Visualizing Pentateuchal Composition: A New View of the Creation of Ancient Hebrew Literature

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Abstract

This article describes a gap in scholarship on the Hebrew Bible, and demonstrates a way to address it via a digital humanities project that is at once a research tool and an interactive work of public scholarship. The gap results from the fact, well-known among scholars but still startling to much of the public, that ancient Israel had no Bible as we know it. This is the case for the Persian and Hellenistic period, when, as we know largely from the evidence of the Dead Sea Scrolls, the textual form of many biblical books and the biblical canon as a unit was not yet fixed. But it is also true in a different way for an earlier period in the history of the Pentateuch, before the texts were edited into their current form. With this consensus as a starting point, we present the opportunity to visualize the most widely-agreed on possible sources and layers of the Pentateuch separately, offering a glimpse of texts closer to what people in ancient Israel may have actually had, and letting readers experiment with how they may have been combined.

Keywords: *Pentateuch; Hebrew Bible; Comparative Literature; Source Criticism; Non-Documentarian; Neo-Documentarian; Gilgamesh; Flood*

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> Very deep is the well of the past. Should we not call it bottomless?... For the deeper we sound, the further down into the lower world of the past we probe and press, the more do we find that the earliest foundations of humanity, its history and culture, reveal themselves unfathomable. No matter to what hazardous lengths we let out our line they still withdraw again, and further, into the depths...
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> Thomas Mann, *Joseph and His Brothers*

1. Introduction

This article describes a gap in scholarship on the Hebrew Bible and demonstrates a way to address it via a digital humanities project that is at once a research tool and an interactive work of public scholarship.[4] The paradoxical gap we address results from the fact, so well-known among scholars as to be almost banal but still startling to much of the public, that ancient Israel had no Bible as we know it. This is the case for the Persian and Hellenistic period, when, as we know largely from the evidence of the Dead Sea Scrolls, the textual form of many biblical books and the biblical canon as a unit was not yet fixed. But it is also true in a different way for an earlier period in the history of the Pentateuch, before the texts were edited into their current form.

Scholars have long noted that the striking contradictions in the Bible's first five books suggest it was not written at once but combined from different preexisting narrative sources. But why? Currently there are two main competing theories of why and how the Pentateuch was created: 1) by weaving together a set of different, complete, preexisting narrative sources to preserve them in a comprehensive new form (the "Documentary Hypothesis"), or 2) by piecing different short passages onto one complete preexisting narrative source to

increase its level of diversity and difference (the "Non-Documentarian" approach). Yet no one has presented the data that would help us evaluate these theories in a clear, publicly available form. The project's digital functionality lets users see and compare–for the first time in the history of Western scholarship– how the very different (but widely recognized among scholars) accounts of the origins of the universe and original fate of humanity look as independent stories.

Our tools for visualizing the earlier building blocks of the Pentateuch will be new to both the public and to the scholarly world. With few exceptions, the primary textual basis of scholarly and public access to biblical literature remains the Masoretic Text. That is, a medieval transcript of a late antique edition of the Hebrew Bible is still treated as the starting point of literary evidence for ancient Israel. This project aims to change that by producing the first open-access version of the elements of the Pentateuch. Using digital tools, it allows both scholars and the public to read and visualize the Bible's building blocks as they may have looked prior to their redaction into the biblical texts we know today. Cognizant of the two major schools of Pentateuchal criticism, the project begins with the major area on which they agree— the existence of a relatively unified and independent pre-Canonical Priestly source. With this consensus as a starting point, we present the opportunity to visualize the other sources or layers of the Pentateuch separately, offering a glimpse of texts closer to what people in ancient Israel may have actually had, and how they may have been combined.

Our goal is not to achieve a predetermined set of conclusions about Pentateuchal composition. Rather than canonizing one theory, the project is designed to let people visualize several of the most compelling arguments about how the Pentateuch developed. To do this, the project puts the tools of digital humanities in the hands of ordinary readers by letting let them encounter the Pentateuch's building blocks in a new way: by visualizing the Pentateuch's component stories on their own, letting them compare their shared

elements, search for key themes, and rearrange its building blocks to test out different possibilities for its creation.

This project thus proposes, and creates, a new digitally-based mode of argument by creating a new mode of visualization: simultaneous variant reading (see **Figures 8, 10**, and **11)**. It will advance beyond current scholarly practices, which are still limited to the same traditional modes of reading they critique, because they do not allow the reader to visualize the very history and composition of the text which they assume and on which their arguments depend. Rather than leaving unexamined the invisible assumptions built into the canonical text, the project allows us to compare alternative reconstructions.

These digital tools will allow students and scholars to experiment with ways that the core of a major sacred text could plausibly have been composed, to see for themselves how it resembles other sacred texts of its time, and to consider what was distinct about the literary and cultural values of ancient Israel and early Judaism that produced it. The project will also establish a set of tools for other scholars to work with, in the form of the first open-access, grammatically tagged literary dataset of the Pentateuch in both English and Hebrew, with themes and compositional elements tagged in the widely used TEI format and posted in a permanent open access repository on Github.

In this article, we first lay out the larger problems associated with treating printed Hebrew Bibles as self-evident data about ancient Hebrew literature. We then lay out in detail a digital humanities methodology for addressing these problems. This methodology includes the pilot project and how it was accomplished, as well as the plan for the final project in both the practical dimensions of visual layout, open access and sustainability, and accessibility. Finally, a set of case studies display how the project affords viewpoints which differ from those of a printed Hebrew Bible, and offer a preview of the new

experiences of reading and possible forms of knowledge it is designed to facilitate.

2. The Masoretic Version as Textual Anachronism

Modern scholarly editing and publishing practices work to reinforce the impression that the canonical text of the Hebrew Bible is self-evident, a "primary source" for the study of the Levant in the Iron Age through the Hellenistic period. Yet if there is one area where the fast-moving and diverse areas of textual criticism and historical criticism agree, it is that the Hebrew Bible did not exist as a complete or unified textual whole in the Hellenistic period, and that significant elements of its composition were still ongoing through the early Persian period. After taking some years to fully absorb the revolutionary impact of the Dead Sea Scrolls, in recent decades scholarship has recognized that, according to all manuscript evidence prior to the fourth century CE, there was no Hebrew Bible closely resembling modern ones.[5] In the third century CE or earlier it would have been difficult if not impossible to even encounter the contents of our Hebrew Bibles with the order and exclusions that define them.

Thus, arguably the central discovery of 20th century Hebrew textual scholarship was to show that modern scholarly reading of the Bible stands across an obvious, cavernous gap from ancient reading of Hebrew literature. It stands far closer to modern religious readings—particularly the Jewish traditions that literally produced the text in its first canonical forms, with both academic and confessional presentations of the text standing on the opposite side of a great

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[5] Prior to the late Roman period, users of ancient Hebrew literature worked mainly with disparate collections of scrolls that would only rarely have included the majority of the content found in the later Jewish Masoretic text, and would typically have included other material, whether with divergent contents and orders such as the Hebrew texts underlying the Septuagint versions of Joshua, Daniel, Jeremiah, Ezekiel, Psalms, or Proverbs, or different works entirely such as Jubilees, 1 Maccabees, or the Aramaic Books of Enoch. For a convenient open-access introduction with bibliography see James Nati and Seth Sanders, "Introduction to 'Ancient Hebrew Literature Beyond "The Bible:" Part One,'" *Metatron* 1 (January 26, 2022). https://metatron.scholasticahq.com/article/21198-introduction, citing Stone, Kraft, Mroczek, Reed, and Zahn.

textual divide separating them from the ancient Hebrew literature of the third century CE and before.[6] This divide increased in late antiquity with the increasing standardization of Bibles and reached its apex with the great editorial tradition of the Masoretes (beginning around the 7th century CE), on which all modern scholarly editions of the Hebrew are based. The only current options are near-verbatim transcripts of them such as *Biblia Hebraica Stuttgartensia*, or completely verbatim transcripts such as Dotan's Biblia *Hebraica Leningradensia* or the Keter Yerushalayim edition of Codex Aleppo.[7]

Furthermore, as Shemaryahu Talmon identified early on, this gap very much includes even relatively stable texts such as the Pentateuch.[8] This is because it is not the result of a single rupture or divide early in the Common Era, but an ongoing, punctuated creative process. This process worked such that the further back we go in the history of Hebrew literature, the more diversity we may expect to encounter. In particular, virtually all critical scholarship agrees that the Pentateuch itself shows glaring signs of the interweaving of multiple parallel threads that existed independently.

This idea of the canonical text's primacy is deeply anachronistic, both from the materialist viewpoint of manuscript analysis and from the viewpoint of composition history, yet the constant reproduction—that this is usually the only text we can see—reinforces the universal material presence of the canonical text. Yet at the same time, people historically have acted as if they had access to a single unitary literary

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[6] On the startling ambivalence toward the written biblical text found in many Rabbinic ideologies see Rebecca Scharbach Wollenberg's *The Closed Book: How the Rabbis Taught the Jews (Not) to Read the Bible* (Princeton: University Press, 2023).

[7] Aron Dotan, Biblia Hebraica Leningradensia: prepared according to the vocalization, accents, and masora of Aaron ben Moses ben Asher in the Leningrad Codex (Peabody, MA: Hendrickson Publishers, 2001); Mordechai Breuer, Yosef Ofer, and Mordechai Glatzer, Keter Yerushalayim: Tanakh ha-Universiṭah ha-ʿIvrit bi-Yerushalayim (Jerusalem: Bazel: N. Ben-Tsevi mifʿale defus ; Ḳeren Mishpaḥat Ḳarger, 2000).

[8] Shemaryahu Talmon, "Aspects of the Textual Transmission of the Bible in the Light of Qumran Manuscripts," *Textus* 4, (1964): 95–132.

work, and the assumed unity and boundedness of this text—its knowability—is in some ways the scholarly community's reason for being. No scholarly community, let alone a broader public, could together "read" every interesting variant, manuscript, or fragment. Such an attempt would require a remarkable homogeneity of interests and commitments and the exclusion of some of the key themes and questions, such as the literary values and messages, that constitute much of its reason for being in a larger historical and public sense.

As in classical textual criticism, the semi-mythic assumption of a "biblical text" is the very thing that connects the Septuagint, Samaritan Pentateuch, Masoretic text, the Latin, and Qumran Pentateuchal manuscripts. Scholarship can put these sources into a creative dialogue because at a high level and in divergent ways they are assumed to be versions "of" something.[9] The reason these often quite diverse "versions" can historically be discussed together is because of this heuristic assumption of a shared archetype and history. Even as scholars over the past 50 years have moved away from the rigid ontological assumption of a single *Urtext*, we implicitly affirm that there is a thing to be critiqued even in the ways we argue over it or deny its unity.

But if we know that ancient Hebrew writers and audiences used a very different set of texts than what we read today, what does this mean for the Bible? What is certain is that if we want to understand what religion and history were like in ancient Israel, we will be in trouble if

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[9] Compare the principle in classical textual editing expressed by R. J. Tarrant: "Although the ideal of the recoverable original is impossible to achieve, the concept still has a useful part to play. One of its benefits is psychological: it seems unlikely that scholars would be willing to devote themselves to editorial projects that often span decades if they were not sustained by the hope of recovering the author's text. It may also be necessary for critics to operate as if a single recoverable original existed, in order to avoid a bedlam of competing reconstructions." Tarrant, *Texts, Editors, and Readers: Methods and Problems in Latin Textual Criticism*, Roman Literature and Its Contexts (Cambridge: University Press, 2016) 40.

we assume that our Bible is an accurate and unbiased snapshot of ancient Hebrew literature.

3. Beginning with Consensus: *The Oldest Recoverable Elements of the Pentateuch*

Speaking of the disconnect between popular and academic interests in ancient religion, the best-selling scholar of Christianity and Islam Reza Aslan once said that often, "it's the topics that scholars consider old hat that can set the public on fire, while the questions that have scholars tearing their hair out put the same public to sleep."[10] This is true in the case of the Pentateuch, where it is the sheer fact of its building blocks, the simultaneous presence of two or even three interwoven alternative versions of Creation, the Patriarchal Stories, or the Exodus that typically fascinates or disturbs students and laypeople. Yet at the same time, the crucial disagreements about the nature of those building blocks, which define the major scholarly schools and sharply divide Pentateuchal critics, often barely register with normal people.

The value of presenting the separate building blocks of the Bible in a digestible and clear way is obvious for pedagogy and public engagement. But an approach that simply makes available what we "all know" is also valuable for consolidating scholarly progress. Scholars have spoken almost continuously for the past 60 years of a never-ending "crisis" in Pentateuchal study, that is, the apparently intractable impasse between what are now called the neo-documentarian and the non-documentarian schools. This narrative can produce the illusion of a Sisyphean effort that has produced no real

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[10] In a lecture at Trinity College, 9/2010.

results since the 19th century, and the assumption that we still have no real idea how the literature of ancient Israel developed.[11]

Yet in fact, there is a remarkable degree of consensus on one major issue: the final outlines[12] of the Priestly Source, and therefore, minimally, the division between P and "non-P" layers of the Pentateuch. When scholars first began reading the Bible critically, using the same historical and literary tools they would use for understanding any other human artifact, they quickly noticed a clear pattern running through its first books. This is the one in which God creates the universe by sheer verbal command in seven days. This story then constantly refers back to the calendar and God's commandments, while adding a whole new set after Moses' return from Mount Sinai. The plot events and religious ideas are consistent within this thread but often disagree strongly with the rest of the Pentateuch. This narrative tells how the universe and humanity were created through divine command, so that humans could learn and follow these commands. Its plot and ideas form such a bright line that scholars used it as a foundation for understanding how the other parts

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[11] Compare the diversity of 19th-century approaches surveyed by Ernest Nicholson, *The Pentateuch in the Twentieth Century: The Legacy of Julius Wellhausen* (Oxford: Clarendon Press, 1998) with the new announcements of a crisis in Pentateuchal method. These vary slightly but have appeared steadily at least once a decade for the past century. A few examples include J. Coert Rylaarsdam, "The Present Status of Pentateuchal Criticism," *Journal of Bible and Religion* 22, no. 4 (1954): 242–47; Rolf Rendtorff, *The Problem of the Process of Transmission in the Pentateuch* JSOT Supp 89 (Sheffield: T&T Clark/Sheffield Academic Press, 1990 [1977]) 173; John van Seters, "Recent Studies on the Pentateuch: A Crisis in Method," *JAOS* 99 (1979): 663–73; Jan Christian Gertz, Konrad Schmid, and Markus Witte, *Abschied vom Jahwisten: Die Komposition des Hexateuch in der jüngsten Diskussion*, BZAW 315 (Berlin ; New York: Walter de Gruyter, 2002); Georg Fischer, "Time for a Change!: Why Pentateuchal Research is in Crisis," in *Paradigm Change in Pentateuchal Research*, ed. Matthias Armgardt, Benjamin Kilchör, and Markus Zehnder (Wiesbaden: Harrassowitz, 2019), 3–20.

12 Though not, as we will emphasize, this tradition's internal layering. Non-Documentarian scholars see this tradition as involving a wide spectrum of layers and divisions, while Documentarians tend to see two major layers, P and H. Yet both schools tend to see P's tradents and editors as contributing to a single overall project. And since specialist scholarship advances by finding nuances and critiques in existing consensus, if not by splitting hairs, the larger points of agreement tend to go without saying. For example, it can be easy to lose track of the fact that no Non-Priestly source shows substantial interest in the Tablernacle or the process by which it was first consecrated. Thus the debate between Achenbach and MacDonald (described below) over whether Leviticus 9-10 can be distinguished as one or two later elements within Leviticus is best seen as one of nuance and emphasis over how late and complex one sees revision *within* the Priestly tradition.

were likely to have been shaped and added, and called it the "founding document" (*Grundschrift* in German) when they were first developing these ideas in detail in the 19th century.[13]

The Priestly source, first presented in full on our pilot site **(Figures 1 and 2)**, and now published and translated in an excellent print version by Liane Feldman, is not only the most detailed body of religious law preserved from the ancient Near East, but also a narrative argument that the universe was created so that its rituals could be performed.[14] Obscured by the editing that placed it at the heart of the Bible, this intellectual work was nonetheless formative to the Western imagination. It constitutes the largest part of the Torah/Pentateuch and presents a single clear picture of ancient Israel's mythic history and rituals buried in the present text. This "Bible within the Bible" is everything our edited canonical Bible is not: precise, consistent, and

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[13] The delimitations of the *Grundschrift* as laid out in the most detail by Theodor Nöldeke, *Untersuchungen zur Kritik des Alten Testaments* (Kiel: Schwers, 1869) are essentially the same as those of the Priestly source given by all Neo-Documentarian and many Non-Documentarian scholars today. The foundational role of Nöldeke's study for scholarly understanding of the Priestly work and the Pentateuch more broadly is undisputed. See Eckart Otto, "Forschungen zur Priesterschrift," *Theologische Rundschau* 62 (1997): 1–3 and cf. Norbert Lohfink "Die Priesterschrift und die Geschichte" in *Congress Volume Göttingen 1977,* 189–225. Vetus Testamentum Supplements 29 (Leiden: Brill, 1978), 189n3. Compare the detailed picture of the Sinai revelation shared between Nöldeke and J. Estlin Carpenter and George Harford-Battersby, *The Hexateuch According to the Revised Version: Arranged in Its Constituent Documents by Members of the Society of Historical Theology, Oxford* (London: Longmans, Green, 1900), with the slightly more maximal Neo-Documentarian version of Baruch Schwartz, "The Priestly Account of the Theophany and Lawgiving at Sinai," in *Texts, Temples and Traditions—A Tribute to Menahem Haran*, ed. Michael Fox et al. (Winona Lake: Eisenbrauns, 1996), 103–34 and the slightly more minimal version of Erhard Blum, *Studien zur Komposition des Pentateuch* BZAW 189 (Berlin: de Gruyter, 1990). The maximal version (Schwartz) contains about forty-nine chapters of material, the minimal (Blum) forty-seven, and the older treatments like Nöldeke and Carpenter and Harford-Battersby have forty-eight. It is important to note that some Non-Documentarian scholars see an original Priestly work as ending earlier to be continued by later Priestly-like layers, but as Jacob Wöhrle, "The Priestly Writing(s): Scope and Nature," in *Oxford Handbook of the Pentateuch,* ed. Joel S Baden and Jeffrey Stackert (Oxford: Oxford University Press, 2021), 255–75 notes, this is to some extent a question of nuance. For an example of this nuance see the finer but more conjectural separation of P into multiple supposedly post-exilic P layers, the earliest of which is claimed to already be aware of D, JE, and most prophetic literature by Lohfink "Die Priesterschrift."

[14] pentateuch.digital published January 2022; Liane Feldman, *The Consuming Fire: The Complete Priestly Source, from Creation to the Promised Land*, World Literature in Translation (Oakland: University of California Press, 2023).

unified in a way that sets it apart from all other major biblical texts.[15] It is a story with not just a coherent plot but a theoretically significant vision of language, the human body, and the cosmos—all coordinated through ritual.

Today the Priestly work is one of the only things that scholars of every school agree came before the Torah. Whether as an ongoing multilayered project with multiple recoverable earlier versions (as in recent Non-Documentary views), or as a unified source created by a single school with one major revision (the Documentarian view with P revised in a single later "Holiness" stage), there is a de facto consensus on it as a single project. While including a diversity of visions and arguments, it still constitutes the most fundamental fact about our achieved understanding of the Pentateuch's history. Making this fact visualizable makes it accessible and self-evident in a new way. Even the narrowest and most consensus-based version of the Priestly narrative (e.g. our pilot site or Feldman's book), is closer to what ancient Hebrew literature would actually have looked like than our Bible. This makes it a good starting point for understanding ancient Israel. Historians are not sure how far back the Torah goes, but agree that the Priestly work is the oldest part we can be sure about, and the Non-Priestly elements provide the remaining data we must explain.

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[15] This level of unity, setting it apart from all other elements in the Pentateuch, has long been noted. For one of the many summaries see e.g. Volkmar Fritz: "Weitgehende Übereinstimmung herrscht nur in der Frage nach dem Anteil der Priesterschrift, der sich aufgrund sprachlicher und inhaltlicher Eigenart verhältnismäßig eindeutig bestimmen läßt." Fritz,"Das Geschichtsverständnis Der Priesterschrift," *Zeitschrift für Theologie und Kirche* 84 (1987): 426–39, 426. Though as we emphasize below, the consistent and unified quality of P is relative, not absolute: while far more coherent than the other corpora scholars have observed within the Pentateuch, it still shows clear signs of being a tradition developed by generations over years. It has long been noted that there are layers and seams within the Priestly tradition, and the most recent work over the past decade which we briefly survey below develops these observations. However, the overall picture these recent studies form still strongly tends toward being of a single tradition, with tradents adding to it carefully, typically striving to "color within the lines" with significant (though not perfect) success. For the fundamental question of the Priestly work's status as a chronologically layered long-term collective project with a set of shared concerns, see most recently, Benjamin D. Sommer, "Tradition and Change in Priestly Law. On the Internal Coherence of the Priestly Worldview" in *The Pentateuch and Its Readers*, ed. Jeffrey Stackert and Joel S Baden, Forschungen Zum Alten Testament, 170. (Tübingen: Mohr Siebeck, 2023), 269–84.

The achieved consensus about the P source has been easy to miss because, until very recently, little scholarly work has gone into making it accessible or appear self-evident. Virtually all our critical editions and translations of which reproduce the late antique canonical edition of the Masoretes. Thus, readers have been faced only with an already-edited text and left to their own devices to untangle its strands based either on lists of chapter-verse references in scholarly publication, or on a few inadequate criteria. The most easily graspable—yet deeply misleading—guide to the Pentateuch's seams have been the divine names Yahweh and Elohim, which have been abandoned by all approaches, though Documentarian scholarship still uses J and E as shorthand for the two literary complexes it discerns outside of P in Genesis through Numbers. A similarly insufficient approach is the enumeration of characteristic phrases and verbal tics, which tend to reduce the great differences in plot, storytelling, and ideas to a search for trivial features. These criteria remained attractive in the absence of any apparently self-evident alternatives. But these isolated divine names and phrases can make more sense in the context of individual narrative entities or layers of P and non-P texts, which the project will now make possible to visualize.
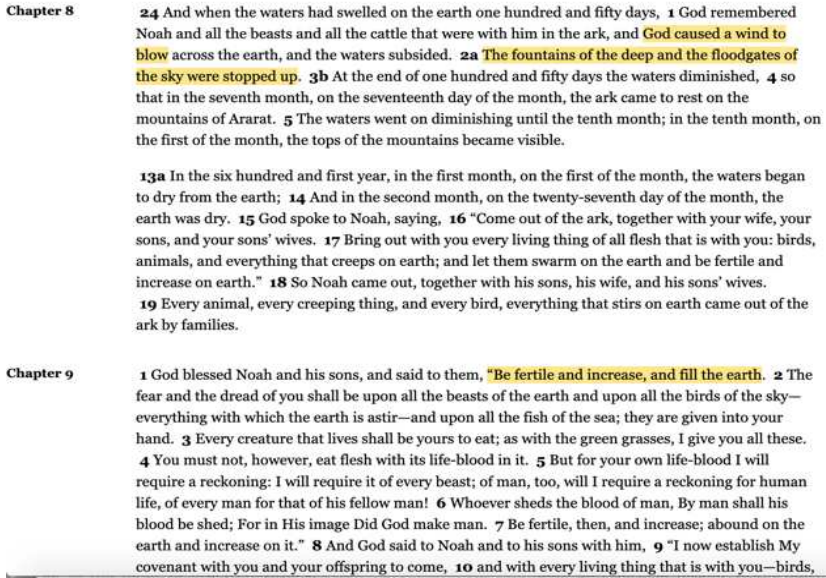
Figure 1. Screenshot of Pilot Project illustrating the coherent approach to the creation of scripture: the Priestly version of the flood by itself.
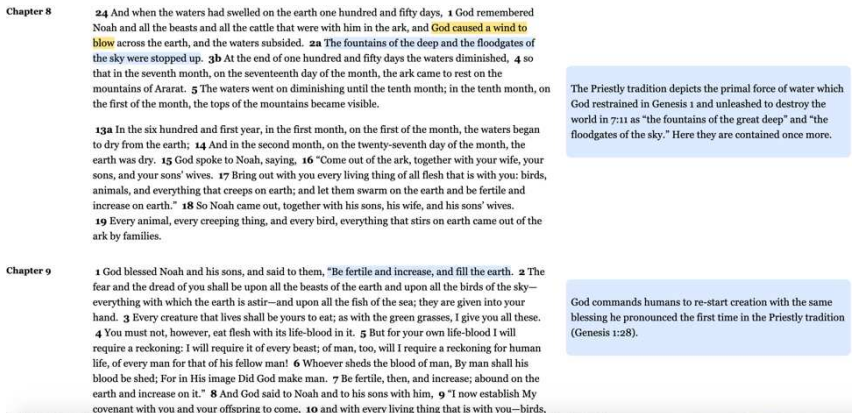

Figure 2. Screenshot of Pilot Project illustrating the coherent approach to the creation of scripture: the Priestly version of the flood by itself with clickable annotations activated.

4. Visualizing the Bible's Layers

Is it possible to visualize textual sources or layers that are concrete enough to be subject to discussion, that are knowable in some ways, while also concretely representing the crucial things we know about its historicity? How can we make the text knowable, give a basis for conversation and teaching about it, without creating a false sense of timeless unity? For scholars, after Harold Bloom's 1989 challenge to see the Yahwistic work as a foundational creative force in Western literature we have seen increasingly urgent calls to integrate the literary study of the Pentateuch with a historical understanding of its compositional elements. This project joins a growing movement to open these building blocks up to literary investigation by means of reading.[16] Important predecessors in terms of alternative productions of the texts' material presence include Rosenberg and Bloom's *Book of J*, Pola's "Original Priestly Source," Yoreh's E, Gaines' "Poetic Priestly Source," and Feldman's version of P.[17] All use the best of print technology, which is especially well suited for presenting a single

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[16] The two have often been seen as contradictory because literary reading is typically holistic, looking at the complete picture of how a text portrays characters, events, and ideas. By contrast, historical views of the Pentateuch typically read its diverse parts separately, consisting of varied, even contradictory layers and building blocks that came together in different time periods. A key recent example in the flagship journal of biblical studies exemplifies this call in the case of the book of Exodus, arguing for a way of literary reading that is "appropriate to the complex compositional nature of this text." Hindy Najman and Konrad Schmid, "Reading the Blood Plague (Exodus 7: 14–25): The Hermeneutics of a Composite Text," *JBL* 141 (2022):23. Yet the result remains formally conservative, using the late antique canonical bible as its only primary data and interpreting all of the often-inconsistent narrative claims that result from the interweaving as entirely deliberate (rather than a byproduct of their chronological sequence). This hermeneutic is in fact completely consistent with older established holistic readings of the Pentateuch's "composite artistry," what Robert Polzin, *Moses and the Deuteronomist* (New York: Seabury Press, 1980) found in Deuteronomy or Robert Alter, *The Art of Biblical Narrative* (New York: Basic Books, 1981) found in Genesis to be "a technique of placing two parallel accounts in dynamically complementary sequence" where the interpretive assumption is that "it is obvious enough that the two accounts are complementary as well as contradictory and overlapping."

[17] David Rosenberg and Harold Bloom, eds. *The Book of J* (New York: Grove Weidenfeld, 1990). Thomas Pola, *Die ursprüngliche Priesterschrift: Beobachtungen zur Literarkritik und Traditionsgeschichte von Pg* (Neukirchen-Vluyn: Neukirchener Verlag, 1995); Tzemah Yoreh, *The First Book of God* BZAW 402 (Berlin: de Gruyter, 2010); Jason M. Gaines, *The Poetic Priestly Source* (Minneapolis: Fortress Press, 2015); Feldman, *The Consuming Fire* (op. cit.).

narrative that reads continuously. Alternative texts are included as footnotes or marginalia.

These print publications of plausible biblical sources help contribute to focused, line by line literary reading. But as fixed, non-interactive texts, such presentations also tend to silo the texts off from the possibilities of seeing them historically, as threads or layers in the history of ancient Hebrew literary production. The next step we propose is to present the texts in their relationships with one another, which helps make visible the single most fundamental, material aspect of ancient Hebrew literary creativity in the Pentateuch, with interweaving as its most distinctive feature. A core consensus among a wide spectrum of scholars is that it was woven together in some way from preexisting source elements.[18] Thus, the dominant fact about the values that drove the creation of the Pentateuch is that they have all been brought into relationship, but it is hard for both the public and scholars to see how and why. The Pentateuch's way of telling multiple stories at once by interweaving them is something for which modern readers do not have good parallels or precedents because it does not appear in any other Western literature.[19] To understand the distinctive compositional values that drove the creation of the Pentateuch, we

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[18] Schmid, Konrad, "Has European Scholarship Abandoned the Documentary Hypothesis? Some Reminders on Its History and Remarks on Its Current Status," in Thomas Dozeman, et al., eds*., The Pentateuch. International Perspectives on Current Research*, FAT 78 (Tübingen: Mohr-Siebeck 2011), 17–30.

[19] Much biblical scholarship still does not identify what is distinctive about the problem of Pentateuchal literature—the presence of interwoven parallel variants with the same general plot, where most key events occur two or three times. The failure to separate the distinctive problem of the Pentateuch from the broader and more widespread premodern phenomenon of textual fluidity seems to risk a *reductio ad absurdum* in the mutually contradictory claims that "empirical models" support both the plausibility and implausibility of Documentarian analysis. For the Pro case see Jeffrey Tigay, ed. *Empirical Models for Biblical Criticism* (Philadelphia: University of Pennsylvania Press, 1985) and for the opposite Raymond Person and Robert Rezetko, eds., *Empirical Models Challenging Biblical Criticism* (Atlanta: SBL Press, 2016). Seth Sanders has argued against the self-evidence of untheorized comparative data in "What If There Aren't Any Empirical Models for Pentateuchal Criticism?" in *Contextualizing Israel's Sacred Writings: Ancient Literacy, Orality, and Literary Production*, ed. Brian Schmidt (Atlanta: SBL Press, 2015), 281–304.

need to literally see how its earlier elements were brought into relationship with each other.

It is not a coincidence that scholarly visions of the Pentateuch's historical development in layers emerged around the same time as the geological vision of the earth's development in strata. Geology provided the first and clearest picture of how something that seemed eternal could be read for its non-eternal, temporal history. And early geology and evolutionary theory developed alongside the critical and historical study of the Bible, which provided one of the conceptual foundations of modern science (**Figures 3 and 4**).[20] The sheer recognition that the seemingly eternal Bible, like animal life and the earth itself, had a history was transformative. Considering the possible building blocks of the Bible opened a new window on the history of religion and literature in a similar way as recognizing the superposition and layering of geological strata opened a new window on the history of the earth. Challenging traditional views of biblical creation, both the Bible and the earth were found to have building blocks and emerge in stages over time.

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[20] For the surprisingly strong interconnection between biblical scholarship and European scientific conceptualizations of the history of earth and life see M. J. S. Rudwick, *Earth's Deep History: How It Was Discovered and Why It Matters* (Chicago: University of Chicago Press, 2014).

Figure 3. Visual evidence of the earth's historical stratification in canyon wall. Source: Flickr, travelwayoflife, "Quebrada de Cafayate, Argentina," (2011): https://www.flickr.com/photos/travelwayoflife/6164348161/ License: CC BY-SA 4.0 https://creativecommons.org/licenses/by-sa/4.0>, via Wikimedia Commons.
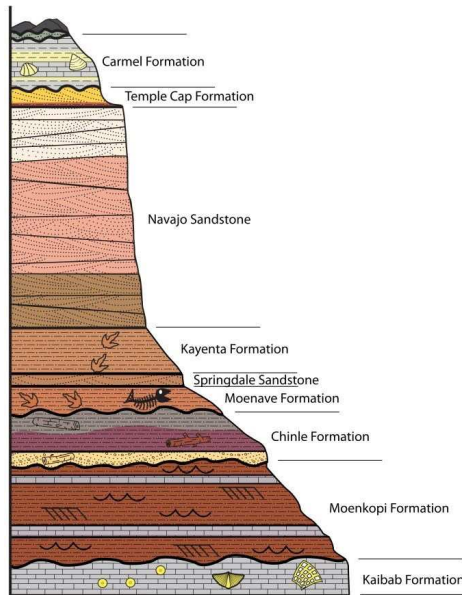

Figure 4. Geological strata cross-section. Source: U.S. National Park Service, public domain:https://www.nps.gov/zion/learn/nature/images/ZionStratColumn_small_1.jpg?maxwidth=1300&maxheight=1300&autorotate=false

But while in geology it has long been possible to visualize the building blocks of the earth's history, until now–despite strong agreement on the Pentateuch's simplest building blocks–it has been difficult to visualize them in their independent form. For this relational and diachronic aspect of visualizing Pentateuchal sources, it is ironically a much older project, the multi-column presentation of Carpenter and Harford-Battersby, that affords the closest precursor to our work.

For the Bible's layers, compare the two most widely known and used types of presentation, those of Carpenter and Harford-Battersby (1900) vs. Haupt (1896) and Friedman (2003).[21] While the older work of Carpenter and Harford-Battersby (**Figure 5**) clearly separates the two plausible interwoven sources, they swim in a sea of tiny margin notes on all sides.

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[21] Carpenter and Harford-Battersby, The Hexateuch, op. cit.; Paul Haupt, ed. *The Sacred Books of the Old Testament: A Critical Edition of the Hebrew Text, Printed in Colors, with Notes Prepared by Eminent Biblical Scholars of Europe and America. Vol. 1: The Book of Genesis* (Leipzig; Baltimore: Hinrichs; The Johns Hopkins Press, 1896); Richard Elliott Friedman, *The Bible with Sources Revealed: A New View into the Five Books of Moses* (San Francisco: HarperSanFrancisco, 2003).

Gen 7²¹ EARLY HISTORY OF MANKIND

J	J²	P
		ing thing that swarmeth upon the earth, and every man.
	. . . ²² all in whose "nostrils was the "breath of *the* "spirit of life, of all that was in the "dry land "died. ²³ "And every "living thing was "blotted out which was upon the "face of the ground, "both man, and cattle, and "creeping thing, and fowl of the heaven; and they were "blotted out from the earth; and Noah only was "left, and they that were with him in the ark.	
		²⁴ And the waters "prevailed upon the earth an "hundred and fifty days. 8¹ And God "remembered Noah, and every "living thing, and all the cattle that were with him in the ark: and God made a wind to pass over the earth, and the waters "assuaged; ² the "fountains also of the deep and the windows of heaven were "stopped,
	—⁶ᵃ "And it came to pass "at the end of "forty days—²ᵇ that the "rain from heaven was restrained; ³ᵃ and the waters returned from off the earth "continually.	
		³ᵇ and after the end of "an "hundred and fifty days the waters decreased. ⁴ And the ark rested in the "seventh month, on the seventeenth day of the month, upon the mountains of Ararat. ⁵ And the waters decreased continually until the "tenth month: in the tenth month, on the first day of the month, were the tops of the mountains seen.
	⁶ᵇ And Noah opened the "window of the ark which he had made: ⁷ and he "sent forth a raven, and it went forth "to and fro, until the waters were dried up from off the earth. ⁸ "And he sent forth a dove from him, to see if the waters were "abated from off the "face of the ground; ⁹ but the dove "found no "rest for the sole of her foot, and she returned unto him to the ark, for the waters were on the "face of the whole earth: and he put forth his hand, and took her, and brought	

7²² A composite phrase occurring nowhere else. R² has apparently tried to unite J's terminology 'all in whose nostrils was the *nishmath* of life' with P's 'all in whom was the *ruah* of life,' cp 6¹⁷. The process results in the unique combination 'the *nishmath* of the *ruah* of life.'
²³ᵃ M Or, *and he blotted out every living thing.*—Cp 6⁷.
²³ᵇ R² following 6²⁰ 7¹⁴ ²¹. The idiom 'both . . . and' is the same as in 6⁷, et 7²¹.
8⁴ᵃ This clause, standing in the text at the opening of ⁵, probably preceded ²ᵇ, fixing the date of the cessation of the

rain 7¹². In combining this passage with P's longer duration of the flood, R has transposed the clause, but in doing so deprived it of its meaning, for after ² what is the starting-point of the reckoning?
² The formula at the opening of 10 17 implies a preceding period of seven days' waiting not now found in the text. The conjecture that some words have here been dropped out, such as 'and he stayed seven days,' has been widely adopted. So Olshausen, Schrader, Delitzsch, Budde, Dillmann, &c.

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Figure 5. Carpenter and Harford-Battersby's 1900 presentation of part of the Flood narrative in *The Hexateuch*.

The presentation developed by Paul Haupt for his *Polychrome Bible* (**Figure 6**) is echoed in the more recent work of Richard Elliot Friedman (**Figure 7**), which is visually simpler but follows Haupt in essence. In

both one must recall which colored lines correspond to which source, and if one wants to read either as a coherent work, imagination and memory are required, and supported only by sparse notes.

Among the treatments currently available only Carpenter and Harford-Battersby's 1900 treatment facilitates continuous reading of possible sources using the four-thousand-year-old technology of parallel columns. While still powerful in affording a unified view of diverse parallel textual elements, this presentation is still severely limited by the gaps and changes in columnar layout as the sources and layers presented shift in type from P to J to E and R, with various divisions and variants. Meanwhile Friedman's *Bible with Sources Revealed* follows a tradition established by Haupt's 1896 *Polychrome Bible* in printing the canonical Masoretic text or a translation of it with the traditional text intact and sources color-coded. It is ironic that after centuries of sophisticated scholarship the most advanced visual technology currently available for Pentateuchal study —the multi-column format—is arguably the earliest one ever developed, since multi-column lexical texts were among the main tools for teaching scribes to write Sumerian by 2000 BCE.[22]

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[22] Veldhuis, Niek, "Elementary Education at Nippur: The Lists of Trees and Wooden Objects," University of Groningen Ph.D. Dissertation, 1997. For the development of this visual technology some 2000 years later for analyzing Christian biblical texts in late antiquity see Jeremiah Coogan, "Reading (in) a Quadriform Cosmos: Gospel Books in the Early Christian Bibliographic Imagination," *Journal of Early Christian Studies* 31 (2023): 85–103.

Figure 6. Haupt's *Polychrome Genesis* (1896).

| E P RJE R *Other* | 45

8

¹And God remembered Noah and all the wild animals and all the domestic animals that were with him in the ark, and God passed a wind over the earth, and the water decreased. ²And the fountains of the deep and the apertures of the skies were shut, And the rain was restrained from the skies. ³And the waters went back from on the earth, going back continually, and the water receded at the end of a hundred fifty days. ⁴And the ark rested in the seventh month, in the seventeenth day of the month, on the mountains of Ararat. ⁵And the water went on receding until the tenth month. In the tenth month, in the first of the month, the tops of the mountains appeared. ⁶And it was at the end of forty days, and Noah opened the window of the ark that he had made. ⁷And he let a raven go,* and it went back and forth until the water dried up from the earth. ⁸And he let a dove go from him to see whether the waters had eased from the face of the earth. ⁹And the dove did not find a resting place for its foot, and it came back to him to the ark, for waters were on the face of the earth, and he put out his hand and took it and brought it to him to the ark. ¹⁰And he waited still another seven days, and he again let a dove go from the ark. ¹¹And the dove came to him at evening time, and here was an olive leaf torn off in its mouth, and Noah knew that the waters had eased from the earth. ¹²And he waited still another seven days, and he let a dove go, and it did not come back to him ever again. ¹³And it was in the six hundred and first year, in the first month, in the first of the month: the water dried from on the earth. And Noah turned back the covering of the ark and looked, and here the face of the earth had dried. ¹⁴And in the second month, in the twenty-seventh day of the month, the earth dried up.**

¹⁵And God spoke to Noah, saying, ¹⁶"Go out from the ark, you and your wife and your sons and your sons' wives with you. ¹⁷Bring out with you all the living things that are with you, of all flesh, of the birds and of the domestic animals and of all the creeping animals that creep on the earth, and they will swarm in the earth and be fruitful and multiply on the earth."

¹⁸And Noah went out, and his sons and his wife and his sons' wives with him. ¹⁹All the living things, all the creeping animals and all the birds, all that creep on the earth went out from the ark by their families.

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*In P Noah sends out a raven. In J he sends out a dove (three times). (In the Epic of Gilgamesh, the hero of the flood sends out a raven, a dove, and a swallow.)

**In P the flood lasts a year (or a year and ten days). In J it is the more familiar forty days and nights.

Figure 7. Friedman's 2003 *Bible with Sources Revealed*, an English-language echo of the format of Haupt's *Polychrome Genesis* (1896).

The comparative layouts being built for the project provide a few simple advances: the ability to read parallel texts and plot points side by side (**Figure 8**), and the ability to toggle between documentarian and non-documentarian approaches. These do not represent any vast advance in computing power or data analysis, but allow readers for the first time to change what data to display and how, and thus have some agency in which textual data appear self-evident. This, in a way, represents the first qualitative change in how we present the Pentateuch in millennia.

The Priestly Account of Creation

Moment of origin: God creates by speaking

1 Of the first things God created, the earth and the sky:
When Earth was a wild wasteland and Dark covered Deep,
 then God's breath stirred the surface of the water
God said: "light!" then Light was there.
 God approved of the Light; he pried Light and Dark apart.
He named the light Day and the dark Night
 so there was an evening, then a morning: a day.

God said: "let there be a sky in the water!" And something separated the waters. So God made the sky: he set the water beneath the sky and the water above the sky apart. And it happened.

He named the sky Heaven. So there was an evening, then a morning: a second day.

9 God said: "let the waters beneath Heaven pool together; let land appear." And it happened. He named the land Earth and the pool Ocean. God approved.

First life created: vegetation

11 God said: "let the Earth grow green: plants sowing seed, trees fruiting, each with their own special kind, each bearing seed. So it happened: Earth burst forth green, plants sowing seed, each of their own special kind, trees fruiting, each of their own special kind, each bearing seed. God approved. So there was an evening, then a morning: a third day.

14 God said: "let there be lights in the dome of Heaven, to set day and night apart. They will serve as omens to bring on festivals, days, and years. The lights in the dome of Heaven will shine down on Earth.

So it happened: God made the two great lights: the greater light to rule the day, and the lesser light to rule the night--and the stars...
And God set them in the dome of heaven to shine down on Earth, to rule the day and night, to set light and dark apart. And God approved.
So there was an evening, then a morning: a fourth day.

Final act of creation: humans, both male and female

26. God proposed: let's make humans just like us, so they look like one of us, so they will be the masters of the fish of the sea, the birds of the heavens, the cattle, the whole earth and everything crawling on it. So God created humans that looked like he did, like a copy of him, male and female he created them. 28. And God blessed them: "bear fruit, become many, fill the earth, harness it and be the masters of all the fish of the sea, the birds in the air, all life crawling on the earth.

The Yahwistic Account of Creation

Moment of origin: Yahweh creates by sculpting and breathing

2:4b On the day the god Yahweh made earth and heaven, there was not yet so much as a shrub on the ground, and no grass or green had yet grown outside, for the god Yahweh had not made it rain on the ground and there was nobody to work the soil. But the earth would flood, watering the whole surface.

First type of life created: human male

Then the god Yahweh sculpted the Mortal out of the soil's dust, and blew the breath of life into his face, and the Mortal came to life. And the god Yahweh planted a garden in Paradise to the east, and there he placed the Mortal he had sculpted.

And the god Yahweh grew there every beautiful tree that was good to eat from, with the Tree of Life in the very middle of the garden, and the Tree of Knowing Good from Bad.

And a river flows from Paradise to water the garden, and from there it forks into four sources: the name of the first is the Bubbling River, that flows all around the Land of Dunes, where there is gold. The gold of that land is pure; there, there are Amber and Onyx. The name of the second is the Gushing River, that flows all around the land of Cush. The name of the third is the Tigris, which runs east of Ashur. And the fourth river is the Euphrates.

Now the god Yahweh had set up the Mortal in the garden Paradise to work it and guard it. And the god Yahweh ordered the Mortal, "You can certainly eat from any tree in the garden, but the Tree of Knowing Good from Bad--you cannot eat from that one, because the moment you eat from it you will certainly die."

The god Yahweh said, "The Mortal should not be alone; I will make a partner for him." So the god Yahweh sculpted all the beasts of the wild and every bird in the sky. He had them come to the Mortal to see what he would call it, and whatever the Mortal called each wild beast was its name. So the Mortal

Final act of creation: human female

Then the god Yahweh put the Mortal in a trance, took from his ribs while he slept, and sealed his body back up. And the god Yahweh built up the rib he took from the Mortal into a woman and he had her come to the Mortal. And the Mortal said, "Finally! Bone from my bone, a body from my body--this will be called 'woman' for she was taken from 'man!'" And this is why 'man' abandons his father and his mother and adheres to his 'woman', so they become one body. And the Mortal and his woman were bare and unembarrassed.

Figure 8. Comparison of beginning and end of P and Non-P (Yahwistic) versions of creation in literary translation.

5. Relation to Comparable Existing Digital Projects

While we were informed and inspired by print precursors, our project is born digital and uses the tools of digital humanities to open new possibilities for analysis of ancient texts. Digital humanities research on the Bible is currently dominated by non-academic, Evangelical Christian entrepreneurial projects. This holds true from the two main commercial Bible software packages, Accordance and Logos, to the dominant open-access annotated online translations (see bible.org, under NET Bible).[23] While the Jewish sefaria.org site provides access to traditional Jewish religious interpretation, it relies on printed editions of texts—often more accessible but less accurate than critical editions. By contrast, our tagged data is designed to enable critical study of the Bible's composition.

Existing printed academic work on the composition of the Hebrew Bible is quite traditional and does not take advantage of the possibilities of digital humanities (see discussion of Carpenter and Harford-Battersby and Richard Elliot Friedman above). While there are no other comparable digital projects addressing the Bible's composition, it can be useful to compare with other ancient Hebrew-related projects more generally.

The sefaria.org project provides access to a very wide spectrum of ancient and medieval Jewish texts, often in translation. It follows the *Minimum Viable Product* model emphasizing usability, which has made it highly practical and widely used. In order to provide access to such a wide range of texts it does not emphasize analysis or comparison as our project does, or the type of philological work that goes into specialist critical editions. At the other end of the spectrum, the University of Chicago's CEDAR project aims to build a manuscript-

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[23] John Dyer, *People of the Screen: How Evangelicals Created the Digital Bible and How It Shapes Their Reading of Scripture* (New York: Oxford University Press, 2023).

based digital edition of the Hebrew Bible. This project is long-term and high-powered, and intended for a more specialized audience. Since its beginnings in 2017 it has focused on 354 manuscripts written in Hebrew, Greek, Latin, Coptic, Syriac, and Aramaic and is designed for researchers within the project rather than delivering an open-access public product. The CEDAR website (https://voices.uchicago.edu/cedar/) states that they have so far encoded 31 chapters of 8 books across the Hebrew Bible in various manuscripts and versions. Given that there are 929 or so chapters this will require a significantly longer time to completion than our project (e.g. even assuming a 500% increase in productivity it would require about two decades to complete). The CEDAR project is based on the powerful and versatile but proprietary OCHRE system. For example, it cannot be run from a browser but requires special software to be installed before a user can access it. This means that its capacities are far greater than the relatively simple TEI/xslt we plan to use, but our comparatively low-powered minimalist platform has advantages in terms of interoperability, including that virtually anyone with a phone can access it, regardless of computing power and without installing further software.

By contrast, not relating to the Bible's ancient context, composition and contradictions but the modern world, digital humanities study of English Bible translations in modern American popular culture have been interesting and robust. An example is https://americaspublicbible.org/, which uses machine learning of the sort our site also will employ to detect quotations (though only of the King James Version, rather than more recent popular translations such as the New Revised Standard Version or the Jewish Publication Society version).

6. Functions and Possibilities: From Minimum Viable Product to Data Feminism and Comparative Literature

6a. Compositional Layers

Our project is the first to let users visualize the Pentateuch's composition and give people the tools to build their own explanation by creating a new type of open-access text that also serves as a reference collection. It is based on semantically tagged open-access versions of the underlying sources of the Pentateuch which users can use to compare and answer their own questions.

The project's first innovation will be to let users juxtapose the possible ways of dividing and analyzing the texts. The project's "minimum viable product" approach of completing the simplest and most useful elements first caused us to begin with the most broadly accepted and, therefore, widely useful area of progress, the separation of the Priestly source from other elements (the consensus of "P vs Non-P"). We have built the second-simplest part, a Neo-Documentarian separation of Non-P into E and J informed by the arguments of Baruch Schwartz and his students Joel Baden and Jeffrey Stackert, and added the most widely agreed layer of the Priestly school, the Holiness tradition (H) onto P.[24]

Our project's final stage of divisions will help advance the public understanding of the important but subtler layering of the Non-Documentarian theories represented by scholars such as Konrad Schmid and David Carr. The challenge here will be to clearly and intuitively indicate a compositional process that its proponents agree is more intricate and less conducive to instant visualization. We will

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[24] For guides to Neo-Documentarian consensus on E vs J divisions see Joel Baden, *The Composition of the Pentateuch: Renewing the Documentary Hypothesis*, The Anchor Yale Bible Reference Library (New Haven: Yale University Press, 2012) and Jeffrey Stackert, *A Prophet like Moses: Prophecy, Law, and Israelite Religion* (New York: Oxford University Press, 2014). For Neo-Documentarian divisions of H vs P see Israel Knohl, *The Sanctuary of Silence: The Priestly Torah and the Holiness School* (Minneapolis: Fortress Press, 1995), with rethinking of the role of Leviticus 17 in Liane Feldman, *The Story of Sacrifice: Ritual and Narrative in the Priestly Source*, FAT 141 (Tübingen: Mohr Siebeck, 2020).

build here on a proposal of David Carr to use more clearly descriptive language for this understanding, which he suggests we term the "Blocks and Bridges" approach.[25] Similarly, he argues, we can envision the Non-Priestly portions of the first four books of the Pentateuch positively, as the result of a process of deliberate and careful layering. Rather than an unassigned, negative space (Non-P implying "whatever isn't in P") Carr has termed the collective editorial creativity that built rest of the Pentateuch "L," for the "Lay" source but also suggesting the complex process of layering that Non-Documentarian scholars see as essential to the Pentateuch's creation.[26]

With both major contemporary proposals instantly available for every chapter of the Pentateuch, both readers and scholars will be afforded a parallax view of how it could have come to be. Users will be able to save different divisions in their own version of the Pentateuch, creating their own potential reconstructions and test which theories may best illuminate processes of ancient literary composition.

In contrast to the older image of geological strata or interwoven threads, the Non-Documentarian "Blocks and Bridges" approach can be visualized by analogy with this conglomerate rock **(Figure 9)**. David Carr compares the narrative blocks with larger pre-exilic "rocks"— such as the non-P primeval history and Jacob- Joseph story—and the L editorial bridges with the rocky cement binding the rocks of the conglomerate into a whole.[27]

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[25] David M. Carr, personal communication 8/22.

[26] For the terminology of P vs L, rather than P vs Non-P, see David M. Carr, *The Hebrew Bible: A Contemporary Introduction to the Christian Old Testament and the Jewish Tanakh* (Sussex: John Wiley & Sons, 2021), 206-11.

[27] Carr, *The Hebrew Bible*, 201.

Figure 9. "Conglomerate Variety Puddingstone." Source: Siim Sepp (Sandatlas), https://commons.wikimedia.org/wiki/File:00142_9_cm_conglomerate.jpg, CC BY-SA 3.0 https://creativecommons.org/licenses/by-sa/3.0>, via Wikimedia Commons.

6b. Semantic Markup and Data Feminism

A second innovation is that it lets readers view Pentateuchal texts by theme and different compositional threads. This lets them see beyond the sometimes anachronistic organization and divisions of our canonical Bible to ask fresh, relevant questions of the traditional texts. Our first planned layer of semantic markup relates to gender across the compositional layers of the Pentateuch. While the Bible's representation of ancient Judahite society was patriarchal, literary approaches such as that of Ilana Pardes have read contrasting "countertraditions" within its narrative threads, Sarah Shectman has emphasized the importance of integrating the study of ancient gender ideologies with source criticism, and Kelly Murphy has shown how successive redactional layers in the book of Judges tell a story of shifting conceptions of masculinity over time.[28] With our digital tools, we can push such approaches further by flagging key gender roles in the narratives as we encode the text, making new patterns in the Pentateuch's compositional layers visible. By tagging characters' roles in addition to and in relation to compositional strands, we can take an

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[28] Ilana Pardes, *Countertraditions in the Bible: A Feminist Approach* (Cambridge: Harvard University Press, 1992); Sarah Shectman, *Women in the Pentateuch: A Feminist and Source-Critical Analysis*, HBM 23 (Sheffield: Sheffield Phoenix Press, 2009); Kelly J. Murphy, *Rewriting Masculinity: Gideon, Men, and Might* (New York: Oxford University Press, 2019).

approach informed by what D'Ignazio and Klein call Data Feminism, helping make the gendered patterns of the data as "objectively" visible as commonly recognized themes like God's covenant or compositional threads like the Priestly Source.[29]

As scholars such as Feldman have argued, legal perspectives are often deeply intertwined with these narrative questions in the Pentateuch's various, often conflicting perspectives on issues like childbirth. Yet it is currently impossible for the curious reader to quickly view and compare different biblical passages in a historically informed way. Our encoding makes possible a quick but contextualized view of areas where gender and law meet such as the question of whether induced miscarriage is considered parallel to murder (**Figure 10**). In doing this it promises to democratize understanding of the text.

	Covenant Code *Exodus 21-23*	**Laws of Deuteronomy** *Deuteronomy 5-26*	**Holiness Tradition** *Leviticus 17-27 + parts of Numbers*
Killing *Manslaughter*	Ex. 21:12 He who kills a man shall be put to death. ¹³ If he did not do it by design, but it came about by an act of God, I will assign you a place to which he can flee.	Deut. 19:4 Now this is the case of the manslayer who may flee [to a town of refuge] and live: one who has killed another unwittingly, without having been his enemy in the past. --he did not incur the death penalty, since he had never been the other's enemy.	Lev. 24:17 If anyone kills any human being, he shall be put to death. ¹⁸ One who kills a beast shall make restitution for it: life for life. [Num. 35:15 (But)... anyone who kills a person unintentionally may flee (to the towns of refuge).
Murder	¹⁴ (But) If a man schemes against another and kills him treacherously, you shall take him from My very altar to be put to death...	¹¹ If, however, a person who is the enemy of another lies in wait for him and sets upon him and strikes him a fatal blow and then flees to one of these towns, ¹² the elders of his town shall have him brought back from there and shall hand him over to the blood-avenger to be put to death;	¹⁸ But anyone who strikes another with an iron object so that death results is a murderer; the murderer must be put to death. ¹⁷ Or if he struck him with a stone tool that could cause death, and death resulted, he is a murderer; the murderer must be put to death....]
Injury *Reproductive*	²² When men fight, and one of them pushes a pregnant woman and a miscarriage results, but no other damage ensues, the one responsible shall be fined according as the woman's husband may exact from him, the payment to be based on arbitration.	Deut. 25:11 If two men get into a fight with each other, and the wife of one comes up to save her husband from his antagonist and puts out her hand and seizes him by his genitals, ¹² you shall cut off her hand; show no pity.	
Other Bodily Injury	²³ But if other damage ensues, the penalty shall be life for life, ²⁴ eye for eye, tooth for tooth, hand for hand, foot for foot, ²⁵ burn for burn, wound for wound, bruise for bruise.		¹⁹ If anyone maims his fellow, as he has done so shall it be done to him: ²⁰ fracture for fracture, eye for eye, tooth for tooth. The injury he inflicted on another shall be inflicted on him.

Figure 10. The interplay of gender and responsibility in the laws of murder and manslaughter

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[29] Catherine D'Ignazio and Lauren F. Klein, *Data Feminism* (Cambridge: MIT Libraries Experimental Collections Fund, 2020) open access edition https://data-feminism.mitpress.mit.edu/.

An example of our goals for encoding narrative roles is to make it possible at a glance for readers to be able to ask what the main roles the Pentateuch's different narrative traditions envision for women, either on their own or contrasted with men, and whether these gender roles can be correlated in some way with the Pentateuch's distinct compositional layers. One set of options that readers can switch on will start with the female roles envisioned by the biblical scholar Tikva Frymer-Kensky.[30] Going in the order of our canonical Bible, she characterizes them as:

1. "The 'woman as victor' stories are tales about heroic women who become saviors. These women, both Israelites and foreigners, help Israel survive and defeat its enemies." She finds them in Genesis, Exodus, Joshua, Judges, and Samuel. Tellingly they disappear with David's monarchy and return after the death of the kingdom.

2. "The 'women as victims' stories are the 'texts of terror,' tales of women who suffer at the hands of the men in power...the placement of these stories is a clue to revealing their purpose. They all appear in two of the historical books of the Bible, Judges and Second Samuel," describing the settlement of Israel and consolidation of the Davidic monarchy.

3. The tales of "virgins" present a more varied picture. "These stories concern questions of marriage, intermarriage, ethnicity, and boundaries with non-Israelites."[31]

Do some compositional elements only talk about women as Victors or Victims, others Virgins? Can we offer a more fine-grained historical narrative about gender in ancient Israel based on the way it functions in the Pentateuch's separate strands? While even the most widely agreed-on building blocks and literary themes of the Torah are

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[30] Tikva Simone Frymer-Kensky, *Reading the Women of the Bible* (New York: Schocken Books, 2002).

[31] Frymer-Kensky, *Reading*, xvii-xix.

difficult for both lay people and scholars to immediately visualize, our solution will let users immediately see and manipulate the elements of the Bible's composition and content themselves. The topic of gender roles, our first major theme for semantic tagging, is only one example of endless possible topics around which the data can be analyzed.

EXAMPLE: The Promise to Abraham

An example of the literary qualities that our Semantic Markup process can render instantly visible Genesis' two parallel versions of the promise of a son to Abraham, in Genesis 17 and 18. This semantic markup allows us to immediately recognize the specific ways in which the two stories contain powerfully different, sometimes mutually exclusive versions of the same core plot points (with key diverging statements bolded).

Gen 17:15-21

And God said to Abraham, "**As for your wife Sarai, you shall not call her Sarai, but her name shall be Sarah. I will bless her**; indeed, I will give you a son by her. I will bless her so that she shall give rise to nations; rulers of peoples shall issue from her." **Abraham threw himself on his face and laughed**, as he said to himself, "Can a child be born to a man a hundred years old, or can Sarah bear a child at ninety?" And Abraham said to God, **"O that Ishmael might live by Your favor!"** God said, "Nevertheless, Sarah your wife shall bear you a son, and you shall name him Isaac; and I will maintain My covenant with him as an everlasting covenant for his offspring to come. As for Ishmael, I have heeded you. I hereby bless him. I will make him fertile and exceedingly numerous. He shall be the father of twelve chieftains, and I will make of him a great nation. But My covenant I will maintain with Isaac, whom Sarah shall bear to you at this season next year."

This passage would be encoded as a single literary unit with the following categories:[32] *Composition*: Priestly; Ancestor Narrative; *Genre*: Narrative; *Character Participants and Gender/Kinship Roles*: Abraham (M, Father), God (M, Divinity); *Character Non-Participants:* Sarah (F, Mother); Ishmael (M, Son); Isaac (M, Son) *Literary Themes:* Covenant, Blessing (Sarah), Promise of Offspring (Abraham, Sarah), Infertility (Sarah), Laughter (Abraham), Renaming (Sarah).

Gen 18:9-15

They said to him, "Where is your wife Sarah?" And he replied, "There, in the tent." Then one said, "I will return to you next year, and your wife Sarah shall have a son!" Sarah was listening at the entrance of the tent, which was behind him. Now Abraham and Sarah were old, advanced in years; **Sarah had stopped having her periods.**

And **Sarah laughed to herself**, saying, "**Now that I've lost the ability, am I to have enjoyment—with my husband so old?**"

Then the Lord said to Abraham, "Why did Sarah laugh, saying, 'Shall I in truth bear a child, old as I am? Is anything too wondrous for the Lord? I will return to you at the same season next year, and Sarah shall have a son." **Sarah lied, saying, "I did not laugh," for she was frightened.** Came the reply, "You did laugh.

Composition: Non-P; Documentary Specification J; Non-Documentary Specification L; Ancestor Narrative; *Genre*: Narrative; *Character Participants and Gender/Kinship Roles*: Abraham (M, Father), Sarah (F, Mother); The Lord (M, Divinity); *Character Non-Participants*: Isaac (M, Son); Literary Themes: Covenant, Blessing of Offspring, Infertility

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[32] Note that while the encoding choices here are ours, they build on a tradition of thematic analysis in biblical studies that is itself part of a broader tradition of motif analysis in folklore. A valuable recent example is Alexander Rofé, *Introduction to the Literature of the Hebrew Bible*, Jerusalem Biblical Studies 9 (Jerusalem: Simor, 2009), which stands in the scholarly tradition founded by Hermann Gunkel in his *Genesis*, Handkommentar Zum Alten Testament (Göttingen: Vandenhoeck & Ruprecht, 1901).

(Sarah), Laughter (Sarah), Fear of God (Sarah), Menstruation (Sarah), Sexual Pleasure (Sarah).

With the option of illuminating literary differences selected, we can see that the core event of fulfilling the promise of offspring has profoundly different, and highly gendered, literary qualities in the P vs. Non-P (J) versions. In P, all participants are male. Sarah is a non-participant, the passive recipient of renaming and blessing, but one who does not speak a single line. Meanwhile Abraham is the one who laughs, and vocally expresses concern for his son Ishmael who is not a topic of interest for him in the Non-P (J) version.

The Semantic Markup makes immediately visible how in the Non-P (J) version the roles are almost reversed—Abraham's one line concerns Sarah and is spoken without indicating his name. Meanwhile the bodily specifics of Sarah's menopause and enjoyment of sex are highlighted, as well as her potentially dangerous laughter which nonetheless puts her in direct dialogue with Yahweh, a pattern noted by Pardes as central to Genesis' heroic narratives of motherhood.

6c. Comparative Work

A third powerful tool is the ability to compare biblical episodes with key ancient parallels (**Figure 11**). Tablet XI of the Epic of Gilgamesh is the most famous parallel to the biblical Flood story in Genesis, but it is only when placed side by side and organized thematically that one can see how almost every major plot point occurs just once in Gilgamesh but twice, in two different ways, in Genesis 6-9. Similarly, the ancient Aramaic Books of Enoch contain a striking comparable parallel in its narrative of the Fall of the Angels, where each major plot point occurs twice in parallel, but this can only be visualized when it is thematically marked and encoded and can be visualized and manipulated in its parallel forms.

The distinctiveness of Pentateuchal composition is suggested by comparing the flood story of Genesis 6-9 with its most widespread contemporary parallel in the first millennium BCE, the Gilgamesh Flood tablet. The plots are closely parallel, including at least six key moments, each of which occurs once in the Gilgamesh version.

1. Defect in world and divine decision to destroy it

Gen. 6:5-7 The LORD saw how great was man's wickedness on earth, and how every plan devised by his mind was nothing but evil all the time. And the LORD regretted that He had made man on earth, and His heart was saddened. The LORD said, "I will blot out from the earth the men whom I created — men together with beasts, creeping things, and birds of the sky; for I regret that I made them."

Gen. 6:*11-13 The earth became corrupt before God; the earth was filled with lawlessness. When God saw how corrupt the earth was, for all flesh had corrupted its ways on earth, God said to Noah, "I have decided to put an end to all flesh, for the earth is filled with lawlessness because of them: I am about to destroy them with the earth.*

Gilgamesh XI [*Assumed background: gods cannot sleep because of the terrible disturbance humans create*] 14 The great gods resolved to send the deluge.

2. A divinely favored hero is chosen to survive the destruction

Gen 6:8 But Noah found favor with the LORD.

Gen. 6:9 *This is the line of Noah. — Noah was a righteous man; he was blameless in his age; Noah walked with God.*

Gilgamesh XI [*Gilgamesh asks Uta-Napishti why he was favored by the gods:*] 7 "How was it you stood with the gods in assembly? How was it you gained eternal life?

3. The god instructs the hero to prepare to rescue his family and animal life from the flood

Gen. 7:1 Then the LORD said to Noah, "Go into the ark, with all your household, for you alone have I found righteous before Me in this generation. Of every clean animal you shall take seven pairs, males and their mates, and of every animal that is not clean, two, a male and its mate; of the birds of the sky also, seven pairs, male and female, to keep seed alive upon all the earth. For in seven days I will make it rain upon the earth, forty days and forty nights, and I will blot out from the earth all existence that I created."

Gen. 6:17 *"For My part, I am about to bring the Flood--waters upon the earth--to destroy all flesh under the sky in which there is breath of life; everything on earth shall perish. But I will establish My covenant with you, and you shall enter the ark, with your sons, your wife, and your sons' wives. And of all that lives, of all flesh, you shall take two of each into the ark to keep alive with you; they shall be male and female. From birds of every kind, cattle of every kind, every kind of creeping thing on earth, two of each shall come to you to stay alive. For your part, take of everything that is eaten and store it away, to serve as food for you and for them."*

Gilg XI 23-27 "Man of Shuruppak, son of Ubartutu, Destroy this house, build a ship, Forsake possessions, seek life, Build an ark and save life. Take aboard ship seed of all living things!"

Figure 11a. Parallel flood narratives in Non-P (Documentarian J), P, and Gilgamesh XI.

4. Flooding of world for a set number of days (40, 150, or 7)

Gen. 7:17-18 The Flood was forty days on the earth, and the waters increased and raised the ark so that it rose above the earth. The waters swelled and increased greatly upon the earth, and the ark drifted upon the waters.	*Gen. 7:24-8:2 The waters swelled on the earth one hundred and fifty days, then God remembered Noah and all the beasts and all the cattle that were with him in the ark, and God caused a wind to blow across the earth, and the waters subsided. The fountains of the deep and the floodgates of the sky were stopped up, and the rain from the sky was held back…*	Gilg XI 128-131…134-5…137-8 For six days and [seven] nights, there blew the wind, the downpour, the gale, the Deluge--it flattened the land. But when the seventh day came, The gale relented, the Deluge ended….I looked at the weather, it was quiet and still, but all the people had turned to clay…. Down I sat, I knelt and I wept, down my cheeks the tears were coursing.

5. Discovery that the flood has ended

Gen. 8:6, 8-12 At the end of forty days, Noah opened the window of the ark that he had made. Then he sent out the dove to see whether the waters had decreased from the surface of the ground. But the dove could not find a resting place for its foot, and returned to him to the ark, for there was water over all the earth. So putting out his hand, he took it into the ark with him. He waited another seven days, and again sent out the dove from the ark. The dove came back to him toward evening, and there in its bill was a plucked-off olive leaf! Then Noah knew that the waters had decreased on the earth. He waited still another seven days and sent the dove forth; and it did not return to him any more.	Gen. 8:7, 13-17 *Then [Noah] sent out a raven; it went to and fro until the waters had dried up from the earth. In the six hundred and first year, in the first month, on the first of the month, the waters were drying from the earth; and when Noah removed the covering of the ark, he saw that the surface of the ground was drying up. And in the second month, on the twenty-seventh day of the month, the earth was completely dry. God spoke to Noah, saying, "Come out of the ark, together with your wife, your sons, and your sons' wives. Bring out with you every living thing of all flesh that is with you…and let them swarm on the earth and be fertile and increase on earth…*	Gilg XI 147ff When the seventh day arrived, I released a dove to go free. The dove went and returned. No landing place came to view, so it turned back. I released a swallow to go free. The swallow went and returned, No landing place came to view, so it turned back. I sent a raven to go free. The raven went forth, saw the waters receding, finding food…it did not come back to me.

6. Killing of animals and divine decision never to flood again

Gen. 8:20-21 Then Noah built an altar to the LORD and, taking of every clean animal and of every clean bird, he offered burnt offerings on the altar. The LORD smelled the pleasing odor, and the LORD said to Himself: "Never again will I doom the earth because of man, since the devisings of man's mind are evil from his youth; nor will I ever again destroy every living being, as I have done. …	Gen. 9:1-11 *God blessed Noah and his sons, and said to them, "Be fertile and increase, and fill the earth….Every creature that lives shall be yours to eat; as with the green grasses, I give you all these. You must not, however, eat flesh with its life-blood in it. But for your own life-blood I will require a reckoning…Whoever sheds the blood of man, By man shall his blood be shed; For in His image Did God make man. Be fertile, then, and increase; abound on the earth and increase on it." … "I now establish My covenant with you and your offspring to come, and with every living thing that is with you.. I will maintain My covenant with you: never again shall all flesh be cut off by the waters of a flood."*	Gilg XI 157-167 I set up an offering stand on the top of the mountain. … The gods smelled the savor, The gods smelled the sweet savor. The gods crowded around the sacrificer like flies. As soon as Belet-ili arrived, She held up the great fly-ornaments that Anu had made her in his infatuation. 'O these gods here, as surely as I shall not forget his lapis on my neck, I shall be mindful of these days, and not forget, forever

Figure 11b. Parallel flood narratives in Non-P (Documentarian J), P, and Gilgamesh XI.

7. Sustainability and Access

Technically, the project's design emphasizes robustness, sustainability, and open access. Its design is relatively straightforward and therefore more widely accessible and robust, using Javascript and

XSLT on top of TEI to create dynamic views for the user. The TEI encoding allows us to tag both compositional features (e.g. connecting each passage to a compositional source, as well as providing more than one option in cases where there is debate) and literary themes, such as "God's promise," with plot-related variables, such as "to Abraham, to Sarah, to Moses" etc. This will allow readers to not only follow classic biblical source divisions but experiment and create their own, based on literary themes and plot continuities.

For its data the project will also create the first sustainable open-access literary encodings of the Pentateuch in both the original Hebrew and a widely-accepted and well-founded English translation (the Jewish Publication Society version, for which we have secured permanent permission from the University of Nebraska Press). The key innovation of this that will allow new forms of manipulation, comparison, and analysis are that its themes and compositional elements will be tagged in the widely used TEI format and posted at https://github.com/ebcproject. Since it can generate both web views and PDFs, it will allow users to build their own versions and educational readers with selected paragraphs or chapters in any order or columns of parallel versions or "greatest hits" of the Torah.

The final product as described above will let users follow the arguments about the Bible's creation by making their own textual comparisons on the project website. They will thus be able to see its data and test its conclusions for themselves. The project will reside at the already existing open-access site for its original pilot project. In terms of fundamental accessibility principles it will follow the existing best practices and recommendations of project advisor Doug Emery, head of Cultural Heritage Computing for University of Pennsylvania Libraries. These include first, adhering to FAIR (Findable, Accessible, Interoperable, Reusable) standards for our data.

A second key principle is that we are building the project from the ground up to be accessible to disabled scholars and audiences. In particular, we have adopted the internationally recognized accessibility standards of the Institute for Disability Research, Policy, and Practice. Finally, its data preservation plan is to back up both the code and data to both Github and Humanities Commons on a weekly basis.

Its dissemination plan is to work with our existing partner LibreTexts (the world's largest Open Educational Resource website, which has 250 million pageviews annually) and via interviews and shared media with project board member Dan McClellan's (@maklelan) large social media/biblical studies audience on Tiktok and Instagram, and interviews with project board member and BBC presenter and biblical scholar Francesca Stavrakopoulou.

8. History, Scope, and Duration

The pilot version of this project, including user testing, was built over the course of 6 months from August 2021 to January 2022 by Sanders (the PI), Kay White (a Religious Studies MA student), and developer Dan Jutan. It was based on an initial division by Sanders' undergraduate thesis student Alix De Gramont and annotations by Sanders' PhD student Aron Tillema. The project had 3 phases, each one coordinated by weekly meetings between Sanders and White and biweekly all-hands meetings.

Pilot Phase 1: Building the data set. In first 3 months, White first researched permissions for English translations and found that the Jewish Publication Society provided the most sustainable high quality option, offering us a free license for scholarly purposes. Sanders edited and lightly adapted their English text and provided it to White and Jutan via Google Docs. White checked Sanders' text against major previous comprehensive analyses including those of Carpenter and

Harford-Battersby and Knohl. They summarized the key arguments which formed the basis of most footnotes. Working simultaneously with Sanders' draft text, Jutan wrote Javascript code (available on Github) to automatically pipe Google docs versions of the base text into a serverless netlify site as they were uploaded and modified.

Pilot Phase 2: Building site functionality. In the second 2 months, Sanders and White uploaded edited versions of the text to the Google Docs site which Jutan's script piped into the site for testing. Jutan modified the site to improve user functions, and Sanders added interpretive essays. Once the site was operational Sanders publicized it to an active user base of bible scholars and interested members of the public via social media, and requested feedback via interviews.

Pilot Phase 3: User testing. In the final month Sanders conducted interviews with a dozen users and took notes on their experiences including what they expressed to be most valuable about the current site and most interesting and desirable for future iterations. These expressed user interests form the basis of the project's new functions for manipulating and analyzing the data. Our limited resources could not support a commercial analytics package and because of ethical and legal concerns we only implemented Google analytics over a limited time period. Those results suggested approximately 2300 pageviews by 590 unique users over a month.

Under our model, the team built the pilot site efficiently on a shoestring budget, resulting in an open-access, serverless digital English presentation of the Priestly source on the pentateuch.digital site in about 6 months start to finish with less than $6,000 (a $2,000 grant from the UC Davis Academic Senate and a $3,500 grant from the UC Davis Jewish Studies Program). This site is static and pre-compiled and therefore robust and sustainable because of its very low computing and budgetary requirements.

Building and testing the first "minimum viable product" pilot version provided a concrete benchmark for estimating the current project's time to completion and directions for the next step. Users interviewed wanted a broader presentation of data that provided analytical tools and the ability for users to manipulate the data and presentation rather than read a simple online text edition. It is this sense of users' interests and needs which guides the current plan. User testing also confirmed an active interest in the project among students and scholars, exemplified in the rapid growth of the project's social media outlet on twitter which was received with significant expressions of enthusiasm, going from 0 to almost 200 followers in 24 hours.

The pilot project's empirical benchmark for completion was 40 hours of developer time, 120 hours of graduate researcher time, and 100 hours of PI time working part time over about 6 months with less than $6,000. In this time we created an English version of the largest biblical source, which represents about 50% of the textual material in the Pentateuch.[33]

Phase 2: By itself we estimate that building the remaining 50% of text with a richer type of encoding (TEI semantic markup including tags for compositional elements, literary themes, gender and narrative roles) and creating a parallel Hebrew version from the existing open-access, tagged Hebrew text should take about twice the developer time and three times the graduate researcher time the original required (though we have budgeted capacity for more if needed). It will also require substantial consultation with the advisory board we have now assembled, and more phases of testing and outreach.

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[33] In addition to the pilot project site, work on the project has already born fruit in a pair of forthcoming articles, Seth Sanders, "The Biblical Priestly Tradition as Material Religion: A Comparative Ancient Mediterranean Approach," in *The Bloomsbury Handbook of Material Religion in the Ancient Near East*, ed. Sharon Steadman and Nicola Laneri (London: Bloomsbury, 2023), 261-73. And Sander, "The Book of the Watchers as Biblical Literature" (*Metatron* online journal, in press).

In response to the greater demands of this phase we have substantially increased our human and financial resources. We have added a second lead researcher, PhD student Walker Rhea. We have also added an advisory board with significant experience in building similar projects (see above). While this second, more ambitious phase of the project will take significantly more human hours, the present budget and timetable includes ample time and resources to accomplish the project comfortably within two years. For example, while we estimate 90 developer hours, the UC Davis Academic Senate committed funds to enable us to pay for additional developer time if necessary. Similarly, supplemental funding from the Academic Senate will allow for up to 200% of the original graduate researcher time if needed.

9. Toward Participation-Based Experiment

What sets our project apart from a standard academic publication is that, as a digital humanities work, it is designed to respond to user interests and questions and function as a living document. It goes beyond attempting to print a single, definitive edition that cannot incorporate new discoveries, improvements, or counterarguments— let alone the ideas and questions of its audience. Instead, our project is designed to be iterative, starting with a basic version and growing with the field and the interests of users via the incorporation of user feedback and new scholarship.

In order to navigate between the sometimes-doctrinaire presentations of the competing scholarly schools, and their competing, complex and difficult to digest presentations of the data, this project is oriented toward discovery rather than doctrine. Uniquely, it gives any reader in the world the chance to read a Hebrew edition or reliable English translation of scholars' best guess at what came before the Bible and see for themselves what it is like. Does it cohere or raise new questions? Does it seem plausible as the main building block of this

foundation of Western religion and culture? It is designed to help you explore, compare, and understand things for yourself.

9a. Composition as a Process

One of our two lead researchers, Kay White, describes the participatory element of the project:

"Working as a researcher on the project has pushed me to see beyond the value of source division as a concept, to its interest as a process. When first entering the field of biblical study, it is nearly impossible to miss the discussion of the sources, and those conversations open up a world of possibility within the text. Suddenly there are all sorts of new questions to be asked about this once-familiar unified work, now envisioned as a compilation.

Especially for those new to the field, it can be easy for scholarly accounts to create either an oversimplified, flattened image of biblical composition or an extremely atomized one. The flattened image is of one unified Bible made of a handful of separate but complete source documents combined by one neat redactional hand. The other extreme of that spectrum presents the text as a mere compilation of fragments. And it can be hard to visualize anything between these two extremes. This project asked us to sit with the text as we now have it and to study the way a variety of scholars have divided it over time — to make sense of the ways in which those divisions and the methods by which they were created have shifted, then to map those discussions back out onto the history of the text.

We started with Carpenter Harford-Battersby's divisions as the main reference point, as their work on the Hexateuch most clearly and fully delineated a complete source division. From there, I worked forward in time reading a wide variety of influential scholars such as Joel Baden, Israel Knohl, and Liane Feldman with the goal of isolating the Priestly text. While there is a relatively high degree of consensus on

the basic outlines of the Priestly text, no two divisions are precisely the same. We chose to prioritize consensus in our divisions, of course noting when and where there have historically been disagreements and interesting or viable arguments for other modes of reading.

Once that base Priestly text was isolated, we began assembling a distinct Non-P document with notations to track more specific divisions of J, E and occasionally the redactor within this larger assemblage. Our current step is to add the Holiness Code material back into the Priestly document fully tagged so that we can eventually display the full Pentateuchal text as a product of compositional layering connected by the themes, concerns, and quirks of the source documents that make them up.

This project has given me the chance to understand source divisions more authentically and more deeply as an ongoing discussion rather than the already completed work of several historic detectives. I also believe it will make the text more accessible to a wider variety of learners and more clearly demonstrate the sources and their content in several different displays that themselves make the text and its compositional history easier to digest and dig into."

9b. From Pentateuch to Psalms and Back Again

Researcher Walker Rhea lays out a form of dialogue this new format facilitates:

"The ability to visualize more than one version of pre-Pentateuchal Hebrew literature at once can facilitate new kinds of experiment and comparison, both within Pentateuchal studies and beyond, because it makes possible more kinds of dialogue between Pentateuch and ancient Hebrew literature more broadly. When plural scholarly versions of pre-Pentateuchal literature are immediately available, they can be easily contrasted and their literary patterns identified, in

comparison with editions of the canonical Pentateuch that form the basis of current scholarly comparison.

An example of an argument that can be seen anew when we visualize it is the non-Documentarian thesis that the non-Priestly material such as that labeled J by documentarians in Genesis and Exodus should not be considered parts of a unified whole. Starting with the analyses of Noth and von Rad,[34] a primary piece of evidence for the Pentateuch as built of thematic clusters rather than extended continuous narratives has been the parallel accounts of Israel's history we find in the Psalms and the prophetic books, many of which do not contain a full account of the patriarchal stories. Non-Documentarians such as Konrad Schmid conclude that this is because this non-pentateuchal material is older, before a substantial patriarchal narrative tradition had been incorporated into the history of Israel.[35]

However, using the Psalms to reflect on questions of Pentateuchal composition opens up a two-way dialogue: the relevance of certain Psalms to investigating the construction of the Pentateuch also suggests ways that Pentateuchal theories help us investigate the construction of the Psalms. This dialogue of course has a long history, with the most well-known aspect being the identification of an "Elohistic" as well as possibly a Yahwistic Psalter.[36] Yet this project can inspire us to continue the dialogue from new perspectives. First, the absence of certain details of the above narrative within a given psalm may not constitute prima facie evidence for a narrative element's

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[34] Martin Noth, *Überlieferungsgeschichtliche Studien*, Schriften der Königsberger gelehrte Gesellschaft. Geisteswissenschaftliche Klasse 18 (Halle: M. Niemeyer, 1943). Gerhard von Rad, *Das formgeschichtliche Problem des Hexateuchs*, Beiträge zur Wissenschaft vom Alten und Neuen Testament 4 (Stuttgart: Kohlhammer, 1938).

[35] Konrad Schmid, "Genesis and Exodus as Two Formerly Independent Traditions of Origins for Ancient Israel," *Biblica*. 93 (2012) 190. No Psalm contains the entirety of Israel's history, from Abraham to the fall of the temple, but some psalms do contain portions of it, namely 77, 78, 105, 106, 135, and 136. Psalm 105 comes closest to a "complete" account of the history of Israel from Genesis through II Kings.

[36] A valuable recent study with bibliography is Joel Burnett, "The Elohistic Psalter in Light of Mesopotamian Hymn and Lament Traditions," in *"Wer Lässt Uns Gutes Sehen?" (Ps 4,7) Internationale Studien Zu Klagen in Den Psalmen*, ed. Johann Schnocks, 63–90. (Freiburg: Herder, 2016).

presence or absence in an earlier version of Israel's history. And although there is no substantial patriarchal narrative in any of the above psalms, Psalms 77, 78, and 135 all mention Jacob, if only in a limited way.[37] But the most natural question that this comparison invokes is: which Pentateuchal elements are a given Psalm familiar with or making use of in its composition of Israel's history?

J and E each have a slightly different and identifiable way of telling the story of the Exodus. For example, J uses the term Sinai and E uses the term Horeb to refer to the mountain where Moses spoke to God. Sinai is not mentioned in any of the Psalms under consideration, but Horeb is, in Psalm 106:19: "They made a calf at Horeb, and bowed down to a molten image." (JPS) Since Horeb is used so rarely, especially compared to Sinai, this may not be sufficient on its own to connect 106 to the recension of E and D. Nonetheless, if we look more closely at 106's description of the priests, we can make a stronger connection with E. In addition to Aaron and Phineas, 106 mentions the revolt of Dathan and Abiram. 106 is the only psalm that mentions these figures at all. Both traditional and recent neo-documentarian scholars like Joel Baden have marked the Dathan and Abiram story as E, and Korach as P. Although this does not strictly prove that Psalm 106 was interacting with E, it does suggest that the version of the Exodus we find in E is also reflected here, while there is no evidence for the J version of the Exodus. Much more research needs to be done on this subject, but given the difficulty in dating many of the Psalms, and the existence of a relative chronology for different Pentateuchal sources, these kinds of question have the potential to yield fruitful results."

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[37] Strikingly, and relevant to the current comparison, Ps 78:44-51 has the same plagues as J (though in a different order), and Ps 105 uniquely shares the darkness plague with P.

9c. Literary Values from the Pentateuch to the Dead Sea Scrolls

For Sanders, working on the project has offered new perspectives on fundamental scholarly concerns in the study of both Second Temple literature and the Pentateuch, namely, the idea of what literary values drove the creation and transmission of texts over time:

One argument the project will offer builds on a new theoretical framework that has developed since 2000. A dominant theoretical framework from the 1980s through the beginning of the early 21st century has been that the production of scripture was always essentially the same, a process of continuous reinterpretation and rewriting, termed inner-biblical exegesis, Midrash, or *Fortschreibung.* But groundbreaking new work based on the Dead Sea Scrolls has disrupted the consensus, which existed until up til around 2000.

In contrast to the 'reinterpretation all the way down' theory, strong agreement has developed in recent decades that we can instead identify two sharply different approaches to producing and transmitting scripture during the Hellenistic and Roman periods—an *exact* and a *creative* approach.[38] The first, exact or conservative approach has as its ideal the verbatim reproduction of scriptural texts—an approach that would later come to dominate the production of Hebrew literature, bringing us the highly exact Masoretic Text which came to be identified with the original Hebrew Bible (Jerome's "Hebraica Veritas") itself by late antiquity. The second is a very different, creative approach with the ideal of transformative re-combining and retelling of scriptural contents. This approach, famously recognized at Qumran under the now-controversial category of "reworked Pentateuch," produced the Samaritan Pentateuch among

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[38] For the history of research and the typology of "exact" and "creative," building on parallel concepts in the work of Eugene Ulrich and Emanuel Tov, see Sidnie White Crawford, "Interpreting the Pentateuch through Scribal Processes: The Evidence from the Qumran Manuscripts," in White Crawford, *The Text of the Pentateuch* (New York: de Gruyter, 2022), 147–68.

other texts but otherwise largely died out in the Roman period. It was marked by a surprisingly free attitude toward supposedly God-given language, energetically drawing from, rewriting and re-combining existing elements of scriptural text. By contrast with pre-Hellenistic Hebrew evidence, scholars developed ways to visualize these later manuscript materials, making them theoretically possible to know and practically possible to compare.

Finally, then, the project extends the fruitful possibilities of Hellenistic comparisons to pre-Hellenistic approaches to Hebrew literature using visual examples and arguments. In contrast to the two Hellenistic approaches, the exact and creative, recent theorizations of the Pentateuch's have suggested a different set of contrasting values: *coherent* vs. *comprehensive*.[39] Coherent narratives, exemplified in **Figures 11a** and **Figure 11b** by the Gilgamesh Flood narrative, follow a sequential plot with a narrative arc, where one event leads to the next. By contrast, a narrative form distinctive to Pentateuchal literature appears to be the comprehensive type, which includes two or more versions of the plot, and where each event or cluster of events may be followed by a variant version of that event or cluster. To visualize the possibilities of coherence vs. comprehensiveness the reader can compare the two most widely-agreed-on and best-supported early approaches to scripture, ones that can be most easily represented by the Priestly and non-Priestly/L elements of the Pentateuch.

What the project may suggest is that we can trace parallels to the two approaches into the Persian period and even before, just as we know

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[39] The concept of coherence is debated between Neo-Documentarian and Non-Documentarian critics, contrast Jeffrey Stackert, "Pentateuchal Coherence and the Science of Reading," in *The Formation of the Pentateuch: Bridging the Academic Cultures of Europe, Israel, and North America*, ed. Jan C. Gertz (Forschungen zum alten Testament 111. Tübingen: Mohr Siebeck, 2016), 253–68 with Andrew Teeter and William Tooman, "Standards of (In)Coherence in Ancient Jewish Literature," *Hebrew Bible and Ancient Israel* 9 (2020): 94–129.

such approaches are well documented in Mesopotamian literature.[40] In order for the Priestly source—with its high degree of internal coherence despite its high degree of contrast with the surrounding canonical text— to be universally recognizable after over 2,000 years, some Hebrew tradents must have held ideals ancestral to the exact approach, which values verbatim reproduction of texts. Meanwhile for this material to have been so thoroughly interwoven with contrasting material resulting in the incorporation of two or even three versions of the same plot points requires very active predecessors of the creative approach, which values participation in the ongoing transformation of tradition.

10. Conclusion

In conclusion, what we offer to biblical, ancient Near Eastern, and literary scholarship is neither a self-evident, value-neutral edition of texts nor a predetermined set of arguments but a third thing that partakes of the openness of an edition and the active agency of scholarly argument. But instead of attempting to persuade our audience of students, scholars, and public of a particular argument ourselves, we want to offer them tools to explore and debate for themselves. It is this element of participation in the empirical process of close reading and discovery that we hope digital humanities can add to Pentateuchal study in the 21st century.

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[40] Contrast the highly stable text of Hammurapi's laws, which over the course of more than 1,000 years of transmission largely present only constrained sorts of orthographic variation, with the Shu Ila prayers studied by Alan Lenzi, "Scribal Revision and Textual Variation in Akkadian Šuila-Prayers: Two Case Studies in Ritual Adaptation," in *Empirical Models Challenging Biblical Criticism*, ed. Raymond F. Person and Robert Rezetko (Atlanta: SBL Press, 2016), 63–108, which show so much variation that each manuscript is almost a new literary document entirely.

Appendix: On the Relative Unity and Independence of P as the Basis for Our Choice of Text

The goal of this project—and this article as a contribution to the field—is to explore how the evidence for the bible's composition can be *seen*, both literally and metaphorically. In a literal sense it shows one way that basic data about the Pentateuch's building blocks can be visualized in a new, more accessible form. But we also mean it in a broader, metaphorical way: to see how the *historicity* of an ancient literature—not whether it accurately describes some historical reality, but the very fact that it shows distinct signs of an earlier history involving the layering and interweaving of literary elements, can be made apparent and meaningful. Can scholars make the *humanly created* quality of ancient Hebrew literature public?

To do this also requires setting some limits and justifying our choice of starting text. Just as no edition of the Hebrew Bible cannot present every one of the thousands of potentially relevant readings, let alone all the manuscripts, so making a sober trade-off between accessibility and comprehensiveness means accepting some boundaries in terms of how many scholarly nuances will be presented to a general public.

This necessitates a certain break from the strong and understandable pressures in the field to choose to prioritize disagreement, the continuous revisions and paradigm shifts which create a sense of constant "crisis." It is worth asking whether students—and even experts—think best under crisis conditions, especially ones that may be self-imposed. Does the atmosphere of crisis encourage reflection and holistic views? How real is the crisis—is it clearly the case that all of the nuances and critiques are equally self-evident, or do some views require more presuppositions than others? If so, one hermeneutical choice would be to place both the simpler and more intricate explanations on the same plane, but we argue instead for the following alternative.

Alternatives to a Maximal Version of the Priestly Tradition: Disunity vs. Layering

The Priestly tradition has been chosen as the "minimum viable product"—the most elementary and easily representable area of agreement between the

documentary and non-documentary approaches. It has advantages as a starting point: it is based on a clear and easily explained set of arguments and criteria, and it can be coded and put online with a straightforward interface. The main criterion is consistency of what the text is saying—its claims about the world, events that happen in it, and their resulting effects. When those appear to be the same from passage to passage, we assume it is one source or tradition. It is essential to this method that no further assumptions are made—that is, it does not require any further assumptions about authorship or circumstances of production. We do not assume that this tradition was created by a single person or even a single group during a single period but could develop over decades or even centuries—as long as the writers working within the tradition adhere to the same basic narrative claims, it is assigned to one tradition.

There are other approaches to the division of the Priestly tradition itself, which we will now briefly survey along with an explanation of why we do not use them as the basis of our text. Some of these approaches require more starting assumptions and create a diversity of fine-grained distinctions and are therefore more challenging to visualize, while others ultimately simply depict a more historically and conceptually layered P. And in contrast to the hypothesis of an essentially unified P, which has been represented visually a number of times, proponents of a divided P have shown less interest in representing them textually or visually. Taken together, these factors make such approaches important to include, but will require a later, more advanced stage of the project to do them justice.

1. Fundamental Disunity within P

Some recent critiques of the Priestly work's coherence tend to assume at key points that it is *self-evident* that the Priestly narrative from Genesis through Exodus is neither unified or independent. However, they do not entirely agree on why it would be self-evident, and indeed offer up to four different arguments for this self-evidence. The statement of Hutzli is representative: "*Prima facie*, the common assumption that the flood and the Abraham narratives... on the one hand and the Priestly Sinai pericope, the center of the Priestly composition, on the other stem from the same author is

problematic."[41] What are the self-evident problems in connecting the Priestly narrative?

Hutzli lays out three key assumptions under which the narrative and conceptual disunity of P would appear self-evident. The first assumption is that P has a theory of history under which Priestly ritual institutions have always existed, rather than contrasting an earlier, pre-revelation period with a later point when the institutions were revealed. Under this assumption, every narrative element of the Priestly source should be expected to directly announce the legitimacy of Israelite identity and Priestly institutions, and no human figure prior to this would be deserving of divine approval, let alone the covenants with Noah and Abraham. [42] However, this assumption resembles late antique Rabbinic theology[43] more than any well documented ancient Near Eastern narrative pattern, requiring P to be an exception not only to other ancient Hebrew literature but Babylonian and Sumerian literature in lacking any concept of earlier historical eras, e.g. before and after the Flood, being fundamentally different from later ones. And this assumption of changelessness is not only not self-evident, but not entirely plausible. According to this postulate even before the revelation of the name Israel (Gen 35:10) and the Priestly ritual laws (Exodus 25ff), a unitary Priestly author would have required characters like Noah and Abraham to identify as Israelite and practice Priestly ritual in order to participate in God's covenant.

A second complex assumption is that explicit statements of connection or "bridges" between parts of a narrative can act *either* as evidence of unity *or* as

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[41] Jürg Hutzli, *The Origins of P: Literary Profiles and Strata of the Priestly Texts in Genesis 1—Exodus 40*, Forschungen Zum Alten Testament 164 (Tübingen: Mohr Siebeck, 2023) 346; cf. Jakob Wöhrle, "The Priestly Writing(s): Scope and Nature," in *The Oxford Handbook of the Pentateuch,* ed. Joel S Baden and Jeffrey Stackert (Oxford: Oxford University Press, 2021), 255–75.

[42] The theory of a unified Priestly narrative "cannot explain the presence of two completely different models of allegiance to God/YHWH. For what reason would the author of P[C]—who according to common scholarly interpretation is primarily interested in the authorization of Israel's theocratic institutions and sacrificial cultus—have prefaced his work with accounts about two honored non-Israelite figures who received the deity's covenant by virtue of their blameless but cultless conduct?" Hutzli, *Origins*, 346; cf. Wöhrle "Priestly Writing(s)," 258. But Pentateuchal scholarship has long recognized the Priestly periodization of history into differently structured covenants. For example see Volkmar Fritz,"Das Geschichtsverständnis Der Priesterschrift," *Zeitschrift Für Theologie Und Kirche* 84 (1987): 426–39.

[43] This image of a timeless, changeless covenant assuming obedience to revealed law from the start does appear in Hebrew literature, but only as a far later concept inseparable from a specifically Rabbinic theology, e.g. Genesis Rabbah 79:7, 92:4 on Jacob and Joseph following the Torah before it was revealed.

evidence of disunity. An example of the bridge-as-sign-of-unity assumption appears with respect to the covenant at Sinai. For the Priestly narratives of Genesis and Exodus to be unified, Hutzli expects the connection between the two major events of the covenant with Abraham and the Sinai covenant to be explicitly noted with a bridging cross-reference so its *absence* here is an obvious mark of disunity.[44] An example of the bridge-as-sign-of-disunity assumption is that for the same author, in the Priestly Genesis narrative, the *presence* of such a "bridge" in Genesis 5:32 between Genesis 5 and 6-9 counts instead as a mark of disunity.[45] Because this assumption treats both the presence and absence of explicit connecting statements as evidence of disunity, it is not yet methodologically clear how it could be visualized, nor how a student could learn to apply it in a clear and consistent way. Finally, it offers no way to decide between a pre-literary Priestly bridge, which would itself be a sign of editorial work *within* a unified, independent Priestly work at any time before the canonical Pentateuch was created, and a post-Priestly bridge.[46]

A third assumption is that biblical texts contain tacit, but clearly decidable, references to historical contexts. Thus the lack of sacrifice in the Priestly ancestor narratives would place them precisely between the First and Second Temple periods,[47] and by this logic the Sinai narratives with their extensive discussion of central sacrifice would be preexilic. However, Benjamin Sommer has shown convincingly that this assumption of tacit allusion is methodologically problematic.[48] Because it requires metaphorical or allegorical reading in place of explicit evidence, this type of argument has

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[44] "In no part of [the Sinai revelation] is the reader reminded that Abraham's covenant is now finding its fulfillment." (Hutzli, *Origins*, 347).

[45] Hutzli, *Origins*, 126.

[46] Cf. the arguments of Baden, *Composition*.

[47] The lack of sacrifice "would fit nicely with a setting for these stories among Judeans after the destruction of the temple in the Neo-Babylonian era... Operation of the regular cult at the sanctuary in Jerusalem was no longer possible; a large part of the Judean population lived in exile, without access to a Yahwistic sanctuary." Hutzli, *Origins*, 347.

[48] Benjamin D. Sommer, "Dating Pentateuchal Texts and the Perils of Pseudo-Historicism," in *The Pentateuch: International Perspectives on Current Research,* ed. Thomas B. Dozeman, Konrad Schmid, and Baruch J. Schwartz, Forschungen Zum Alten Testament 78 (Tübingen: Mohr Siebeck, 2011), 85–108.

been used with concerning frequency by different scholars to argue for both a late and an early dating for the very same text.

In a discussion of the limits of the Priestly work that includes careful consideration of the possible historical layering of P, Wöhrle adds a fourth argument to the idea of Priestly disunity, that the lack of independence of the Priestly tradition is sometimes self-evident through literary reading.

> For example, it is generally assumed that within an originally independent priestly source Gen 12:5 and Gen 13:6 followed upon each other. According to Gen 12:5, Abraham, his wife Sarah, his brother Lot, and all the people of his house departed and came to the land of Canaan. Gen 13:6 says that the land could not support "them" so that "they" could not live together in this land. Thus, read after Gen 12:5, the plural forms of 13:6 ought to be related to Abraham, Sarah, Lot, and the people of his house. This, however, can hardly be the case. As the subsequent narrative (the priestly as well as the non-priestly) shows, Gen 13:6 describes a conflict between only Abraham and Lot. [49]

But these arguments for the dependence of P on Non-P are all sufficiently complex that they require further consideration and discussion before they can be safely assumed. First, in this case, there is an error (likely typographical) with significant consequences since Lot is not, in fact, Abraham's "brother" but his nephew. Second, the apparent contradiction Wöhrle finds between Gen 12:5's Abraham, Sarah, Lot, "and all the possessions and persons each had acquired in Haran," versus Gen 13:6ff's conflict between Abraham and Lot, who each had "too many possessions" for the land to support is based on a misunderstanding. Both passages refer to only two households. This is because we are dealing with a Patriarchal narrative whose literary logic is predicated on a set of ancient patriarchal assumptions. [50] In this ancient patriarchal logic, a well-known pattern is that a paternal household (a "house of the father" or *bêt āb*) consists of wife, children,

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[49] "Moreover, on closer inspection, those texts of the ancestral narratives which are undoubtedly parts of the priestly stratum often do not connect with each other, but rather presuppose their non-priestly context." Wöhrle, "The Priestly Writing(s)," 258. For a broad new perspective on these issues see David Carr, "Changes in Pentateuchal Criticism," a thoroughly revised version of his 2014 essay, in *From Sources to Scrolls and Beyond: Methodologies for Study of the Pentateuch* (forthcoming).

[50] For particularly clear and brilliant examinations of these assumptions see Pardes, *Countertraditions* and Frymer-Kensky, *Reading*.

servants, and possessions as parts of that household, so that as the son of Abraham's brother Lot and his possessions constitute in both cases the second of two and only two households.[51] Indeed, part of this set of background assumptions is precisely the tendency toward conflict between paternal uncle and nephew, a foundational aspect of narrative in Genesis, most prominently in the Jacob-Laban cycle.

2. Complex Historical Layering Within P

A second tendency is to emphasize historical layering and diversity *within* the Priestly tradition, but with respect to plot elements and concerns that are still distinctively Priestly. For example, Nathan MacDonald's recent treatment of Leviticus 9 and 10 argues for the value of a compositional approach to the exegetical issues posed by the text. In contrast to Achenbach, who sees Lev 10 as a complete unit that must be separated from Lev 9, MacDonald proposes that the "literary jolt" is not "so dramatic as to require the presence of another author." Rather, he argues that the annihilation of Nadab and Abihu reflects nothing more than the inherent dangers of priestly responsibility, which allows him to read the two chapters as a literary unity. Following this he interrogates whether this literary unity can be considered as part of an original, early Priestly work (a Priestly *Grundschrift*, or P^g).

MacDonald uses a literary critical approach based on attending closely to narrative details in an attempt to make the most fluid sense of the text. He attempts to base this reconstruction on as few fragmentations and assertions as possible unless the misalignments of narrative detail are so severe as to demand explanation by multiple authors. His conclusions align with Christian Frevel against attributing Lev 9 to P^g due both to finding Nihan's arguments for including it as the fulfillment to Exod 29:43-46 to be "wooden" and to its being out of step with Lev 1-7, which is widely held to belong to P^g. These

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[51] For the archaeological and historical dimensions of this ancient assumption see the important study of J. David Schloen, *The House of the Father as Fact and Symbol: Patrimonialism in Ugarit and the Ancient Near East*, Studies in the Archaeology and History of the Levant 2 (Winona Lake: Eisenbrauns, 2001). For the crucial neglected role of maternal kinship ties in Hebrew literature, see Cynthia R. Chapman, *The House of the Mother: The Social Roles of Maternal Kin in Biblical Hebrew Narrative and Poetry*, The Anchor Yale Bible Reference Library (New Haven, CT: Yale University Press, 2016); and for this pattern in the documented political history of the ancient Levant Christine Neal Thomas, *Royal Women at Ugarit: Reconceiving the House of the Father* (London: Routledge, forthcoming).

factors lead MacDonald to posit that ch. 9-10, while being a unified literary whole, constitute a much later addition to the Priestly tradition.

In a recent article Christoph Berner, like MacDonald, argues for a reading of P that incorporates both documentarian and supplemental approaches, seeing some sections of P as indicative of a continuous narrative, and other sections as evidence of later redaction. [52] He advocates a reading of P both as a redactional layer and as an independent source, or what Berner calls a "literary stratification of P," adding that "it is essential to clarify whether the somewhat diffuse character of P oscillating between a source and a redaction might be due to the fact that the different strata of the Priestly text have different literary characteristics."[53]

We have shown why we are hesitant to include approaches that claim a fundamental disunity within P, which we find at least possible but require too many uncertain assumptions for inclusion in the presentation to be both necessary and practical. By contrast, we concur with scholars such as MacDonald and Berner that complex historical layering within P is plausible, if not conclusively proven, and we plan to incorporate a discussion of such layers in the notes to our presentation.

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[52] Berner, Christoph, "The Literary Character of the Priestly Portions of the Exodus Narrative (Exod 1-14)," in *Farewell to the Priestly Writing? The Current State of the Debate*, ed. Friedhelm Hartenstein (Atlanta: SBL, 2019), 95-134.

[53] Berner, "Literary Character," 131-132.