On Maps

Vivien Zhang October 2025



fig.1 Installation view Vivien Zhang: Paths Unseen Aranya Art Center North May 27 - November 23, 2025 Photography Sun Shi

Maps – the diagrammatic art of tracing our knowledge and our capacity to imagine the world as a whole – are a foundational way of looking at and thinking about how we relate to the world we inhabit. They have been an anchoring point for my paintings over the past five years, and I mean a particular kind of map: the *map projection*.

Map projections are transformations and displays of the globe's spherical surface onto a flat plane. They are a wrestle between two- and three-dimensional space. This question is not merely geological, but one that artists have pondered, translated, and reconciled for centuries.

Complicating this relationship is the tension between the dissemination of knowledge and the creation of art – the delicate balance between the factual and the imaginary. Chinese maps in the eleventh century, for instance, were often re-categorised as "gazetteer" (zhi, \bar{z}), rather than "map" (tu, \underline{z}) – a direct result of the triumph of textual, descriptive data over symbolic, visual representation. Mapping in China historically prioritised factual statistics over the imaginative rendering of faraway lands.

This long tradition of mapping as moral and textual description found an unexpected turning point in the late sixteenth century, when ideas about global space and visual representation began to cross continents. When the Italian Jesuit priest Matteo Ricci arrived in Guangdong in 1582, he introduced to China the first map of the world that depicted a spherical earth, five large continents, and a worldview integrating China into a global network of nations. Though not new to Chinese mapmakers, the spherical view of Ricci's world map had given way to flat, square iterations emphasising moral and political order over geography. Ricci "translated" this map into Chinese, producing the *Kunyu wanguo quantu* (坤與万国全图,1602) [fig.2] – the first Chinese world map to incorporate European geographic knowledge.



fig.2 Matteo Ricci kunyu wanguo quantu 1602

One of the most remarkable reactions to Ricci's map, however, was to its illustration of the vast distance between the Chinese kingdom and the Western world – the map is suspected to have been intentionally elongated lengthwise by Ricci to exaggerate that distance. A murmur of relief spread amongst scholars and imperial elites as they were presented with this new global overview; fears and anxieties of an imminent Western invasion instantly lifted.

Ricci, and later another Jesuit priest, Ferdinand Verbiest, who arrived in China in the 1650s, nonetheless were exceptional diplomats with an eye for discernment. Both missionaries' world maps, designed for presentation to the Chinese dynasties, centred China and the Pacific at the middle of the map in lieu of the then conventional European centring. It is this importance of the vantage point that map projections remind us, remind me, remind artists, of the accountability and authority of the storyteller.

This nuance of vantage point continues to reverberate not only in the design of the maps, but also in their display and interpretation. Ricci's map, nicknamed *The Impossible Black Tulip* (for its rarity and recalling the tulip mania of the Dutch Golden Age), was printed on panels of rice paper that together formed six folding screens. Ironically, in 2010 at the Library of Congress, Washington, D.C., a surviving copy was displayed opposite the 1507 *Waldseemüller World Map* [fig.3], a map that focused Europe at its centre. Two ways of looking at the world had a face off. Vantage points, on point.

I am certainly not alone in this fascination with maps, and in my attempt to chart our relationship to the world and each other through them. Mona Hatoum's Routes II (2002) [fig.4] is a case in point: the work maps our globe through movement, tracing flight routes rather than national or political borders. Olafur Eliasson's Daylight Map (2005) chronicles the world through the passage of light; illuminating, using neon tubes, the movement of daylight across international time zones. Alighiero Boetti's La Mappa del Mondo series (1971-1989) employs the fairer Robinson projection and embraces the "mistakes" of the Afghan craftswomen who produced the works for the artist – seas rendered in whatever colour thread was available, borders blurred by unconscious inaccuracies. Other maps, such as Greyson Perry's Map of an Englishman (2004) [fig.5] and Qiu Zhijie's Mapping the World Project (2015-2017) more explicitly outline personalised geographies, portraying worlds shaped by the interior mind rather than exterior reality.

My arrival at map projections, in particular, the Cahill butterfly map [fig.6], lends much credit to the curved Releaux triangle. It happened through a relay of visual associations, born out of content-based image retrieval: a journey from Johannes Itten's theory on the colour of shapes (Itten assigned the curved triangle to the colour "green") [fig.7], to the Releaux triangle [fig.8], to Leonardo da Vinci's mappa mundi (c. 1514) [fig.9], and finally, the Cahill butterfly projection. It is a journey that metaphorically mirrors the latticework that is our interconnected world.

The myriad of map projections developed over the past centuries (each rooted, to my delight, in some form of geometry) strive to represent our world with greater fairness and accuracy. Yet it is the Cahill butterfly



fig.3 Waldseemüller World Map 1507



fig.4 Mona Hatoum Routes II 2002



fig.5 Greyson Perry Map of an Englishman 2004



fig.6 B. J. S. Cahill Cahill butterfly map version 1915



fig.7 Johannes Itten in Bauhaus c.1920

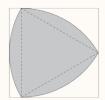


fig.8 Reuleaux triangle



fig.9 Leonardo da Vinci's *Mappa mundi* c. 1514

map – manifested in such an elaborately organic shape – that has piqued my imagination. There's something metaphysical about this iteration: the map facilitates navigation and therefore movement and migration, but nevertheless, it echoes a species whose migratory patterns remains only partially understood – butterflies.

If a map projection is like the skin of the earth, then the skin of the butterfly is in its colouring. Its pattern is written from a vantage point not its own: evolved for the eyes of its predator. Whether as camouflage (as in the clearwing butterfly) or as a warning signal (as in the Melinaea butterfly), its surface becomes both protection and communication: a record of its own relationship to its environment.

Just as the butterfly's patterned surface reveals hidden structures of adaptation, the map projection exposes its own logics of distortion and selection. Map projections are as much about what is represented as they are about the cartographer and map's intended purpose. Every projection carries distortions – most often at its edges. Much depends on what is placed front and centre.

Maps may appear as objective means to counter subjectivity; yet, it is precisely the interpretive aspect that truly unlocks their design. The literacy and knowledge of the reader form as much a part of a map's meaning as its geometry. Just as one can never see the globe in its entirety – the far side can never be perceived in the same instant as the front side – we can never unravel a painting in its entirety, nor should we. To read maps, one might use tools such as Tissot's indicatrix to chart areas of distortion; and in reading an artist's work, one brings not only analytical tools but also experience and baggage. It is, after all, an exchange of vantage points and vulnerabilities.

Image sources:

- [1] Installation view, Vivien Zhang: Paths Unseen, Aranya Art Center North, May 27 November 23, 2025, Photography Sun Shi
- [2] Ricci's Kunyu Wanguo Quantu, https://umedia.lib.umn.edu/item/p16022coll251:8823
- [3] Martin Waldseemüller's World Map, https://www.loc.gov/collections/discovery-and-exploration/articles-and-essays/recognizing-and-naming-america/
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- [9] Leonardo da Vinci's mappa mundi, https://en.wikipedia.org/wiki/File:Leonardo_da_ Vinci%E2%80%99s_Mappamundi.jpg

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