1917. Blaché directed approximately 1000 films and produced many more (McMahan 2002 p. xxvii). The duration of her career speaks for her extraordinary ability to adapt to a constantly changing industry with its own demands. (McMahan 2002 p. xxvi)

“Madame Blaché is a striking example of the modern woman in business who is doing a man’s work”
[Shimkus 2006 p. 2]

The question why women were so scarcely represented in this industry was a question that Madame Blaché did not understand. She wrote an article in 1914 for *The Moving Picture World*, and in it she said:

”It has long been a source of wonder to me that many women have not seized upon the wonderful opportunities offered to them by the motion-picture art to make their way to fame and fortune as producers of photodramas. Of all the arts there is probably none in which they can make such a splendid use of talents so much more natural to a woman than to a man and so necessary to its perfection (Slide, 1986, p.139)”. [Shimkus 2006 p. 2]

Focusing on domestic feature films in Finland, Maiju Leppänen is the second female cinematographer, worth mentioning in the Finnish film history. She was the cinematographer in the domestic feature film *Suolaista ja Makeaa*, directed by Kaisa Rastimo in 1995. It took 25 years for the Finnish film industry to produce another successful female feature film cinematographer after Honkasalo. Even nowadays the number of female cinematographers in the Finnish film industry is very low – female cinematographers are a rare breed. (von Bagh 2005 p. 696) In between Honkasalo and Leppänen there was only one more female cinematographer shooting a feature film.

Her name is Eija Petterberg, she shot the movie *Lintumies* in 1978. Petterberg is named to be accurate. In the literature her achievements as cinematographer are not discussed any further (von Bagh 2005 p. 313).

Pirjo Honkasalo, born in 1947, is one of the most successful female filmmakers in Finland. Like elsewhere in the world, the Finnish film industry has been and still is dominated by its male traditions, which root very deep. Honkasalo successfully established herself amongst all the men and eventually paved the way for younger generations of female filmmakers. Honkasalo originally started as cinematographer. That did not stop her from working as a director, scriptwriter and editor. She also mastered both the genres documentary and feature film. Her career is an outstanding example for a female in the film business and should be encouraging to other women. She worked together with prominent directors like Jörn Donner (*Yhdeksän tapaa lähestyä Helsinkiä*, 1982) and Pekka Lehto, (they directed, produced and wrote the film *Tulipää* in 1980). (Mitchell 2005 p. 292-293); (von Bagh 2005 p. 607)

Women have been producing and directing films straight from the beginning. As already mentioned, Alice Guy Blaché is recognized as the first woman director of a fiction film in 1896. Despite the involvement of women in film production, the concept of women's cinema is a relatively new one. The phenomenon of women filmmakers is seen as rather contemporary. (Byerly & Ross 2006 p. 83)

The researcher Ritva Mitchell interviewed a female professional in Finland, name unknown, who says the following:

“Women have progressed most in the field of documentary production. Why is this so? Because there is a lot one can do on one's own and women are more able than men at that – and it is also often the only way to progress in their careers. Documentaries have actually offered a gateway for entry into profession.” [Mitchell 2005 p.274]

In the 1990s a new generation of female directors debuted. Since then, the documentary genre has been the main and most common field for female filmmakers in Finland. Nevertheless are female cinematographers still scarce in the feature film industry. (von Bagh 2005 p. 680)

In the 2005 filmography, published by the Finnish Film Archive *Suomen elokuva-arkisto*, data clearly shows that there still was a lack of women in the late 1990s in the camera departments in domestic feature films. In between the years 1996 and 2000 only Pirjo Honkasalo, Marita Hällfors and Maiju Leppänen contributed repeatedly to feature films as DPs. Despite a gradually increasing number of females working in editing and set designing, which both used to be a male domain, there has not been a similar development in lighting and cinematography. Women following the path of Honkasalo and Hällfors usually don't make it further than the position of a camera assistant. For some females even the profession of camera assistant remains an untouchable goal. (Leppikangas 2006 pp.7-8)

3.2 Technical and Physical Entry Barriers

Daniela Knapp, Austrian director of photography and judge of the international female film festival in Dortmund Germany is frequently confronted with astonishment: “Oh, you are a camerawoman? Isn't the camera far too heavy for you?” What happens behind the scenes of making a movie is more of a secret to the audience than some filmmakers might think. The doubt and criticism Daniela Knapp and many other female cinematographers have to deal with, tells a lot about the public perception and thoughts of the industry. The broad public knows very little about the profession “cinematographer”. I want to look at the prejudices that are out there and whether they are true or not. Is it really true that cameras are too heavy or female cinematographers are too weak?

Every production of a feature film, documentary or anything else, which involves filming, is different every time. Still, productions have some things in common. For example there usually is a Producer, a Cinematographer, a Director, etc. involved. Depending on the production being shot, the film camera department differs. The typical camera department internationally usually consists of the following crewmembers:

- Director of Photography DP
- Camera Operator
- First Assistant Cameraman 1st AC or Focus Puller
- Second Assistant Cameraman 2nd AC or Clapper/ Loader
- Loader Optional position on larger multi camera productions

The Cinematographer or DP is the head of the camera department, and he or she is directly responsible to the Director. (Elkins 2009 pp. 43-44)

In the literature the DP's position is described as the head of all the technical departments on a film crew and responsible for establishing how the script is translated into visual images based on the Director's request (Elkins 2009 p. 44). The common career of DPs starts with small, low-budget films or student film projects. Small projects enable upcoming DPs to gain valuable experience that helps them to score major, big-budget productions. (Elkins 2009 p. 45)

As the DP is the head of the technical departments it is of course vital to know each of them by heart. The DP has to be a professional in any of the jobs he or she is supervising. This, needless to say, includes the operation of the camera equipment. The Director of Photography can be compared with the conductor of an orchestra. The conductor unifies the performers, sets the tempo, executes clear preparations and beats, listens critically and shapes the sound of the ensemble. The DP manages the technical departments in a similar way. He or she conducts the crewmembers, sets the tempo, gives clear instructions and commands, mentors the camerapersons and overall shapes the atmosphere of a picture by playing with light, shadow and color.

Filming methods are continuously changing and so is camera equipment. At the beginning of film production, 1910s to early 1960s (Sklar 1993 p. 32), cameras and camera equipment used to be very heavy and the job of a cameraperson required almost engineer-like technical knowledge in order to operate the complex cameras. (Leppikangas 2006 p. 4)

The art of filmmaking is relatively young compared to other skilled crafts and trades. Nevertheless, the film industry has been subject to many changes in its short time of existence. Since the introduction of the first 35mm film camera by George Eastman in 1889 (Elkins 2009 p. xxv), the camera and post-production technology has been improved constantly. Nowadays, digital production is state of the art in film production.



Figure 2 - SI-K2 [www.siliconimaging.com]

The digital production was revolutionized with the introduction of digital cinematography. Here the motion pictures are captured as digital images, rather than on film. Cameras like the SI-2K from Silicon Imaging, which was used for filming *Slumdog Millionaire* (Academy Award for Best Cinematography 2009), brought wide acceptance for digital cinematography (SiliconImaging 2012).



Figure 3 - ARRI ALEXA [www.arri.com]



Figure 4 - RED ONE EPIC [www.red.com]



Figure 5 - PANAVISION GENESIS [www.panavision.com]



Figure 6 - SONY PMW-F3K RGB [pro.sony.com]



Figure 7 - P2HD VARICAM [panasonic.com]



Figure 8 - CANON C300 [cinemaeos.usa.canon.com]

Important camera brands manufacturing digital picture cameras are ARRI (ARRI ALEXA), RED (ONE, EPIC, SCARLET), Panavision (Genesis), Sony (F35) and Panasonic (P2HD VariCam). The technology available today allows to film with resolutions up to 5K on full frame 35mm sensors. The latest innovation of Canon, to keep up with the other brands in digital cinematography, is the EOS C300. The EOS C300 is designed and built to meet the requirements of professional cinematographers. The main unit weighs 1430g and in the setup with Grip, Monitor, Handle, Battery and two Compact Flash memory cards it weighs 2700g, compared to an ARRI ALEXA, which weighs without special setup around 7000g. (Canon 2012; ARRI Group 2012) Digital cameras have an advantage over film cameras when it comes to size and weight. 35mm film cameras cannot be reduced in size below certain measurements since the film magazine and film transport mechanism have a minimum size due to their physical size. From similar large and bulky digital cinematography cameras the trend of development goes towards lighter cameras with better portability and better versatile maneuverability. In addition to the launch of digital cinematography cameras, DSLR cameras capable of HD video capture were launched on the market in the year 2008. DSLRs with this feature are often referred to as HDSLR or DSLR video shooter. (Canon 2012)

Naturally, due to the complex and advanced technology of cameras, the public perception of cinematographers is that they have to be skilled technicians. There obviously is no way around knowing how to manually use a camera for a cameraperson. The manual of a camera always comes in handy. With the wide use of digital cameras come new challenges for camerapersons. Digital cameras rely on many complex software applications, e.g. shutter speed, white balance, audiometers, etc., and also the hardware is more fragile and complex. This results in different problems with equipment compared to analog systems. One of the problems one faces using an analog 35mm camera is film jam. Digital cameras on the other hand are subject to software default or deterioration of critical parts like the image sensor. Worst-case scenarios are complete malfunctioning of digital cameras on the set. However, a cinematographer is much more than a technician:

”Technical mastery of their craft may be the cornerstone of what they do, but it is the manipulation of light and shadow, colour and tone, space and movement, in order to create an emotionally charged visual arena for the action of a film which makes cinematography a vocation for so many.” [Ettedgui 1998 p.8]

In his book “The Five Cs of Cinematography” Joseph V. Mascelli points out:

”Many cameramen – particularly those shooting non-theatrical pictures tend to forget that the primary purpose of a motion picture is to tell an interesting story! There is much more to shooting motion pictures than threading a roll of film in a camera, and exposing the picture correctly.” [Mascelli 1965 p. 8]

In addition to mastering the technical skills, a visual and creative eye is needed. For example, one of the main responsibilities of a cinematographer is the visualization of the story telling in a film.

“Quite apart from technical and artistic considerations, the cinematographer must be a true communicator, able to understand and absorb the efforts of other key personnel on the film, and also to martial his own lighting and camera crews – abilities which are of critical importance in bringing a film in schedule and on budget”. [Ettedgui 1998 p.9]

The key skills of a professional cinematographer, to conclude, are: good technical skills, a visual eye and not to forget social competence.

Even though the profession of cinematography is highly technical and involves the handling of heavy equipment there is no physical reason why women should not strive to become a cinematographer. The change in technology to digital cinematography, with its developments and improvements, made it physically less demanding to operate a camera than it used to be. Cutting the weight down to less than 5Kg (e.g. Canon EOS C300) women can handle the equipment as easily as men do. The weight of equipment cannot be used as an argument for the small number of women in the camera departments. Even if there is heavy equipment women will always get assistance and help when handling it. As DP the tasks are more coordinative anyways. Cinematography is very demanding in every aspect but there has to be an emphasis on the intellectual tasks. The creative aspect should be rather encouraging since DPs have a lot of freedom in realizing their creativity. There is no logical reason why men have an advantage over women in those fields.

3.3 Social and Gender Entry Barriers

”Women’s liberation movements, governmental equal opportunity employment acts and advances in the science and technology of filmmaking, which decrease the physical strength required to operate equipment, have managed to make very little impact on women’s success in cinematography. If women in the early 1900s succeeded in creating motion pictures, why then in the 21st century are women still underrepresented as cinematographers in the film industry? Why is this still a topic of discussion in our society that prides itself on forward thinking and progress?” [Shimkus 2006 p.4]

In chapter 3.2.1 Barriers that used to exist it has been outlined how the working equipment affects women’s ability to become or to be a cinematographer. The main conclusion from the chapter 3.2.1 is that the technical and physical reasons are not a barrier for women. The process of research into what stops women from becoming cinematographers and why the female cinematographers have such a hard time being successful other aspects have to be analyzed. This chapter concentrates on occupational segregation in general and what is responsible for it. The occupational segregation provides some answers to the miserable situation of women in some occupations. Occupational segregation is divided into two major fields: the horizontal and the vertical segregation. The horizontal segregation takes a look at why men dominate some professions and why women dominate others. The vertical segregation tries to explain why women have a hard time being successful in certain jobs.

3.3.1 Occupational Segregation

“Gender-based occupational segregation is one of the most important factors contributing to women’s inequality in the labour market. It concerns the tendency for men and women to be employed in different occupations across the entire occupational structure (horizontal segregation), and the tendency for women and men to be employed in different positions within the same occupation or occupational group (vertical segregation).” [Melkas & Anker 1998 p.5]

The majority of women serves, cares and educates people. The majority of men on the other hand prepares, handles and moves objects. The genders are clearly separated into women dominating the healthcare and men dominating the scientific and technological area. (cf. Kinnunen & Korvajärvi 1996 pp. 10-11)

Women		Men	
Code	Description	Code	Description
522	Shop salesperson and demonstrators	832	Motor vehicle drivers
913	Domestic and related helpers, cleaners and laundrerers	712	Building frame and related trade workers
513	Personal care and related workers	131	Managers of small enterprises
419	Other office clerks	713	Building finishers and related trades workers
343	Administrative associate professionals	311	Physical and engineering science technicians
512	Housekeeping and restaurant services workers	723	Machinery mechanics and fitters

NB: ISCO-88 occupational codes (EU-25).

Source: Eurostat (2008, p. 59).

Table 1 The top six occupations for women and men in Europe, 2005 [EGGE 2009 p. 31]

Employment segregation or occupational segregation is the expression for the gendered division of labour in paid employment. The expression was introduced, into academic debate, in the 1960s. Back then women often earned little more than half of what men did. Employment segregation by sex is still at high levels in Europe. Table 1 shows the top six occupations for women and men in Europe and none overlap. In 2005 36% of women in work in the EU were employed in only six of the 130 standard occupational categories. (EGGE 2009 p. 30)

The three measures the EGGE uses are:

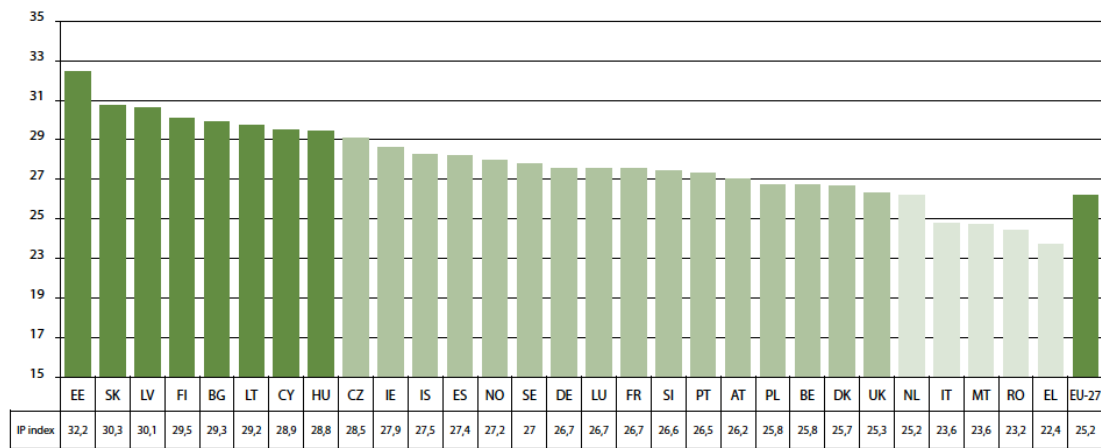
- the standardized or Karmel and MacLachlan index (IP)
- the Duncan and Duncan index of dissimilarity (ID)
- a tripartite classification of female-dominated, mixed and male-dominated occupations or sectors.

“Both the IP and ID indices assume that segregation results in a different distribution of women and men across occupations or sectors: the less equal the distribution, the higher the level of segregation. The IP index is the reference index for the present report because it is used to monitor gender equality within the European employment strategy. It can be interpreted as the share of the employed population that would need to change occupation (sector) in order to bring about an even distribution of men and women among occupations or sectors. The index ranges from 0 in the case of complete equality to twice the male share of employment multiplied by the female share in the case of complete dissimilarity. In percentage terms, the absolute maximum for the index is 50 and it is reached when there are as many women as men in employment working in completely segregated occupations/sectors. Because the value of the IP depends on how high the female share of employment is, studying change over time can be problematic, since the recorded level of segregation could increase or decrease solely in response to change in this share.” [EGGE 2009 p. 31]

3.3.2 Horizontal Segregation

“Horizontal segregation is understood as under- (over-) representation of a given group in occupations or sectors, not ordered by any criterion, and is often referred to as segregation *tout court*.” [EGGE 2009 p. 7]

The skills and abilities, e.g. strength and technical knowledge, a profession requires, shapes the societies understanding whether a job is regarded as suitable for women or for men. It feels rather strange to see women in a job, which is perceived as tough and dangerous because the stereotypical woman is rather weak and avoids danger.

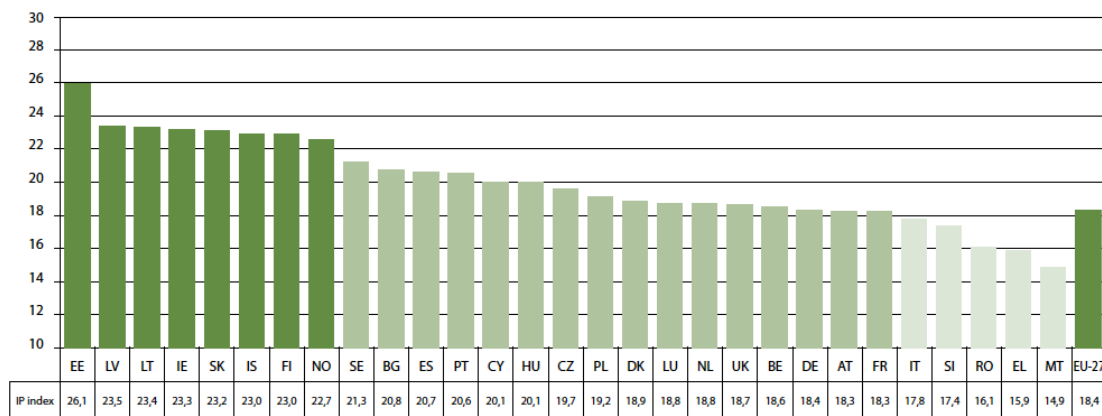


NB: Countries are grouped by level of the IP index into high (black bar), medium (pattered bar) and low (grey bar). High- (low-) segregation countries score above (below) the EU average + (-) the mean absolute deviation.

Source: Own calculations using LFS (ISCO-88 three-digit).

Table 2 Gender occupational segregation in Europe, 2007 [EGGE 2009 p. 33]

Finland is amongst the group of countries that are ranked as high segregation countries, see Table 2. Finland witnessed a remarkable increase in female-dominated occupations between 1997 and 2007. This trend stands in contrast to most of the countries in Europe experiencing an increase in mixed-occupations. Finland can also be found in the high sectoral segregation group, see Table 3.



NB: Countries are grouped, according to the level of the IP index, into high/low-segregated, with the IP index accordingly being higher/lower than mean+MAD/mean-MAD (19.97+2.14/19.97-2.14); the residual is a middle group

Source: Own calculations using LFS (NACE two-digit).

Table 3 Gender sectoral segregation in Europe, 2007 [EGGE 2009 p. 34]

With Finland ranking as number 4 of the most occupational segregated countries in Europe it is easy to make the false assumption that it is hard for women to enter the labour market. Finland, Sweden and Norway are all countries with high-segregation but also high-employment. This means that professions in Finland are perceived as either female or male, which makes it really hard for individuals to enter into the opposite gender occupation. However, the number of females employed is high, with females mostly working in female occupations. (cf. EGGE 2009 pp.32-37)

By looking at the reason why employment segregation comes about and changes over the years there are two statements that crystallized: firstly that segregation implies unequal pay for equal work, and secondly that there is no single-factor explanation for segregation.

The following key factors accounting for segregation can be singled out from the literature discussing segregation:

- comparative advantages,
- under-investment,
- socialization and stereotypes,
- entry barriers and organizational practices,
- differential income roles.

[EGGE 2009 p. 38]

Comparative advantages. As already discussed in chapter 3.2 *Technical, social and physical entry barriers*, technological progress evened out the role of physical characteristics. A study that is frequently referred to, conducted by Maccoby and Jackling in 1974, states in its findings that men are better at solving abstract mathematical and visuo-spatial problems whereas women show a high degree of verbal competence. The studies finding is supported by other studies like Jones from 2008. In the latest PISA test however, women scored as high or even higher than men in math in Sweden, Norway and Iceland. Thanks to modern technology the comparative biological advantages may play a role in only a few professions in the future anyways. The association of competences to biology is arguable in general. (EGGE 2009 p.38)

Under-investment. The idea of under-investment explains segregation by assuming that women choose not to invest into their education. The theory discusses that women are afraid that their education is a waste of time and money since they expect to end up in jobs that do not require investment. The de-segregation of higher education, among younger students, on the contrary proves that women do invest into their education. Where on-the-job training is needed for job or firm-specific skills, research shows that women on average receive less hours of training than men. (EGGE 2009 pp. 38-39)

Preferences and prejudices. Girls and boys have prior to their initial education or their entry into the labour market strong ideas of what they want to become. Their wishes are based on their personal preferences and will eventually influence their decisions. This could mean that a woman will accept lower payment in order to be able to work in the job she prefers. (EGGE 2009 p. 39)

“This might help the labour market situation – women take up more easily less paid jobs in the production process. This is not gender equality but a return to the good old days when women were camera girls and assistants etc.” [Mitchell 2005 p. 277]

“[However], proving that women truly prefer female-dominated jobs even if they are paid less is problematic and comes dangerously close to being tautological. In fact, we are not aware of attempts to directly validate the compensating differential argument in relation to occupational segregation.” [EGGE 2009 p. 39]

Socialization and stereotypes.

“All societies categorise members by their sex. Personality traits, preferences and potential are inferred from individual’s biological sex. These sex-based inferences are sex-stereotypes. Stereotypes matter because they are generally known and prescribe appropriate behaviour.” [Reskin & Bielby 2005 p. 73]

Women suffer under stereotypes because stereotypes might be valid for some women but are assumed for all women. Stereotypes are one of the core reasons for occupational segregation. They account for the association of particular occupations with one or the other sex. (EGGE 2009 p. 40)

Barriers to entry and organizational practices. Over time the formal entry barriers for women, e.g. legislation and labour unions, have been disestablished. They however still exert influence today. Women are protected against discrimination hiring by anti-discriminatory legislation, nevertheless are hiring policies by companies and their whole personnel practices largely secret. Therefore the assignation of jobs usually still depends on the gender of the applicant.

Research that compared the career ladders of women with that of men found out that male jobs have longer ladders. In female-dominated jobs the rungs on the ladder are closer together. This implies that it takes more promotions in female jobs to advance in the same amount than personnel do in men jobs.

Income and care roles. A widespread assumption is that men are securing the monetary income for the family whereas women are primarily securing the care work. This assumption could make “employer find it easier to match men with greater value added jobs for which they are willing to pay more” [EGGE 2009 p. 40].

“The unequal care burden also provides an explanation alternative to compensating wage differentials for the frequent finding that women seek occupational niches where hours are shorter or more flexible. It is not that women are willing to forgo pay because they enjoy flexible hours whilst men do not; rather, women are more likely to accept lower (per hour) wage offers if this is the only way that they can combine the roles of mother and wage earner.” [EGGE 2009 p. 41]

It cannot be dismissed that there are biological differences between men and women. Nevertheless should women not be judged grounded on attributes that are associated with their gender. When forming a professional opinion about a man or a woman, in a working context, it should be done based on the individual talent of the person. (cf. Kinnunen & Korvajärvi 1996 pp. 12-13)

There is the possibility to assume that gender equality can be guaranteed through bypassing the sex and thus creating gender neutrality. However, to just stop talking about the gender does not change the fundamental problem of an unequal job environment that does not offer the same opportunities to women. To sweep the issue under the carpet by pretending to be only dealing with one gender does not improve the support for women. Women need to be supported in the labour market and the help has to be adjusted to their specific needs. (cf. Kinnunen & Korvajärvi 1996 p. 236)

According to Kinnunen & Korvajärvi, the abilities of men and women would come to a better understanding, if the strict segregation between the two genders would be demolished. (Kinnunen & Korvajärvi 1996 p.240)

3.3.3 Vertical Segregation

The small number of women in leading positions, vertical segregation, and their small chance of progressing in their careers is seen as a problem. (Kinnunen & Korvajärvi 1996 p.89)

Women are still facing glass ceilings when they try to pursue a career in larger companies. Glass ceiling is used to describe the phenomenon of women getting stuck at some point of their career with little chance of progressing on the career ladder. When climbing the corporate ladder, the word “ceiling” implies that there is a limit to how far someone can climb the ladder. According to the *Culture-Biz* book, women have little chance of penetrating the closed power circles of top management due in part to nepotism in many family owned media conglomerates. This has led to many females leaving these traditionally structured companies. They are instead trying to set up their own businesses. While the top management is difficult to reach for women there are more women working in the middle management positions. The glass ceilings mainly hinder women when they are trying to work their way up to the executive level. When women managed to successfully break through the glass ceilings they instead are facing *glass walls*. These glass walls divide men and women on the top executive floors of large companies. This is a reason why men remain in the most powerful and prestigious

executive positions of President, Chairman or CEO. While women usually occupy executive positions related to communication, marketing and human resources. (Culture-Biz 2005 p. XVII)

Quite apart from the fact that very few women get to the top in any category, there is a noticeable concentration of women in certain areas – usually the less prestigious, less well-paid ones, from which promotion or career development is a near impossibility. [Gallagher 1981 p.90]

The glass ceiling is very much present in the media and the film business. Very few women are in the leading and prestigious positions on the sets or in companies. Women in powerful positions in companies, for examples as members of the board of directors are seldom. This is not a regional problem of Finland, this applies throughout the whole world. France implemented a gender quota for boards of directors for stock market listed companies in 2011 to conquer the underrepresentation of women (European Network for Women in Leadership 2012). Germany was discussing the same matter after France implemented the laws but hasn't come to consent yet. Norwegian implemented as first country a quota requiring 40 percent of Norwegian firm's directors to be women. By the time the new law was proposed only nine percent of directors were women (Ahern, Kenneth R. & Dittmar, Amy K. 2011 p. 1). An American study researched the consequences of this new law. The study focused on whether the value of the companies improved or declined as a result of the new board structures. The study compared firms that had a greater proportion of female directors prior to the quota with firms with fewer female directors. On the day the new law was announced the stock return for companies with no female directors dropped on average about 3,54% compared to -0,02% for firms with at least one female director. The findings indicate that the impact of the quota on firm value persists over time. In general one can say that the implementation of the quota affected most of the companies value negatively (Ahern, Kenneth R. & Dittmar, Amy K. 2011 p. 20). One hypothesis explains the negative impact by the quota with the change in the board characteristics. It is estimated that a 20 percent increase in women results in a decline of directors with CEO experience of nearly 12 percent (Ahern, Kenneth R. & Dittmar, Amy K. 2011 p. 24). The problem is seen in the significantly less CEO experience of women and their young age compared with the male directors (Ahern, Kenneth R. & Dittmar, Amy K. 2011 p. 32). The studies findings support the

hypothesis that women don't receive the same training and opportunities as men. Women need to be enabled to make the same experiences as men otherwise they will not be able to perform in the same way and the overall welfare will suffer. There were and are women in powerful, important and prestigious positions. Two examples are Tarja Halonen Finnish president 2000 – 2012 and Angela Merkel German chancellor 2005 – 2013. Both are well-respected politicians however women don't necessarily have it easier in top positions. The influence media has on the picture of powerful women is not always in the interest of women:

“If some of the most powerful women in any given society have problems being taken seriously by their nation's news media, there is little reason to be hopeful for the rest of us [women]” [Byerly & Ross 2006 p. 46]

Women struggle with being taken seriously not only by the news media but also by the society in general and much more important by their subordinates. Powerful women are portrayed by the media as mostly positive but are often constructed as perfect woman with both the best of feminine and masculine attributes. This construction does not take into account what women went through while progressing in their career. The reporting lets work-life balance issues completely aside. (Byerly & Ross 2006 pp. 46-47)

Pierre Bourdieu a French sociologist, anthropologist and philosopher has the following ideas about women succeeding in a male-dominated occupation:

”[P]ossess not only what is explicitly demanded by the job description, but also a whole set of properties which the male occupants normally bring to the job – a physical stature, a voice, or dispositions such as aggressiveness, selfassurance,... natural authority, etc., for which men have been tacitly prepared and trained as men.” [Bourdieu 1998 p. 62]

In order to be hired in the film industry usually extensive experience is required. Gaining this experience seems to be a difficult matter for women. To gain experience one has to be employed. Social and occupational networks are key to first employments because they provide recommendations and recognition. Unfortunately women are currently not included in the networks. The problem for women is to get their name and work out into the industry. To collect working experience can already be very difficult, as women are not employed in the first place without experience. The industry usually expects from newcomers to work for free, regardless of their education. This is of course is a drill that both men and women have to go through. (Shimkus 2006 pp. 45-46)

After being hired in the first place women struggle to maintain their respect and confidence in the job under the scrutiny of their male colleagues.

“When asked what it might take for women to reach equality with men in terms of respect and opportunities behind the camera, several discussed the lack of leadership skills and confidence women possessed, contrary to men who seemed to be much more sure of themselves and able to lead a crew.” [Shimkus 2006 p. 62]

In chapter 3.2.1 *Barriers that used to exist* it was discussed what the requirements for Directors of Photography are. In the context of the glass ceiling and the complications women are facing when trying to pursue their career the requirements have to be taken into account. A Director of Photography who is leading a team, has like any other manager, to have proper skills in leading. To lead a team certain self-confidence is needed as well as the ability to represent the own opinion. Literature suggests that this is a big concern for women who are pursuing the career of a Director of Photography. In the case that women are not born as natural leaders like many men are, they have to acquire leading skills. Women have to find their place amongst their male colleagues and gain their respect to create a harmonized working environment. Technical skills alone will not be a guaranty for the respect of the male co-workers.

“Attitudes are as important as being able to carry the camera.” [Shimkus 2006 p. 55]

The answers of young female cinematographers who were asked how they feel about working in a male dominated environment were mostly positive. For none female it was a major concern to work with men in general. They are aware of gender differences and think they can notice certain gender influenced behaviour but they don't see any disadvantages for themselves. Their experience with working with men was mostly positive and none prefers to work only with women. The phenomenon of the glass ceiling is an intangible idea for young female students of cinematography. They are very confident about their success, they believe that the right portion of motivation, courage, determination and drive are the key components to their success.

Elizabeth Shimkus, 2006, writes in her thesis, *The underrepresentation of Women as Cinematographers: A Sociological Exploration*, that since one has to work to get the training, yet many women are having trouble getting hired in the first place (cf. Shimkus 2006 p. 46). Furthermore Shimkus writes about a female cinematographer who describes how she was full of fear to make mistakes, due to the fact that she did not feel like she had the necessary experience needed to do the job properly. Another female stated “I felt that I was in a battle zone everyday just going to work.” (Shimkus 2006 p. 46) The working experiences from females in the industry are very contrary to the expectations of the young inexperienced students.

Since/After the Finnish polytechnics were created in the 1990s, they are now considered the professional equivalents of science and art universities, due to the new dual model of Finnish higher education. In terms of finding employment opportunities, education plays an important role in this matter. (cf. Mitchell 2005 p. 276)

Universities naturally offer the best gateway to film production, and provide the best opportunities for future networking in the sector. In 2004 some 1700 students in all began their studies in the field of film at different levels of professional training. The formalization of professional's training in film and television sector has already started to provide a steady flow of new freelance professionals to the labour markets. At the same time the share of female freelancers in the field of mass media in general and in film and television production in particular has increased substantially. It has been predicted that when the new flow of professionals entering the film sector from the polytechnics has its full impact, there will be a great oversupply of freelancers and job seekers. Since the scale of production is not increasing, it is feared that un- and underemployment is imminent and there is a fear that it will concern women more than men. Why expand education and training, if production is not expanding? Why let young people think that the film sector can offer professional careers, if it is not, in fact, able to do that? (Mitchell 2005 pp.272-276)

4 BARRIERS IN AND PRIOR TO SCHOOL

In this chapter I will go true the data that I gathered from my interviews with young female students that are at different stages of their education. Some just started their studies others are about to finish them. I chose to interview women from different years of their studies to get a wider picture of the situation. I also expected the experiences to be different and hoped that experience has an effect on their estimation of the labour market situation.

There is extensive data available on the experiences of women working in the media and film industry. Research in the past generally focused on how women survive in the male dominated industry. Successful female individuals are picked to illustrate how hard it is for women to establish themselves. Other females who were not able to climb the career ladder to be a director of photography are taken as examples of females failing in the industry. In general the focus is on the discrimination of women in the film industry. This phenomenon is witnessed in other industries as well and is also geographically wide spread. To access the existing data about female's fates is rather easy when using the scientific vocabulary. The European Union commissions a lot of research and publishes reports on gender equality and the labour market situation in Europe on a regular basis.

In my qualitative research I focused on experience prior to education and professional studies. The goal was to get a picture of what girls think about the profession before they make any experience themselves. The interviews were designed to get qualitative answers about how young girls perceive the profession and what motivates them to become a cinematographer. Here another important part was how they valued the reputation of their school and how they justified their choices. In the interview the respondents were ask to critically reflect their choices and how they try to positively influence their career path. Questions covered also any bad experiences and anxieties. The other important part of the interview was how females, who are in the middle of their education, perceive and understand the situation and environment in which they will be working. I needed to know how well aware the girls are of what they are about to face. I believe that I have, due to my research and working experience, a fairly realistic picture of what it means to be female in the film industry. I wanted to understand what girls with little experience think. What influences, what they think and how it is influenced?

The interviews should enable me to answer the question whether only really strong female personalities will make it into the universities because all the other girls are scared of before that. I wanted to get a better picture of when females are hit by the barriers in their career, if the barriers become real in the post education time or if the university education already has an important influence on the success of female cinematographers.

4.1 Themes and Hypothesis

In this chapter I present my collected data from the interviews. I interviewed four young female students that are at different stages of their education. Some just started their studies others are about to finish them. I chose to interview women from different years of their studies to get a wider picture of the situation. To my surprise I found very similar attitudes and experiences amongst the interviewees. For example all of them felt a need to get positive feedback on their ability to the job, whether it was from a teacher, family member or someone who they respected. They all shared similar thoughts about the significance of gender, how it is represented and what role it plays, when it comes to the profession or career of a cinematographer.

From my research of literature and material published about the topic of my thesis, I wrote down hypothesis based on the knowledge that I gathered, to get thoughts and answers for my hypothesis among those interviewed.

Direct quotations from the interviewees speech is separated from the other text with quotation marks and italics. The proper names are removed in the interviewees' speeches in order to ensure their anonymity.

4.1.1 Motivation for becoming a cinematographer

Educational psychology researches how motivation affects learning and behaviour. Motivation commonly is differentiated into intrinsic motivation and extrinsic motivation. Intrinsic motivation is based on taking pleasure in an activity rather than working towards an external reward. Extrinsic motivations are outside rewards and do not come from the inside of the individual. There are several factors that promote intrinsic motivation: challenge, curiosity, control, fantasy, competition, cooperation and recognition. The questions the respondents had to answer were mainly focusing on their intrinsic motivation. Asking for their motivation is important because motivation can energize, direct and sustain behaviour. Motivation gets people moving in a certain direction and can keep people going. Cinematography is a rather not so popular field of studies when comparing the number of applicants with the numbers of other courses e.g. business administration. I assumed that girls who chose this particular field of study are highly motivated and have clear rational reasons for becoming a cinematographer. (cf. Vockell 2012 Chapter 5 Intrinsic Motivation)

The interviews revealed that the majority of the female students did not know straight from the beginning that they really wanted to become cinematographers. Two of the students had studied still photography before they applied to the film school and felt it was the next natural step to move into a film school. One of the girls had studied economics and journalism and felt that this was not the right path for her, so she decided to apply for cinematography and the last one had difficulties deciding what to do after secondary high school. All of them had in common that they had been doing still photography more or less as a hobby before they started to think about pursuing a career of moving pictures. It was not before they got into the film school that they realized that they wanted to invest their time fully on becoming a cinematographer.

For one of the students photography has been and is a very important part of her life. She knew from an early age that she wanted to work with this in the future:

“I have always been interested in taking pictures. I got my first digital camera when I was 13 years old. Before that I used to film with the family’s video camera small short stories with my brother, we did not realize it then what we were doing, we just did it for the joy of it, but already at that young age I started to tell stories with the camera, nothing was off course planned we just went with the flow.”

She continues describing how her interest for photography gradually changed towards cinematography.

“When I was in high school, during the second year of my studies, my mother read about an article in the newspaper that there was a beginners course in the summer, how to learn to use a film camera. It was like a small basic course for beginners where you could learn about different interview techniques. So I decided to enroll for it. I spent two weeks in Tammisaari, I traveled there every day. We learned how to use the big bulky Sony camera and did different exercises with it e.g. how to tilt the camera up and down and how to pan the camera from right to left, very basic stuff and then we got feedback of our footage that we took. After we learned the basics we were ready to shoot our first real thing. I remember that we made a documentary about youth centers in Kirkkonummi. After that we edited it with Adobe premier and I thought to myself that this is something that I want to continue doing in the future. After that summer I knew what I wanted to do. So I applied to a film school straight after high school, because there was nothing else that I wanted to do.”

Another opposite example was a girl who had no clue of what she wanted to become, before she suddenly discovered the world of moving images:

“I did not know what I wanted to become, I had no idea. I filmed dance and then I made videos and mixed music and I sort of fell in love more with the technology than with the dance. So I felt that the dance became more of a hobby and I started to focus on the camera and the pictures instead.”

I was surprised that so few of them really wanted to become cinematographers when they were applying to the film school. They were more curious about the profession and hoped to see what it becomes. They said that it is not really clear yet, what part of the whole business they want to work in. The promotional factor challenge of intrinsic motivation is described as:

“People are best motivated when they are working toward personally meaningful goals whose attainment requires activity at a continuously optimal (intermediate) level of difficulty.” [Vockell 2012 Chapter 5 Intrinsic Motivation]

The majority of the girls interviewed are missing clear goals, which could result in a lack of motivation and determination. Only one respondent was determined and had a goal and seemed therefore more motivated than the others. I would have thought that they had a clear motivation for why they wanted to become cinematographers. In order to succeed in this business, certain strength and purposefulness is needed to survive not only in the business. Motivation can enhance performance and can lead to increased effort and energy. I could not observe meaningful goals for the girls and therefore there was little motivation. At this point the question comes up whether the schools require applying students to present and articulate their motivation. Is the motivation a critical factor for the admission of new students? Are schools setting the entry bar too low and focus on the wrong criteria? I am personally astonished that students without clear drive made it into a school and are getting professional training in something they can't even relate to. Further research could investigate whether unmotivated students are pulling motivated students down and have an overall negative effect on the education of the whole academic year.

Could this be a reason from the schools side that the bar is too low for students who are applying to film schools, especially polytechnics, where the schools are taking in far too many students and this will lead to unemployment maybe later on in the future? One of the interviewed felt that the school could raise the bar, so the unmotivated could be eliminated at an early stage of the entrance examination for the school.

4.1.2 Recognition and support

Recognition is an interpersonal factor in motivation and a need. Maslow proposed that achievement, respect of others and respect by others are needs related to esteem. In general people enjoy having their accomplishments and efforts appreciated and recognized by others. In order for other persons to obtain recognition the activity, achievement etc. must be visible to other persons. There has to be an awareness of the activity otherwise there will be no recognition. From the theoretical background I assumed that the girls are motivated by recognition and support from others including their family, friends etc. The questions in the interview targeted at the perceived recognition and support by others. The respondents had to evaluate the perceived recognition they received. (Vockell 2012 Chapter 5 Interpersonal Motivation)

“Parents, teachers and trainers are important role models that form the development of young people’s professional career paths and strategies”. [Culture-Biz 2005 p.126]

The support from family and friends is one of the key reasons and important things for the student’s development of professional career paths and strategies. Important role models that form the support and encouragement are parents, teachers and trainers.

The interviewed pointed out that it is very important to get support. Without the support some even said that they felt it is useless to continue. The majority of them felt that friends and family does not really understand the workload that they get from schools and working in productions. It was an invisible barrier that deteriorated relationships among friends. All of them felt that they got great support from home but that they had a hard time explaining the rules and patterns in film school.

“Family and friends have a hard time understanding why school is demanding so much time from me. Maybe it has something to do with that people who never have done this before will never understand what it really means.”

“My mother always told me that she had a hard time understanding how much work is behind a short movie or a feature film before I started to study it. It was not until she saw me working on my short movie when she realized how much time and hard work it takes to produce a 5-minute film. She told me that she has a greater respect for it now compared to what she used to have.”

“I have got great support from home and they have understood how important and how much this means to me. When I still was living at my parents place they always helped me out, it was such good service you know! I did not have a driving license and my mom always gave me a ride back and forth, especially when I was working on a documentary film, she even made sure that I slept and ate. The support from home has been great.”

“There is one thing that I am still missing with my boyfriend and that would be if he could come to one of my film shoots so he could see with his own eyes how much hard work is involved and maybe he then would understand why I am so tired after a day of filming, because if you have not seen it with your own eyes, you don’t understand what it’s all about. You cannot explain in words why it is so exhausting. It is really important for me to have someone to come home to, who understands how much this means to me and puts up with me when I’m tired and grumpy. Off course it is important to spend some time with yourself and just do something totally different from filmmaking. If my boyfriend would not understand how important this is for me, it would be pretty tough for me to keep doing what I’m doing right now.”

“My family is supporting me and they like to listen about what I’m working on in school. I also tell them a lot, I tell them so much! They like to listen but there comes a time when I tell them so much that they ask if I can shut up for a minute.”

“I think it’s really important to get support from friends and family, but actually none of my friends are really into these kind of things, they have a hard time understanding all the stuff behind filmmaking.”

“I think my family does support me, as much as they can, probably. I think it’s really hard for them to show that they actually care, my mum is mainly just glad that I’m actually studying something and I’m going to finish it and that I actually do like what I’m studying, because she noticed that I did not like the last school where I was studying. They try to be supportive I guess by asking what I’m doing and always want to watch what I’ve done, but they have a very hard time grasping why it takes such a long time to make a 5-minute movie and why I do I talk so much about it.”

There are three ways to achieve visibility of activities:

1. The process of performing an activity may be visible
2. The product of the activity may be visible
3. Some other result of the activity may be visible (e.g. media coverage)

(Vockell 2012 Chapter 5 Interpersonal Motivation)

Usually the second point is the single point that is visible to others. Very rarely others than the film crew are present on film sets. That is why the process of performing the activity is not visible. The whole filming process sort of happens behind closed doors. It is hard for others to recognize the performing of the activity. The third point is not easy either because only few students work on films, which are presented to the broad public. All respondents claimed that others do not understand how much effort they put into making even short films. There is a lack of understanding of others what it means to make movies. Logically it is hard for someone to recognize something when they have little knowledge of the process. The need for recognition is natural but the emphasis the girls put on it leaves one worrying that with the slightest rejection from someone they have a motivational break down.

To conclude the recognition and support one can say that support is important for the students, they do get support, which motivates them, but the key issue is that students do not perceive the support and recognition as honest because others cannot grasp what happens behind the scenes.

4.1.3 Education

In order to become a cinematographer there are not many options to choose from. The most common path today is to attend university education in a film school or similar institutions. The students are commonly taught by professionals from the industry which have extensive working experience and knowledge about filmmaking. Because internships provide a good opportunity to gain real working experience straight from the industry, schools commonly require their students to do at least one internship during their studies. In the school men and women have to work together and are simulating the real work in a smaller scale. From my research I knew that women are treated differently by the industry than men are. I wanted to know whether the discrimination of women already starts in school or if schools provide students of different gender with the same opportunities when they graduate. With my personal background and several internships I consider internships an essential part of the education of young professionals. Therefore I wanted to know how the young students evaluate and value the internships in the context of their whole education.

All of the respondents stated that there is a fair division of male and female students in the cinematography courses.

“We are now six cinematography students in my class and two are females. I have not noticed anything discriminating in my education. My school is treating everyone equally. “

Another respondent agreed with the fact that there are more and more females studying to become cinematographers. She felt that the broad public is unaware of the situation, that the industry is changing and striving for more equality, where both men and women cinematographers are appreciated.

“In our class now we have just as many women as men. I think that maybe people who are not in this business or school education, who don’t know about this education, they don’t know that it is becoming more equal so that is something maybe schools have to like do more advertisement for. I think that would help and that’s a good thing.”

One of the respondents made it clear that she does not want to be treated differently just because of her gender.

“I don’t see the reason for why schools have to take in women just because they are women. If it’s a year that there are more men who are better, then why bring in women to the school? I think that is just stupid. Schools should only accept the best ones. If it happens to be that the women are only acceptable one year, then it should only be women taken in. I just think it’s ridiculous to have some kind of classification between men and women applying for a school. I hope that schools are not looking only at ones gender. They should only focus on the person, the individual instead.”

All of the respondents spoke for the importance of finding a good internship. They pointed out both positive and negative experiences that they have made. All of the older students agreed that school should give a helping hand when students are looking for their internships. They felt that as a woman it could be harder to find an internship where you get a good educational learning experience and at the same time get treated equal.

“I did an internship last spring at Nordisk Film, doing some logging for a TV show in Helsinki and that was cruel! That does prepare you a little bit what is like, but I also think that if you are an intern you always get the crappy things to do. We were actually treated differently, maybe some part of it was because of our gender. We were doing the twice or three times the load of work, we got fired and they hired a completely new guy to work for a month and he was a male.”

“I haven’t heard of any of my classmates that would have been given an internship anywhere, they have sought them out themselves, me included. The school could give more examples of where you could go.”

“The internship is important, then you get a taste from the real working life. You get the chance to work on getting a better network of contacts. I just hope that school would help out finding a good place where to do your internship, or even give some suggestions where one could call.”

“You will get an internship but getting an internship where you actually learn something and can take advantage of is really hard. Being a woman and trying to find an internship where you can show them what you are good at is really hard to find.”

“It doesn’t scare me to go to that internship but its scares me to that I don’t know now what exactly I am aiming for. But then again when I think like that I grab my self and say you should stop with that because there is no need to worry because you are only as good as you can be.”

There was no respondent that felt they have been treated unequally in school. All of them felt that school is providing them with the same opportunities. They felt that it is important to show the lecturers that you have the right attitude and want to get engaged in the education provided. Furthermore, the respondents considered it valuable to hear examples from the industry that the lecturers have made personally.

“I have never noticed that I would be treated differently. I don’t see a reason for why you would at school. I think it starts when you get out in the business more. Because then people who don’t know you will start to have opinions, but in school usually people are quite equal.”

“I appreciate when my teachers tell me stories from the real life and give me examples from different situations that they have had to deal with from the real industry. I wish they could give me even more examples from the business.”

“I think we are fairly treated in school and it depends more on your own attitude how you are treated. If you have the right attitude and show the teachers that this is something that you really want to work hard for, they will show you the respect and help you as much as possible.”

“It’s very much up to you what you make out of your own education. If you just attend the courses that you are supposed to attend and don’t do anything outside of that I don’t think that you are ready for the business.”

The respondents showed a great interest about listening and learning from experiences that their lecturers have made from the real industry. They felt that the school should provide them with more guest lecturers, so that they could get a taste from the real world. All of the respondents acknowledged that they need to show more interest into domestic feature films and the industry.

“I know very little about the film industry in Finland, embarrassing little actually. I probably don’t know anything else than what the teachers have told us last year which was not much. Just how there was a lot more money involved before, but now it’s kind of a poor business.”

“I think the school should invite more guest lecturers to talk about experiences from the business. Then we would have a better picture of what is happening in the film industry in Finland and what is going on at the moment. The teachers could start with telling more about their own experiences from their personal career.”

One of the respondents wanted to point out that the overall attitude from school is very equal for both genders. However, when she applied to the school where she is studying at the moment, she was confronted with a teacher who pointed out the difficulties of being a female in the industry.

“Nobody has told me directly about occupational segregation in the film industry in Finland, except one of our teachers, well he was laughing in my face when I was applying to my school and he asked me what am I applying for and I said that I want to become a cinematographer and he just laughed in my face and told me that “You do know that it is hard work and it is not for females”. That just made me even more angry and after that I really wanted to prove him wrong.”

One of the best ways, that school can prepare the students into the industry, is to establish contacts. The respondents were of the same opinion that contacts play an important part when trying to find employment.

“The connections that I’ve made so far. There is only so far you can get with your CV, the rest is up to what people have heard of you and what sort of a picture there is of you in the business. It is a really important part. Its not the only way to get into the business but it is sure enough the easier way, that I do believe. That is something our teacher usually also mark out, it is very important what people think of you in the business.”

“I think it’s the contacts that you get and to ask from the teachers that is the best way of preparing.”

“I’m hoping to gain some contacts true school, contacts further to the world of work”.

The answers of the students concerning gender equality during the studies were pleasing. All of the respondents felt that schools are admitting women and men equally. In most of the classes there is a 50/ 50 division of female students and male students. They all reported from a positive working environment where women and men are working together on equal terms. Not only was the working environment perceived as fair but also the treatment received from the lecturers. None of the respondents reported about discriminatory behaviour by lecturers. All the answers together communicate an inspiring working environment in schools where females have the same opportunities to develop as males do.

The school, where the young professionals are studying, requires the students to complete an internship. An internship provides the opportunity for students to apply and reflect on knowledge acquired in the classroom. The advantage of gaining experience and building a professional network is to have better chances of getting full employment after graduation. Real world experience is something that is highly valued by the employers when they are looking for a competent candidate. The students are free to choose where they want to do the internship. However the respondents felt that there was little guidance or orientation from the teachers how to approach the issue of finding a valuable placement. The respondents were lacking knowledge about the industry and did not know from what kind of placement they could benefit the most. Despite practical experience and orientation the internship left the students without a clear perspective.

4.1.4 Challenges

Challenges are one of the most powerful motivational factors of intrinsic motivation. A challenge does not necessarily include several people, it can also be individual because a challenge does not need to include more than one person. Achieving a goal usually gives a satisfactory feeling and will sustain motivation. A challenge can have two outcomes either success or failure. While working towards a goal the level of certainty is important because it will determine the degree to which a challenge motivates a learner. In general it is said that an intermediate degree of certainty is best. Intermediate means that neither success nor failure is guaranteed. Self-esteem is closely related to motivation because we consider ourselves to be good or competent to that extent to which we succeed at challenges we consider important. Here again the interview asked for goals the student might have set themselves during their studies. On the other hand the awareness of upcoming or existing challenges was investigated by some questions. Are the respondents motivated by challenges they are facing given they are aware of them or is it contrary that some challenges imply insurmountable barriers, which discourage the students. (Vockell 2012 Chapter 5 Challenges)

Low self-esteem was something that the respondents pointed out. It is something that seems to be a bigger challenge for most of the respondents.

“Big obstacle is self-awareness and some sort of self-esteem. That is a big challenge and another obstacle is how to learn to delegate stuff to people, you can’t do everything yourself, which is very hard. I think it has to do something with my upbringing that, when you work you work hard and you do it yourself because then you do it right. To learn to trust people and to actually think that somebody has chosen you as their cinematographer for a reason, because they like your work and just to get to that set of mind.”

The respondents felt that they have to be a little bit better than their male opponents.

“As a woman you have to be twice as good as your male opponents, you have to show what you are made of and as a women trying to get your name out there, it’s not an easy task to do”

“Actually when I was just talking to a friend, he is studying sound. I talked to him that me and my other friend, who is a female, are planning the lights and the pictures for a concert that we are making in multi camera. I said that it is so hard the communication between people and especially when it is men. I told my friend that we have to do something, we have to call them and we have to tell them what we want so we get this clear because I don’t know, men don’t always discuss as much as women do. So I told this to my friend and he was like, well, when you are female in this branch you have to step up and have to show them that you have a dick. He just said that to me. I was like. Yeah that is true but when I thought about it later I thought like we don’t have to have a dick. We are women we can do this. I usually just say that we have to use our elbows to get through and always stand up and say what we think. Because if you don’t talk then nobody will listen to you and it is about the tone of the voice too. You don’t have to have a dick you don’t have to be a man. You can just talk and discuss and you shouldn’t be scared or shy just because you are a woman.”

“Stereotypes and prejudices play a big part still in the mind of people. People assume that men are better than women in this work. As a woman you have to prove that you are as good as a man, you have to be more talented than a man. You need to work your ass off to earn your respect as a female cinematographer. This world has always been dominated by men, that is why I think that there is preconceived ideas in the head of people.

Important about challenges is what an individual perceives as challenging. According to the answers the girls gave during the interview it can be concluded that they are aware of certain challenges and that they are confronted with situations they perceive as challenging. Some feel that requirements concerning their personality are challenging e.g. low self-esteem and lack of leadership skills. All the girls tend to neglect their ability to do jobs perfectly. On the other hand the respondents did not mention external challenges, which are not connected to their personality. Judging by the answers I got one can assume that the girls do not think very far into their professional future and have not heard many negative things either. Their concerns spin mainly around problems they encounter during their studies where they feel they are lacking experience or certain

personality traits. I assume that the girls did not mention challenges during the post education like initial employment because they are not aware of them.

Challenges can set free motivation and energy and focused strength. The respondents tend to play the challenges and problems down. They don't want to accept what they are told and how it might influence them. I am not sure whether it motivates the girls that others say they will have hard times establishing themselves or if they simply believe very strongly in their own abilities despite doubting themselves. Several interviewees answered that they don't think their gender will affect them negatively because they feel like they can do anything a man can do. They do not understand that the occupational segregation and discrimination of women in the film industry is not based on the actual abilities of women compared to the abilities of men. The youngsters believe that the best students will get employment based on their experience and quality of work. The interview clearly showed that awareness has to be raised for the discriminative aspect in hiring.

4.1.5 Entering the industry/ working life

After graduating from a school the next step on the career ladder is to enter the film industry and get employment there. This step from the school into the real industry is one of the hardest challenges that young female cinematographers face. It is widely known that contacts and connections into the business improve one's chances of finding employment significantly. I researched how the respondents judge their chance of being successful and how they picture their entry into the industry. I already mentioned in chapter 3.3.3 Vertical Segregation, how important employment is to gain experience which then helps one to get better jobs. Being employed without significant experience is really hard for female cinematographers. My questions aimed at getting an understanding of the girls' strategy to compete with their male colleagues. I wanted to know how girls want to improve their chance of being chosen over a male cinematographer.

Role models play an important part:

“I’m thinking if there would be no females in this industry, if there would only be men or only men studying in my class. I would probably think twice about studying it. I think female role models play an important part, even if we don’t acknowledge them as much as we should.”

I wanted to know how they felt about competing against all the men that are out there. A clear answer was really hard to get from the respondents. But some of the respondents spoke about the determination and self-esteem, how important it is for them, to be able to become successful. Most of them are unaware of what they are facing when they are graduating from school. It seems like they don’t want to think about the problems that might come along in the future, they are maybe not aware of the challenges that could become reality.

“I’m trying to push myself, to become more determined. I’m trying to work on it every day as much as I can. It would be a dream coming true if I could work as a female cinematographer and be respected for the work that I accomplish.”

“I don’t really think that anybody will look at my papers or grades, maybe just about which school I went to and that’s only in the beginning of my career. The further I go the more it becomes about who you have worked with and what people you know.”

“I’m not going to be the best cinematographer in Finland, I don’t have that in me. I have never been that person, with the personality wanting to be the best. I think that my road is there in the front of me, but I don’t know what will be waiting for me. I have to try different things now in the beginning and see what working place is the best for me.

“I don’t think I have any clue how hard it’s going to be, but I’m quite happy as ignorance is bliss and just continue along that path and think that you can actually make it and hope for a lucky break.”

“Somehow school helps you to enter into the film industry, at some point you do realize that this is going to be hell to actually make it. Somebody is going to tell you that it will be hard and they are going to be right. School might not tell you everything about working life but it does teach you something, the basics that you need to make it or break it.”

“I think the more you are going to think about it the more it’s going to stop you. Just try to get out of that mindset and I’m just a person like everybody else. Not specified by gender. Just happened to be a female that wants to be a cinematographer. I could have just as easily been a male. It is just one chromosome. “

One of the respondents had acknowledged that it will not be an easy road to success. However, she was hoping for more opportunities for the younger generation in the future.

“Everything is possibly if you are very talented. I just think that the road to success is very far away, if we think realistically. Still today it is a long way to go, but who knows, maybe we are the ones who will make the breakthrough? It feels like it is the same people who are running the business. I think it was Jörn Donner who came up with the idea to use young talents, he handpicked only young talents, which I considered to be a great idea! Because otherwise, it will always be the same old men who get the opportunity to make movies. It should off course only be the best one who should get the opportunity to make movies, but there are also other talented filmmakers who should get the chance to make a movie. ”

“I consider that females are as smart as men when it comes to technical things. We can read manuals and learn them by heart if we want to. That is something that you can learn by yourself or just by doing. There is only one thing that is missing and it’s the fact that there should just be more females that are doing this.”

None of the respondents had a clear answer for how they will compete against their male cinematography competitors. They pointed out how they would like to work on their own determination and to try to set future goals for themselves. One of the respondents stated the importance of role models. She even said that if there would be no females in the industry or in the school doing this, she would think twice on pursuing with this. However, none of the respondents were able to mention a female cinematographer. Their poor knowledge of the domestic industry is something that the students should change and put more effort into learning about the industry. The schools could help out by discussing the industry and talking about currently successful professional cinematographers and their work. The respondents showed great interest in real life film industry experiences from their lecturers. Students need to show more initiative but it would not hurt to give them a little push to get them going. The respondents felt that the gender issue can be overwhelming and therefore make it harder to nevertheless believe in success. They feel that one should stop thinking about what gender one is and just do what one wants to do, despite the gender. The respondents consider themselves to be as smart as men when it comes to technical things, and according to them being female is not a barrier to pursue a career in cinematography. One of the respondents stated that the only thing that is missing, is more women working as cinematographers.

5 DISCUSSION/CONCLUSION

The purpose of this thesis has been to research about young female cinematographer students on their way to becoming professional cinematographers. I chose to divide the path of becoming a cinematographer into three stages:

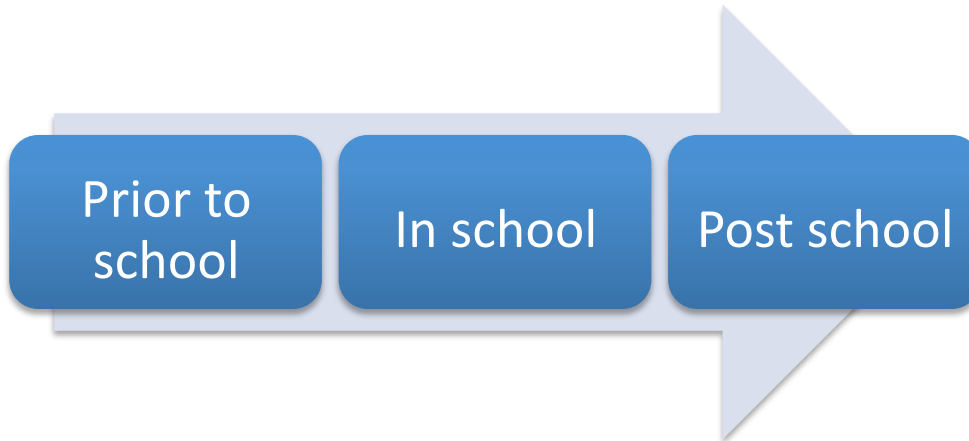


Figure 9 - The three career stages

The division takes different kind of problems and barriers into account. By looking at the different stages I could analyze at what stage the major barriers occur and where female cinematographers would need more assistance. I assumed that some barriers will be very specific for some stages and that others will stretch through all the stages. There is plenty of material and research available for the post professional education. Particularly material about women who are already working in the industry and have several years of experience, or have already retired is common. What was not available was information, about young women who just finished their university entrance qualification and are applying to schools or just started to study cinematography.

In the pre-educational stage young women commonly make up their mind about what they want to be in the future. What career they are going to pursue, what school to choose and what subject to study. Usually friends and family have major influence on the girls. Role models typically can have an important influence too. Each field of studies usually has typical attributes assigned to it by the public. For example: Persons who are studying business administration are often perceived as highly competitive, selfish

and money oriented. The same exists with the film business and cinematography. As I discussed in chapter 3.2.1 Barriers that used to exist, there is a widely spread picture of the job of a cinematographer in the head of people. Mostly those persons do not have more detailed knowledge about the profession or the industry. People think that the job requires a lot of physical strength to operate the equipment and therefore think it is a profession mainly for men. This could possibly scare of women wanting to become a cinematographer because they believe in the prejudice and feel it will be impossible for them. This is an important issue, why women might not feel suitable for the profession. However as I lined out in chapter 3.2.1 Barriers that used to exist this is not valid anymore. The technology and camera equipment, used by the film industry, has developed rapidly. Even though the profession of cinematography is highly technical and involves the handling of heavy equipment, there is no physical reason for why women should not strive to become cinematographers. With information campaigns targeted at girls finishing secondary schools the doubts could be disposed of for once and for all. It cannot happen that someone tells a motivated and ambitious woman that cinematography is not suitable for women. This destroys dreams and stops potentially talented women from studying cinematography. The stage prior to school will only stop the females who are not strong enough to stand up for their dreams and believe in themselves. It will take down all the girls who doubt themselves and are looking for something more comfortable and easy to do with their future. The stage prior to school is not the stage that hinders women from becoming cinematographers. This stage has an influence on the mindset of girls but does not actively hinder girls from becoming cinematographers.

When a girl chose to study cinematography the next step is to apply to a school that provides lectures in cinematography. I looked at the admitting policy of schools. I can say that in general schools admit students fairly and no gender is favored. This already provides a fair setting for women and men. If women and men are admitted equally to schools, how are they treated in them? Due to my research I can say that female students perceive to be treated equally to male students. They all reported from a positive working environment where women and men are working together on equal terms. Not only was the working environment perceived as fair but also the treatment received from the lecturers. None of the respondents reported about discriminatory behavior by lecturers.

The school, where the young professionals are studying, requires the students to complete an internship. This is an important opportunity for the students to get a taste of the real world. Students get a chance to work on future contacts in the industry. The advantage of gaining experience and building a professional network is to have better chances of getting full employment after graduation. The internship is a one-time chance to show your abilities and talent. Failing in the internship could mean that a negative reputation is sticking to oneself, which will affect future hiring negatively. The industry in Finland is so small that information about who better not to hire spreads quickly. This means a lot of pressure for the students because the internship could be the start and the end of their career at the same time. Through my research I learned that the students appreciate the internship time and they understand the importance of that time. Nevertheless, it is difficult for the students to find suitable placements. Here I could notice first differences in how women are treated by the industry compared to men. One of the respondents told me about a negative experience that she had during her first internship. She felt that she was treated differently, because of her gender. She was doing the same workload as her male colleagues and sometimes even the double, despite that, she got fired from the production. This of course is only one negative example from one student's perspective, which is not representative.

I am convinced that schools are not the problem for female students and do not hinder them on their way to become a cinematographer. But it is the internships where female students make first contact with the industry and learn what it means to work in it. I still want to emphasize that my research showed that schools provide good possibilities for female students and that this is highly important. Female students receive the same support in school as their fellow male students do. This means that the students who are graduating should in general have the same expertise disregarding of their gender. Schools provide the industry with well-trained female cinematographers who are capable of doing the same as male graduates.

We now know, what hinders women from becoming a cinematographer does not occur until they enter the industry. To understand the discrimination, women are experiencing in the film industry, I needed to understand the reasons for this phenomenon. This topic is discussed in literature under the concept of occupational segregation and in chapter

3.3 Social Gender Entry Barriers. Even though there is a fair division of females and males in school, there is still not a fair division of men and women working in the cinematography profession. In Finland, professions are perceived as either female or male, which makes it really hard for individuals to enter into the opposite gender occupation. However, the number of females employed is high, with females mostly working in female occupations. Women suffer under stereotypes because stereotypes might be valid for some women but are assumed for all women.

Men dominate the film industry. Men own and run most of the production companies and are the ones responsible for hiring new personnel. Stereotypes and many other reasons are responsible for how men make decisions. However, one of the key points is the fact that networking is not including women. Women have to be given the chance to gain a reputation to get better jobs. The main issue at the moment is that people don't know the names of female cinematographers and what they are capable of producing. Producers and directors should try to provide more opportunities for women. Decision-making processes are very complex but decisions are based on attitudes towards subjects. The attitude men have in the industry towards women is affecting women negatively. Women are rarely employed in positions where they can fully unfold.

I really believe that if producers and directors are more open-minded to hiring women in key positions, then that's when things will start to change. Women will be discriminated as long as men have no incentives to act differently. In my thesis I clearly lined out that the discrimination of women is not based on rational facts. Occupational segregation is not either. The topic is very complex and the discrimination of women in the labour market is a worldwide socio-economic problem. If a female cinematographer gets hired, this usually means for her that she has little chance of progressing and climbing up the career ladder. Women reported frequently how their colleagues turned their working place into an uncomfortable environment. Women need to constantly prove to the male colleagues that they are capable of anything a male cinematographer can do. The ongoing pressure is a great burden for women. In the interviews it became clear that the young professionals do not understand their situation to the full extent. Due to the fact that schools provide an equal environment they send wrong signals to the female students. None of the female students interviewed was aware of how difficult it will be for them to get hired into positions they desire. I can only hope that recent developments

with plenty of female students graduating and searching for employment in the media business will in general bring a change to the film industry as well. It will be interesting to see where the opportunities lay for upcoming and younger generation of female cinematographers, who have a positive attitude towards men and women working together.

Literature agrees on the point that discriminative behaviour is very complex. The base of stereotypes has many facets. When one wants to research why women are having problems in the labour market one has to look at the history of the humankind, how societies work and how culture affects stereotypes. I restricted my work on researching where the main barriers for women, who want to become a cinematographer, are. I am able to name some of the barriers but the reasons why these barriers exist are too complex to discuss and explain them all in this thesis. What we can conclude from the research that I have conducted is the fact that the main barriers do not occur prior to education or in education. The main issue concerning what hinders women when trying to become cinematographers is mainly in the industry itself.

For some, both men and women, the technical aspects of cinematography are certainly more difficult to overcome. However, from the results of my study, the skills can be obtained. In order to change the situation behind the camera, awareness must be raised, attitudes must change and stereotypes must be broken. Talented women who are passionate about cinematography must be accepted, encouraged, trained and supported throughout their careers. When forming a professional opinion about a man or a woman, in a working context, it should be done based on the individual talent of the person.

REFERENCES

5.1 Literature

Bourdieu, Pierre. 1998, *Masculine Domination*, California: Stanford University Press.

Brown, Blain. 2002, *CINEMATOGRAPHY. THEORY AND PRACTICE*, UK: Elsevier, Focal Press, 303pp.

Byerly, Carolyn M. & Ross, Karen. 2006, *Women & Media. A critical introduction*, United Kingdom: Blackwell Publishing Ltd, 293 pp.

Elkins, David E.. 2009, *The Camera Assistant's Manual*, USA: Elsevier, Focal Press, 516 pp.

Etteedgui, Peter. 1998, *Cinematography. Screencraft*, Switzerland: RotoVision SA 1998, 207pp.

European Commission's Expert Group on Gender and Employment (EGGE). 2009, *Gender segregation in the labour market. Root causes, implications and policy responses in the EU*, Luxembourg: Publications Office of the European Union, 120 pp.

Gallagher, Margaret. 1981, *Unequal opportunities. The case of women and the media*, Paris: Unesco, 221pp.

Hirsjärvi, Sirkka & Hurme, Helena. 1980, *TEEMAHAASTATTELU*, Tampere: Tammer-Paino Oy, 158 pp.

- Joshi S. R.. 1987, *Invisible barriers: women at senior levels in Indian television: Women and media decision-making. The invisible barriers*, France: Unesco 121 pp.
- Kinnunen, Merja & Korvajärvi, Päivi. 1996, *Työelämän sukupuolistavat käytännöt*, Jyväskylä: Gummerus Kirjapaino Oy, 267 pp.
- Mascelli, Joseph V.. 1965, *The five c's of cinematography. Motion picture filming techniques*, Los Angeles: Silman-James Press, 251 pp.
- McMahan, Alison. 2002, *Alice Guy Blaché. Lost Visionary of the Cinema*, New York: The Continuum International Publishing Group Inc, 361 pp.
- Melkas, Helinä & Anker, Richard. 1998, *Gender Equality and Occupational Segregation in Nordic Labour Markets*, International Labour Organization, 108 pp.
- Merriam, Sharan B.. 2009, *Qualitative Research. A guide to Design and Implementation*, San Francisco: Jossey-Bass, 304pp.
- Mitchell, Ritva. 2005, *The Culture Industry in Finland: Evolving Gender Balance in Film Making. Culture-Biz. Locating Women as Film and Book Publishing Professionals in Europe*, ARCult Media, 395 pp.
- Seidman, Irving. 2006, *Interviewing as Qualitative Research*, New York: Teachers College Press, 162 pp.
- Sklar, Robert. 1993, *Film. An international history of the medium*, London: Thames and Hudson Ltd, 560 pp.
- von Bagh, Peter. 2005, *Suomalaisen elokuvan uusi kultainen kirja*, Keuruu: Otavan Kirjapaino Oy, 735 pp.

Widerberg, Karin. 2002, *Kvalitativ forskning i praktiken*, Sverige:
Studentlitteratur, 232 pp

5.2 Electronic References [www].

3sat. 30.03.2011, *Allein unter Männern. Kamerafrauen in Deutschland*, 3sat
website [www]. Available:
<http://www.3sat.de/page/?source=/kulturzeit/themen/153178/index.html>
Retrieved: 21.02.2012

Ahern, Kenneth R. & Dittmar, Amy K.. 2011, *The Changing of the Boards: The
Impact on Firm Valuation of Mandated Female Board Representation*,
(20 May 2011)
Available: <http://ssrn.com/abstract=1364470>
Retrieved: 15.03.2012

ARRI Group. 2012, *ALEXA. ALEXA Specifications*, ARRI Group website [www].
Available:
http://www.arri.com/camera/digital_cameras/cameras/camera_details.html?product=9&subsection=technical_data&cHash=162d1b0527fd98e5f204488ab9cc7257
Retrieved: 26.02.2012

ARRI Group. 2012, *ALEXA M. Small and Lightweight – Perfect for 3D, or
wherever your Imagination takes You*, ARRI Group website [www].
Available:
http://www.arri.com/camera/digital_cameras/cameras/camera_details.html?product=7&cHash=bb2adbaa9d
Retrieved: 26.02.2012

Canon U.S.A.. 2012, *About EOS C300. Specifications*, Canon website [www].

Available:

http://www.usa.canon.com/cusa/professional/products/professional_cameras/cinema_eos_cameras/eos_c300#Specifications

Retrieved: 26.02.2012

Canon U.S.A..2012, Hd and SD Video capture. *Canon U.S.A Introduces The EOS Rebel T1i Digital SLR camera The First Rebel DSLR to Feature HD Video Capture*, Canon wbsite [www.]

Available:

http://www.usa.canon.com/cusa/about_canon?pageKeyCode=pressrelde tail&docId=0901e0248004d359

Retrieved: 26.02.2012

ENCYCLOPEDIA.Britannica.eb.com.2012, *conductor*, Encyclopedia Brittanica website [www].

Available: <http://www.britannica.com/EBchecked/topic/131701/conductor>

Retrieved: 27.02.2012

European Network for Women in Leadership. 2011, *Gender Quotas on Boards*, European Network for Women in Leadership website [www].

Available: <http://www.wileurope.org/articles/details/Gender-Quotas-on-Boards>

Retrieved: 13.03.2012

Leppikangas, Hanna. 2006, "*SEHÄN ON IHAN PALVELUAMMATTI*". *Naisten kokemuksia kuvaajan ja kameramiehen työstä*, Tampereen ammattikorkeakoulu, Viestinnän koulutusohjelman tutkintotyö,

Kuvauksen suuntautumisvaihtoehto, 38 pp. Available:

Available:

https://publications.theseus.fi/bitstream/handle/10024/10638/TMP_objres.628.pdf?sequence=2

Retrieved: 22.02.2012

Shimkus, Elizabeth. 2006, *The underrepresentation of Women as Cinematographers: A Sociological Exploration*, Directed by Dr. Kenneth Allan, Greensboro. 89pp. Available:
<http://libres.uncg.edu/ir/uncg/f/umi-uncg-1256.pdf>.
Retrieved: 21.02.2012

Vockell Edward, Ph.D.. 2012, *Educational Psychology A Practical Approach*, Purdue University Calumet website [www].
Available: <http://education.calumet.purdue.edu/vockell/edPsybook/>
Retrieved: 21.03.2012

SiliconImaging. 2012, *Slumdog Millionaire Shot With Innovative SI-2K Digital Cinema Camera*, SiliconImaging website [www].
Available:
http://www.siliconimaging.com/DigitalCinema/News/PR_01_31_09_Slumdog.html
Retrieved: 26.02.2012

5.3 Magazine articles

Sundström, Hans. 2012, En dokumentärfilmare har ordet, *Hufvudstadsbladet*, 18.02.2012.

Reskin, B.F. & Bielby, D.D.. 2005, A sociological perspective on gender and career outcomes, *Journal of Economic Perspectives*, Volume 19, Number 1, Winter 2005, pp. 71-86.
Available:
http://www.northeastern.edu/womensstudies/graduate/courses/course_material/men_women_social/documents/Reskin_Soc_Perspectives.pdf
Retrieved: 05.03.2012

APPENDICES

Interview Questions – ENTRY BARRIERS PRIOR TO EDUCATION/ LABOUR MARKET

Name:

Birth date:

Gender: female

Start of studies, approx. End of studies:

University:

STARTING OUT

- Why did you choose to become a cinematographer?
- Why did u choose to study at the school where you are studying at the moment? What other schools were you applying at?
- Is your family and friends supporting you and your choice of becoming a cinematographer? How are they supporting you? (ideologically, financially, mentally)
- What did you know/think about cinematography before you started studying it?

OBSTACLES

- What are the challenges you are facing at the moment? Which challenges did you master?
- Do you feel that the profession of cinematography is technically and physically demanding?
- What could make it more difficult to become a cinematographer for women than for men?
- Is this profession more suitable for men or women and can you see a difference between female and male cinematography work?
- Have you ever regretted to become a cinematographer?
- How do you think the job as a cinematographer affects one's family life? (long times away from home, irregular working hours and income, uncertain future)
- Do you have a female idol which inspires or motivates you in anyway?

EDUCATION

- Is there a fair division between males and females? Do you feel the number of male students compared to female ones is fair?
- What is your personal opinion about the training process? What has been the most important thing?
- Do you think your studies prepare you for any aspect of the profession including working on your own?
- Does school prepare you in a good way to stand alone in the real world?
- Does school give you a realistic picture of the business?
- Have you ever been treated differently in school because of your gender?
- Have your teachers in school discussed about the Finnish film history and the female cinematographers?
- What do you think about the internship? Does school help you out?
- What moment would you see yourself as an important thing to see yourself as a successful cinematographer?

WORKING LIFE

- Do you have any experience in the Finnish film industry? What kind of picture did you get from that experience?
- What genre would you like to work in?
- What can you do in order to stand out against male cinematographers?
- Are you up to the task to compete against all the male cinematographers?
- What are your goals/ plans for your professional career?

