Robert Rauschenberg’s ‘White Paintings’, created at Black Mountain College in 1951, were so bare of mark-making, that their surfaces registered traces of natural light and the shadows of the audience that looked upon them; as Rauschenberg once commented “you could almost tell how many people are in the room”. It was to be a musician who was to see the productive potential in these works, already passed off as reductive – John Cage complimented the paintings as ‘airports of the lights, shadows and particles.’ The ‘White Paintings’ were subsequently to inspire Cage’s legendary composition 4’33”, which was to be a similar ‘hypersensitive screen’ - a bare silence that registered room noise into its vacuum, including the sounds of the audience’s reactions and movements.

The ‘hypersensitive screen’ and the idea of imagined space is also to be found as the underlying basis of the work of German artist Jorinde Voigt. For Voigt, her drawn works - produced since the early 2000’s, act as an interface to this imagined space that constantly renews itself as an inspiring and interesting medium for the artist to work with. What do we mean by imagined space? Like Cage’s ‘silence’ the undisturbed void of our projected thought is actually a shared room of sense perceptions derived from our known surroundings. It is, in fact, the combination with which we put these perceptions together, creating highly individual realms that make our imagined space personalized. So how to develop an impartiality that commands the interface to something so subjective?

Voigt augments the impartial through a decision of elements notated in her diagrammatic drawings. Kisses, pop hits, electricity, aeroplanes, cars, explosions and eagles are some of the apparatuses chosen by the artist to be bound together in what is reminiscent of graph structures, governed by various axes such as duration of time, temperature change, speed or geographical location (longitude/latitude). The drawing’s material limit is often extended by these axes: In O.T. I-14 (Plate.1), the width of each of the fourteen drawings increase by 10 cm each time in relation to changing temperature featured within the drawings’ content. In these cases, the drawings seem to transcend the discipline given them. The potential of expansive structure is illustrated, as the drawings take on a correlative physicality.

Several of the drawings are referred to as ‘Partiturs’ by Voigt, meaning ‘scores’ in musical terminology. Seeing the drawings (such as Weisse Partitur Top 10 Popsongs Taktweise-Plate.2) as grids imposed over source material and read in lineal fashion may help us in understanding how imaginary space can be commanded. It was Cage who, in his Imaginary Landscape No. 4 (1951) deployed two players to control twelve radio receivers. One player tuned the frequency of the radio, the other controlled the volume level. As in Voigt’s graph like diagrams, two axes are set to initiate and orientate a specific process, and as in the detailed notation of Voigt’s drawings, Cage wrote precise instructions in the score, about how the performers should set their radios and change them over time.

Interfacing with the imagined landscape yields interesting results. Cage could not control the sound emitted from the radios, since this was randomly affected by whatever broadcasts were transmitted at the time of his performance. The most popular pop song of the week – an element to be found repetitively in Voigt’s work is subject to change based on current popular opinion. Therefore all other elements in the drawing are influenced by this variable. Voigt points out in her ‘definition of terms’ written in parallel to each series of work, that:

“Repetition and variation are a theme in every work… If one were to read the drawings as… musical or choreography scores, their realization in real time would be thwarted. The events are not possible in reality. It is much more a matter of intensity of what is… with the particular element ”

The idea of a variable and the setting of a parameter within which action can unfold affected by this variable, evokes the principles of scores composed using indeterminate methods in comparison to performatively indeterminate ones. This debate surrounded Cage’s Variations, where the decision making process rested mostly on the performers (orchestra) whose response to the score produced the final result of the work. Voigt’s recent programming of pop songs, bar by bar into a specially created software allows that the opening section of a number of top ten hits to be

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1 From Evacuation to Fullness: Rauschenberg in the ‘50s by Ed Krcma (lecture)
2 Cage’s personal interpretation of the effect of Rauschenberg’s white canvases (Ed Krcma)
triggered simultaneously. The order of the sections can also be programmed both determinately and in random. The result is white noise, produced from the clashing content of many songs. The drawn notations that split the pop hits into temporal and rhythmic sections and distribute them to command other actions (Top 7 Popsongs Akustische Impulse Detonationen 2 Küssten Sich - Plate.3) are described by Voigt as “a structure that keeps noise alive”. In the same way, Cage declared, after hearing his own nervous system and blood flow within an anechoic chamber³ at Harvard University, “until I die there will be sounds. And they will continue following my death. One need not fear about the future of music.”

Gazing into the complex details of Voigt’s most recent drawings such as the PERM (Plate.4) works, one’s initial reaction is to attempt to make sense of the apparently disparate structures, while at the same time acknowledging that there may be a system of connection at play within the drawings. The graceful, stretching arcs and looped lines that bind eagles together with electricity, temperature with pop songs, explosions with kisses seem to assure us that the artist is proposing a realistic relation of elements. However, Jorinde Voigt’s reasoning behind the drawings has more to do with the idea of confrontation and negotiation than association or connection.

Voigt regards connectivity as a form of symbiosis; a beneficial relationship between different things. However, the idea that the chosen elements in her drawings are in beneficial relation to each other defies the concept that the elements should be viewed autonomously. The course of an element’s action “triggers, stops or changes those of the others at a particular point”⁴, i.e.: elements have a bearing on each other, but not in a mutual way. For Voigt, the things represented in her drawings and Partiturs, have “symbolic importance in a society, or are decisive in describing…their surroundings”⁵ The elements, such as pop songs, electricity and aeroplanes passing overhead are in social proportions to one another. Their grouping is determined by their spatial and temporal relationship to one and another. Ultimately, through this, a definitive spatial constellation is described. It is these constellations, proposed by Voigt, that comprise the more extended situations she creates through the drawn works. For her, constellations mean isolative elements, capable of initiating confrontational responses in the viewer. Singular units in isolation deny a context to be built around the situation that they themselves comprise. Context comes from connectivity, from a relational web that describes a broader surrounding. Voigt’s drawings are not about interaction and mutuality - they stand instead as dispassionate, overhead views on the symbolic aspects that comprise our communal organization. It may even be true to say that the works depend on a degree of hostility in order to engage themselves with the observer, like Cage’s demands of his scores, that brought out hostile reactions in his performers.

Here, it is interesting to turn back to Cage and his response to the Ryoanji rock gardens in Kyoto, Japan. The traditional garden at Ryoanji, with its raked white sand and careful placement of fifteen stones, inspired Cage to begin a set of drawings using the same amount of stones, drawn around with a varying number of pencils of different gradients, from hard lead to soft. It was not only the placement of the stones that fascinated him (the full number of stones in the garden could never be captured in one view, thus playing with the idea of mathematical sequences) but also the way that the rocks were displayed in relative isolation from each other. In his drawings, titled Where R = Ryoanji⁶ Cage labelled the individual sketches depending on how many times he circled the pencil around the stone: 5R/10 indicating for example a trace of five times (5) around fifteen stones (R meaning Ryoanji) using ten pencils (10). This repetitive circling of the stones seems to tell us that Cage was almost reiterating the spatial, isolative qualities of these elements, such as Voigt opts for the isolated constellation over a related connection in her drawings. This harmonic ordering of objects in space exists not only as a traditional craft in Japan but is also a way of life. Buddhism (highly influential to Cage) follows an ethic of freeing oneself of desire and a certain holistic perspective on matters of life is encouraged, that has very much to do with concentrating on an overall picture rather than detail. It is without surprise then, that Cage’s composition: Ryoanji based on the Where R = Ryoanji drawings, is sparse, spatial atonal music, reminiscent of the atmosphere of the original rock garden.

As Cage considered the sequential order of stones at Ryoanji, so we might also think about further number systems, such as the Fibonacci sequence. Pioneered by Sanskrit grammarian Pingala, Indian mathematician

³ An anechoic chamber is a room in which there are no echoes. This description was originally used in the context of acoustic (sound) echoes caused by reflections from the internal surfaces of the room but more recently the same description has been adopted for the radio frequency (RF) anechoic chamber.
⁴ Quoted from the artist’s notes to her work
⁵ Further quotes from the artist’s notes to her work
⁶ Initiated by Cage in 1983
Virahanka employed it in the analysis of long and short syllables. It then went on to be developed by Leonardo of Pisa in the 1100’s after whom the sequence was named. The Fibonacci sequence is a progression of a number chain that advances depending on the sum of the present digit plus its preceding digit. Employed to support theories on organic growth, the Fibonacci sequence displays how structures may expand and grow rapidly over a brief period of time and an extended spatial area. In Voigt’s 2 Küssen Sich I-V (Plate.5) and Temperaturverlauf -8°C bis 16°C (Plate.6) the Fibonacci sequence is evident as the artist uses it as an expansion regulator, broadening the quantity of kissing couples or increasing temperature from below freezing to halfway to room temperature. It is interesting to note, that when visually illustrated, the optical results of the Fibonacci number system are themselves close to the structures of the natural world. Singular points branch out to create broad surface areas to be found in leaves of plants or the wings of birds.

While taking rests from the working on the complex and large-scale PERM drawings for her solo exhibition Perm Millennial, Voigt spent time in the outside courtyard of her studio, observing various plants there. This study came to lead her to research in what way plant life reproduces itself and its surface area. Voigt was surprised to find that rather than the plants’ total growth being decided from one initial point, the growth was given commands only from its preceding stage of development. In this way, the growth systems of structures seem to defy explanation such as Fibonacci, since Fibonacci progresses based on the chain of numbers preceding its present sum. What interested Voigt, was that maybe each stage of growth was self contained, isolated and kept within it the data for the next progressive step.

This can be applied to another focus point of drawings such as 60 Adler, 60 Sekunden, Strom, Popsongs (Plate.7) that being the inclusion of electricity. For Voigt, electricity acts as a binding charge, energizing all elements appearing in the drawings. If temperature increase/decrease acts as a rational measurement tool for organizing the elements, then electricity is what provides these abstract situations with stimulus and power. It is also a way of communicating between the chosen symbols, as flocks of eagles are caught in direct electrical contact with repeating popular music hits, their active encounter ordered over a timescale of one complete minute. We, as viewers, gaze at these drawings - our bodies are also electrified at varying strengths, depending on the number of electrons required to balance the charge of protons. These electric fields, essential to nervous and cerebral communication are constantly in flux, but nevertheless continuously binding our mental and physical skills together. Such as the plant cells that may contain data in isolation, so the neuro-structure of our brain depends on a difference in voltage that initiates nervous activity. One could argue then, that thought is not initiated from a shared biological experience, but from one of polarity or imbalance.

Here we return to imaginary space, the extension of thought. Into this void, Voigt inserts language, a language that has a perpetual present tense, where „everything happens at the moment that you read it“ and where there is no discernible beginning or no discernible end. The idea of infinity is fundamental to Voigt, as an underlying basis of a process that is ongoing, unfolding, expanding or even imploding into the negative.

The realistic depictions of the Indonesien series (Plate.8), (where Voigt recorded in drawn form, daily sounds of Jakarta such as bomb blasts through the open window of her hotel room) and the fictive structures of the PERM works (where the detonations remembered from Jakarta, are re-employed as rhythmic „beats“ that separate kisses, stretched over time) are bridged by the Pfeile series (Plate.9). These drawings, made while on a trip to New York, comprise hundreds of tiny arrows, forming massive directional flows. However, they go against the cliché of the artist walking the street, depicting the energy of the city; Voigt drew the Pfeile series entirely within the confines of a rented room. Although in direct relation with the influences of the actual city just outside the window – these drawings are more to do with the imagined world that may exist there, while at the same time, acting as an intensive, insular search for a way forward. The way forward drives the artwork and the art-maker herself - an occupant of the gap between societal normality and an imagined personal realm. What we see, is the artist as a person very much aware of the space between these two points. The Pfeile series seems to stand for this sort of introverted hunt for a direction, and often we observe the flows of energy crash into themselves, allowing the drawings to talk of entropy and collapse.

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7 If points are not connected, and the voltage difference between those points is high enough, electrical ionization of the atmosphere will occur, and current flow will tend to occur along the path of least resistance.

8 Joe Patlak and Ray Gibbons (Copyright 1998), Department of Physiology, University of Vermont.

9 Directly quoted from the artist
However, if implosion is necessary for progression, the works that followed, 2 *Küssen Sich* (Plate.10), *Nautilus Series* (Plate.11), *Colorado Series* (Plate.12), and ultimately *PERM*, describe a new utopian mechanism. Symbols that we can relate to are put into ‘purposeless play’\textsuperscript{10} with fictive and imagined situations. These drawings may even be read as types of aspirational ‘dream’, understood in the modern sense of dream as "time before time", or "time outside of time". To approximate the Aboriginal "All-at-once" time - a co-existence of all time frames (referred to by sociologist W.H.Stanner as ‘Everywhen’\textsuperscript{11}), dreaming takes place in the present and in the future - bringing to mind Voigt’s „everything happens at the moment…”. From this indigenous viewpoint, dreaming is thought to be impartial and objective, with time (as a linear concept) considered a consciousness of one's own lifetime in the waking state (subjective).

Similarly for Voigt, the subjective, imagined space that her work sets out to interface, is objectified through a utopic vision - driven by electricity, temperature, air volume, birds and music. As Voigt has mentioned in relation to making her art: “What for others is colour, for me is cultural material”. Time in the drawings however, is presented as objective, rational, lineal - but subjective in what comprises it, whether it be repetitive detonations, passing aircraft, or the bars of next weeks top ten hit. Interesting to note then, that in the rationally concentrated culture of the West, dream is perceived as subjective, with time as the objective, governing concept. In the drawings of Jorinde Voigt, the Everywhen of dream seems to be in place. These monochromatic systems are both present and infinite. Isolative, informing, imagined.

\textsuperscript{10} A phrase used by Cage to describe his music. To this he added: "this play is an affirmation of life—not an attempt to bring order out of chaos, nor to suggest improvements in creation, but simply to wake up to the very life we are living, which is so excellent once one gets one’s mind and desires out the way and lets it act of its own accord."

\textsuperscript{11} W H Stanner, (1968) "After the Dreaming" (ABC Boyer Lectures)