

## **Catalogue**

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## Unit2 Written Response

### PROMPT

This written component has two parts. We recommend writing them in this order (though when you submit your writing should present them in the opposite order):

A small annotated bibliography of 6 references that help you to situate this project in wider contexts. These references can be texts, projects, or practices (bodies of work that explore a consistent theme). As you look for and select references, think about how they specifically challenge, stretch, or deepen your approach to your project. Maybe they give you a new critical angle on a topic you're exploring. Maybe they suggest a new process or method to test out.

For each reference on your annotated bibliography you will include: (a) an academic citation, (b) a short quote, an image, or some other detail sampled from the reference, and (c) a short statement (100–200 words) explaining how that specific detail of the reference contributes to your understanding of your specific area of interest. (Tip: Don't summarize the reference; instead, put it in context of your emerging practice.)

Your set of references should include:

- 2 references drawn from the course reading list that situate your project in a broader discourse or conceptual domain
- 1 reference that is specifically related to your project in its topic (theme or subject matter)
- 1 reference that is specifically related to your project in its medium or method
- 1 reference that demonstrates a critical position in context of your specific topic, medium, or method
- 1 wild card reference (identify another type of relationship, or re-use any of the above prompts)

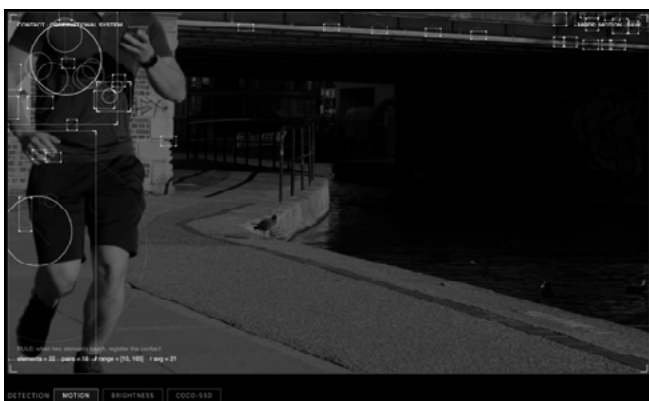
A short statement (100–200 words) that articulates your line of enquiry. What questions are you exploring in this project, and how are you exploring them? Be as focused and specific as possible. (Tip: Don't try to write this during the first week. Wait until your iterations have developed meaningfully.)

### Line Of Enquiry

My research project, CONTACT, asks: when an abstract rule is applied through different machine-vision systems to the same footage, what does each register as "contact," and how does the divergence between them become visible to the viewer? CONTACT is a browser tool that runs one rule from Casey Reas's *Element 1* (B3: *when two elements touch, register the contact*) on a single video stream through three detectors—pixel, brightness, and AI recognition. Same rule, same footage; three irreconcilable accounts of what touched what. My enquiry sits in this irreconcilability. Reas wrote B3 in plain language, but the rule was written for code, not for a viewer. To reach the screen it must first be translated into binary; to reach the viewer it must then pass through one detector's specific logic. A rule is never executed alone—always through an apparatus that has already decided, before any contact occurs, what counts as "contact." My position: this divergence is not a flaw to resolve but the subject of the work. The tool exists so the viewer can see what each machine eye sees, and recognise that an apparatus assumed to be neutral is never neutral once chosen.



QR code for the CONTACT website



CONTACT visualizes the rules of code in the real world through real-time detection

## Unit2 Written Response

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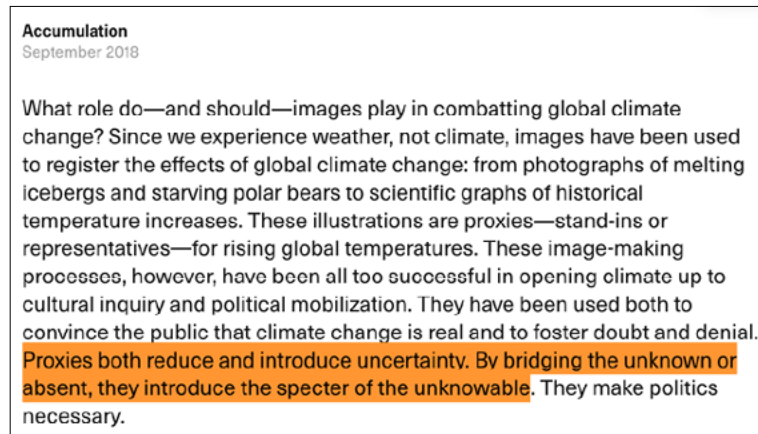
### Chun (reading list)

#### Citation

Chun, W.H.K. (2018) 'On Patterns and Proxies', *e-flux Architecture: Accumulation*, September. Available at: <https://www.e-flux.com/architecture/accumulation/212275/on-patterns-and-proxies> (Accessed: 21 April 2026).

#### Quote

"Proxies both reduce and introduce uncertainty. By bridging the unknown or absent, they introduce the specter of the unknowable." (Chun, 2018)

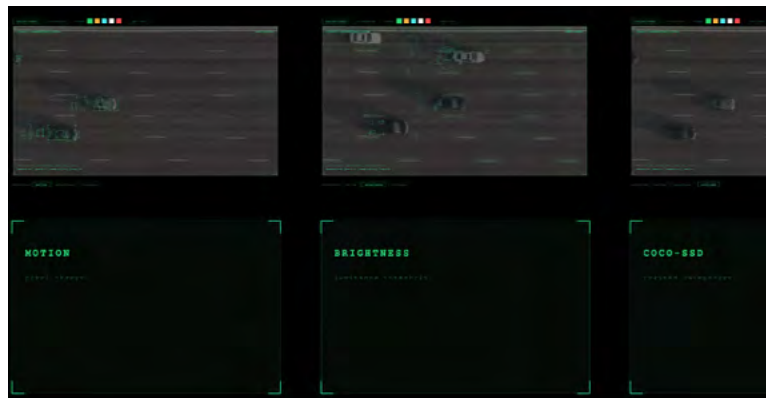
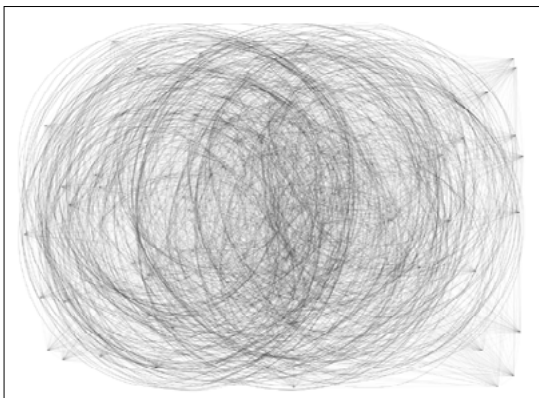


Chun, W.H.K. (2018) 'On Patterns and Proxies'

#### Annotation

Chun opens on a problem of visibility: climate is too abstract to be directly experienced, so it must be made legible through proxies: melting icebergs, temperature graphs. This gave me a way to reframe the second week of iteration. I needed to introduce another kind of proxy, one that would let the viewer directly experience "contact," an otherwise abstract concept. By feeding real footage into three different detectors, the user could analyse the real world through each, allowing the code rule to manifest itself in the world outside the system.

But Chun does not stop at necessity. She argues that the same proxy which makes something legible also introduces new uncertainty. I had introduced these proxies hoping to make the rule more objectively visible. Looking back at the finished tool, Chun's argument re-asserts itself one level higher: the moment I run the rule through more than one proxy at once, the very objectivity and neutrality I was reaching for collapse. Three proxies do not converge on a clearer view; they produce three irreconcilable views, each carrying its own preset aesthetic and non-neutral position, and the gap between them is the unknowable Chun names.



Using the concept of proxies, transition into developing a new proxy pattern in the second week

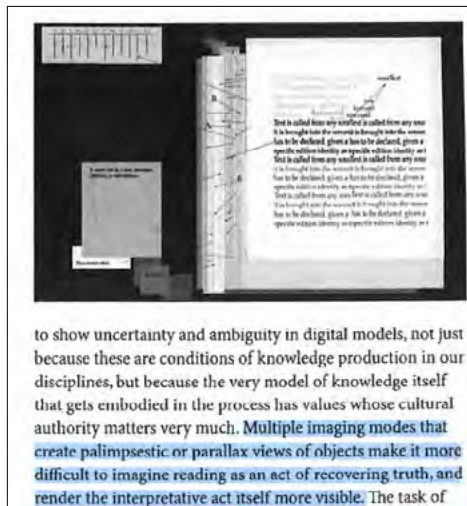
Drucker (reading list)

Citation

Drucker, J. (2014) 'Designing graphic interpretation', in *Graphesis: Visual Forms of Knowledge Production*. Cambridge, MA: Harvard University Press, pp. 180–192.

Quote

"Multiple imaging modes that create palimpsestic or parallax views of objects make it more difficult to imagine reading as an act of recovering truth, and render the interpretative act itself more visible." (Drucker, 2014, p. 191)

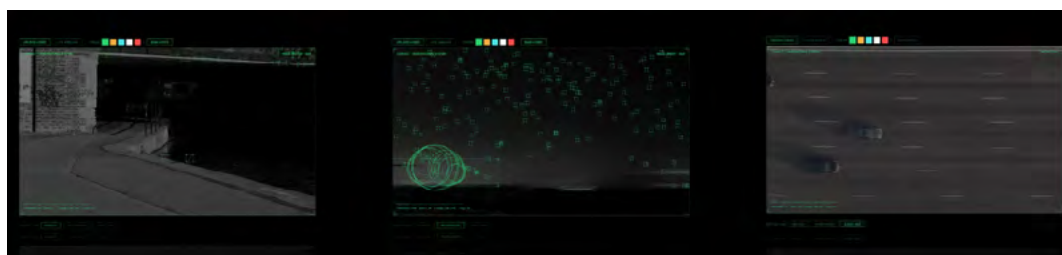


Drucker, 2014, p. 191

Annotation

Drucker reads single-view displays as a kind of politics. A graphic system that shows only one version of what it sees — even an accurate one — carries what she calls an "administrative sensibility": authority maintained through standardisation, through making one way of looking appear to be the only way. Her alternative is parallax: multiple incompatible views of the same object held together, so that no single view can pass itself off as the truth.

This argument determined the form CONTACT eventually took. Under ideal experimental conditions, once a camera was feeding the system, a faithful execution of B3 from a position of neutrality should yield a single, objective output: the most accurate one preserved. Drucker made me reconsider the single-output form of the first week — the collapse of position she warns against. The moment I choose one "accurate" view, I have already taken an administrative position of singularity and authority. Keeping the three detectors side by side, each producing its own population of elements from the same footage, is Drucker's parallax enacted at the level of machine vision. The three irreconcilable views are not a comparison waiting to be resolved; they are the work refusing to deliver "truth," and showing the act of interpretation itself.



Keeping the three detectors side by side

## Unit2 Written Response

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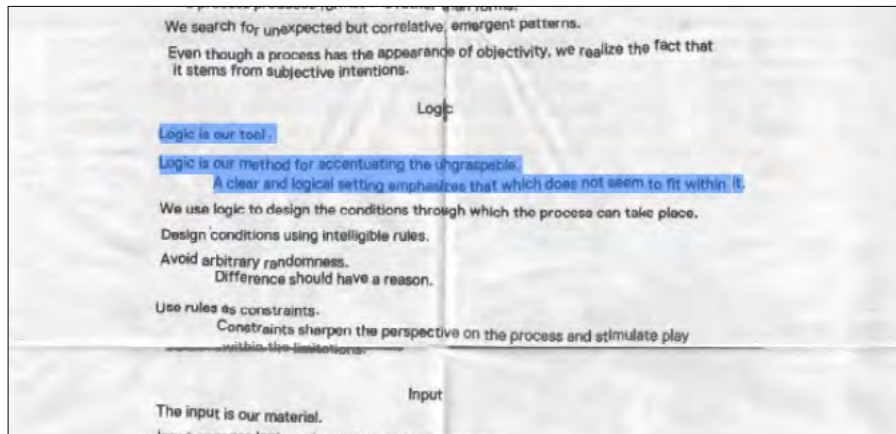
### Conditional Design Workbook (related to my project in its topic)

#### Citation

Maurer, L., Paulus, E., Puckey, J. and Wouters, R. (2013) 'Conditional Design Manifesto', in Blauvelt, A., Maurer, L., Paulus, E., Puckey, J. and Wouters, R., *Conditional Design Workbook*. Amsterdam: Valiz, p. ii.

#### Quote

"Logic is our tool. Logic is our method for accentuating the ungraspable. A clear and logical setting emphasizes that which does not seem to fit within it." (Maurer et al., 2013, p. ii)



Conditional design workbook by Maurer, Luna

#### Annotation

The Conditional Design Manifesto describes a way of working that is structurally analogous to what this project does at the level of detection. Maurer, Paulus, Puckey and Wouters propose a method in which a small set of logical conditions is set in advance, then executed by a group of human participants on a shared input. The conditions are fixed; the executors are not. What emerges is not a single image but a population of irreconcilable outcomes — each one a faithful execution of the same rule, each one different.

This is the method I had been performing without naming it. CONTACT inherits B3 from Casey Reas as a single fixed condition, and runs it through three executors: Motion, Brightness, COCO-SSD — on a shared video. The detectors are faithful to the rule; they are not faithful to each other. This let me understand what I had been treating as a problem: the divergence is not noise around the rule, it is the rule's mode of existence. A condition only becomes a condition when more than one executor tries to enact it.



Run on the same video by the executors. The detectors are faithful to the rule; they are not faithful to each other.

## Unit2 Written Response

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### Akten, Fiebrink & Grierson (medium / method)

#### Citation

Akten, M., Fiebrink, R. and Grierson, M. (2019) 'Learning to See: You Are What You See', pp.1–6. doi: 10.1145/3306211.3320143.

#### Quote

"Metaphorically speaking, the training data determines the full life experience of the network and ultimately shapes its worldview. When the trained network looks out into the world via the camera, it can only see what it already knows." (Akten, Fiebrink and Grierson, 2019)

**Motivations: Bias**  
We have two primary motivations behind this work. One is a conceptual motivation related to bias. The work exposes and amplifies the learned bias in artificial neural networks, demonstrating how critical the training data is to the predictions that the model will make. This is particularly obvious when different models using the same architecture (but trained on different datasets) produce radically different outputs for the same input. Metaphorically speaking, the training data determines the full life experience of the network and ultimately shapes its worldview. When the trained network looks out into the world via the camera, it can only see what it already knows.

Akten, Fiebrink and Grierson, 2019

#### Annotation

Akten, Fiebrink and Grierson describe Learning to See as a "visual instrument": a real-time system in which a neural network trained on a specific dataset: ocean waves, flowers, Hubble images — looks out through a camera and reconstructs whatever it sees using only the visual vocabulary it was trained on. A piece of crumpled cloth becomes a wave; a tangle of wires becomes a galaxy.

This is the medium CONTACT inherits from: a camera feeding live frames into a browser-based pipeline, rendered on screen in real time. The architecture is the same; the move is in what gets foregrounded. Learning to See makes a single trained network's worldview visible by letting it reconstruct the world. CONTACT places three detectors on the same footage at once: pixel difference, brightness threshold, and COCO-SSD — to make visible what Learning to See states as a structural claim: that no eye looking through code is ever looking neutrally. Akten's piece sets the medium and the stakes. Where it shows one apparatus's worldview, CONTACT shows the divergence between three, and treats that divergence — as what the work is about.



Effect of CONTACT in a smartphone camera

## Unit2 Written Response

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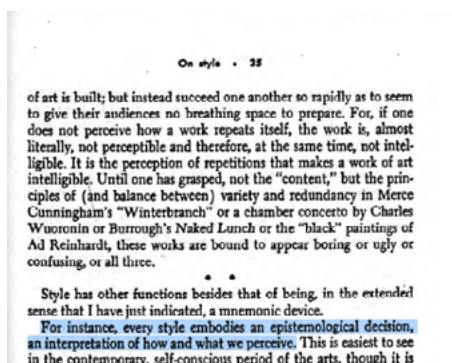
### Sontag (critical position)

#### Citation

Sontag, S. (2009) 'On Style', in *Against Interpretation and Other Essays*. London: Penguin, pp. 15–36. (Originally published 1965.)

#### Quote

"For instance, every style embodies an epistemological decision, an interpretation of how and what we perceive." (Sontag, 2009, p. 35)



Sontag, 2009, p. 35

#### Annotation

Sontag's essay attacks a fantasy she calls "style-less, transparent art": the belief that a work can exist in which content speaks for itself, unmediated by formal choice. She acknowledges most critics know this is impossible, but argues they behave as if it were. Her counter-claim is sharp: style is not an addition to content, it is an epistemological decision. Every stylistic choice determines what can be perceived and, just as importantly, what cannot.

This argument operates at two levels in CONTACT. The first-week system was monochrome, geometric, symmetrical: a style I had read as "no style," as if code-generated circles were the most neutral possible output. Yet that aesthetic belongs to a particular and very familiar stylistic tradition. So I used three detectors to explore exactly this: each is not simply "seeing" — each outputs a chosen form (circles, contours, bounding boxes), and each is a stylistic decision about what is allowed to count as an element. Sontag's argument confirms the position I had already taken: an apparatus is non-neutral not because of a flaw in its design, but because, in her terms, every form is itself an epistemological decision.

## Unit2 Written Response

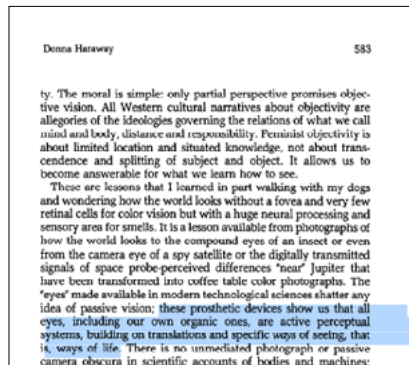
### Haraway (wild card)

#### Citation

Haraway, D. (1988) 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective', *Feminist Studies*, 14(3), pp. 575–599.

#### Quote

"These prosthetic devices show us that all eyes, including our own organic ones, are active perceptual systems, building on translations and specific ways of seeing, that is, ways of life." (Haraway, 1988, p. 583)



Haraway, 1988, p. 583

#### Annotation

Haraway writes against what she calls the "god trick", the fantasy of seeing everything from nowhere, a vision of objectivity as disembodied and unlocated. She lists the technologies that have put this fantasy into ordinary practice, including AI-linked imaging and satellite surveillance.

Her response is not to reject technological vision but to re-situate it: all eyes are "active perceptual systems" built on specific translations, on specific ways of life. This let me see CONTACT in a different shape. It is not a neutral instrument applied to the world; it is itself a specific way of observing, with one camera, one rule, three particular detectors, in a particular body (the user's phone at a particular time under particular light), from which one particular version of contact becomes legible. Haraway's crucial move is that situatedness is not a limitation: only partial perspective promises objective vision. CONTACT does not present one partial perspective; it places three side by side, and the gap between them is what the user sees. What stays with me is her closing phrase: a situated system "allows us to become answerable for what we learn how to see."



The user's phone at a particular time under particular light

### PROMPT

Alongside your studio response, you will also use reading and writing to contextualise your emerging line of enquiry. This written component will take two forms:

1. A continually growing bibliography of references. By the time you finish this project, you should have gathered at least 12 references: roughly 3–4 from the reading list, and the rest a balanced mixture of texts and projects (or practices) that you've found through your own research. These 12 references can include the 6 you've previously found.

As before, look for references that specifically challenge, stretch, or deepen the approach you were taking. Maybe they give you a new critical angle on a topic you're exploring. Maybe they suggest a new process or method to test out.

Each bibliographical entry should be accompanied by a short statement (100–200 words) explaining how the reference enhances or challenges your understanding of your specific area of interest. (Remember: Don't summarize the reference; instead, put it in context of your emerging practice.)

2. Extended critical analyses of two of the references that you've

found: one text and one project (or practice). Each analysis should be at least 500 words long (1,000 words total). One of them should probably be the reference that you've chosen to respond to in your studio project, but it's not required.

In each critical analysis, start by briefly introducing the key idea(s) or position(s) presented in the reference. Then: Describe how that key idea or position is evident in or supported by the formal qualities of the work (if it's a text, this could mean its rhetoric, typography, or layout; if it's a project or practice, this could be its medium, material, mode of production, or circulation). Discuss how the reference reinforces or challenges your existing understanding of the field of graphic or communication design. You might also draw it into dialogue with another of your references.

Most importantly, discuss how it might shape the way you develop your project. (As always, be as specific as possible.)

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### Line Of Enquiry

How does grid resolution change the legibility, comparison and information loss of the same railway timetable?

### Project Overview

This project shifts from a critique of the “neutral system” towards an experimental observation of grid resolution. My starting point was Müller-Brockmann's statement: “Working with the grid system means submitting to laws of universal validity” (Müller-Brockmann, 1981, p. 10). The word “submitting” made the grid appear not as a neutral support, but as a structure that pre-decides what can count as order. I then narrowed this critique into a testable line of enquiry: how does grid resolution change reading? My source material comes from Kinross's discussion of a 1928 railway timetable. He argues that timetables already use rhetorical means because they “organize and articulate and give visual presence to information” (Kinross, 1985, p. 19). I therefore do not redesign the timetable as an improvement. Instead, I use Müller-Brockmann's structural methods of progressive grid resolution and three-dimensional grid logic to test how the same information changes across legibility, comparison and information loss (Müller-Brockmann, 1981, pp. 75, 79, 90, 148).

This set of twelve references is organised not as a neutral list of sources, but as a field map around my line of enquiry. It follows three axes. The first, Grid / Neutrality, identifies the system being tested: modernist grid logic, railway timetable form and the rhetoric of neutrality. The second, Information / Mediation, examines how information is produced through displays, proxies, inscriptions and serial comparison, rather than transmitted transparently. The third, Conditions / Execution, considers how a fixed source can generate different reading outcomes when it passes through different rules, media and viewing conditions. Together, these axes place the same railway timetable at the intersection of grid systems, information mediation and repeated conditions of execution. They support my central question: how does grid resolution change the legibility, comparison and information loss of the same railway timetable?

Müller-Brockmann, J. (1981) *Grid Systems in Graphic Design*.

Citation

Müller-Brockmann, J. (1981) *Grid Systems in Graphic Design: A Visual Communication Manual for Graphic Designers, Typographers and Three Dimensional Designers*. Niederteufen: Verlag Arthur Niggli.

Quote

“Working with the grid system means submitting to laws of universal validity” (Müller-Brockmann, 1981, p. 10).

Annotation

Müller-Brockmann is the key reference in the Grid / Neutrality axis. I first read *Grid Systems in Graphic Design* as an object of critique, because his statement that working with the grid means “submitting to laws of universal validity” makes the grid appear not as a neutral assistant, but as a normative structure that disciplines composition and reading (Müller-Brockmann, 1981, p. 10). After my enquiry narrowed from neutral systems to grid resolution, this reference also became a method. Its progressive grid systems and spatial grid logic give me specific conditions for testing the same railway timetable (Müller-Brockmann, 1981, pp. 75, 79, 90, 148). I use these grids not as Swiss style, but as apparatuses with different capacities for division, alignment, hierarchy and density. Applying them to Kinross’s timetable lets me observe how the same source becomes differently legible. A lower resolution grid may clarify broad structure while weakening detailed comparison; a higher resolution grid may preserve more relations while increasing density and reading pressure. Müller-Brockmann therefore shifts my line of enquiry from asking whether the grid is neutral to asking what each grid resolution makes readable, comparable or lost.



Müller-Brockmann, 1981, pp. 10, 75, 79, 90, 148

### Crouwel, W. and van Toorn, J. (1972/2015) ‘The Debate’ (reading list)

#### Citation

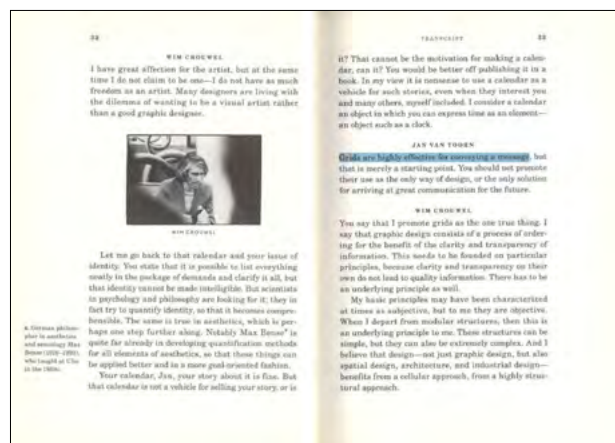
Crouwel, W. and van Toorn, J. (2015) ‘The Debate’, in *The Debate: The Legendary Contest of Two Giants of Graphic Design*. New York: The Monacelli Press, pp. 21–38. Original work published 1972.

#### Quote

“Grids are highly effective for conveying a message, but that is merely a starting point” (Crouwel and van Toorn, 2015, p. 33).

#### Annotation

Crouwel and van Toorn place my project inside a direct argument about objectivity, order and the designer’s position. Crouwel defends graphic design as a process of ordering for clarity and transparency, while van Toorn challenges the idea that a designer can act as a neutral intermediary. The most useful point for my enquiry is van Toorn’s claim that grids are effective, but only as a starting point (Crouwel and van Toorn, 2015, p. 33). This helps me avoid treating the grid either as a universal solution or as something to reject completely. In *Timetable Resolution Study*, the 8 grid, 20 grid and 32 grid systems are not used to prove that one grid is correct. They are used as different conditions through which the same railway timetable can be tested. This reference therefore shifts my line of enquiry from a general critique of neutrality towards a more specific investigation of how each grid resolution changes legibility, comparison and information loss.



Crouwel and van Toorn, 2015, p. 33



**Haraway, D. (1988) ‘Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective’ (reading list)**

**Citation**

Haraway, D. (1988) ‘Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective’, *Feminist Studies*, 14(3), pp. 575–599.

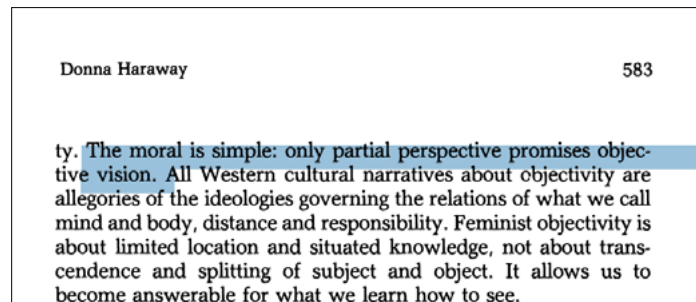
**Quote**

“The moral is simple: only partial perspective promises objective vision” (Haraway, 1988, p. 583).

**Annotation**

Haraway entered the project when I was still testing CONTACT through different machine-vision systems. At that stage, I was trying to understand why the same footage produced incompatible readings when seen through pixel difference, brightness and object recognition. Haraway’s critique of the “god trick” gave me a way to name the false neutrality of those systems. Each detector was not simply seeing the world; it was seeing from a particular technical position.

When the project moved towards the railway timetable, Haraway’s argument helped me keep the question of position rather than abandon it. The problem was no longer where the machine sees from, but where the reader sees from. A timetable changes when it is viewed on screen, printed at A3 or A4, folded, bound, held close to the body or entered through a three-dimensional grid. These are not secondary display choices. They are partial perspectives that shape what can be read, compared or lost. Haraway therefore prevents my grid experiments from becoming a search for a universal best version. Each version has to declare its own position.



Haraway, 1988, p. 583

### Chun, W.H.K. (2018) 'On Patterns and Proxies' (reading list)

#### Citation

Chun, W.H.K. (2018) 'On Patterns and Proxies', *e-flux Architecture: Accumulation*, September. Available at: <https://www.e-flux.com/architecture/accumulation/212275/on-patterns-and-proxies> (Accessed: 21 April 2026).

#### Quote

“Proxies both reduce and introduce uncertainty. By bridging the unknown or absent, they introduce the specter of the unknowable” (Chun, 2018).

Accumulation  
September 2018

What role do—and should—images play in combatting global climate change? Since we experience weather, not climate, images have been used to register the effects of global climate change: from photographs of melting icebergs and starving polar bears to scientific graphs of historical temperature increases. These illustrations are proxies—stand-ins or representatives—for rising global temperatures. These image-making processes, however, have been all too successful in opening climate up to cultural inquiry and political mobilization. They have been used both to convince the public that climate change is real and to foster doubt and denial. Proxies both reduce and introduce uncertainty. By bridging the unknown or absent, they introduce the specter of the unknowable. They make politics necessary.

Chun, 2018.

#### Annotation

Chun first affected my project during an earlier stage of iteration, when I was working with CONTACT and trying to make an abstract rule visible through machine vision systems. Her essay gave me the concept of the proxy: a form that makes something absent or difficult to experience legible, while also producing new uncertainty. This pushed my work from one direct execution of a rule towards several mediated views of the same input.

In the current Timetable Resolution Study, Chun remains useful, but the proxy has changed. The railway timetable is already a proxy for dispersed movement, waiting, routes and time. The grid systems then become a second layer of proxy, translating the same timetable into different conditions of reading. This helps me understand grid resolution not as a neutral technical setting, but as a mediating condition. Each resolution reduces uncertainty by giving the timetable structure, while also introducing new uncertainty through compression, density and information loss.



### Drucker, J. (2014) 'Designing graphic interpretation' (reading list)

#### Citation

Drucker, J. (2014) 'Designing graphic interpretation', in *Graphesis: Visual Forms of Knowledge Production*. Cambridge, MA: Harvard University Press, pp. 180–192.

#### Quote

“Multiple imaging modes that create palimpsestic or parallax views of objects make it more difficult to imagine reading as an act of recovering truth, and render the interpretative act itself more visible” (Drucker, 2014, p. 191).



Drucker, 2014, p. 191

#### Annotation

Drucker entered my project when CONTACT was still organised around the problem of output. At that point, I was tempted to treat the three machine-vision readings as competing results, as if one might eventually become the most accurate version. Drucker's argument about parallax changed that decision. A display does not need to collapse difference into one authoritative view; it can keep incompatible views in tension so that interpretation becomes part of what the viewer sees.

This became useful again when the project moved from machine vision to the railway timetable. The issue was no longer three detectors, but several graphic states of the same source. Drucker gives me a way to treat those states as interpretative surfaces rather than design alternatives. The 8 grid, 20 grid and 32 grid versions do not compete to reveal the timetable more truthfully. They expose different reading behaviours: scanning, tracing, comparing, losing place, recovering structure. Her writing therefore supports my decision to keep multiple versions in play, so that the work does not resolve the timetable into one correct layout.

Latour, B. (1986) ‘Visualisation and Cognition: Drawing Things Together’ (reading list)

Citation

Latour, B. (1986) ‘Visualisation and Cognition: Drawing Things Together’, in Kuklick, H. (ed.) *Knowledge and Society: Studies in the Sociology of Culture Past and Present*, 6. Greenwich, CT: JAI Press, pp. 1–40.

Quote

“all these inscriptions can be superimposed, reshuffled, recombined, and summarized.” (Latour, 1986, p. 30)



Latour, 1986, p. 30

Annotation

Latour became important to my project when I stopped treating the timetable as a page and began to understand it as a centre of calculation. His discussion of inscriptions examines how maps, files, drawings and records gain force when they can be gathered, overlaid, reordered and summarised (Latour, 1986, p. 30). This matters because the railway timetable already performs this operation. It compresses stations, routes, departure times, intervals and possible journeys onto one surface, allowing them to be compared without being physically present.

This made me reconsider the timetable not as a visual object that needs to be improved, but as a calculative surface whose authority comes from the compression of high-density information. The grid experiments therefore became a way of intervening in this mechanism of compression. When the same timetable is placed into different grid resolutions, some relations become easier to gather and compare, while others become too dense, displaced or fragile to remain stable. Latour helps me understand that my project is not only changing layout, but testing how a graphic surface concentrates information and produces a position through that concentration.

**Becher, B. and Becher, H. (2005) Basic Forms of Industrial Buildings**

**Citation**

Becher, B. and Becher, H. (2005) *Basic Forms of Industrial Buildings*. Muni ch: Schirmer/Mosel.

**Visual detail**

A repeated sequence of black and white industrial building photographs, each isolated through a consistent frontal view, stable distance and typological grouping.



Becher, B. and Becher, H. (2005)

**Annotation**

Becher and Becher entered my project when I began to think about comparison as a designed condition rather than a neutral act. Their photographs of water towers, winding towers, gas tanks and other industrial structures are not isolated images. They are made through a repeated protocol: black and white, frontal view, stable distance, reduced background and typological grouping. This protocol does not remove interpretation. It creates the conditions under which differences between similar structures can appear.

This helped me clarify what my timetable iterations were doing. I was not producing separate redesigns of the railway timetable, but building a comparative situation around one fixed source. Like the Bechers' industrial forms, the timetable needs a stable recording condition before variation can become meaningful. In my project, the grid performs part of that role. It holds the source in a repeatable structure, while changes in resolution, scale, print format and spatial display reveal different forms of legibility and loss. Becher and Becher therefore help me understand the grid as a comparative protocol, not only as a layout system.

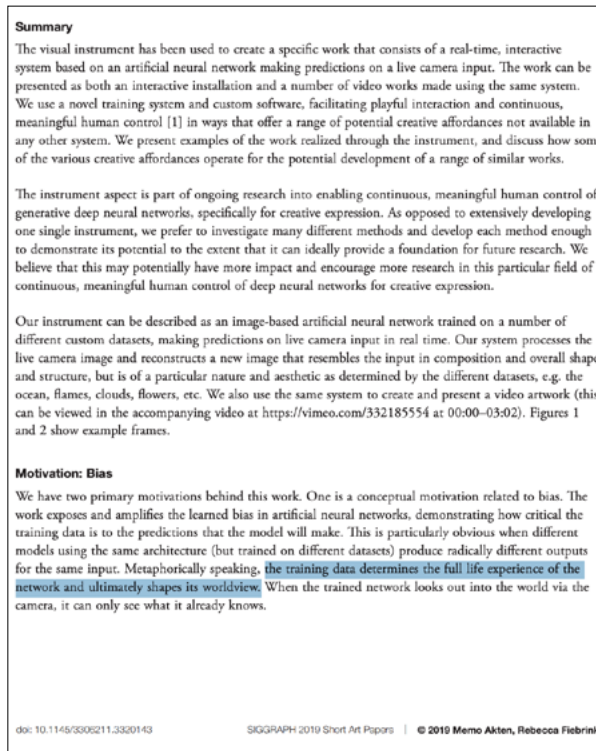
### Akten, M., Fiebrink, R. and Grierson, M. (2019) 'Learning to See: You Are What You See'

#### Citation

Akten, M., Fiebrink, R. and Grierson, M. (2019) 'Learning to See: You Are What You See', *SIGGRAPH 2019 Short Art Papers*. doi: 10.1145/3306211.3320143.

#### Quote

"the training data determines the full life experience of the network and ultimately shapes its worldview" (Akten, Fiebrink and Grierson, 2019, p. 1).



Akten, Fiebrink and Grierson, 2019, p. 1

#### Annotation

Akten, Fiebrink and Grierson were important in the CONTACT stage because they helped me separate two kinds of system: one that follows a rule, and one that has been shaped by prior training. Their description of Learning to See made the camera feed less important than the learned vocabulary through which the feed was reconstructed. This was the reason I added COCO-SSD beside Motion and Brightness. The third mode was not just another detector; it carried a trained worldview.

In the timetable project, I am no longer working with neural networks, but this distinction still changes how I approach graphic systems. A grid also arrives with prior knowledge, although that knowledge is historical and formal rather than statistical. It already knows how to divide, align, order and prioritise. When the same railway timetable enters different grid resolutions, each system reconstructs the source according to what it is able to structure. Akten helps me keep one question from CONTACT alive: not only what does the system show, but what has the system already been trained, built or designed to recognise?

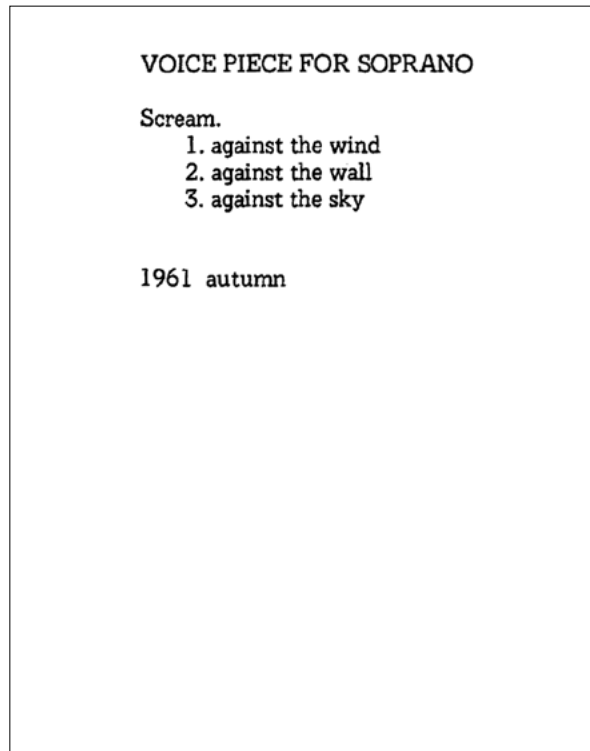
**Ono, Y. (1964/2000) Grapefruit**

**Citation**

Ono, Y. (2000) *Grapefruit: A Book of Instructions and Drawings*. New York: Simon & Schuster. Original work published 1964.

**Quote**

“Scream. 1. against the wind 2. against the wall 3. against the sky” (Ono, 2000, p. 4).



Ono, Y. (1964/2000) *Grapefruit*

**Annotation**

*Grapefruit* belongs in the Conditions axis because it treats the artwork as something activated by a condition, rather than completed by a single fixed form. In *Voice Piece for Soprano*, the instruction is almost bare: “Scream.” Yet the same action changes when it is performed “against the wind”, “against the wall” or “against the sky” (Ono, 2000, p. 4). The work is therefore not located only in the instruction, but in the relation between instruction, body, site and execution.

For my project, Ono is not a direct methodological model. The railway timetable is not an open poetic score, and I do not want to force an instruction-art framework onto it. However, *Grapefruit* helps me think dialectically about repeated conditions. A fixed source does not guarantee a fixed result. When the same material is placed under different conditions, the outcome can shift without the source itself being replaced. This supports the third axis of my bibliography as a secondary but important frame: it helps me consider how grid resolution, print scale, folding, binding, screen and spatial display act as conditions of execution, rather than neutral presentation formats.

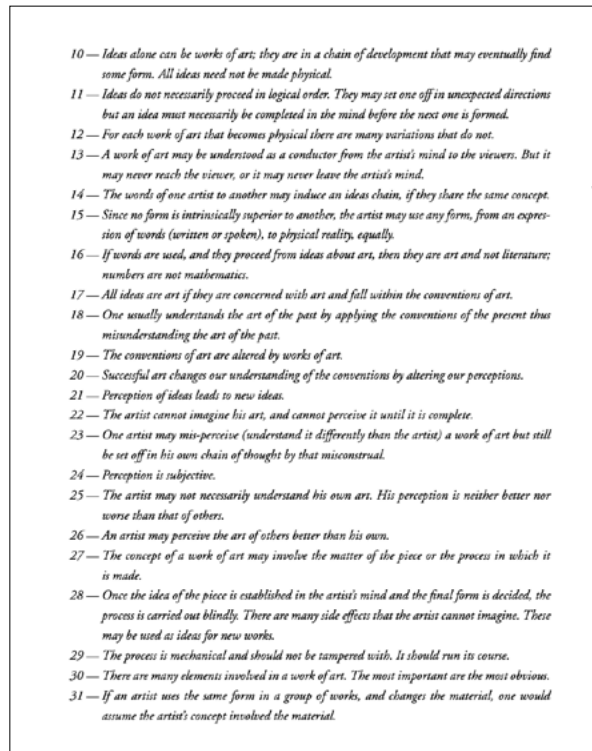
LeWitt, S. (1969/1999) ‘Sentences on Conceptual Art’

Citation

LeWitt, S. (1999) ‘Sentences on Conceptual Art’, in Alberro, A. and Stimson, B. (eds) *Conceptual Art: A Critical Anthology*. Cambridge, MA: MIT Press, pp. 106–108. Original work published in 0–9, 5, 1969, pp. 3–5.

Quote

“The process is mechanical and should not be tampered with. It should run its course” (LeWitt, 1999, p. 107).



LeWitt, 1999, p. 107

Annotation

LeWitt gives the third axis a stricter procedural position than Ono. In ‘Sentences on Conceptual Art’, the artwork is not defined by expressive adjustment during making, but by a concept or system that has already been set in motion. His statement that “the process is mechanical and should not be tampered with” presents execution as something that should follow from an initial decision rather than continuous subjective correction (LeWitt, 1999, p. 107).

For my project, this is useful as both a reference and a limit. It supports the decision to keep the railway timetable as a fixed source and to test it through repeated conditions, rather than redesigning it freely each time. The grid resolutions need to operate as controlled procedures, so that differences between outcomes can be read as the effect of the system rather than personal taste. At the same time, I do not fully adopt LeWitt’s idea of blind execution. Because my source is an information object, the process still has to be judged through legibility, comparison and loss.

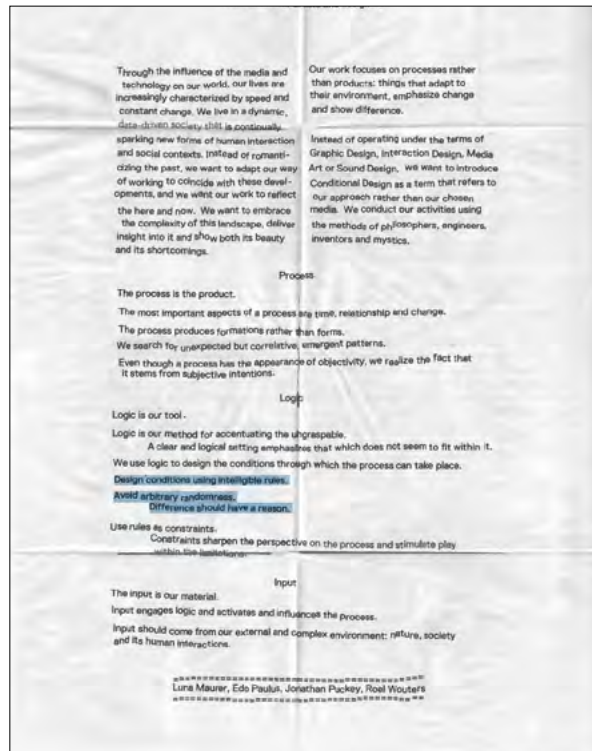
Maurer, L., Paulus, E., Puckey, J. and Wouters, R. (2013) Conditional Design Workbook(reading list)

Citation

Maurer, L., Paulus, E., Puckey, J. and Wouters, R. (2013) Conditional Design Workbook. Amsterdam: Valiz.

Quote

“Design conditions using intelligible rules. Avoid arbitrary randomness. Difference should have a reason” (Maurer et al., 2013, p. ii).



Maurer et al., 2013, p. ii

Annotation

Conditional Design Workbook gives the third axis its clearest design logic. The manifesto does not treat rules as a way to remove complexity. Instead, rules are used to produce difference within a clearly defined situation. Its demand to “avoid arbitrary randomness” is especially important, because it separates conditional work from decorative variation (Maurer et al., 2013, p. ii). A condition must be legible enough for the resulting difference to be understood.

This reference helps me discipline the expanding iterations of the timetable project. As the work moved into grid resolution, print scale, folding, binding, screen display and three dimensional space, there was a risk that each version could appear as a separate formal experiment. Conditional Design helps me hold them together as a set of tested conditions. The question is not whether variation happens, but whether the reason for each variation can be identified. For this reason, random shift, grid change or spatial translation cannot be used only for visual effect. Each operation has to clarify what has changed in the reading situation, and what has remained fixed. This gives my third axis a practical role: it frames iteration as conditional testing rather than stylistic multiplication.

**Kinross, R. (1985) ‘The rhetoric of neutrality’, Design Issues, 2(2), pp. 18–30.**

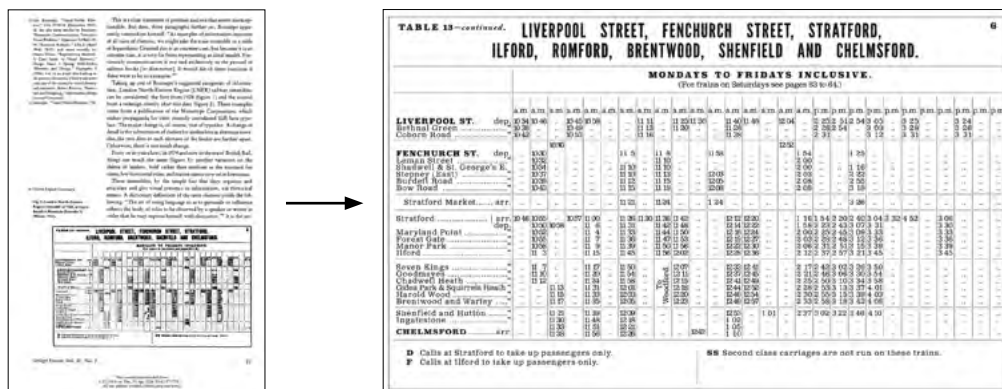
Robin Kinross's ‘The rhetoric of neutrality’ is a key textual reference for my current enquiry because it shifts information design away from the opposition between functional clarity and visual expression. The essay asks “whether information can be neutral” (Kinross, 1985, p. 18), but it does not treat this as an abstract theoretical problem. Kinross argues through the railway timetable: an everyday, compressed and apparently self-evident information object. His position is that visual information becomes rhetorical as soon as it is given visible form. The timetable may seem purely practical, but its typography, spacing, leaders, rules, colour, hierarchy and typeface already decide how information is organised, how authority is performed, and what kind of reader is imagined.

The formal method of the essay is central to this argument. Kinross works through close visual reading rather than broad historical summary. By comparing British and Dutch railway timetables, he locates rhetoric in small material decisions: dot leaders, Gill Sans, horizontal rules, colour, serif and sans serif type systems. This treats the designed surface as evidence. When Kinross writes that timetables “organize and articulate and give visual presence to information” (Kinross, 1985, p. 19), he makes legibility inseparable from arrangement. Information does not sit behind design waiting to be communicated; it is produced through the typographic procedures that make it available to a reader.

This challenges the assumption that graphic communication design can clarify information without altering its meaning. Kinross does not simply attack functionalism from the outside. He takes one of functionalism’s most ordinary objects and shows that function itself has rhetorical consequences. A timetable can be useful and still carry assumptions about efficiency, standardisation, infrastructure and institutional authority. His discussion of modernism, Swiss typography and HfG Ulm shows how neutrality became a visual style attached to post-war beliefs in technology, rational order and ideology-free communication (Kinross, 1985, pp. 24–29). This sharpens my position: the grid cannot be treated as a neutral support structure.

For my studio response, Kinross changes the status of the railway timetable. I should not treat it as raw data to be improved through a more elegant grid, or as nostalgic graphic material to be revived. I should treat it as an existing rhetorical apparatus before any new intervention takes place. This matters because my line of enquiry asks: how does grid resolution change the legibility, comparison and information loss of the same railway timetable? With Kinross, the timetable becomes a precise object for iteration: a source structure whose typographic details, density and hierarchy can be tested under different conditions.

Kinross’s conclusion that “nothing is free of rhetoric” (Kinross, 1985, p. 29) is therefore useful as a methodology for iteration, rather than as a rule to be translated directly into interface modules. His essay gives me both a source object and a way of reading it. The historical timetable becomes a repeatable matrix through which changes of scale, grid resolution, print format and binding can be observed. My A3 prints, newspaper-format prints, A4 prints and experiments with different binding forms come from this methodological lesson. They are material tests of how information is organised, how authority is performed, and what kind of reader each format imagines.



Using Kinross as a reference point

**Müller-Brockmann, J. (1981) *Grid Systems in Graphic Design: A Visual Communication Manual for Graphic Designers, Typographers and Three Dimensional Designers*. Niederteufen: Verlag Arthur Niggli.**

Josef Müller-Brockmann's *Grid Systems in Graphic Design* is the practice reference that structures my current studio response. Although it is a book, I am using it primarily as evidence of a graphic design practice: the systematic construction of visual order through modular grids, measured columns, margins, intervals and proportional fields. Its key position is that the grid offers a rational basis for organising communication. Müller-Brockmann states this position clearly when he writes that "working with the grid system means submitting to laws of universal validity" (Müller-Brockmann, 1981, p. 10). This statement is important because it exposes the authority built into the grid. The designer does not simply use the grid as a neutral aid; the material is submitted to a system that promises clarity, consistency and universal order. I am therefore not using Müller-Brockmann as a neutral authority, but as the historical system that my timetable experiment tests.

The formal qualities of the reference are essential to this role. The grid examples are not simply images of finished layouts; they expose the underlying armature through which layouts are planned. Lines, columns, gutters, modules and measured divisions become visible as a technical language. The reference pages I am working from provide different grid conditions, including 8, 20 and 32 grid structures (Müller-Brockmann, 1981, pp. 72, 76, 87). These are not arbitrary choices in my studio response. They are borrowed constraints from a canonical modernist method. By applying these grid resolutions to Kinross's railway timetable, I can test what happens when a modernist structure of order encounters an already dense historical information surface.

The project reinforces one part of my understanding of graphic communication: structure matters. The grid is not just a background device. It determines where information can sit, how groups are formed, what becomes dominant and how a reader moves across a page. In the timetable experiments, this becomes visible through difference. A lower grid resolution tends to produce broader fields and stronger visual hierarchy, but detailed train-by-train comparison becomes more fragile. A higher grid resolution can retain and align more information, but it also increases density and reading pressure. The grid therefore does not merely organise information. It redistributes attention.

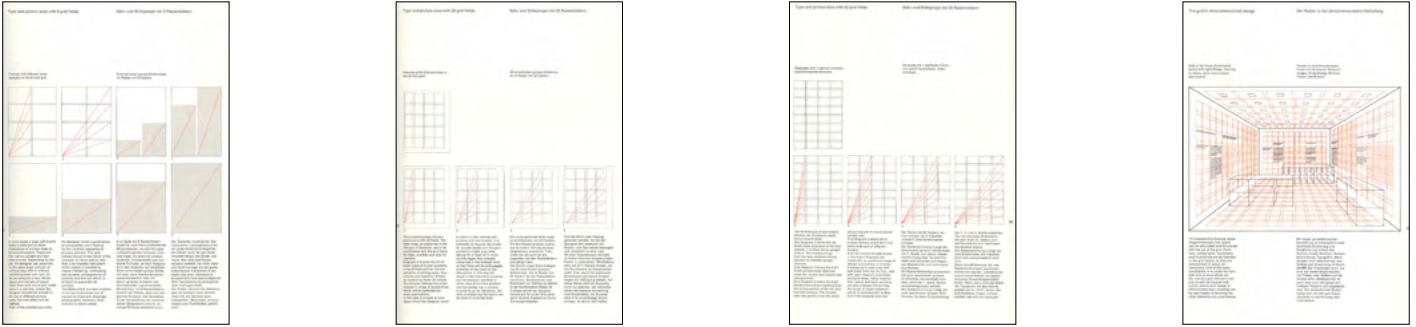
The later development of the website towards a three-dimensional grid also comes from this reference. In the section on three-dimensional design, Müller-Brockmann shows a perspectival interior in which walls, floor, ceiling, furniture, lighting, texts and images are all coordinated through the same spatial grid. He writes that "space can be articulated and structured with the aid of the grid" (Müller-Brockmann, 1981, p. 148). This page matters because it extends the grid beyond the flat page. It suggests that the grid can operate as a spatial coordinate system, not only as a typographic layout device. My three-dimensional grid development draws from this shift. It translates the timetable from a two-dimensional printed surface into a spatial structure where density, orientation and reading order can be tested through depth and movement.

At the same time, Müller-Brockmann challenges my project because his method carries an implied faith in rational visual order. The grid appears to be a solution: a disciplined structure that can bring coherence to complex material. My project tests that belief rather than repeating it. The railway timetable is useful because it resists clean modernist absorption. It already contains columns, station rows, dot leaders, time sequences, footnotes and a dense internal rhythm. When I place this material into 8, 20 and 32 grid systems, the grid does not simply clarify the timetable. It also displaces information, creates new hierarchies and produces different forms of information loss. This reveals the grid as an apparatus, not just a tool.

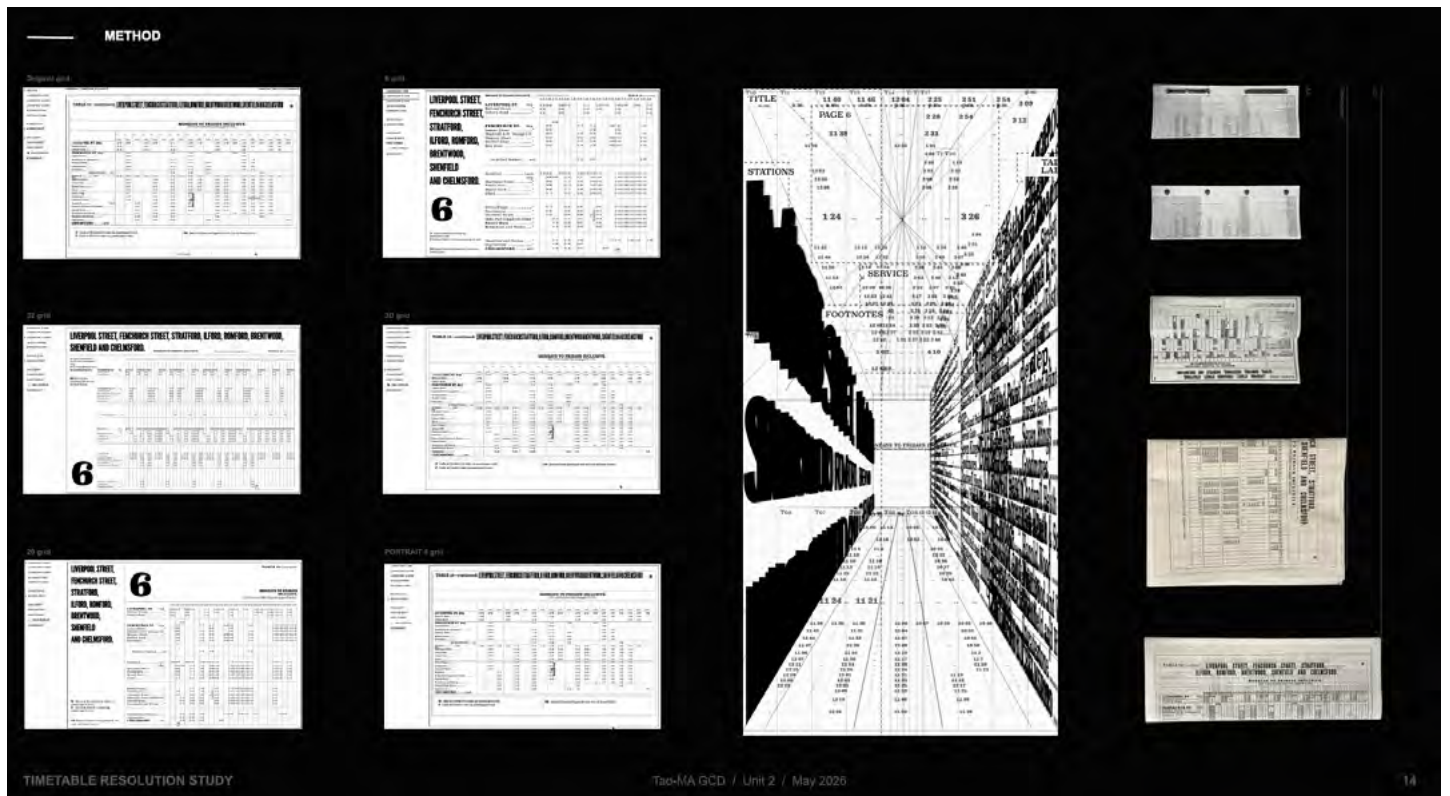
This reference has also shaped my multi-media and binding experiments. In moving between A3 prints, A4 prints, poster formats, web-based viewing and possible bound structures, I have repeatedly had to adapt the grid to different publication sizes and reading situations. Müller-Brockmann gives this process both a critical direction and an iterative direction. Critically, his work allows me to question the modernist belief that order automatically produces clarity. Iteratively, it gives me a system that can be adjusted, scaled, folded, printed, spatialised and tested. My studio response is therefore not anti-grid, and it is not a decorative homage to Swiss modernism. It

## Unit2 Written Response - CRITICAL ANALYSES

uses the grid as a controlled condition through which legibility, comparison and information loss can be observed across different media and formats. In this sense, Müller-Brockmann's practice is both the structure of the experiment and the object being tested.



Müller-Brockmann, J. (1981) Grid Systems in Graphic Design



My project

<https://tttttttaaaooooooooo-sudo.github.io/timetable/>







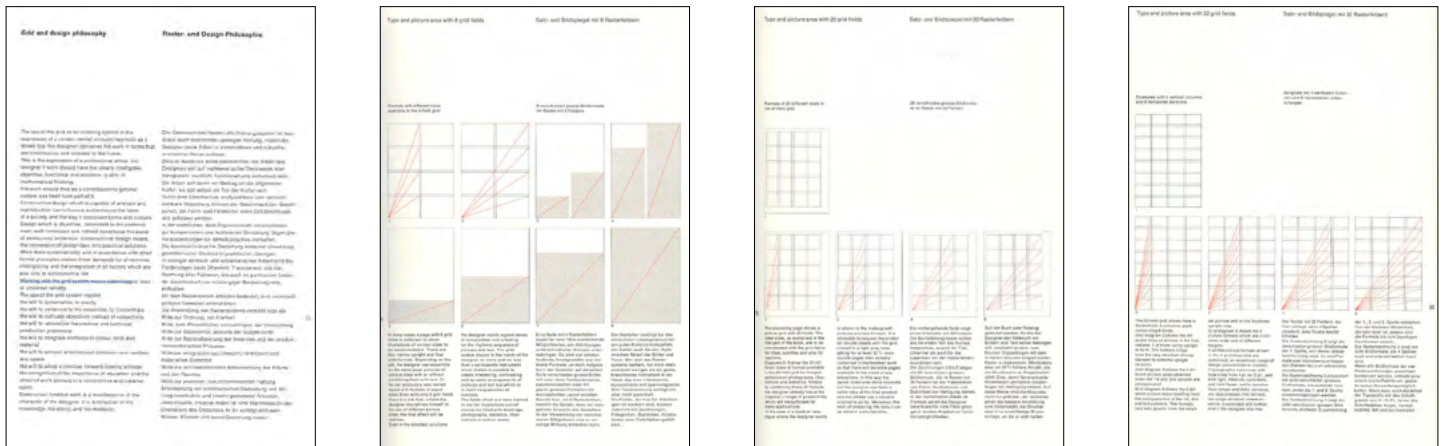
# Unit2 Written Response - Text-based Video Essay Component

## Reference: Müller-Brockmann

Josef Müller-Brockmann is the object of my critique. In *Grid Systems in Graphic Design* (1981), he describes the grid as a structure of order, clarity and rational organisation.

He also writes that working with the grid system means submitting to rules of universal validity. For me, the word “submitting” is important. It suggests that the grid is not simply a neutral assistant. It is a structure of authority.

I use Müller-Brockmann’s grid logic to test what happens when the same timetable is forced into different systems of order.



Grid Systems in Graphic Design (1981)



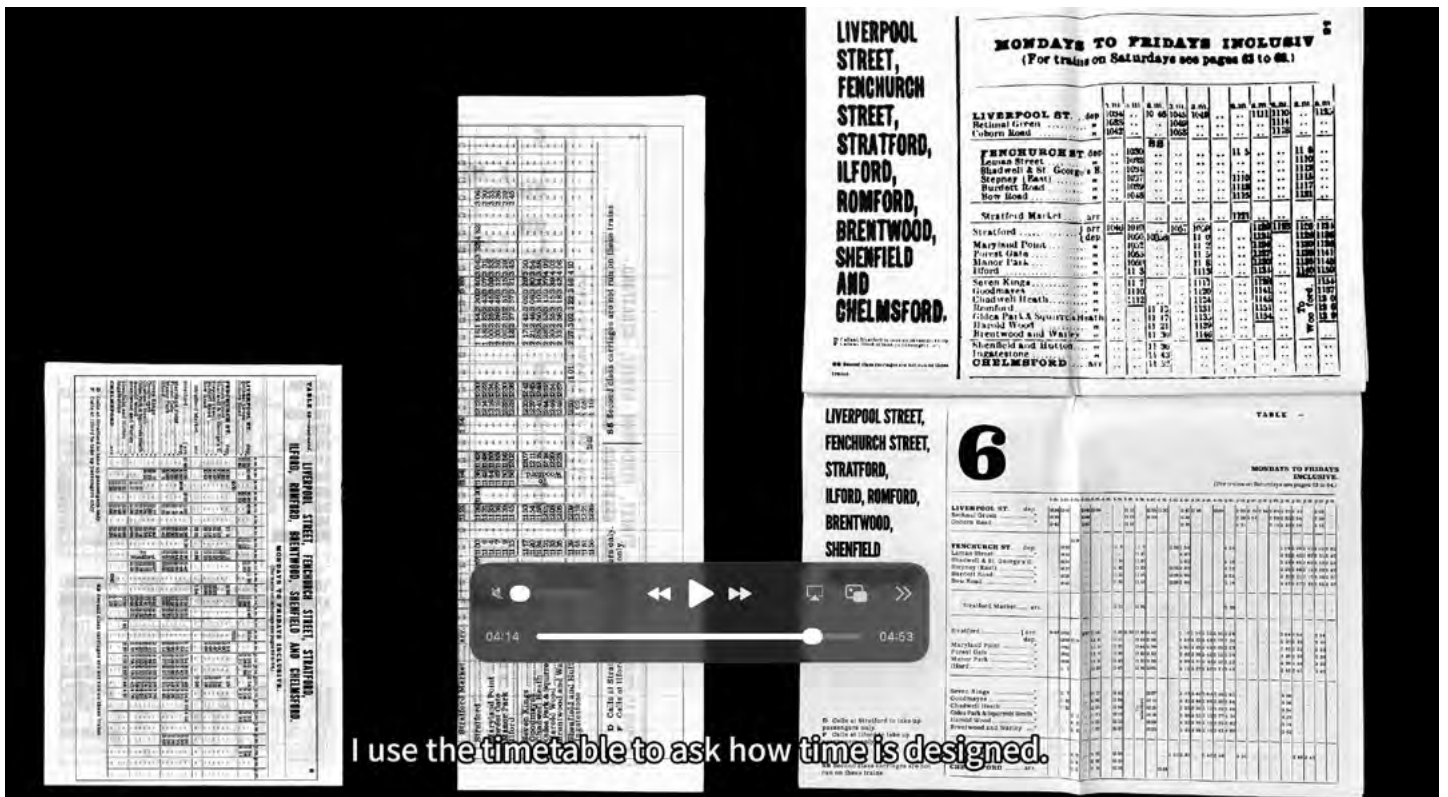
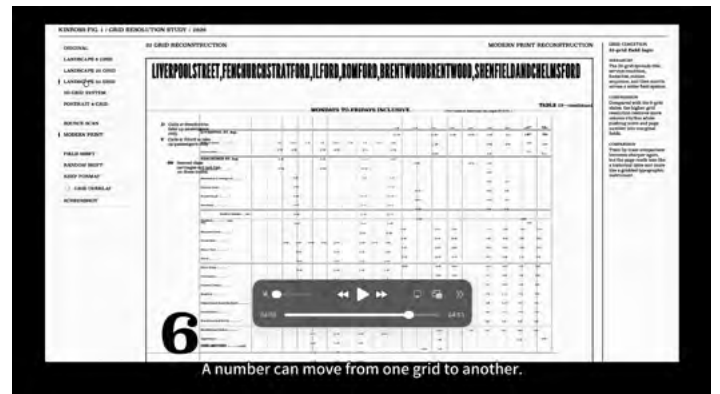
# Unit2 Written Response - Text-based Video Essay Component

## Method

My method is based on iteration. I keep the same railway timetable, but change the conditions around it.

I test different grid resolutions, including 8-column, 20-column and 32-column structures. I also move the timetable from screen to paper, from flat layout to book spread, and from page-based composition into a 3D reading condition.

Through these changes, I observe three things: what becomes easier to read, what becomes easier to compare, and what disappears or becomes noise.



## Video Structure

The video begins with the timetable as something familiar and fast. A digital 10:10 and fragments of railway information introduce time as a graphic image.

The film then slows down and enters the structure behind the image: the printed timetable, the PDF reference, the grid calculator, the ruler, the page and the software interface.

As the video develops, the same timetable is repeatedly transformed. It becomes a typographic object, a measured surface, a grid experiment, a publication spread and finally a spatial system.

FIRST 15 SECONDS							
Timetable as a Graphic System for Organised Time							
0:00-0:15	0:15-0:35	0:35-0:55	0:55-1:20	1:20-2:20	2:20-3:35	3:35-4:45	4:45-5:10
<p><b>Visual</b> A small 08:30 appears on a black screen, flickering like a digital display. Quick cropped fragments of train screens, flight schedules, school timetables, phone calendars, bus times and work shifts appear like visual memories.</p> <p><b>Camera</b> Static shot, then fast jump cuts and close-ups. Each fragment stays for less than 0.5 seconds.</p> <p><b>Sound</b> Digital refresh, station announcements, keyboard sounds and paper turning.</p> <p><b>On-screen Text</b> Timetables are everywhere.</p>	<p><b>Visual</b> The fragments slow down and form a clearer timetable: columns, times and horizontal lines. It looks clean, rational and readable.</p> <p><b>Camera</b> Move from fragmented views into one complete top-down surface.</p> <p><b>Sound</b> The sound reduces to a soft ticking.</p> <p><b>On-screen Text</b> They look practical, ordinary and neutral.</p>	<p><b>Visual</b> The timetable freezes. Grid lines enlarge, and time numbers such as 08:30, 09:15 and 10:00 separate from the table and float on a blank page.</p> <p><b>Camera</b> Slowly push in from the full timetable to one time number.</p> <p><b>Sound</b> The ticking becomes closer and more intense, with a low-frequency pressure.</p> <p><b>On-screen Text</b> But a timetable does more than organise information.</p>	<p><b>Visual</b> Enter an InDesign interface. The screen focuses on one text box containing only 10:10. Baseline, bounding box, anchor points, margins and column guides appear.</p> <p><b>Camera</b> Push further into the text box until the number becomes almost abstract.</p> <p><b>Sound</b> Mouse clicks, page zooms and keyboard typing, as if inside the software.</p> <p><b>On-screen Text</b> What happens when time is placed inside a grid?</p>	<p><b>Visual</b> A point expands into part of a number, then into a complete number, then into a line of time. Point size, leading, tracking and alignment begin to shift.</p> <p><b>Camera</b> Slow zoom out, revealing one number, one line and one column.</p> <p><b>Sound</b> A steady rhythm, like mechanical typesetting or printing.</p> <p><b>On-screen Text</b> A point becomes a number. A number becomes a line. A line becomes a system.</p>	<p><b>Visual</b> Show my process. InDesign layout iterations, printed paper, folding, cutting, binding tests, code-generated grids, side-by-side versions, page turning and overprinted structures.</p> <p><b>Camera</b> Top-down desk shots, screen recordings and close-ups of paper texture.</p> <p><b>Sound</b> Paper friction, printing, mouse clicks and keyboard sounds.</p> <p><b>On-screen Text</b> I explore this through iteration. Grid / Spacing / Density / Sequence / Medium</p>	<p><b>Visual</b> Train, flight, school, work, calendar, delivery and notification systems overlap into lines, grids and time points. The image becomes dense and almost unreadable.</p> <p><b>Camera</b> Slow zoom out from one timetable to many, then into a large connected network.</p> <p><b>Sound</b> All earlier sounds overlap and build, then suddenly cut out.</p> <p><b>On-screen Text</b> When every timetable is connected, time becomes larger than the individual.</p>	<p><b>Visual</b> Return to a blank screen with the original 08:30. Faint grids, lines and paper textures remain around it. The number slowly disappears, leaving only the grid.</p> <p><b>Camera</b> Very slow zoom out.</p> <p><b>Sound</b> Almost silent, with only a soft paper sound.</p> <p><b>On-screen Text</b> I am not redesigning the timetable to make it more efficient. I use iteration to make its hidden structure visible. A timetable is not only a way to read time. It is a way to design time.</p>

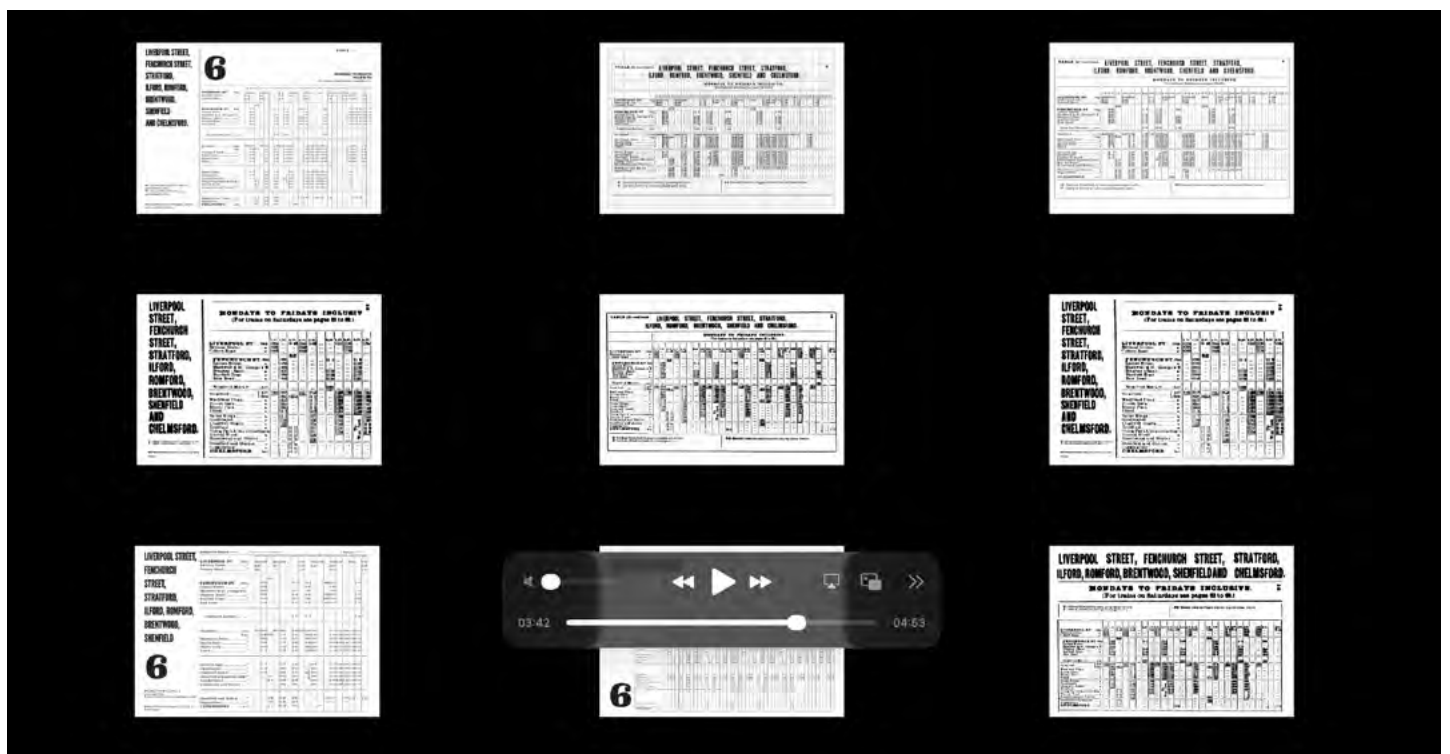
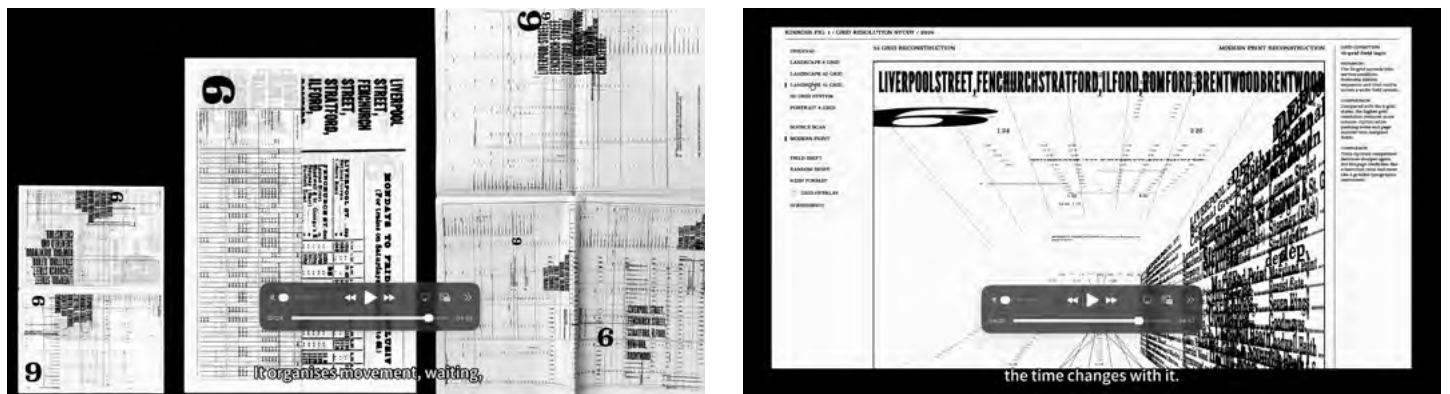
# Unit2 Written Response - Text-based Video Essay Component

## Evaluation

The project shows that grid resolution is not only a technical setting. It changes the politics of reading.

A lower-resolution grid can make the timetable feel more stable and readable, but it may reduce detail. A higher-resolution grid can allow more comparison and precision, but it can also create visual pressure and information noise.

When the grid becomes too dense, the timetable stops being a clear tool and becomes an image of control. The system is still ordered, but the reader begins to lose access to the information.





## Unit2 Written Response - Bibliography

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