



Looking Back, Moving Forward: Reflection on STS Twenty Years after the Green Storm

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ABSTRACT: In this essay we present a broad picture of the development of Science and Technology Studies (STS) during the last 20 years. Through a historical approach and the use of fluid methodologies we study STS literature and the public reaction to it. The essay focuses on explaining the rise of this particular field of Social Sciences and the reasons for the recent conflicts within it. The authors argue that the developments of STS were intertwined with the retelling and repositioning of the events of the Green Storm attack. Taking this into account, this new approach provides valuable additions to our understanding and it contributes to a further theorizing of academic research, the role of academia in policy-making and the appearance of new schools of thought. Furthermore, while most previous research on the Green Storm events and history of STS failed to acknowledge this double contingency, our preliminary findings indicate that it is crucial not only to understand the past of STS, but also its future.

KEYWORDS: Green Storm, STS, year 2034, PLCT, critical botanism, paperclip theory, Art & Science, climate change, eco terrorism, sustainability, meat production, oil extraction, big data



Disclaimer

The paper you are about to read is a fictional scientific paper, set in an alternate reality. Any resemblance to actual persons, living or dead, institutions or actual events is purely coincidental.

We spent the last year working on fictional future scenarios, which play with the notions of fears and hopes connected to science and developed them through different media. The starting point was a collaboration between the ‘DokNE department (the Doctoral studies program specialized in sustainability and policy-making at the University of Natural Resources and Life Sciences, Vienna) and the ‘Art & Science’ department (University for Applied Arts, Vienna), resulting in a participatory theatre piece called ‘The Green Storm’. The performance dealt with a variety of topics: scientific models, sustainability, game theory, institutional language, fear of terrorism, policy-making; and ultimately, humor. In the play the participants were asked to take up the roles of world leaders attending an International summit. On this fictional summit an emergency situation would suddenly occur, in which the group of radical eco-activists ‘Green Storm’ threaten the modern way of life with an unknown organic entity. The participants were asked to find solutions for the situation, thus influencing the course of the play.

We were invited to the Changing Worlds conference organized by the students of the Science and Technology Studies department at the University of Vienna, in order to present the structure and results of this interdisciplinary project. At the end of the lecture we asked the audience to tell us how they would have decided. The majority chose to oppose the ‘Green Storm’ in a non-violent way, by concentrating the resources of global community in scientific research in order to find appropriate counter-measures. The paper that follows unravels the consequences of this decision. Notice that the authors of this paper are not native English speakers, nor would they wish to be. We recommend reading this paper with your favorite continental accent.

Introduction

As former President Hillary Clinton wrote in her autobiography ‘[...] the big Apple blossomed, the world stood still and when it started turning again, we spoke,

thought and looked differently. We were a different kind of people' (Clinton 2020, 32) This tragedy not only struck New York, but many capitals and industrial centers across the globe, causing the loss of vital infrastructures, invaluable historical heritages and, most of all, many lives, truly deserves to be called a paradigmatic shift for humanity. Unlike any other event humankind has ever witnessed, it affected the totality of the global community in an instant. (Stupr 2022, 5)

Until the summer of 2014, the group of radical environmentalists the 'Green Storm' was not well known. Leaked documents¹ showed that even the CIA just considered them at the time as an eccentric smoothies start-up, with a tendency towards genetically enhanced spinach. It took the public as a surprise, when the genetically modified plant ravaged the complete island of Manhattan in a single day. Its devastating force stemmed from its rapid growth and the fact that it used cement and steel as nutrition. The 'Green Storm' argued in their video ultimatum that the world was on the brink of destruction and that this drastic step would be the only way to save life on this planet. The date of the attack was not only chosen because of the solstice (symbol of renewal), but also because it coincided with the 'International Summit for a Sustainable World', where most world leaders were gathered in Vienna to decide upon environmental issues. Showcasing the destructive power of the plant, the group ensured that their threat to destroy all major industrial centers of the world, had to be taken seriously. The world community was forced to decide in only 24 hours, if they agreed on a global halt of the industrial meat production and the oil extraction or face an attack of unprecedented proportions. Giving into the demands would have meant, skyrocketing unemployment rates, tremendous problems in food distribution and the collapse of the global economy. In this crossroad two other possible solutions dominated the discussion of the emergency conference. Either to unite military and intelligence services to find and eliminate the Green Storm following the scheme of a counter-terror-operation. Or to invest into finding and developing an herbicide that could stop this very resilient species. The emergency conference decided on not giving in to the demands of the Green Storm and instead investing in scientific means, to develop effective countermeasures to contain the plant, and re-examine the socio-political dimensions of the situation at hand. The researchers were successful in finding an effective herbicide, but it took them nearly a week, in which the released plants destroyed a vast amount of infrastructure around the globe. The green storm could

be captured and prosecuted, but the consequences of the attack meant the loss of many lives and a substantial setback for the world community.

The severity of this event made the examining and reflecting on it, a pressing issue for the social sciences. In the following paper we want to take a closer look at how the narratives and viewpoints Science and Technology Studies offered have changed over the last 20 years. We believe that the diversity of STS makes it impossible to offer one unquestionable definition, to what STS truly is. Instead we want to focus on the authors and institutes that consider themselves as STS scholars. By reflecting on the double contingent relation between STS and the transforming narratives of this event, we argue that a repositioning and restructuring of techno sciences in the scientific community occurred through and *with the retelling of the story of this event*. (Endler 2022) Reflecting on the emerging deliberations, considers the reflexivity of the actors involved, opening a discursive realm of the perpetrated descriptive alignments of thought through its diverse ambiguities of *beingness*.

Rise of the Phoenix

After the collapse of the institutional framework of science, big parts of essential infrastructures and means of scientific communication had to be re-established. It took three years² until *Out of Time. Looking at the Green Storm*, the first historical publication, a collection of articles on the topic could be printed and distributed. Because of the lack of alternatives it became an immediate bestseller. Many articles were controversially discussed, in particular the one of historian Lubomir Bradicich's on *the events of the 20 of June 2014* (Langstrom 2017, 1456).

Back then nobody thought the eco-activist group 'the green storm' would get militant, much less threatening the world leaders to release a genetically enhanced plant hybrid, capable of tremendous growth and the power to devour complete cities. Nothing in the environmental movement indicated this penchant for violence. [...] It is understandable that it was considered an empty threat, especially because it seemed ludicrous to assume, a small organization like 'the green storm', would really carry out a global attack in this scale, even after witnessing the destruction of Manhattan. It wasn't even a *wild card* scenario,

rather a *no card* scenario. Giving in to their demands, by completely stopping the oil and meat production, causing the collapse of the entire economy and modern civilization was never a real option (Bradicich 2018).

Bradicich argued that the whole situation appeared so utterly absurd, that everyone involved in the decision process was either confused or in a state of skeptic disbelief, making them incapable of grasping the consequences. He refers to this state of mind as a 'Let's wait and see' mentality. Bradicich's position captured the discontent of large parts of the population, with the decision made by the emergency conference (Boktanova 2020).

The newly awoken social sciences reacted vividly on Bradicich's paper and soon split into two factions. On one side were Bradicich's followers, holding that the actors involved in the decision process were incapable of making a rational decision, due to their heightened state of confusion and skepticism, which we will refer to as *epistemic diffusion theory*. One of its most prominent proponents was the well-known media theoretician Philip Piung. He substantiated this claim two years after the publication, with a qualitative study, in which many of the involved decision-makers made statements such as, 'we thought the whole situation was an elaborated hoax, or some sort of art performance we accidentally stumbled upon' and that they might have chosen differently, if they would have been certain that it was not, 'a George Orwell invasion of the world type of thing' (Piung 2018, 68).

On the other side, a theory formed around the statisticians and historians of economy Aladdin Almanac, Sabina Gluehbirn and Fidela Doublefine. They regarded Bradicich's article and Piung's follow up study as fundamentally flawed, because they were strongly founded on the statements of the deciding actors themselves. 'We should not believe what people say, and what politicians say double so (Gluehbirn 2018, 440).' Employing a methodological triangulation of rational choice theory, data mining and epistatistics to reconstruct the narrative of the event. They argued, that the decision of the conference was in fact the most rational at the time and also in hindsight. With a tremendous amount of effort they gathered a vast number of quantifiable data, from the estimated number of potential victims to the phone numbers of the participants, to the number of times the letter 's' appeared in the dinner menu (Almanac, Gluehbirn and Doublefine 2018). The authors claimed to have found a conclusive proof, that the decision makers

were fully aware of the consequences of their choice. They were especially proud about the fact that '[...] not a single grain of fuzzy qualitative data was used [...]' (Almanac, Gluehbirn and Doublefine 2018, 60). This was achieved by ruling out any potential factors, which could have primed the decision makers to one decision or another or frame the options in an unbalanced way. The study provoked the outrage of many politicians involved in the decision process, claiming that the degree of harm caused by the *Green Storm* was unforeseeable. But the authors regarded this as just more proof to the fact, that one should not trust politicians.

Although skeptic to both positions, the STS scholars could not offer a conclusive alternative to this narrative in an early stage of the debate. Not until 2019 when Ruth Gromwell published her book *Worlds of Paper*. In it she presented a compelling perspective through a thorough analysis of the material matrix of the emergency conference. Although she offered many possible aspects influencing the outcome of the event, she identified one factor as being the most crucial to this particular decision. The decision on how to respond to the threat had to be taken within 24 hours. Owing to the time pressure, the staff had to hastily prepare for the sudden change. The complexity of the situation required communicating most of the information through printed documents. Due to the amount of content, the staff were forced to print on both sides of every page. The pages were held together by R23P7 standard type paperclips. This particular model of paperclip had the advantage of having a firm grip on the inserted documents and being at the same time easy to remove and reattach. But soon after the release of the R23P7 standard type the manufacturers received complaints from customers, that the clip was too tight for turning the pages properly, so the production was stopped. The remainder of the stock was thrown cheaply on the market. With the intention to save money for the conference the International Summit for a Sustainable World bought the cheaper R23P7 standard type paperclips instead of more expensive models such as the R23P9 or the standard R23P1 model. The use of the R23P7 and the fact that relevant information was printed on both sides caused most of the recipients to only be aware of half of the content, because the other side was not easily visible.³ Gromwell argued that looking only on the odd numbered pages of the printed information would make it perfectly reasonable to opt for a scientist solution, because the consequences were drastically marginalized (Gromwell 2019, 233).

Gromwell's book was a huge success across the scientific community, since it offered 'a simple yet compelling explanation' and was '[...] written just as thrill-

ing as a crime novel [...]’ (as Kamp and García stated in different book reviews referenced). Even Bradicich admitted that the paper clips must have been a relevant factor in the decision process, although holding on to his *epistemic diffusion* theory. The widespread acceptance of this theory, which became better known as the *Paper clip theory*, did not only mean an immense boost in Gromwell’s academic career, making her appear on the cover of Times magazine as *Thinker of the Year*, but also for the entire field of STS. The following section will examine how this victory of the *Paper clip theory* affected the position of STS, changing its role in both science and society. Ledershuh referred to this time period between 2020 and 2028 as the golden age of STS (Ledershuh 2033).

The Golden Age

The big success of STS is foremost visible in the institutional growth both in university programs and in the number of publications. In only 10 years, literally every university implemented some sort of STS related course. Hard science disciplines specially, became interested in incorporating it into their education programs. In the year 2025 alone, over five hundred thousand STS related articles appeared (Sabha 2030, 45).

This ferocious expansion into so many domains of sciences cannot be merely explained by its epistemic advantages. It was much more a result of the intensive media coverage that brought technoscientific approaches into the spotlight of a broader public, which in return affected its role within the academic realm (Schmalzgruber 2030, 323). The driving force was of course the leading figure Gromwell, which managed to translate complex theories charismatically into everyday problems. Her appearance in the talk show of Oprah Winfrey, where she presented her book *Living with things*, had such a media impact, that the CBS television group, producer of the popular television crime series CSI, considered the broadcasting of a show called STS, where an eccentric Science and Technology Studies professor fights social injustice (Cloestermann 2031, 68).

The psychologist Hopfentropf stated, ‘thinking STS trickled into the vast seas of the collective subconscious, from which countless phantasma of this mindset emerged onto the pages and the screens of our brightest imaginations’ (Hopfentropf 2033, 45). Many of its methods and approaches found their way into pop-culture. One of the most noticeable examples was the film noir ‘Le cornichon af-

fligeant' directed by Michael Bay in which the protagonist, a cucumber, battles with inferiority issues, and Aldru Rodrigues' novel *Printed Letters* a moving love story between a folio and a document in a Portuguese archive of colonial medical records facing modernity and the electronic age.

Rethinking the role of humans, science and technology also appears to have affected theological debates. The third Vatican Council also considered as the 22. Ecumenical council in 2027 appears to include methods of the Actor-network theory concerning topics such as the problem of trinity and transubstantiation, with the goal of reconciling with the other Christian confessions.⁴In the light of this endeavor the first cyborg theology program was created at the Sapienza university of Rome, aiming at reconsidering the ontological status of humans and technology on a metaphysical level (Add 2029, 262). Similar debates emerged in the esoteric community, focusing on the question of what an actor really is. Dupont challenged the idea that a relevant *actant* cannot simply be defined as the entity that realizes potential, but rather as the driving force behind it (Dupont 2020, 262). Considering this argument Fanny Zauner developed the theory that only a singular divine being can be truly considered an *acteur* or *actant*, since everything is part of causal chains⁵ that have to lead ultimately to one single origin (Zauner 2023, 34).

The grown interest in STS and the huge number of related publications was also causing a bigger diversity of topics and the branching out to other fields, one of the most prominent developments being *critical botanism*. The ground laying publication *Plants in labs* by Sophy Giantree, offered an empirical and theoretical analysis on the presence of pot plants in research environments and their influence on the outcome of a research.⁶ In the last chapters she examined the events of June 20, 2014 using a topological approach and a method she termed *agricultural hermeneutics*. She concluded that the arrangement of plants, as well as the specific flora present in the decision process, lowered the probability for choosing a military solution. Papadopoulos one of her scholars introduced in his acclaimed book *Generation clash: the plants of yesterday vs. the fauna of tomorrow*, the idea that the Green Storm events were in fact the culmination of a war among generations. He claimed that humanity was not only driven by its own decisions, but primarily by the needs of plants. Specific species, such as potatoes, tomatoes and cucumbers managed to conquer non-native environments by populating the shelves of supermarkets worldwide. This manipulation was only possible,

by granting humankind the power stored in the remains of their ancestors, in the form of oil and coal. But the influence of these ancient forces had become too predominant. The Green Storm attacks are thus to be understood as an attempt from the living flora to regain control (Papadopoulos 2025).

Interesting enough, another study concerning the event led to a further branch of STS. Timothy Hunter's media analysis studied the role of the representation of the human figure in the video release of the *Green Storm*. Before his research was carried out concerning the wording and the high-inference language used in the video and the overall framing of the images. Instead Hunter started focusing on the depiction of body and body language. In his work he developed a connectivity analysis of the present physical bodies, based on the video recordings of the emergency conference, which were unavailable for the scientific community till 2027 (Hunter 2028).

Brigitte Rosario, leader of the *Green Storm*, was shown in the video ultimatum merely as a shadow in front of a white, blank space, emphasizing her changing gestures and posture. In her silhouette a variety of depictions of human-made structures and nature appear, underlining and adding additional layers to her message. Simon Estragon concluded that it had a powerful effect on viewers, because of the '[...] dreamy photography of the superimposed footage and the inciting narration, created by the soft nuances in her voice'. Estragon stated that what truly made it one of the biggest achievements in the art of propaganda, were the allusions to well-known catchy slogans and quotes from pop-culture, which gave it its heroic utterance (Estragon 2032, 89–90).

Hunter regarded this as a fundamental misconception. In his analysis he claimed to have found universal connectors of body language he called *gwa* (gesture schwa). Much like the schwa in languages like Armenian, Bulgarian, Catalan, Dutch or English, which is not present in writing, but only in spoken language, enabling the speaker to talk more fluently, by decreasing the effort of the vocal apparatus, the *gwa* has a connective function of gestures, determined by the economy of movement. This very fact, that the *gwa* is not determined by cultural or social factors, but rather by the rationality of its use, grants it the ability to transgress cultural and language barriers. Hunter put a strong emphasis on the fact, that there are no universal gestures, but that connective functions are necessary in every form of human communication⁷.

He states that the appeal of the *Green Storm* video ultimatum was due to the artful usage of the *gwa*, conveying a universal message of danger, hope and responsibility. At the emergency conference the scientific solution manifested through the speech of geneticist Dr. Spencer. He pleaded for further research, highlighting the risk of the unpredictable outcome of fighting the plant with conventional means of warfare, and the risk of harming civilians in the process. Hunter claims that the body-brain language managed to make it seem as a morally impeccable position. The idea of not making a deal with the enemy, while avoiding large scale conflicts, turned out to be attractive enough for the leaders, because and through the discursive nature of the embodied dialog. According to Hunter, the military solution lost a lot of its appeal due to the personal qualities of its spokesperson Colonel Pierce. His furious gestures and cruel observations created a constant negligence of conciliation. In particular his physical assaults on Dr. Spencer during his speech, led to negative priming towards this solution. The choice of Col. Pierce as spokesperson has been much discussed and was subject of a lot of speculation.⁸ In Hunter's view, his presence at the emergency conference were certainly not beneficial to the cause he argued for.

Hunter concludes that regardless of the outcome, the discourse was not so much a result of fragmented information as depicted by the *Paper clip theory*, derived from the surrounding flora or a purely rational one, but rather a result of misleading entanglements of bodies and attributions. Based on this analysis he developed the PLCT (Post-lingual communication theory), which tries to achieve the most egalitarian, inclusive and balanced discourse, by banning spoken language and solve conflicts exclusively through dancing. 'If every lawyer, tax accountant and politician would dance instead of talk, there would be no crime, no social inequality and no war.' (Hunter 2038)

In the last section of the paper we want to have a look at the last couple of years pointing to a very different kind of trend.

The big divide

The STS field has developed a big influence in society, moving from a small community, to a scientific endeavor that has found its way deep into the scientific mainstream. As Heather put it jestingly,

Science and Technology studies went on from being the geeky child, no one wants to pick into its baseball team, to the beloved prom queen. Now it is well established in the scientific realm and does not feel the need to pick every fight with her bigger brothers and sisters of academia and sometimes even prefers to drink a hot cup of tea in quiet, with a dash of milk, while the others quarrel (Heather 2029, 66).

Although this comment has to be taken with a grain of salt, it is very true that STS became part of the scientific establishment in the 20's. STS scientists were an intricate part of many ethic commissions, they guided participative projects in many countries to involve the public in political decision-making processes, and they gained a certain influence as councilors for governmental bodies (Sabha, 290–308).

In 2029 the city of Haarlem, in the Netherlands, had grown, to such an extent that it merged into the municipality of Amsterdam. To cope with the unbearable bicycle jams the Netherlands decided to connect both cities with a trans-municipal bike underground system. The ambitious aim was to create a functioning underground system, with wagons, which would be particularly designed to transport a vast amount of bicycles and their bikers. The Netherlands gathered an expert committee of STS scientists, to find an applicable answer on how to deal with the complicated entanglement of the stakeholders affected by this enormous construction plan.

Which parts of the city should be connected? Which buildings can be demolished? Should rollerblades be allowed? Many decisions had to be made. The Netherlands wanted to be at the forefront of innovation, envisioning its underground system to become, the gold standard of STS-approved infrastructure (Lear 2030, 56). This project was the first of its kind and the crowning symbol of the trust, placed in this scientific field. However, with STS's great success a new problem emerged. The rapid development of the field created differentiated approaches, sharing, over time, less and less common ground. The STS committee appointed by the Dutch government illustrated this diversity. The scientists involved in this project quickly started to split into three fractions: the Critical Botanists, the PLCTs and what we want to refer to as Gromwellians.

Although not completely homogenous in themselves, the Gromwellians had similar approaches in common. They hoped to tackle the issues by already well-

established scientific means, such as hyper networks analysis and participatory action research methods, to finding consensus or at least overlapping interests among the stakeholders. They aimed to design the underground-bike system, with an emphasis on the social interaction between the bikers and non-bikers. Trains should not be merely used as a means of transport, but to share time together and meet new people (Dinge 2031).

The critical botanists approach was concerned with the integration of plants as equals into the lives of the peoples and the process of development. A big concern was to find ways to minimize the harm caused by the construction, on the root system of trees and Rhizomes of Mushrooms (Busch 2031). This should have been achieved by creating the so-called 'root route', by mapping every deep-rooted relevant entity and circumventing them as good as possible. Some critical botanists even suggested designing the trains as mobile glasshouses, to ensure the mobility of plants. They stated that to create a truly egalitarian society, one must take into account not only the right for mobility of the fauna, but also of the flora.

The PLCT theoreticians on the other hand focused on the political and social realm of expressive gestures. They started initiating dances in public spaces, such as parks, bus stations and public toilets in order to explore the quality of embodied shared urban spaces. Stemming from this research, an early proposal was to remove all the seats in the trains to provide enough space for bodily expressions. Since they refused to publish papers in written form, it became increasingly harder to communicate among the scientists involved (Kondak 2034, 156).

Four months after the project started, conflicts emerged among the members of the expert committee. Baralla Kualo one of the Gromwellian scientists involved, was frustrated by the lack of progress and blamed publicly the critical botanists for showing no interest in catering to the needs of the people affected. She was particularly harsh towards the PLCT faction, stating that their entire methodology consisted in 'jumping around like a bunch of adolescent chipmunks (Spikey 2032, 12).' This evoked a broader discussion outside the confined borders of the Harlem Committee. Latent conflicts in the STS field were voiced in reaction in the form of papers and tweets. Ledershuh for example tweeted: 'OMG. Crit botanists go green storm on Harlem!!! WTF #LoonyBoties'. The hash tag "LoonyBoties" became immediately a TT (trending topic) for months. His reaction did not only reflect, the disappointment brought by the incapability of the Harlem Committee to work to-

gether on reaching this prestigious goal, but also the ideological proximity of critical botanists to the perpetrators of the Green Storm attacks. The critical botanists were outraged by this comparison. An open letter was released by Papadopoulos, Giantree and other academics sympathizing with critical botanist views, stating their strong and firm rejection to the goals and means of the Green Storm. Furthermore the letter expressed their disappointment towards the mammalocentric views of other STS scholars. 'It seems unacceptable to exclude other species which play such crucial role in our social life. Even from a mammalocentric position one has to admit that our very existence, would not be possible without our Plantae and Fungi kin'. Apart from that Papadopoulos stated, he admired the expressiveness of the PLCT faction and their work. But he was also very clear about the fact that he considered their research as a piece of performance art rather than as a

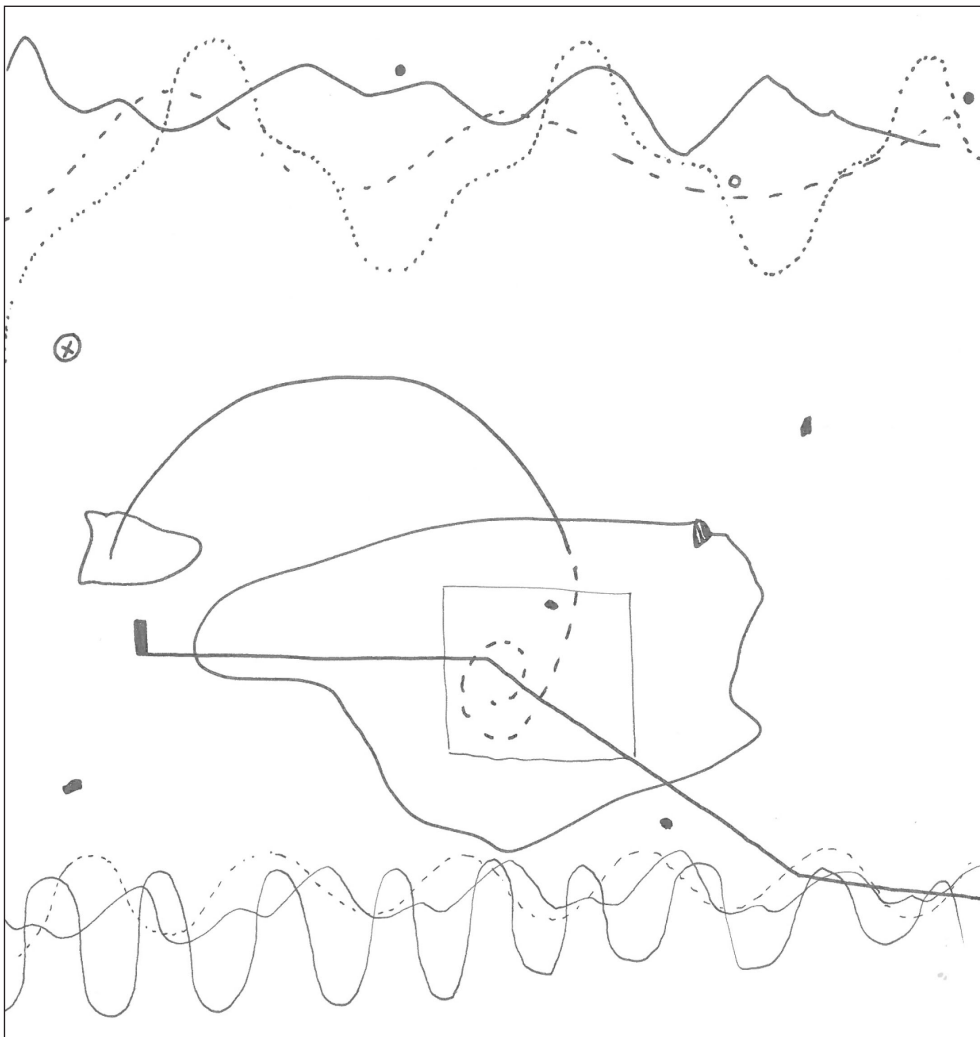


Image 1: Statement delivered by Hunter at the occasion of the Haarlem Underground dispute.

scientific endeavor. Hunter, the founder of the PLCT reacted with a video answer, in which his furious performance expressed the discontent with the direction this debate was heading. His scholars in the Haarlem Committee argued that it was impossible to get some serious work done with their colleges, because the others '[...] just kill the good vibes' and were unwilling to 'go with the flow'.

After only 18 months the project ended prematurely, as the parties involved refused to work together. The very symbol of the social acceptance of the STS field, turned out to be a painful reminder of a discipline falling apart, making the incident an infinite source of hallway quarrels in the STS departments.

In the winter of 2033 the Biannual 'Assembly for the Advancement of Academic Research' (BAAAR) took place in Gibraltar, to commemorate and prepare for the 20th anniversary of the Green Storm attacks. Due to its size and the long list of prominent keynote speakers, it was considered the most important STS conference of the year (Kosheen 2034). During the first days of the event, tensions were noticeable. Shivangi Bupta praised in her introduction speech the advances of the field, without mentioning any of the achievements of the critical botanists or PLCT scientists. On top of that, the critical botanists saw the fact that the conference was only decorated with plastic plants, as a personal offense. At the lecture performance of Hunter in which his research results on the effects of 'touchscreen technology on the emergency conference in 2014' were presented through gestures, the mood in the audience suddenly changed. One of the attendees described it as follows: 'Many ugly words have been said, many inappropriate gestures have been exchanged and it was an overall unpleasant sight.' Although Hunter's performance lecture was not particularly provocative in itself, it was the straw that broke the STS camel's back. The conflict spread throughout other lecture halls, causing a climate of heavy discussions and blame. Accusations of unsound methods or obtuse views circulated. The conference was planned for three more days, but since only a few people showed up the following day, the organizers decided to cancel it.

Twelve months after the BAAAR's failure the STS community still seems to suffer from a hangover. Many signs seem to indicate, that a number of prominent STS departments and research groups are facing strong theoretical and personal conflicts. It is hard to tell whether this will result in a few minor splits or could develop into a major break in the field.

Conclusion

The paper tried to offer a historical overview of the development of the STS field in the last 20 years, by raising the question how the Green Storm attacks affected its sprouting. To do these question justice would require at least another essay, or rather an entire book, but we regard this paper as a first step of developing a conclusive narrative of the changing morphology of this scientific endeavor. Although STS remained always a fluid conglomeration of divergent approaches and goals, it has also reached a broad acceptance in the public eye, hence being perceived as a homogenous field. Projects like the Haarlem Underground, forced the blossoming science to act as a univocal entity, causing situations in which internal discrepancies had to be confronted. We tried to show that both theory and methodology of the recent developments of STS are closely related to the events of June 20, 2014. From the rise of the discipline to its current state, the reflection on the event has repeatedly being the turning point of major changes in the field. History was written, by rewriting it. Hardman said in his speech at the BAAAR in Gibraltar, that it might be time to consider going separate ways (Hardman 2033). We strongly disagree. Conflict is always a chance to grow, which STS has shown in the last 20 years again and again. Its very essence has always been to question the given and finding reveling ways of seeing the presupposed. Although it might have been at times a bumpy journey with many hurdles, one has to admit that it has been an exciting ride. The future lies in overcoming our differences, so we can keep on changing the world.

Endnotes

- ¹ The embarrassing involuntary release of the ‘Smoothiegate papers’ occurred in 2020, when a high-rank CIA agent sub-rented his apartment to an investigative journalist of the international press agency Reuters.
- ² Jefferson Polnja argues that it could have taken only one year, but the lack of auto correcting software added a considerable amount of effort for a generation of digital natives.
- ³ Richard Schweinfurt went even further by elaborating on the topic of incompatibility with the used paper type.
- ⁴ “The ontological status of God, Jesus and the Holy Ghost and their relation to each other were the theological cause of many schisms through out the history of the Christian community. The Actor-network theory offers a new language to find a common ground.” – Pius Alumirasa 2028. *Praying Networks* (Roma: Vatican Press, 89)

- ⁵ In a recently published paper Lee Palatschinke develops the view that hindi and budhist communities have been influenced as well, but less noticeably, because the contingent conception of beingness and ontological statuses were already intrinsic part of their world framing.
- ⁶ Nearly at the same time the famous paper 'Rubber Roots' by Theodor Papadopoulus appeared, addressing the issue of technology and plants, pleading for considering plants in modern society as cyborg beings.
- ⁷ Even though the gwa may change from culture to culture, it always exists in some form, changing the quality of the information communicated.
- ⁸ Alois Deniken suggested that Pierce's privileged position could be linked to the fact that he may be the illegitimate son of a former general of defense of the United States, but his sources have been proven unsound

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