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Supervisor: Onno Schilstra

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SOLVE ET COAGULA
The Alchemy of Early Cinema

Erlend Evensen

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Preface

In this thesis I want to investigate two fields that have consumed my interest increasingly over the years. One being cinema, the other alchemy. I got hooked on cinema from about age 4, as a child I was watching star wars and Chaplin religiously and from a young age started doing my own filmmaking experiments using stop-motion and toys. It became as important to me as the illusion of the scene to learn about the behind the scenes stuff, the “man behind the curtain” as it were. At this young age I developed an interest in strange films, b-movies, campy sci-fi and the like. But there was always something about the very early films, 30s *Frankenstein* and 20s German expressionism that especially tickled my fancy. It’s hard to name it exactly, but there’s an elusive strange dreamlike quality in these films that attract me greatly, they may seem simple or primitive compared to the sophistication of films today. An atmosphere, very surreal and dreamlike almost like they are dug up relics from some rotting dead persons unconscious. I discovered at one point that these films share something fundamental. The creation of the film is not just the desire to tell a story, but somehow it seems an attempt at conjuring up a demon of some sort, using the tricks and opportunities of cinema to do this which in reality would be otherwise quite impossible. *The Cabinet of Dr. Caligari*, Universal's *Frankenstein* films, *Faust* and *The Golem* deal with the occult and in some way the bringing of life into dead matter, or controlling the elements is often an essential part of the story. Looking from the world inside the film screen back behind the scenes, the desire is in a sense similar.

I have been making forays into filmmaking, inspired in part by the early silent films, in shot composition and narrative, visual storytelling. Running parallel to this has been an obsession with the tradition of magic, witchcraft and cabbala, but chiefly alchemy. I found it very useful to study alchemical principles and symbols through the lens of art, and more specifically filmmaking. Watching early films, like those of Méliès, I find the presence of both alchemical ideas as well as the alchemist character, both in front of and behind the scenes. In my own practice I am now in the early stages of attempting to reinvent this old way of crafting films, somewhat more primitive and theatrical, without a clear grammar. The way of moulding material into a projected vision as well as the way of telling the story directly linked to the alchemical cycle. The way the alchemist treated dead matter and brought it back to life, or turned lead into gold if you will. Before I can hope to accomplish this step and experiment with these ideas in the doing, I thought the opportunity of writing this thesis could lay some groundwork and research. I wanted to write a highly speculative document which opens the possibilities that can hopefully inspire myself and others to see the cinemas potential in an expanded, magic sense. It is in a lot of ways a naive dream, maybe detached from reality, but one I would like to indulge in nonetheless.

I will try to use the word magic only when unable to find another, but I should make it clear that a big part of choosing to tackle this mighty subject is my base belief that alchemy and filmmaking are forms of magic which one can practice instrumentally. So running through the entire document is, I hope, an aura of magic.

There seems to currently be a new growing interest both in alchemical and witchcraft traditions, trying to rediscover their spiritual root. Witchcraft has been wrongly dismissed by the status quo due to the inquisitional trials of the church. But there's a rich tradition, going back to pagan times using knowledge of herbs in nature to heal people. Alchemists may have suffered similar ridicule wrongly, being seen as pseudo scientists, foolishly trying to make gold for personal wealth. Yet the true alchemists were never really interested in the gold itself, it was purely a proof of the process and largely trivial, the final stage in discovering the elixir of life or the philosophers stone. Maybe this attitude is what has haunted several filmmakers quest in the search for perhaps a process we now take for granted, but back then before cinema was what we know it as now and was really a very experimental fusion of theatre, magic tricks, and visual storytelling. Alchemy is a vast universe. In my own process of educating myself on the topic it opens up further and further for every new book. It is such a huge project that I am still just scratching the surface, I can therefore not attempt to give a comprehensive overview, rather some essential principles I am in the process of familiarising myself with. Carl Gustav Jung wrote on it for over 30 years, his books on the matter have been of great influence and help to me. A large part of his writing look at the christ figure as alchemical, I don't go much into this in my thesis as it would be too much. In general I have chosen to leave out much detail in favour of what I hope is a clear overview. I can not pretend to be an expert on either field, and giving a complete overview of their history would ultimately be futile, and deviate from the point. Rather I am taking myself on a journey, from which I hope to retrieve some lost knowledge which can later be used as a guide when crafting filmmaking experiments.

Erlend Evensen

Introduction

The way I have chosen to conduct this work is by looking at the topics at hand, first separately then in relation to each other. This relationship between separation and conjunction, or coagulation is key in alchemy as we will see. You could therefore see the process of alchemy in both the obvious research and investigations, as well as the entire thesis itself being such a process.

I want to begin by looking at alchemy on it's own, and then briefly get a basic grip on what cinema is, as it was first invented. Then look for alchemy in cinemas methods as well as narratives of the early films. The final conclusive part will take all this gained knowledge to the next level as a scene from a script I am working on.

The world of Alchemy is closely linked with myths of old and consists of countless symbols, I will try to get a grip on some of the most important ones, and see what they mean both in theory and in practice. When I say theory I mean rather the esoteric element. I want to similarly get a basic understanding of the practice, painting the big picture first and foremost, as sources vary in details.

The cinema part is both telling the story of how we came to craft moving images and how we would start applying meanings and narratives following these inventions. I will look at which elements that together build up a film and look into their deeper meaning, with focus on early silent films. Although I don't think silent films are "better" than later cinema, I want to limit myself to this era as it displays cinemas basic tools, as they were invented/introduced. Also being roughly 100+ years ago the whole practice has an ancient vibe, much like alchemy, which I want to rediscover with fresh eyes. After all we see these films very differently than they did when they were new.

I will then attack the idea of combining these two vast practices from multiple perspectives; Firstly, what do they share in the doing, the actual practice? Then I will look for symbols, characters and ideas that I feel in some ways relate to alchemy in the content of some silent films.

What is the ultimate gold of the thesis?

Finding out if alchemy has any spiritual or methodical value through the lens of the film camera.

Figuring out if my association of the two have any basis in history. You could say my strong interest in the two fields is not coincidental, and finding it on direct levels may help in seeing them both differently, alchemy as an ancestor of cinema. The hopefully gained knowledge or insight of this research can serve as groundwork for a new way of filmmaking, which I am determined to do. This is why I decided to end my work not with a traditional conclusion, but stepping in the direction of filmmaking practice by bringing as many of the ideas and archetypes possible into a script.

The script being a dreamscape which shall guide the process of filmmaking as I set out to further experiment in the field.

Part 1

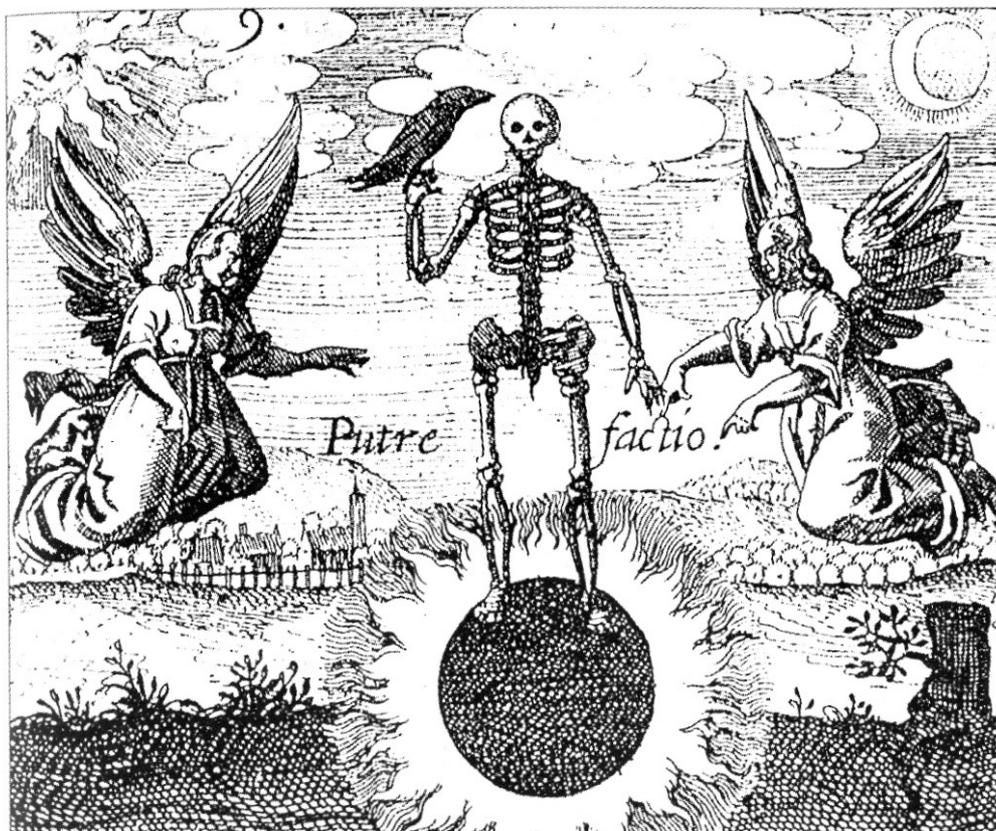
THE PRINCIPLES OF ALCHEMY

What is alchemy? The more I study it, the more complex it seems to become. Turning lead into gold is the first thought most will get in their head when they hear the word *alchemy*. This is a very complex operation on many levels that entails extraordinary precision, but who's chief value is symbolic or allegorical. As with any discipline, there were great minds who traveled the depths with higher intentions than fame and glory, and on the other hand those who wanted just that. Those "alchemists" who wanted to get rich by making gold, cheating as it were for a quick buck, we call *puffers*. In Dutch golden age genre painting these simple minded opportunists are often portrayed as money hungry fools, with shabby workshops and generally no clue. Maybe this archetypical image of the puffer has formed many peoples view of Alchemy. True alchemists had no concern with money or glory as that belongs to the ego, which should be burned in the very beginning of the transmutation process.



When we talk about alchemy today there seems to be a division between two schools of thought. On one hand we find the rationalist claiming it the father of chemistry and as only something of a pseudoscience, the relic of an older time. That it has since the age of enlightenment been proven wrong, yet laid the fundamental groundwork for what was to come. Professor Lawrence Principe has written extensively on alchemy trying to demystify it, as a contemporary chemist working in this field and someone who sees potential in the study of alchemy he is a great source¹. On the other pole of this spectrum we find the esoteric view, seeing alchemy chiefly as a practice of the alchemists own spiritual development. Dennis William Hauck has written extensively on this form of alchemy and has both studied ancient texts and practiced the work. A functional and spiritual approach. From what I have gathered both of these views, rationalist and esoteric, are in some ways true.

The Alchemist wants no less than to conquer the world, the world is both material *and* spirit, which are always in a dance with each other. The alchemical tradition was always shrouded in paradoxes, riddles and mysteries. Its root in the material world and interest in moulding the elements link it to chemistry, but the mythological and symbolic images it uses to illustrate the ideas, and the link to the divine world put it in an entirely different place.



The black sun of putrefaction
Johann Daniel Mylius, *Philosophia reformata* (1622)

¹ *The Secrets of Alchemy*, Lawrence M. Principe, University of Chicago Press, 2012

Chemistry or Magic?

The word magic is problematic these days as it has taken on such a vast amount of meanings, there is no longer a solid definition of *magic* in the collective unconscious. People can refer to a magic evening, and magic shows on stage with rabbits coming out of hats. These uses are not wrong and do connect in some way to the terms initial more stable origins. In medieval times magic was more pragmatic and commonly accepted as real, it was practiced by alchemists and witches alike. It has had peaks of popularity such as 16th century and a popular revival in the late 19th century. We cannot look at ancient documents on the field today without acknowledging the way in which it was filtered through these periods, for better or for worse. Ultimately every part of history has dealt with magic in one way or another. My best definition of magic is; *To be in such control of the things which build up life that one is able to manipulate them to ones own liking*. This goes right along with my definition of alchemists. Therefore we can refer to the majority of alchemists as *practicing magicians*.

But let's backtrack a bit. The essential idea which runs through alchemy in all of its right and wrong misunderstandings is that everything we see and which builds the living world is material elements. From the earth we walk on to the stars we see at night, it's all built with material. And in it the energy or spirit which animates it. Our own invisible life-force what we would later come to call consciousness, *The ghost in the machine*.

Transmutation is both the idea that all material has some common elements and can transform into each other with the right agent; The philosophers stone, *Lapis* in latin. The Alchemist who could create the stone would have the mighty power in his hand to transform with it, any base metal into gold when heated in a furnace or crucible. On a more philosophical note this fundamental idea is also stating that you are not just who you think you are. You come from somewhere bigger than yourself, and that fabric exists within you, rather than being stationary and static, we are soft beings with the inner potential to change into other beings than who we think we are now. The philosophers stone, represents the knowledge which can function as catalyst for this change.

Two key phrases sum up the basic ideas. The first is in latin *Solve et coagula* (dissolve and coagulate). This is the idea of breaking down reality to its most basic compounds, and then piecing it back together again, hopefully with a gained insight. Unlike its relatives philosophy and Religion, this is rather a method of understanding the fundamentals of existence by actually looking at its physical material and being its master by the ability to manipulate it in the right ways, a hugely ambitious task. Back in medieval times science and magic were somewhat the same, and in this strange land the art of alchemy exists. Similarly to Cartesian dualism which separates existence into body and spirit. Alchemy argues that there is not one without the other and in order to gain the insight of spirit is through its physical manifestation, the way in which we can experience higher states of being and spirit is through our bodily "cage". Another maxim very central to alchemy is the hermetic saying *as above, so below*. This is the idea that what happens in the highest heavens is in direct relation to the lowest level of earth, or what happens in the bacterial or atomic realm is directly linked to what happens in the stars and galaxies, micro and macrocosmos, everything in between exists and lives by the same energy.

A Brief History of Alchemy

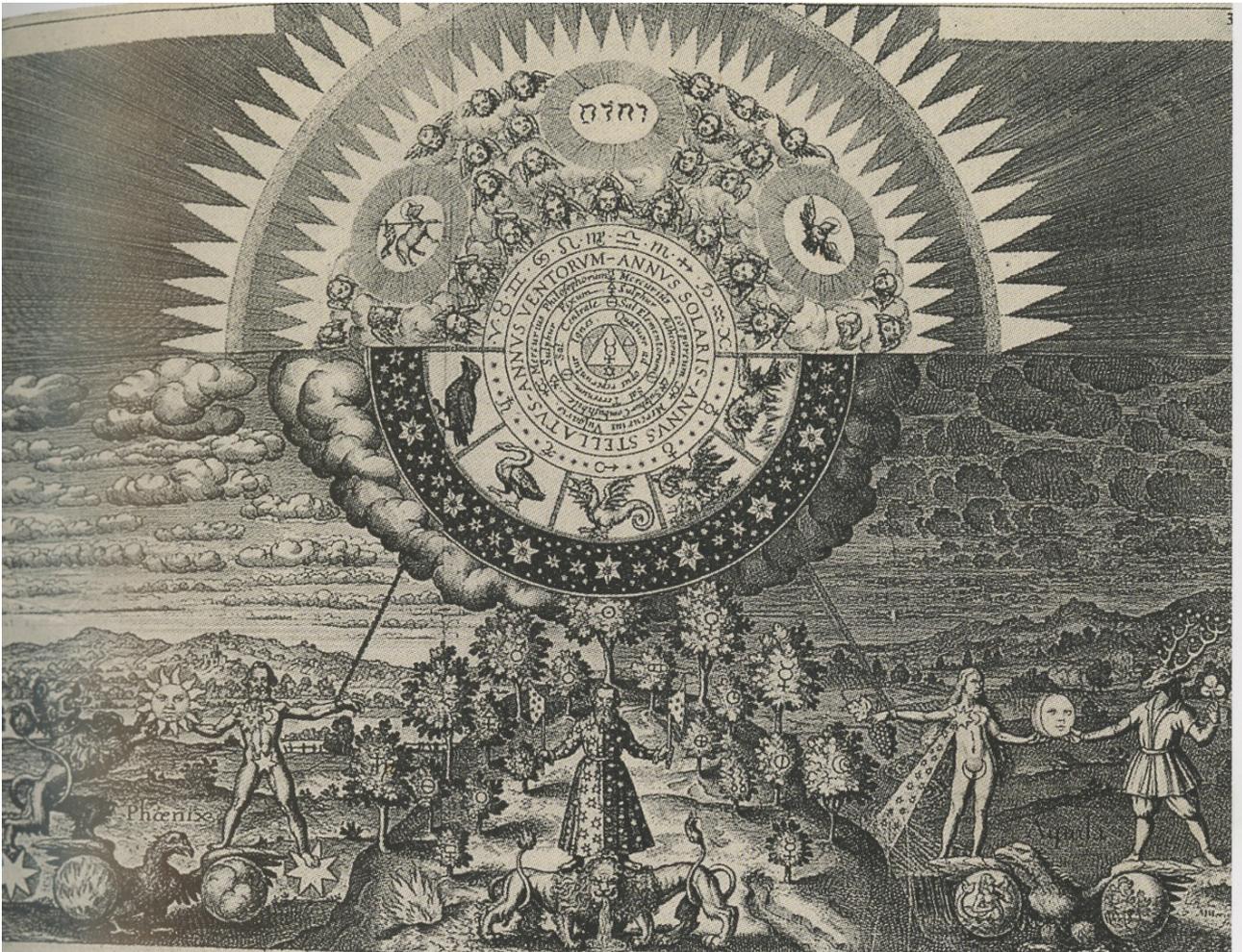
In Europe Alchemy had its heyday in late Medieval times. That is when there existed a huge culture around it, although it was often considered a crime and was therefore surrounded by secrecy.

Alchemy can however be traced back much further, to ancient Egypt and *Akhenaten*, the husband of Nefertiti.

The sacred knowledge which paves the way for alchemical teachings is derived from the hermetic document *The Emerald Tablet* (Latin *Tabulus Smaragdina*). Like everything else we will look at in this chapter, it's full of mysteries and its true origins are unknown. Some will even claim it comes from Atlantis. Hermes Trismegistus (Hermes the "three times great") is the supposed author of these magic documents, *The Hermetic Corpus*, which laid the foundations for hermeticism and several occult arts including alchemy and Astrology. This mysterious Hermes character is a combination of Greek and Egyptian mythology. The Egyptian god of magic, writing, wisdom and the moon; *Thot* and the winged messenger *Hermes* from Greek.

This document was lost for ages along with the writings of Plato and Aristotle, and would only be retrieved from Syria in medieval times during the crusades. Much of what was written on Alchemy was lost in the burning of the Alexandria library.

Just like with witchcraft, at the peak of its popularity in the middle ages, alchemy was considered heresy. The fundamental idea of equality and of a different kind of god energy than that of the church would make any practitioner burned at the stake. It invokes images of black magic, demons and the satanic, and although it is only one aspect of alchemy, these associations are not without reason. Unlike many other spiritual practices, alchemy welcomed the dark, twisted and ugly, its role in the grand cosmical balance being inevitable. Witches were often burned on accounts of pure gossip from the church, in reality probably because the patriarchal repressive Catholic church feared any woman of strong power and knowledge over herbs and other natural healing methods. A lot of stories were falsely implanted to get women killed, who were in fact doing natural healing work. Similarly Alchemists were trying to get to the truth of natural material and its spiritual counterparts, to avoid being persecuted and burned for heresy, much of the alchemical practice was performed in strict secrecy. And similarly for this reason the line of work was confused with being more scientific than spiritual as a cover up of sorts. Many alchemical illustrations are riddled with paradoxes and Christian iconography, this was partially to be on good terms with the church. It should also be mentioned that a large part of the criminalisation was in how the value of gold coins gave enormous status and power to the king, which was not to be tampered with. In the year 1317 Pope John XXII issued a decree against the practice of Alchemy, on the foundations of counterfitting. It was seen as wrong and opportunistic selling fake gold to the poor. On the other hand many kings and emperors, such as the Hapsburg emperor Rudolf II of Prague, were positive towards alchemists, hoping to get the elixir of eternal life, they would finance large amounts of the work.



An engraving illustrating the emerald tablet by Mattheus Merian for Johann Daniel Mylius' *Medico-Chymicum* (1618)

The lower left illustrates the masculine, rational daylight (sol). To the right the feminine, intuitive, lunar night. The alchemist stands right in the middle and above him the way to the spiritual realm in its many levels. The mandala has a clear axis which divides the above divine realm and natural realm below. The seven trees surrounding him bear the symbols of the planets/metals.

The first area encountered as the alchemist travels along this vertical axis is a Ring of Stars in which seven larger stars predominate. This stellar ring presents the seven alchemical operations as cosmic principles available to sentient species everywhere. It is followed by a semicircle of five scenes that lead to the Quintessence. This register of alchemical accomplishments is known as the Ring of Planets, and each scene depicts the bird of spirit associated with one of the five planetary bodies. From left to right: the Black Crow of Calcination (Saturn), the White Goose of Dissolution (Jupiter), the Rooster of Conjunction (Earth), the Pelican of Distillation (Venus), and finally, the Phoenix of Coagulation (Sun).²

²*The Emerald Tablet*, Dennis William Hauck, Penguin, 1999

The alchemical goal/mission

“The belief that nature can be imitated became one of the fundamental theories of alchemy, summed up in the maxim that “the most natural and most perfect work is to create that which is like itself”³

In large part this practice is about penetrating the cosmic order. Things exist in a certain order which most take for granted, day and night, feminine and masculine, life and death, by bringing these together the alchemist hopes to fulfil a philosophical birth, resulting in the creation of the stone.

Another side of this dominance over the elements was conquering death and merging the masculine and the feminine.

These days I find it extremely hard to get a clear grasp on Alchemy, but there are certain constants that go through all the different interpretations. Lead, considered the darkest, heaviest metal directly linked to Saturn and gold being a symbol of perfection and the sun. Silver the moon. To perform the alchemical operation requires going through 12 very delicate processes. More commonly referred to are the 7 steps which first breaks the material down to the black and dead matter. Then infusing the dead substance’s potential with new life, resulting in the creation of first gold, as a new dawn, then of the philosophers stone (*Lapis Philosophorum*). An agent which could transform any metal or substance into gold. The quintessence (fifth element) represents the knowledge that can manipulate all other elements.

The idea of finding the first building block of life goes way back to the pre-socratic philosophers, like Parmenides and Democritus. The natural philosophy which allows alchemy to exist is the old idea of the four elements:



Fire, water, air and earth.

Famously championed by Aristotle, the idea of the four elements was first presented by the pre-socratic philosopher Empedocles. One can not stress these elements importance enough. The entire world is built from these qualities; Hot, Cold, wet and dry. They can also of course both symbiotically create and neutralise each other, earth and water creating soil, air lets fire breathe and dance. Their separate existence is philosophical, as they can only exist in proximity to one another. The general idea was that all material consists of these four qualities in various doses. *Aether* was in medieval philosophy thought to be the fifth element, or the quintessence. The fifth element had in it the potential for all the other elements to exist, the philosophers stone was to alchemists a manifestation of this power. The pentagram (five pointed star pointing upwards towards the heaven is symbolising this higher knowledge).

The Alchemist wanted total control over the elements, but as a human trapped in the human body, part of this control also entails the dominance over ones own consciousness and ego. Therefore the true alchemist would perform all kinds of chemical experiments in his laboratory which all would directly link to work on himself. It is mainly this element that separated its practice from modern science, chemistry and physics which are only concerned with empirical facts and knowledge.

³ *The Black Arts*, Richard Cavendish, Pan, 1967

We have now developed incredibly precise forms of testing. But for the alchemist these materials were only one part of a unity between mind (spirit), soul and body. Carl Gustav Jung wrote extensively on this in the 1930s. He found in the alchemical processes direct links to the steps of psychoanalysis.

Alchemists were practicing chemical experiments and derived from natural philosophy with spiritual intensions. What happens *above* happens *below* as well; Altering the chemical properties of the elements is therefore linked to the stars and planets as well as the alchemists inner universe, his psychology.

The symbols

Jung developed an interest in the field when finding himself and his psychological patients describing alchemical symbols from their dreams. It was a next step in uncovering what he thought was the collective unconscious, which penetrates both time and space. Where does it come from?

Alchemy is just like all magic largely symbolic. Every gesture and element is loaded with symbolism. These symbols can represent parts of the process, material properties and mythological characters. In ancient alchemy you had to believe that the 7 visible planets were directly linked both to the material properties of the metals and the archetypical gods. They would usually refer to the gods with their roman names, just as the planets as we know them today. The planets are linked with the archetypes in the zodiac wheel of astrology.



Saturn the god and planet was represented by the metal lead. Cold, heavy and malleable. Lead is highly poisonous and has negative connotations. In medieval times when someone suffered from Melancholia or depression, it was believed they had too much lead or black bile in their intestines. Saturn is often called the father of time. Just like the metal he was cold and heavy, very moody and melancholic. Concerned heavily with matters of the earth, materialism, and a desire to rule all others. This is the paranoia that led him to devour his own children as soon as they were born, aware of a prophecy that he would be overthrown by his son. After he had eaten several of his children, his wife Rhea gave him a stone which she claimed to be Jupiter to prevent this devouring just after his birth. Saturn ate the stone thinking he ate Jupiter.



Tin represented Jupiter, the character of Jupiter or Zeus. The quintessential Patriarch and the king of all gods. Masculine ruler and leader, but also just as god in Abrahamic religions he is an opportunist and user of people. The planet of Jupiter being the biggest is logical in this mindset, as it is the grand leader, but in fact just as tin is a frail and weak metal only impressive on the surface, so the planet is mostly hydrogen and helium inside and lacking in much depth. It is fascinating that astronomy has confirmed this later, that Jupiter is the biggest, but full of gas. Saturn and Jupiter both are attaining mass in the hopes of becoming stars, or suns. Scientifically they are our solar systems *gas giants*.



Iron was the metal of Mars, the red planet and god of war. The red of Mars represents a fiery aggressive energy, and is the planet most like earth. Iron, and later steel has been essential for human development. But this connection to Mars is also in large part seen in how iron has been used for weapons and warfare. In alchemy this energy is a good thing

as catalyst but is not a stage one should remain in, new agers will argue that to heal the earth we must overcome the iron age.



Venus is the goddess of love, and was the metal of copper. Sometimes called the “whore of the metals” due to it getting along well with most other metals, such as iron naturally (Mars and Venus). Copper is often crucial in alloys, such as brass and bronze.



Mercury was the roman name for Hermes, the messenger of the gods. The element of mercury, or quicksilver, was thought to have a similar role as a messenger, something which could bring together all kinds of opposing forces. As it was both a metal and liquid it was though to have a dual nature, and an ability to reconcile separate parts. Therefore mercury was extraordinarily important to alchemist, often illustrated as a hermaphrodite, indicating this impossible duality of being which was fundamental to alchemists. The rational light of masculinity was in perfect equality to the dark intuition of femininity, alchemist believed that once they were one, and through performing transmutations they could be brought together again. It was also crucial therefore that the alchemist needed to encompass all these qualities within himself.

Mercury stood for the possibility or potential, which is the source of alchemical transformation. The nature of mercury, as a substance is someone easy to mediate. The Hermes or Mercury archetype as the messenger between the world of men and world of gods make him a symbol for what the alchemists wanted to achieve. Newton also wrote on this likening it to the Jesus character, both human and divine.

In alchemy the 7 metals relate to the 7 classical planets, which include the sun and moon as planets, and exclude Uranus and Neptune. It is therefore problematic calling them such going by today's definition of a *planet*. The line between fantasy symbols and science become confusing at this point. But these 7 are at least the most relevant to earth.



The moon represents silver, The lunar energy is feminine and mysterious, maternal. Silver is the most reflective metal, just as the moon is the nightly reflection of the great sunlight. As it has a great sensitivity to light in addition to this reflectivity it is a key component in photochemical development, which I will look further into in the next chapter.



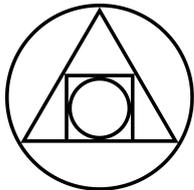
The sun is gold, shining in perfection, does not corrode and is indestructible. The one god. It is fitting that this ultimate creation is linked to the sun. Our relationship to the sun is imperial, not only is it what lights our visible world and provide us with the heat to live, but physics has even proven scientifically that the stuff of which we are made, like carbon, hydrogen and oxygen was created by dying suns. So both modern science and ancient beliefs similarly hold the sun as a power responsible for and beyond our existence. With the gold the alchemist can hold this power in his hand.



Mercury, sulphur and salt

Three crucial elements that will be brought up when discussing alchemy are Mercury, Sulphur and salt. Representing a trinity of soul, spirit and matter. The idea of mercury being the fluid spirit/intellect and sulphur the masculine, consistent soul goes way back. Sulphur was also known as *brimstone* or *the stone which burns*. It was seen as the soul within, which is constant, whereas the Mercurial spirit is in motion, like electricity. Between the fluid quicksilver/mercury and insoluble brimstone/sulphur lies a polarity symbolic of the polarity on which all things rest.

It was the eccentric Swiss alchemist Paracelsus (1493–1541) who introduced salt as symbolic of the earthly material world. We then have the trinity of masculine soul, female body or matter, and the bisexual mercury as mediator between the two. Paracelsus would label this trinity the *three primes*, *tria prima* in latin.



The Rosicrucian alchemist Michael Maier, who died in 1622, said, “*from a man and a woman make a circle, then a square, then a triangle, finally a circle and you will obtain the philosophers stone.*”⁴

⁴ *The Dark Arts*, Richard Cavendish, Pan, 1967

Alchemists were quite fond of lead in fact, despite its negative qualities, the heaviness has in it a desire for development, being the starting point in the alchemical process, lead was in fact very close to gold. The frailty and negative quality was thought to bear in it the possibility of gold, an inspiring philosophical idea.

This is a circular way of considering things, which is represented by the dragon or serpent eating its own tail, the *Ouroboros*.

Jung and Rolan note the dragon symbol as uniting the serpent with the wings of birds, making it Mercurial, a unity. Ouroboros, is a common image of the alchemical process, again mercurial in it bringing together two ends, and illustrating the cycle itself, the first step of the cycle being in direct contact with the last stage. We are dealing with a circular process, much like nature itself, things are not linear.

Jung on Ouroboros: *He symbolizes the One, who proceeds from the clash of opposites, and he therefore constitutes the secret of the prima materia which ... unquestionably stems from man's unconscious*⁵



The Great Work

The process of transmuting base metals into gold was referred to as *The great work*, or in latin *Magnum Opus*. It was in the work itself that both on the surface and spirit level would go through a magic journey. The 12 processes put forth by George Ripley in 1470 are *calcination, solution, separation, conjunction, putrefaction, coagulation, cibation, sublimation, fermentation, exaltation, multiplication and projection*.⁶

The number 12 relates the steps to the zodiac cycle,

The initial desire is to create the base matter, or *prima materia*, the first matter which all is made from. This base matter functions as a soil, in chemical terms for infusing chemical agent to give new properties to a given substance. In spiritual terms this soil is the base of all life and death which inevitably exists and must infuse and nourish the creation of new ideas. For a new idea to be born there must take place a process in which a multitude of old ideas are run through analysed and killed.

The material was not necessarily lead, but should be something worthless, there was a lot of discussion what could be used.

As with most of alchemy, there is discussion and disagreements between the exact number of steps. The most commonly referred to are 7, linking it to both the seven planets as well as the 7 chakras in eastern spirituality, which in similar manner attempt to chart the universe within and without, in its base components.

These 7 or 12 steps exist within four phases of the work:

Nigredo- The blackening, death and formation of prima materia

Albedo- The whitening, the new light, silver moon appearing in the dark night

Citrinitas- The yellowing where it turns to gold, the sun

Rubedo- The reddening, the philosophers stone, a new red dawn



⁶ *The Dark Arts*, Richard Cavendish, Pan, 1967

In order to attain the prima materia, some sort of death had to take place. The *prima materia* or *first matter* is seen as a dark and stinky substance stripped of any qualities, often symbolised by a crow. In nature death leads to rotting. When you rot you become reduced from a person with various physical and spiritual traits, into earth, a soil with potential for others to grow on. The prima materia being the first stage in the transformation process makes it incredibly important to the whole operation, many alchemists would spend their entire lives only in search of this black material. Jesus christ had to die to be reborn and arise into the light making his whole journey on earth an alchemical process. He was the prima materia, a riddling thing related to dust and shit.

The first process; *calcination*, would be turning the material into dry ash, or calcium (limestone, bone). It is the burning stage, which is heavily linked to death. The substance being worked on will burn until its body is ash and unaffected by fire. Sulphuric acid was also used, a kind of liquid fire which ate flesh and all metals but gold.⁷

On the psychoanalytic level this is the burning of the ego, before the inner transformation can take place you must let go of your ego, which is something of a death. Most people are in the calcination stage all their lives, your status and social value is dependent on it. But it also keeps you locked away from the divine self, or a cosmical connection, whatever you want to call it, it quickly sounds corny in those terms. But burning your personality away to reveal your true self is exactly what this stage tried to unlock

After calcination comes *dissolution*. This second important part of the process is closely linked with water. The element of water being essential for all life can not be denied even by science. The point of this stage is to dissolve the ash substance left by the previous death step. At this stage mercury becomes important as an agent, both the god messenger and the substance of quicksilver, or mercury. Mercurial water being of similar function chemically. This water symbolically carries the swan. *“The brightness of the swan is often erroneously mistaken for true illumination but is merely a first conscious encounter with the etheric world, which, in comparison with physical experience, is so overpowering it appears as a blinding white light.”*⁸

The bird analogy goes from black crow into white blinding light of the swan which is then fractured into the many colours of the peacock. The *Separation* stage wanted to separate the material into several components by filtering through funnels. I am not super clear exactly on this method, like fractal distillation you want to separate the chemical elements inherent in the material. The separated parts thought useless would be discarded. Left were the pure and important parts, which could be combined again in *Conjunction*. They amalgamated again into new metals. Bringing together these elements again which derived from the same source is sometimes seem as an incest. A less disturbing way to see it would be as a marriage of the day and night, sun and moon. Combining these elements puts separated ways of interpreting the world together in fuller understanding, the intellect married to the intuition, spirit to soul, mercury to sulphur.

⁷ https://www.azothalchemy.org/azoth_ritual.htm, Article by Dennis William Hauck

⁸ <https://blabelalchemy.wordpress.com/2012/07/22/five-birds-in-the-alchemy-of-tounges/> Article by

Fermentation will lead most to think of the process in which alcohol is made. When something ferments it is first allowed to rot, to die. Following this putrefaction it starts to ferment, leading to bacteria growing. Alchemists saw this as the body transforming to spirit. The stinky black matter derived from the previous steps (sometimes with a rotting agent like manure) would in this magic process open up. It's literally the most carnal body opening up to the most divine.

Distillation would follow, keeping alcohol connotations. In the lab this was performed on the Impure compound by boiling it, purifying it. Vapours go off and are then condensed to liquid again in retort. It was thought that repeating this process would keep purifying the mercurial and sulphurous substances.

Distillation is a bridging of the unconscious and the conscious, the above and below. Going from solid form to vapour, like mercurial trip from heaven to earth. This was the pelican stage, it is there to distill this experience psychologically, zooming out, back to the dark.

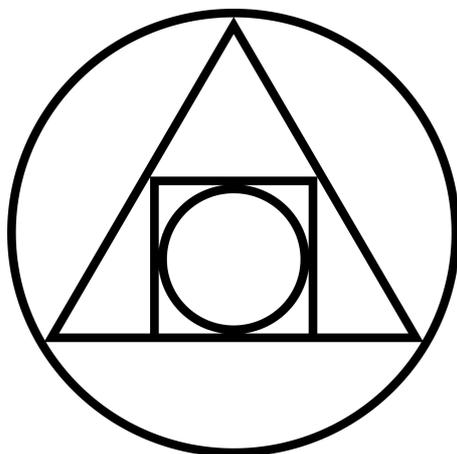
Coagulation: coagulating is bringing together all the other processes, it should fall into place if everything was done well.

The final bird was the phoenix, rising from the ashes. The ultimate symbol of this process of transformation. The element of fire runs through the whole process, in the sulphur, in actual fire and in the alchemists own persistence. When wood burns fire is released leaving ashes, the fire is the spirit and soul and the ashes the body, first matter. The phoenix rising from the ashes symbolises the alchemy its accomplishing this spiritual rebirth out of the material. The gold coming like a sun from the night.

The *lapis*, or *philosophers stone* would result from this long delicate process. It has been described as red, a "new dawn", powder-like, within it the power of any transmutation. Fusing the four elements, three primes and two opposites all into one.

The last processes were *multiplication* and *projection*. This means exercising the power of the one stone, the ability to make the one, two, three and four again. As the stone is like a matrix, there is potential for endless multiplication, infinite reproduction of silver and gold. (Again, more symbolically than literally). Projection mingles the stone with a base metal, animating first matter like the holy spirit.

The stone was also thought to be able to produce the *elixir of life*. Implying its great power transcends age and time, immortality.



The legitimacy and misunderstandings of Alchemy

There have been no solid evidence that you can transmute lead into gold, although several claims. Oftentimes there was probably cases of transmutation base metals into something with similar surface qualities as gold, but it would not stand specific modern testing, and was therefore fake gold. Robert Boyle, the father of chemistry, is claimed to have successfully transmuted lead into gold and a manuscript with his recipe survived him. Isaac Newton was as much an alchemist as scientist, and was determined to get his hands on this precious document. It is not clearly written and is like nearly all alchemical texts, shrouded in riddles and largely parabolic language.⁹

In 1980 a successful transmutation did take place; Chemist Glenn Seaborg used advanced equipment to change atoms of Bismuth into that of gold by nuclear means. Removing protons and neutrons from the bismuths atoms, did indeed end up with small pieces of gold. This experiment was ridiculously expensive, and therefore highly inefficient if valuing it on the price of gold attained in relation to the budget of the operation. But it does actually prove that this alchemical idea is technically possible using nuclear physics as a modern philosophers stone. Material is made from smaller components which can be manipulated to change the material entirely.¹⁰

It is likely because of this obvious scientific fallacy in the actual literal transformation from lead to gold that most contemporary rationalists are quick to dismiss alchemy, although no-one can refuse it's immense influence on modern science and an enormous amount of discoveries. We can thank them for alcoholic distillates to name one example, the name *spirit* is no coincidence. If one is to believe in alchemy today, this proves that one must take another stance than the "lead and the gold" purely as such, their allegorical function is of higher importance. The transformation of material by means of spiritual knowledge. One should not however dismiss the physical material work. From what I have gathered it seems one of the most important keys of alchemical work is exactly this heavy reliance on both the spiritual, esoteric plane *and* the physical manifest.

If anything is to be attained from the extensive writings of Jung on the topic it is that alchemy is mainly a spiritual or psychological practice, which is using physical means. We project metaphysical concepts onto chemical substances. Buddhist talk about enlightenment, christians about heaven, and alchemists about gold. But it is in the process the magic happens.

Since the texts and evidence are riddled and temporal paradigms prevent us from being able to fully see it impartially, we must, I think, accept that we will never get a clear grasp on Alchemy. I do admire attempts such as that of Lawrence Principe, to demystify the tradition and get a clearer understanding historically, it is especially nice that someone in the field of contemporary chemistry finds value in the old forerunner. He is trying to, by means of practice, get a clear idea of what alchemist were actually doing. It is a difficult challenge as the texts they left were of a highly metaphorical and secretive language, one can not take these cryptic texts as actual instructions. He argues that these mythological and very beautiful images can be decoded chemically. On the other hand there is no question that it was for the brightest practitioners a spiritual practice, the problem in contemporary spiritual ways of seeing alchemy lies in the inevitable level of filling in the unknown aspects with ones own or other traditions.

⁹ *The Secrets of Alchemy*, Lawrence M. Principe, University of Chicago Press, 2012

¹⁰ <https://www.thevintagenews.com/2017/12/06/glenn-seaborg-chemist-in-1980/>

Back in the day people would have great troubles learning the secrets of alchemy, having to dig up ancient manuscripts in archives. Today with the advent of the internet we can pretty much type in any concept and be overwhelmed by tons of info in just seconds. This is a wonderful thing but also I am aware of its negative aspects. The internet is a treasure trove of great knowledge and information, it is also a huge dumpster polluted with vast amounts of misinformation. It is a cluttered landscape to navigate.

As Principe notes many sources we can find today on magic, alchemy, witchcraft and the like stem from 19th century interpretations. In this time there was a huge revival of anything esoteric, which gave rise to secret societies like Crowley's *Hermetic Order of the Golden Dawn*. These are fascinating to read for us, but are often heavily romanticised and interpreted, so it should be taken with a grain of salt. Many myths and common misconceptions about magic stem from this revival. Although with any further distanced decade, interpretations and unique perspectives are bound to happen, as it always have in any mythology or storytelling.

Even Jung was in some ways creating a new wave movement of alchemy, I do appreciate it and find it useful to study this as well, but the awareness that some blanks are filled in by later thought leads me to the conclusion that in developing a taste for alchemy will include personal interpretation and applied use. I will get back to how I chose to do this in my own artistic practice in part 3.

The thing that attracts me to alchemy personally is the mysterious nature of its images, but that it, unlike many religions, also tries to explain something fundamental about the matter, as well as metaphysical concepts. The field is attempting to grasp and systematically engineer some of the vast web we call reality. It dares to tap on the universal truths.

A fundamental idea one must buy if getting into alchemical thinking is the material relation of all things, which leads to a highly associative way of thinking. Separations do not exist as such, but represent mere possibilities for change in properties and characteristics. Let's keep in mind that the gold is symbolic.

What have I learned about alchemy?

What I think stands out the most is it being misinterpreted by history and having a very unstable foundation.

Its intrinsic truths have often in some shape been proven right by later science, however much of it is utter bogus.

The idea of turning lead into gold is largely trivial, those with that as an end goal of interest can be considered con artists. Just like in cinema, the field of practicing magic has at all times been full of cons, also giving the actual sacred knowledge a bad reputation.

Part 2

ON CINEMA

*A group of people seated in the dark for an hour or two
Watching projected light with moving images running through it
The events happening on screen are real to them as they watch
They cut from long shots to faces
From day to night
Interior to exterior
Magic is taking place before their eyes
A collective dream*

The dream machine we call *cinema, films, movies, motion pictures* or whatever else is one of the largest art forms of our time. The dreamlike images of film can be seen and processed by the mind through a technical process in which light is exposed through a plastic carrier of recorded life moving at varying rates. The word *film* comes from this thin plastic carrier of images which in sequence give the illusion of captured time. When many people go to cinema they are not aware of how much work is behind it all, after all, the work should become invisible and the *illusion* or *escapism* should consume the audiences imagination.

Cinema has become industrialised and developed its own grammar over time and as most filmmakers would point out, it is still relatively young as a form. Yet when we watch films made a 100 years ago they seem truly ancient, there could be many reasons for this, primitive equipment compared to todays standards, different traditions of framing and storytelling.

The potential of cinema ranges from high artistic poetic pieces, to pure populist entertainment, escapism, documentary and propaganda. What we find when looking back through decades of history is that it has always been this way. Always a "*cheap thrill*" with commercial intentions but artistic ambitions, the greatest creators walking on a rope in-between. In this section I want to go on a journey back to the very beginning of cinema, the first moving images and look at early developments. With some key films from the early 20th century to highlight certain ideas that deal with occultist tendencies on some level. I will try to stay on track and deal mainly with the elements that make up a film, the way in which it dissects reality in its parts and uses this dead matter to infuse with a new life, a new creation of consciousness.

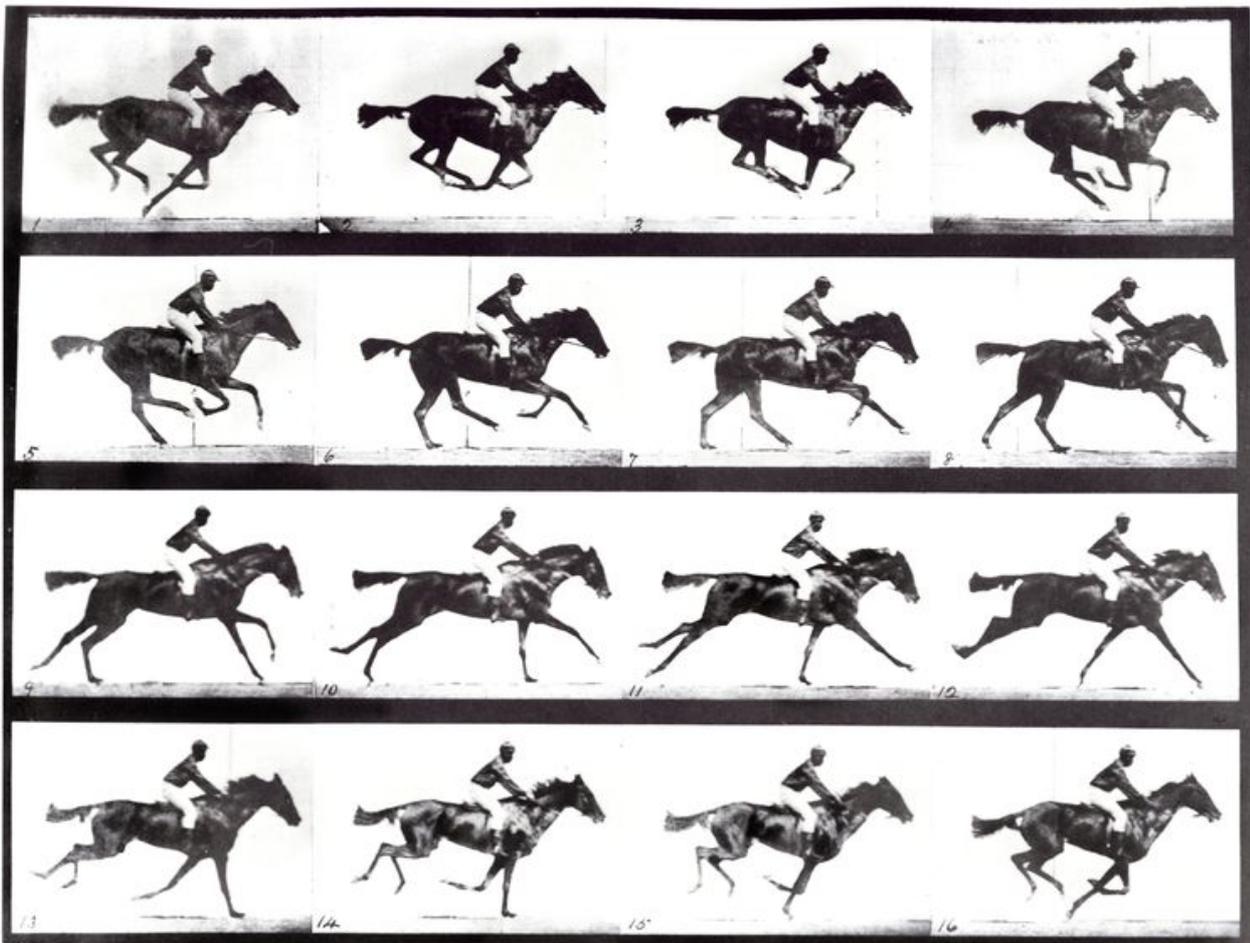
Cinema is painted with light. Light as a natural phenomena has been explained in many models and theories over the centuries. The two common models that stand today are the theory of electromagnetic lightwaves and light particles, *Photons*.

Isaac Newton wrote in his book *Opticks* (1704) on the refraction of light through prisms and lenses. He would champion the theory that light is made by particles traveling rapidly in space. In his time there was a rift between supporters of his *particles of light* and Christian Huygens' *waves of light*, which could explain refraction. Later science would evolve both theories to a point where they are both relevant; Electromagnetic waves denoting how light travels through time and space, while photons are the quantum within. As I mentioned in the previous part, Isaac Newton was an alchemist, which will surprise many people today. Looking at his legacy, he is viewed as the father of modern physics and the calculus. A hero of science. Many are unaware of his background in the occult. He represents a bridge between the magic tradition and the rationality of the enlightenment.¹¹ Looking at Newton as an alchemist, his theory of light is in a sense alchemical, turning spirit into matter.¹² Even with these models we still can not explain quite what light is, we can only measure how it operates. It is not quite a physical thing, it is our guide through the optical world.

The convex lenses described by Newton in *Opticks* are essentially using the refraction of light to project a smaller image of reality. Experiments with camera lenses were made already in the beginning of the 11th century by Arab scientists like Ibn Al-Haytham. His discoveries of the convex lenses opened up a whole world, he is also the inventor of the first pinhole camera, by making a small hole in a box the light passing through would create an upside down projection on the opposite side. Later with the advantage of lenses would the *Camera Obscura* be invented. "*Camera*" is latin for chamber, and that's precisely what this device was; a picture chamber. Light and lenses forming a perfect reflection of the optical world.

Photography in its most basic form is taking this principle in combination with light sensitive paper onto which the projected image is recorded.

¹¹ <https://www.nationalgeographic.com/news/2016/04/160404-isaac-newton-alchemy-mercury-recipe-chemistry-science/> (Article describes both how academics have taken the alchemical writings of Newton lightly, and how the alchemical methods fed the scientific methods.)



The first moving images

Funnily enough the reason the moving image was invented involved a raging debate concerning whether or not the galloping horse at any point has all four legs in the air. The American photographer Eadweard Muybridge (1830-1904) was up for the challenge and especially prepared a racetrack with cameras lined up to be released by the galloping horses legs, to release the cameras and get clear pictures he also made the first shutter mechanism. Muybridge got his desired picture showing all four hooves above the ground at the same time. But much more interestingly, he got the very first of what would be an impressive library of human and animal movements, captured minutely. Only later would he realise that the sequence of images taken in just seconds would in rapid succession give the eye the illusion of movement. This would be the template for the first moving image, although at first the movement was not to be seen. Only years later, with the invention of the zoetrope, and later the kinoscope could the human eye witness a moment in time captured. The same horse galloping then as it still does today. What sorcery! He created the quintessential archive of human and animal motion. Animators still use his archive as guide.

When writing about the origins of cinema, what is commonly referred to as the first film is the brothers Louie and Auguste Lumières 1895 film showing the arrival of a train. The story commonly goes that people were unaware of what kind of show they were to expect, and as the train on screen approached the audience it caused a riot. People fled for their lives. It sounds ridiculous by today's standard and is likely an exaggerated urban legend, (it was not even the first film the brothers screened). Nevertheless it does give us some context on the role the audience had in those early days. For people to actually for the first time be able to see life captured as if it's happening right in front of you. As we now take this process for granted, it is hard to imagine how mind blowing it must have been. Maybe one could draw comparisons to modern VR-experiences.



The Lumières developed the cinematograph to make this event happen. Edison had patented the kinetograph, the first motion picture camera, as well as the kinetoscope in which one person could through a peep-hole view the captured footage. The cinematograph was vastly superior as it could function both as camera and projector, and could project the image onto a canvas for a large audience.

People of cultural sophistication were used to going to the opera, the theatre and so on. Vaudeville shows were generally considered cheaper entertainment for lower classes. Cinemas beginnings were more of a gimmick where the possibilities of showing movement on film was enough to entertain, this in turn led to the “magic show” films of late 19th century. In it's very beginnings Cinema was largely medium for working-class audiences.



Georges Méliès

The most famous early movie director would be Georges Méliès (1861-1938), who has an enormous 500 films to his credit, of which about 200 are still available today (but lost prints are still discovered to this day, true relics). He is often called *the father of special effects*, *the father of fantasy and sci-fi*, but most importantly he is the first who took the idea of capturing images on film and used it to tell bigger narratives. Narratives were not a big part of the very early cinema, and Méliès to some extent represents the gap or transition.

It was as much a show, a magic show, vaudeville, the person on stage directly addressing the audience. His films were shot to be presented as theatre plays, with few cuts, and mostly static long shots “face on”, almost as if the actors were on stage. This lets you really take in and appreciate the fantastical tableaux he weaved on the screen.

Méliès had a background as an inventor and stage magician, he also ran his own theatre in Paris. He would first be exposed to the new invention by the Lumière brothers, *the cinematograph*, at a special event at the grand cafe. His mind was blown and he would never be the same. He offered the brothers the lucrative sum of 10 000 francs for a film-camera of his own, but they refused him, as they were protective of their invention, and also though it was just a passing fad with no future.

The Lumières brothers and the first film experiments were simply using the camera as a recording device for mundane situations, glimpses of everyday Parisian life, from the bourgeoisie picnics to workers in the factory. Méliès was the first who truly saw the potential in cinema as a form of magic where the possibilities are endless. At first this was performed in a simple way by doing magic tricks, such as the vanishing lady. Later by telling stories and taking audiences on journeys to fantastical worlds. He had his own theatre and was ridiculously prolific. His early films would be shown at his theatre once a week, with plays being performed the other days.

Méliès reconstructed the British Robert M Pauls *animatograph* into a movie camera, determined to make films of his own. There were no processing labs for cinema in Paris at the time, Méliès would buy stock in London and figure it out himself. Méliès patented the *kinetograph Robert Houdin* (named after his mentor in stage magic). Eventually he would manage to buy equipment from the Lumières and Charles Pathé.

Méliès built his studio outside Paris, all the walls and ceiling were made of glass to allow as much sunlight in as possible. There were no strong enough sources of artificial light for exposures of film at this time. He would have costume department, make huge props, background paintings and pyrotechnics. It was an entourage of artists and performers creating together, in the same environment, what would later be more and more compartmentalised as cinema developed further.

He was not coy about admitting that he was a showman first of all, and his films both behind and in front of the camera are a great deal of fun. With great simple illusionistic tricks he crafted memorable tableaux, in what is often ludicrous stories typical jolly fin-de-siècle escapism opening up the imagination.

In his huge filmography there are historical epics, political commentary films, and even so called stag films (erotic nudies). His film serial *The Dreyfus Affair* was telling the story of a man who was trialed for espionage, while the trial was still going on, it caused a riot. In the film *The Temptation of st. Anthony* he uses a biblical story as social satire. It was however his "*faeries*", which were both back then and today his most popular. This genre is the father of the sci-fi and fantasy genre, most films falling somewhere in-between, there's a touch of Jules Verne, but lighter on the science.

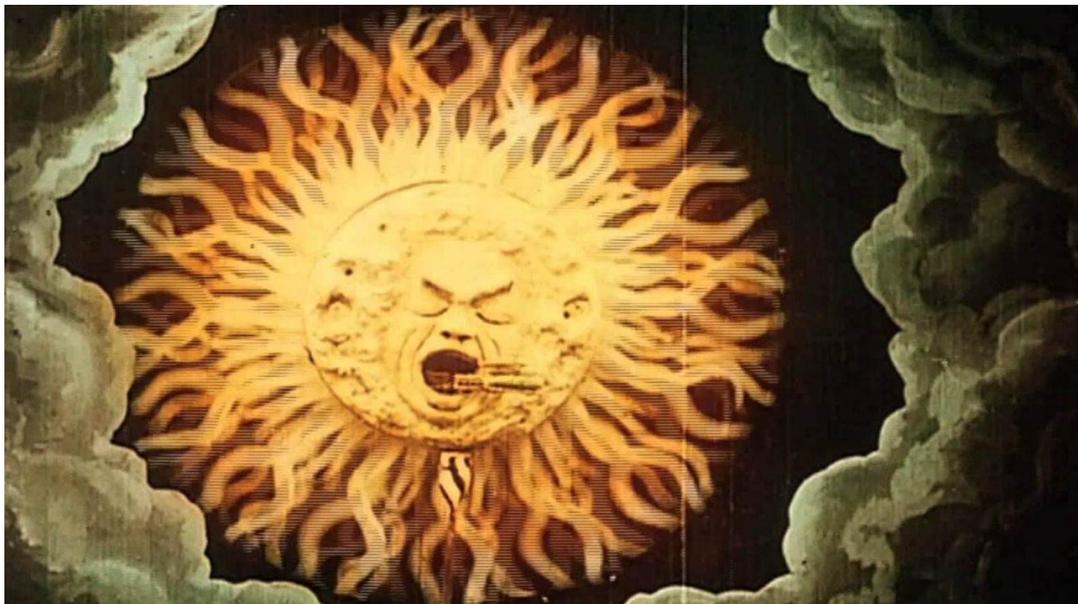
His 1902 *A Trip to the Moon* is the most famous of these, considered his magnum opus. It was a huge success on its release, and he followed it with the even more ambitious *Kingdom of the Faeries* the following year and *The Impossible Voyage* the year after that. The stories are quite similar in their basic structure. The narrative was used as a framing device for the characters going on journeys to fantastical worlds, and through them the audience. The moon, the sun, underwater kingdoms.

In a large amount of early Méliès shorts he or someone else, plays the part of the mad scientist, sometimes an alchemist like Faust or an astrologer. He also loved to play mephisto, the devil. The magician scientist is very enthusiastically gesturing the plan to make a magical expedition. Sometimes illustrated on a blackboard with primitive animation. Then a group of very enthusiastic individuals will take off in some vehicle and soon land in the magic world, almost like going on a picnic. They will then return back to earth where they started. The stories exist primarily as a tool to dazzle the audience and make use the cinemas possibility for transcending reality and going into a dreamland.

The striking images he would craft on screen are often reminiscent of medieval tarot cards or other occult illustrations, for example by giving the sun and the moon human faces, playing into the mythological and alchemical idea of personifying the body of the heavens.



The image of the rocket crashing into the eye of the moon's face might possibly be the most famous and iconic image of all cinema. It's interesting considering the moon's importance in alchemy as the reflector of the sun, just as cinema reflects the light of first hand existence. In its recording and distribution of the image happens a kind of fermentation and distillation, (I will flesh out this thought in the following chapter). Also notable is the moon and silver being synonymous in alchemy, when we see the Méliès moon it is on film being crafted by means of silver bromide, and the old canvases for projection were also being woven from a silvery fabric, hence cinema often being referred to as "the silver screen".



No matter how superficial it may be, it is clear that Méliès was aware of this parallel between the alchemy laboratory and the film laboratory, even as a magic showman, he was also an alchemist of cinematic gold.

The Impossible Voyage involves a flying train which travels through space and enters through the mouth of the morning sun's yawning face.

Despite its silliness and campy atmosphere, the production values are impressive. It is certainly reflecting a different mentality and a different time, the grand Victorian industrial machines in baroque palaces. Méliès had no limit or niche, he seems to as the inventor personality he was, want to go to as many places as possible in the cinematic playground.

“As for the scenario, the “fable”, or “tale”, I only consider it at the end. I can state that the scenario constructed in this manner has no importance, since I use it merely as a pretext for the “stage effects”, “the tricks”, or for a nicely arranged tableaux.”¹³

-Georges Méliès

Being mainly an illusionistic visual medium, cinema has always had a very strong bond in painting. One way this manifests itself in the films of Méliès is in how most of his backdrops were hand painted, a practice that in fact survived in some form till today. Unknown to most casual moviegoers, in almost any film “matte painting” or “glass painting” has been a practice used since the very beginning and still exists today, mostly digital. The matte painting is a way for the filmmaker to cheaply enhance a set or in fact show enormous scenarios without having to build more than a small piece of it. The place of action is left in the glass, while the rest of the glass is painted to perfectly blend in. Films like *Gone with the Wind* used this extensively with over 100 such paintings. Méliès would more frequently have theatre workers paint large backdrops. Hand painted backdrop on a still stage basically the size of a theatre stage. Characters will enter with a lot of life and vaudeville movements, often facing the audience between acts. Due to the fact that Méliès films were generally viewed “dead on” long shot, his sets had only to be constructed to be seen from one angle. Therefore the main concern was how the performers would integrate in the space. There are objects that will be dealt with or somehow activated with magic tricks, real props, but also foreground objects that are still or only move sideways, often cylindrical or round shapes were actually flat and only painted to look round from the camera angle. Since each shot is relatively long and static, Méliès really lets you take in the beautiful painted sets in detail.

¹³ Quote from *The Cinema of Attractions, Early film, it's spectator and the avant-garde* by Tom Gunning



Kingdom of the Fairies' Atlantean underwater world

The images Méliès created, this kind of filmmaking is something that has been lost. The hand painted backdrops, simple effective tricks like putting a fish tank in front of the camera to give the illusion of an underwater scene are ingenious in their simplicity. Keeping in mind his background of stage magic and invention it is very interesting to note that he essentially invented the idea of telling a longer narrative in a series of images (though i suppose it was just waiting to happen, and he was lucky to be first). I think the films in their own unique way hold up today and knowing the playful DIY approach he used behind the scenes is very inspiring, I think this way to make films is due for a comeback.

During Méliès' career cinema existed in an interesting place, where it still didn't have any rules or grammar to deal with and every film was in some way an experiment. Filmmakers such as Edwin S. Porter would start "discovering" the magic of the cut. For example cutting from a shot of a burning house to a firetruck and having that make sense was a huge deal. We now take it for granted, but in the early anarchistic days such simple inventions would revolutionise the possibilities of storytelling. In this era the seed was planted for what would become the industry, with professional studios and financing of motion pictures. It started as a wasteland like the wild west where opportunist businessmen could try building up something from scratch.

The laboratory work

The true magic of cinema takes place in the laboratory. The photochemical process of actually capturing light on film is made to happen, or at least it used to for the first 100 or so years. After the digital revolution in the late 90s, many filmmakers shoot films on digital, whose “first matter” or atoms are *zeroes* and *ones* on a file somewhere. It has its own magic of course, and a specific look which may be the best representation of the world today. As this thesis concerns early films and alchemy, one must stress the importance of the lab work and actual chemical elements who work with light in crafting the image.

The process of making a negative is the same as in analogue photography only that a negative semi transparent strip is used to print the positive image rather than light-sensitive paper.

This long roll of film would be a base. Made of cellulose of various kinds, in the silent era nitrate-celluloid or acetate would be the most common. The emulsion which would allow the image to be crafted onto the film would be a thin layer of gelatine (crushed animal bones). Along with silver bromide or silver salts, invisible to the naked eye, they would form a highly light sensitive emulsion. With the right chemical agents the light exposed onto this sensitive emulsion would transform it into fine silver metal. High amounts of light would make black and less light, lower values. The absolutely largest manufacturer of film; Eastman Kodak, owned a substantial amount of the worlds silver mines.

Similar to other forms of printing, the basic idea of the process is exposing certain areas to light others not, and when removed, the negative will provide a matrix for multiple printings of the film strip. You end up with what is called negative stock, simply said the tones of the stock are the reverse of that which will be projected on actual film, there’s potential for multiple positives.

Cinema is unlike a painting, a live concert or theatre in that what is experienced will always be just one print of many reproductions, it has to be recorded in the past. This is a lot of the appeal though, that since it always will have been recorded in the past it always gives a direct link into the time it was made, it is a time machine in a literal sense. The original is the negative, from which in principle, endless copies can be chemically produced in the lab. From these first generation films duplicate negatives can be made, when such second and third generation duplicates are produced, there will be a visible loss in quality. As this process happened repeatedly, as well as taking into account the deterioration of nitrate film, old films are now scratchy and damaged. We will unfortunately never be able to see them as they were first seen. The fact that Méliès films on first viewing were in pristine resolution is almost unfathomable to us, as we have only seen reproductions. But as Paolo Church Usai notes in his book on silent film preservation¹⁴, the fact that we can even view some of these films at all are in itself a miracle.

¹⁴ *Silent cinema: A guide to study, Research and Curatorship*, Paolo Cherchi Usai, 3rd edition, (2019)

Dissecting cinema

If we are to dissect cinema into all of its base components we find they relate firstly to the senses, then as a natural progression to our sense of time, space and narrative.

The fact that cinema deals with time, movement, physics, language, composition, colour and so on, makes filmmaking essentially a conglomerate of any great art, from fashion to architecture, music, poetry, literature, theatre and what have you. It is a *gesamtkunstwerk*. The composer Carl Maria von Weber, defined *gesamtkunstwerk* as: *“An art work complete in itself, in which partial contributions of the related and collaborating arts blend together, disappear, and, in disappearing, somehow form a new world.”*¹⁵

We have five senses, as well as the combinations of senses in-between, making a complex system of perception. Sight and sound are fundamental to cinema and have always been, even in silent cinema, the idea of watching it with no music would be taking away a whole dimension. Smell, taste and touch are not a part of the cinematic experience in a direct sense, although they can be indirectly sensed in good filmmaking. There have been experiments done with smell in the cinema, using for instance scratch cards or the “smell-o-vision” of the 60s, the idea seems a little cheap and gimmicky. We do not really have an instruments of capturing and reproducing smell or taste, in the way we do in visual and audio. With audio we can capture the waves of sound, in pictures it is capturing light, in other words it is all reflections. Smell, touch and taste are more directly chemical things, artists in other fields are experimenting a lot with smell, and smell is a powerful agent. It could be interesting to again try incorporating it into cinema.

In good filmmaking you can refer to the entirety of the *gesamtkunstwerk* as magic, and that’s the alchemical success of it. Some may complement the performances, dialogue, lighting or sets, but every element is united into one whole. They are all interrelated parts of the whole.

We can break a film down to it’s basic components:

Visuals: cinematography, sets/locations, actors, costumes, visual effects

Audio: Music, sound, dialogue, sound effects

Story: narrative, time, mise en scene, setting, editing,

literature, performance, theatre, composition, characters, drama, humour, mystery, suspense, shock, disgust,,,

Cinematography is one of the strongest tools of creating the atmosphere in a scene.

Placement of camera, composition, lighting, depth. Contrasts of hot and cold, light and dark. In the earliest films only natural light from the sun was strong enough to light a scene. Then in early 1900s mercury vapour lights would revolutionise cinema lighting (A direct link to alchemy) They would quickly be replaced by even stronger carbon lights.

Cinematography is unique to cinema, it has in it an enormous power in literally directing the viewers gaze as well as crafting the atmosphere, and all the greatest films are aware of this. Silent film cinematography is often very striking, relative of theatre, but also using the opportunities to take this further than what a play can achieve.

¹⁵ https://en.wikipedia.org/wiki/Gesamtkunstwerk#cite_note-8

Andrei Tarkovsky called filmmaking “*sculpting in time*”. Although his films are very visual, the meditative trance those images puts the audience in, are most importantly down to the filmmakers ability to craft time itself. Tarkovsky would champion this as the cinemas greatest unique feature as a form. Theatre and music are also time based mediums. But cinema with its unique tools can craft and shift time in an entirely unique way. In silent films the two stages which relate to time directly are the shoot and the editing.

Since the early cameras had to be operated by a human operator the controlling of time was even more literal than later cameras which shoot at a consistent frame-rate. 24 fps (frames per second) has been standard projection and filming speed for cinemas for as far back as people remember, with a few instances of 48 and 60 fps appearing now, and 12 often for animated films). But in the silent era there was no such thing as a standard speed. It was generally more organic, the projectionist and cameraman both had to have a good sense of rhythm, often using a metronome. Motors were sometimes used. The idea that silent films move “faster” is simply not true, it was used intentionally in comedies such as Chaplin, Buster Keaton and Harold Lloyd as faster moves make the action funnier, especially chase and fight scenes. But films back then were often done at anything from 12 to 24 fps, 16 was very common in the very beginning, but far from exclusive. Filmmakers like D. W. Griffiths even made very specific directions to the cameraman at which speed should be used for different scenes, often using many different speeds in the same films, this of course had to be communicated to the projectionist. It was often to give the right dramatic feeling, but even more an economical decision, as fit stock was expensive.¹⁶ It was often tried to maximise the roll of film as much as possible. The projectionist would have to closely recreate the pace of the camera operator, solve et coagula. For many decades cinemas screening silent films would have a separate projector labeled “silent” with a certain speed. Unfortunately as every film was different this means very often the film would be screened at the wrong speed often ruining the pace of the film. 24 is not some magical number here, and Edison thought 46 would be ideal projection speed, but it would be too costly, due to expensive film stock. With sound films (“talkies”) it became even more important to sync audio and visual and it explains in big part why 24 fps became a norm.

Editing is one of the most important tools for crafting the cinematic vision, it is where you control time and space. Where you control the audiences experience with subtleties, tensions and rhythms. Leading the gaze, and taking you into the world of the captured footage. In some sense making sense of it, curating it, but more importantly What the lenses have experienced from different subjective angles can be combined to tell a grander story. Editing has become more its own big craft over time. In early cinema the editing was simpler, yet no less effective. Closeups are generally rarer and therefore make a bigger impact; In the scene from *The Cabinet of Dr. Caligari*, in which Caligari wakes up the sleepwalker the entire frame is dedicated to showing his face, and we sense the pain and struggle as he slowly lifts his eyelids.

¹⁶ *Silent Films- What was the Right Speed?*, Kevin Brownlow (essay from the collection *Early Cinema, Space, Frame, Narrative*, Edited by Thomas Elsaesser, BFI, 1990)



the cuts are also usually fewer. In fact speaking in general terms it seems mainstream films is a story of shorter and shorter cuts. Its hard for me to argue one way or the other. good editing can to some extent save mediocre footage, but won't make a film great on its own.

The cut is generally dictated by new information, or a progression of focus in the action of the scene. In early silent film the cuts are often dictated by characters leaving and entering the "stage". Tom Gunning points to the "chase films", an early comedic genre where the narrative framework is characters being chased through different locations.¹⁷

Early silent films are in so many ways like theatre, from the angles and staging as well as how they were presented, in the same kinds of lush theatres with opening curtains. This is still in many movie theatres, and psychologically an important part of entering another world, perhaps a bit like being born. Going back to look with fresh eyes on the silent movies, it's incredible how many of their creators were expert craftsmen in crafting visual stories. The movements are often quite minimal, the light and shadow very striking, it's quite simplistic in some ways. More primitive, yet very impactful. I am very inspired by these simple things, and think they have something to say now in a different way perhaps than when they were new. They have something which can be called highly theatrical. The word theatrical is paradoxical. When we talk about a film being theatrical, it's usually referring to the costumes, sets and acting being a bit over the top and gestural, rather than aiming for a kind of naturalism. But this is not really what theatre is, except on a direct surface level as it takes place on a stage. Theatre can be naturalistic, but we won't call a naturalistic film "theatrical". Theatricality in cinema tends to mean something connected to artifice. *Gestures* is maybe the best word, and I like that about films, when used rightly. Murnau's *Nosferatu* uses these tricks very well with the vampire in shadow, slow unnatural movements, creating an eerie uncanny feeling.

Some films are "theatrical films", they can be based on a play, and show performers, actors, shine in their roles. The camera taking a more passive role as recorder of these performances. It is one kind of filmmaking, that has certain liberties which theatre doesn't have. Theatre makes you suspend your disbelief as it's all taking place on one stage and if you're going from interior to exterior, scenography must be used cleverly, which is often highly artistic, whatever the roles being displayed in the drama may be. With filmmaking

¹⁷ *Non-Continuity, Continuity, Discontinuity, a Theory of Genres in Early Films*, Tom Gunning (essay from the collection *Early Cinema, Space, Frame, Narrative*, Edited by Thomas Elsaesser, BFI, 1990)

of course you can go shoot on various sets and locations and cut it together in post, you don't have to suspend your disbelief in this way. Films can suspend your disbelief in other ways, whether you believe in demons and bringing life to the dead is irrelevant. When you're watching the Golem awaken, you are watching that happen, and cannot deny that happening in the film's reality, if they did their job right. In the filmic reality that you have entered, the dream, these things are all possible.

Silent cinema is also more related to literature, in the literal sense that all the dialogue is actually read. This also gives unique opportunities from the filmmaker, not possible in talkies, despite being mostly a limitation. From this limitation visual storytelling does become key, and the inter titles a last resort for exposition and dialogue.

Buster Keaton was a master in this regard, using hardly any inter titles, feeling if a scene required much reading it's a sign the scene doesn't work. Murnau and Mayer were determined to create filmmaking exclusively relying on visuals to tell the story. On the other hand a written text has a certain freedom to it, what works when read can seem hokey when spoken or narrated, as the viewer reads it with their own inner voice it takes on a place which is more similar to when you read a book, because you are actually reading. In films like Benjamin Christensen's *Häxan*, the director uses it as his own voice, confronting the audience from the film directly as in an essay. In his case both describing and showing the history of witchcraft in Europe.

The magic of semantics is considerable. Verbal language exists in its own dimension which relates to the physical and psychological dimensions. Similar to alchemists using metals to relate the spirits and heavens using matter, words spell and direct energies. Spelling is a magical act, literally casting spells.

We must also briefly address the immense importance of music in cinema. Since silent movies relied heavily on images telling the story, with some literary support from the inter titles, music became key in breathing life, atmosphere and emotion into the images. Nobody watches a silent film in silence, it would be like stripping away half of the experience. Moreover the power sprung largely from the music being performed live; either by a single organist or an orchestra. Having the music performed in real time marrying the images captured in the past seems to reactivate their immediacy somehow. Today the musical performance is a huge aspect in the event of silent movie screenings. A recent example was the film *Häxan* screened in Prague's national film archive last year. The music was all electronic, improvised to the images. The atmosphere blended perfectly. It gives the idea back of what events these early movie shows could be like. I would even go as far as to claim the musical performance is today's main appeal in going to silent cinema screenings, the power music has over image can not be underestimated.

People often refer to special effects as "movie magic", Special effects are today more widespread, and the term "effects film" is not necessarily positive. On the other hand what is called a special effect is usually in service of the narrative, the vision, and is therefore a part of the whole. A piece in the puzzle. Or so it should be, rather than vice versa. The magic of spellbinding tricks is just one part of the magic process though, in some cases showmanship. With people like Ray Harryhausen the effects are a big important part of the narrative and characters, while still spellbinding. I think when the effects are separated too much from the overall project both suffer. Every part of the production is in some ways a trick after all, crafted into a unified vision by any available means necessary. Practicing magicians or alchemists held the opinion that apparitions are no more magical than so called everyday events like breathing, walking. The power of editing is no less a magic act than visual tricks. They are all creative tools.

A common misunderstanding about silent films for those who don't watch them in cinematheques, is that they were black and white. Though it is true that they were shot in black and white. They would usually be presented in colour. Black and white was rare and would actually only become standard with the "talkies". This was far from a simple gimmick but a crucial element in the presentation. Méliès would have a barn outside his glasshouse studio where a group of skilled women would paint dyes onto the footage frame by frame on an assembly line. In films like *Kingdom of the Fairies*, the complex hand colouring add a magic dimension, furthering the dreamlike atmosphere, the idea of a moving painting. This process was very expensive, labour- and time consuming. For most feature silent films the scenes would be colour tinted in dye baths. Also to great effect. Giving both emotional and depth and a sense of atmosphere, or simply breathing a temperature into the cinematic spaces. The colours were carefully chosen by the director to match the mood of the scene. Or differentiate interior/exterior as well as day/night. Watching *Häxan* or *Cabinet of Dr. Caligari* in black and white would be like watching them in silence, as the colours were part of the directors vision.



Examples of tinted film from *The Cabinet of Dr. Caligari* ¹⁸

¹⁸ <http://www.movingimagearchivenews.org/reproducing-film-colors-and-their-significances/>
Images taken from article by Peter Monaghan

Cinema is a unique way of expression, working with ideas which can not be described in logic verbal ways. There are certain limits to the rational mind. It has its place, but looking at the living universe it can only go so far in its explanations. Here is a key link between alchemy and cinema, not surrendering the rational logical theory, but also going into the unknown by means of images, symbols and visual riddles one can endlessly meditate upon. Paracelsus said *“That which lives on reason lives against the spirit”*.¹⁹ When people anticipate the coming of a god, it must destroy literalism, as any text is always bound to be misunderstood if only taken at face value.

As I said in the beginning of the chapter, cinema is still very young as a form. There has since its invention never been a time without innovation and master practitioners of the craft. There has slowly been built up both standardised techniques and grammar for storytelling. These conventions are then broken and reinvented by visionaries, deconstructions.

I think once you are familiar with the history and the “rules”, it’s playtime. As all great film wizards do, you look at the history and learn, it is a living body, resurrecting itself with every viewing. Just as the process of crafting the film is itself delicate and complex, so is the larger world built up by films over many years. I find this process to mirror the delicate steps of alchemy in multiple ways that are worth investigating.

¹⁹ *Alchemy and Mysticism, The Hermetic Library*, Alexander Roob, Taschen, 1997

Part 3

Cinema and Alchemy



There are many ways to approach the fusion of alchemy and cinema as a topic. When searching and browsing, what seems to have been mostly written on are films which use alchemy as a storytelling narrative device. Films like *The Dark Crystal*, *2001 a Space Odyssey* and even *The Wizard of Oz* are often analysed through the lens of alchemy, and there is reason to believe the filmmakers were conscious of the alchemical process when unfolding the narrative.

I want to focus on something different and perhaps more obvious here:

The actual creation of the film as an alchemical operation. Following that, I want to see if the director as the films alchemist is playing with this role as a sort of alter ego in the films story.

It is my belief that both alchemy and cinema are forms of magic. The kinds of magic that one can practice instrumentally.

Going back to magic, which as I mentioned earlier is a problematic term nowadays, it is worth looking at it through the lens of cinema. People often refer to “movie magic” which I think makes a lot of sense. Keeping in mind my definition of magic as attaining dominance over the elements, or the ability to mould them as one will, this is exactly what cinema attempt to achieve. The elements that make up everything, perceived with our mind and our senses, from the weather and changes in nature, to our emotions, temperament, fears and unconscious, making films just like alchemy is working with all these metaphysical concepts and energies using physical means. We can see it as attempts to control the four elements in nature as well as the spiritual or metaphysical elements and even elements of poetry.

Magic traditions are still very popular today as it has seemingly been for any age. Lots of young people in my generation are into astrology, tarot readings, chakras, out of body esoteric and psychedelic experiences. People like Jung who took all this stuff very seriously and attempted to find its practical use in contemporary times have kept it going strong. If it wasn't for this wave of interest in the esoteric and occult, I would probably not have chosen to write on alchemy. Of course as we have seen in history again and again these things are doomed to be twisted, warped and misunderstood by the mainstream, and the truly devoted are often very cautious and secretive, and often mistaken too. Although I think it's great that the new agers have grown devoted, we also see in the capitalist climate we live in that also spirituality is bought and sold like junk food, and although not entirely devoid of true depth it seems too often to be cheapened for the common consumer. But that is another story (although this has clear parallels to cinema's story as well).

Much has been written on the alchemy of art, or in a broader sense art or creative work as practicing magic. Alchemy was itself an art (*"the great art"*) from a time when the terms had different connotations. So in what way is cinema different or unique from other art-forms?

I would say the answer chiefly has to do with the ambition. The all encompassing vision of alchemy and its multi-parted nature is what relates it to cinema in a greater way as a practice.

What leads me to the idea of cinema as a successful form of alchemy is inherent in the *solve et coagula* maxim; If the Alchemists wanted to gain spiritual and metaphysical knowledge by taking apart reality in its material form, so do filmmakers. Even with endless variables of visions the filmmaker is always taking something apart and piecing it together again. That's what the process does, following certain steps which lead to one whole which connects to all parts. A complex operation.

Cinema is much like the alchemical practice more than anything in this very ambition; the desire of the filmmaker to deconstruct the outer world as it is taken in by many senses, represented by different mediums of art, and reconstruct it in a new way that opens up certain truths and perspectives of his own mind. Cinema is not theatre. It is not painting. Not music, not poetry, nor fashion. It is all of them, none of them and more. The true *gesamtkunstwerk*.

I do not think most filmmakers are consciously working with alchemical methods. Nor do I see this alchemical connection as exclusive to cinema. My ambition is going on the basic assumption that alchemy has some inherent bigger truth about the cosmos; micro and macro. This truth can then be applied to another act of creation such as the cinematic. An act of creating not something out of nothing, but moulding something material with one's knowledge into another thing which wasn't there before the work. Alchemy is largely philosophical. When I first got into it I used it in my own art with the idea in mind that cheap ruined materials put together in the right way become spiritual "gold". I took this personally to mean trash and in general material which on its own had no value. The philosophical implication being that, with a strong enough idea carried out through craft, this waste material without any value, will attain spiritual or artistic value in the process it goes through by the artist's hand. Gold is metaphorical of something higher.

When it first appears in the filmmakers head the film is an elusive thing, often either from the depths of the unconscious or inspired by first or second hand experience. Either way, whether talking about completely speculative fantasy stories or social-realist dramas, the process is the same; This idea which is the films reality must be picked apart to then be crafted by material means to then be, fermented, distilled and coagulated into a higher spiritual experience, which is the true gold; the film or “motion picture” if you like. If the experiment is successful, all the careful steps merge into a magic conglomerate which is more than the sum of its parts. The film then exists on another level, a new being has been brought into existence which can inspire and interact with the audience on a new level. What can we call this process of transforming fished ideas into a script filmed and crafted on projectional material? If this is not one of the greatest forms of magic, then what is?

The Ouroboros symbol (snake eating his own tail) is a powerful symbol on many levels. One level of which one can perceive it, an obvious one, is that it shows the cycle of time, creation and destruction. More importantly the truth that both past and future are only a part of the present. The moment the snake puts his own tail in his mouth he connects past and future into the present. Within your minds dark cinema you can watch new movies yet to be made, similarly to watching old movies. Old movies watched for the first time are only old in one historical sense. As your eyes glaze the images for the first time the time it was made is reactivated and becomes an experience in the present. This is one of the Ouroboric loopholes that bonds cinematic reality with our perceived normal reality. The magic trick of cinema is thinking up a future time that will have been crafted in the past to be seen only in the present. A film is only viewed in the present, meaning its intrinsic reality is never-ending.

“The Work”

When dividing reality like this in every which way one can get lost on the theory level, which is why cinema and alchemy are blessed to always have one foot in "*the work*", the actual practice itself as notation. In trying to find unity in these two arts, *projection* becomes a key term.

The Projection of light onto nothingness is the foundation of the visible world, which is imitated- and sometimes even improved by the camera. Film has, at least in the pre-digital age, always been projected from filmstrips onto the canvas, the *silver-screen*. Alchemy uses the term *projection* extensively, meaning projection of the spiritual divine world onto the material. The alchemist believed the light of the sun was projected from a black sun. People like Einstein and Newton discovered in a sense that some basic alchemical principles were proven true in how particles of light travel. The optical visible world only being a reality as a consequence of light being projected onto the endless darkness that is the prima materia, where we come from and go, just like films. It happens when the light projects on the "screen".

The filmmaker in some way will have to break down the outer worlds in certain aspects which will be processed and then coagulated by artistic means, The magic of the lens being able to transmute light into image lays the foundation for this god-like ambition.

As unfathomably varied as films made today and in the past are, in look and feel, as well as their manner of production, they do still share some fundamental things. However different, there are three stages to its process; *Pre-production*, *production* and *post-production*. Without these three stages, there can be no film. Exactly how they are dealt with of course has a large freedom, but in some way the three stages must be followed in order. Of course the way films are made has changed over time, as I am focusing on early silent films, the stages were still being discovered. On a base level the cycle of film production remains the same today.

It's a hard task to find exact echoes of the alchemical steps in the stages of making films, but I will try anyway:

The first part of alchemy is taking the material, such as lead, and stripping it of its quality by calcination, *the burning*.

The first step of filmmaking, well it varies, but it has to start with an idea. That idea can come from many places. But once it is in your mind you can't shake it. It has a lead like quality, it has poisoned your mind as a filmmaker. As it is heavy and its value at this point only lies in its potential, something must be done to it, it must be fed other qualities to escape your mind. Usually you write an outline, and sometimes make sketches if it is a more visual idea. This can later be reworked into a script and storyboards. But one tends to start rougher before getting into finer details, sketching an overall vision template. Which leads us to the next stage: Dissolution. In alchemy this is the mercurial step, dissolving the ashes of the prima materia as a way of opening it to further influence. This second stage is treating it with water, just as the first lead stage was treated with fire. Psychologically the first step is about burning away ego (with this goes tradition, habit, prejudice and other so called programming). In the stage of dissolution, the mercurial water interacts with the ashes relating it to the flow of unconsciousness. In the filmmaking process this could be mirrored in the actual writing of the screenplay, which works on the idea, and reworks it in new ways, hopefully opening up unpredicted sides of its basic concept, subtleties arise. The characters and world should come to life, or at least the idea of them. As the first step is connected to the destruction of the ego, the dissolution stage's mercurial water is often described as bitter, and hard to achieve and can easily be

mistaken, the bitterness reflects psychologically in how going through this fire you realise how savage is your true nature. You realise that in order to achieve the alchemical transformation, a lot of work is to be done. In the screenwriting it can also be a bitter process identifying what you are working on, finding inner flaws, as it does hopefully connect to your unconscious and has a desire to open up what is known and unknown.

An alchemist worked on the chemical- and psychological levels. In the lab or cave with crucibles and furnaces. On the surface level the filmmaking process is not very similar to the alchemist in the laboratory. Both are however looking at the world and starting to dissect it, which requires an immense research on a variety of topics. Alchemists were studying the stars and the myths of old as well as herbs and elements. At this point the filmmaker usually has a screenplay and needs to start financing the process to come, and further detailing the production. This is the pre-production stage. Producers enter the stage, casting directors, art directors, costume- and set-designers et cetera. The paradox becomes evident in the alchemist-filmmakers desire for control, when in order to perform the operation this control must also be given up. The term *director* is good as it's implying the direction, beyond all specified work there is a general direction. The alchemist is similarly to some extent surrendering the control to natural processes which can only be directed, not created from scratch. Alchemists did also require a lot of assistance. Someone had to make all the equipment, get the chemical materials, there were lab assistants, often a separate part of the laboratory for glass blowing, as well as an oratory and of course just as in cinema, someone had to finance this expensive endeavour. Because the process has gotten very bureaucratic some films are made with directors-for-hire, perfectly competent directors coming in to do the job, nothing else. Great films are always a singular vision, there's a director behind it and no matter who else was involved in the production, you sense this one visionary mind behind it all. It is not always fair to all the great talent needed for a film to give the director top billing, as their job is more that of a general, but in the end that's the artist, the alchemist.

The separation stage was separating the material into fractal components, mercury, sulphur and salt. Using a centrifuge, This is the point where the filmmaking process is also separated into various departments. There is in neither practice an exact known number of components the work should be separated into, in filmmaking it depends on the kind of production as well as the size of the production, smaller productions usually have fewer smaller departments, whereas big blockbusters can have separate units of shooting simultaneously and enormous amount of specified sub-departments, sometimes in different countries. The shoot or production (principal photography) is bringing together many elements from these departments; sets, costumes, script supervisor, cinematographer, actors and too many to list. Despite this bringing together I would still see it as a part of the separation stage, the scenes shot are usually not finished, filmed separately by either one or several crews in units. This is of course a very important part of the operation as it will produce the raw material that will be reworked in post-production. As in alchemical operation, much of what results of this separation will be dismissible waste. The idea has gone from the written word into the optical, enacted in time and space. The raw material of chemical film has taken over and must be dealt with further.

The post production and production stage are inter-related as in most films after a rough cut has been assembled, several reshoots usually have to be shot and inserted to make it work. But to continue the alchemy analogy, it is in the work of editing and sound mixing that the separation process turns to conjunction, attempting to combine previous work, bringing together.

In order to move forward successfully in the production of a film, the process always has to be reevaluated. For instance during the shooting stage it has always been common practice to view “dailies” or “rushes”; a screening of a days work, to see where things are going, what works, what does not and so on. In the alchemical process, it was common for the esoteric alchemists to constantly meditate in the oratory during the process. There would be images, like mandalas and illustrations mapping the polarities of the material world and the relation to the divine sun, often the alchemist himself is drawn in the middle of such illustrations as a mediator of the horizontal and vertical axes (see emerald tablet illustration in chapter 1).

From conjunction the alchemical work turns to fermentation, the “psychedelic” peacock stage where the material ferments as a way from matter to spirit. Just like in the creation of ethanol or alcohol there’s a magic transformation. This stage can mirror a films later stages of production where it will be recut, remixed, effects shots added, and the craft should become a spiritual experience. When all these little things come together at last just like in alchemy vaporises and condenses back and forth, from spirit to matter. The whole process will be distilled and coagulate into the gold. And of course just as the alchemist was likely not to achieve gold, in cinema the true gold is rear, but has taken place throughout its short history, there’s no shortage of masterpieces that I think have enriched the world. And the pursuit of gold has a quality in and of itself. The cinematic gold is the film, like the sun it lights up a unique world, projected in the dark.

The greatest filmmakers are the most inspired filmmakers. The spark of inspiration from one filmmaker to another is like the magic of the stone. The stone is the knowledge of gold, nothing will inspire you to make a great film more than watching a great film. The inspiration which shines from this cinematic gold can enlighten others who do the right steps to make gold themselves. Inspiration is the holy spirit just like the stone is described. Becoming bigger than oneself radiates electric energy which we call inspiration. The word *inspiration* literally means to breathe life, like the pneuma alchemists believed inherent in all things.

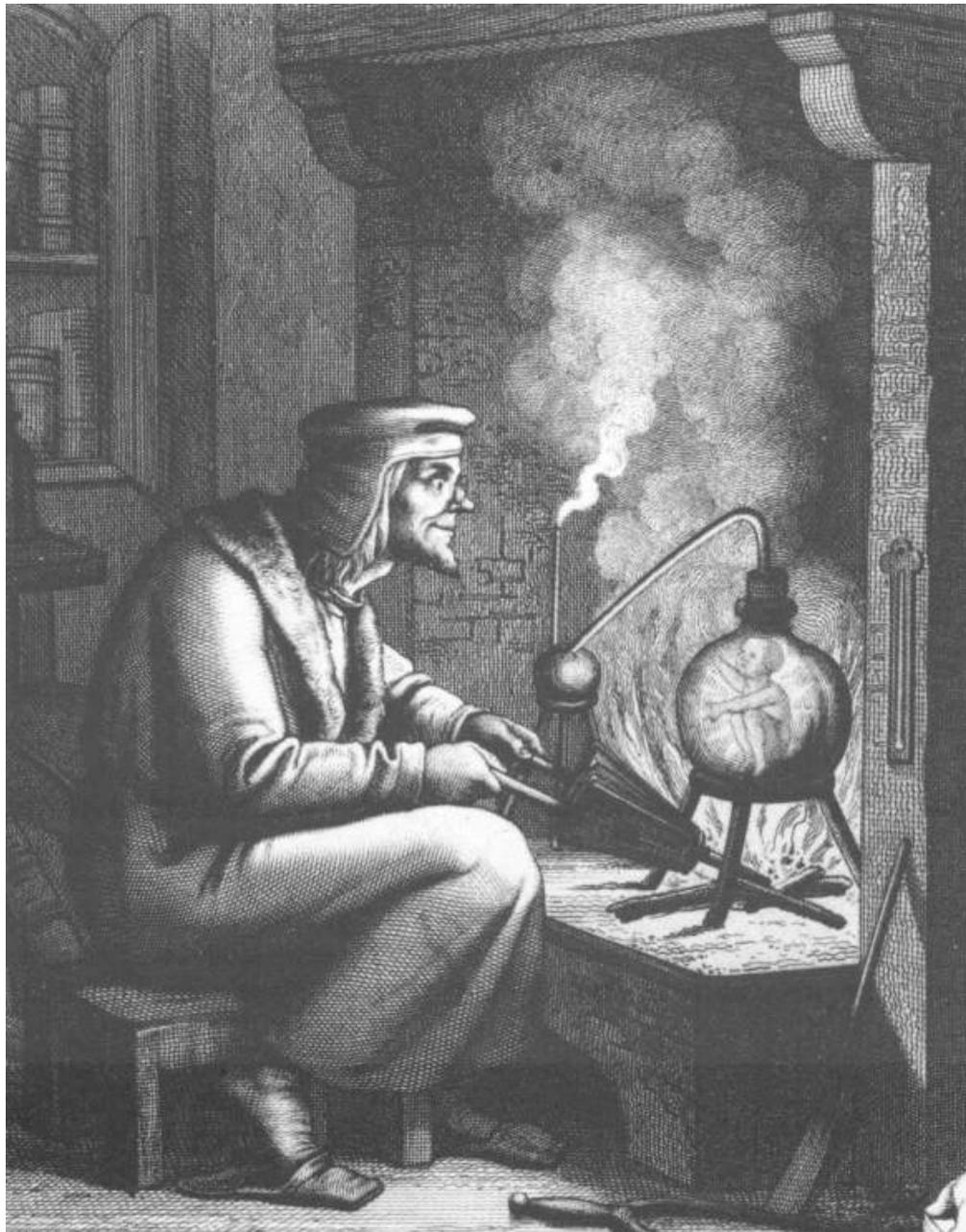
Alright, so this way of literally trying to fit the steps of filmmaking with the steps of alchemy is a bit forced. It may not strengthen any argument. If we zoom out to a bigger plane however it is clear that both operations must go through a process of different steps that are acted out in certain order physically for metaphysical means. Weaving, as it were, the fabric of life. Constantly The existential implications of these parts also share a lot. Transcending everyday existence and operating big concept like creation and destruction, birth and death. Transformation is a keyword in these processes. Alchemy means constant transformation. In the sequence of events that go from an idea’s inception in the mind, until the final film is projected to an audience, is a constant transformation. The two things will not look alike, as on every step of the way new problems arise which must be overcome, the struggle against the elements which is the making of a film is part of its complex quality. The idea is being constantly tested by the materials which are its necessary components. the alchemist, just like the director, must keep the fire in the retort stable. psychologically this entails a consistent flow of work. There are clear steps to be taken, and it must be done steadily without losing oneself in the process in order to achieve the operation’s desired goal. Every step is crucial and must be trodden with a great deal of care and confidence.

If we stay with the analogy and briefly look at the 12 Ripley steps, the final two stages are *multiplication* and *projection*. This is the work the alchemist would carry out with the stone after the gold was created. I could go into how this relates to cinema, but I think it can be literally said by the words themselves.

Believing in any such esoteric knowledge as alchemy is not so much about finding exact measurable evidence, that's sciences job. As its to guide ones personal journey through the world. Its truths are intrinsic and highly relative to its own perspective. You can for example write it off as superstition and go make great films in whatever way you want. Choosing to follow alchemical processes can be a helpful guide however in understanding the fundamentals, but in the end it is as true as you believe it to be, if you believe its truth and that magic is real, then it is. One can use forms such as cinema to channel that, or rather vice versa. You undermine the creative process of crafting moving visions with an ancient knowledge.

Cinema and alchemy have always been very dependent on economic support. It is in many ways extremely comparable how absurd it is that rich aristocrats or monarchs (like Emperor Rudolf II) would chose to give large amounts of money to strange wizards who wanted to make gold, and similarly how movie producers give financial support to crazy film wizards. In both cases there's a huge risk or gamble. One of the things that inspires me about silent movies is precisely this. Although there's a rich "arthaus"scene, mainstream movie financing today is becoming increasingly safe with brand recognition and market research. The Unwillingness of big studios to take risks often result in mediocre products. Films based on brands that make safe money and are quickly forgotten. But this is another story, which I will avoid getting into here. Suffice to say artists strive for independence but are blessed whenever granted financing from business moguls. One of filmmaking's many struggles. Despite having been hailed as one of the greatest directors, the last decades of Orson Welles career was exactly this struggle for financial backing.

Considering alchemy's intrinsic nature it is no surprise that it has been used as a tool or method of creation by artists in all fields for a long time. As Jung discovered, the inner connection to self rebirth and ancient discoveries of alchemy go hand in hand, and it is precisely in this way the old tradition has value. Artists work from matter such as clay or paint to mould spiritual creations that transcend the materials initial properties, but is inherent in it and brought out by the artists spirit. They are natural elements and conglomerates. The more esoteric part of alchemy has also served as a source of inspiration for both composers and poets. The seven steps, or chakras in eastern tradition, are also linked to the octaves in music, representing inter-connected steps of the same grand structure. The lowest in direct correspondence with the highest, yet elevated in tone. Much like lead and gold.



The Homunculus

If you entered an alchemist's laboratory you would see dried carcasses of frogs and other animals, various dead matter,

It was thought that all these collected pieces of rotted life could be revitalised as the *homunculus*. A small fully formed humanoid being. A beautiful idea to be sure, but as with much of alchemical experiments highly improbable on the surface level. The idea of little homunculi inhabiting our heads is a great metaphor, but quickly becomes a paradoxical loophole when realising those have also similar heads.

Paracelsus wrote a detailed recipe for making homunculi. The believed possibility of the idea comes from their thinking of sperms containing little people with already formed limbs. The mother's womb was thought to be a place for this little sperm creature to grow large. So from this rather crazy line of thinking it was thought possible to create life from sperm without a woman present. Paracelsus thought the womb could be imitated, by warm organic matter. Horse dung.

When we look back at alchemy through today's lens, the little homunculus is perhaps the most far-out and ridiculous idea. Still, in modern psychology the homunculus term is used to illustrate how our senses look to our brain. The little monsters have tiny limbs with huge hands and mouth with a huge tongue, as these are delicate sensual areas. As ridiculous as the medieval homunculus seems to us, through the lens of the camera it makes just a bit too much sense.

Going back to the very beginning of film, what Eadward Muybridge invented with his series of moving pictures of humans and animals could be considered the groundwork for the invention of stop-motion animation. Realising that the illusion of movement is created in the beholder's eye when watching still images in rapid succession, a way of infiltrating this process was to control each image and what happens in between. This led to the invention of animation; The pictures did not have to capture something happening in real time, but could be completely fabricated, in essence to *engineer time itself*. Using small or bigger movements one can make a figure or object move exactly as desired. In the cinematic sense of reality this proves the homunculus theory true with the ghost in the machine. The theatre of the mind is a great metaphor not to be taken literally. But with the stop-motion technique you can literally practice the basic idea of bringing a little creature to life.

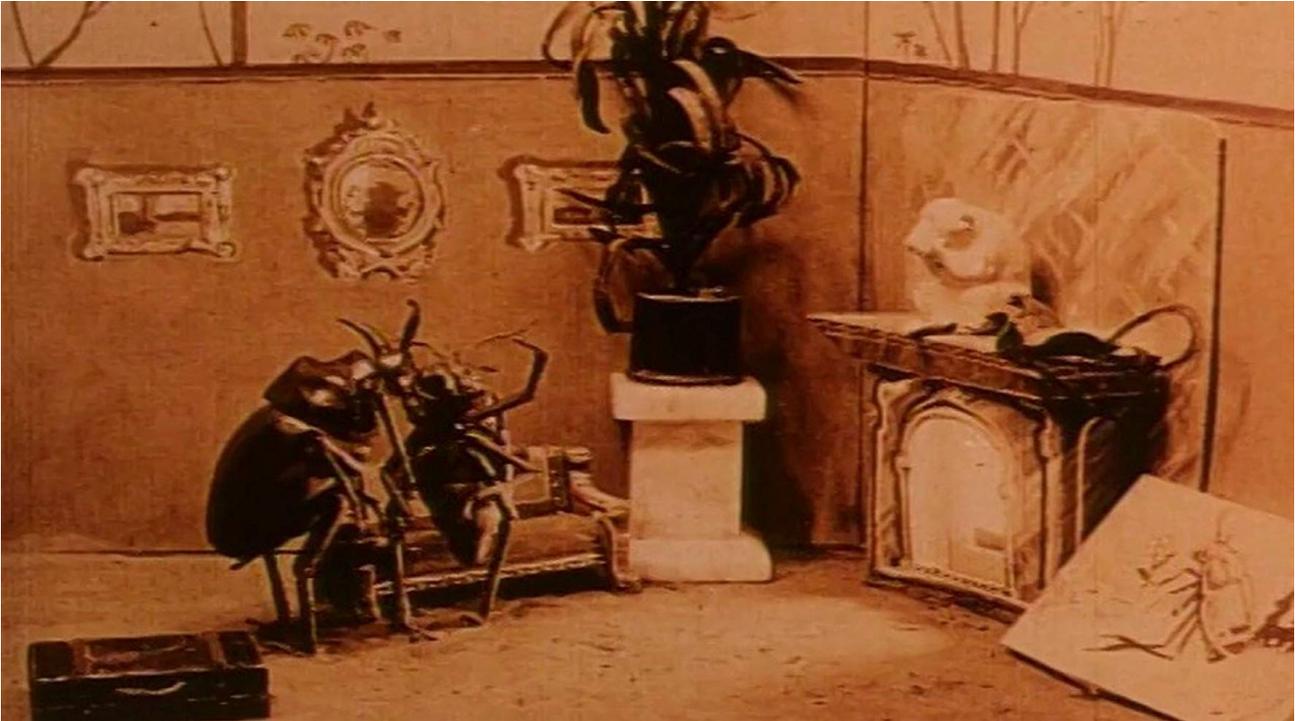
There have been too many dedicated stop-motion wizards throughout the years to mention, two notable figures are Polish-Russian Wladyslaw Starewicz as well as the American Willis O'Brien whose magnum opus is *King Kong* (1933), possibly the most famous stop-motion character of all time. His protégé Ray Harryhausen would perfect the method of integrating stop-motion characters into live action elements.

Like so many cases in this story of cinema Starewicz was cast into the field of stop motion by an accident of sorts, or at least it was chiefly a means of problem solving. An entomologist at heart, he was determined to capture on celluloid the fight between two stag beetles. However the intense heat from the strong studio lights made the beetles fold completely, and they would not move in this temperature. This led Starewicz to the idea of removing the insects' limbs and replacing them with wire, making it possible to bring them to life through animation. Following this, he became obsessed with animation, and would be so for the remainder of his life. A true loner and jack of all trades, he would himself carry out every task in the production of his short films. Scripts, sets, lighting, animation. ²⁰

He started as early as 1912 making short films about everyday domestic issues, but starring insects. It makes for an absurd twist, but on another level makes you question the consciousness of insects, and how we are natural beings domesticated. This was three years before Kafka's *The Metamorphose* would be published, in which the radical transformation from a man to an unspecified insect works as a catalyst for critiquing bureaucracy's de-humanisation.

²⁰ <https://culture.pl/en/article/wladyslaw-starewicz-the-bug-trainer>

Starewicz's most famous "social- comedic-insect-dramas" is *The Cameramans Revenge* (1912). It is about Mr. Beetle having an affair, which is secretly filmed by a grasshopper. The film ends with a scene in which the bugs are in a cinema setting looking at the film made by the grasshopper character within the film, exposing Mr. Beetle's infidelity.

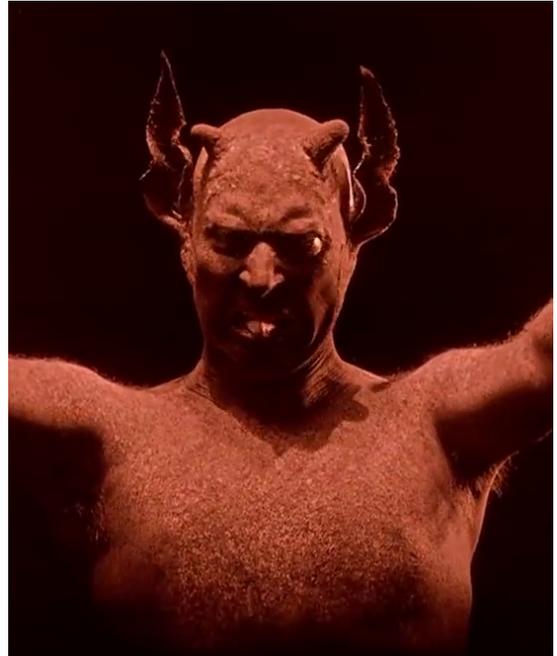


To animate comes from latin *anima*. Breathing life into the dead, like necromancy or the homunculus. The animator must be in touch with the sensory homunculus in order to breathe life into the material homunculus, transferring his *anima* or *pneuma* into the inanimate artificial body. Good animation is a performance, it is not just the ability to make it move a certain way, it is the ability to give life, personality, subtlety to the character not through ones body directly but acting through a medium. Animators often joke that they are shy actors. They are also practicing alchemical magic, animation is a true magic.

The Director as Alchemist

Looking at the very first films (Méliès, De Chomon) we often find a “mad scientist” character in exaggerated lab settings. One cannot help but see this not just as a narrative device but the cinema functioning as a “magic mirror” reflecting the filmmaker as a sort of mad scientist archetype. Méliès starting in magic shows lays the foundation of cinema as a magic apparition.

The Golem (Paul Wegener, 1921) is a great example of director literally putting himself into the film, curiously not as the alchemist character but as his creation. The golem is like *the homunculus* a man artificially brought to life with the knowledge of black magic. In many ways a prototype for the re-animator/Frankenstein genre. Another such case of a director placing himself into a supernatural role in his own film is Benjamin Christensen in the aforementioned *Häxan* (1922), wherein he plays the role of satan, as a satirical seducer (left). Méliès himself, who loved playing in his films often took on the guise of the devil. The devil or satan being a favourite “bad guy” of cinema is no coincidence. Filmmakers have used the cinematic medium to summon the devil countless times, very much like the legendary alchemist *Faust*.



FAUST

There lived a man named Johann Faust in late medieval Germany, although he was a real practicing alchemist, he is more known today as a myth which was built around him. “*The faustian pact*”; selling ones soul to the devil in exchange for glory, fame, talents or insight. In the J. W. Goethe play, which he reworked all his life and is thought by many the definite version of the legend, Faust is an old man who performs occult alchemical experiments in his lab and manages to conjure up the devil in the form of Mephistoteles to make him back youth. Mephisto lures Faust into the world of carnal pleasure, and love. Goethe took what was chiefly a cautionary folktale and added many layers of depth, in the character of Faust himself and the themes of good and evil.

Demons and satan are often just concrete personifications of abstract concepts.

Faust has been adapted various times to the cinema both with and without that name. Méliès supposedly made no less than five versions. The greatest version came in 1926, directed by Friedrich Wilhelm Murnau (1888-1931). It was his final production to be made in Germany before emigrating to Hollywood. His version takes plot elements both from Christopher Marlowe’s 1590 play (*Dr. Faustus*), as well as the 1829 Goethe romantic play *A true epic film, with incredible atmosphere. Faust* (played both as old and young by Gosta Ekman) practices alchemy, the turning of base metals into gold, creating the homunculus. The film’s opening scene makes clear, despite his godlike aspirations, that his own life is a bet of morality between an angel and the devil.



The most haunting shot in the film shows the huge dark looming figure of the devil shrouding the German village in his mighty darkness. It is this plague which inspires Faust to summon the devil incarnate Mephisto (Emil Jannings) to save his people. Only later is he lured into vanity by selling his soul to regain his youth. Unlike the play, Murnau's film ends with Faust being burned at the stake along with his lover Gretchen. As he grows old again, his soul is redeemed and good conquers evil. In his essay *Tradition as Intellectual Montage*, Matt Erlin argues that the film has a meta message in which Mephistopheles luring Faust parallels the cinematic luring the literary in the film itself. The Faust character being representative of his own story as a literary folktale and Mephisto being an image of the cinematic, showing him the wonders of the world beyond his library and lab. One could ask oneself if the film director is more like Faust, the old magician in the laboratory, or more like the cunning Mephisto, seducing and impressing with glorious visions. *Faust* was not well received on its release, but is now considered one of the best early supernatural films, though not as talked about as Murnau's earlier *Nosferatu* (1922), appropriately subtitled *A Symphony of Horror*. Loosely based on Bram Stokers *Dracula*, but unable to get the rights to the character names. *Nosferatu* is along with *The Cabinet of Dr. Caligari* considered the greatest example of German expressionist cinema.

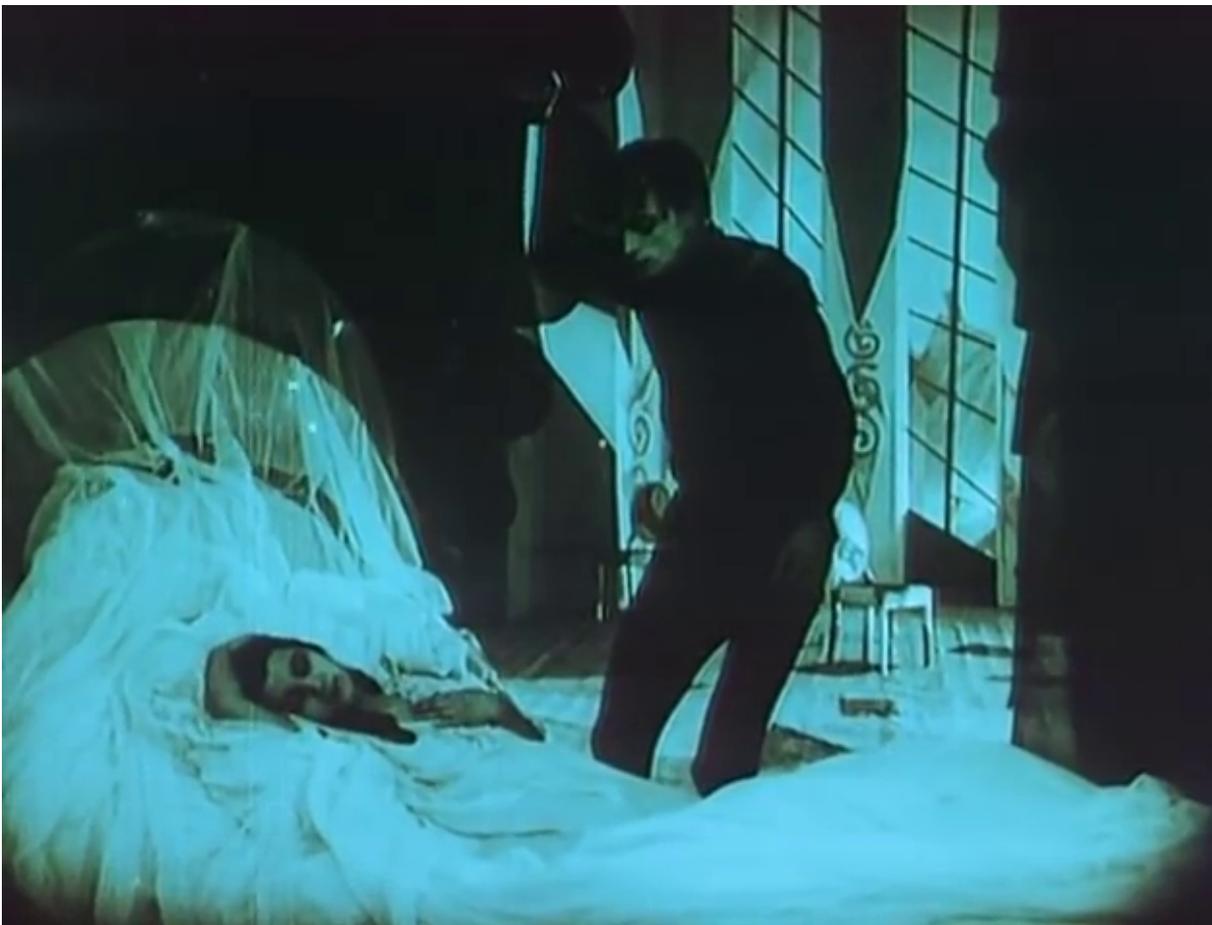
German expressionism

Chiefly characterised as a stylistic movement, it entails films made in Weimar Germany in the 20s with vast expressive nightmarish sets, distorted angles and long looming shadows. It was not an art movement as such. We can consider Dr. Caligari and how it did something expressionistic in both stylistic terms and narrative, which was revolutionary at the time, and influenced many filmmakers since. Murnau's *Nosferatu* and Fritz Lang's *Metropolis* (1927) bear some of this influence in storytelling and images, but it is not as directly there, there are shots of long shadows and some distortion of sets, but never as all-encompassing and extreme as the first example of *Caligari*. At the time the style would be coined as "*Caligarism*", but the idea of labelling this stylistic movement came in later years. There were equally gothic and dark films coming out of Sweden and Denmark at the time (like *Häxan* and Victor Sjöström's *The Ghost Carriage*). This focus on high contrast between light and dark is one of the greatest strengths of Silent film era. It has often been replicated in later films and would pave the way for *film noir*. Once you watch and analyse individual shots in these films, you are struck by their painterly quality. Not in virtuosity, but in clever compositions of shapes. Lights and darks, arranged to tell more than what is taking place on the surface. It can be obvious, or subliminal. *Nosferatu* is full of iconic images that will haunt one forever. The use of heavy contrast, long sharp shadows and simple compositions.

The shot of the vampire count Orlok on the ship, seen from underneath; A dark lurking figure with long crooked claws perfectly framed by the masts and ropes on the ship against a white sky. An image which recalls a spider in its web, the viewer feels as its trapped prey.



The Cabinet of Dr. Caligari (Robert Wiene, 1920) is a great if not the best example of an early film that both takes the narrative and visuals to the extreme. At a fair in some German village, a mysterious character named *Caligari* (Werner Krauss) is presenting his somnambulist (sleepwalker) *Cesare* (Conrad Veidt), who can foresee the future. It starts as a creepy murder mystery and turns into a psychiatric ward delusion where the story is told from a patient. It turns out Caligari is using the somnambulist to carry out murders. The plot unravels in twists and turns unheard of, making the viewer uncertain of who to trust. The film's groundbreaking radical visuals and non-linear subjective storytelling shocked audiences in 1920. I screened the film for a friend recently and it absolutely blew him away. The actor's facial expressions are haunting. The shot of Cesare waking up first time, the scene where Dr. Caligari feeds him porridge, and perhaps most iconic of all Cesare with a knife looming over the sleeping beauty.



Hypnotism was very hot topic at the time of the films production, being researched extensively. The advertising world was beginning to take full advantage of discoveries in this field of mind-control. The films tagline is taken from a key scene near the end of the film "*Du must Caligari warden!*" (*You must become Caligari!*). In an interesting advertising campaign, this line was posted in newspapers without any mention of the film itself²¹, making it already a play on the films hypnotic quality by planting this mysterious phrase in the collective unconscious, much like the hypnotist himself would.

²¹ *Suggestion, Hypnosis, and Crime*, Essay by Stefan Andropoulos

Dreams, visions, hallucinations. The over the top acting and set design create an aura of total uncertainty. The entire film is subjective to such an extent that you are not sure what is real or not, you think you got it, but as it unveils, nothing is certain. Caligari eventually being literally the director of the insane asylum.

The name *Caligari* is referring to a mysterious character who carried out sleepwalking hypnosis murders in the 18th century. The “Doctor” in the film is revealed to only take on this guise as a means of doing illegal experiments on mind control. Perhaps there is a desire for knowledge gone too far, and ending up in serial killing. The final scene implies that the narrator of the story, who seemed the only reliable source, is actually the insane one, and what we have witnessed was only his paranoid delusion. And yet you still to some degree believe what he has told, due to it being so convincingly done. Here is a great parallel to cinema itself, after being invested in another world with its stories, you are taken back to this world, but if the filmmaker did his job ,you still believe it was real in some way, if only as a fabricated dream.

THE GOLEM



In 1921, only a year after *Caligari*, *The Golem* was released. This film is the last and best known of the director Paul Wegener’s “golem trilogy”

Unfortunately it is also the only film in the series still in existence. Unlike the other two films where he placed the golem character as an antique in his contemporary setting, this tells the story of how he came to be, in Jewish medieval Prague. Hence the subtitle: *How he came to the world*. The story takes place in the Jewish quarter of Prague, highly stylized in lavish expressionist sets. The Golem is a Jewish myth of the man made out of clay and brought to life through black magic, a *proto-Frankenstein*. In the Talmud, Adam is animated by God as a man of clay. The Alchemist or black magician character in this story is *Rabbi Loew* (Albert Steinruck), who was a real historical figure in the Jewish and alchemical circles of the 16th century Rudolfinian Prague. He lived to an impressive 96 years of age, and his grave can be visited in the Jewish cemetery in Prague centrum. Like the beginning of *Faust*, the black magic is used at first for altruism. The rabbi sets out to create the golem as a means of saving the Jewish people from the Catholic persecution.

The parallels between the Rabbi and Dr. Caligari are many, both being mysterious characters using some kind of magic to make a robot or puppet carry out tasks for them. The puppet master is not necessarily evil, but looms in a shroud of suspicious behaviour. The relationship between the golem and the rabbi is much like that of Dr. Caligari and Cesare the sleepwalker. The scenes in which the puppet, homunculus or clay-man wake up are shot similarly. Much like a stage production both films make use of limited sets used repeatedly (the lab/cabinet, the town street etc). Expressionistic style of surreal organic architecture, reinforcing a kind of madness in the world itself. These similarities both in visual style and in story was also noted by contemporary reviewers. The rabbi wants the golem to do well and it turns on him, unlike Caligari, who is plotting crimes using the somnambulist to carry out the dirty work. But Caligari is like Faust not necessarily driven by the intention of hurting people. Rather a pursued scientific obsession gone too far, the potential of man to hypnotise another being to unconsciously even do such an act as murder.



Just as Dr. Caligari and Méliès Rabbi Loeuw is a showman as well as a mystic. In what is perhaps the most meta-scene in any of the described films, he presents an optical vision to the christian-townsfolk, showing the ancient desert with the jewish great grandfather Abraham. The rabbi uses magical optical tricks to tell an audience the story of the jews. It mirrors the cinema as the audience is participating in watching a vision crafted by the

magician before their eyes, then the apparition suddenly disrupts and the film turns green mid scene.

The word *golem* is found in the psalms, meaning “*raw or unformed material*”. What god used to create Adam as the first man, before breathing life into him. There are clear parallels to the alchemical prima materia. It is no coincidence that the golem is such a prominent figure in the jewish lore of Prague. In addition to being the capital of alchemy, Prague has always had a huge history of puppetry, animation and robots. The golem is all over Prague. Golem is at first created to do work and carry out tasks, making it almost like the first robot.²²

²² Fun fact; the word *robot* comes from the Czech *robota*. The first use of the word *robot* (meaning “forced labour”) appears in Karel Čapek’s satirical Sci-fi play *R.U.R.* Which premiered in 1921, same year as *The Golem*.

The golden age of horror films in Hollywood in the 30s was heavily influenced by the 20s German expressionist films aforementioned. Director James Whales *Frankenstein* (with Boris Karloff, 1931) especially show this influence, in the germanic gothic setting, huge looming laboratory sets et cetera. The idea of using the electricity of lightning bolts to awaken the creature is not in Mary Shelley's original novel, but has later become the definitive image of the Frankenstein monster. The novel describes the actual awakening of the dead body vaguely, hinting on black magic. The character Victor Frankenstein, like alchemists, was protective about his method. The link between Rabbi Loew and Dr. Frankenstein are obvious. Unlike Dr. Caligari, the cold tyrant, Dr. Frankenstein is a tragic figure who never sets out to do ill, but is rather conducting shady experiments in purely scientific spirit. The sequel *Bride of Frankenstein* (1935) introduces us to the character of Dr. Pretorious (Ernest Thessinger) who is more of an evil mad scientist. Pretorious is truly mad and twisted, as well as obsessed with creating life, by any means necessary, definitely a relative of *Rotwang* from *Metropolis* (1927). In the scene where he introduces himself to Dr. Frankenstein (Colin Clive), he presents his own experiments of an entirely different nature than the Frankenstein creature. He has used magic to create little people in Jars. The scene is like all of James Whale's work very camp, which is wonderful. The 7 little homunculus figures are all types; a queen, a king, a bishop, a mermaid, a ballerina and a devil. I am particularly interested in this scene for various reasons:

The tricks of the little people as well as their comedic exaggerated acting brings to mind the early Méliès films. It, in a film, shows an alchemist character presenting the idea of making life by means of black magic as a campy "vaudeville" show. The cinematic loophole is evident. Also the scene fits eerily with descriptions of a homunculus experiment made by Count Johann Ferdinand von Kufstein and the Italian mystic Abbé Geloni, where they supposedly grew 10 homunculi in sealed Jars. An account made by the cryptozoologist Karl Shuker describes how they were all unique and were given titles of king, queen, knight, monk etc a bit like the tarot or chessboard. He describes the king attempting to climb out of his jar.²³ In *Bride*, the king climbs out of his jar to be with the queen and Dr. Pretorious picks him up with a tweezer and dumps him back in his jar, just like in the highly suspect story.

The special effects in this scene are still impressive to this day. As the whole homunculus thing sounds very silly I think exactly this comedic handling of it is what makes the Pretorious scene so perfect, it's a campy farce. It takes this silly concept and makes it work both as a humorous scene and yet it actually does makes the experiment work in the cinematic dimension.



²³ <https://mysteriousuniverse.org/2018/09/the-mysterious-world-of-the-homunculi/>



“A Certain resemblance to me, don't you think? Or do I flatter myself”

Having looked at various examples of the Faustian or Promethean archetype; Caligari, Rabbi Loew and Pretorius the question arises, do these characters actually reflect the film director? Many essays and reviews of these early films do make note of the obvious similarity of the “mad scientist” and the film director. What are the goals of these characters? Although they do differ slightly, in all cases they want to dominate life, by artificially creating it or controlling it. To some extent this is what the director does, however I don't want to imply this being the chief motivation for making a film. The Golem and Cesare are set out to do tasks ordered by their master, like robots. In both cases this is part of the motivation for bringing them to life under their control, but maybe more important to their creators is the exercising of this magical power, the successful experiment of “giving life to the dead”. In the case of a film director, he is directing people to perform on his command, but this is in service of a grander vision, an alternate reality which tells a story. Were the alchemists storytellers?

In the case of *The Golem*, since director Paul Wegener plays the golem creation, he is in fact behind the scenes directing an actor who plays the character that in the scene is directing the character played by him, making it something of an Ouroborotic situation.

Alchemy was considered an *art* as in *artificial*, as opposed to natural. Although it had to operate with natural principles. But they were “hacked”. Creating Homunculi is putting oneself in place of the *demiurge*, the great creator. The eccentric Paracelsus made a big point out of this, it is also interesting to note that this man obsessed with in-depth techniques of “faking” the creation of humans was according to rumours either castrated or a hermaphrodite.

Going back to the “ordinary” kind of magic which, when you get hooked on it you realise is not ordinary. Nothing is really trivial, mundane or so called everyday in this perspective. What belongs to the subconscious, which is not a rational thing, beyond the scientific. The thing we call god is in this perspective is really the ability to step beyond life as it’s experienced and lived, engineer it. That is what a filmmaker does, not playing god but actually stepping in and being a god-figure in a reality you can objectively perceive. Of course most filmmakers do not set out with the ambition of explaining the entirety of the universe in a film. Like any work of art, it is looking at something from a certain point of view, but also trying to communicate something. We would not feel the urge to craft visions into viewable films if it was not for this desire to communicate something. What is communicated however is too complex and broad to generalise. In a film like *The Cabinet of Dr. Caligari* for example, both the visual look of the film and the subjective story are shattered, leaving an image of the world as a confusing and scary place where you can not trust anyone, even yourself. It taps on the spirit of the time and place it was made. Most directors do to some degree have a compulsion to create worlds, tell stories and make engaging scenarios, but you are fabricating a dream for others. Just like the little homunculi inside our heads who direct new dream shows every night.

Summary

I have investigated quite a lot of similarities and connections between alchemy and cinema. There are clearly endless perspectives one can choose to take when opening up this vast cosmical field wherein they meet and bond. So what does it all mean?

Méliès was a true magician, to some extent an alchemist, crafting wondrous apparitions. Finding the process which would be developed in his day and further bearing similarities to an ancient “art”. It may seem trivial, or forced. But I am utterly fascinated by my findings and in crafting my own films as something more than just products of entertainment I find the fusion of the forms very helpful and inspiring. I will keep educating myself on both practices, and more importantly try cinematically crafting the ideas I have encountered in alchemy. Alchemy is so poly-semiotic, I only described a few key symbols. There are endless ways of symbolically describe the great work, dragons and birds and various paradoxical allegories and parables. I think this is implying the importance of the doing, just as mercury and sulphur merge with salt, the mind must enact the theories in material practice. The similarities of the characters may be incidental, but also this I find enormously inspiring. Making mirrors of the process in symbolic representations of the characters, maybe as a wink at the audience, or reminder of what is actually happening on another level. To go further with this thesis will be exciting, taking on the guises and performing the magical operations. This alchemical filmmaking process, like any film, starts with a script.

PART 4

Scene From Unwritten Script

Explanation:

In this thesis I have looked at both cinema and alchemy as forms of magic. Rather than making a standard conclusion, I would like to use the attained knowledge to attempt creating a scene from an unwritten script.

I always wanted to make a film with oddly shaped sets, high contrast and silly costumes. This screenplay for one of the final scenes in the larger story will serve as inspiration for experimenting with these theatrical filmmaking styles. It's meant to be a scene which deals with the thesis topic in both its story and in its physical cinematic techniques.

"Film will only become an art when its materials are as inexpensive as pencil and paper."

-Jean Cocteau

This quote by Jean Cocteau has been extremely inspiring to me since I first read it. It stresses the ambition of filmmakers to create un-compromised direct visions from their dream-space. Trying to liberate the magic process from the business and enterprise. I want to make something which could work on a pure Méliès-esque entertainment level; showing weird images and tricks. On the other hand I want something deeper, to make the crafting of these visions be a part of the story, about literally the magic of cinema. Cinema's ability to do impossible things. Then have a character who is thrown into the dream-space wherein these things come to be. Being both explained and guided through the filmmaking tricks in metaphors and parables as well as what they may mean on a deeper level, hinting on alchemical symbols.

I feel the words only reach so far. The rest, the true magic, can only be expressed cinematically. Just like the alchemists surprising symbols and images. As we have seen before, it happens in *"the work"*.

I will take information gathered in the research and put it to the ultimate test by becoming the director alchemist archetype myself, creating a loophole between cinematic fiction and reality, using filmmaking as an alchemical tool to pierce the dimensions.

One big cine-magic trick.

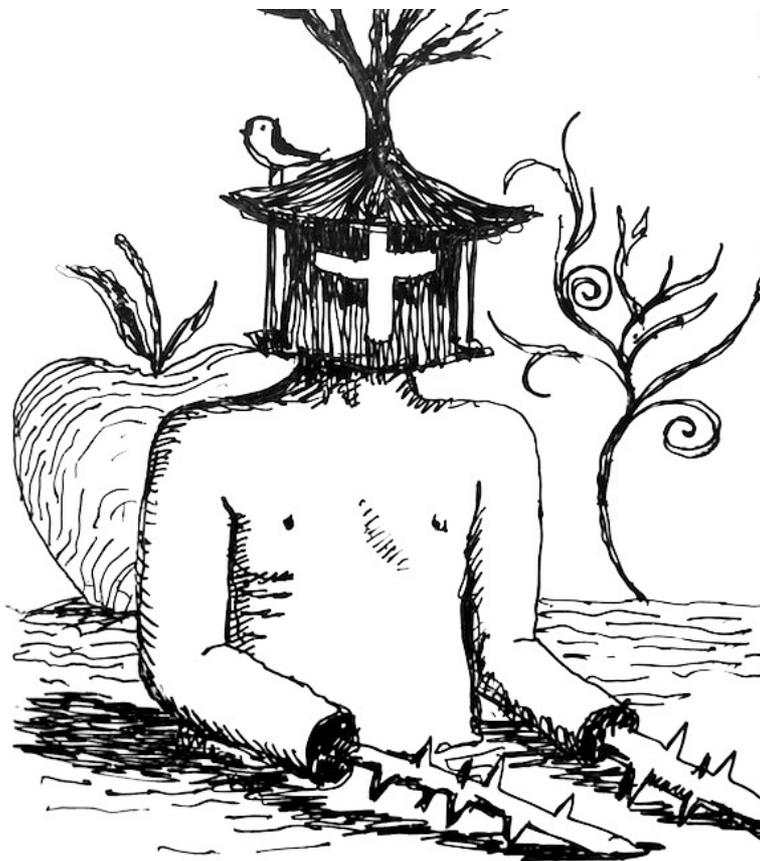
This is just a draft, and the scene will be rewritten again before I start actual production in the method of "Zebra filmmaking".

THE STORY synopsis

The protagonist has escape from a corrupt and techno facist society and found himself waking up in an an Arabian Nights palace of psychedelic fairy wonders. A land where poetry is physics, night and day always in a dance. The mattress flies. But how did this all come to be? There was a small tyrant, like Richard III or the machiavellian pope of Velazquez, a tyrannical dictator with a vision for this harmony of perfect melodies, who killed many civilisations to end up here. The protagonist was at first seduced into this and goes into the wild orgy of ecstasy. But found out more and more how cold and calculated it was, no better than the society he escaped from.

He ran off one night and awoke in the forest, the next chapter. In the forest he meditated, finding a new poetic peace. Guided by a fox, the wind, the stones, the earth and trees. After ages spent in the forest, he discovered an outside world, it a white desert of salt. Captured and taken by white cavemen to the white cave, he confronted Akhenatens tomb, was attacked by a demon cat and mummified.

He wakes up alone in the desert slightly unconscious as it gets emptier and emptier till there's nothing but a branch and the vague shapes in the distance.



SCENE

THE WHITE DESERT OF SALT

In the stillness of the pure white

There are fragments of ancient giant human figures around, with various gothic plants and trees growing through, some also have houses built on them. It's completely white, just some dead branches around.

DIRECTOR
(voiceover in the sky)

He came up to the endless white planes. Walking, walking, walking on salt, no up or down.

He comes to me here where I will show him that which crawls around in his mind. Little hard working ants, hardly working to no end. He is as an ant trapped in his own mind. For as I have conjured the golden sun in your sky the great mind has provided its shadow, its foundation, the black sun.

Black sun appears. Revolving.
Camera tilts down.

Protagonist shown walking in whiteness.
Closeup of face slowly looking around.
Cut to tracking shot. Feet walking from behind.

PROTAGONIST (to himself)

I wonder if I'm dead or dreaming. I feel conscious and clearer than ever, yet like as if someone else is controlling me. I can't tell anymore where my thoughts end and my body begins.

He walks upside down and round and round, the horizon comes and goes, a few black clouds appear in the distance.
Then birds. Blackest crows

One crow approaches and sits on a log, a tortured wrinkled log in the whiteness, on its reaching branches the crow sits and starts screeching, (nigredo, black matter, death.)

PROTAGONIST:

I really love you, you are a lovely intelligent crow, and the only life I have seen in a forever ago. Or I mean since I came here... I guess.

CROW:

No, I am no life nor love, you are simply attracted to me as the embodiment of black earth, onto which your life is liberated into the soil of another beings potential.

PROTAGONIST:

where do you come from, strange crow?

CROW:

I am in your head, which is in fact not yours, you simply share it with the audience. I can tell no more. But can you tell me how you came to be here?

PROTAGONIST:

I was living in the forest, guided by the fox and then on day... In the wastelands! Ehhmm.. I got kidnapped by cavemen... and taken to their cave... I was unconscious, I think I was attacked by a demon cat or something. My wounded unconscious body was then wrapped and here I am. It rather strange when I come to think of it? Did that even really happen? Am I dead?

CROW:

*yes, and no. Dead in that world, but you are still experiencing the experience of being experienced are you not?
he will pick you up now anytime I am sure.*

PROTAGONIST:

who???

CROW:

*The dreamweaver and film director, the alchemist of your story's many transformations. He rides a zebra, or so the script says....
Do you like it here?*

Protagonist looks around, in what was just white upon white, he now sees some new shapes have appeared

PROTAGONIST

I guess so, it looks like someone drew it? They must've had fun...

(Answer from sky, DIRECTOR)

It was fun and hard work all the same, giving life is enjoying life is it not?

Black crown flies under black sun revolving in the sky.

Protagonist alone in the white. Fascinated by matter coming and going like pulses from the ground.

One such pulse grows into a strange worm and grows a face which starts looping from black to white to black endlessly.

A rider on a zebra approaches. (Rotoscoped Muybridge zebra with figure riding.)

PROTAGONIST:

(Sitting in fetus position)

When I was a boy everything was so simple, now it just seems to get more complex. Nothing makes too much sense man...

DIRECTOR:

(steps off zebra)

POV from underneath

*A lot of things have taken place since then I tell you.
From the desert of salt I heard your call. I am the pepper you cried for,
before you inquire about all this silliness any further I can assure you that I
am both responsible for you being in it and irresponsibly instrumental in its
messy creation.*

PROTAGONIST:

I don't understand what's going on sir.

(sits on ground still arms wrapped)

DIRECTOR:

*Noonsense, you understand just fine. It needs you as you need it
Let me now draw you a circle.*

with a rope device director draws a perfect circle on the ground

PROTAGONIST:

What's this "it"? What is going on? What is going on?

DIRECTOR:

See that camera over there?

PROTAGONIST:

No, there's no camera. I don't see it, i'm in character remember.

DIRECTOR:

*Ah good. Well it is eating you and spitting you out on a silver screen in
another world, this might make you happy to hear.*

The desert of salt has brought you to me. I am the dreamweaver, all that which you have now seen and done is because I made it so, I brought you as well as everyone you encountered into existence, or at least in part. I built the forest and instructed all its creatures, I built both the palace and the tyrant, I made the mattress fly and I gave you the psychedelic visions from the pipe. And the world where you originally come from I also come from, I am a bum in that world, you have seen me on the streets. Those mad ramblings you heard there will hopefully make some more sense to you in this realm, or maybe not, it doesn't really matter.

I ride the zebra because this world of mine is all black and white, black on white, white to black and white in black. Who is black to white after all, tell me that?

I am not man or woman, I am not human, I am all and more. the great holy trinity. The divinest of bastards. (voice multitrack by male and female voice)

Let us now explore the possibilities, I think you have earned it. Tell me what do you want to dream?

PROTAGONIST:

What! I knew they were watching me! Ha, wow. Or wait who? Dreams, yes! This is just a big fat dream all the same. I can do as I like, I am lucid now.

DIRECTOR:

This is dream-space. You are most welcome. You can dream up anything here and manifest it. Like ink dancing on paper, the purest magic

As the director says "ink dancing on paper" a giant brush paints a cloud in the sky.

The director raises his hand up, magnetically takes the black cloud from the sky in his palm and rolls it to a ball.

He then throws the black ball to the protagonist.

The protagonist looks at the ball, then rolls it on the ground (closeup tracking shot)

The directors foot steps on it.

The black matter is on the ground .

Then the director puts his hand over the black pool of matter and begins animating it. Camera tilts from hand down to the black pool. It grows in abstract shapes.

Little tentacles reaching up, like slow flames

...and eventually moulds into the crow.

CROW:
(like a director)

*Ok now act scared, there's a monster approaching!!!
Black and white monsters of dreams. Gargantuas.*

A white gargantua monster seen in the distance approaching terrifyingly.
The crow morphs into a camera

*-nono more scared common you are scared they will come and eat you. BE
SCARED!! SCREAM FOR YOUR LIFE!!*

The protagonist starts overreacting scared as in silent film.

*And this here is a castle, look I can break it, I can make flowing waves, black
waves are beams, realms of the ink from the great octopus beast beneath the
sea.*

*Ok enough playing around, let's get to work. We will now explore the
endlessness limits of possibilities.*

Goes back to the circle he drew before:

*-This circle is what we will always exist within, whether you are up or down
doesn't matter to the circle, to himself he is infinite. You can make points, as
we humans love to do. Just kidding, I am not human, but putting on this
human mask sure is great. We can deconstruct reality with the power of
dreams. The square inside the circle represents four seasons or elements,
take your pick, clear point in the infinite circle.*

Ouroboros appears in circle, which then turns to filmstrip

PROTAGONIST

...The quintessence on top of all four

DIRECTOR

*Very good. Ride with me hero, to my laboratory and have a cup of hot black
coffee.*

Both ride on the back of the zebra through the white landscape, passing a few
black objects.

The circle is in a square, then triangle, then circle. Then becomes the black sun.

IN THE DIRECTORS LAB

A space with large ecclesiastical art nouveau windows animated. There's a white table with a few abstract objects like cylinders and so on. Some homunculi in jars. A chair.

DIRECTOR

Come inside, boy. I'll show you some of my work, feel free to rearrange my furniture.

Protagonist moves a chair slightly, perplexed by the strange remark. Then walks away slowly and the chair turns upside down.

DIRECTOR:

Tell me, do you like stories, fairytales? symbols? Let's draw together some symbols my friend.

They are rather lovely things which makes life amazing. Humans are monsters. Big stinky mouldminded and foulmouthed monsters. But in their use of symbols and stories do they transcend that brutal fact. Out of their frail ash-like bodies a fire of inspiration burns.

As the magician talks a small dark beetle-like creature appears crawling on the table, between the jars and white cylinders.

DIRECTOR

They dream up spaceships that takes them to the moon. Then they actually manage to build them years later. Then they claim it was just a trick, a cinematic illusion, everyones great confusion. Well let me tell you where you are now, that moon landing was true. And so was the sun landing, in fact you are currently a part of it.

As the director talks he picks up the cylinder and magically flips it into a spiral staircase. The beetle like creature begins walking up the staircase he holds in his hands, as it reaches the top, the director turns it around and the beetle works his way up again, endlessly.

Mustache grows on protagonist's face.

Cut from paper, sliced into two. What you call depth is relevant to your horizon, which I can draw wherever I please.

Protagonist walks towards a large black hill in the background, but as he approaches it grows smaller, then he passes it like a rock and turns confused.

Weird black and white objects in background (milk with ink high speed tank)

PROTAGONIST

(In discerned voice)

The old crone is swimming in the ceiling, but no-one pays that any mind. A thousand dancing demons in the kitchen.

(insert short dramatic parable, maybe love triangle. This will be shown as a very short silent-comedy on the table)

DIRECTOR

Whether careless or too careful with the way in which you conduct your life, you cannot escape drama. That is where stories come from; the inner conflict and outer conflict in conflict with each other. Have a salt and pepper cocktail my friend. Now let me teach you about the miracle of animation, making love to creation.

They drink coffee

We live for the artifice, the magic is that. Any act of creation is an act of magic. I can make people out of clay and breathe life into them, just as god once did, then the Jewish mystic, but that was just a story, this is real, at least for the moment that you experience it. What is real of course entirely depends on what focus you wish to take, but the existence of anything will, by that very definition, solidify it in the cosmos, the endless cosmos. You may not like me or like hearing me say all this, nor would I. My knowledge is as limited as it is endless.

Gnosis, knowledge that nothing is everything is what is what is what we are is not were not were nothing we are not we are not we are we but not what we could be be be but that's me meme.

You must always explore the animals, the other people, their fine motorise, their quirks, their faces. Watch them passively as they walk down the street, their endless face masks full of problems and thoughts and desires. Written in their wrinkles, the dramatic scripts of their lives.

Above monologue is illustrated in strange drawn images, claymation or actors in masks. The black mirror on the wall shows distorted faces.

Wear masks to become someone else, or maybe your own homunculus, the theatre of life and the theatre of the mind submerged, the conjunction of realities.

This is shown by a character who has only a black stump for a head sitting on a bench in an urban landscape. He takes a white silicone face cast mask and puts it on the black ball.

Here let me paint you a moving scene, smell it also. If I do my job you can even smell it. (screen turns black)

The faun in the landscape, the valley is smooth and endless as is the light that bathes the sky above it.

I was not as famous then as I am now, and nor was I as restrained, but with such virility inevitably comes a tendency to rush over such details. As the lonely dancing flower with little pink leaves, down there by the riverbank, it knows it is special, and unnoticed by the faun. The faun is busy chasing the nymph. What an image it is, the masculine and feminine side by side, the civilised and primal in dance. Flares of flowering waves of hair, endlessly dancing into the landscape of this crystallised lucid moment that will never come to near be.

But is not the dream of it evoking even stronger feelings than that which the actors feel inside? Glowing daybreak and lush poetry vines recklessly dancing up the wall, the stone wall drinking the sun. Which upon top of sits a man who never gave a care in his life of the fact that the sunflowers idolised him.

It's not easy to be me, to be you, to see, to be true. But as we wander through days on end wondering what to do, there's a small death lurking and its waiting for you

here we are, we have arrived at the scene, this is the end of the film, and the beginning of life. To you of course they are still the same, and you are a vessel of the audience, they have vicariously lived your life, which is but an illusion, a dream.

PROTAGONIST

Well, at least we had fun. But who am I really, I cannot tell anymore...

DIRECTOR

To be everything is to be you and to be poetry is to be true. All is one, but it is cracked in our eyes, we fracture light into coloraturas and god into words.

Here now do we find ourselves, in a moment, that will end, but with the magic of cinema will live on forever, if we keep the fire awake. End, beginning, mirrors are infinite just like circles.

At the end of the desert awaits a tower, all my life have I waited for you to enter it.

PROTAGONIST

You fucking weirdo

What's in the tower, can't I stay here with you???

DIRECTOR

You have now witnessed an incredible adventure, but it was all a film, a dream, does that not make it real though?

A faraway tower looms in distance.

Protagonist starts slowly walking towards it as screen fades to black.

Sources

Books:

- *The Secrets of Alchemy*, Lawrence M. Principe, University of Chicago Press, 2012
- *The Emerald Tablet*, Dennis William Hauck, Penguin, 1999
- *The Black Arts*, Richard Cavendish, Pan books, 1967
- *Alchemy & Mysticism*, Alexander Roob, Taschen, 1997
- *Collected works vol 12. Psychology and Alchemy*, C. G. Jung, Princeton university press, 1968 (2nd edition)
- *Early Cinema- Space, Frame, Narrative*, essays, edited by Thomas Elsaesser, BFI, 1990
- *Weimar Cinema*, essays, edited by Noah Isenberg, Columbia university press 2009
- *Cinefantastic Beyond the Dream Machine*, David Annan, Lorrimer, 1974
- *Silent Cinema A guide to Study, Research and Curatorship*, Paolo Cherchi Usai, BFI 2019
- *Theatre and its Double*, Antonin Artaud, Grove Press, 1958

Articles:

- https://www.azothalchemy.org/azoth_ritual.htm
- <https://www.alchemylab.com/smaragdina.htm>
- <https://www.nationalgeographic.com/news/2016/04/160404-isaac-newton-alchemy-mercury-recipe-chemistry-science/>
- <https://mysteriousuniverse.org/2018/09/the-mysterious-world-of-the-homunculi/>
- <https://filmschoolrejects.com/cinematic-persistence-of-faust/>
- <https://www.thevintagenews.com/2017/12/06/glenn-seaborg-alchemimist-in-1980/>
- <https://www.thenewatlantis.com/publications/the-problem-of-alchemy>
- <https://www.grunge.com/176460/the-weird-history-of-alchemy/>
- <https://culture.pl/en/article/wladyslaw-starewicz-the-bug-trainer>
- <https://en.wikipedia.org/wiki/R.U.R.>

Documentaries and lectures:

- *George Méliès: To The Moon and Back*, <https://www.youtube.com/watch?v=Zp3OjSCgzBc>
- *The secrets of Alchemy*, Lawrence. J. Principe, <https://vimeo.com/53880152>
- *Consciousness in Alchemy and science*, Dennis Hauck, <https://www.youtube.com/watch?v=5xqFTvpTWnk&t=1s>
- *How Alchemist Achieved their Transformations*, Dennis Hauck, <https://www.youtube.com/watch?v=j1XAodf2ou8>
- *Secrets of the Metals*, Dennis Hauck, https://www.youtube.com/watch?v=_6vXA-QQ8pM
- *Tour of an Alchemy Lab*, Dennis Hauck, <https://www.youtube.com/watch?v=uLvW477y9hw>

Other:

- *Speculum Alchemiae*, tour of a rediscovered alchemical lab, Stare mesto, Prague
- *BBC In Our Time (Science)*, Podcast, episodes on Alchemy and Renaissance magic, Melvyn Bragg, 2005
- *Alchemergy*, Podcast, Dennis Hauck 2002-18