

THE ART OF TERRESTRIAL DIAGRAMS IN EARLY CHINA

By Michelle H. Wang

University of Chicago Press, 2023

256 pages

Hardcover: \$55.00, ISBN: 978-0-226-82746-9

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The Art of Terrestrial Diagrams in Early China is a methodical exploration of the meaning, process, and mythology surrounding the artifacts known as *ditu*, a little-known form of spatial representation practiced in ancient China, predominantly in the centuries before the common era (BCE). The extraordinary artifacts examined in this book were uncovered in archaeological excavations of Chinese tombs at sites in Zhongshan, Fangmatan, and Mawangdui that can be dated to between the second and fourth centuries BCE. Their discovery and identification amongst the grave goods in these three ancient and widely separated tombs provides an opportunity to learn about these artifacts firsthand.

Author Michelle H. Wang holds a PhD in art history—specializing in the art and archaeology of China from the tenth century BCE to the third century CE—and her study of *ditu* draws upon the history of cartography as well as on the disciplines of art history, architecture, material science, religion, and philosophy. It is her particular interest in early notational systems that leads her to focus on what she sees as the trickiness of categorizing these artifacts.

Until their discovery in the 1970s and 1980s, the existence and nature of these map-like objects was known only from the derogatory and hearsay remarks of later commentators. On the one hand, the term “ditu”—compounded of “di,” (terrestrial) and “tu,” (diagram)—is the common (contemporary Mandarin) Chinese word for “map.” On the other

hand, *ditu*, collectively, represent a type of mapping significantly different from that of other early Chinese maps that have hitherto been available.

While much early mapping in China was focused on practical, military, or bureaucratic use, and leveraged sophisticated topographic and land survey techniques, *ditu* were often created in anticipation of, or following, the death of an individual of notable social standing. While some *ditu* offered instructions for the living on how to honor and support the deceased, others were intended for use by the deceased themselves and other persons they would presumably encounter in the afterlife. *Ditu* varied in their construction, ranging from inscriptions on wood boards to images cast in bronze, silver, and gold, with materials reflecting the social rank of the persons for whom they were crafted.

Are they *maps*, or are they *diagrams*? What would make them either one or the other? Does the difference matter? Why make a distinction?

Wang argues that “normative” maps in ancient China were tools of utility—constructed in conformation to explicit and rigid rules of scale, consistency, and use—while the *ditu* were instead tools of philosophical expression and embodiment, and thus more akin to art than to science. Because the *ditu* fall short of strict adherence to scale as the foundation of their logic, Wang maintains that they are marked out as fundamentally different in kind from



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maps: that, in fact, they are not maps but are instead diagrams. In support of this, she cites examples of *ditu* from the Fangmatan and Mawangdui tombs where scale or consistency of pattern may seem present at first glance, but closer inspection causes this impression to break down (115). This breakdown of what Wang sees as the core characteristics of normative mapping definitively disqualifies *ditu* as maps.

Wang also recognizes that *ditu* offer a similar experience to the kinds of artworks and musical compositions that Alva Noë (144, citing Noë 2015) refers to as “strange tools”—works that function as a means by which individuals may experience a type of confusion that allows them to investigate themselves with new perspective. In Wang’s view, *ditu* were the strange tools used by the people of that time and culture when setting off on their postmortem existence; a use that also distances the *ditu* from the common run of maps.

Furthermore, Wang goes to great lengths to distinguish artworks—including strange tool artworks—from maps. Denis Wood and John Fels, in their book *The Nature of Maps* (2008), use similar arguments to differentiate map from art. Wang’s discussion dances between qualities of the creator’s intention and method, the capacity of materials to represent the intention, and external realities (accuracy to the actual location being mapped). Readers of *The Art of Terrestrial Diagrams in Early China* will likely not come away with any simple formula for deciding what qualifies as a map. However, while there is a risk that this nuanced assertion might sidetrack the reader’s attention, it should not be allowed to detract from Wang’s salient point—to illustrate the value of *ditu*’s capacity to connect real-world physical locations with cultural and religious concepts of place by inhabiting a liminal space simultaneously holding some of the characteristics she ascribes to maps and some of those she assigns to diagrams having artistic and expressive qualities.

Wang maintains that most people using maps make the same, or similar, distinctions. They presume that all maps adhere to conventions she calls normative, and characterizes as rational, mathematical, and Apollonian—that they aspire to be rigorously mathematical representations of real-world spatial locations that support and facilitate calculations in linear or areal units. She tells us that such conventions assert their power through material reality, in

that the map user can confirm the map’s conjectures by physically visiting the place it represents.

In opposition to this Apollonian (reasoned and ordered) characterization of maps, Wang positions diagrams as Dionysian (passionate, emotional, and instinctual)—that is, as visualizations representing knowledge and concepts that we cannot visit and confirm so easily. Diagrams, she writes, pick up where maps leave off, sidestepping mathematical regularity and blurring any boundaries that many map users would suppose exist between the subjective nature of personal experience and the objective, seemingly factual nature of the world in which we live. According to Wang, diagrams bend to the whims of their creators or commissioners—think of the abstractions that can be found in mind maps, theoretical maps of the universe, or the geometric diagrams of the heavens found in Buddhist texts.

It is with this fundamental struggle between the rational and the irrational that Wang introduces and frames her insightful exploration of these terrestrial diagrams.

The book’s four chapters are dedicated to meticulously unpacking the contents of each of the three tombs—the third tomb, Mawangdui, gets two chapters—with special attention to the *ditu* they contained. Wang explores the historical and cultural context of each of the *ditu*; pouring over the materials and the production process of each in an exploration that tethers postulated postmortem realities back to the materials they are composed of: metal, wood, silk, and ink. Readers will delight in the numerous high-fidelity color images included in the book, allowing us to see the nuances of the *ditu* for ourselves, albeit partially obscured by the patina of centuries below ground.

Chapters 1 through 3 also acquaint us with the deceased occupant of each tomb—individuals whose culture and societal status influenced the creation of the *ditu* buried with them. In Chapter 1, we encounter the first tomb: the resting place of the powerful King Cuo of the fourth century BCE Warring States-era kingdom of Zhongshan, whose *ditu* instructs the king’s staff in the afterlife to construct a grandiose burial tomb. Chapter 2 introduces us to the third century BCE tomb of a lowly Qin dynasty scribe whose burial artifacts include *ditu* of semi-factual lands adhering to bureaucratic formalities, along with a strange narrative of his resurrection. The resting place of

the chancellor of a city of strategic military significance is the topic of the third chapter. The *ditu* preserved there offer military advice and divinatory instructions for success in warfare.

Early on in her discussion, Wang draws a careful distinction between two types of *ditu* encountered in the tombs—*shenqi* or “articles of the living” that were created for real-world, tactical application, and *mingqi*, or “spirit articles,” that were created for use in the afterlife—and she takes great care in identifying the purposes that the diagrams in each tomb served. Spoiler alert: the majority of diagrams and other grave objects considered in this book were custom-made for the deceased!

The *Mausoleum Diagram* (Figure 1) in Chapter 1, “Zhongshan and Plans for Life After Death,” is the plan for the grand tomb of King Cuo—who died circa 313 BCE—and the location where it was to be constructed in present-day Sanji, Pingshan County, Hebei Province. The

diagram is made of hardy stuff—cast in bronze and inlaid with gold and silver—and is representative, Wang tells us, of a category of artifacts that held a “planning” function for the deceased (as in plans to be enacted after death), placing it squarely into the category of *mingqi* (spirit articles).

For the *Mausoleum Diagram*, form follows function; and the function it serves is not that of tomb erection. Wang notes several reasons why the diagram’s translation to a building would be challenging, one among them being the various materials used in the diagram’s creation that would have thwarted any builder’s attempts to extract scaled measurements to build the actual structure, due to limitations in the ability to preserve scale throughout the process of creating a clay mold and casting the bronze *ditu*. Wang writes, “Even a single centimeter of shrinkage either when the clay dries or when the bronze cools results in hundreds of meters of deviation in the dimensions of the site” (51). Furthermore, that shrinkage will vary across the entire *ditu*, rendering scale uneven. She notes, too, that details of

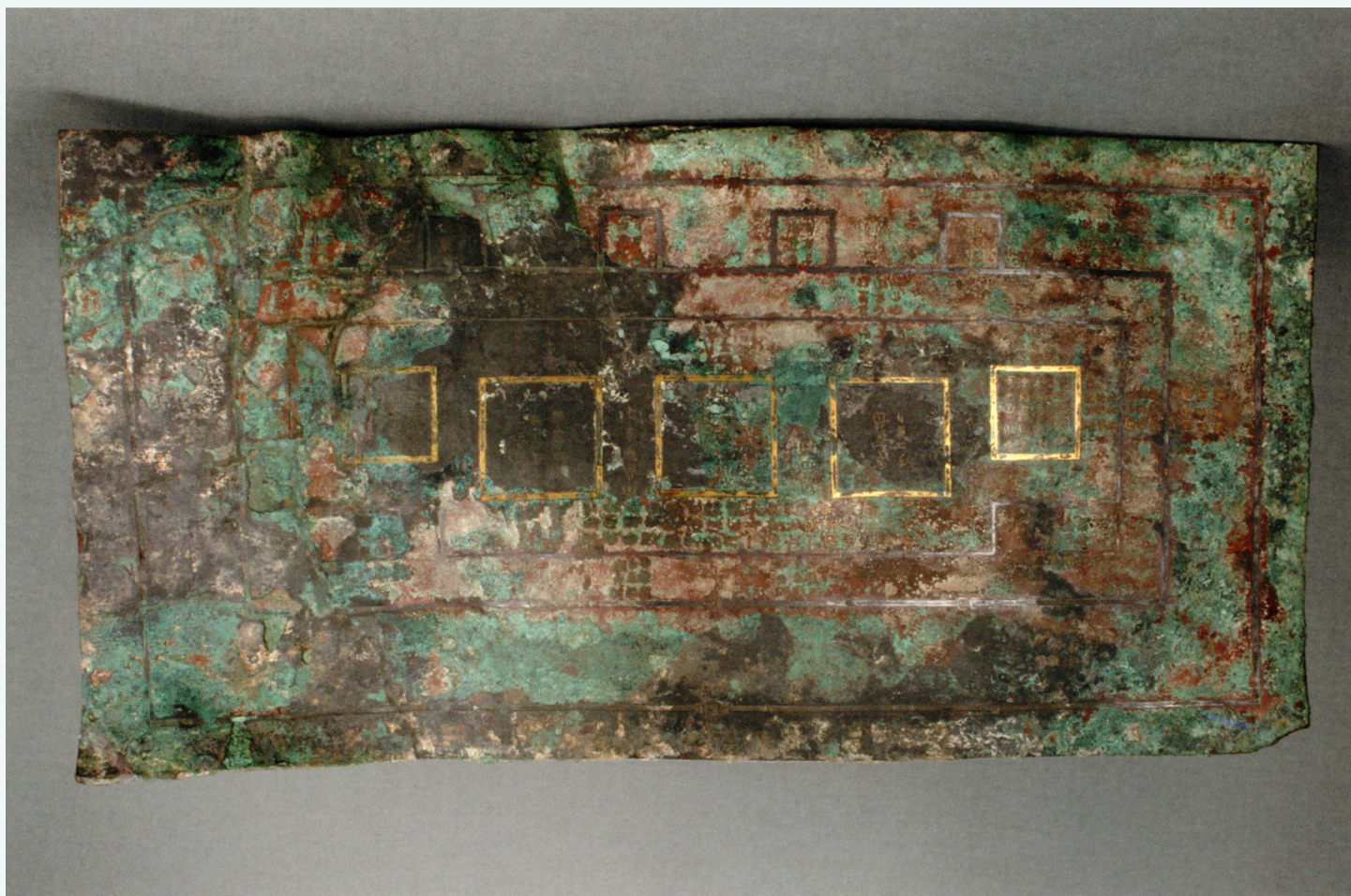


Figure 1. Mausoleum Diagram (Zhaoyu tu), ca. 313 BCE, excavated from Zhongshan tomb 1 in Sanji, Pingshan County, Hebei Province. Bronze with gold and silver inlay, 48 × 96 × 0.7–1.2cm. From Chapter 1, page 28.

construction are generalized beyond utility, yet still coherent in and of themselves. When it comes to the layout of chambers and hallways, Wang observes that these structures are positioned with an eye towards symmetry and ritual movement, rather than actual architectural practicality, thus rendering the layout symbolic, and the goal of the map as auspicious rather than constructionist.

Thus, Wang asserts, the viewer is asked to trust that the ditu's purpose will be achieved in an otherworldly, post-mortem space that we in this physical space cannot confirm with our own eyes. These observations and theories exemplify Wang's unique perspective and talent—to leverage knowledge of material science and fabrication drawn from an art historical perspective—and immerse the reader in the time and culture within which the ditu were created.

The ditu from the Fangmatan tomb in Tianshui, in Gansu Province are examined in Chapter 2: "Fangmatan and the Bureaucratization of Space." These diagrams offered an assurance to the tomb's occupant—a lifelong, low-level governmental functionary—who may have feared that death would be overly chaotic, by indicating that the familiar bureaucratic processes governing this world would extend into the next. This reading is supported by a document written on seven long, thin bamboo strips, recounting a most uncanny story of "Dan" (a scribe who may have been the person buried in the tomb), who is temporarily permitted to return to the land of the living after the netherworld bureaucracy clears him of injustice suffered at the hands of the mortal justice system.

The last two core chapters—3 and 4—are perhaps my favorites. They explore the site in Mawangdui, located in Changsha, Hunan Province, which houses three Western Han dynasty (168–206 BCE) tombs. Artifacts from the third tomb include a pair of magnificently detailed ditu drawings rendered in ink on silk. Buried along with a chancellor responsible for a region of strategic importance to the Han empire, the *Garrison Diagram* and *Topography Diagram* (Figure 2), address military concerns and activities.

At first glance, these maps were thought to be shengqi (articles for the living), presenting a level of consistency that shows careful attention to spacing, form, and line that suggests they might have been used for actual, tactical military purposes. Nonetheless, Wang—citing scholars



Figure 2. Recreation of the Topography Diagram (Dixing tu), Western Han Dynasty, (206 BCE–9 CE), excavated from Mawangdui tomb 3. Original is ink and pigment on silk, 96 x 96 cm. From Chapter 4, page 113.

whose work complements her own examination (Hsing I-tien 2014; Yee 2001)—reveals the diagrams to be, in fact, mingqi—or “spirit articles”—highly stylized ornamental tessellations of the natural landscape favoring uniformity in shape, curvature, and proximity, (very much comparable to patterns seen in embroidery) which ultimately favors artistic form over function.

Chapter 4, “Mawangdui and the Art of Strategy,” moves further out into the peripheries of the visible world and its interpretation, through examination of some of the other beautiful diagrams from the Mawangdui tomb. Some offer advice on prognostication for warfare purposes, conveyed through visual instructions for reading omens in clouds, rainbows, comets, and eclipses.

In this mingqi form of ditu, we find diagrams that morph into tools of prognostication, yielding meaning-making control to an individual's local circumstances. The underlying logic and conclusions to be drawn from each diagram are left to the observer—creating what, in 2007, Donald Harper called a “purposeful polyvalent map” that sets “observed phenomena into a larger scheme of significance” (Harper 2007, 169–189). In this case, the ditu function as a lens through which to view one's environment, appealing

to nature and begging the blessings of the cosmos itself. A careful reader will appreciate here that an observation made by Wang earlier in the book—that “humans are situated at the heart of any interpretation of heaven and earth” (12)—has come full circle.

In the book’s closing section, “Coda: Tunnel Vision,” Wang offers Massimo Vignelli’s 1972 New York City subway map as a modern analogy to this conceptually abstract situation. She writes that Vignelli’s highly stylized, abstracted map required riders to disconnect from real-world landmarks, and to travel through unknown spaces guided by simple geometric symbols in what could be seen as a ditu-like way—a way more extreme than what is commonly demanded by other maps. This leap was too much for many subway users, leading to a major revision that aligned the map more closely with above-ground coordinates. Protesting the changes, Vignelli responded, “Who cares? You’re underground, or you’re above, you don’t even know where you’re going” (76, citing Lloyd et al. 2012, 76). The author draws a parallel between this sentiment and the perhaps more extreme and magical logic of the ditu makers. The latter trusted that their creations would manifest traversable worlds for the deceased, guiding them to their next station in the afterlife, regardless of whether or not they knew where they were going.

I find that the framework Wang adopts for looking at these early Chinese ditu maps invites us to reconsider the origins of many of the foundational logic systems we use today, as well as the circumstances under which they arose.

In particular, I recognize Wang’s interpretation of the ancient ditu as congruent with the hierarchy of needs introduced in Abraham Maslow’s 1943 paper “A Theory of Human Motivation.” Ditu were produced to provide a sense of safety in the face of death—a sense Maslow considered to be a fundamental human need. They also offered prestige to those who wielded them—prestige being another thing Maslow considered to be a goal towards which humanity inherently strives. Lastly, they served as creative inspiration to those who look beyond their immediate utility to wonder at their implications—showing that the ditu are indeed strange tools: abstract before charted, ineffable before spoken. Examining modern maps, we can find similar motivations and opportunities for reflection.

As someone with educational roots in both fine art and psychology, and who works in a company with deep ties to GIS and cartography, this book came as an unexpected delight. I imagined I might learn a few interesting things about early Chinese diagrams and mapmakers. Little did I know I would be taken on an expansive journey, exploring sense-making throughout history and the beautiful ways people have found to represent abstract notions in visual form.

Wang’s writing can be dense and methodical at times, but I encourage readers to jump in and stay with it. The investigations in this book are thorough, and they clear away the dust of time to reveal the significance of these artifacts in the history of not only cartography but of philosophy as well. Emerging from each round of rigorous investigation, readers will recognize the work these strange tools enable; a vision that looks past the resplendent qualities found in each ditu and their connections to the external world, to the inner luminous landscape of creative human nature.

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