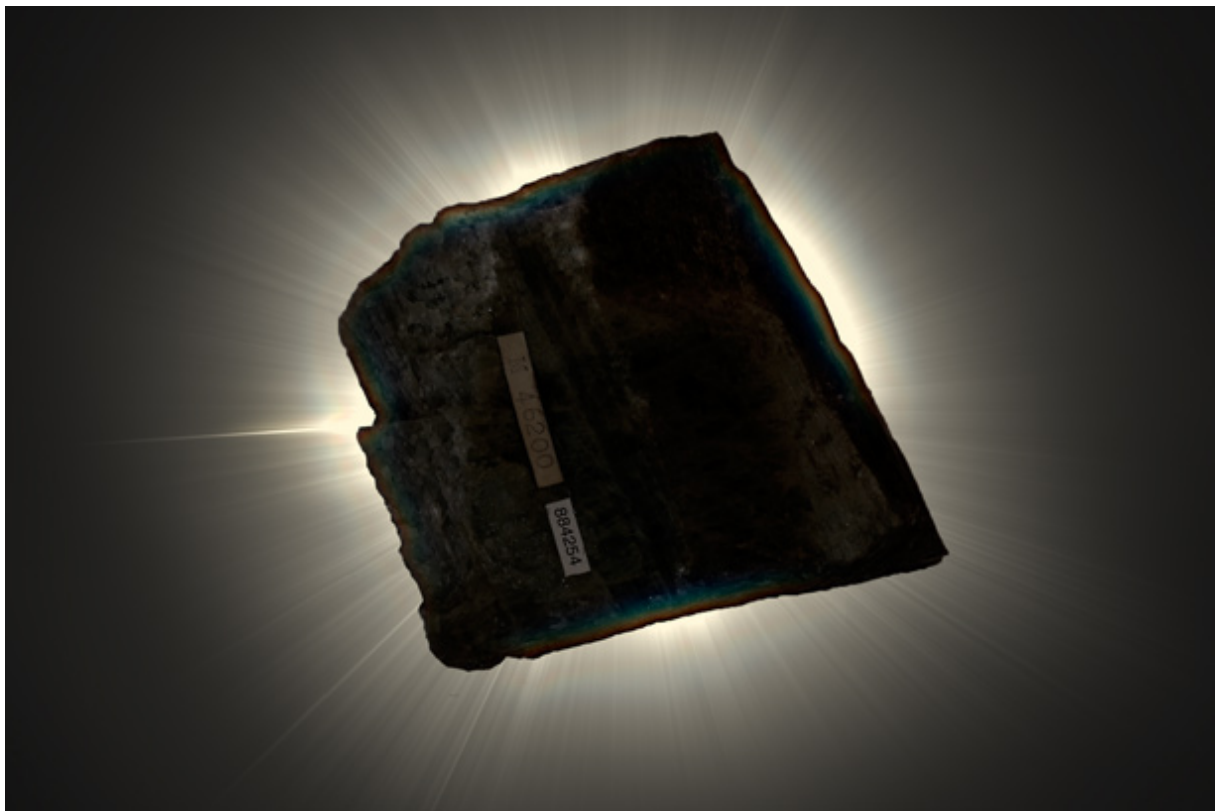


## OUTSOURCING ANIMATION

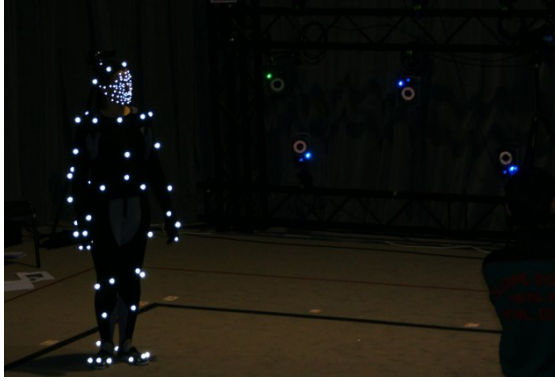
Reflections on the artistic and ecological problems with the outsourcing logic and industrial production of animation in a free trade market. From the Chronocyclograph via Disney picket line to the vfx diaspora of Hollywood.

As a teacher, animator, artist I've been thinking more and more about how work is organized. I believe that how we make art is a big part of what the artwork turns out to be. Production modes will reflect on what stories and ideas become made. The digital image often seem as immaterial zeroes and ones. Images of fantasy dragons & sci-fi kingdoms are smoothly streamed right into our livingroom flatscreens. All material aspects become invisible here. In my project *Boulder Eclips* I wanted to make them visible. I decided to portray the minerals that the electronics I use, are made from. From the cameras & computer to projectors and screens, and at the same time tell the story of the workers in the mines extracting these minerals. For example Columbite is used for components in video cameras. 64% of the world's Columbite assets are located in Congo. It is mined by children and workers under the leadership of the rebel groups who in their turn sell it to international companies such as Cabot Corporation & OM Group. But also the process of refining these minerals into digital dragons takes a lot of hard physical work.



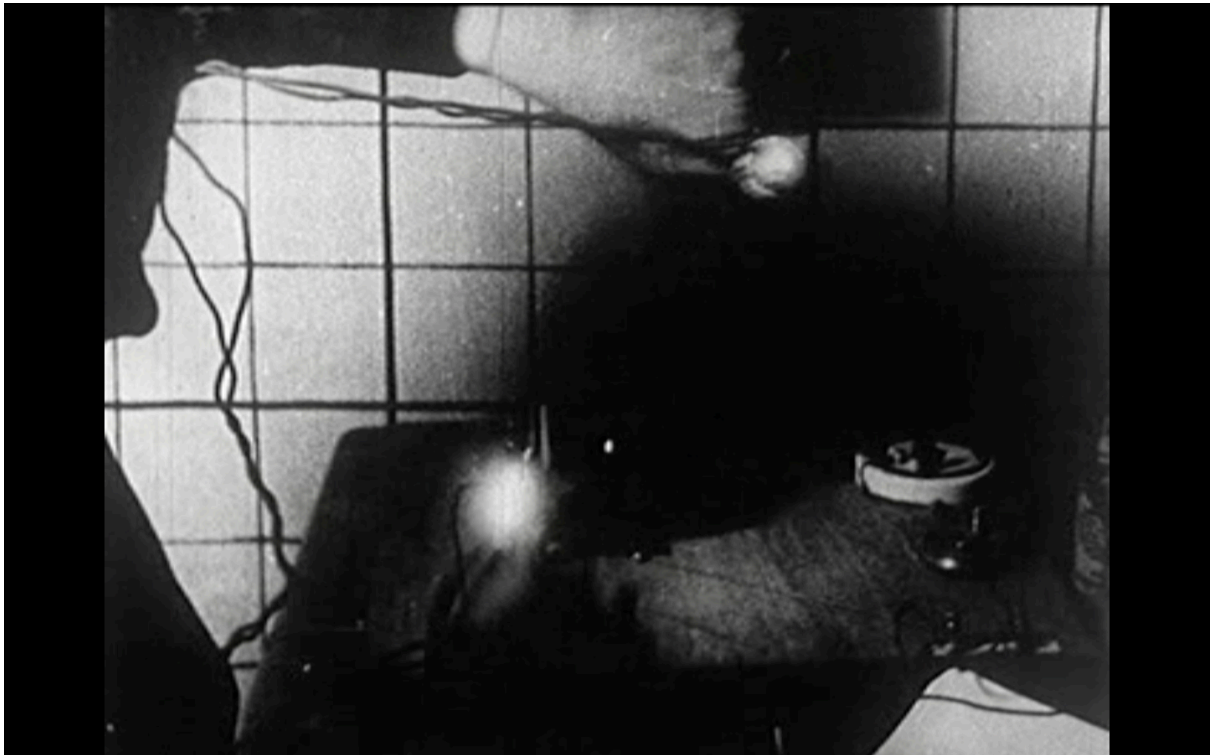
*Videostill, Boulder Eclips, 2010, Lina Persson*

Motion capture is a cornerstone in the production of digital moving images. It is a animation technology where you record movements in bodies that is later applied to 3d modelled characters. This process can cut cost & effectivise production by automating the animation process and outsourcing the labor.



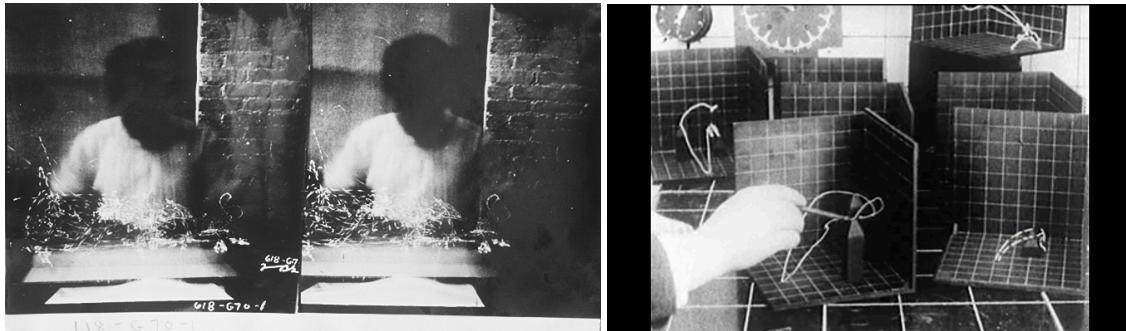
*Motioncapture actor*

The predecessor of motion capture, the chronocyclograph was developed by Frank & Lilian Gilbreth in 1913, hundred years ago. A camera connected to a large number of light bulbs. These lights could be distributed on a body performing a movement. The purpose was to study the workers movements at the assembly lines in factories.



*Time study by Frank & Lilian Gilbreth*

Gilbreth's studies of movements was combined with Fredrick Taylors time study and resulted in the business efficiency technique "time – motion study". The time-motion study was a foundation in Taylorism. The purpose was economic efficiency, to centralise and specialize every part of the production according to scientific studies.



*Time study by Gilbreth*

the aim was to develop standards for everyone to follow. A ideal movement would be without any unnecessary hesitation or detour, exactly repeating the the most efficient version of the operation, lika a machine or a loop. Also animation was made at a assembly line. (bild)



*Funny little bunnies, Disney, 193?*

In animation production the use of repetetive loops also make it into the films. In early disney films there are many examples of where the whole story circles around this idea to effectivise and recycle the labourexensive animations. In *Funny little bunnies* the universe of the film is one single assembly line.

But the workers were not content with Taylorism. They resented being confined in repetitive loops, alianated from the result of their work, resented being monitored, surveilled and controlled in every body movement. They felt treated like machines who hadnt intellegence enough to figure out their own movements. The labour movement grew stronger. Workers protest, strike and form unions.



*Protest sign, 1938*

For the animation workers in the US, the screen cartoonist's guild was founded in the in 1938. Art Babbitt was one of the animators at Disney that supported fair wages for the animators. When he was fired due to his protests the whole disney studio went on strike.



*Art Babbitt*

This was in the middle of the production of *Dumbo* in which we can recognise some of the striking workers portrayed as clowns that wants to "hit the big boss for a raise". In the end, a deal was signed in the workers favour.

*Oh, we're gonna hit the Big Boss for a raise!*  
*Yeah, we're gonna hit the Big Boss for a raise!*  
*Oh, we're gonna get more money, 'cause we know that we're funny*  
*Oh, we're gonna hit the Big Boss for a raise!*



*Film stills, Dumbo, Disney, 19??*

But in the 1980's the free trade market started developing. It allowed multinational companies to move around their production in the world in order to cut costs for wages. If workers are to demanding in one place a company could move its production elsewhere.

The freetrade market has had effects on every industry. In animation there are many examples. The hollywood vfx industry has created a diaspora of migrant workers with nonexistent job security. They work 60- 120 hours a week, without getting paid overtime.<sup>1</sup> Even though 47 of the top 50 films of all time are visual effects-driven and billions of dollars of profits are generated



yearly, the artists who create the effects describe their work as sweatshops, with inhuman schedules and without health insurance or pensions. (April 2012 Richard Verrier).

In internet forums vfx workers blame themselves for not making more demands and organizing in unions and in 2012 the International Alliance of Theatrical Stage Employees started attempts to unionize the vfx industry.



*Filmposter Life of Pi & protesters outside the oscars 2013*

In 2013 *Life of Pi* got an oscar for best visual effects. Outside the Oscars american Vfx workers rally for a fair share of the profit.<sup>ii</sup>

But at the same time the company Rythm & Hues Studios, who had provided the effects was forced to file for bankruptcy. Now American and european vfx companies lay off workers and close down because they cant place the lowest bid, in spite of preassured wages for the workers. Now when workers in the west won't push their work efficiency further the labour of animation is exported to countries with lower standards for wages and workers rights. Global digital pipelines are used to farm out labor-intensive work to asia, where labor costs are as much as 60% lower. In a Simpsons couch gag artist Banksey comments on animators working conditions in this kind of outsourced production.



*Filmstills, Simpsons couch gag, Banksey*

A country where most profit can be made is a country where wages are low, trade unions are suppressed, and the state willing to spend its funds on infrastructure projects that ensure that the factories can run non stop & that goods can be shipped off.<sup>iii</sup> The profit from the digital imagery is generated on behalf of workers bodies and their environment.

In this essay I wanted to reflect on ecological sustainability through examples from the animation field. I wanted to trace the ecological impact of current production modes in the animation industry. I see three mainpoints:

1. Overworked people (That causes wasteful consumption)
2. Jobsecurity & democratic rights (The lack of it leads to sacrificing the environment)
3. Profitmaximized industry – (leads to lack of diverse & challenging perspectives in films)

1

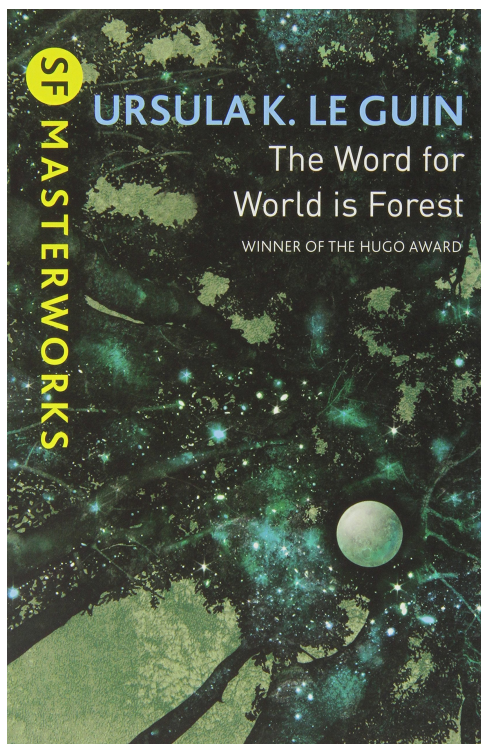
Overworked people cause more emissions. They are too busy and tired to engage in lowconsumption activities like gardening and cooking and they have to rely more on wasteful consumption to fix the everydaypussle. Many researchers hav studied the climate benefits of working less. *”John Stutz, a senior fellow at the Boston-based Tellus Institute, envisions that “hours of paid work and income could converge worldwide at substantially lower levels than is seen in the developed countries today.” If countries aimed for somewhere around three to four days a week, introduced gradually over a period of decades, he argues, it could offset much of the emissions growth projected through 2030 while improving quality of life.”*<sup>iv</sup>

2

Job security & democratic rights are inevetable for standing up for ones environment. Exploited workers leads to an exploited environment. In free trade global capitalism where companies can leave as soon as workers starts to make demands, jobs will be offered on behalf of clean air and water<sup>v</sup>. If workers had other options they would not sacrifice health and environment to rely on these companies to make a living.

3

A profitmaximized industry takes no chances. Only stories that attract broad audiences and doesn’t challenge the current view on things is a safe investment. But to change the development of the ecological crisis we definately need to challenge the current view. Bola Agbaje talks<sup>vi</sup> about how she could make a playwright with majority of black characters but when making a film about it she was questioned whether that would be attractive to a broader audience. She had to move beyond the regular production patterns and instead explore web-formats and interacting with audiences etc. The narrowness of diversity in filmidustry does not only deny stories with critical race perspectives but also alternative views on our environment and humans relationships to it.



*Avatar* for example, very similar in plot to Ursula Le Guin's novel *The Word for World Is Forest* but with one big difference. In the novel the indigenous people also revolt against colonisers seeking to exploit their environment, but it doesn't end there in a success as in the film. In Le Guin's version the innocence has been lost, the knowledge of colonisers' violence can't be undone, the world has changed and the book leaves us with an open ending. But in *Avatar* the conventional Hollywood dramaturgy closes the story in a less complex understanding.

From an artistic perspective my main interest is in the third point. The question I want to investigate further is: How can the animation practice be a way to explore our relation to our environment and learn something new about it, as a valuable experience rather than a outsourcable cost?

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<sup>i</sup> More Than Digital Makeup: The Visual Effects Industry as Hollywood Diaspora  
By Sarah K. Hellström

<sup>ii</sup> Generating stunning visual effects, but not enough revenue, March 24, 2013 | By Richard Verrier, Los Angeles Times

<sup>iii</sup> Klein, N, 2014, this changes everything, Random house, Canada p. 71

<sup>iv</sup> Klein, N, 2014, this changes everything, Random house, Canada p. 82

<sup>v</sup> Klein, N, 2014, this changes everything, Random house, Canada p

<sup>vi</sup> Bola Agbaje, filmrummet: full tackning, september 2015 <http://www.filminstitutet.se/sv/se-och-samtala-om-film/filmrummet/evenemang/evenemang/full-tackning/>