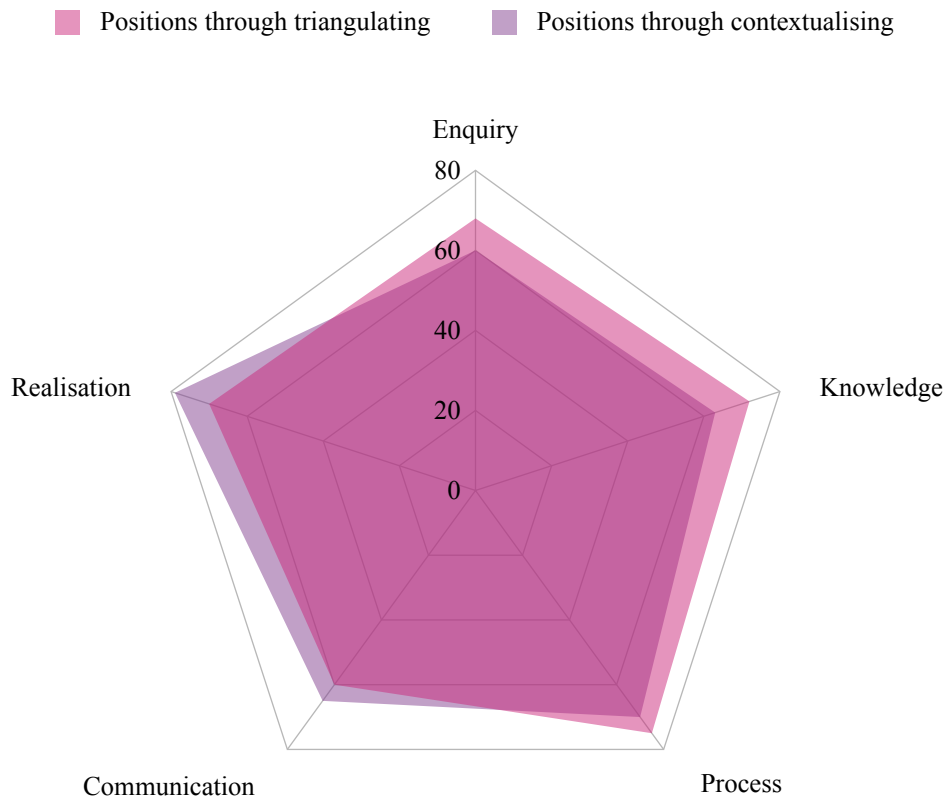


Δ 2 WRITING

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In the Δ1 STUDIO project titled “Positions through triangulating,” I narrowed down my initial work in Unit 2, focusing my research on the daily challenges and personal narratives of individuals living with asthma. Asthma is a non-communicable, invisible, unpredictable, and incurable chronic lung disease, primarily caused by air pollution and asthma triggers. Common symptoms of this disease include chest tightness, shortness of breath and difficulty breathing. According to the World Health Organization, asthma affected an estimated 262 million people in 2019 and resulted in 455,000 deaths. The climate crisis is also a health crisis, and this realization and resonance led me to delve into discussions surrounding this ailment and its connection to air pollution, sparking my curiosity and exploration of the key question, “How can the link between asthma attacks and air pollution be visualized effectively through information visualization?” This curiosity propelled my inquiry and work forward, enabling a more meticulous observation and experimentation. I furthered my research through an interdisciplinary approach, learning from and studying the works of designers who have explored information visualization and asthma-related projects. For

instance, references such as Tiziana Alocci's "Necessity Collection" (Alocci, 2021), Giorgia Lupi's "Bruises: The Data We Don't See" (Lupi, 2018), and Julian Young's "hyeperVENT" (Young, 2021) provided significant support and inspiration for my study on asthma.

However, Manuel Lima's "Information Visualization Manifesto" (Lima, 2009) has provided me with a new understanding of information visualization, prompting critical thinking and challenging me to reconsider my stance in my work. This reference, authored by Manuel Lima in 2009, is presented in a concise style, with a positive tone and a web-based medium, which effectively conveys the key principles and responsibilities of information visualization, aiming to stimulate discussions and reflections within the information visualization field among practitioners, researchers, educators, students, and interested readers. For me, it serves as an enlightening guide to follow. In this manifesto, Manuel, as a designer, writer, and lecturer in the fields of information visualization and visual culture, engages in dialogue and reflection with industry professionals. Through illustrative examples, he argues against the behavior of treating aesthetics as the sole pursuit within the context of information visualization. He acknowledges that information visualization and information art can coexist but require a clear demarcation and a middle ground to avoid gratuitous ornate experiments, thus promoting the exchange of ideas, methods, and techniques. Through a clear argument spanning four sections, Manuel emphasizes the need to redefine the objectives of information visualization, namely functionality, interactivity, interpretability, and diversity. He succinctly presents ten directions for any project in the field. Manuel mentions in the manifesto, "To the growing amounts of publicly available data, Information Visualization needs to respond as a cognitive filter, an empowered lens of insight, and should never add more noise to the flow." However, for information art, aesthetics take precedence, focusing on creativity and expression. Aesthetics are an important quality for information visualization, but not its ultimate goal. Therefore, there are clear differences in objectives and methods between the two. Manuel hopes that through this manifesto, readers and professionals in the field will develop critical thinking and insight, thereby inspiring higher levels of practice in information visualization.

The publication of this manifesto sparked mixed discussions and reactions, which have provided me with new insights for my work. On one hand, I align with this reference in

recognizing that information visualization is not just a powerful tool but also a tool for discovery that can effectively communicate and solve problems, helping people better understand complex or unknown information. Information visualization also provides an opportunity for me to push my own boundaries, learn new knowledge, and it is both engaging and challenging. This is precisely why I chose to employ information visualization to explore the research topic of asthma in this project, with the aim of conveying the severity of this disease to the audience. On the other hand, this reference, to some extent, **contradicts my previous thinking**. As a graphic communication designer exploring information visualization in an interdisciplinary context, my knowledge of the field remains relatively limited. I often found it challenging to distinguish between information visualization and information art. In my work for the $\Delta 1$ STUDIO project, aesthetics became the primary consideration for my visualizations, and I failed to incorporate the functionality of information into my work objectives. Despite being an asthma patient with personal experiences and insights into the disease, and spending time collecting a substantial amount of respiratory audio data at specific time intervals, comparing it with data from healthy individuals for visual representation, my experimental visualizations of asthma patient respiratory sounds were recognized primarily at a technical level. As Manuel Lima pointed out, **“simply conveying data in a visual form, without shedding light on the portrayed subject,”** **my visual work was overly straightforward, lacking a clear depiction of its relationship with air pollution, deeper layers of information and emotion, or a clear explanation of my inquiry.** These elements are precisely the principles that a good information visualization piece should adhere to.

As Manuel Lima succinctly stated, **“A core ability of Information Visualization is to translate information into knowledge,”** and echoing Ben Shneiderman’s words, **“The purpose of visualization is insight, not pictures.”** This reference has brilliantly highlighted the distinction between information visualization and information art, serving as a timely reminder of the shortcomings in my current work and the need to avoid creating projects in this field that prioritize aesthetics over functionality. **Engaging in a dialogue with Manuel Lim’s “Information Visualization Manifesto,”** I have clarified that my work should target the educational community, students, and environmental activists. My position should be centered on how to visualize the link between asthma attacks and air pollution, presenting the daily challenges and emotions of asthma patients through personal narratives. This serves to

promote lung health awareness and emphasize the importance of air pollution. Therefore, in my upcoming information visualization work, I will focus on these premises to guide my efforts. Throughout the process of “thinking through making,” I will adhere to the principle that “form follows function,” ensuring a clear and accurate response to inquiries and effective information conveyance.

In summary, this reference has prompted critical self-reflection on my prior work, leading to fresh insights and perspectives on the key questions I've been exploring. It has also emphasized the importance of balancing functionality and aesthetics within the field of information visualization.

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