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Has There Ever Been a Divide? A *Longue Durée* Perspective

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ABSTRACT

This essay investigates the origins of the divide between what we nowadays refer to as the “sciences” and the “humanities.” It argues that from the third century BCE onward, there have been two opposing scholarly practices: searching for patterns versus understanding the unique. A *longue durée* analysis suggests that this opposition does not originate from a divide between the sciences and the humanities but from two opposing approaches in the humanities. Both approaches still prevail today.

There is no doubt that the idea that the sciences and the humanities are divided has been, and still is, very much alive. It structures the entrenched organization of the university; and it is taken for granted in academics’ everyday thinking. While the idea of the divide comes in many forms, one notion has become particularly influential, namely, the idea that the sciences are dominated by the search for the general, that is, for laws and patterns, while the humanities are concerned with understanding the particular without searching for patterns or laws. This notion of the divide is usually attributed to Wilhelm Windelband, namely, his opposition between the *nomothetic* and the *idiographic*.¹ This opposition continues—implicitly or explicitly—to play a role in the work of contemporary authors such as by Hans-Georg Gadamer, Jürgen Habermas, Martha Nussbaum, Steven Pinker, and others.²

I am indebted to the organizer of this forum section and to the reviewers for their excellent comments and suggestions. The comments I received from one of my fellow editors were particularly helpful—beyond the call of duty. Needless to say, all remaining errors and inconsistencies are entirely my own.

1. Wilhelm Windelband, *Geschichte und Naturwissenschaft* (Strassburg: Heitz, 1904).

2. Hans-Georg Gadamer, *Truth and Method* (London: Bloomsbury, 1975), 228–30; Jürgen Habermas, “Die Idee der Universität—Lernprozesse,” in *Kleine Politische Schriften VI* (Berlin: Suhrkamp, 1987), 72; Martha Nussbaum, *Not for Profit: Why Democracy Needs the Humanities* (Princeton, NJ: Princeton University Press, 2010), 131–32; Steven Pinker, “Science Is Not Your Enemy.” *New Republic* (August 2013).

In this essay I shall argue that the opposition between searching for the general versus understanding the particular can be traced back to antiquity, where it is—surprisingly—rooted in the disciplines that we now call “humanities.”³ That is, from about the third century BCE onward, there have been two kinds of practices in philology, historiography, poetics, the study of art, the study of language and the study of music. We find, on the one hand, scholars searching for patterns, while, on the other hand, there are scholars who reject the notion of pattern and search for the unique or the exceptional. These two approaches were already in contrast in antiquity and have not disappeared ever since. This raises the question of whether this opposition should be understood as a divide emerging between the humanities and the sciences or as a divide originating from the humanities themselves. I will opt for the latter.

While no definition of “pattern” may hold for all disciplines and periods, we may attempt to provide a more narrative description of the term:⁴

A pattern can consist of a regularity (possibly with exceptions) but also of a grammatical rule or a historical trend. Patterns may even be similar to “laws” such as the sound shift laws in linguistics or the laws of harmony in musicology. The notion of “pattern” is thus an umbrella term that covers everything that can be found between inexact trends and exact laws.

I will use this broad notion of pattern for the current essay.

ANTIQUITY: THE ORIGIN OF THE DIVIDE

Arguably the oldest debate which contrasts patterns to the particular is found in philology. This debate was described by the Latin grammarian M. Terentius Varro (116–27 BCE) and has come to be known as the controversy between the *analogsists* of Alexandria and the *anomalists* of Pergamon.⁵ With the establishment of the library of Alexandria, hundreds of thousands of manuscripts—and remnants thereof—were brought together. Among the often dozens or even hundreds of copies of the same text, no two were alike. In some cases the differences were small and had come about because of copying errors, but the discrepancies could also be substantial, consisting of whole sentences that appeared to be deliberate changes, additions, or omissions. And

3. For the scope of this short essay I will limit myself to the Western tradition. For a more global perspective, see Rens Bod, *A New History of the Humanities* (Oxford: Oxford University Press, 2013). Many of the examples in the current essay are drawn from my book.

4. Ibid., 9. For an overview of the notion of pattern, see James McAllister, “The Ontology of Patterns in Empirical Data,” *Philosophy of Science* 77, no. 5 (2011): 804–14.

5. Detlev Fehling, “Varro und die grammatische Lehre von der Analogie und der Flexion,” *Glotta* 35 (1956): 214–70, and 36 (1957): 48–100.

there were also texts that had only survived in the form of incomplete fragments. How could the original text be deduced from all this material?

The first librarian of the library, Zenodotus of Ephesus (ca. 333–ca. 260 BCE) tried to tackle this problem by compiling a dictionary of typically Homeric words. This way he hoped to be able to formulate the “perfect” Homeric text from the many corrupt remnants of manuscripts.⁶ Most of Zenodotus’s criteria were however based on his own aesthetic preferences. His successors Aristophanes of Byzantium (ca. 257–180 BCE) and Aristarchus of Samothrace (ca. 216–ca. 144 BCE) opted for a more impartial and explicit method to figure out how an unknown word form can be identified either as an archaic word or as an error. Aristophanes approached this problem on the basis of the concept of *analogy*.⁷ If one could establish that an unknown word was conjugated or declined following the same pattern as a known word, it could be taken as an archaic word, otherwise it was a corrupted word. Aristophanes defined five criteria that word forms had to comply with among themselves in order to be described as “analogous.” The word forms had to correspond in regard to *gender, case, ending, number of syllables, and stress* (or sound).

In contrast to the Alexandrian school, there was a Stoic school that was established in Pergamon by Zeno of Citium (334–262 BCE). The philologists of this school focused on the unique or the exceptional rather than on regularities. They worked on the basis of what they called *anomalía*, which was introduced by Chrysippus of Soli (ca. 280–ca. 207 BCE). Instead of looking for analogies between word forms, Chrysippus stressed the importance of seeking unique word forms that did not fit any pattern. According to the anomalists it was impossible to deduce the original form of a text. The most fervent supporter of this approach, Crates of Mallos (died ca. 150 BCE), declared that all the efforts expended by the analogists were vain and superficial. The philologist’s task was to select the surviving document that came as close as possible to the author’s intentions, and, once this selection had been made, the chosen document had to be adhered to as closely as possible.⁸ According to the anomalists no deeper system of regularities or patterns existed and the greatest interest for the philologist lay in interpreting the unique document at hand. This approach was less formal than the method based on analogies and often resulted in fanciful and allegorical text interpretations.

6. Klaus Nickau, *Untersuchungen zur textkritischen Methode des Zenodotos von Ephesos* (Berlin: De Gruyter, 1977).

7. Christopher Callanan, *Die Sprachbeschreibung bei Aristophanes von Byzanz* (Göttingen: Vandenhoeck und Ruprecht, 1987).

8. Maria Broggiato, ed., *Cratete di Mallo: I frammenti* (Catania: Agorà Edizioni, 2001).

The anomalist approach produced a number of extraordinarily original works. The anomalists—unlike the analogists—created erudite commentaries. For example, Demetrius of Scepsis wrote a series of thirty books about the Trojan forces, which were addressed in fewer than sixty-two lines in the entire *Iliad*. Every point of view was discussed by the author, using a vast quantity of literature, local and oral traditions, history, mythology, geography, poetry, and observations by travelers—in other words, he called upon the entirety of knowledge to contribute to the interpretation of the text.⁹

Thus the two schools—analogue versus anomalist—involved not just two different methods but different goals too. The analogue search for patterns across words and texts served to derive the original text, while the anomalist focus on the unique and the exceptional served to interpret a specific version of the text.

There are similar oppositions in other ancient humanistic disciplines. In their descriptions of the Persian and Peloponnesian Wars, the historians Herodotus (ca. 484–425 BCE) and Thucydides (ca. 460–ca. 395 BCE) believed they could recognize a pattern in past events. Herodotus's *Histories*, for instance, reflected a pattern of rise, peak, and decline. He discerns this pattern in both people and states—for example, the tyrant Pisistratus and Athens, King Croesus and Lydia, and Darius and Persia: their fortunes rose and fell. Herodotus considered the pattern to be the basic structure of history: “For many states that were once great have now become small, and in my lifetime those that are great used to be small.”¹⁰ In addition Thucydides contended that the rise and fall of Athens and its disintegration during the Peloponnesian Wars had parallels with other historical periods, and he believed that this pattern was analogous to human nature and therefore could even serve as an “aid for interpreting the future.”¹¹

Contrary to Herodotus and Thucydides, the Greek historian Polybius (ca. 200–ca. 118 BCE) rejected the general pattern of rise, peak, and fall in history. Instead he glorified the unique and the exceptional character of his new patria, Rome. Polybius expressed great admiration for the way Rome succeeded where the Greeks had failed. Rome, he argued, refuted the pattern of rise, peak, and decline that had occurred in the history of Athens, that is, a cycle of monarchy, aristocracy, oligarchy, democracy, and, via tyranny, back to monarchy again.¹² Unlike Athens and other cities, Rome was immune to this cycle—and therefore to decline—because of its *mixed* constitution. In Rome at the time of Polybius there were a monarchy (the consuls), an aristocracy (the senate), and a democracy (the people's assemblies), all at the same time. According to

9. For fragments of Demetrius of Scepsis, see <http://www.digitalclassicist.org/>.

10. Herodotus, *Histories* 1.5.

11. Thucydides, *History of the Peloponnesian War* 1.22.

12. Polybius, *Histories* 1.1–2.

Polybius this simultaneity broke the cyclical pattern, which turned the history of Rome into a unique noncyclical history, so he believed.¹³

Although we cannot speak of a debate between Herodotus and Thucydides, on the one hand, and Polybius, on the other, an opposition between the two ideas is nevertheless discernible: where Herodotus and Thucydides saw a recurring pattern in the history of different states and peoples, Polybius saw the uniqueness in the history of Rome.

This opposition between searching for the regular and searching for the unique is also present in the study of literature, art, and music in antiquity. For example, while Aristotle and others found regularities and rules for “good” narratives,¹⁴ Longinus argued that “sublime” narratives do not follow any rules but, instead, are unique.¹⁵ And while Pliny found a pattern in Greek and Roman art that could be defined by mathematical proportions known as the *canon*,¹⁶ the same Pliny contended that “beautiful” art depended on inspiration or even on coincidence.¹⁷ And while the “first musicologist”¹⁸ Aristoxenus found rules for harmony and melody in Greek musical pieces, the Harmonists opposed any rules and claimed that there were no laws of music whatsoever. In sum, rules exist for *good* literature, art, and music but not for *beautiful* literature, art, and music. Beauty, according to these scholars, evidently adds something inexplicable that cannot be generalized.

FROM THE MEDIEVAL TO THE EARLY MODERN ERA

After the fall of the western Roman Empire, the search for patterns and the unique continued. History writing in the West was dominated by universal histories initiated by Christian historians in late antiquity such as Sextus Julius Africanus (ca. 160–ca. 240) and Eusebius (ca. 265–ca. 340). These histories involved periodizations forming a linear narrative pattern that started with the Creation and continued until the contemporary era, or even until the Last Judgment.¹⁹ In other disciplines, such as poetics, art theory, and philology, pattern searching was less prominent, though it never disappeared. In poetics the main goal was to bring textual interpretation into agreement with Biblical interpretation, as

13. *Ibid.*, 1.4.

14. Aristotle, *Poetica* 24.60a16.

15. Longinus, *Peri Hupsous* 1.3.

16. Pliny, *Naturalis historia* 34.55.

17. *Ibid.*, 35.104. Pliny tells the story of the painter Protogenes, who tried to portray a dog foaming at the mouth. After many failed attempts, Protogenes threw his sponge at the panel in a fury, and this produced precisely the visual effect he wanted. “And so chance gave the painting naturalness!”

18. Sophie Gibson, *Aristoxenus of Tarentum and the Birth of Musicology* (London: Routledge, 2005), 169.

19. Raoul Mortley, *The Idea of Universal History from Hellenistic Philosophy to Early Christian Historiography* (Lewiston, NY: Mellen, 1996).

we see in Fulgentius and others.²⁰ The medieval study of art was mostly limited to technical handbooks, such as by Theophilus Presbyter (ca. 1070–1125).²¹ And in philology the Alexandrian method was briefly revived by Lupus de Ferrière (ca. 805–62).²²

With the advent of humanism, we see a renewed interest in pattern searching. In philology, Angelo Poliziano (1454–94) goes beyond the Alexandrian philological approach when he takes into account the genealogical relationship between extant copies.²³ Poliziano realized that a group of completely consistent sources could still be a problem.²⁴ Assume that a number of sources—A, B, C, and D—all agree on one point, and that B, C, and D are entirely dependent on A for their information. Should B, C, and D nevertheless be included as extra evidence of the authenticity of A? According to Poliziano, they should not: if derived sources were mutually consistent, they should be identified and eliminated.²⁵ Sources should be ranked genealogically so that their dependence in regard to an older source becomes clear. One anomalous manuscript can refute dozens of consistent manuscripts purely on the basis of its position in the genealogical ranking. Poliziano used his method with exemplary precision. His quest for genealogies of manuscripts resulted in highly accurate reconstructions of Terence, Virgil, Seneca, Propertius, and Flaccus.

Other fields also showed a renewed interest in patterns or the rejection thereof. In linguistics, for example, Johannes de Laet discovered that there was no lexical or syntactic relationship whatsoever between American Indian languages and Hebrew. This refuted the idea that Hebrew was the cradle of all languages.²⁶ In music theory the realization that there was no hard distinction between consonances and dissonances rebutted the centuries-old Pythagorean cosmic harmony.²⁷ And in historiography, a new spiral pattern in the course of history identified by French Enlightenment historians

20. Fulgentius, *The Exposition of the Content of Virgil*, trans. O. B. Hardison, in *Classical and Medieval Literary Criticism: Translations and Interpretations*, ed. Alex Preminger, O. B. Hardison, and Kevin Kerrane (New York: Ungar, 1974), 333–39.

21. Erhard Brepohl, *Theophilus Presbyter und das mittelalterliche Kunsthandwerk* (Vienna: Böhlau, 1999).

22. Robert Garipey, *Lupus of Ferrieres and the Classics* (Darien, CT: Monographic Press, 1967).

23. Angelo Poliziano, *Miscellanea* (1490), in *Opera omnia*, ed. Ida Maier (Ravenna: Bottega d'Erasmus, 1970–71).

24. See Anthony Grafton, *Defenders of the Text* (Cambridge, MA: Harvard University Press, 1991), 56.

25. Poliziano, *Miscellanea* 1.39.

26. Johannes de Laet, *Notae ad dissertationem Hugonis Grotii De origine gentium americanarum, et observationes aliquot ad meliorem indaginem difficillimae illius quaestionis* (Amsterdam: Elzevier, 1643).

27. See H. Floris Cohen, “Music as Science and as Art: The 16th/17th-Century Destruction of Cosmic Harmony,” in *The Making of the Humanities*, vol. 1, *Early Modern Europe*, ed. R. Bod, J. Maat, and T. Weststeijn (Amsterdam: Amsterdam University Press, 2010), 59–71.

opposed the linear pattern from the Creation to the end of the world.²⁸ Many of these patterns thus stood in sharp contrast with the Christian worldview. This also counted for many of the discoveries made in the study of nature: newly discovered patterns (“laws”) of planetary movements by Kepler, of falling bodies by Galileo, of air pressure by Boyle, and of the tiny *dierkens* (animalcules) by van Leeuwenhoek also challenged the then accepted worldview. Discoveries from the “humanities” and the “sciences” went hand in hand in moulding the transformation that we now call the Scientific Revolution.

THE MODERN PERIOD

The first conceptual distinction between a science of the human and a science of the natural was put forward in Giambattista Vico’s *Scienza Nuova* (1725), but his work was ignored for almost a hundred years. It was in the nineteenth century that Wilhelm Dilthey (1833–1911) gave a foundation for the disciplines that we now call humanities. According to Dilthey the humanities (*Geisteswissenschaften*) are concerned primarily with *verstehen* (understanding), whereas the sciences (*Naturwissenschaften*) are about *erklären* (explaining).²⁹ Humanities scholars would be failing if they observed, counted, measured, or hunted for apparent regularities. What they should be doing is searching for the motives and intentions of historical figures. Laying bare these inner mainsprings is more important than studying the external manifestations of the human mind. At least as significant was the distinction presented by Wilhelm Windelband (1848–1915), mentioned in the introduction, between an “idiographic” approach to knowledge (which is the study of the unique, the special) and a “nomothetic” way of studying (which seeks to generalize and searches for the lawlike).³⁰ It was exactly this distinction that gave the humanities a powerful identity that enabled them to differentiate and emancipate themselves from the other disciplines.

This constitutive separation between humanities and sciences did not, however, correspond to actual practice in the humanities: the search for patterns simply continued, in all humanities disciplines, alongside the search for the unique. Also, at the time of Windelband, there continued to be both nomothetic and idiographic practices in the humanities: pattern-seeking components were found not only in linguistics (from Verner to De Saussure) but also in philology (Lachmann, Maas), musicology (Adler,

28. See Bod, *New History of the Humanities*, 174–76. See in particular the spiral pattern of history in Ronald Meek, ed., *Turgot on Progress, Sociology and Economics: Three Major Texts Translated with an Introduction by the Editor* (Cambridge: Cambridge University Press, 1973), 41.

29. Wilhelm Dilthey, *Einleitung in die Geisteswissenschaften* (Leipzig: Duncker & Humblot, 1883), 29–30.

30. Windelband, *Geschichte und Naturwissenschaft*.

Schenker), literary theory (Propp), art history (Wölfflin), and historiography (the *Annales* school). And this pattern-seeking tradition continued throughout the twentieth and into the twenty-first centuries.³¹

For example, in art history, the analysis of stylistic patterns was initiated by Giovanni Morelli (1816–91), who created detailed taxonomies of pictorial representations of ears, noses, hands, and other parts of the body, as well as clouds, leaves, folds, and individual brushstrokes in Italian art.³² Whereas Morelli's stylistic analysis was entirely based on details, it is thanks to work by Heinrich Wölfflin (1864–1945) that we have a stylistic method in which it was not only all the separate parts of the work that were examined but also their relationship with the whole. In his *Kunstgeschichtliche Grundbegriffe* (1915), Wölfflin introduced a gamut of new stylistic concepts that he grouped in five pairs of opposites in order to characterize style transitions (in particular from Renaissance to Baroque).³³ He defined such notions as linear versus painterly representations, flat versus deep composition, closed versus open forms, and clear versus diffuse representations, among others. His notions are still part of the vocabulary of art historians today. Yet, Wölfflin was also criticized by people like Walter Benjamin, who in his essay "Strengere Kunstwissenschaft" (1933) argued that Wölfflin neglected the social and cultural interpretations of paintings.³⁴ Later work by Aby Warburg and Erwin Panofsky took such interpretations into account.

The quest for patterns and subsequent interpretations is also found in literary studies. While it may not be surprising to find pattern-seeking practices in formalist and early structuralist literary scholars like Vladimir Propp and Roman Jakobson, it is less known that those who reacted to structuralism—the post-structuralists—also were elaborating on patterns. This becomes particularly clear if we look at the work of Roland Barthes (1915–80), who built on but also went beyond the long tradition set out by formalists and structuralists. In his book *S/Z* (1970), Barthes started his famous analysis of Balzac's story *Sarrasine* with a structuring of the novella into 561 reading units ("lexies").³⁵ He then analyzed these units in terms of different meaning attributions, showing that Balzac's realistic text is full of symbolic and other connotations that can be interpreted in various ways by the reader.

31. For an extensive overview, see Bod, *New History of the Humanities*.

32. Giovanni Morelli, *Kunstkritische Studien über italienische Malerei* (Leipzig: Brockhaus, 1890–93).

33. Heinrich Wölfflin, *Kunstgeschichtliche Grundbegriffe: Das Problem der Stilentwicklung in der neueren Kunst* (Munich: Bruckmann, 1915).

34. For an English translation, see Walter Benjamin, "Rigorous Study of Art," trans. Thomas Levin, *October* 47 (1998): 84–90.

35. Roland Barthes, *S/Z: An Essay* (New York: Farrar, Straus & Giroux, 1975).

Thus, the interpretations of a literary production do not stand in opposition to but are consonant with the patterning of the text. This is not to say that pattern seeking was uncontroversial in the humanities. In historiography, for example, the opposition was strongly felt. While social-economic historians and (prewar) cultural historians like Oswald Spengler and Arnold Toynbee searched for general patterns in history, their approaches were criticized by narrativists (who argued that only the “narrative” could give an account of an absent past), the critical school (which claimed that only general criticism could demythologize the past), and the postmodernists (who went farthest by arguing that any claim to historical truth is subject to deconstruction). Yet it appears that the pattern-rejecting historians criticized not so much patterns per se but “universal” patterns that were claimed to be culture independent. Their refutation made way for a quest for different patterns that were culture specific or ideological. In fact, some historians have found patterns in a historical epoch by employing categories and principles from that period. If historians know the rules of fifteenth-century art theory or rhetoric, for example, they can use them to analyze and interpret works of art, texts, and other even less obvious objects dating from that time.³⁶

We find also in musicology and linguistics—as well as in the more recent disciplines of theater studies, film studies, television studies, and media studies—practices of analyzing, relating, connecting, and comparing humanistic material. Here too, pattern searching and subsequent interpretation are the order of the day. In film studies, for example, scholars have developed precise methods of analyzing a film by integrating insights from semiology, literary studies, and linguistics. We see this perhaps most clearly in the work of Christian Metz (1931–93), who developed his *grande syntagmatique* in which he called the building blocks of film *syntagmas*. He provided a hierarchical organization for them so that the cinematic structure could be visualized and interpreted. Such a cinematic narrative structure is represented as a tree diagram in which the leaves of the tree represent film scenes and the branched structure reflects the relationships between the scenes. This formal analysis into building blocks has led to some surprising patterns. For example, the narrative structure of the popular series *CSI: Crime Scene Investigation*, which has dragged on for years, has been found to consist of only eight narrative building blocks that are endlessly reshuffled.³⁷

36. Michael Baxandall, *Giotto and the Orators: Humanist Observers of Painting in Italy and the Discovery of Pictorial Composition, 1350–1450* (Oxford: Oxford University Press, 1971).

37. Benedikt Löwe, Eric Pacuit, and Sanchit Saraf, “Identifying the Structure of a Narrative via an Agent-based Logic of Preferences and Beliefs: Formalizations of Episodes from *CSI: Crime Scene Investigation*™,” *Proceedings of the Fifth International Workshop on Modelling of Objects, Components and Agents, MOCA’09* (2009): 45–63.

And in television studies, Raymond Williams identified a widely discussed pattern in the development of the medium.³⁸ In the course of the 1970s, TV programs were no longer made with separate, successive blocks such as news, quiz, and film; instead everything flowed virtually seamlessly into everything else. The natural breaks were now commercials and announcements about films and quizzes on the following day. This pattern, which Williams called *flow*, resulted in a nonstop stream of information, advertising, entertainment, and trailers, which was interpreted by Williams as a way to keep the viewer tuned to a particular channel.

The most recent branch in the tree of humanities disciplines, the new and upcoming field of digital humanities, has declared pattern searching in art, music, and literature as its main business.³⁹ But as has emerged from this essay, the digital humanities simply stand in a long tradition of pattern searching that exists in the humanities and sciences alike. The main difference compared with the traditional humanities is the digital humanities' use of very large amounts of data and the utilization of algorithms. Yet, like in other disciplines, the discovery of patterns is in no way the final goal of digital humanities—these digitally identified patterns need to be interpreted too.⁴⁰

CONCLUSION

What can we draw from our *longue durée* overview? We have seen that it would be mistaken to simply refer to the practice of pattern searching as “scientific” and to the practice of searching for the unique as “humanistic.”⁴¹ Common wisdom still has it that the humanities are applying scientific methods when they focus on patterns and regularities rather than on the unique and the particular. Instead, we have seen that pattern-seeking practices have always been part of the humanities. From a practice-based point of view, the divide between the humanities and the sciences is nonexistent.

WORKS CITED

- Barthes, Roland. 1975. *S/Z: An Essay*. New York: Farrar, Straus & Giroux.
- Baxandall, Michael. 1971. *Giotto and the Orators: Humanist Observers of Painting in Italy and the Discovery of Pictorial Composition, 1350–1450*. Oxford: Oxford University Press.
- Benjamin, Walter. 1988. “Rigorous Study of Art.” Translated by Thomas Levin. *October* 47:84–90.

38. Raymond Williams, *Television: Technology and Cultural Form* (London: Routledge, 1974).

39. See, e.g., Melissa Terras, Julianna Nyhan, and E. Vanhoutte, eds., *Defining Digital Humanities* (London: Ashgate, 2013). See also Rens Bod, “Who’s Afraid of Patterns? The Particular versus the Universal and the Meaning of Humanities 3.0,” *BMGN—Low Countries Historical Review* 128, no. 4 (2013): 171–80.

40. See Franco Moretti, *Patterns and Interpretations*, Pamphlets of the Stanford Literary Lab 15 (Stanford, CA: Stanford University, 2017).

41. A typical example of this misunderstanding is found in Pinker, “Science Is Not Your Enemy.”

- Bod, Rens. 2013a. *A New History of the Humanities: The Search for Principles and Patterns from Antiquity to the Present*. Oxford: Oxford University Press.
- . 2013b. "Who's Afraid of Patterns? The Particular versus the Universal and the Meaning of Humanities 3.0." *BMGN—Low Countries Historical Review* 128 (4): 171–80.
- Brepohl, Erhard. 1999. *Theophilus Presbyter und das mittelalterliche Kunsthandwerk*. Vienna: Böhlau.
- Broggiato, Maria, ed. 2001. *Cratete di Mallo: I frammenti*. Catania: Agorà Edizioni.
- Callanan, Christopher. 1987. *Die Sprachbeschreibung bei Aristophanes von Byzanz*. Göttingen: Vandenhoeck und Ruprecht.
- Cohen, H. Floris. 2010. "Music as Science and as Art: The 16/17th-Century Destruction of Cosmic Harmony." In *The Making of the Humanities*, vol. 1, *Early Modern Europe*, edited by Rens Bod, Jaap Maat and Thijs Weststeijn, 59–71. Amsterdam: Amsterdam University Press.
- Dilthey, Wilhelm. 1883. *Einleitung in die Geisteswissenschaften: Versuch einer Grundlegung für das Studium der Gesellschaft und der Geschichte*. Leipzig: Duncker & Humblot.
- Fehling, Detlev. 1956–57. "Varro und die grammatische Lehre von der Analogie und der Flexion." *Glotta* 35:214–70, 36:48–100.
- Gadamer, Hans-Georg. (1960) 1975. *Truth and Method*. London: Bloomsbury.
- Garipey, Robert. 1967. *Lupus of Ferrieres and the Classics*. Darien, CT: Monographic Press.
- Gibson, Sophie. 2005. *Aristoxenus of Tarentum and the Birth of Musicology*. London: Routledge.
- Grafton, Anthony. 1991. *Defenders of the Text*. Cambridge, MA: Harvard University Press.
- Habermas, Jürgen. 1987. *Kleine Politische Schriften VI*. Berlin: Suhrkamp.
- Laet, Johannes de. 1643. *Notae ad dissertationem Hugonis Grotii De origine gentium americanarum, et observationes aliquot ad meliorem indaginem difficillimae illius quaestionis*. Amsterdam: Elzevier.
- Löwe, Benedikt, Eric Pacuit, and Sanchit Saraf. 2009. "Identifying the Structure of a Narrative via an Agent-based Logic of Preferences and Beliefs: Formalizations of Episodes from CSI: Crime Scene Investigation™." *Proceedings of the Fifth International Workshop on Modelling of Objects, Components and Agents, MOCA'09*, 45–63.
- McAllister, James. 2011. "The Ontology of Patterns in Empirical Data." *Philosophy of Science* 77 (5): 804–14.
- Meek, Ronald, ed. 1973. *Turgot on Progress, Sociology and Economics: Three Major Texts Translated with an Introduction by the Editor*. Cambridge: Cambridge University Press.
- Morelli, Giovanni. 1890–93. *Kunstkritische Studien über italienische Malerei*. Leipzig: Brockhaus.
- Moretti, Franco. 2017. *Patterns and Interpretations*. Pamphlets of the Stanford Literary Lab 15. Stanford, CA: Stanford University.
- Mortley, Raoul. 1996. *The Idea of Universal History from Hellenistic Philosophy to Early Christian Historiography*. Lewiston, NY: Mellen.
- Nickau, Klaus. 1977. *Untersuchungen zur textkritischen Methode des Zenodotos von Ephesos*. Berlin: De Gruyter.
- Nussbaum, Martha. 2010. *Not for Profit: Why Democracy Needs the Humanities*. Princeton, NJ: Princeton University Press.
- Pinker, Steven. 2013. "Science Is Not Your Enemy." *New Republic*, August.
- Poliziano, Angelo. 1970. *Opera omnia*. Edited by Ida Maier. Ravenna: Bottega d'Erasmus.
- Preminger, Alex, O. B. Hardison, and Kevin Kerrane, eds. 1974. *Classical and Medieval Literary Criticism: Translations and Interpretations*. New York: Ungar.
- Terras, Melissa, Julianna Nyhan, and E. Vanhoutte, eds. 2013. *Defining Digital Humanities*. London: Ashgate.
- Williams, Raymond. 1974. *Television: Technology and Cultural Form*. London: Routledge.
- Windelband, Wilhelm. 1904. *Geschichte und Naturwissenschaft*. Strassburg: Heitz.
- Wölfflin, Heinrich. 1915. *Kunstgeschichtliche Grundbegriffe: Das Problem der Stilentwicklung in der neueren Kunst*. Munich: Bruckmann.