Article

When the Truth Is Not What Actually Happened: The Epistemology of Religious Truth in Orthodox Jewish Bible Study

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Abstract: Recent research on student epistemology has shifted from seeing epistemology as a stable entity possessed by individuals to a collection of more situated cognitive resources that individuals may employ differently depending on the context. Much of this research has focused on the explicit beliefs students maintain about the nature of knowledge. This paper uses data from Jewish religious *chumash* (Bible) study to examine how students' conceptions of biblical truth are grounded in the particular forms of *chumash* study they engage in. Using data from clinical interviews with Orthodox Jewish Bible students, we argue that, in relation to the biblical text, questions of truth are functionally meaningless; that is, they are irrelevant to the implicit epistemology embedded in the practice of *chumash* study. Because of this, students were unable to coherently answer questions about the truth-value of the biblical text, even while engaging in sophisticated reasoning about its literary character. This has implications for how religious schools and teachers approach religious study of traditional texts.

Keywords: epistemology; Bible; religious beliefs; education

Talmud Bavli, Taanit 5b: *Rabbi Yitzḥak said to Rav Naḥman: Rabbi Yoḥanan said as follows—Our patriarch Jacob did not die. Rav Naḥman asked him in surprise: And was it for naught that the eulogizers eulogized him and the embalmers embalmed him and the buriers buried him? Rabbi Yitzḥak replied to Rav Naḥman—**mikra ani doresh**—I am interpreting a verse! As it is stated: "Therefore do not fear, Jacob My servant, says the Lord, neither be dismayed, Israel, for I will save you from afar, and your seed from the land of their captivity" (Jeremiah 30:10). This verse juxtaposes Jacob to his seed: Just as his seed is alive when redeemed, so too, Jacob himself is alive.*

1. Introduction

A rich body of education research published beginning in the 1970s addresses how learners understand what it means to know something (formally, "epistemology") (e.g., Hofer and Pintrich 2004; Packer and Goicoechea 2000; Perry 1970). This research assumes that people's understandings of what it means to know and to learn in a given domain play a role in the ways they engage in learning and thus help shape what they come to know and how they come to know it. This work tends to focus on learners' (tacit or explicit) answers to questions such as: What is the nature of knowledge? What do I need to do in order to acquire, create, or demonstrate knowledge? What does it mean to learn? How certain is this knowledge, and how can I assess its truth? Epistemological beliefs are pervasive and underlie all knowledge construction activity in every aspect of life (e.g., Muis et al. 2006; Muis 2007; Schommer-Aikins 2004).

Almost all of this epistemological research examines student learning within a secular, scientific framework. Though a few studies (Gottlieb and Mandel Leadership Institute 2007; Gottlieb and

Wineburg 2011) have examined religious epistemologies, very little has been done to flesh out how students in religious school environments understand the nature of religious knowledge. How, for example, do students in religious Jewish or Christian schools understand their own knowledge of the Bible? What does it mean to believe in biblical stories? How do students' beliefs about the Bible relate to their other cultural and existential beliefs about the world?

This paper offers a beginning account of student epistemologies about *chumash* (Bible) in Orthodox Jewish day schools. *Chumash* is the most basic subject of instruction in the early grades in Orthodox schools; it is universally studied across all of these schools, and it is foundational to Orthodox Jewish belief and culture. Previous research (Deitcher 1992; Krakowski 2013; Sigel 2010) has demonstrated that *chumash* study in Orthodox Jewish day schools almost always integrates *midrashic* elaboration with textual analysis (particularly in the early years of instruction). Stories drawn from *midrashim*—homiletical expansions of the biblical text written mainly in late antiquity but whose content is often embedded within later Jewish biblical commentaries from the Middle Ages and after—frame student *chumash* learning both within the classroom and in other domains, e.g., when listening to sermons in the synagogue. Conversely, students' non-school religious lives also frame *chumash* study; students learn *chumash* through the lens of their larger religious and cultural experiences as Orthodox Jews. Thus, *chumash* study is part of Orthodox life. It typically assumes *midrashic* expansions as necessary to its study, and both these aspects affect and are reflected to Orthodox classroom practices (Krakowski 2013).

Using data from two sources, classroom observation of a *chumash* class in an Orthodox day school and a set of clinical interviews conducted with Orthodox day school students, this paper asks a series of related exploratory questions: What beliefs do students in this setting maintain about *chumash* knowledge in this setting? More precisely, what epistemic commitments are assumed by *chumash* study? How does incorporating *midrash* into textual study shape students' epistemology of *chumash*? How do *chumash* study practices in these schools relate to the types of claims students make about the biblical text?

These questions are foundational to all Orthodox Jewish education and have major implications for Jewish education more generally. How do schools' and teachers' curricular and pedagogical choices impact how students understand central elements of their religion? As students make sense of *chumash*, they may also be implicitly shaping the ways they understand truth, history, and the nature of knowledge itself.

This paper argues that the types of epistemological commitments that have been the subject of most epistemology research are a poor fit for understanding student understandings of *chumash*. Questions about the empirical truth of Bible and *midrash* that turn on evidence, sourcing, or historical accuracy do not help explain students' understanding of the biblical text or the consequent religious epistemology that they develop through *chumash* study. Drawing on an initial set of data drawn from clinical interviews with 19 Orthodox day school students, we suggest that questions centered on the empirical "truth" of *chumash* may be the wrong epistemological heuristic to apply to *chumash* study, which privileges very different types of knowledge questions. In *chumash* study, "truth" is an ill-defined construct that hovers behind the practice, while *chumash* epistemology is built around other concerns, such as how or why the text appears as it does.

2. Personal Epistemologies in Education

A long tradition in education research examines students' understandings of knowledge and learning in different educational contexts.

Epistemology research mainly considers learners' answers to questions about the nature of knowledge and attempts to understand, on this basis, how students come to know things in different domains. Most work on epistemology in education assumes that such questions arise repeatedly and constantly during learning.

Early research on students' epistemologies focused on the development of epistemological reasoning from less to more sophisticated modes of reasoning (King and Kitchener 2004; Kuhn 1991;

Kuhn et al. 2000; Perry 1970). These approaches viewed epistemology as a relatively uniform or stable feature of cognition—an orientation that people have and apply evenly in their lives.

In the last two decades, however, work on epistemic reasoning has increasingly viewed epistemology as assembled from many fine-grained resources intimately tied to particular practices (e.g., Hammer and Elby 2002; Sandoval 2005, 2012). Rather than attempting to identify large, coherent epistemologies, this approach emphasizes the different types of epistemic reasoning a learner engages in when participating in particularly culturally situated learning activities.

In a series of articles, Eli Gottlieb showed that epistemologies are heavily dependent on the specific cultural and educational material that students learn, are deeply connected to student identity (Gottlieb et al. 2014), and that people can switch between different epistemologies depending on the task (Gottlieb and Wineburg 2011; Gottlieb 2002). For example, students in religious and secular schools in Israel reasoned quite differently from one another when discussing God's existence but did not reason at all differently when discussing religiously neutral material (Gottlieb and Mandel Leadership Institute 2007). This was a direct result of the particular instruction that students received in religious and secular schools.

Similarly, Stevens et al. (2005) argued for domain specificity in epistemological reasoning (i.e., that students reason differently about knowledge in different domains). David Hammer (Hammer and Elby 2002; Hammer et al. 2005; Rosenberg et al. 2006) conceptualized epistemology as a toolkit of resources that students bring to bear on their learning (and that can be utilized differently depending on the content, the circumstance, and the framing of the class activity). Shaffer (Shaffer 2005, 2006) explicitly considered the epistemic framing of different activities, noting that engagement in different types of activities naturally structures student epistemological reasoning in ways that are relevant to that activity.

Whereas early work in this field conceived of personal epistemology as the stable orientation of a particular individual, recent work thus views epistemological beliefs as "things that reside not in individual heads but in the interactions between people, activities, and contexts" (Gottlieb and Mandel Leadership Institute 2007, p. 28).

Sandoval (2005, 2012) offers an especially sharp account of this shift in arguing for a situated approach to epistemic cognition. Sandoval distinguishes between formal epistemology, students' explicitly stated ideas about science and how it works, and the practical epistemologies they actually employ (and believe about themselves) when working on science. This important distinction recognizes that how students answer questions about knowledge in a domain is not equivalent to the practical ways they use knowledge when acting within the domain.

Moreover, Sandoval argues that students' expressed beliefs are highly contingent on the activities they engage in: "Epistemic beliefs emerge from and are linked to particular forms of activity … such beliefs are not really beliefs in the sense that they are stable cognitive entities. Instead, what people express as beliefs about epistemic matters may be ad-hoc constructions built from networks of finer-grained, i.e., more situated, cognitive resources" (Sandoval 2012, p. 350).

3. Epistemology and Chumash Study

In our view, Sandoval's distinction between formal and practical epistemologies is especially salient to *chumash* study. Formal epistemological commitments, including commitments to belief in the Bible's revealed nature and authority, are central to Orthodox Judaism. Almost no work to date, however, has considered how such beliefs relate to the implicit, practical epistemology contained in the practice of *chumash* study in Orthodox Jewish schools.

To consider this question, this paper employs the micro-practice framework, an epistemology framework designed to tease apart the different ways epistemology is expressed in everyday life (Sherin et al. 2004). This model uses the term "micro-practice" to denote basic building blocks of daily activity that also structure those activities by providing a framework or a template for them; they might

specify, for example, the roles and the discourse patterns present in a particular activity. Given this way of chunking everyday life, this framework envisions (at least) four different senses of epistemology:

E1—Emergent epistemology: Epistemology is an implicit, emergent property of people's daily activities (i.e., of regular micro-practices).

E2—Cognitive epistemology: Epistemology can alternatively be approached through students' epistemological reasoning. This maps closely to the accounts of epistemic cognition found in the research literature (e.g., Hammer and Elby 2002).

E3—Commitment statements: Even knowledge and beliefs that are not explicitly epistemological bear epistemological implications. Students hold ideas about the world around them that offer implicit cognitive frameworks for their encounters with further phenomena. For example, the belief in an all-powerful God is not an epistemological belief but certainly impacts the types of epistemic thinking that students might engage in.

E4—Explicit epistemology: Students may have explicit epistemologies that are about knowledge and knowledge acquisition in a way that commitment statements are not. These sorts of explicit epistemologies are similar to Sandoval's formal epistemologies and are likely to be more stable and uniform than the other three types of epistemology.

Most early epistemology research focused on E4 (explicit epistemology), as suggested by surveys, questionnaires, and explicit belief statement prompts. Following more recent trends in epistemological research, however, the micro-practice framework takes E4 to be the least significant of the four types in shaping how knowledge is sought, identified, and evaluated. Rather, the implicit epistemologies inherent in daily activities and knowledge practices (found in E1 and E2) are more important to shaping student thinking and understanding (Sherin et al. 2004).

3.1. E1–E4 in a First Grade Chumash Class

What do these categories look like in the context of *chumash* study? To illustrate this classroom practice and its epistemological features, in this section, we closely evaluate a short transcript of student–teacher interaction taken from videotaped observation of a first-grade Orthodox day school classroom (Krakowski 2013).[1]

This particular school is a medium sized *yeshivish* (one branch of ultra-Orthodox Judaism, the other being *chassidic*) boys' elementary school located in a large urban Jewish community. The *chumash* practices found in this school are representative of most ultra-Orthodox and centrist Orthodox schools, and many (though not all) modern Orthodox schools, as early *chumash* instruction, tends to follow a fairly common template. Students engage in reading fluency practice and translation together with Hebrew grammar and extra-textual *midrashic* stories. Many schools also employ a recognizably specific *chumash* practice of call and response reading. Beginning students usually start by focusing on the early sections of Genesis and eventually move through the entire Pentateuch over the course of elementary school (although some *chassidic* schools follow the weekly Torah portion, going deeper into the portion in every additional grade).

3.1.1. First-Grade Chumash

Chumash learning in the Orthodox day school context naturally involves the first three types of epistemology—implicit epistemology in the practice and knowledge of *chumash* and explicit commitment statements about the world—but is almost entirely lacking in explicit epistemological statements. The following excerpt, a transcript of *chumash* learning we observed in a school that uses call and response reading, brings these features of epistemology into sharp relief.

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1 All research was conducted with the approval of a university IRB and informed consent was obtained from the participants as well as their parents using IRB approved consent forms.

Students in this classroom were reviewing *pesukim* (verses) from the story of Noah and the flood, which describe God deciding to destroy the world because of mankind's wickedness. The transcribed excerpt focuses on the students' review of one verse that describes the wickedness of the "sons of the *elohim*", who were kidnapping women to be their wives: *"And the sons of the elohim saw the daughters of men, that they were good, and they took wives for themselves from among all that they chose"* (Gen. 6:2). The transcript uses all-caps in places to indicate the sing-song cadence of the call and response typical of young children's *chumash* study.

> **Rebbe** (religious teacher): Okay, alright, let's say *pasuk beis* (verse 2) together:
> (**all together, slowly with rebbe**): *Va-yir'u bnei haeloKIM*—and the sons of the rulers SAW, *es benos haADOM*—the daughters of the MAN, *ki TO-vos heina*—that they were good. *Vayikchu lahem nashim*—and they took for themselves wives, *miKOL asher BA-CHARU*—from whoever they CHOSE.

The *rebbe* then points out that another Hebrew word from the verse, "they chose" (*bacharu*), also has a *vov*-suffix denoting the third person plural:

> R: And here's the word *bacharu*, *bacharu* means chose, the *vov*—THEY chose, the *vov* at the end makes it "they", the *vov* at the end makes it "they", okay the *vov* at the end makes it "they", except, Yosef Chaim, can you tell me again where does it say the word THEY? Where does it say—which part of the word makes it they?
> S: The *vov.*

The *rebbe* asks first one and then the other half of the class (previously grouped into teams as the "Cholent Pots" and "Lukshen Kugels") to chant the verse together again, which they do twice before turning to its content, placing this verse in context of the following biblical verse ("*And the Lord said, My spirit will not abide in man forever, for he too is flesh, and his days will be one hundred and twenty years*") and of a rabbinic story associated with the biblical character Enosh (Gen. 5:6–11):

> R: Alright, this did not make *Hashem* (God) very happy—both sides, the lukshen kugels did very nicely, yes—*Hashem* was not very happy with what he saw, when people were kidnapping, and not only that they were kidnapping other people's wives, no problem they were (unintelligible) they were *chas ve-sholom* (God forbid) killing the husbands to steal their wives, that's terrible! People were doing *avodah zorah* (idol worship), and they were stealing each other's wives, and they were killing. What happened to the beautiful world that *Hashem* created?
>
> *Hashem* was not very happy with the people, *Hashem* was a little bit upset, and so *pasuk gimmel* (verse 3), let's take a look what *Hashem* said, *Hashem* said I'm gonna give the world 120 years to do *teshuva* (to repent) and I hope by then they will change their bad ways and become good again. I'm hoping that after 120 years that the people will do *teshuva*, right?—They're not gonna live forever otherwise. What is *Hashem*, Shloimeh Zalman, gonna send if they don't become good again? What's *Hashem* gonna send to the world?
> S: A *mabul* (flood).
> R: A *mabul. Hashem* is gonna send a flood, right. As a matter of fact, what happened in the time of *Enosh*? Already when the *avodah zara* started, what did *Hashem* do? Dov?
> S: He destroyed one third of the world
> R: He destroyed one THIRD of the world. He was hoping—if I destroy just part of the world the other parts will do?
> (Students together) *Teshuva.*
> R: Teshuva. And did they do *Teshuva*?
> (Students together) No.
> R: Shloimeh Zalman, and did they do *Teshuva*?

> S: No.
>
> R: No. They did not. Okay let's take a look at *pasuk gimmel*.

This brief, very typical snippet of *chumash* learning is notable for its complete lack of explicitly epistemological (E4) features. This classroom practice contains no elements that classical epistemology research would recognize as "epistemological." The teacher articulates no beliefs about the nature of knowledge or about what it means to know something. However, this episode is nonetheless clearly profoundly epistemologically significant in the first three senses of the micro-practice framework.

Some of the literature on teacher and student orientations to Bible study (e.g., Hassenfeld 2016; Holtz 2013) has touched on the epistemological aspects implicit in *chumash* study, but they have done so only obliquely, working backwards from archetypes of classroom activity to understand the "real-life actualization of a teacher's underlying beliefs and pedagogic goals" (Holtz 2013, p. 28). Applying an epistemological micro-practice approach to classroom practices, however, suggests how elements of *chumash* study practice contribute to an epistemology of *chumash* as a knowledge practice in a more targeted way.

First, *chumash* only exists in this interaction as a body of knowledge transmitted by the *rebbe* (Hammer's "knowledge as propagated stuff") and mediated by the text; students are not encouraged, for example, to find their own meanings in the text. This feature is representative of a combination of E1 and E2, as it is implicit in the structure of the micro-practice and relates to the way in which knowledge is acquired.

Second, this episode suggests that religious and empirical knowledge are not easily separable within this mode of learning. For example, the teacher's account of how God acts in the world conveys both. This is an example of E3 epistemology, as it involves commitment statements about the world that have profound epistemological significance.

Third, comparison of this classroom practice to adult *chumash* practices suggests that student identity is implicitly shaped in relation to the activity. Though adults do not typically engage in call and response, in a number of important ways, the micro-practice is structured to resemble adult *chumash* practices. Rather than providing separate grammar and vocabulary lessons, or Hebrew reading distinct from biblical content, this micro-practice integrates vocabulary, grammar, and reading practice with the study of the text itself. Students' *chumash* skills will not be needed for some other content or for more far-ranging linguistic analysis; rather, it is expected that they will continue to study this exact text throughout their lives. This activity needs no justification, and the knowledge contained in this activity does not require proof or evidence. Rather, the knowledge activity is valuable in and of itself. The ultimate mature expression of *chumash* learning is more *chumash* learning. This is another example of E1—implicit epistemology within the structure of the micro-practice.

Finally, the teacher's merging of *midrash* and text, with so little of his discourse driven by the words of the verse itself, conveys to students that the Bible itself is only comprehensible through the lens of rabbinic homiletics.

For example, the *rebbe* translates the evil "*bnei haelohim*" as "the children of the rulers." This would be a non-standard translation in most contexts—while the word "*elohim*" can mean rulers, it more frequently means "God" or "gods"—but is, in fact, a reading proposed by the medieval exegete Rashi, as the alternative is theologically problematic. Similarly, the *rebbe* explains the people's wickedness as exemplified by their killing husbands, kidnapping their wives, and engaging in idol worship. Of those, only "kidnapping wives" has any possible textual basis ("and they took for themselves wives, from whoever they chose"); this comment rather derives from a *midrashic* gloss on the biblical story, as does the teacher's statement that God had previously destroyed a third of the world in order to get the rest of the world to repent—a *midrashic* detail absent from the biblical text itself.

This interweaving of *midrash* and medieval exegesis into the biblical text is typical of most Orthodox *chumash* study. The ensuing contrast between what is actually written in the text and the story the students are taught creates an implicit emergent epistemology (E1) in which the text may only be understood through traditional sources rather than on its own.

Yet, all these epistemological elements are implicit, even those that may be classified as E3 (explicit commitment statements, e.g., in this example, the *rebbe*'s descriptions of how God behaves towards human beings). Explicit *epistemological* commitments (E4) are entirely absent from this classroom practice.

3.1.2. Explicit Epistemology and Students' Conceptions of Truth

Given the implicitly epistemological character of *chumash* study and its relative lack of E4 epistemology, in the rest of this paper, we consider students' explicit ideas about the epistemological features of *chumash*, such as empirical truth and certainty of knowledge. What are their explicit epistemological beliefs, if indeed they have any, and how do they relate to the epistemology found implicitly in the knowledge practice of *chumash* study?

To put this another way, if *chumash* practice implicitly produces one kind of epistemology—one that situates *chumash* in a communal religious structure and privileges rabbinic interpretation—how do students explicitly discuss the nature of the text and the nature of the rabbinic interpretation? When, on its surface, the biblical text tells a very different story than the rabbinic gloss, how do students assess the truth of either?

This is an important epistemological question as well as a religious one.

4. Truth in the Bible: Clinical Interviews

To examine these questions, we gave nineteen Orthodox Jewish students from both Israel and the United States (in 1st through 11th grade—ages 6 through 18) a number of tasks in a loosely structured clinical interview (Ginsberg 1997) that asked them to reason about classic stories from the Bible.

This diverse group of students was initially chosen as part of a pilot study examining Orthodox students' approaches to the biblical text. The structure of the pilot interview covered a wide range of biblical stories and texts in an effort to determine which of these could serve as a foundation for more in-depth investigation. The same logic applied to the wide range of student ages and our inclusion of students from both Israel and America. We had not intended to publish the data from this initial project due to the students' great diversity. However, one task in this initial set of interviews produced remarkable data that were striking enough that we considered them significant despite the subjects' age and cultural disparities. The results from this task suggest a striking feature of the ideas about *chumash* students develop in Orthodox Jewish schools.

This task came at the very end of the interview and was completed by 18 of the 19 students. We provided students with three versions of the introduction to the Biblical story of Noah and the flood. In this segment of *chumash*, which lines up neatly with the excerpt of *chumash* class presented above, God decides to destroy the world on account of human wickedness. Students were presented with three versions of the story: (1) an excerpt from an English-language *midrashic* compilation for children, (2) a straightforward English translation of the biblical text, and (3) a brief summary of the biblical story stripped of detail. Students read the three versions and were then asked to reason aloud about which of the stories is most "true", which is most likely to have happened the way it is described in the text before them, and which, if any, is most likely to be the version that is actually written in the Bible as it appeared in this task.

This task directly responded to the central question at the heart of *chumash* epistemology. We were hoping to explore how students understood the relationship between the text and the *midrash*, particularly as it related to their ideas of religious truth, empirical truth (i.e., what actually happened), and the certainty of truth in both religious texts and religious traditions. In particular, given the implicit epistemology found in *chumash* study, how would students reason when forced to reason explicitly about the nature of biblical content?

It might have been possible, for example, that explicit epistemology constrains the scope of possible implicit epistemologies along with the types of commitment statements students may make. Thus, if students explicitly believe that the *midrashic* stories are nothing but rabbinic tales, it might limit the impact of the implicit epistemology found in *chumash* class. Conversely, it is possible that the

explicit statements students make are only a function of the implicit epistemological elements found in the activity of *chumash* study, in which case they would see the *midrashic* tales as essentially true, though what that truth means to them would still need explication.

As an example of this question's significance to Orthodox religious doctrine, consider the contemporary religious debate in some corners of the Orthodox Jewish world over Torah Mi-Sinai—Torah from Sinai. Traditional Jewish sources describe God giving the Jewish people the Torah more or less all at once—either on Sinai, or over the forty years of their desert wandering. Rabbinic tradition, beginning with the Talmud, maintains further that much of the oral Torah (including traditions that provide correct interpretations of the written text) was given at that time as well and identifies the authors of the various other books of the Hebrew Bible (Tanakh)—the Prophets and Writings.

Most Orthodox Jews consider this account to be essentially correct and would answer, if asked, with the assertion that both the written and the oral Torah were transmitted entirely to Moshe at some point shortly after the Exodus.

This assertion is epistemological in both the third and the fourth senses of the micro-practice model. It is a commitment statement—a fact about the world (E3)—that is also an assertion about the nature of the knowledge contained in the Torah (E4). Yet, some Jews who identify themselves as Orthodox or (in Israel) Dati adopt the perspective of biblical criticism, a knowledge practice (that is, a way of studying Bible) that presumes an entirely different set of E3 and E4 commitment statements. Frequently, in this account, revelation is described as unfolding or progressive (Brill 2013; Frankel 2015), taking place over many centuries.

In this case, explicit epistemic commitment statements and practices must influence one another, but precisely how do they do so? Does a commitment to progressive revelation produce the knowledge practice of Biblical criticism? Is it the reverse? Or is there some other relationship between the practice and the belief that does not involve causality at all? Examining the seeds of this issue in students' initial *chumash* study can help shed light on how religious epistemology develops generally and is potentially shaped by the types of knowledge activities in which people engage.

4.1. Students' Responses

As described above, students were provided with three different versions of the beginning of the story of Noah and the flood and asked to discuss which of these stories was the most true (however the students understood that term), which was most historically accurate (what, if anything, "actually happened"), and which was most textually accurate (most likely to be the actual biblical text).

Responses to this task were independently coded by two coders and then analyzed for their epistemological features. Among others, codes for truth, history, factual knowledge, intuitive-sense-of-text, and sense-of-midrash were generated from segments of the interviews and then reapplied systematically across all of the interviews by both coders.

Student responses to this task followed a striking and surprising pattern, demonstrated in Table 1 below. Its most notable features, elaborated below, were as follows:

- The complete absence of any consistent pattern in student responses;
- Students were often unsure of themselves and tentative;
- Students switched their answers frequently;
- Students did not equate truth with historical or empirical reality;
- They did not see the text of the Torah as mostly true;
- Older students identified the Torah text accurately, but younger students did not;
- All students recognized the *midrash* reading as extra-textual.

Table 1. Student Responses. 1 = Midrash, 2 = Translation, and 3 = Summary.

Name	Age	Most True *Initial*	Switch	Most Likely to Have Happened *Initial*	Switch	In the Text *Initial*	Switch
Yaheli	6.5	1		1		1	
Uriel	6.5	2		*NA*		2	
Yaakov	7	*NA*		*NA*	*NA*	*NA*	*NA*
Maayan	9	1		1		**not 1**	
Meir	9	3		3		3	
Itai	9.5	1		3 **or** 1		3	2
Lital	9.5	3		1		3	
Gavriel	11	3	2	2		3	
Chana	11	All		1			
Moshe	11	All	unsure	1 **and** 3		1	
Avi	13	3		1		2	3
Jacob	15	2		1	2	3	
Yisroel	15	All		2		2	
Aharon	15.5	All		1		2	
Eli	16	All		NA		2	
Noa	17	All		1		2	
Ari	17	All		1		2	
Shira	17	All		3	All	2	
Aliza	18	1		3		2	

Note: All names are pseudonyms.

4.1.1. No Common Pattern of Response

The first notable feature of these student responses is their diversity. The task yielded no single response pattern; only three of the students (all amongst the oldest of the group) agreed in their answers to all three questions. The rest of the students responded in completely inconsistent ways.

This is both unusual and highly telling. Typically, when students are asked about common, basic material that they have all learned extensively, they offer fairly similar and consistent patterns of response. When they answer correctly, they answer in similar ways, and the mistakes they make are fairly predictable as well. When students share a common learning background, there are often only a handful of ways in which they can go wrong.

When student answers are inconsistent with one another, however, it is usually because they do not share a common conceptual or epistemological framework. Yet, in this case, students did share a common background for understanding this material, all having attended Jewish day schools that (despite their diverse ages and nationality) tend to approach basic Bible instruction in essentially similar ways. Nevertheless, students shared no consensus in their approach to the three questions, and the responses they did provide were frequently tentative, confused, and subject to change.

4.1.2. Tentative Responses/Confusion

Students' confusion about this task is illustrated by this exchange with Aliza:
(1 is the *midrashic* tales, 2 is the translation, and 3 is the summary).

I: But the first one was still the most true?
A: I guess.
I: There's no right answer—
A: No, it's just that I'm contradicting myself.
I: Why is there a contradiction?
A: Because if I'm saying that 2 is most like the Torah, and 1 is most true . . .
I: Where do you think 1 comes from?
A: The *midrash*.

> I: And you're saying that that's not true? The *midrash* can't be true?
> A: No it is true, it is true. I think a lot of it is *midrash* here in the first story.

Initially, Aliza (age 18) says that the first (*midrashic*) version of the story is the most true because it has the most detail, and that the second one is the most likely to actually be the Torah text (she cannot explain why: "It really *feels* like Torah", she says). She later says that she thinks that the third one, the summary, most likely happened. However, this does not sit well with her, and throughout the interview, she grapples with what for her is the contradiction of the Torah text not being the truest.

4.1.3. Answer Switching

In addition to the tentative nature of many of the students' responses, students also frequently switched their answers as they puzzled through the task. Jacob (age 15) started this section of the interview as follows:

> I: OK. Of these stories, which one would you say is most true? Are any more true than the others?
> N: I don't know, maybe . . . Either between the first or the second. Because the first might just be also . . . like a lot of the stuff in there is stuff that is . . . I guess to be honest, I don't know whether half the things are *midrashim* or wives' tales, so I don't know, I guess the second one.
> I: The second one is most true?
> N: Yah, because I wouldn't know whether the details in the first one is true or not.

At the outset, he is unsure of whether the first or the second should be considered most true. He correctly identifies the first with *midrashim*, but he does not know whether to consider *midrashic* details as being true. When we later ask him which version most likely happened the way it is described, he initially does not hesitate in identifying the *midrashic* one:

> I: Which one do you think is most likely to be the complete story—like what happened?
> N: The first.
> I: The first is most likely what happened, like if we had a time machine to go back and watch what happened?
> N: Yah.
> I: But you said it's not necessarily the most true.
> N: Yah.
> I: So what's the difference between that, do you think?
> N: See, the thing about it is that is that it has all the details that I for one can't say . . . I've never really heard of these. So I mean they could be true, but I'm not really sure if they're the sort of thing that you get from those books that you read when you're kids or things that are actually recorded.
> I: So if it were recorded it would be true?
> N: Yah. I felt like the first one was more . . . It sounded like it was from a children's book.
> I: But you still think it was the one that's most likely to have happened.
> N: Either that or the second one, *probably the second much more*. I'm not really sure because, again—I don't know if the details are true.

Similar to Aliza, Jacob is uncertain of his responses, and all of his responses are tentative. At first, he states that the *midrash* is the most likely to have happened, but then qualifies that this is only the case as long as these are recorded opinions (by this, we understood him to mean actual *midrashim*) rather than just children's literature. Given their style, however, by the end of the task, he decides that the second one is truer.

4.1.4. What is True Is Not What Happened

Among the many interesting aspects of Jacob's response is that, throughout most of the task, he was comfortable asserting that the text that was most true (2) was not the same as the one that actually happened (1). In both cases, he was worried about the details; in the first instance, he worried about a reason to choose text 2 as the most true, and in the second, he worried that the style of the details sounded more like children's stories than *midrash* and may not have "really happened." Had the texts "sounded right," however, he would have stuck with two different answers for truth and empirical (historical) reality, even though he seemed uneasy at the idea of separating those concepts.

This distinction between what "happened" and what was most "true" was common in students' responses. For example, Avi (age 13) responded as follows:

I: Which of the three is most true? Or are they all equally true?
F: I think the last one–

Short exchange omitted

I: Which is most likely to have happened?
F: The first one.
I: The first one. Which one is the most likely to have been in the *pesukim* (verses)?
F: The second one.

Lital (age 9.5) also didn't group these two options together:

I: So which one do you think is the most true?
T: Uh . . . I think the third . . .
I: Which one of those is the most likely to have happened the way I said it?
T: I think the first.
I: How come?
T: I don't know. I'm just not sure.

4.1.5. The Text of Torah Is Not the Most True!

Finally, students did not generally assume that the text they identified as the one written in the Torah was the most true. For example, Maayan (age nine) was quite certain that whichever one was most true was also not likely to be in the Torah text:

I: Which story do you think of the 3 is most true?
H: The first.
I: The first? How come?
H: Because it sounds like it's . . . like it's more real.
I: More real . . . So, which is most likely to have happened the way I told it?
H: The first.
I: The first one. Which is most likely to be in the *pesukim* (verses)?
H: Probably not the first.
I: Not the first? That's more likely to be true—
H: The first is like the *perushim* (commentaries). And the second from the *pesukim*, I think.

For Maayan, the *perushim*, medieval biblical commentaries, provide detail that fill in the story that the Bible itself does not tell. Thus, in her view, the biblical text may be holy, but it does not give us the whole truth. This was a common theme in many of the student responses, as very few students were willing to equate what was written in the text with either "the Truth" or with what actually happened.
Likewise with Aharon:

I: So they are all equally true, it's just a question of how much detail is offered.
Y: Right.
I: Which one of the stories is most likely to be written in the Torah that way?
Y: I think the second one.
I: How come?
Y: Because it talks of ... it doesn't say really "man," it says "flesh." Like man is flesh like animals. You don't really call man "flesh," you call animals—its animals ... its flesh.

This common confusion was striking, especially given the diversity of the students' ages and nationalities. It would have been easy to assume that, given the fundamentalist nature of Orthodox Jewish religious belief, students' ideas about what is "true" would line up evenly with what they took to be the biblical text. That was clearly not the case, as very few students identified the textually correct version with the one that "actually happened." The three questions—what was true, what happened, and which was in the Bible—were clearly very different questions to these students.

4.1.6. Older Students Recognized the Text of the Bible

The only discernably consistent pattern emerged from our interviews with the older students. Among the students age 15 and older, seven out of eight identified the biblical text correctly, and six out of those eight said that all three texts were "true" but that they simply varied in which aspects of the story were recounted. They could not agree on what actually happened, however. One did not answer, three said the *midrashic* tales happened, two said the text is what happened, and two said the summary is what happened.

4.2. Students' Responses: Reasoning Employed

In a sample this small with so few students of any given age, it is hard to draw any meaningful inferences from the differences between the older and the younger students' answers. Still, one obvious factor may help explain the older students' correct identification of the text. Older students have much more experience reading the biblical text directly and have an intuitive sense of what that text sounds like. That is, they likely possess a more robust schema for what Bible text looks like and can thus reason, bottom-up, from clues in the text to identify it as genuinely biblical.

For example, in the above transcript, Aharon reasoned that the terminology used in text 2 was biblical: "Because it talks of ... it doesn't say really "man," it says "flesh." Like man is flesh like animals. You don't really call man "flesh," you call animals—its animals ... its flesh."

Yona (age 17) not only recognized the style and language but also the precise words used:

I: Which one of those is more likely to be in the *pesukim*?
Y: The second one.
I: The second one. How do you know?
Y: I'm pretty sure that's the exact words translated.
I: So you know the words, and you know those are the words.
Y: Yes.

In contrast, the younger students were much more likely to choose the third text, the simple summary, as the one most likely to be the biblical text. Their reasoning reflected a less-developed schema, as they had to reason from broader and less specific principles or from specific elements in the story (rather than recognition of specific words).

For example, Lital (age 9.5):

I: Which one of these is most likely to be what is actually written in the *pesukim*?
T: The third.
I: The third? The shortest one?

> T: Yah, because it says what happens, but, like, not in every single . . .
> I: And that's usually the *pesukim*?
> T: Yah, it doesn't always say exactly what happened, because the Torah doesn't tell you exactly what happened.

Other younger students used their knowledge of the story to make educated guesses about the text, such as Itai, who did not want to identify the second text as in the Bible.

> I: What about the second one?
> S: I think I already . . . like I just said . . . It didn't say anything about the *mabul* (flood), it said how the earth will destroy them.

Because the actual description of the flood happens later, the verse at this point only mentions destruction. Without a robust schema for what biblical texts look like, Itai can only base himself on the story he knows and excludes the second text because it does not include the flood.

4.2.1. Form vs. Content

Each of these examples (Aharon, Yona, Lital, and Itai) reflects a further dichotomy in the types of reasoning used by the students, a split present consistently throughout the interviews. Roughly two-thirds of the students reasoned from form-based schemas, focusing on the style of the text and pointing to aspects such as the level of detail, the types of words used, or the length of the excerpt. This approach was present in Aharon and Lital's responses and did not depend on the specific content presented. About a third of the students, however, based their answers on specific facts they knew. Even Yona, who based himself on linguistic cues, did not justify his response by saying that this is the type of language used in the text, but by the fact that he recognized these exact words. Likewise, Itai based his answer on specific knowledge he had of the story.

One specific element of the story that was repeatedly used as a content-specific reasoning tool was the inclusion of Noah's wife, Na'ama, in the first *midrashic* account. Three different students, all age nine or under, specifically stopped at the reference to Na'ama in the *midrashic* account and said that the text of the Torah does not mention Na'ama, and therefore this text could not have come from the Torah. In all likelihood, this point is something that teachers reference in school when discussing the Noah story. Rather than representing a robust schema for the story or the text, it is an isolated fact used to reason about questions of textual accuracy.

4.2.2. Students Were All Able to Distinguish *Midrash* and Bible

One final point regarding the students' responses is that, just as it would have been incorrect (based on the way *chumash* study actually works) to assume that students would identify the biblical text with absolute truth, it was also not the case that the blending of *midrash* with biblical text in the classroom prevented these students from distinguishing between the two. In fact, nearly all the students, regardless of age, were able to identify the first reading as extra-textual stories found in *midrash*. This is especially noteworthy given the very strange and *midrashic* sounding nature of the actual biblical text in this case. Some students felt that the extra detail made *midrash* more true or more likely to have happened, and others felt just the opposite—that such stories are just rabbinic guesses to help fill in the void left by the Biblical text. Yet they all recognized that the *midrashic* expansions were something quite different from the text of the Bible. Though they blend the two in class, the students had no trouble recognizing them as distinct.

5. The Epistemology of *Chumash*

The student responses presented in the previous section followed no particular pattern and reflected tentative answers that students often retracted. Students did not equate truth with the biblical text or with "what actually happened." They reasoned about the texts based on schemas for both

the form and the content of the bible, with older students recognizing the biblical text with greater accuracy. Some students used specific content knowledge, such as Na'ama's absence from the bible, even without more fully developed schemas. Finally, nearly all students recognized the *midrashic* text as extra-biblical.

What do these data suggest about student epistemology of *chumash*?

First, despite their inconsistent responses, students were clearly able to activate a robust network of epistemological resources to make sense of the task. They immediately recognized, for example, that these texts were fundamentally the "right" sorts of texts, though they had not previously encountered much of this specific material previously. Students were intuitively able to recognize the material as "authentic", often due to nuances in language or content, but also often without an articulated basis, as in Aliza's example: "I don't know—because it's very like ... it just sounds ... [Long pause ... she reads a passage] It really feels like Torah."

The same was true of their response to the *midrashic* stories, despite the fact that none of them had seen this particular compilation. In fact, one student, Gavriel (age 11) explained why he initially suspected the biblical text of being a *midrashic* text:

> I: Right. But without ever having learned it—remember, it's not about being wrong or right—what made it seem like *midrash*?
> S: Because it's something more spiritual. It's talking about the daughters of man marrying the sons of God.
> I: Right. I don't know if I would say more spiritual, but I think I know what you mean.
> S: More mystical. Something that's not ...
> I: And you think *midrashim* would be more likely to talk about those sorts of things than the Torah itself.
> S: Right. Because *midrashim* kinda bring in stuff like "Og was a giant, and he held onto the *teivah* (ark)."

These types of observations reflect a deep sense of both the type of knowledge contained in *midrash* and Bible and their uses and meaning. Despite a school system that almost always includes *midrashic* material intertwined with the text (at least during the formative years of *chumash* study), students understood which was which and were even able to puzzle through some fair hypotheses as to what each type of text does. Numerous students provided some version of the claim that *chumash* gives us "just the information we need," while *midrash* is how the Rabbis fill in the gaps to complete the story.

To understand the significance of this finding, consider how these students might have responded to a text that described the atmospheric weather conditions during a massive flood along with other scientific sounding empirical descriptions of mass extinctions, for example. Students would certainly have recognized those types of texts as belonging to a very different epistemic game. By providing them with these three texts, we activated a "*chumash* learning" mode of reasoning with all the cognitive resources that accompany that mode; this included all the content of the story, but, importantly, it also included information about what sort of knowledge this is and how one ought to reason with this knowledge.

What, then, to make of the students' confusion? Students clearly recognized the activity as *chumash* related but nonetheless had an extremely difficult time giving consistent responses to our questions.

5.1. Chumash Is Not an Empirical Investigation

We suggest that the central answer to this paradox is that the clinical interview used texts that activated epistemological resources associated with the micro-practice of *chumash* study while asking questions that activated the epistemology of science and empiricism. That is, the results of this pilot study suggest that questions about truth—whether empirical, historical, or other—are fundamentally at odds with the practice of *chumash* study. That is, these are the wrong sorts of questions to apply

to this practice. Unlike science, whose epistemic purpose is finding things out about the world (what happened, how did it happen, what will happen, how do we know, what is the evidence), the knowledge practices embedded in *chumash* study are simply not designed to address directly what "happened" or what is "true".

Knowing "what happened" is certainly part of *chumash* knowledge, but only obliquely. *Midrash* is articulated within *chumash* study as containing stories that happened as something true and as something that bears some relation to the text, but these are all fuzzy background assumptions that are quite deliberately kept implicit within the activity itself and play little role in the actual practice of *chumash* study. The questions asked, therefore, did not match students' epistemological expectations about the kinds of tasks these texts called for.

In their examination of how students understand school learning domains differently, Stevens et al. (2005) open by noting the obvious differences between what teachers mean by "causes and evidence" in science and in history. Though both domains employ these terms, they denote different things in each. This is because knowledge systems are purpose driven; there are no epistemological truths for science or history outside of the specific set of assumptions, purposes, and practices that characterize each domain.

In some learning practices, the "truth" reflects the epistemic purpose of understanding what happened, but in *chumash*, that sort of truth fundamentally misses the point. The epistemological resources that students draw on depend on the activities that those knowledge systems are tied to, and questions that are meaningful in empirically focused knowledge systems may not be meaningful in others. Put another way, the nature of knowledge is, in some sense, not separable from the activity that produces the facts.

Thus, outside of the practice of *chumash* study, in the course of an artificial clinical interview, epistemic questions about what is most likely to have happened or what is most true may not have clear-cut answers but will need to be generated amidst some confusion during the course of the interview.

We can thus return to one of the questions posed earlier regarding the relationship between explicit epistemological commitment statements (E4) and the more implicit epistemology found in the micro-practice of *chumash*.

In the interviews, students were unable to produce coherent claims; their responses were fragmented in a way that very much indicated an attempt at in-the-moment knowledge construction (as in Sherin et al. 2007). They tried to reason on the basis of their background knowledge, but because the epistemic framing was so different from what they were used to doing with *chumash*, they were left grasping at pieces of a completely different epistemological game. For example, the ways in which students jumped at the mention of Na'ama reflected a clear attempt at epistemological crossover. This was one of the few pieces of knowledge from one learning practice (*chumash* study) that they could use in the very different context of the interview.

This has important implications for the relationship between explicit epistemological commitments (E4) and other types of epistemology found in learning activities. If explicit epistemological truth claims are so tied to the activity of *chumash* study as to be essentially "un-say-able" outside of that context (for example, that of a clinical interview with different epistemological concerns), we cannot really depend on these claims to predict and direct future learning. Similarly, explicit epistemological beliefs that are not important to the knowledge activity (as these were not) will be unlikely to play a role in student learning. To some degree, E4 beliefs that are framed in an empirical and a historical way may always be post-hoc justifications or irrelevant slogans rather than actually driving the knowledge construction, precisely because they do not actually belong to the knowledge practice of *chumash* study.

Rather than asking for this type of explicit epistemology (what students think the truth is), it might be better to ask how teaching and learning in this activity shapes students' epistemology—that is, how the activity shapes the individual's understanding of the world, and how it would be different if the activity changed. This does not, however, mean that there are no explicit epistemological statements

associated with *chumash* study, simply that these questions framed this way are the wrong way to access that epistemology since they do not naturally emerge from the knowledge practice.

5.2. The Right Sorts of Questions

If these were the wrong questions to investigate explicit epistemology in the context of *chumash* study, what would the rights sorts of questions be? What sorts of epistemological claims would be the right sorts of claims to investigate?

Think of science. There are certain foundational assumptions about the world that underpin most scientific activity. These include assumptions both about the way knowledge is acquired (the scientific method) and basic commitments about the world (E3), such as those found in physics (Newton and Einstein) and biology (Darwin), among others. These assumptions are deeply embedded in the activities scientists engage in. The same is true of religious study of *chumash* in Orthodox schools. This learning practice encodes foundational assumptions about the world and the text, such as the belief that every word of the biblical text is sacred, that the Bible was given by God, and that miracles happen. These are deeply connected to the sorts of things people do with the Biblical text while studying, such as identifying and resolving conflicting texts or *midrashim* or noting nuances in the Biblical language. Because every word is sacred, an extra word matters and is a reason to look more closely at the text to understand a deeper point. Instead of asking which account is truer, we should have been asking questions that explored the commitments behind this textual, interpretive move.

The interview task gave students little opportunity to engage in those sorts of reasoning activities. However, because these epistemological elements are so much a part of *chumash* study, where possible, students introduced those elements anyway, going against the grain of the interview. For example, as soon as we started to show the first text to Uriel (age 6.5), he interrupted to elaborate on the title, following the medieval commentator, Rashi's, famous *midrashic* explanation.

> I: This one is called "Noach Was a Tzadik (righteous person) in His Time."
> Y: In his time . . .
> I: Yes. Why is that interesting?
> Y: Because in Avraham's time he wasn't.
> I: He wouldn't be a tzadik. Everyone agrees with that?
> Y: At least I do!

This exchange is embedded in an authentic epistemology of *chumash*—one that complements the epistemology embedded in *chumash* study practices. Had the interview been tailored to capture epistemological commitments related to these textual moves, we might have followed up with a more detailed exploration of why Rashi makes that comparison, why Noah and Abraham merit such comparison, and what the text could have said that would have avoided extra homilitical interpretation (e.g., "Noach was a Tzadik"). We then could have arrived at some sort of explicit E4 epistemology regarding the nature of *chumash* knowledge.

6. Conclusions

Many accounts of epistemic reasoning implicitly privilege certain epistemic questions (such as the evidence for or the certainty of knowledge) without attending to the knowledge practice that would make those questions meaningful. In the case of *chumash* study, and particularly how Orthodox students understand the nature of the text in light of rabbinic tradition, there are a host of explicit epistemic commitments that could have been investigated, but they would have had to map more closely to the actual epistemology of *chumash* practice to be meaningful to the students.

Thus, the first takeaway of this study is that scientific, historical approaches to epistemology are not useful for understanding Orthodox students' understanding of the nature of *chumash.*

The second takeaway relates to the way in which we teach *chumash* in schools. Exploring the implicit epistemic commitments of different learning approaches may significantly impact how we

choose to teach *chumash*—in particular, how *midrash* and text are or are not integrated. Thus, instead of asking whether *midrash* text integration is the right way to teach, it is probably better to ask how teaching this way shapes students' epistemology—that is, how does the activity shape students' understanding of the world given the broader cultural context to which they belong? How would these understandings be affected if the activity changed?

This has deep implications for Orthodox students' religious worldview in a broader sense. Our findings suggest that, in Orthodox schools, *chumash* study is constituted as a "religious" activity not solely because of the beliefs students maintain about the text; rather, the beliefs they maintain are a product of a religious practice in which students engage with the text in uniquely religious ways. Embedded in these practices is a complex religious epistemology that implicitly structures beliefs about the text in addition to religious and socio-cultural expectations. Because of this, altering what might seem to be merely functional parts of *chumash* practice may have important religious consequences. When teachers introduce new methodologies into *chumash* study, they may do so on the assumption that students' religious worldviews are reflected in strong explicit commitment statements. However, if the explicit commitments are more a function of the practice than the reverse, small changes in the practice may lead to large changes in religious outlook.

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