

# CHAPTER NUMBER

## DRAWING AS RECORDING

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### **Introduction<sup>1</sup>**

Recently there was a surge in user-friendly Artificial Intelligence engines (AI) that are able to make images based on textual prompts<sup>2</sup>. A string of words is ‘translated’ by the AI into a more than plausible image (depending on the prompt that is). In order to construct this image, the AI scans some kind of image database to compile a suggestion that can be further fine-tuned into ever more intricate and detailed images.

Without going into the many questions, challenges and potential discussions that surround AI, what struck us, as drawing instructors in architectural faculties, is that the methodology the AI uses to propose images, seems to mimic humanoid imaginative processes. When spatial practitioners<sup>3</sup> draw from memory, they scan the back of their minds, so to say, to find suitable material for what they aim to explore and express. In scanning image banks based on prompts (ideas), the AI seems to perform similar activities to construct an image.

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<sup>1</sup> Note to the reader: throughout the following, text and images are considered as complementary lines of thought. While the written article searches for a working concept of drawing-as-recording, the images and their captions explore potential expressions that explore the activity and residue of drawing-as-recording.

<sup>2</sup> In spring 2023, a quick Google search provided these apps to turn textual prompts into images: Dream Studio, Midjourney, Night Café, Hotpot.ai, Fotor, Crayon, Deep Dream Generator, Starry AI, Art Breeder, Photogenic, Deep AI, Big Sleep, Final Thoughts, etc. The success of these will probably generate more offspring and better qualities, too. The possibilities of these AI engines are challenging but that is a different article all together.

<sup>3</sup> Throughout the text, we will refer to architecture and urban design practices as ‘spatial practices’ and will refer to its educational field as ‘spatial education’.

As drawing practitioners-researchers-teachers, we are continuously on the lookout for inspiring and new vantage points and challenges, such as AI, that potentially extend spatial drawing practice and its discourse. While theories of perception, drawing research and AI's have been moving on, drawing instruction in architectural education seems to keep returning to the mathematical safety of its metric-projective approach. While its metric-projective approach is an incredible tool to represent spaces, it remains fundamentally unable to express the full scope of spatial experiences. The drawing research we engage in, is aimed at precisely that: exploring the conveying of the ephemeral qualities of spatial experiences.

Spatial practitioners continuously scan the world to gather information and data about spatial ecologies, textures, abilities, composition, circulation, organisation, etc. Space is multi-sensory, multidimensional, multivariate, etc. and as such difficult, if not impossible to translate in any medium, let alone on a two-dimensional plane. The burden of spatial practitioners is, that the material they work with is never really present. This virtuality forces them to explore all kinds of media to convey a visual substitute for their concepts and spatial ideas.

At a certain point, to structure our conceptual framework with regard to spatial drawing, we disassembled spatial drawing into four interrelated functions: 'recording', 'exploration', 'communication' and 'expression'.<sup>4</sup> While the functions are to a certain extent indivisible, their delineation and isolation allow us to become more precise about what these functions entail within creative design and learning processes. Furthermore, the distinction allows us to investigate distinct properties of spatial literacy and cognition, by isolating and exploring specific drawing strategies and activities.

- 'Drawing as recording' refers to ways to preserve, graph or map experiences, observations and impressions. It also refers to the permanent character of the drawing, allowing it to become a record of a line of thought, or a specific detail that can be re-examined at a certain point in time.
- 'Drawing as exploration' refers to the generative character of drawing. This function is about discovering and finding formal and spatial qualities, through drawing. It is an iterative process where one drawing inspires a next one. Recording and exploration might overlap when a recording generates a new idea or when the

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<sup>4</sup> Robin Schaefferbeke, Hélène Aarts, "Architectural literacy": Functions of architectural drawing", *Drawing Research Theory Practice*, Vol. 6, No. 1, (2021): 83-97.

recorded, embodied and internalised spatial experiences give rise to new ideas.

- ‘Drawing as communication’ refers to drawing’s intermediary role, between the different parties involved in the design and/or building process. The communication relies on the conventions of a notational system, which enables everyone to extract spatial knowledge from a drawing. Proficiency in the notational system allows the drawer to explore and extend the system. In that process, exploration, recording and communication start to coincide.
- Drawing as expression, finally, refers to both the manifestation of metaphoric sensory and symbolic properties of form and space, as well as the autographic quality of drawing. Here the expressive capabilities of drawing can bring about new ideas through a process of creative reinterpretation, so that expression and exploration start to overlap. Furthermore, in exploring the conveying of the ephemeral by investigating alternative literacies, expression, recording and communication seem to blend.

Spatial drawing, the recording, exploration, communication and expression of forms and spaces, is a distinct skill that adds a complementary approach to see, interact and act upon the world. We are convinced that spatial drawing is able to provide knowledge and significance for a variety of contexts beyond our very own disciplinary boundaries. By exploring visual and perceptual theories and concepts, as well as the ways to transpose them into drawings, design-based spatial drawing is able to nourish drawing approaches concerned with invention and reinterpretation, beyond an academic-representational notion of drawing.

In that sense, investigating spatial drawing requires more than repeating personal and disciplinary drawing skills, approaches and expertise. Spatial drawing, to our contention, should be concerned with triggering imaginative and investigative attitudes by asking questions such as:

What is space? What is space made of? How does one perceive space? How does one experience space? How does one imagine space? How does one express space? How does one make space? How does one transform space? As opposed to providing fixed answers and solutions, drawers, practitioners, teachers and researchers alike can be challenged to look at the world in ways they never imagined.

Consider the following as an attempt to answer some of the previous questions by unpacking recording as the native function for drawing in spatial practices and its education. The motivation to explore a concept for drawing-as-recording, we want to argue, is that the activity, the translation as well as the residue, supports spatial cognition and creative processes on

several levels. The ambition is to outline some of the conditions, constraints, and pitfalls to investigate the activity and the residue of drawing-as-recording.

Drawing-as-recording is regarded as an intimate activity, by default intended to be communicated to the (creative) self. As such the residue of the process remains concealed in the author's files and imagination, waiting to be unearthed or rediscovered at a certain time. In what follows, drawing-as-recording will be approached as a personal creative tool, merely isolated from its communicative, artistic, or representational ambitions.

## Recording

A line drawn is important not for what it records so much as what it leads you on to see<sup>5</sup>.

Recording is introduced here as a container term to describe activities that document formal or spatial information. The Oxford Dictionary relates recording to 'putting something in writing or making notes'. Closer to our activity, recording is understood as 'putting something down on paper, to document, register, chronicle, file, chart, catalogue or log'. Recording is also related to 'inscribing or transcribing' even to the 'making of an inventory'. The Oxford Dictionary even mentions the word "diarise", which connects to aspects of the diary, journal or notebook.

Recording, as a concept, is more easily connected to sound recording than to drawing-as-recording. In that sense drawing-as-recording requires some articulation in order to propose recording as the native function of spatial drawing. In sound and music, recording is understood as "a technique to transfer sounds in the air for storage and later reproduction"<sup>6</sup>. In a similar way, drawing-as-recording can be considered "as an activity to transfer spatial matter for storage and later reproduction".

Sound recording, as an activity takes place in and through studios, labs, fields, and stages to cover live, edited, sampled and treated performances,

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<sup>5</sup> John Berger, *Berger on Drawing*, ed. Jim Savage (Cork, Ireland: Occasional Press, 2007), 3; quoted in Michael Taussig, *I swear I saw this: drawings in fieldwork notebooks, namely my own* (Chicago: University of Chicago Press, 2011), 22.

<sup>6</sup> Gaute Barlindhaug, "The Ontological Status of Sound Recording: An Artistic Blend between Documentation and Sonic Aesthetics", *Proceedings from the Document Academy*, Vol. 7, No. 1 (2020).

environments or occurrences<sup>7</sup>. Analogue to that, drawing-as-recording also covers a large area of drawing activities to be undertaken in a large variety of contexts, whether real, virtual or even out of the ordinary.

We also need to make a distinction between recording and notation, as the two concepts are often confused with one-another. Linguistically, notations represent collections of related symbols that are given an arbitrary meaning. Notations are created to facilitate structured communication within a discipline, domain, field or study. Philosopher Nelson Goodman has argued that the projective system spatial practitioners adhere to, much like musical scores, is notational because they consist of symbols (utterances, inscriptions, marks) that can be exchanged without syntactical effect<sup>8</sup>. While notation can be used to transcribe spatial information and ideas, we should conceptually differentiate the two.

In music, as electronic musician Gaute Barlindhaug observes, notation-as-recording should be regarded as a process that, both in its stage of capturing and reproduction is based on the act of subjective interpretation<sup>9</sup>. Drawing-as-notation works on similar grounds. One has to be able to think and interpret within the notational system, to be able to discern qualities and properties from the drawing. In our functional model of spatial drawing, we argue that drawing-as-notation, which is rooted in Cartesian space, is too limited to record the multivariate qualities that make up spatial experiences. To replace the notational approach as well as the academic-representational approach, we sought a different paradigm, hence proposing *recording*.

Ernst Gombrich's statement "a drawing is a record of visual perception" provides a seemingly easy entry, but the statement is an over-simplification, which ignores the sensory, cognitive and cultural properties involved in the process of drawing as recording<sup>10</sup>. Perceptual psychologist James Gibson

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<sup>7</sup> Angus Carlyle, "Memories of Memories of Memories of Memories: Remembering and Recording on the Silent Mountain", in *Sonic Thinking. A Media Philosophical Approach*, ed. Bernd Herzogenrath (New York, NY: Bloomsbury USA Academy, 2017), 65-82.

<sup>8</sup> Nelson Goodman, *Languages of Art* (Indianapolis, In: Bobbs-Merrill, 1968), 219-220.

<sup>9</sup> Barlindhaug, "The Ontological Status".

<sup>10</sup> Howard Riley departs from the phrase 'record of perception' which he took from Norman Bryson's 1983 *Vision and Painting. The Logic of the Gaze*, London: Macmillan. Bryson used this phrase (page vii) to sum up Gombrich's emphasis upon perceptualism, and to highlight Gombrich's suppression of the social character of images. We were triggered by the phrase as it seems to represent an easy basis for our hypothesis. For Riley's extended critique upon Gombrich's position see: Howard Riley, *The Intelligence of Seeing*, PhD Thesis (Swansea, UK: School of Art and Design, Swansea Institute of higher education, 2001), 64.

argues that what a drawing records, registers or consolidates is ‘information’,<sup>11</sup> rather than perception<sup>12</sup>. According to Gibson, a drawing records signs of an awareness of being in a certain place at a certain time. In that sense, a drawing preserves what its maker has noticed and considers worth noticing.<sup>13</sup> Or, as John Berger puts it, “a drawing of a tree shows, not a tree, *but a tree being-looked-at*”<sup>14</sup>. According to Berger, a drawing is an autobiographical record of one’s discovery of an event – seen, remembered, or imagined<sup>15</sup>.

Drawing researcher and practitioner Howard Riley argues that drawing essentially expresses a meaning made between the individual and the environment, which is different than signifying a drawer’s perception of that environment. In Riley’s view, the activity of drawing is a manifestation of the relationship between the drawer and her/his environment. Furthermore, Riley asserts, we also need to recognise that drawing is a process of cultural production to a greater extent than it is a recording of a perception. In Riley’s view, drawing is an activity that can reveal, isolate and thus bring into question those culturally based conventions, which are naturalised by Gombrich’s statement<sup>16</sup>.

Recording conjures up a duality: on the one hand, it refers to an ‘activity, the act of doing it’, on the other hand, it refers to the ‘sediment of that

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<sup>11</sup> We tend to follow James Gibson’s understanding of information. For Gibson information refers to the specification of the observer’s environment, not to the specification of the observer’s receptors or sense organs. In his *Ecological Approach to Visual Perception* Gibson goes on to argue that in discussing perception, the term, information cannot have its familiar dictionary meaning of ‘knowledge communicated to a receiver’. In Gibson’s sense, the picking up of information is not to be thought of as a case of communicating because the world does not speak to the observer. Animals and humans communicate with cries, gestures, speech, pictures, writing and television, but according to Gibson we cannot understand perception in terms of these channels; it is quite the other way around. Words and pictures convey information, carry it, or transmit it, but the information in the sea of energy around each of us, luminous or mechanical or chemical energy, is not conveyed. It is simply there. The assumption that information can be transmitted and the assumption that it can be stored are appropriate for the theory of communication, not for the theory of perception. James Jerome Gibson, *The Ecological Approach to Visual Perception* (Boston: Houghton Mifflin, 1979), 242.

<sup>12</sup> *Ivi*, 80.

<sup>13</sup> *Ivi*, 274.

<sup>14</sup> Berger, *Berger on Drawing*, 71 (italic added by the authors); quoted in Karina Kuschnir, “Ethnographic Drawing: Eleven Benefits of Using a Sketchbox for Fieldwork”, *Visual Ethnography Journal*, Vol. 5, No. 1, (2016): 103-134.

<sup>15</sup> *Ibidem*; quoted in Taussig, *I swear*, 3.

<sup>16</sup> Riley, *The Intelligence*, 64-65.

activity’. The activity encompasses seeing, observing, exploring, examining, inspecting, inquiring, etc. The sediment of the activity conjures up tools, techniques and formulas to record as well as the different media we can turn into a recording. Finally, we have to be aware that any act of recording always will be a reduction and an extension at the same time. It reduces an experience into a medium and by doing so, it literally extends or prolongs the ephemeral by preserving it in some way or another.

## Perception, Drawing, Recording

[...] drawing looks simultaneously outwards and inwards, to the observed or imagined world, and into the draftsman’s own persona and mental world. Each sketch and drawing contains a part of the maker and his/her mental world, at the same time that it represents an object or vista in the real, or in an imagined universe. Every drawing is also an excavation into the drawer’s past and memory<sup>17</sup>.

The role of perception is to access information in the world when it is needed. That is, perception is not a representational process, but an activity that is intertwined with sensorimotor skills. According to cognitive scientist and philosopher Alva Noë, perception is created by the goals, intentions, and bodily movements one makes while engaging with the world. Noë states that the way one understands the world is mediated by the way one’s body and senses interact with it. According to Noë perception is a purposeful activity that enables one to stay alive, but also to act upon the world in a meaningful manner<sup>18</sup>.

Spatial practitioners always start off from a perceptual context—be it a specific, fictionalised, theoretical, imaginary or even virtual one. For long human beings were believed to see only with their eyes. In that view images of the world were imprinted on the retina to be then transmitted and interpreted by the brain<sup>19</sup>. From this belief, theories of drawing maintained that perception is based on the concept that a picture (a scene) is projected into the mind’s eye and that drawing is a process of translating this projection onto a flat surface.

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<sup>17</sup> Juhani Pallasmaa, *The Thinking Hand: Essential and Embodied Wisdom in Architecture* (London: Wiley&Sons, 2009),89-90.

<sup>18</sup> Alva Noë, *Action in Perception* (Cambridge, MA: MIT Press, 2004).

<sup>19</sup> Cinzia Accetta, “Art and mind set. Neuroscience and education in the life project”, in *Intelligence, Creativity and Fantasy*, eds. Mário Ming Kong, Maria do Rosário Monteiro, Maria João Pereira Neto (Paris: CRC Press, 2019), 261-265.

Recent research revealed that there is no image in the eye, not in the traditional sense. The retina, on the other hand, is the filter and the channel of signals to the brain. Alva Noë builds upon this idea and proposes to think of perception as an activity of exploring the environment.<sup>20</sup> Similar to Gibson, Noë locates perception in bodily action rather than in the eye and brain. According to Noë all perception entails movement of some sort. Perception, in this regard, is our noticing and registering of changes in sensation. Or, as Gibson puts it, one obtains information by moving and by motion or change in objects in the world over time – i.e. events. Hence Noë’s statement that “perception is something we do, not something that happens to us, or in us”.<sup>21</sup>

As it is impossible to take in the entire field of vision all at once, one navigates the world by moving one's eyes, head and body.<sup>22</sup> Merleau-Ponty observed that upon entering a space, one first makes a kind of overall map of that space. From that overall map, one tries to outline in order to focus. By directing one's gaze, focusing on a specific space the rest disappears to the periphery. In that sense, one is not able to focus on different things at once. This is only possible in a drawing or painting, where one oversees the whole, at once. Merleau-Ponty adds that while directing one's gaze, one does not seem to be aware of the implicit movements, of one's eyes, head and body. Still, one moves in a purposeful and efficient manner<sup>23</sup>. Parallel to Merleau-Ponty, Gibson observed that in one's visual image, all objects move radially away from an optically static point in the direction that we are heading toward<sup>24</sup>.

This direction, as Gibson observed, also has a time-related aspect. Human beings have the ability to look in – and be aware of the past, present and future. This is a characteristic feat for spatial practitioners. By and through reading the present and investigating its historical context, spatial practitioners are able to imagine future interventions. Drawing-as-recording, we argue, helps them to learn about these timeframes. Professor of Philosophy Anthony Chemero infers that rather than as the production of internal images we should think of perception as “[...]”

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<sup>20</sup> Noë, *Action in Perception*, 1-2.

<sup>21</sup> *Ibidem*.

<sup>22</sup> Remigius Cornelis Kwant, “Merleau-Ponty’s Nieuwe Filosofie van de Perceptie, De Natuur en de Logos”, *Tijdschrift voor Filosofie*, Vol. 51, No. 4 (1989): 669-695 (authors’ translation).

<sup>23</sup> Maurice Merleau-Ponty, *The world of perception*, transl. Oliver Davis (London, New York, NY: Routledge, Taylor and Francis, 2004), 54.

<sup>24</sup> Brian Rogers, “Optic Flow: Perceiving and Acting in a 3-D World”, *Iperception*, 2021, accessed 21 November 2022, <https://pubmed.ncbi.nlm.nih.gov/33613957>



affordances, or opportunities for behaviour rather than of objects”<sup>25</sup>. One reads the environment and evaluates what one sees based on what it affords, and what one can do with it. Similar as Gibson, he contends that perception is an-exploratory activity of searching for information to survive, ‘to act upon and within’ the environment. Neuropsychologist Richard Gregory came to a similar conclusion when he stated that visual perception is a kind of hypothesis testing. According to Gregory, during a perceptive process, one develops blueprints or schemata of how one expects things to look and behave<sup>26</sup>.

Perception is thus created and changed by experience. Researcher, artist and drawing teacher Angela Clare Brew argues that one does not draw from perception but, instead, one perceives from drawing. According to Clare Brew drawing must be regarded as a distinct form of perception, which uses one's senses and tests visual hypotheses in a particular way. Clare Brew observes that, while drawing, one is forced to approach the world in novel ways which allows for new meanings to emerge. Richard Gregory even considered vision as undetermined. In his view, the eyes set problems for the brain and body to solve.

### **I swear I saw this<sup>27</sup>**

If perception is a kind of hypothesis testing, about approaching the world in novel ways, this changes the direction of the drawing instruction. Instead of learning to project a three-dimensional scene onto a flat surface one has to investigate drawing as a method to explore the world through thinking in images. Our take on drawing-as-recording, as should be clear from the above, is concerned with the investigative. In that sense drawing-as-recording becomes an activity to report about the world, complementary to sounds, words, diagrams, models, formulas, and so on.

The kind of drawing we are looking for seems to be dealing with an exploration of the world. It is about jotting down hypotheses rather than projecting invariables. It requires an activity that confronts the grubby material of the real world and finding, by experiencing spaces and events, ways to comprehend that world, by making marks. It is a kind of drawing that implies ‘going out, into the field’! Introducing the concept of the field

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<sup>25</sup> Anthony Chemero, *Radical Embodied Cognitive Science* (Cambridge, MA: MIT Press, 2011), 135; quoted in Angela Clare Brew, *Learning to draw: an active perceptual approach to observational drawing synchronising the eye and hand in time and space*, PhD thesis (London: University of the Arts, 2015), 15.

<sup>26</sup> *Ivi*, 111.

<sup>27</sup> Taussig, *I swear*.

rang a bell. For isn't it the kind of drawing ethnographers do akin to what we are looking for? Isn't fieldwork, in ethnography a way to explore possible characterisations of a culture or a specific (ethnic) group? While ethnography might come across as a detour, some investigations revealed that there is a disciplinary branch that appears to provide some supportive ideas and contributions, able to strengthen our concept of drawing-as-recording<sup>28</sup>.

It looks as though ethnographers face a similar burden as what we call 'the burden of an architect' - the impossibility to capture the full scope of spatial experiences albeit with people, habits, rituals, etc. Ethnographers acknowledge having to work within the knowledge that no tool, technique or medium will ever be able to capture the essence of a certain folk, at a certain place, at a certain time. For some ethnographers, this lead to the realisation that drawing can also be regarded as a distinct method to surpass representational boundaries, to transcend *mere* graphical documentation<sup>29</sup>.

Author and anthropologist Michael Taussig sees drawing as a tool to wander. His *I swear I saw this* reads as a tribute for ways of drawing that transcend traditional notions of documentation and selection. In Taussig's view, drawing can be more than the result of seeing and he observes that a drawing is born out of doubt in the act of perception<sup>30</sup>. Taussig's view accords with Gregory's observation that perception is a kind of hypothesis testing, moreover Taussig seems to subscribe Gregory's suggestion that perception, and thus drawing itself, is indeterminate. For Taussig, drawing is a way to figure out the world in a different manner than for instance writing, video or photography do<sup>31</sup>.

Taussig's *I swear I saw this* bulges with fresh takes on how to see the world and record it by drawing. Taussig believes that drawing is a way to explore

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<sup>28</sup> Ethnography prominently came into architectural discourse by virtue of Tokyo based Atelier Bow-Wow. By analysing natural behaviours, people's behaviours, social systems, Momoyo Kaijima and Yoshi Tsukamoto from Atelier Bow-Wow searched for a different kind of kind of architectural intelligence. Tsukamoto argues that drawing represents the ecology of things for architecture. It also means the ecology of things can be taken into account in architectural design. We choose not to expand upon Bow-Wow's take on architectural ethnography as this would result in a different article altogether. See (amongst others): Momo Kajima, Laurent Stalder and Yu Iseki, *Architectural Ethnography - Japanese Pavilion Venice Biennale* (Tokyo: Toto, 2018); Michael K. Hays, *Architectural Ethnography: Atelier Bow-Wow*. Edited by Sigler, Jennifer; & Whitman-Salkin, Lea (MA: Harvard University Graduate School of Design, 2017)

<sup>29</sup> Kuschnir, "Ethnographic Drawing".

<sup>30</sup> Taussig, *I swear*, 2.

<sup>31</sup> Taussig, *I swear*, 13.

the world and by doing so, to suggest worlds beyond what is already there. In his view, a drawing should point away from the real and but against realism and its desire for completeness. For Taussig, the ‘clinical accuracy’ of the taxonomic-like drawings inserted in many ethnographic texts, betray what John Berger deems to be the most important feature of drawing: ‘a process that leads you on to see’<sup>32</sup>.

### **To see is to forget the name of the thing one sees<sup>33</sup>**

We commenced our contribution with a reflection about AI image generators that, based upon a textual prompt, roam image databanks in order to compile a convincing image. By doing some reverse engineering, we argue that drawing-as-recording fuels a similar, albeit embodied databank, which enables us to ignite one’s (spatial) imagination. To activate, inquire and evaluate activities of drawing-as-recording, we discerned three preconditions: engaging with the real world; drawing as a way to find out about things and drawing to explore ways to (re)organise selection and information.

The first precondition implies going out. Only the dynamic and multivariate nature of tangible spaces and events provide the richness and complexity of experiences that nourish spatial understanding. The prolonged, analytical as well as experiential gaze, facilitates an analysis of spatial properties that can become embodied information, which can be revisited in design and creation processes.

A second precondition is that drawing-as-recording is concerned with discovery. That it is concerned with exploring ways to visualise, but also to verbalise what it is that unfolds when perceiving forms and spaces. This also implies being aware that when we look ‘to understand the world’, we see it simultaneously as a world of things and a world of processes. Howard Riley reminds us here that these two complementary perspectives work together and he uses a machine as an example. Understanding a machine not only requires a ‘synoptic view’ of its construction and how components fit together, but also a ‘dynamic view’ of how it performs over time<sup>34</sup>. Drawing from the alliance between the synoptic and the dynamic is an invitation to

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<sup>32</sup> John Berger paraphrased in Michael Taussig, “What do drawings want?”, *Culture, Theory and Critique*, No. 50, 2-3 (2009): 263-274; quoted in Kuschnir, “Ethnographic Drawing”.

<sup>33</sup> Paul Valéry quoted in Alexandra Horowitz, *On Looking. Eleven walks with expert eyes* (New York, NY: Scribner Horowitz, 2013), 57; quoted in Kuschnir, “Ethnographic Drawing”.

<sup>34</sup> Riley, *The Intelligence*, 107-108.

look at spaces and events from multiple, static as well as dynamic, points of view. Furthermore, it challenges one to pay attention to their interaction, while looking for ways to record them.

The third precondition postulates that drawing-as-recording puts selection and information into play. It enables the drawer to find and establish new relationships with forms and spaces. By activating drawing to (re)organise selection and information drawing can become an activity where, to paraphrase Taussig, imagination and documentation coexist. Where our second precondition is aimed at finding out interactions and relations, the third precondition challenges the drawer to look for imaginative ways to preserve them, as opposed to analyse and register. The two clearly work together, one challenging the other.

By interacting with real-life spaces and events, drawing-as-recording supports memory in similar ways as handwriting does in taking notes<sup>35</sup>. By doing so, the activity contributes to the cognitive library of spatial practitioners. While the preconditions enable spatial practitioners to direct, abstract and internalise spatial properties, the drawer also has to become aware of a set of habits, which could inhibit the outcome of their investigative processes. To investigate drawing-as-recording we have to become aware of a number of habits, or clichés that seem to challenge the drawing practitioner. Becoming aware of these habits tends to destabilise and unsettle what one knows and does, well within the process of drawing. By doing so, they are able to challenge the drawer to reconsider these habits as a way to diverge into new avenues of knowing. Up until now, we discerned three habits, those of perceiving, of drawing and of expression.

Everyone possesses preconceived knowledge that influences the ways one approaches the world. This knowledge is determined by silent assumptions that are descriptive, evaluative and prescriptive<sup>36</sup>. In activating drawing-as-recording one has to become aware of these silent assumptions and try to get rid of what our conceptual frameworks seem to suggest us to see. In many situations, as author Alexandra Horowitz observes, ‘we see least the things we see most’<sup>37</sup>. Opening up to new experiences and meanings,

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<sup>35</sup> Timothy J. Smoker, Carrie E. Murphy and Alison K. Rockwell, “Comparing Memory for Handwriting versus Typing”, in *Proceedings of the Human Factors and Ergonomics Society Annual Meeting 53(22)* (Orlando, FL: University of Central Florida, 2009), 1744–1747.

<sup>36</sup> Jacob Voorthuis, Hélène Aarts, “Spatial Imagination and Representation”, in *Architectural research addressing societal challenges*, eds. Couceiro da Costa et al. (London: CRC Press, Taylor & Francis, 2017), 1085-1092.

<sup>37</sup> Horowitz, *On Looking*, 155.

transforming the familiar into the exotic, can refresh one's eyes, generating new points of view.

Secondly drawing-as-recording, as indicated in our conceptual mapping of the term, should not be confused with drawing-as-notation – conventional, symbolic or even patterned ways of drawing, based on cultural, disciplinary or formal codes. Many drawing approaches depart from 'frames of reference' or 'schemata': declarative knowledge about objects and forms which result in instructions about how to draw something. One should keep in mind, following John Berger, that a drawing is the outcome of a conversation with the thing being drawn<sup>38</sup>. The conversation and the exploration are concerned with the ways to draw in order to understand what the thing tries to elucidate. By focusing on the conversation to discover, drawing can become a space where imagination and documentation start to coexist<sup>39</sup>.

Where habits of drawing refer to the declarative and notational procedures, habits of expression refer to one's (again cultural and disciplinary) inclination to aim for the realism of pictorial representations. In *Languages of Art*, Nelson Goodman observes that 'realism', in pictorial representations, can be reduced to a matter of 'habit' or 'familiarity'. In Goodman's view, the rules of perspective only provide a relative – i.e., relative to culturally established conceptual schemata – standard of fidelity. Goodman argues that so called realistic paintings, drawings, etc. are those that are painted or drawn in a familiar style, i.e., according to a familiar system of correlation<sup>40</sup>. In our view, this kind of realism is detached from the sensorial delicacies of spaces and events. By heightening one's awareness to sensorial stimuli and information about spaces and events, the drawer can discover complementary 'dashes of realism' and from these discoveries explore complementary ways of expressing them.

Drawing-as-recording, as should be evident by now, aims to concentrate on processes, gestures and experiences to discover something new. Looking for the suggestive potential of drawing, rather than a painful strive for realist representation. Drawing-as-recording is regarded as an intimate activity concerned with the sketchy, suggestive and metaphysical<sup>41</sup>. It is something one does, and keeps, for one's cognitive library of spatial evidence – evidence as information drawn from personal testimony (Oxford) to make something evident.

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<sup>38</sup> Berger quoted in Taussig, *I swear*, 124.

<sup>39</sup> Taussig, *I swear*, 31.

<sup>40</sup> Goodman, *Languages of Art*, 10-19.

<sup>41</sup> Taussig, *I swear*, 14-16.

Drawing-as-recording is about the accumulation of visual investigations and expressions. By confining them to notebooks and folders recordings can also settle in one's mind. By preserving them, as Taussig observes, the notebook becomes a provisional receptacle of inspired randomness.<sup>42</sup> Taussig quotes writer Joan Didion, who observes that notebooks contain "the sparks, or, better yet, dry tinder, which in the right hands at the right moment will burst into flame"<sup>43</sup>. Drawing-as-recording, in Didion's terms, would come down to collecting as much dry tinder as possible.

### **Seeing the world with a pencil in one's hands**

There is an immense difference between seeing a thing without a pencil and seeing it while drawing it. Even an object most familiar to our eyes becomes totally different if one applies oneself to drawing it, one perceives that one did not really know it, one has never really seen it<sup>44</sup>.

In times of online inspiration and distraction, efficacy and immediacy, it almost seems reactionary to advocate for the slowness of drawing-as-recording, as the activity presupposes to stretch and take time. Stretching time to prolong attention, taking time to see and inspect things and situations more attentively. This process involves a prolonged and complete immersion and encompasses time, contrary to photography which tends to freeze time<sup>45</sup>.

In the opening, we listed a series of questions characterising spatial drawing didactics. These questions gave rise to a plea to consider drawing-as-recording as the native function of drawing for spatial practitioners. Throughout the above we have argued that drawing-as-recording nourishes spatial understanding, supports spatial memory and by doing so it is able to trigger spatial imagination. Now is the time to see how drawing-as-recording might be of help in answering these questions.

'Getting to know what space is made of and how one perceives space' implies 'enacting' with real-world spaces, activities and events to find out about spatial properties. Drawing-as-recording is concerned with the authentic experiences, cultures and intentions of its maker, resulting in an

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<sup>42</sup> Taussig, *I swear*, 117.

<sup>43</sup> Taussig, *I swear*, 118.

<sup>44</sup> Paul Valéry quoted in Rena Chaplinska, "Time for Drawing. Time for Awakening Sensory Awareness", in *Drawing in the University Today*, eds. Paulo Almeida, Miguel Duarte and José Barbosa (Porto: Research Institute in Art, Design and Society, 2014), 505-512.

<sup>45</sup> Taussig, *I swear*, 3.

informed palette of recording techniques. By looking for ways to map properties, our notebooks and minds will be nourished with embodied precedents and preferences waiting to be set on fire.

‘To know how one imagines space and how to express that imagination’ implies being able to approach the world in novel ways, allowing new meanings to emerge. Drawing-as-recording is an invitation to embrace the richness and diversity of the world to discover something—anything—worthwhile. By storing these discoveries in our notebooks and papers they can settle in our brains from where they can be retrieved (entirely or fragmented) during imaginative and generative processes.

When exploring drawing-as-recording, it is important to be aware of the dynamism in the world as well as within one’s own body. This implies looking for ways to record movement while being aware of one’s moving eye and body. The residue of the activity is concerned with the process of investigating the gestures to express dynamism. This suggests investigating possible drawing gestures that result from the activity of observing. The marks that result from that process of observation become information that can be analysed and evaluated for their ability to express what has been experienced.

Framing ‘drawing-as-recording’ is an attempt to break loose from the shackles of an academic tradition, based upon a one-eyed frozen view of the world, including its supposed claim to realism and measurability. While observation and life remain important aspects of drawing-as-recording, the kind of drawing we refer to aims to include complementary approaches and possibilities to record something ‘out there’. Drawing-as-recording looks for ways of drawing that can pick up information, in Gibson’s sense, as opposed to accepting and departing from systemised drawing approaches to communicate a motionless world.

Drawing-as-recording is an invitation to discover properties, assets, conflicts, proportions, moods, and atmospheres that characterise and distinguish this space from that one. Drawing-as-recording helps to establish a positioning – as spatial practitioner, inhabitant, human being, etc., in and towards the world out there. For practitioners, scholars and teachers alike this is an invitation to depart on a journey to (co-)create new combinations of visual theories, elements and practices. This journey, in our view, enables one to become aware of, and question personal preferences and clichés, to discover ‘what space and form could be made of’.

Finally, in order ‘to make and transform space’ one needs to indulge in life, absorbing and celebrating life while looking for ways to embrace and preserve the richness of one’s (collective) experiences. Drawing-as-Recording implies that the drawing provides evidence and/or data which

can be used as information, as testimony, as a witness, as dry tinder, to paraphrase Joan Didion. To see the drawing as a reminder or even a remainder to fuel one's imaginary database in making and transforming space. If you agree, as we do, that spatial practitioners have a responsibility to facilitate the collective imagination of how to make the world a better place then consider drawing-as-recording as a way to better understand the world – as a prerequisite to adding value to it.





**Fig. 1.** THERE AND THEN (drawing by a group of 7 students, Drawing-as-Recording workshop Charleroi, May 2022)

While drawing, being there and then and observing the environment one can get into contact with spatial properties. While drawing, the pencil follows the roving eye and (virtually) touches the different elements and particularities which characterise *that* space, thinking about what it is one aims to ‘take home’ from one’s experience while looking for ways to capture that in a drawing. Or, to paraphrase Kimon Nicolaïdes, ‘*drawing is a research process that enables people to find a method, to find out facts for themselves*’.<sup>46</sup> Drawing together is a great way to investigate the properties of these facts with one another. Drawing together challenges the participants to discuss the interactions and relations one has found during the drawing process. Furthermore, the conversation is an invitation to learn from one another’s ways and methods of drawing. On top of that drawing together is also an invitation to look for ways to blur the autographic qualities of the evolving drawing into a different, collective, kind of autography and even composition.

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<sup>46</sup> Kimon Nicolaïdes, (1941-1969), *The Natural Way to Draw*, Houghton Mifflin Company

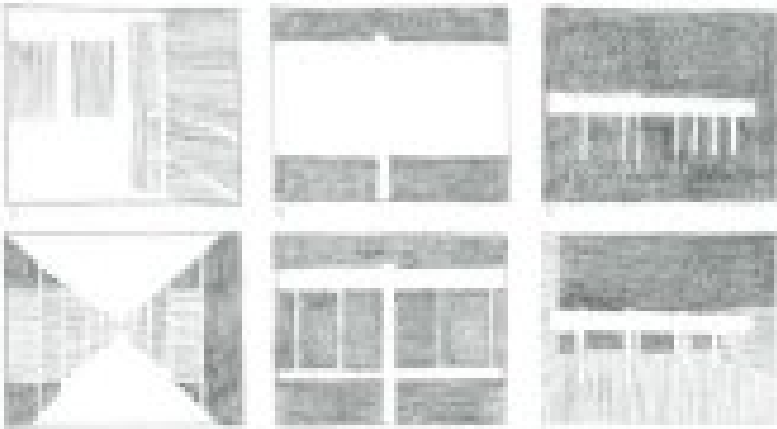


**Fig. 2.** THERE IS NO SUCH THING AS PERSPECTIVE! (drawing by Liedewij Deruwe, Drawing-as-Recording workshop, Charleroi, May 2022)

For James Gibson it is obvious that a motionless observer can see the world from a single fixed point of observation and can thus notice the perspectives of things. Gibson continues, that it is not so obvious, but true, that an observer who is moving about sees the world at no point of observation and thus, strictly speaking, cannot notice the perspectives of things.<sup>47</sup> According to Gibson, we navigate the world by paying attention to variant and invariant information while scanning ‘occluding edges’. That is one object covering another one, much like theatre stage sets. Focusing on the superposition of planes, as opposed to drawing perspective, is a way to move away from drawing perspective views.

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<sup>47</sup> *Ivi*, 187.



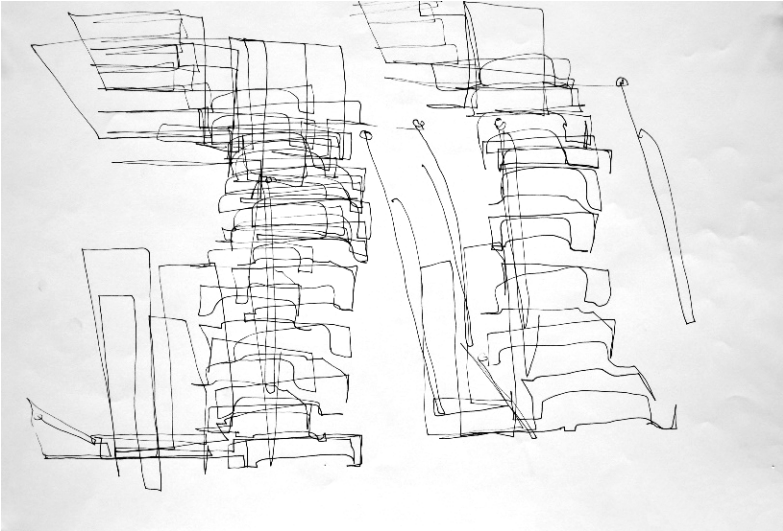
**Fig. 3. RESEARCH & PROCESS** (drawing by Simone Creemers, assignment residual space, course ‘Spatial Imagination’, Eindhoven, 2016)

Philosopher Eckhart Tolle has drawn an interesting correlation between space and silence: ‘If there were nothing but silence, silence would not exist. It is only when we hear sounds that silence is able to surface’. Similarly, Tolle continues, ‘if there were nothing but space and no objects in it, space would not exist’. Observations such as Tolle’s make manifest that space in essence is nothing and nothing can be without space.<sup>48</sup> In our day-to-day interactions, we scan the environment for what it affords.<sup>49</sup> In reality, we are never consciously aware of shifts between the elements space is made of. By investigating how to manipulate these spatial variables, in a drawing, one is able to analyse properties impacting spatial experiences and how they do so. By analysing the elements and playing around with them, one can become aware of spatial ambiguities.

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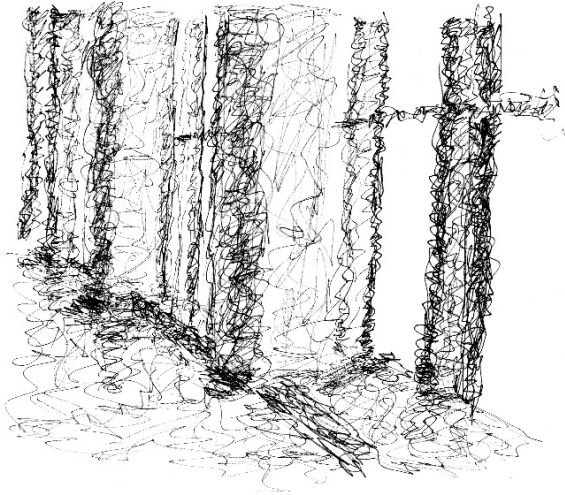
<sup>48</sup> Eckhart Tolle, *A New Earth: Awakening to Your Life’s Purpose* (New York, NY: Penguin, 2005), 226-227.

<sup>49</sup> Gibson, *The Ecological Approach*. According to Gibson, the affordances of the environment are what it offers, what it provides or furnishes, either for good or ill. (119) A fire, for instance, affords warmth on a cold night; it also affords being burnt (94). What we perceive when we look at objects are their affordances, not their qualities (126).



**Fig. 4. CHALLENGING REPRESENTATIONAL HABITS** (Elisa Moosdorf, (assignment ‘blind’ drawing’, course ‘Spatial Imagination’, Eindhoven, 2015)

These two drawings of the same space were made ‘blind’, i.e. drawing while observing something without looking at the paper. The instruction is to follow the object with one’s eyes as if the eyes touch the object. On the one hand, exploring methods such as *drawing blind* emulate Alva Noë’s hypothesis that perception departs from touch. On the other hand, *drawing blind* keeps one away from the continuous judgement of the evolving drawing according to habitual pictorial rules. While evaluating the drawings, Elisa observed that the blind drawings seemed to be more truthful to the sensation of walking up the stairs in comparison to the more traditional perspective drawings, which were also part of the assignment.



**Fig. 5.** CHALLENGING DRAWING HABITS (drawing by an unknown student, drawing without lines, course ‘Spatial Imagination’, Eindhoven, 2015)

Traditional drawing procedures presuppose marking lines on a carrier. The line represents the demarcation between objects and their backgrounds. In reality, these linear demarcations do not exist. What we do perceive is the distinction between the surfaces of objects and their backgrounds (occluding edges), but not lines. Looking through one’s eyelashes, blurring the sharpness of one’s eyes and simultaneously concentrating on tones rather than demarcations is one way to explore tonal values.

assignment



**Fig. 6.** DRY TINDER (drawing by Joris Vandenhaute, collection of impressions, Drawing-as-Recording workshop, Charleroi, May 2022)

Imagination can be understood as the sum of perceiving, remembering and finding a way to reconfigure what it was one retains from the remembrance in some medium or another. Imagination is fuelled by one's ability to remember and reproduce formal and spatial matter for a different context. When James Gibson defines imagination as one's capacity to be aware of the surfaces that do not occur, but that could arise or be fabricated within, what one calls 'the limits of possibility', it comes across as a rather apt definition of what spatial practitioners do.<sup>50</sup> By recording the world, spatial practitioners compile a memory bank they can revisit, tangibly in a notebook, or virtually in their minds, during design reasoning.

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<sup>50</sup> Note that Gibson's *limits of possibility* demarcate the thin line between imagination, fantasy and hallucination. See: Gibson, *The Ecological Approach*, 244.



**Fig. 7.** CHALLENGING ATMOSPHERIC EXISTENCE (drawing by Julian de Groot, 'gradients' in space, course 'Spatial Imagination', Eindhoven, 2021)

Colour, Merleau-Ponty argues, seems to be interwoven with the density of seeing. The colours are already there before we direct our attention to colour. Colour exists in atmospheres and tonalities of the visual field wherein we dwell.<sup>51</sup> In this assignment, the instruction was to investigate how space can be manipulated by looking at gradients. Julian mainly focused on the aspect of colour. He distinguished between warm and cold values to be combined with textural gradients in a series of small experiments. By extracting and isolating values he noted how one differentiates within different constellations and how these can be used as parameters to influence expression.

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<sup>51</sup> Remigius Cornelis Kwant, *De stemmen van de stilte: Merleau-Ponty's analyse van de schilderkunst* (Hilversum: Paul Brand, 1966), 20.

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