



Typographic Dialogues: Local-Global

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Collaborative Typographic Installations: Leveraging Trust as a Creative Catalyst

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Abstract: This article documents a review of collaborative typographic practice that leverages trust as a creative catalyst. ‘Trust’ is the new buzzword being brandished across many industries, the design industry included; and as we stand at the cusp of the 4th industrial revolution, it is now more important than ever that we recognize and foster the potentiality that trust advances within our societies. Accordingly, this project engaged students to collectively reflect on the complex notion of trust through a collaborative typographic installation. The project also introduced students to a design thinking model: The 4 ‘S’ Approach: See, Sort, Synthesise, Solutions, with students required to document their process as part of this strategic design thinking methodology. The creative process culminated in the fabrication of a series of three-dimensional, interactive, typographic installations, which visually narrate the tangible interpretations of a distinctly intangible concept.

Key words: *Typographic Installation, Trust, Experimental Type, Design Thinking*

1. Introduction

Students in an undergraduate, advanced level typography course at Nanyang Technological University’s School of Art, Design and Media in Singapore, were asked to explore the notion of trust via an active research strategy and experimental typographic practice. The project employed a design thinking model to facilitate and frame investigations into this complex social phenomenon with the objective being, to create visual narrative via tangible interpretations of a distinctly intangible concept.

27 Visual Communication students participated in the project, all of whom had successfully completed 2 previous typography courses as prerequisite for enrolment to this advanced course. The students were randomly divided into groups of 4 to 5 members, with 6 groups formed in total. All participants were provided with a detailed project brief, alongside a series of 5 assigned exercises, which were designed to facilitate project completion over an 11-week period. The following section of this paper will now move to introduce the design thinking methodology which underpinned the creative practice throughout this project.

2. The 4 'S' Approach: A Design Thinking Model

Design thinking was chosen as the methodological approach for this project, as according to Winstanley (2019), it provides a robust, human-centric approach to problem solving and supports visualization as a pragmatic means for the development of creative strategies and innovative solutions. Liedtka and Ogilvie (2011) also purport that, "In a world that needs innovation and well-run companies, design thinking is an approach to problem solving that allows us to combine right-brain creative thinking with left-brain analytical thinking." Therefore, it was deemed both appropriate and necessary to adopt a strategy with a clear, teachable methodology but also with the flexibility to encourage experimentation and iteration within an active research program.

The 4 'S' approach defines 4 iterative creative phases as follows:

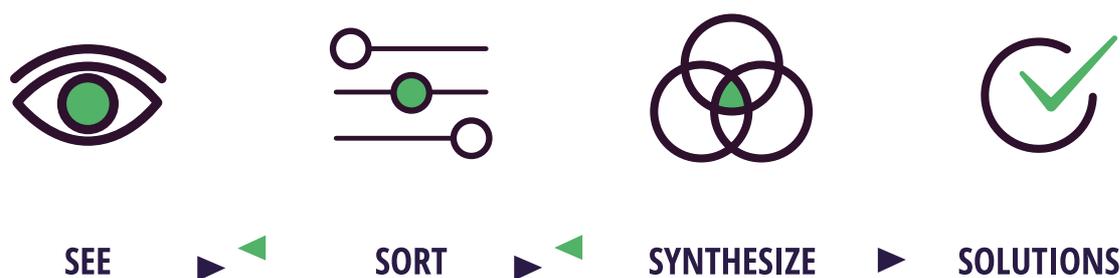


Figure.1 The 4 'S' Approach Model: See, Sort, Synthesise, Solutions © Winstanley L, 2019

The SEE phase of this framework is equivalent to the empathise and define stages utilised in other models, whereby the design problem is defined and is broken down accordingly:



SEE (Find the I.D.E.A. ©) Identify. Discover. Examine. Analyse.

(What are you looking at?)

- **Identify:** Identify the problem. Ask Questions. Who are you designing for? What issues are they facing? Why is this project needed?
- **Discover:** Listen, empathize, gather insights and inspiration
Examine: Research what you do know, identify what you don't know. Figure out why that matters
Analyse: Compare and contrast all your information to gain a broader viewpoint

The SORT phase could be likened to the define stage of other models. Meaning that brainstorming and unpacking the data from the SEE stage takes place:



SORT (Organise the D.A.T.A. ©) Discuss. Assess. Think. Agree.

(What are you working with?)

- **Discuss:** Review your findings from 'See'. Talk through these findings. What did you find? Was it different from others? Why do you think this is so?
- **Assess:** What was important and what was not?
- **Think:** How could these findings help your design? Is there anything you could have missed? Are the ideas you have feasible?
- **Agree:** Agree on a creative brief that addresses the fundamental creative problem

The SYNTHESIZE stage is equivalent to the ideate and prototype stages of other models, whereby experimentation and testing takes place.



SYNTHESIZE (Light the F.U.S.E. ©) Find. Unlearn. Shape. Experiment.

(How can you work with it?)

- **Find:** Now you know the problem and have looked at it from multiple angles and perspectives, find and develop a range of potential solutions.
- **Unlearn:** Forget what you already know. Innovate, ideate, brainstorm and play

- **Shape:** Test and iterate prototypes. Build, test and then rebuild better with a view to ‘intelligent, fast failure’.
- **Experiment:** Approach with an experimental mindset. Investigate, discover and document the process.

Finally, the SOLUTIONS phase:



SOLUTIONS (Make it real R.E.A.L. ©) Resolve. Establish. Authenticate. Launch.

(Does it work well?)

Resolve: Any issues, time for last minute tweaks.

Establish: Protocols and best practice for this and future projects

Authenticate: Are all stakeholders happy with your solutions? Survey, benchmark and refine.

Validate you have the right approach.

Launch: Launch your project! What lessons have you learned? Was the project a success and why? Debut and Document your results.

The following section of this paper will now move on to detail the project requirements and specifications.

3. The Project brief

The project brief required students to work as a team, with specific roles and responsibilities designated to each team member. Team roles were specifically designed in line with Belbin’s (2017) theory that there are nine clusters of behaviour which propagate high performance within team dynamics. The team roles were therefore designed to facilitate optimal behavioural contributions amongst team members, in contrast to merely providing titles for each position. Significantly, this also allowed students to feel ownership of their own roles, better understand contribution requirements and contribute integrally to the team decision making process.

Collectively the teams were then instructed to discuss what the concept of trust meant to them and how they planned to interpret it. Prompts for debate were suggested, such as, if trust should be considered as a behavioural intervention, a psychological state (Rousseau, Sitkin, Burt & Camerer, 1998) or an attitude or willingness to take a risk (Mollering, 2006).

These prompts stemmed from the author's current research and provided avenues for scholarly discourse to underpin the practice led component of the project.

Instruction was also provided on the materiality of the work and a small budget of S\$100 (Singapore Dollars) was provided for each group to purchase relevant materials for fabrication and construction of their prototypes and end product. It was indicated that the outcomes should be constructed with the aim of encouraging connections with people and documentation of public interaction with the piece would be reviewed very favourably.

As aforementioned, the project brief was supported by 5 Assigned Exercises, which were designed to guide students through the creative process and facilitate successful completion of the project. All Assigned Exercises adopted a design thinking model: The 4 'S' Approach: See, Sort, Synthesise, Solutions. Each Assigned Exercise required students to implement this methodology and document the process accordingly. The following sections, 3.1-3.5, detail each Assigned Exercise and its relevance to the brief.

3.1 Assigned Exercise 1: Building a Team

The initial exercise required the students to build their team; delegating team roles and responsibilities through creation of a team operating agreement and forecasting a project timeline. The objective being, to aid students in determining rules for communication, file sharing protocols and team working methods, with the overarching aim of developing a culture of trust within the group at the onset of the project. As previously stated, the roles were predefined in line with the 9 Belbin (2017), however, team members were free to decide which role or roles they wished to undertake within their group.



Figure.2 An example of a completed version of Assigned Exercise 1: Building a team, demonstrating assigned roles and responsibilities, a team operating agreement and planned project timeline. Student names have been removed for privacy.

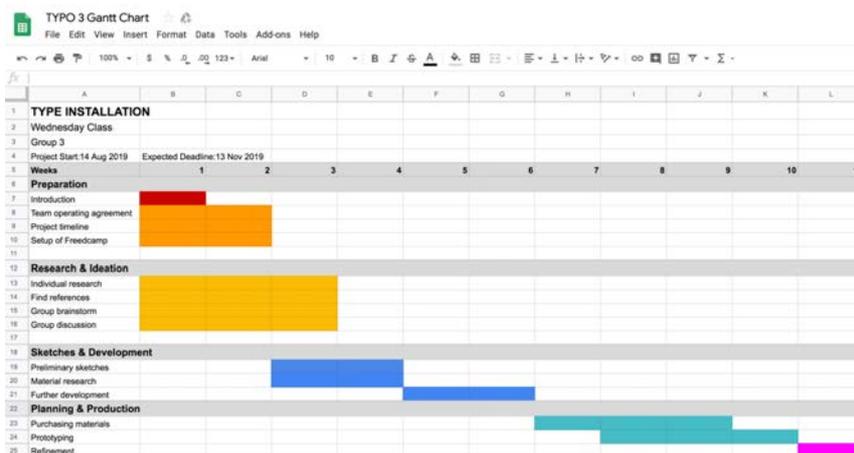


Figure.3 An example of a completed timeline in the form of a Gantt chart. This was created by one team in response to Assigned Exercise 1

3.2 Assigned Exercise 2: Preliminary Research & Planning

This exercise was divided into two sections with 'Brain Dump' as the first. A brain dump is an exercise designed to explore sensemaking, utilising both analytical and synthesising skills to externalise mental efforts. Research supports (Brade, Brändel & Groh, 2020) the use of visual interfaces for sensemaking, however in this instance students were asked to

complete this task by hand to take advantage of the H.U.M.P.S technique: “H = Hands-on, U = Unique, M = Memorable, P = Portable, S = Stylish” as proposed by Advantages of Hand-Drawn Mind mapping,(n.d.) Using a paper and pen/pencil, students were asked to make a list of words that came to mind when they thought of the theme Trust. They were prompted to consider what imagery it triggered, and it was indicated that their responses could be literal or abstract, including emotions, phrases or slang terms. The following examples denote several submissions for the first portion of this 2 part exercise.

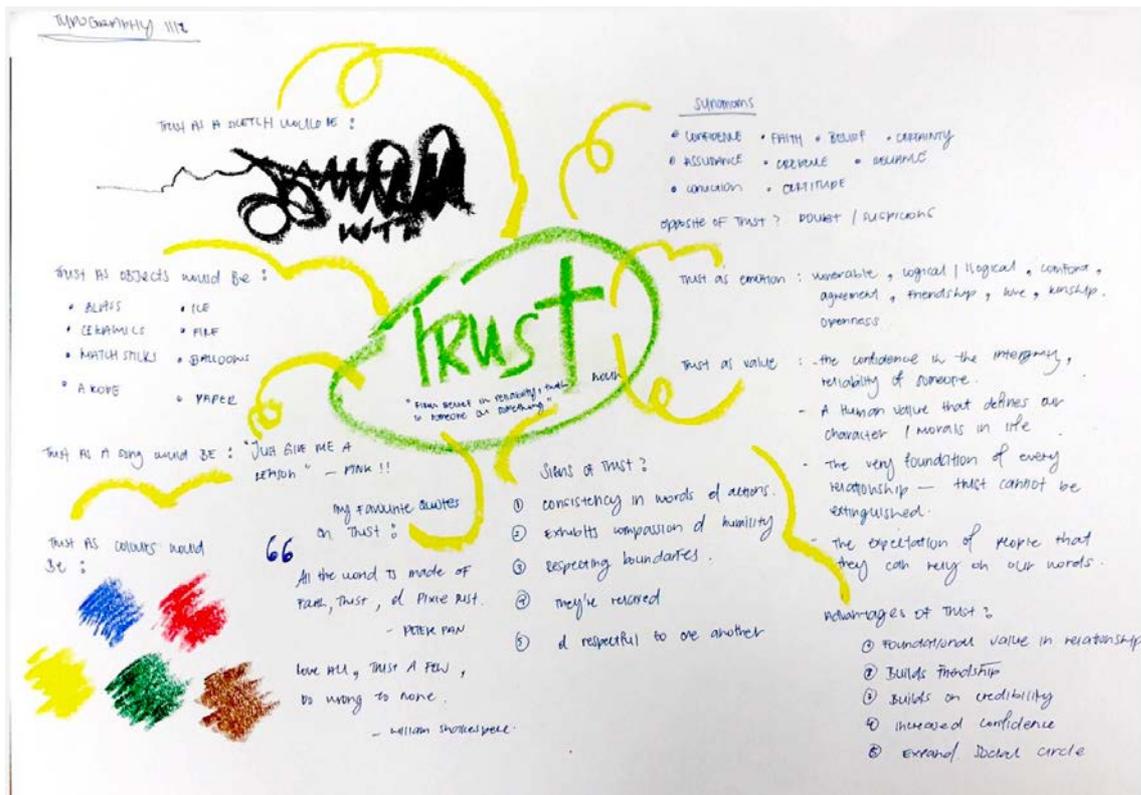


Figure.4 A brain dump exploring the notion of Trust and exploring colour and randomness as part of the ideation process

Trust Brain Dump

- trust is gained / earned
- trust is slowly built up (it is a process) - trust vs time
- it is faster to break trust as compared to building it
- it takes more time for people with trust issues to trust someone
 - ↳ could be due to past experience where someone broke their trust
 - ↳ there are both good and bad experience tied with trust
- animals as pets are vulnerable to trust
 - ↳ they cannot choose their owners (no choice)
- fragile materials that can associate with breaking trust
 - ↳ glass, thread, bubbles, mesh
- strong materials that can convey the strength of trust
 - ↳ wire, cable ties
- a relationship of screen protector and phone
- trust in a team → trust can ↑ efficiency
- the trust test  performance art by Marina Abramovic
The story of bow and arrow
- Positive Emotions tied with trust: gratitude, hope, relief, confidence
- Negative Emotions tied with trust: disappointed, anger, frustration, despair
- "trust your heart"
- weight of trust can be heavy → meeting expectations

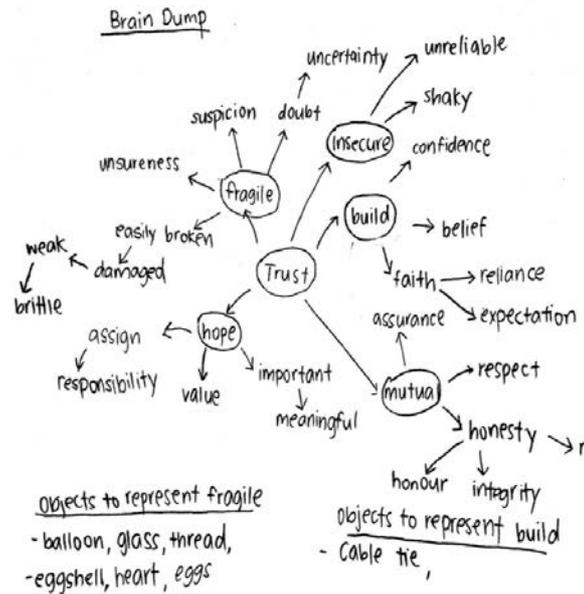
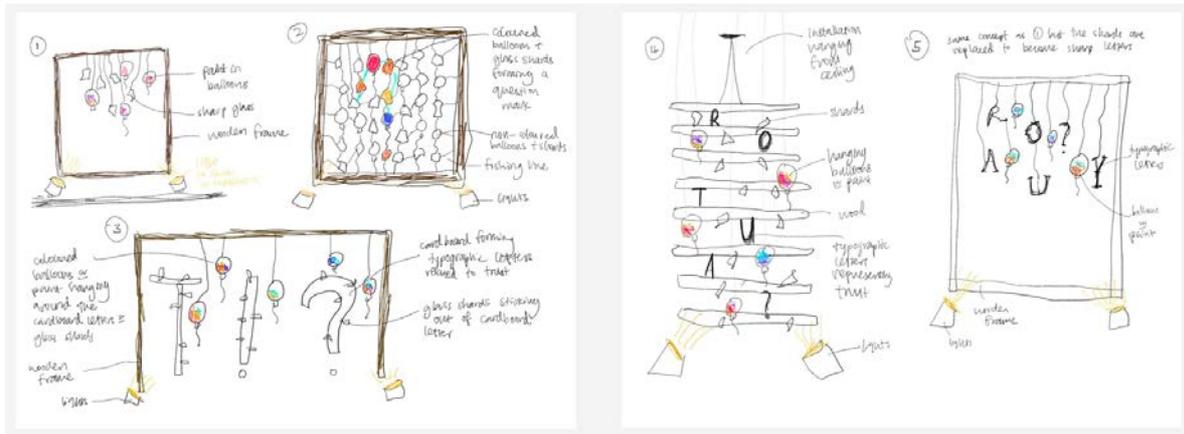


Figure.5 This brain dump utilised an analytic listing strategy combined with a mind-mapping technique, as a means of sensemaking for the complex phenomenon of trust.

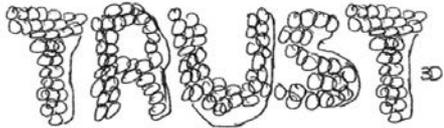
Secondly, students were asked to individually create a minimum of 5 rough sketches which they could then discuss as a group. This activity encouraged discussion, debate and the generation of transferable knowledge through the creation of tangible artefacts.

Accordingly, this paper proposes that the knowledge transfer occurring in this functional design ecology can be attributed to the creation of Design Boundary Objects (DBOs). A DBO can be defined to be “any representational artefact that enables knowledge about a designed system, its design process, or its environment to be transferred between social worlds and that simultaneously facilitates the alignment of stakeholder interests populating these social worlds by reducing design knowledge gaps.” (Bergman, Lytinen, and Mark, 2007). Assigned Exercise 2 provided opportunity to create several tangible artefacts which were subsequently utilised as DBOs by the students as a means to foster affective group communication within the context of a heterogeneous creative process.

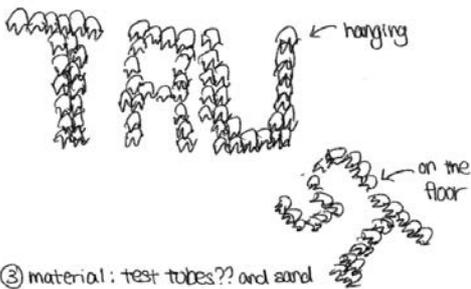


5 Rough Sketches

① material: cable tie



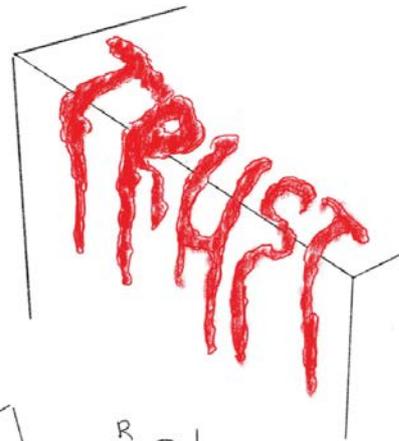
② material: egg shells



③ material: test tubes?? and sand



④ material: wax



⑤

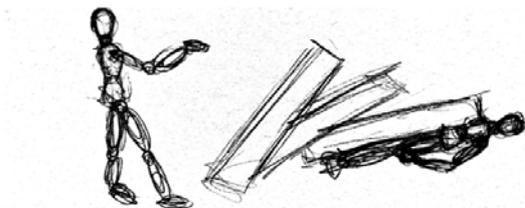
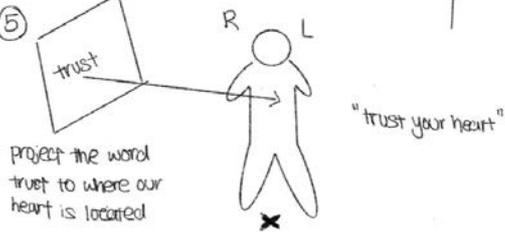


Figure.6 A series of rough sketches from various students.

3.3 Assigned Exercise 3: Materials Research and Sketches

This exercise asked the students to develop a range of potential solutions to the creative brief and provided the opportunity for play, experimentation and for 'wild' ideas. At this juncture it was specified that the solutions did not need to be viable, but it was more important to consider innovative approaches to use of materials and how materials could be elevated with creativity. Precedence was also given to the influence of material attributes on the user experience. According to Ashby & Johnson, (2014) "Objects can have meaning, carry associations, or be symbols of more abstract ideas." It was, therefore, the aim of this exercise to encourage students to embody symbolic representations of trust in new and unusual ways, subsequently building and refining their previous ideas and testing out new ones in 2D sketch form. The resulting ideation provided students with a clearer creative direction and a more distilled notion of how materials could shape their solutions.

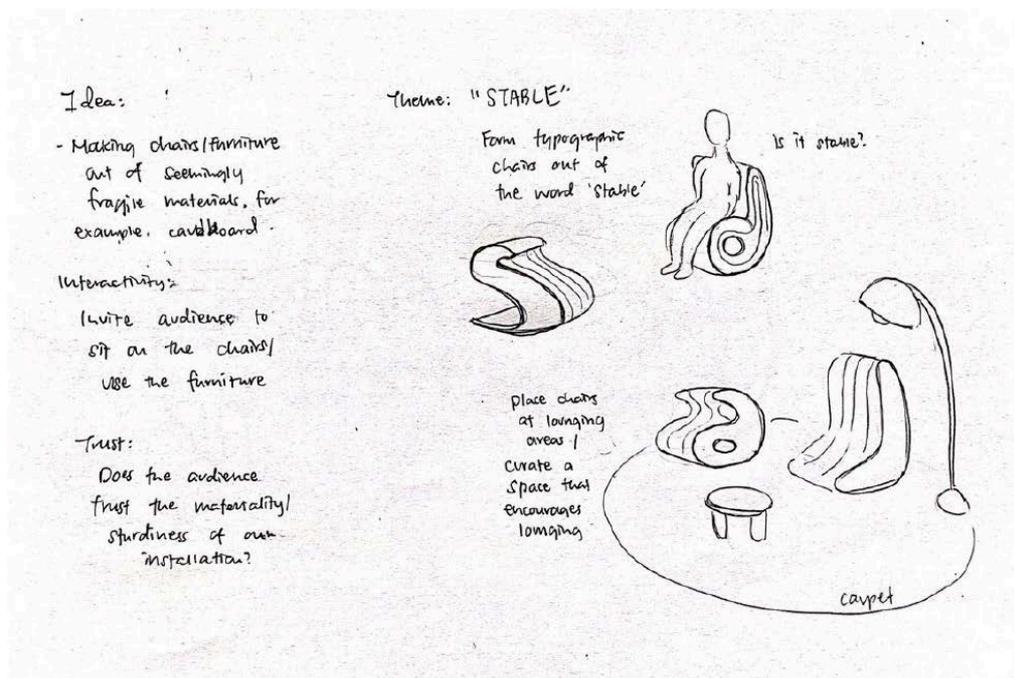


Figure.7 Ideation sketches depicting the use of materials in creation of 3D typographic installations. Here, the student considers how interaction the piece would create mistrust in the functionality of the materials.

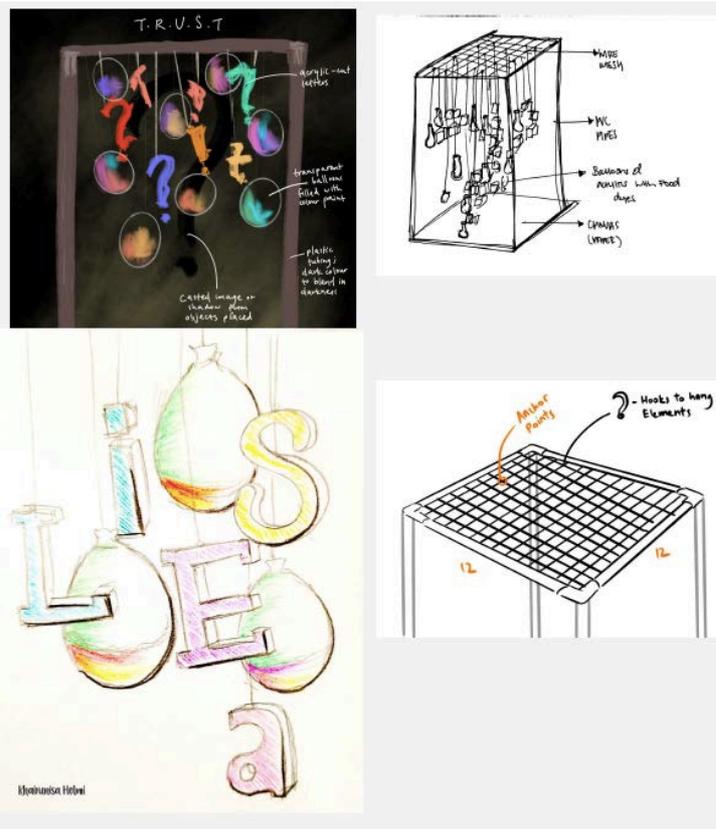


Figure.8 Ideation sketches. Here, the student considers how light could play a role in the use of materials and the effect this may have on the viewer.

3.4 Assigned Exercise 4: Case Study

Students were asked to individually choose a 3D typographic installation to analyse. They were prompted with the following questions as a means of analysis:

- Who is the designer/s?
- Where are they based?
- What materials did they use?
- Where is the installation displayed?
- Was the piece successful? Why/Why not?
- What could have been done better?
- What did they do well?
- What did you learn from this case that could be applied to your own work?

The idea behind this exercise was not only to expose students to contemporary typographic practice, but also to enable a holistic approach to the design problem. As opposed to other qualitative research methods, Teegavarapu, Summers & Mocko, (2009) suggest that case studies encompass many phases of research including, “(1) problem definition, (2) formation of hypothesis, (3) data collection or (4) data analysis etc”. Thus,

providing the holistic research framework envisaged. The students chose to analyse incredibly varied designers and typographic applications, thereby expanding their pool of knowledge and widening the scope of their own practice.

3.5 Assigned Exercise 5: Materials & Prototyping

This final exercise requested students to create low fidelity prototypes of their chosen design solutions and then to seek feedback from key stakeholders. They were instructed to document feedback, both positive and negative, and as a team create a plan to develop a high-fidelity prototype for final user testing. Prompts were given to consider the interactivity of the final installation and how the interactions may be continued after viewers left the physical space. The aim of this final testing phase was to ensure an iterative approach to the design problem by synergising abductive and deductive thinking to identify final creative solutions. This human centric approach also ensured that end users' needs were empathetically considered as a critical aspect of the refinement process as well as a means to test functionality.

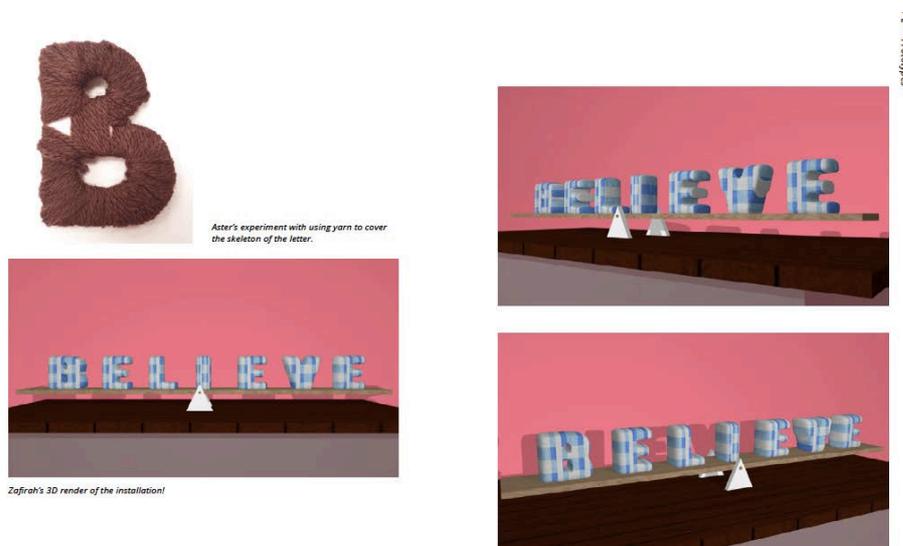


Figure.9 Physical and virtual prototypes, testing material functionality and conceptual clarity

4. Final Outcomes

As discussed at the offset of this paper, trust is a complex phenomenon, nonetheless one that regularly permeates our lives as an essential component in our social interactions. With this in mind, the challenges that students faced in this project were numerous; to make the intangible, tangible and to embody a concept so familiar, yet still decidedly ambiguous. The following section will now present the 6 final outcomes of this 11 week project and detail the conceptual thinking behind each installation in response to trust.

4.1 Group 1: Believe

Group 1 created an interactive installation requiring audience participation to balance a series of plush letterforms on a wooden see-saw platform. Each letter of the word 'believe' was hand crafted from colourful fabric, wool and cardboard and weighted with clay blocks to give each letterform a unique weight. In order to successfully balance the see-saw participants had to accurately kern the letterforms across the wooden platform. The concept behind this piece was based on the fact that the level of trust between two parties may not always be equal and that seemingly small actions could have much larger repercussions.

In the student's own words (Believe, 2019) "We understood more about the nature of the materials that we worked with as well... and learned a lot about the specificities of kinetics (reduction of friction in the see-saw's movement, the weight and balance of letters). We got to know our fellow classmates a lot better too during the project since it took a lot of time to create all the letters."



Figure.10 Believe a typographic balancing act

2.2 Group 2: Gossamer of Truth

This group broached the concept of trust by reviewing its fragility and presented the 'Gossamer of Truth' as an embodiment of broken trust. As a representation of honesty and transparency, the letterforms were laser cut from clear acrylic; upon closer inspection it was revealed that these transparent letterforms actually spell out the word 'betrayal',

insinuating that all may not be as it initially seemed. The sharpness of the letterforms abutting the delicate balloons was specifically intended to give the viewer a sense of unease as if the balloon could burst at any moment revealing the metaphorical lie within.

In the students' own words, (Gossamer of Truth, 2019) "In our installation, we aim to show how trust is beautiful. The transparent acrylic letters show how one can see right through something when a person takes that step to trust. The letters are also sharp and distorted. Put them next to the coloured balloons and these beautiful balloons might just be easily shattered. This shows the fragility of trust."



Figure.11 Gossamer of Truth - a visual commentary on the fragility of trust

2.3 Group 3: Sweet

Group 3 tackled this project by playfully addressing the somewhat serious notion of betrayal with the idea that some people trust far too easily. The team produced laser cut stencils to spell out several typographic applications of the word sweet and then utilised salt as their creative medium. The salt was coloured and scented to give the false impression that it was in-fact sugar! The unknowing participants were encouraged to use the templates along with the various coloured substances in order to populate the canvas with type. They were then enticed to taste the typography with some rather amusing results.

In the student's own words (Sweet, 2019) "The project was a success!! We tried out and managed to capture our audience reaction. Indeed, they did not think twice before tasting the 'sugar' and even took big spoonful. This really captured our concept of trust in this installation whereby we were trying to portray the characteristic of people who trust too easily."



Figure.12 Sweet Installation

2.4 Group 4: Don't Twist My Words

This installation required considerable problem-solving skills on the part of the audience which provided a fun, interactive and tactile experience. The 3-part exhibit was constructed from several concentric circles which were laser cut from transparent acrylic.

The raster function of the laser cutting machine was then utilised to etch out the typography on each circle, which when layers on top of each other at a specific angle formed a message of mis-trust. The idea being that the viewer would need to twist the circles into the right place in order to correctly decipher the message. Conceptually, this group focused on misplaced trust, visually communicating how not everyone can (or should) be trusted to represent your best interests, effectively twisting the words of another. Building on this idiom the group decided on a very literal portrayal of twisting words to create this modular, typographic configuration.

In the words of the students (Don't Twist my Words, 2019) "After reviewing the designs and prototypes we came up with, we realized instead of choosing one large design to work with, we can break up our installation into 3 smaller-sized ones of varying words. We came up with a sentence that can be broken into 3 separate phrases-"The truth gets warped, speak with caution or rumours will fly," These phrases can work individually with the accompanying phrase, "Don't twist my words" or can be added up together to form the full sentence.



Figure.13 Twist My Words Installation

2.5 Group 5: Now You See Me

This solution focused on the vulnerability of trusting and as with the previous group, required audience participation and interaction with the exhibit. The group fabricated a stable wooden frame which supported a large acrylic panel. Users were expected to stand behind the acrylic sheet and have water thrown at them in order to reveal a hidden typographic message, which stated 'Now you see me'. This 'invisible' type was created by stencilling the letterforms onto the acrylic panel using a waterproof shoe spray. This became visible for only a few seconds once a soap water solution was thrown at the panel. Slow motion videos were taken, and photographs captured the fleeting typographic message to document the outcome.

The students themselves (Now You See Me, 2019) commented, "Currently, the idea of tension and playing with anticipation can bring about interaction and also discomfort to our audiences." This piece was certainly uncomfortable and created a real sense of anticipation once you were stood behind the clear panel. It was necessary to trust that the students did, in fact, not intend to throw water all over their professor and fortunately in this case the professor stayed dry!



Figure.14 Now You See Me Installation

2.6 Group 6: Worth

This final installation explored the notion of trust being dependent on external factors; with the correct circumstances required to obtain and maintain trust. To express this, the group employed the variable element of natural wind as one aspect of the installation; making it interactive with the external environment within which it was positioned. When the environment was turbulent or unpredictable, for example the draft created when someone walked by the installation, the word 'worth' was distorted, as the visual embodiment of uncertainty.

In the student's own words, (Worth, 2019) "We wanted a word that has a rewarding meaning as the installation is in a way where the constructed word cannot be seen easily and requires the right condition. When the word is seen, there would be a sense of reward and worth to trust." The use of semi-opaque materials and hand rendered typography ensured that this, the final of the 6 installations, provided the audience with abstract notions of trust which were able to arouse curiosity and provide intriguing lines of dialogue questioning and enquiry.



Figure.15 Worth installation

5. Conclusions

The groups created 6 unique typographic installations, each utilising trust as the catalyst for their creativity. The resulting outcomes were varied in materials, applications, interactivity and interpretation of the complex notion of trust. Alternative and unconventional methods of creating typography were explored, ranging from edible type, to modular, movable type, type as a system, type with hidden meaning and type as art; each considering the nuances of typographic variables, typesetting conventions, and linguistic issues. By implementing the 4 'S' Approach ©, rooted in design thinking strategy, the teams were able to streamline the collaborative process and document each stage of their project with clarity. By utilising trust as part of a strategic design thinking creative practice, this project reviews how trust can be leveraged to improve, build and nurture collaborative relationships, with the ultimate aim to create a greater appreciation of typographic practice that extends beyond aesthetics alone.

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