



From “Introduction: Why Water?”

Dixit vero Deus congregentur aquae quae sub caelo sunt in locum unum
et appareat arida factumque est ita et vocavit Deus aridam terram
congregationesque aquarum appellavit maria at vidit Deus quod esset bonum.
– Genesis 1:9–10, Vulgate

Und Gott sprach: Es samle sich das wasser unter dem himel an sondere örter, das
man das trocken sehe. Und es geschach also. Und Gott nennet das trocken Erde,
und die samlung der wasser nennet er Meere. Und Gott sahe es fur gut an.
– Genesis 1:9–10, Martin Luther, Biblia/ das ist/ die gantze Heilige Schrift
Deutsch (1534)

God said againe, Let the waters under the heaven be gathered into one place, &
let the drye land appeare. And it was so. And God called the drye land, Earth, &
he called the gathering together of the waters, Seas: & God sawe that it was good.
– Genesis 1:9–10, The Geneva Bible (1559)

The earth is surrounded by water, just as that is by the sphere of air, and that
again by the sphere called that of fire (which is the outermost both on the
common view and on ours). Now the sun, moving as it does, sets up processes of
change and becoming and decay, and by its agency the finest and sweetest water
is every day carried up and is dissolved into vapor and rises to the upper region,
where it is condensed again by the cold and so returns to the earth. This, as we
have said before, is the regular course of nature.
– Aristotle, Meteorology 2.2, 354b23–32

These texts provided the foundation through which many Europeans from the patristic period through the sixteenth century understood water’s contemporary ontological and spatial relationships to the earth. Both the Book of Genesis and Aristotle’s Meteorology provided explanations of how water related to the earth, including why water did not currently submerge dry land where it existed in the world. According to Genesis, primordial water had entirely immersed it until God commanded this primordial water to come together in one place on the third day of creation, thereby providing a dry place for people, animals, and plants to live, and fashioning the basis of the current layout of the world’s waterways and landmasses. Whereas God is responsible for the ontological and spatial relationships between water and earth in Genesis, Aristotle viewed these relationships as a part of the regular course of nature. In his works on natural philosophy, or libri naturales, he divided the sublunary world into four concentric, elemental spheres with earth at the center, surrounded by the spheres of water, air,

and fire in that order. Recognizing that some dry land stuck out above water, Aristotle juxtaposed an assertion of the existence of these four concentric, elemental spheres with an explanation of a hydrologic cycle, implying, though not actually stating, that water's natural process of change from a liquid to a vapor and back to a liquid allowed for earth to emerge above water wherever it did so in the world.

Whether attributing water's relationship to earth and their spatial arrangement to God or nature, both Genesis and Aristotle's *libri naturales* still left open the possibility that water could and perhaps should currently inundate the dry land, drowning plants, animals, and people alike wherever they existed. Whereas the flood narrative of Genesis 6–9:17 showed what had happened when God ceased to hold water back from the earth to punish people for their sins, Aristotle ultimately wrote very little on the actual relationship between the spheres of water and earth. The ontological status of the dry land's existence and its location vis-à-vis water sparked commentary from and discussion among European exegetes, natural philosophers, geographers, and cosmographers from the patristic period into the sixteenth century. Though this commentary and discussion persisted for more than a millennium, the explanations these European authors gave of the water-earth relationship and their spatial arrangement changed, depending on the time period in which they were written. Though patristic and medieval writers tended to argue that the natural order God had established through creation and the promise he gave to Noah in Genesis 9:11 explained why the dry land currently existed where it did, sixteenth-century authors of exegetical, natural philosophical, geographical, and cosmographical texts provided a much wider variety of explanations for the water-earth relationship and placement, claiming that this relationship and placement were natural, preternatural, supernatural, a miracle, or even a wonder. The discussion of water vis-à-vis the earth in Augustine of Hippo's (354–430) fourth- and fifth-century works, the *Literal Meaning of Genesis* (*De Genesi ad litteram*) and the *City of God* (*De civitate dei*), and John Calvin's (1509–1564) *Commentaries on the First Book of Moses Called Genesis* (*In primum Mosis librum qui Genesis vulgo dicitur*, 1554) illustrates some of these differences. For Augustine, all processes in the world could be understood as simultaneously miraculous and natural as he claimed that creation itself was a miracle that God had implanted with all possibilities for future natural processes. His explanation for the contemporary water-earth relationship in *De Genesi ad litteram* focused on this natural order, though. His first explanation posited that water was different before the third day of creation. He argued that before the third day, primordial water

could have been a thin vapor, much like a cloud, which hovered over the entire earth. It only became the denser, less expansive substance people currently experienced in nature after God commanded it to gather into one place. In his second explanation, Augustine pointed to the earth's natural position to explain why water did not currently submerge it. According to this explanation, the earth settled during creation, providing hollow places within it for the primordial waters to flow. Since the earth rested on solid supports, it naturally extended over the primordial water that filled its caverns and hollow places. In contrast, John Calvin argued vehemently that water's failure to flood the dry land was an illustrious miracle. Drawing on Aristotle's notion of concentric, elemental spheres that should nestle inside one another, Calvin argued that water would entirely flood the earth if it were to follow its natural propensity, and he credited God's active and continued intervention into the world to restrain water from the dry land.

This book explores how authors of this wide range of texts from the patristic period into the sixteenth century understood water's ontological and spatial relationships to the earth. It seeks to explain why the relative agreement between patristic and medieval authors about water's relationship to dry land began to break down in the sixteenth century. It argues that the influx of ancient texts, religious reformations, and fifteenth- and sixteenth-century European sea voyages led these authors to reconsider the relationship between the water and earth, including the layout of the world's landmasses and waterways. Though newly perused ancient texts and different understandings of how God related to the universe and to people certainly led these authors to examine their basic understandings of the world, fifteenth- and sixteenth-century sea voyages to sub-Saharan Africa and the Americas led them to conduct this re-examination in the context of water and its relationship to the earth. Discovering that water did not entirely submerge the Southern Hemisphere of the globe as many medieval authors had argued and encountering the people who lived there either directly or through rumors and printed works, these authors focused on the topic of water as a means through which to redefine a universe that experience revealed to be different than they had previously imagined....