'And Then What Happens?'

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Bibliography
1. Introduction

In this paper I will discuss the relationship between art and science and the sharp distinction that is made between them. This dualism has shaped our thoughts over centuries and separated essence from matter, mind from body, and objectivity from subjectivity. For me that's always meant to live in two cultures, with different methods and values and while I love art and the beauty and freedom of expression it embodies, I've often found myself cheering for the wrong side in this old dispute over nothing less than what it means to be human. Somehow I take this battle very personal. It's something that's also taking place inside of me and I will try to explain how I attempt to reconcile my passion for science and reasoning with my love for the subjective and irrational beauty of art. I'll do this by using all my senses to look at the thing that appears to be responsible for the whole problem: the brain.

2. The Two Cultures

I would like to start this section with an incomplete and personal elaboration of the historical developments in the field of visual art in which I have to place myself today.

2.1. Subjectivity in Art

Art has always been a much debated and fought over domain of human expression. It's been associated with meaning beyond temporal mortality, an expression of the purest traits and virtues found in our hearts and minds and many have sought it's proximity hoping that some divinity may rub off on the ordinary. Since it's been lifted close to heaven it comes as no surprise that the devil was also called upon and if not outright vicious, art has been declared mischievous, wrong or at least a pointless waste of time. Since Plato and Aristotle, and well through the Middle Ages, even in the early more enlightened times, art was clearly on the 'good' side and there was a far reaching agreement that above all it had to be beautiful in a pleasing and uplifting way. Art was used by those who had the means to decorate their monuments of importance and to reinforce their sophistication by making it visible to anyone in possession of good taste. The successful artists where skilled craftsmen, highly trained and admired for their skills. They enjoyed recognition and fame but they were also servants to patrons and God.

This all changed with the emergence of the genius. Now that God's influence on the matter was gradually diminishing and an expanding number of increasingly freer people had a word to say about it, art also flourished in new places. It gained emotional depth and expressiveness reflected in the humanization of the heroes and myths it then depicted. Romanticism, meant to be a counterproposal to the values of the Enlightenment and it's successions, the scientific rationalization of nature and industrialization - but it was their achievements that allowed them to focus on the individual with unprecedented introspection. As science went on shedding light in many hidden corners of the world and attempted to clean up and explain all the secrets with matter, numbers and logic, art increasingly became more associated with essence, a retreat for the irrational and emotional. The myth of the misjudged and desperately starving but brilliant artist lives to this day.

What followed is the self-explanatory scientific era - and along with it's constantly rising quality of living and critical scrutiny seemingly cleaning up among the mysteries of life - art became messy. Freed by photography and encouraged by manifold attempts to change the world through the power of imagination, art became more visible as an indicator for any light a particular society or scene wanted itself depicted. Analog to the many movements of modern times art could be anything from political propaganda to social criticism, purposeful or purposeless, opulent or minimal, material or conceptual. One of the predominant commonalities between these different fields, often hard to realize as part of the same domain, remains the focus on the individual as creator. Art is expected to be a unique expression of the artists perspective and feelings. Although technological and scientific developments have been utilized by artists, paving the way for scientific
studies of art that reach beyond the acquiring of manual skills, art has preserved close ties to subjectivity and the promise of higher revelation.

Much of today's understanding of art's definition is so deeply entangled with postmodernist ideas that it's hard to define it without a reverberation of the relativism that comes with it. A lot has been written about art - and the creativity spent working out theoretical explanations doesn't fall short of the efforts put into it's creation. Today's art is often impossible to tell apart from non-art unless it's placed in a gallery and even then it's sometimes impossible to find out whether one is actually looking at the work or if there's yet another, more conceptual ingredient that needs to be taken into consideration. Anything could be art, anything is art. While this statement sounds exceptionally democratic and down-to-earth it's also obvious that art has been heaved up on pedestals and made incomprehensible for the uneducated mind. Although Kant and Hume would have difficulties seeing anything resembling good taste or beauty in today's art, it's still a place for the educated and gifted. The status of art is hard to explain without the old values still lingering on.

Even people who don't show much interest in art (except that which can be hung on the living room wall) haven't fully lost the belief that art, no matter how incomprehensible, has a significance beyond the obvious. In more recent times this feeling has certainly been much enhanced by the enormous amounts of money involved in the commercialization of art and the resulting raise of prestige, and perceived value of art in our capitalist society. But what happens when artists who started off by questioning the well established ideas about 'good taste' in the art world, and many other aspects of the society where they live and work are bought up by the same establishment?

It's easy to see Baudrillard's self-seducing self that has turned in upon itself ready to honor a postmodernist's boldest predictions. The mess is complete. Although heavily entwined with society and even shaping it in mutual exchange (more visible than ever before), art has been left to subjectivity to such a degree that most attempts to apply meaning beyond itself are bound to look cynical or simply loose their justification as 'good' art.

2.2. The Age of Science

2.2.1. The Scientific Method

The breathtaking developments in the two last centuries with a constant acceleration of pace have made our life more interesting and independent than ever before. From the day Copernicus stripped off the first layer of human delusion and pushed us out of the center of the universe, the victory of science has been unstoppable. The scientific method has proven itself the most powerful tool ever invented. The accumulation of knowledge through observation and measuring, the openness of the system to new discoveries and the potential to constantly improve theories by further accumulation of knowledge, has approached continually greater mysteries of life and made them accessible to reason. Spurred by early successes, Science soon took on more complex and ambivalent problems and thus started to scratch the assumption that humans represent the summit of creation. Gradually the room for believe has shrunk - making room for further investigation.

No one today seriously disputes the fact that everything on this earth (and far beyond) is made up of the same components and everything has to follow the laws of nature. In the case of our body this has made possible treatments working various scales and on a purely 'mechanical' basis, improving our standard of living and saving us from diseases that would have ravaged only decades ago. While the laws of nature apply perfectly on a mechanical scale and science is purposefully allowed into the realm of the human subject, this can be more problematic on a grand scale. Science has been careful to stick to it's preferred stamping grounds where the scientific method is easily applicable, and spurred by success, readily declared any resistance to that which is irrational and potentially harmful for human advancement. Although the line has been blurred in many places by scientific advancement, the two cultures of art and science, belief and reason, remain ignorant towards the other's significance. The so called Science Wars in the nineties, in which proponents of both sides tried to prove the others incompetence is evidence of this.

Philosophers have been looking at both sides, but even there - little consolation has been offered.
Neither Descartes' dualism nor postmodernist existentialism give practical answers as to why everything in our world seems to be somehow connected, except the undeniable perception of the self. Gaining a better picture of the processes taking place within our body through advancements in measurement techniques and an enhanced understanding of the processes involved in natural selection (for example- genetics), it now seems that the opponents reason and subjectivity, material and essence, thought and feeling have been delivered to the gate behind which they might have to reconcile at last: the brain. In recent years the mechanisms of the brain have been looked at closely and discoveries have been made analogue to the advancements in monitoring techniques. It is now generally accepted that feelings and physiology are closely linked and even complex moods like sadness or stress can be manipulated and triggered by interfering with the mechanisms in the brain. Things that only ten years ago lay far beyond the reach of a scientific investigation can now be measured and investigated objectively. It becomes obvious that many apparently irrational traits of the human character, which fundamentally influence our reasoning, have evolved through the same processes that made us lose our tails but gifted us with opposable thumbs.

I believe that research and the consequential conclusions concerning the brain, the search for an explanation for why things are functioning the way they do, how everything we perceive about our surroundings and ourselves, the only measures by which we 'are' anything, basically rises from the accumulation of nervous cells that fit in a head. This also includes consciousness and thus reaches all the way down to the foundations of philosophy. The possibilities have only recently opened up for more thorough investigation, and we're only at the very beginning of explaining construction, let alone the functions of the brain but, what's already been discovered is groundbreaking and truly inspiring.

2.2.2. Analytical Thinking and Consciousness

Although I've always liked art and mostly directed my creativity towards an aesthetic output, biology opened my eyes to the greatness and wonders of the world. I was lucky to have a teacher with a great passion for biology and once we got into the anatomy and physiology of the human body I felt an excitement and curiosity sparked by this relatively new way of looking at the world. Looking at the Immune System, and the process of learning regulated by Neurotransmitters, and hence the new perspectives opened up in Psychology, made me feel at ease with existence for the first time since I had become aware of the problems connected with it. Science offers a much more hands-on approach to life and all its problems than what is available in philosophy. It gives small answers to small problems, step by step, and the true miracle about it is that it makes the world grow, rather than shrink. It's the notion that nothing in and around us is just there and looks the way it does without reason. There are systems and concepts interacting on infinite scales and we, as conscious beings, are endowed with the ability to admire it all.

Research carried out by neuroscientists have been looking at various regions of the brain and are now in the position of formulating the first theories concerning consciousness. The theory of the Global Workspace first introduced by Bernard J. Baars in 1988 but adjusted and improved by many others, among them S. Dehaene and L. Naccache is the current standard and it's a simplified architecture accounting for the workings of consciousness. G. Tonioni and G. M. Edelman and their theory of Neuronal Group Selection share the same views. The latter concentrates on the question of how consciousness could have come into existence through evolution - by looking closely at the organization of the brain. Based on many experiments, insights from neuropsychology (the study of the structure and function of the brain related to psychological processes and behavior), they've shown that the brain truly isn't a computer but a highly complex system that is able to change itself continuously. A computer has a central processor that gets the information already translated into code from the outside and then distributes it to the components of the system, for example the programs and applications. It is responsible for coordinating the different components and thus creating an output. Almost all computers built today still function this way and while they may be able to perform highly complicated tasks, they aren't flexible by any means, relying purely on man-made variables, predefined logical decision trees. In the brain there is no central processor and all the different components are highly connected, constantly
communicating back and forth in always changing patterns. This system is so complicated that it is only now getting possible to simulate or even just grasp its capacities. What's stunning about it is that although it is a flexible system allowing for no two brains to be the same, it appears to be working quite fine, which anyone could confirm from experience. The assumption of the global work space theory and all other theories which are well grounded on neurological research and complex system modeling on computers is that the simplest and most plausible conclusion about how consciousness arises is that our brain actually IS our consciousness.

One way to make this idea more comprehensible is to point out all the things going on in our brain at any given moment that we aren't conscious of. This is not only the case for the autonomous body functions but also for most things our eyes and all other senses register continuously but which only get our attention when they report something unusual or when we direct our attention towards them. The same is true when we have to learn something by consciously going through every step of an action. Eventually these steps become automatic and are carried out unconsciously. Speaking and writing are two important examples of this. The unconscious events play a much greater role than we could possibly feel and many of them could potentially become conscious at any given time. There is a perceptual hierarchy regulating our senses and a complex value system that connects events with emotions and thus is of great importance for memory. These are incredibly complex mechanisms, some argue the most complex dealt with so far, but there are patterns that can be traced and confirmed by experiments. This has lead to groundbreaking results at a groundbreaking and rapid pace.

2.2.3. Consequences

I'm not claiming to be familiar with all the details of these processes and the theories explaining them but I find them highly stimulating. The prospect of rationalizing things as complicated as behavior or emotions and how they affect our view of the world and to a certain degree predict and influence them is both relieving and frightening. With so many problems still unsolved and different theories contradicting themselves, it is easy to see the humans behind the scientists in a field that requires them to be highly creative and yet systematic. While in philosophy battles seem to be won by logic, words and pure reasoning, these propositions about how we think and who we are need to be scientifically verified on the very subject – us.

Once science gets into the mind and even links our consciousness to evolution it seems to be more and more incompatible with religion. It also has and will have even greater effects on how we look upon the character and behavior of different people and to what extent and scale they can be manipulated. This affects many different fields and is bound to concern many people who are yet unaware of the problem. The dispute about the 'balancing off' of natural selection by the pseudo scientific theory of Intelligent Design in American schools is a very extreme example but there are more such problems ahead. While all the evidence is on their side and scientists can easily confute all the biblical based attacks on evolution they apparently often fail to convince the public. The often arrogant and highly cynical demeanor of the scientists is thereby just as disturbing as the flaunted ignorance of their opponents. This reveals the emotional side of this dry topic and what happens when questions previously reserved for philosophy and academia become relevant to anybody. This mix-up of reason and irrationality is a minefield of misconceptions and errors and thus a very fertile ground for art.

2.3. Art

After this excursion into the wondrous world of Science I now have to take on the challenge of explaining what this all has to do with art. There have been many times when I've found it hard to find the right arguments myself but I'm still convinced that there can be a symbiosis. After all there are many artists who work quite similar to experimental scientists and one could argue that Dieter Roth might have been a successful physicist and Albert Einstein a brilliant artist if they had lived under different circumstances in this specific case not least a reversed affection for alcohol. Their most prominent characteristics were creativity and the power of imagination and a drive to explore the world. They also both had a peculiar sense of humor.
2.3.1. The Swiss

Roman Signer has made a career out of leading the life of an art scientist and his sedulous inquisitiveness and experimentation has involved the props of everyday life, the forces of nature and most notably himself. The correlation of his fondness of explosives with the precise set-up of the experiments makes it possible to literally blast the deep mines of perceptive partiality. He's more interested in the process than the outcome and the essence of the work is only captured on video. What remains there to be seen for later visitors to the scene are wrecked Piaggios, chopped up helicopters and canoes with holes (Fig. 1). While Signer's research doesn't follow the strict principles of science and is directed by his subjective interest and reasoning there's a strong notion that he's on to something that resonates with a deep sensation of what it means to be human. In the film *Signers Koffer*\(^10\) he explains how he tries to justify his working as an artist. Convincing himself that he's doing a job like anyone else, he goes to work every day and explores what he finds worthy of exploring by his own means. There's something strikingly humble about this statement but it also reveals his rebellious rejection to accept a value system in which useful and valuable pursuits are quickly distinguished from what is best described as a waste of time.

There is more examples of artist exploring this question of value. It is probably not a coincidence that a country like Switzerland, known for precision and accuracy and high technical standards, combined with the persistence acquired over centuries spent in remote mountain valleys has produced quite a number of such artist. Being Swiss myself I've only recently become aware of this connection but I can personally confirm that the combination of conformity and rebellion can lead to rather bizarre results. The potential energy in this conflict makes sure that things keep moving. Peter Fischli and David Weiss have put this energy to work in their attempt to explain the world with the help of car tires, planks and, once more fire, explosives and spectacular chemical reactions. *The Way Things Go* (Fig. 2)\(^11\) is a much copied and strikingly simple adaptation of the scientific principle of causality. The seemingly light-hearted motion sequence of everyday objects kept going by well appointed physical and chemical processes almost looks like the working of nature all by itself, making it easy to forget the precision and practice needed to keep it moving. Another work worth mentioning in this context is the *The Sausage Series* (Fig. 3)\(^12\). In this photographic series the artists use food, kitchen appliances and anything else that can be found at home to stage more or less trivial events in everyday life and history.

Finally Jean Tinguely, another compatriot can be regarded as the forefather of this venture. His large scale sculptures were machines with deliberately nondistinctive functions also made from scrap materials and everyday objects. They were quite a statement in the fifties and sixties when technology was still mostly associated with unstoppable progress. As a co-founder of the Nouveau Realisme\(^13\) movement he devoted himself to the poetic recycling of urban, industrial and advertising reality. He was a very skilled and resourceful engineer if only for the fact that his constructions are still running today and the term metamechanics was invented especially to describe them. There is undoubtedly a lot of criticism of modern overproduction and waste in these works but it's combined with great humor and love for detail, making it accessible to a broader audience. By building functioning machines too large for museum spaces and galleries, Tinguely has taken the idea of recycling much more literally than his fellow artists. Contrary to the conception of the readymade his materials of choice could be regarded simply as a means to an end. The concept of the self-absorbed machine is so strong that it maintains it's value even if it's placed in public space, for example in the numerous fountains (Fig. 4). By moving away from the reliance on the institution to give art it's meaning and by exploring possibilities beyond the traditional categories of painting or sculpture the concept can also be apprehended by people who wouldn't normally show interest in art.

This tradition of light-hearted and adventurous yet well considered and serious art, daring yet humble is something that certainly strikes a chord with me. All three of the given examples work with a mixture of ingredients that together evoke emotions maybe best described as the creative power of a self-aware child refusing to accept the constricting reality of growing up. It's quite a conceptual approach to art but by stretching the boundaries of logical thinking without abandoning
it and looking at the world from different angles the outcome is more wise and intuitive than it might first appear. There's also great potential in not taking oneself too seriously. While this is an approach prominent in the Swiss, it is certainly not reserved for them.

### 2.3.2. Impossibility

One artist with the same playful qualities, but in a much more provocative way is Chris Burden. His art can also be generalized as a playful and rebellious attempt at stretching the boundaries of the perception of art and society as well as the self. While the artists mentioned above seem to come up with more or less peaceful results, danger and the distribution of power are much more predominant in Chris Burden's work. By using his own body as starting point he provokes a much more aversive reaction but also manages to point the attention closer to himself. His most famous piece is *Shoot*[^14], where he was shot in the arm by an assistant in 1971, a singular event of which nothing remained except a short film, or *Velvet Water*[^15] where he announced that "Today I'm going to breathe water which is the opposite of drowning, because when you breathe water you believe water to be a richer, thicker oxygen capable of sustaining life"[^16] and almost drowned himself are good examples for that. I must admit here, that I'm generally rather put-off by this kind of artistic self-injury but in his case I was drawn to the underlying concept of pushing the boundaries. The reason why I was able to look beyond the obvious provocation might be Burden's appearance, which strikes me as modest and rather introverted. In the light of his later works the incorporation of himself into his works seems to be a necessary sacrifice to the idea rather than the idea itself. Chris Burden himself has said he came to use his body as his material because it was the only thing he could afford when starting out as an artist. This is clearly an understatement but reinforces the notion. In more recent years his works became more monumental and playful. His fascination for motors and engineering as well as sufficient founding has caused an increase in size and potential impact but the underlying concept still predominates.

*The Flying Steamroller* ([Fig. 5])[^17] is one of those monumental pieces. It's a huge sculpture consisting of a pivoting arm with a 12-ton steamroller and 36 tons of counter balance attached to it. While the steamroller is going in circles a hydraulic piston is activated to lift it off the ground. The motor is turned off and the steamroller is silently spinning for several minutes. The achievement of making a 12-ton steamroller, in itself the materialization of the law of gravity, fly, not concealing the tricks applied to make the miracle possible and thereby tricking the mind into questioning its own perception of possibility, strangely challenges our senses. There is great area of tension in between the matter-of-factness and construction of the sculpture and the light-hearted flash of genius of teaching the steamroller how to fly created by our concepts of reality. Thought can easily challenge a natural law we are subjected to and even win, but if the idea is realized and confronted with reality there's partial victory at most. But it's those small and frail victories that show the bravery of imagination and how art can capture the impossible.

Another work I would like to mention in this context is *Rising of Street Lamp for Placing of Tire* ([Fig. 6])[^18] by Andreas Slominski. For this piece at the Sculpture Projects Muenster in 1996 he placed a bicycle tire around a street lamp but instead of sliding it over the top of the lamp and down to the ground he had the lamp dug out of the ground, lifted and disconnected. After this Slominski placed the tire around the lamppost and the lamp was put back into the ground. The apparent irrationality of this artistic endeavor was even continued in the real world when the tire was stolen shortly afterwards and it's reasonable to assume that the thieves weren't going through the same lengths to retain it's functionality. This performance can be seen as a reflection on or critique of modern art values, especially the financial aspects - but it also challenges our often unreflected assumption about causality and how imagination gets caught in its own traps.

Despite their shared rational approach to questions about meaning and purpose and their attempt to address them with tangible and materialistic statements, Burden and Slominski are very different artists. Slominski's work generally is genuinely conceptual and reflective and needs the label 'art' to unfold its potential. Chris Burden is pursuing a hands-on approach with the spirit of an explorer which makes his work more self-sustained and comprehensible.
2.4. The Reconciliation

What I find interesting about the artists mentioned above in general and those specific works is the focus on the relationship between the conscious mind of the artist and the natural world. It lies in the nature of a self-conscious human being that this relationship also contains emotional and social aspects that can't be completely distinguished from one another and no matter how rational and neutral the approach might appear, it always amounts to a showdown between the self and the world. While this realization is frequently taken to justify a degree of relativism these works leave no doubt about the power bias. But they also show that there can be victory, that while the colossus can't be defeated it's still worth challenging it. This challenge is constantly going on in the mind and usually remains unnoticed but it's the moments when we become aware of the deception of our thoughts, of the tricks and games we play with ourselves that reveal the true beauty of imagination and creativity. The stage for this quest as well as its protagonist and audience all are unified in an inconspicuous looking organ that is deemed to close the gap between the observer and the observed and already the center of vigorous debate: the brain.

3. The Project

3.1. And Then What Happens?

I'm planning to build a model of a brain in which I can bring together the many aspects and implications I've mentioned above. While the use of the brain structures and the way they function already constitute for a lot of material to work with I'm also interested in the philosophical questions and how they could be visualized. Over time the suggestions for solving the hard problem about how physical processes should give rise to our rich inner life have certainly not lacked creativity. One example would be the idea of a dualist 'cartesian theater' in our head, something like a stage on which all we experience is 'acted out' by the brain. This concept requires for 'something' to act as the observer and director often referred to as the homunculus, the little man in our brain. If there was a homunculus something superior would have to be placed to direct it and it can be argued that this would lead to an infinite regress. Others suggest the involvement of quantum gravity in the process that gives rise to a common consciousness. The philosopher Daniel Dennett addressed the problem this way: *Hard Question – And Then What Happens?* I would like to follow his example by putting everything I've found to be essential to the workings of the brain in place, to then see what happens.

3.2. Realization of the Project

3.2.1. The Model

I'm generally interested in models scientific as well as artistic. Analogous to the process of writing a text, it's first of all a technique to grasp and organize the knowledge one has gathered. For a proper scientific model one would then have to start the process of simplification by trying to remove everything unnecessary until one's looking at the objective essence of the investigation. This is a viable process for a scientist but it can only be imitated by an artist. While a scientist is required to minimize the freedom of interpretation and aim for the greatest possible objectivity, I'm propagating the artistic incorporation of the theoretical waste and subjective aspects that can be complicated whilst keeping them as distinct from each other as possible. The result is a model that is deeply subjective and influenced by intuition but also shows to associations interactions that take place during the process.

While the scientist has to reduce nature to get a working theory the artist is dealing with notions and feelings already enriched with images and feelings, which are best expressed by adding something to nature. In this context *The Flying Steamroller* is essentially nothing but a moving steel construction but we can trace Chris Burdens thoughts through it's technical features step by step, uncovering difficulties he addressed and solved, and details he found especially important, all the way to the initial intentions and ideas like we would expect it in a scientific model. We see not only
the work but the work as a result of a process.

I've used this method to make models of huge artworks which have influenced my own art by taking them apart and then rebuilding them as my personal interpretation with an emphasis on the details and problems I've uncovered during the process. By paying attention to the technical aspects and the proportions the originals are still a part of these works but their linked with my own reflections. The discrepancy between the large scale originals and small models are further enhancing the private character of this interpretation. By establishing a process of analyzing and reinterpretation I encountered many difficulties that weren't necessarily obvious in the actual work but absolutely crucial. In the case of the my model of the *Flying Steam Roller* which I named *My Burden* I had overlooked the involvement of the hydraulic piston at first because it can't be derived from the idea of 'flying' but it soon became clear that there needed to be some extra help. In the model I used two air filled syringes to lift the beam and I find this shift of focus away from the achievement towards the way it's been achieved the most rewarding and meaningful feature of the model.

3.2.2. The Choice of Material

When following a conceptual idea or process the freedom of choice about the materials used to realize it is vast but none the less crucial to the work. If the choice is too arbitrary it obscures the initial idea but there's also a great danger of overstatement. I much prefer an inconspicuous or sketchy looking implementation of a great and far reaching idea to materialistic opulence and astringence which are often associated with simple statements and prejudgment. If the work has a low-key appearance and addresses the viewer at eye level, there's room for reflection and critical judgment going beyond the intentions of the artist. Tinguely's metamechanics are a good example as well as Signer's interventions in nature and they also show that keeping art sincere doesn't mean to keep it plain and unassuming. What is true for the viewer is also relevant for the artist and I find it very liberating to work with found material that has already been discarded. This can be true for cheap material in general but following Tinguely's example and looking at the superabundance and waste of valuable materials in our society a deliberate and responsible choice of material should take this into consideration. In many cases artists start out working with what's readily available for them and gradually abandon the idea as money becomes less of an issue. In some cases they are able to use this greater freedom of choice to enrich or clarify their intentions but I often can't help the feeling that something essential gets lost.

My favorite medium is cardboard combined with hot glue and tape and I will use it to build the structure of the work. In addition I will incorporate anything that becomes available, from waste to electrical appliances, wood and metal. The materials should remain recognizable for what they are but more importantly obtain new meaning in the context of a complex system.

3.2.3. The Structure and It's Placement In the Gallery

Analogue to the physiology of the brain with its different cell structures, transmitters and connected brain regions with distinct but complex functions the model will be an installation consisting of separate parts that are incorporated into the whole structure according to their function. I will use electrical appliances and other methods to create movement and interaction within and between the parts which highlight the connectivity and complexity of the system. It's important to have detailed and recognizable functions on all scales along with purely artistic ones because after all - I want this to be a visual and artistic interpretation of the brain and this should leave plenty of room for imagination. I will start building based on a process that starts out with the 'brain regions'. While some of them actually have a counterpart in the brain, most will be based on philosophical concepts and my own inclination to rearrange given facts. Generally, there will be much more given concepts based on introspection which only exist as complex interactions of many instances in the brain, but it's these concepts that make the whole discussion about consciousness so difficult to grasp. By making visible how much they depend on other factors of the system, I would like to make this simplification visible in it's complexity. The regions will then be joined together and integrated into a larger system consisting of different types of connections and hierarchies.
Depending on the context these larger system can again be part of a larger one theoretically all the way to infinity as indicated in the problem of the cartesian theater above.

The size of the installation will be determined by my ability to create interesting components but I would like to make it big enough for people to get inside of it. It should be possible to look at the details and the whole structure from different angles and distances. There will be relatively independent areas with the aim to evoke specific emotions and thoughts and details that need to be discovered. I think a good size allowing for a good balance between the details and the whole structure would be a layout of about five by five meters including the supporting structure. It would be helpful to use one or two walls as support as well as the ceiling to hang lighter parts.

3.3. Further Considerations

I think it's more important for the viewer to recognize a system and it's association with emotions and unchangeable factors than to educate him in neurobiology. The best possible result would be an installation that can please the neuroscientist as well as a child and still stimulate thinking. In this sense I would like the references to be visible but not dominant and whenever possible self-explanatory.

Another option I would like to keep open is to let motorized and moving parts of the system run on their own and allowing them some autonomy once the whole structure is built. They would go off for as long as they run and create their own patterns. This would be a direct reference to Dennett's question 'And then what happens?' and leave more room for associations about the dynamics aspect of consciousness, free will but also equilibrium in social interactions and even war. It’s always a miracle to me that things function so well, when only minor changes can lead to chaos. This is especially true for the brain. I was glad to discover that Tinguely has also taken up this idea in his self-destroying mechanism Homage to New York (Fig. 7) and Study for an End of the World, No. 2.

4. Conclusion

While planning and building the installation, the reference to the brain and consciousness is absolutely crucial and constitutes for the process of realization, as well as the structure of the work. However this should not inhibit creativity or aesthetic considerations and most importantly artistic freedom. Despite my reliance on scientific and rational methods and the fascination for the insights they bring about, I'm too much of an artist to submit my thoughts to rationality and so far this has meant to live in two separate spheres with little in common but the occasional overlap of subjects. This won't change anytime soon and I've met enough good scientists with bad taste and good artists with bad reasoning to come to the conclusion that that's not necessarily a bad thing. What is already changing though, is our view on creativity and emotions, the significance of the unconscious and memory together with language and how all of this is connected with the image we have of the world and of ourselves. A lot of this is still speculation but for the first time there’s scientific arguments that go beyond introspection and certain statements can already be examined by monitoring the brain. The discussion about consciousness and the self is moving away from philosophical speculation, especially challenging dualist and phenomenalist views. Of course this is happening far away from art, but it provides new arguments against the relativism which is still a prominent feature in discussions about art, without denouncing the importance of the subjective. I think that's a great perspective for art.

When I started to look into Neuroscience and the philosophical and scientific discussions about it, I wasn’t looking for anything except interesting structures I could employ in my art. But it occurred to me that by doing this I am actually looking at myself, the artist who is looking at my brain trying to find some art in it. Underneath the references to science and structural considerations and the philosophical problems I found myself working on a genuine self-portrait.
Bibliography

Notes and References


2. Kant's definition that the genius is what gives rule to the art. Kant, The Critique of Judgment, 168-196.


5. The Science Wars refers to a series of intellectual battles in the 1990s between 'postmodernists' and 'realists'. In 1996 Social Text, a journal of critical theory, compiled a special issue entitled Science Wars. Physicist Alan Sokal submitted a paper titled Transgressing the Boundaries: Towards a Transformative Hermeneutics of Quantum Gravity which was a hoax. The resulting debate focused on the relative scholarly merits or lack thereof of sociological commentary on the physical sciences and of postmodern-influenced sociological disciplines in general. Science Wars. Wikipedia. Available from: http://en.wikipedia.org/wiki/Science_wars [Accessed 27 Feb 2009].


15 Hoffman, Chris Burden, 56-57.

16 Hoffman, Chris Burden, 56.

17 Hoffman, Chris Burden, 272-275.


20 Dennett, *Consciousness Explained*, 255.


Images

Figure 1  Roman Signer, 2003. *Piaggio auf Skischranze (Piaggio on Ski-jump).*

Figure 2  Fischli & Weiss, 1987. Still from *The Way Things Go.*
Figure 3  Fischli & Weiss, 1979. Im Teppichladen (In the Carpet Shop). Photograph from the *Wurstserie* (Sausage Series).

Figure 4  Jean Tinguely, 1977. *Tinguely-Fountain*. Basel, Switzerland

Figure 6  Andreas Slomonski, 1996. *Ausheben der Laterne für das Umlegen des Reifens (Rising of Street Lamp for Placing of Tire)*. Skulptur Projekte Münster, Germany.