

Hegel's Contradiction and Negation

by Sven Nilsen, 2025

In this paper I argue that Hegel's dialectics does not contain antithesis in the ordinary sense of Fichte's thesis-antithesis-synthesis, but contains a neutral thesis that is in contradiction. This results in a process where negation is not the same as the negative, but also a double-negation, the positing of the positive. This form of negation carries with it the synthesis pointing back to itself.

Georg Wilhelm Friedrich Hegel is known as one of the world's most obscure philosophers, which influenced Western philosophy significantly either directly or indirectly. Most famous philosophers who came later, although far from consider themselves Hegelian, react to the philosophy of Hegel.

After studying Hegel for several years, I am not even sure whether any philosopher who came later than Hegel understood him properly. There seems to be different opinions on what Hegel's philosophy is about and by constructing such opinions, the pluraverse of commentaries became the basis on which people build their own philosophy. With other words, people do not simply read Hegel, but participate in discussions about Hegel to form their own reactions based on other people's reactions. Hegel himself is an enigma of Western philosophy.

There some parts of Hegel's philosophy that are easier to understand than other parts. While being obscure overall, Hegel is actually very accessible, hence his popularity, by offering an introduction to his philosophy that is not too hard to grasp. You can usually read any part of Hegel and understand some of it, but when trying to grasp what he does, his ideas seem to slip away.



Immanuel Kant. Aquatint silhouette by J.T. Puttrich, 1793.

The problem starts when you try to explain how Hegel use basic concepts, such as contradiction and negation. Here, Hegel is departing from analytic philosophy and builds his thoughts on speculative usage of terminology. This was before analytic philosophy was established through the pioneering work by George Boole, Charles Sanders Peirce and Gottlob Frege. Around the time of Bertrand Russell, people understand logic well enough to start seeing Hegel as a pseudo-logician.

This turned to be a colossal mistake. Hegel was in some ways so far ahead of his time that analytic philosophy had to be challenged by new perspectives in modern mathematics. These modern perspectives are not considered part of the field of analytic philosophy today, which is more or less stuck in Modal Logic and small deviations from it. Instead, there is a multi-discipline effort in modern mathematics coming from different angels all at once where Category Theory (William Lawvere and others), Type Theory (Vladimir Voevodsky and others), Schema Theory (Kent Palmer) and more recently Path Semantics (Sven Nilsen), is reviving the interest in Hegel's philosophy.

At the same time, the interest in Hegel from the perspective of continental philosophy has never gone away, but is also increasing in later decades, also in reaction to modern mathematics.

Some people have trouble understanding the difference between analytic and continental philosophy. I explain this difference by using “alien” vs “human” philosophy. An alien philosophy is something you in principle would agree with an alien intelligent species. No matter what kind of physiology, social, cultural or intellectual biases, all advanced civilizations might agree on the core ideas of analytic philosophy. On the other hand, a human philosophy is something that is heavily biased toward the particular existence of human beings and their relations, who might agree on the core ideas of continental philosophy.

For example, something that distinguishes homo sapiens from other life forms is the heavy use of language tools to manipulate their environment. This is something than an alien species might not necessarily agree on, depending on how alien they are.

Since logic is not usually very well suited to capture the use of language among homo sapiens, yet has some kind of eternal and universal language bias, there is a tendency that logic is the primary tool in analytic philosophy.

Language in general is in one sense something universal, but in the context of human activity, language tools are biased toward the needs and utility of human minds. There is a tendency that language is the primary tool in continental philosophy.

Path Semantics is a recent field under establishment that instead of studying logic in itself (like logicians do) and language in itself (linguistics), it studies the synthesis of logic and language by building up a framework of tools on the core axiom in its own logical foundation. This is a Wittgensteinean approach (after Ludwig Josef Johann Wittgenstein), but there is no illusion of the world being made out of language. Path Semantics is not post-modernism.

Wittgenstein believed first that there was no analytic solution to the problem of synthesis between logic and language. He stated in his work “Tractatus Logico-Philosophicus” a proposition “Whereof one cannot speak, thereof one must be silent.” Later, he changed his mind and thought about usage of language in terms of language games. Similar ideas of using games and game theory have been applied successfully in other fields, for example by approaching logic through the lens of economics. Wittgenstein’s philosophy had significant influence in Western civilization, but from a Path Semantical perspective this is simply a language bias among many others, which means that Wittgenstein shaped philosophy in a sense of specialization, that has no bearing on general approaches to philosophy.

As a Path Semanticist, I believe Wittgenstein was wrong overall and did not master e.g. propositional logic very well. Wittgenstein was by all means a genius, but even geniuses get often stupid. Yet, Wittgenstein made significant contributions to philosophy. The same could be said about Hegel and most other philosophers. I do not want to go into depth about how Wittgenstein was wrong, but the basic idea is you can move forward and backwards between simple theories, such as classical logic, and more complex approaches such as economics or aesthetics. You do not have to “believe in” some particular theory, because it is sufficient to assume a theory and work on it under its assumptions. People do this today in e.g. Category Theory.

Going back to “Whereof one cannot speak, thereof one must be silent.”, this is a jump to conclusion that was correctly recognized by the later Wittgenstein. However, what is this statement about? The statement is about the fact that there is no analytic solution to the problem of synthesis between logic and language, but instead of going down the road of remaining silent, one can instead make the choice that this requires human synthesis. This means: People who can explain the use of symbols and tradeoffs between logic and language. Which is the purpose of using Path Semantics.

This table helps explaining the overview of Western philosophy today:

	Analytic Philosophy	Continental Philosophy
Civilization language bias	Alien	Human
Primary tool	Logic	Language
Common language bias tool	Path Semantics	Path Semantics

As a consequence, Path Semantics is used to bridge the gap between analytic and continental philosophy. This is not the only use of Path Semantics. For example, Path Semantics is used to explain standard mathematical notation and new notation integrated with standard mathematics. There are many ways to approach Path Semantics and use it to build bridges to other fields.

People who become Path Semanticists specialize in studying how people use symbols, by reducing usage to the core axiom. It is similar to how physicists reduce measurements of lengths to meters, or more broadly, measurements to SI units. The core axiom is kind of like a unit measurement of semantics.

Path Semantics is not part of analytic philosophy, but overlaps in some ways such that the research on the foundation has resulted in major contributions. However, the same goes for many other fields. People that work in other fields can use the results from Path Semantics without being Path Semanticists themselves. Every aspect of human knowledge relates to this field in one way or another. Instead of considering Path Semantics as a sub-field of other fields, it is often better to think of it as its own field that builds bridges to other fields.

By separating Path Semantics as its own field with dedicated experts, it helps narrowing down the focus on the field to use of symbols only, without e.g. concerns about ontology. There is simply too much knowledge that is particular path semantical, that experts have to specialize to get work done.

The argument in this paper is from a Path Semantics perspective. The experience and knowledge from Path Semantics as a field is used to study how Hegel uses contradiction and negation in his philosophy. It is important to recognize this is done in a typical approach for this field. The intention is to explain the basic terminology in Hegel's philosophy to other Path Semanticists.

Instead of trying to analyze all occurrences of contradiction and negation in Hegel's philosophy, I will use another approach: I will explain what contradiction and negation is doing in his philosophy as a predictive theory. This theory is falsifiable, such that in the case it does not fit Hegel's philosophy, it can be dismissed. This is a work-around for the problem of general inconsistency.

From a logical perspective, contradiction is not an easy concept. This is an illusion due to most logicians only thinking about the contradiction of a single proposition $\neg(a \ \& \ !a)$. This holds constructively and therefore also in classical logic (since you get classical logic from constructive logic by adding the axiom of the excluded middle). The problem starts when you express a contradiction between two propositions, e.g. $\neg(a \ \& \ b)$ or $\neg !a \mid !b$. These two expressions are logically equivalent in classical logic, but in constructive logic, they are not logically equivalent.

The first time anyone thought about contradictions of two propositions, was in the paper "Existential Contradiction Logic" (Sven Nilsen, 2024). This is very late in the game compared to the criticism of Hegel that happened hundred years earlier. There simply was no basic work done.

When people have not done even the basic work on contradictions in logic, of course, it looks very bad to criticize anyone for not using terminology of contradiction properly. The problem is not even some semantical language boundary between analytic and continental philosophy. It is simply a matter of logical work that is lacking. This work must be done prior to holding any debate in analytic philosophy itself about the issue, which in turn must be prioritized before debating Hegel.

I am not saying that Hegelian philosophy ought to not be criticized. It should. People should be critical (e.g. not accepting these ideas but not feeling the need to investigate) or skeptical (e.g. investigate the claims to figure out whether these ideas should be accepted) and must be allowed the freedom to take either stance.

For example, if somebody dismisses Hegelian philosophy without basing this criticism on any specific reason, then they are actually doing a healthy thing. It is not healthy to suggest that people ought to investigate all claims they do not accept. This is very important, because many might just dismiss this kind of philosophy without having a deep opinion on why they should dismiss it.

The problem is the way analytic philosophers hundred years ago attacked Hegelian philosophy. It was done on the claims of having a better position. Yet, if they actually had a better position, then why would they leave out basic work on contradiction? They might have other reasons to be skeptical, but these reasons do not seem to be particular to their own expertise and field. It would be better to take a critical stance and not having a strong opinion on Hegel.

Therefore, the reason it was a colossal mistake to view Hegel as a pseudo-logician, was that analytic philosophers themselves behaved in this debate like pseudo-logicians themselves.

Anyway, mistakes that happened in the past is important to recognize, but we need to move forward while trying to avoid repeating the same mistakes. I want to address one reason why Hegel seem so obscure in our times, that explains his popularity: Obsession with photography.

The first commercially successful photographic process, introduced by Louis Daguerre, was the Daguerreotype, referring to both the process and the images created, in 1839. Photography the way one thinks about it today did not exist during Hegel's lifetime, but Silhouettes were popular during his time. A silhouette is created by cutting black paper and placing it against a bright background. This art form became popular around mid 18th century and fell in popularity when photographs became more common. Silhouettes became a cheap and effective alternative to miniature portraits.

Silhouettes introduced a new perspective of self-reflection which was more abstract. Naturally, people were familiar with their own shadow under bright sun light. When silhouettes became widespread, it inspired philosophers like Hegel to think about the self in a different way. All of a sudden, the shadow that had been there for people throughout history, became an art form on its own, raising interesting questions about human nature e.g. by using Plato's allegory of the cave. The attention was changed to thinking about light itself and this in turn encouraged research that resulted in the first photographic process.

Frequently in history, new technological innovations results in similar ideas in philosophy. The scientific explanation of this phenomena by Path Semanticists is that the human brain uses language bias to organize information. When a new technological discovery is given a lot of attention, it influences how the human brain interprets new information. It happens because the organization of information in the human brain changes with the language bias people are exposed to.

Around the time after Hegel, people started taking photographs using negatives on cheaper film materials. It enabled mass production of photo cameras. In turn, this made it possible for more people to be remembered in history where prior to this innovation, paintings were the major medium of visual family remembrance. People became obsessed with photography, because it enabled a stronger reflection of their own selves. When Hegel talks about a thing in itself or for itself, his language of thought is influenced by this massive obsession of people being given an opportunity of stronger reflection, a luxury that previously was restricted to the power elite.

It can be very hard for the modern human mind to understand how people saw the world only a few centuries ago. People prior to this moment have been obsessed with the power elite and their stories for millennia. The elite fabricated stories to manipulate the opinion of the masses. This psychological phenomena built up the reflection of Ego in the elite class, while oppressing the Ego in the worker class. When photography became more accessible, it opened up a new opportunity for more people to shift the focus from the fabricated stories produced by the elite class, to a topic that was more relevant and interesting: Themselves.

People started around this time to ask questions like “Who am I?” instead of just thinking about questions like “Who was Jesus?” or “How does God want me to obey the king?”. When people started asking these questions, they became scared, because nobody around them had answers to these simple questions. Since Jesus was not able to save them from this self-realization, intellectuals started portraying themselves as the champions of the people while submitting their own freedom and people’s freedom in general to the continued elite class. All these intellectuals have the same agenda: Do Apologetics for justifying beliefs in Christianity while also providing seemingly meaningful answers to new scientific and technological influence on society as a whole.

Hegel stepped into the circle of this debate to constrain the working class under the authority of the state, with the ironic consequence of being completely obliterated by Charles Darwin only years after his own death, which put the entire discipline of philosophy in shock for more than a century.

There is one person who arguably had more influence than Hegel in Western philosophy: Charles Darwin. While being inspired by Emmanuel Kant, Darwin never was thought about as a philosopher in his own right because people were simply too busy with attacking him. As a result, Darwin influenced philosophy from the outside, creating the expectation of philosophers to break out of previous philosophical traditions and do something equally revolutionary to Darwin’s work with their own ideas. There is no exaggeration that this attitude among later philosophers, by not recognizing Darwin as a philosopher in his own right at the same time of subconsciously trying to surpass him, has costed humanity hundreds of millions of lives and an extreme amount of suffering. This happened because philosophers did not think carefully about Darwin’s own philosophy.

Regardless of the immense importance to understand Darwin’s external influence on philosophy, this is irrelevant to the understanding of Hegel’s use of contradiction and negation. One can think about Hegel as living near a kind of Apocalypse of philosophy, that changes the field drastically. The year Hegel dies in 1831, is the same year Darwin steps onboard HMS Beagle, to make the most important journey around the world in modern intellectual history. Yet, this event that put in motion a cascade of changes, significant discoveries, but also catastrophes for humanity, is of course unknown to Hegel and has no causal influence on his philosophy. Studying Hegel prior to Darwin is like studying the animals living in the desert of the location where the Manhattan project did the Trinity test, shortly before the nuclear explosion went off.

Hegel's influence on later philosophers is the result of a psychological coping mechanism, where Hegel's philosophy is chosen as the object of attention. Hegel is a safe target which can not fight back, because he was completely obliterated by Darwin and everyone knew it. Hegel's corpse of a philosophical work was reanimated as some kind of obscure zombie philosophy, upon on which later philosophers established their own thinking. It is not like Hegel has something very interesting to say about science, it is more about people's creative usage of Hegel to impress each other.

There are multiple mistakes that later philosophers make about Hegel. First, they reason as if Hegel ought to know about Darwin's work. Second, they reason as if Hegel was trying to do something revolutionary on the level with Darwin, instead of just being recognized as a philosopher with his own ideas. Third, they reason as if Hegel is using the same dialects that originated with Johann Gottlieb Fichte of thesis-antithesis-synthesis.

This is the reason I have to turn the clock back to the time before Darwin. Otherwise, it becomes impossible to avoid all the noise from the later intellectual explosion and chaos that followed.

Fichte's dialects of thesis-antithesis-synthesis has been a such popular idea in philosophy that people often attribute the origin of this idea to Hegel. There are language tools available that people can use today, such as argument maps, but for some reason they have not been very popular in philosophy. My guess is that people write and read philosophy as a combination of entertainment and discipline of thought, which makes whole books dedicated to single arguments more desirable.

With other words, when turning the clock back to Hegel's time, it is easier to explain his writings as being more similar in effort to what other intellectuals around him is doing, plus the influence of this new obsession people have with photography, which made people use self-reflective language.

Silhouettes might have been an inspiration for Hegel's notion of negation, that was leading up to the development of the photographic process. From a Path Semantical perspective, this notion of negation is not like an antithesis. This is because, the negation of the positive image is the negative image, having the same information as the positive image, but with everything negated. The negation of the negative image is the positive image. They are both defined in terms of each other. There is no actual synthesis to arrive at, since the second destination leads to the first and vice versa. With no antithesis, there can also be no synthesis.

There is nothing particular about a photographic negative that makes it inherently negative. You can produce a configuration on the negative film which is identical to the positive image. The negative image is simply part of the process that people used to take pictures at the time when Hegel's philosophy became popular. During Hegel's life, people used silhouettes as a cheap and effective method to capture likeness. Later, people used negative films. In modern photography, electronics removes the need to produce a negative image as a step in the process.

When technology progresses, we lose the historical context which people write their texts. The reason I go back to this period where people start to cut silhouettes and take photographs using negative film, is to remove the later noise in philosophy that covers the missing context: People learning about how photography worked and their own questioning using this technological terminology as a basis for their self-reflective language of thought.

Synthesis must break the cycle of thesis vs antithesis to be useful. Since there is no antithesis in Hegel's philosophy in the sense of Fichte, there is no synthesis to break out of the cycle. Instead of interpreting Hegel as deviating from Fichte as the "correct dialectics", one should see him as providing a form of dialectics that people around him understand in the context of the self-reflective language of thought based on the obsession with photography, which was early on in the form of silhouettes. Hegel is doing this intentionally to help people explain their fear of the simple unanswered questions about themselves and get release of this tension by submitting under authority. People know that Jesus is of no help here, so Hegel criticizes religion as picture-thinking, to put himself on the same side as people having these doubts. Like a savior figure, Hegel is meeting people where they are as lost sheep and bringing them back to the herd, safely guarded by the state. This is in alignment with the philosophers viewing themselves as responsible guardians of society, to assist and show the path toward enlightenment. At the end, he brings back the spirit, The Holy Ghost, to show people that Jesus was there with them all along during their doubts.

This is why Darwin was so shocking for the entire field of philosophy. In that moment of triumph, when people declared victory in the name of Hegel, they were not aware of the doom at the horizon that would bring about the Apocalypse. The positive thinking and optimism of the Enlightenment would be shattered and culminate in the Manhattan project which was the final straw breaking the camel's back, after more than a century of struggle against Darwin's enormous impact. The rest of the past century was philosophy trying to heal from this trauma. With motivation from modern mathematics, philosophers are trying to bring Hegel back, like the rabbit pulled up from the hat of a magician after vanishing. Only to be obliterated again by Path Semantics, showing that even the reaction to Hegel's philosophy originally, was based on misconceptions and lost historical context.

The sad truth in reality is that the deaths of hundreds of millions of people and immense suffering can be for no particular reason at all. There is no safeguard in society against people simply being wrong about their own beliefs. When people are wrong, they live out the consequences of whatever their wrong beliefs will produce in their own environment. An alternative past history was possible, where people instead of fighting two world wars, spend the resources on providing every person on Earth with free clothing, shelter, food and education, which would be cheaper and more efficient.

Human labor consists only of 1/200 of the world economy. 199/200 is the number of big machines. Some economists simply remove human labor overall when using as simplified model of the world economy. The truth is, most of our well being is not caused primarily by human labor. It is just easier to see the labor we do every day as more significant than paying attention to big machines.

Since the world economy is primarily not about human labor anyway, we might as well as species decide to give everybody free clothing, shelter, food and education as human rights and save us the trouble of all the wars about material resources. This would be more sustainable in the long run. A very simple algorithm, a Gini solver, which is a stochastic binary search optimizer for the Gini coefficient, can eliminate poverty, make everyone better off, including the rich and boost markets.

While philosophers can sound rational in their effort to heal from historical trauma, they do not have a track record in modern times to be very efficient. That is why I, as Path Semanticist, is telling you as a reader what simple steps one can do to actually reduce the suffering. I do not want to pretend that suffering is not going on or that using philosophy as psychological therapy is efficient. Like the big machines that drives the world economy, implementing a Gini solver is a hundred times more efficient than most individual efforts to make the world a better place. We can spend as much time we like on making ourselves feel more comfortable, after doing the basics.

A lot of noise has happened in philosophy since Darwin, but it is not of any particular help as long as people do not regard Darwin as a philosopher in his own right. This point of intellectual maturity is needed to move on from defending religious beliefs from what should be considered basic biology. The more time we spend as species on this debate, the more time we waste. This time could be better spent on thinking about the actual impact Darwin had on philosophy and why later philosophers made all sorts of mistakes by pressing themselves to produce revolutionary ideas.

The intuition of Hegel has about the thing in itself, is more or less the same intuition people got from photography after his time. There is a real world object, a thing in itself, which you can capture on film using negative colors. This negation is not just a difference between a positive image and a negative image. It is the difference between the thing in itself and the captured knowledge that is a thing for itself. What is the thing for itself? The family that becomes remembered by history when taking a photograph together. They do it for themselves, not in the service of Jesus or the king.

Amazingly for later generations, this idea has to be deliberately explained to people, that it was possible to do something as a group with the interest for itself, as a natural process of being in the world. Later, people have interpreted group dynamics as self-interested, but this is through the conscious labeling of the modern mind, while the actual group dynamics was self-interested in the sense of genes which DNA code was locally optimized for some environment to have a chance of reproduction. The doubt and uncertainties that people had in Hegel's time of becoming more self-reflective, had to be steered away from dangerous paths toward the safe salvation of the state. After failing to deliver safety for the Nth time, Jesus managed to make a comeback to these people. However, this comeback now happens in the context where groups acting in self-interest is just fine.

Karl Marx was a later philosopher that asked the question based on the social acceptance of groups acting in self-interest: If workers drove the economy and were acting in self-interest, then why did not workers have the power? Why was power concentrated in the hands of a few elite individuals?

It was a natural question to ask at the time, but the mistake was with Darwin's enormous influence to assume that philosophy ought to answer with its own revolutionary ideas. Without doing any careful reasoning, but building on misunderstandings of Hegel's philosophy, hundreds of millions of people are now dead, without the people alive having a satisfying explanation of what happened. The blame game has been reduced to a silly argument about Capitalism vs Communism.

As a species, humans waste a lot of time on social drama. This is one of our big flaws. Moving on from drama to useful work, requires being able to debate things without the debate spiraling out of control into something that just creates more drama. This is not easy when criminals are leaders.

This is why Path Semantics is becoming more and more relevant. First, a better clarification on how humans use symbols, such that misunderstanding can be avoided. Second, a recognition that being a Path Semanticist does not give a person social authority, but functions kind of like a doctor in medicine to bring up things to a scientific debate among Path Semanticists. The community of Path Semanticists have more than enough power through the contributions made to multiple fields by research alone. If anything, then it is desirable that fields themselves put more effort into this work.

For example, in physics, people have developed the SI units and is given a high grade from a Path Semantics perspective. This means that Path Semanticists do not have to put in that much effort when bridging to physics.

Other fields. Well... you can say they have some work to do.

The worst fields are those that generate a lot of drama while doing very little to standardize or explain usage of symbols. Theology and biblical scholarship are currently among those fields.

Hegel's philosophy is among those things that people make a lot of effort to explain, but there are all sorts of opinions and perspectives. Why this effort is so ineffective, might be because people do not apply methods from Path Semantics.

In Path Semantics, there are two fundamental language biases: Seshatism and Platonism. Seshatism credits knowledge by causality and Platonism credits knowledge by abstraction. They are dual to each other and higher dualities are formed by using Joker Calculus. Joker Calculus is designed to account for human evolution, that explains how people e.g. can double down on some position while being opposed or in conflict with another position. Essentially, the reason why people are generating drama, is that the human brain, which uses language biases to organize information, recognizes particular patterns of language biases which automatically triggers social responses.

By identifying language biases that generate drama, we can scale down the conflicts. In this case, one can turn back the clock before Darwin and pretend that Darwin's work never happened when interpreting Hegel. In that context, Hegel's philosophy can be seen as parallel to other intellectual efforts in his time. Hegel is not a revolutionary. He tries to calm people down by addressing the uncertainty and unrest that arises from people becoming more social self-aware as groups. They are starting to ask questions about whether they are acting in self-interest, which is a new idea triggered by the new art form of silhouettes and later by more families becoming remembered by history through photographs.

Hegel has some dark sides to his personality. The trick that he and other intellectuals use, is to subvert the authority by playing different sides against each other and to give a "thumbs up" to groups acting in self-interest. He is giving permission for people to start thinking about themselves, not just as individuals, but as collective units, where the orientation of consciousness is toward questions about the groups themselves, away from the attention and worship of the elite class.

For individuals with a neurotic personality, Hegel seems to be a safe shepherd, a wise wizard, that follows them along on a journey through a strange reversal of the real world. The negative image of the otherwise positive image. In the end, a return to normal life is expected. This gives them a high dopamine release and they submit under authority under the joyful spirit. These individuals are being played, going in circles of thought and used to cover up the actual revolt against authority.

For the rebels, Hegel's philosophy is a secret message in the form of dog whistling, encouraging them to organize and plan ahead. By normalizing the psychological response to change, resulting from new technology, that it is OK to act in self-interest as a group while remaining social respectable humans, Hegel is actually turning the momentum of religion being under attack into a weapon against the economic inequality and social differences between classes in society. While bringing people back under authority, a simple question remains unanswered: Which authority?

Like all the smart people who have pondered upon which authority they should follow through history, Hegel's conclusion is unsurprising: The answer is his own authority.

People read Hegel out of desire to figure out the answers to their questions about life and meaning. The task of philosophers that lead subversive political rebellions, is to make the return to normal life as surgical precise as possible, in the sense that they want people to be where they are in society, with the same buttons and levers to control as before, but with a simple change in their mind. Now, they are seeing themselves as being part of normal society under the leadership of Hegel. Hegel's role is not an explicit leader role, but as the lens in which people view authority in general.

All reactions to Hegel by later philosophers play on this variant, where the deeper disagreement is which authority people should submit to. People think carefully and deep about this question and ending with the conclusion that the authority ought to be their own person. Which contradicts Hegel's philosophy. Yet, because Hegel is encouraging groups to act in self-interest, this produces an anxiety about whether Hegel is firmly holding his claim to leadership or not. This means, later philosophers have to find flaws in Hegel's philosophy itself, not just attack him as a person. Under influence of Darwin, Hegel becomes an easy target. Most philosophers use Hegel for their own means, which has a marketing effect where you have to use Hegel to be regarded as respectable.

What better technique is there to blend in a lot of confusing ideas that further obscures Hegel's philosophy? By claiming that Hegel uses the dialectics of Fichte, even originating it, most people are prevented from figuring out what Hegel is doing with his texts. This means, they have to search out the person who are making these claims and rely on them as an intellectual authority.

If only one person did use this strategy, then it would seem more clever. However, it is hard to stand in the middle of a market where everybody offer you the same product that only differ in price, to regard any individual supplier as being better than another. The only uncertainty is quality, so people with more than enough money in their pockets look for the supplier who delivers to the royal palace. Ironically, it ends up being an appeal to authority that supports existing power structures.

Despite the enormous costs in terms of human lives and the extreme amount of suffering, people end up in a dark Nash equilibrium where all they want from you as citizen is your attention, so they can sell you products. They will produce an amazing drama e.g. about Early Christianity, just to sell something as mundane as a soap. Intellectual content is packaged as dopamine rushes, where the highest of human culture and finest art is reduced to the simplest form of economic transaction. It is a meaning making mechanism into something that does not make sense.

This is the state of Hegel's philosophy today. It is kind of a super-popular brand of philosophy, that people use to construct their own version of it, often claiming to be contrarian to his ideas. All the drama is built on posing, where people ought to deliver something revolutionary like Darwin, while the end result is tiny differences in interpretation of some text.

Did Hegel actually brought about new ideas at all, or is he just being credited for it by other people reacting with shock to Darwin's work? I do not know. At least, I can try explain what I believe Hegel is doing with contradiction and negation and leave it up to you to judge how deep the idea is.

I argued that contradiction is not very well understood at this point in time, even from a basic logical perspective. One can argue that this is not a very good position to be in, because the only way it could be worse, is to have none work at all about it, which is close to where we are today.

How I think about contradiction in Hegel's philosophy is about two propositions instead of one. A thing in itself is not necessarily in contradiction. The thing in itself is in contradiction due to being challenged by other constraints. In this case, it is the family taking a picture of themselves as doing it for themselves while not doing it for any external reason, such as religious purposes or in the service of the king. However, in this society, you are supposed to live your life by religious motivations and in the service of existing authority. You are not allowed to be a free-thinker.

This means, the simple act of taking a picture of our own group, is in contradiction, not because there is an actual physical contradiction, but because there are no constraints present to prevent people from doing it. They have some amount of freedom which is not supposed to be there, but created by the circumstances of desire to mimic the elite and technological innovation. First, the elite made statues, sculptures and paintings of themselves. The desire to mimic the elite made people invent cheaper methods like silhouettes. This in turn became an inspiration for philosophy. Second, the philosophy, inspired by silhouettes, is consumed by people who get obsessed with photography and technological process as a means to achieve social progress as self-interest. This is a huge change toward the modern mind where the focus is shifted from the elite class to people. Hegel's popularity is due to his use of common words people know that reflect the development of promoting self-interest at the individual level and for groups.

Freedom is dangerous to authority, not because it poses a direct danger, but because people might build on this basis a language that enables them to start asking simple questions.

The elite class desires to abuse the working class in their own thoughts, to automate the abuse over time by mental anxiety and stress. This is why Hegel's contradiction is not a contradiction of a single proposition, but two propositions. The contradiction is between the elite's desire for control and the working family that wants to afford a moment of freedom where they get remembered by history as actual beings that once existed, as a group, acting in their own self-interest. This is what a photograph means in this time, beginning in the art form of a silhouette. It is a proof of existence. It is not a painting of some imaginary made up glorification of violent war or an artistic beautification of a tyrant's ugly reality.

Imagine all the wealth under the control of the elite. More horses you could ever take care of, let alone ride or even touch with your hand. More land than you could ever visit. More money than you could ever spend. All this wealth, multiplied with each moment of a tyrant's life. Not a single moment of this chain of events was the tyrant's generosity to be shared with a family in the working class. Not even a single family. Not even a single moment. Not even being remembered.

Suddenly, more people can get their family photo and no matter how much it costed, they would aim for this if they could, as long it was available. Because having this photo in your hand, it meant you could show it to visitors and demonstrate that you belonged in a group, a family with history. You were no longer just an invisible person which history erased over time. The evidence of your worth as being was right there, in your hand. For the first time, you felt that you existed.

No wonder that this freedom, which people take for granted today, was felt as being in contradiction. It felt surreal. Photographs were magic becoming real, unlike the miracles that people prayed for. It changed how people thought about social change. They figured out that they had to work for social change themselves. They learned they had to look after their own.

Once a family member died after having a photograph, the loss was a reminder. Each time you took out the family photo of your desk, you saw the faces of ghosts. This was a catalyst for social changes to reduce unnecessary deaths and by extension, the suffering of the working class.

This is why Hegel uses negation in the context of contradiction. The feeling of loss was accompanied by the feeling of social progress by being remembered as a person. These two feelings, both negative and positive, becomes negation in defiance of a tyrant's power. It leads to an exploding will to power, where humanity casts off its constraints and shed the snake's skin to be reborn as a new open mind who see the world, not through fabricated fairy tales, but by making observations and drawing on knowledge to make qualitative judgements about the general state of the world. They are starting to rise up and science gets its, long overdue, divorce from philosophy.

One likely reason that Hegel uses “negation” in this sense is because it sounds submissive. For authority, the more signs people show that they are obeying their commands, the safer they feel. So, Hegel is using a kind of mental trick where he tells one story to those who skim over his texts, but at a deeper level, a second story where negation can also mean positive. This is a double-negation. The negation of the negative image is a positive image. This opens up the energy in society to be released, such that freethinking thoughts become unstoppable. Like many other intellectuals in his time, Hegel plays the safe game by preparing the ground of social change, subverting the state.

This means, negation in Hegel’s philosophy is self-ironic, which negates the very negation itself.

Still, using irony in this way points to the thing in itself, the group that acts in self-interest, not because of external motivations, but because the group has self-interest for itself. The groups and individuals have questions that are only of relevance to themselves which answers serve no higher authority. This makes it impossible for authority to accuse people of a crime, when the context and meaning of the actions of freedom are authentically relevant to the being of people. This is a being with a big “B”: Being.

Being.

Being.

Like a heartbeat.

Each moment. One step at a time. One photo at a time. One meeting at a time.

Exercising freedom in the sense of groups focusing on their self-interests.

The use of irony in negation is that of the typical use of jokes. There is a deeper point. The joke is not about itself. The joke points toward something else. What negation point towards, by being both positive and negative, is back to the thing in itself. That is the circle Hegel wants people to take away from his philosophy. A photograph of your family in your living room and Hegel’s books on the book shelf. This is genius marketing. This is how Hegel became successful.

The working class, which around the time after Hegel got more access to photographs by cheaper technology, coupled with the printing press continuing to lower costs, they would aim for a family photo and getting a copy of Hegel’s work. These two things come as a package. It is a system designed to reinforce the social interactions from each pillar supporting the other pillars. Overall, it becomes the symbolism of the family itself: The Holy Spirit. The group serving its own interests, not in the interest of others. People around this time start taking the Jesus character out of the church. They keep secret meetings and form new religious movements. Biblical scholarship starts questioning the historical validity of the texts in the bible. Theology and ethics became more secular as fields.

All these changes happen in parallel, causing the elite’s grasp on power to slip, under the cover of groups of people now having the right to self-determination. They have their own interests and this is how they form communities and bond over their own identity. These groups are now orphans and without parents who are responsible for giving them punishments and rewards.

Hegel is reacting to the Romantic period where people start building libraries and sharing knowledge, under the assumption that peace can still be compatible with the lack of political freedom. The state is seeking out their national identity to weaponize books as propaganda, because it sees the direction in the future where all those libraries are bringing people's minds. The elite class can not stop the development, but they can slow it down by pretending to be playing on the same team as the working class. Hegel wants to start over, making social progress unstoppable, but also avoid a bloody revolt in Germany like the one in France.

It looks like this fragile balance could have worked for some time, but it was undermined by Darwin's work. People simply did not anticipate how much change was coming. How people would see their world and their own place in it. Darwin's work shattered whole communities, it shook the entire Western world. People started openly to question the existence of God. They started thinking about religion as fabricated lies and fairy tales for the superstitious. Hegel became THE platform.

Appendix A

Major works of Hegel:

1. **Phenomenology of Spirit (1807):** This is one of Hegel's most important texts, exploring the development of consciousness and self-awareness. It introduces key concepts such as the dialectical method and the master-slave dialectic.
2. **Science of Logic (1812-1813):** In this work, Hegel outlines his ideas on logic and metaphysics, emphasizing the dynamic and evolving nature of reality.
3. **Encyclopedia of the Philosophical Sciences (1817):** This comprehensive work presents Hegel's entire philosophical system, covering logic, nature, and spirit.
4. **Philosophy of Right (1820):** This text discusses ethics, political philosophy, and the nature of freedom, examining the relationship between the individual and the state.

Hegel's works have been published in various editions, with translations available in many languages. Some notable publishers include Cambridge University Press, Oxford University Press, and the University of Chicago Press, which have released critical editions and translations of his works.

John McTaggart Ellis McTaggart (3 September 1866 – 18 January 1925) was among the early English philosophers that engaged deeply with Hegel's philosophy. The name "McTaggart" as middle name is from his granduncle Sir John McTaggart while he was named John McTaggart Ellis, born to Francis Ellis and Caroline Ellis who were cousins. Caroline's mother was Alice Eade who had 12 children with her husband Edward Chauncy Ellis, a cricket player.

Appendix B

Hegel's intention with his work "Science of Logic" and why it is not like doing Path Semantics.

When Hegel writes about Logic, he wants to go beyond pure Logic as a discipline. Yet, it never occurs to Hegel to write about lists. Instead, he jumps from propositions to ideas that are way out there in the world integrated with common human knowledge.

Logic is usually representing a very primitive form of reasoning from a language perspective.

For example, a list of things as an abstract idea is sufficient to perform any computation. Yet, Logic itself does not have this concept of arbitrary use of lists. Since such a simple idea is absent from the language of Logic, it makes it very difficult to even reason properly about what Logic does. The way Path Semanticists work around this problem, is to train themselves using various automated theorem provers, until they understand the basics and can move on to manual theorem proving. Now, with this background knowledge, it is easier to notice how people use lists to perform computations, for example in the form of computer memory, as something distinct from Logic. While a computer performs logical operations, it is a language tool with corresponding bias.

Therefore, something as simple as the meaning of the word "list", has never been formalized fully in Logic. People have formalized lists in hundreds of programming languages, but there is no general "list" that is shared between different implementations. Lists in general only exist as abstract concepts.

There is not just one kind of list. A list can be finite or infinite. Path Semanticists, who frequently reason about functions, might use functions of the type $\text{nat} \rightarrow T$ for infinite lists. From this idea, one can make a finite list by adding a function of type $() \rightarrow \text{nat}$ that tells the length of the list. This is a common trick, at least as good as any other way of representing lists, so Path Semanticists usually do not specify that idea explicitly when they use the word "list". You use whatever definition of a list that is most convenient for some practical purpose.

While lists have never been formalized fully as an abstract idea, there are different formal models that are sufficient for various purposes. Path Semanticists distinguishes general formalization of abstract ideas from specific formalizations that hold in particular contexts.

From many examples of the use of lists and various ways to formalize lists, one can carefully study how people use the word "list". This is a typical approach in Path Semantics. You can not study use of lists alone on your own in a basement, detached from society. Path Semanticists go out to in the real world to learn and study the topic they are interested in. The result of this research is brought back to the Path Semantics community where they spend weeks discussing the work. It is uncommon for Path Semanticists to hold representations, because a lot of context is lost in the process. Paying attention and thinking about nuances is an important part of discussion.

This approach of generating knowledge was never an integrated part of Hegel's philosophy. Therefore, Hegel is not considered a Path Semanticist among Path Semanticists today.

Hegel's attempt at a broader Logic is more like a dream about doing something like Path Semantics. Unfortunately, Hegel does not have the core axiom of Path Semantics and can therefore not know precisely what he is doing. Still, he has lots of ideas that look a bit similar to the foundation of Path Semantics, which is the reason that people are getting more interested in Hegel from a Path Semantical perspective.

Appendix C

Hegel about Excluded Middle axiom in his work “Science of Logic”.

This section contains a hint of reason that is similar to what Path Semanticists call “Avatar Extensions”. For example, if natural numbers are considered a 0-avatar, then the integers are extensions of the natural numbers with a 1-avatar “negation”, where negation is a unary operator. Hegel correctly recognizes that in the language of natural numbers, numbers are neither positive nor negative. Natural numbers are only given an interpretation as positive due to a specific common choice of extending them to integers. In principle, natural numbers might be regarded as negative or neutral, but the theory of Avatar Extensions predicts that we will regard them as positive by design. This is because using negation as 1-avatar is a more optimal extension that requires less work.

Hegel confuses negation of numbers with NOT in propositional logic. In constructive logic, $\neg a$ is modeled using $a \Rightarrow \text{false}$. While Hegel is using faulty reasoning, he arrives at a correct conclusion that the Excluded Middle axiom can be removed from classical logic to arrive at a weaker logic. This weaker logic is what we call constructive logic today, but officially we call it Intuitionistic Propositional Logic. NOT in propositional logic is also like a 1-avatar.

$\text{neg}'(a) \Leftrightarrow \neg a$

Negation as a 1-avatar

$(a \mid \neg a) \wedge \text{true}$

Excluded Middle as an exponential proposition

§ 954 in translated by A. V. Miller, George Allen & Unwin, 1969, original 1812, 1813, 1816.

The law of the excluded middle is also distinguished from the laws of identity and contradiction considered above; the latter of these asserted that there is nothing that is at once A and not-A. It implies that there is nothing that is neither A nor not-A, that there is not a third that is indifferent to the opposition. But in fact the third that is indifferent to the opposition is given in the law itself, namely, A itself is present in it. This A is neither +A nor -A, and is equally well +A as -A. The something that was supposed to be either -A or not A is therefore related to both +A and not-A; and again, in being related to A, it is supposed not to be related to not-A, nor to A, if it is related to not-A. The something itself, therefore, is the third which was supposed to be excluded. Since the opposite determinations in the something are just as much posited as sublated in this positing, the third which has here the form of a dead something, when taken more profoundly, is the unity of reflection into which the opposition withdraws as into ground.

11.285 in the version edited and translated by George di Giovanni, Cambridge UP 2010

The principle of the excluded middle is further distinguished from the previously examined principles of identity or contradiction that said, “Nothing is A and not-A at the same time.” What this implies is that there is nothing which is not either A or not-A; that there is no third that would be indifferent to that opposition. But in fact a third indifferent to it is given in the principle itself, for the A itself is there. This A is neither +A nor -A and just as much also +A and -A. – The something which ought to have been either +A or -A is here attached to the +A as well as the -A; and again, inasmuch as it is attached to the A, it ought not to be attached to the -A, just as it ought not to be attached to the A inasmuch as it is to the not-A. The something itself is therefore the third which ought to have been excluded. Since in this something the opposite determinations are equally posited and sublated, that third which is here in the shape of an inert something, when taken more profoundly, is the unity of the reflection into which the opposition returns as into ground.