

John Hawthorne's terrific comments contain a specifically Talmudic contribution: his suggested alternative interpretation of Rashi's position. Let me begin by addressing that. There are three important virtues of his interpretation as compared to mine (Hawthorne mentions the first two). First, the key notion "rauy" fits more easily into Hawthorne's account than mine. Second, his account immediately explains what R. Aharon might have meant in his remark about prophetic revelation. And there is the following third thing: When I was working on this material years ago I discussed it with a highly eminent Talmudist, and he seemed to say almost exactly what Hawthorne has suggested! Nevertheless, let me try to explain why it seems to me that this interpretation of Rashi is untenable.

There are essentially two reasons. Here is the first. In my leading example Reuven attempts to purchase a house that he specifies as "the house (my) Reuven's wife will choose next week." How then does he wind up purchasing the house that was on the cards to be chosen next week? Certainly that's not what he wants. He wants to please his wife by getting the house that she will choose. He doesn't care about which house is on the cards to be chosen; he just cares about which house will be chosen.

Let's imagine that he makes the following speech (henceforth, "the Speech"): "I intend to purchase the house my wife will choose next week. I intend to purchase that house even if it is not the house that is now on the cards to be chosen. And I do not intend to purchase the house that is now on the cards to be chosen unless that is the house that will be chosen." What would Hawthorne's Rashi say in this case (in behalf of the en breirist)? Suppose the week has passed and she has chosen house A. There seem to be three possibilities: (a) It's determinate that A was purchased last week; (b) It's indeterminate which house was purchased last week; (c) It's determinate that no house was purchased last week. I think we can immediately rule out (a); it seems clear in all the literature that the en breirist's position cannot be easily circumvented, certainly not by simply making the Speech. My Rashi will say (b), but it's hard to see how Hawthorne's Rashi could say (b). Could we insist that despite the Speech Reuven has purchased the house that was on the cards to be

chosen even if that one was not chosen? That's hard to understand. So I think it must be (c). Then without the Speech it's (b), and with the Speech it's (c). But that cannot be! It is not at all plausible that this colossal complication is ignored by Rashi and by his near contemporary critics (e.g., Tosafot).

And let us ask, more fundamentally, why the Speech is even needed. It seems that the Speech merely expresses Reuven's completely obvious intention. Even without the Speech, then, (b) must be wrong. It seems that the notion of being on the cards cannot play the role that Hawthorne wants it to play in Rashi's position.

That is the first reason. Here is the second reason. The fact that A has now been chosen is powerful evidence that last week it was "on the cards" for A to be chosen. Hawthorne says that it is possible for what is on the cards to happen not to happen, but it seems clear from his examples (and if the notion makes any intuitive sense at all) that what is on the cards to happen will almost always happen (will happen others things being equal, barring some intervention, etc.). Hawthorne may be right that we can never "know" what is on the cards except through prophesy, but Talmudic (and typical secular legal) rules of evidence do not require that verdicts be based on "knowledge" in some strong sense. Now, Talmudic rules of evidence are highly complex. The evidence for what was on the cards may be some kind of chazuka or some kind of rov; it might be evidence that holds for monetary cases but not for cases of marriage or divorce, or vice-versa. But here is the point: it is simply inconceivable that the issue of evidence would not have been raised by Rashi and his near contemporaries if Hawthorne's interpretation were correct. That convinces me that the "safek" that figures in Rashi's position is not a matter of ignorance at all. It is an objective safek, a metaphysical safek, and therefore not amenable to any kind of evidence. (And it seems for that matter inconceivable that R. Aharon, having invoked the possibility of prophesy, would not have explored other kinds of more normal evidence if that invocation were meant as a way of resolving ignorance.) Hawthorne's interpretation, it seems to me, cannot be right. [Two caveats: (a) I once looked through a great deal of literature on this topic, but there is always more. So if someone comes up with a Ran or Rashba or even a R. Akiva Eger

who talks about resolving the safak with evidence, then, well, we'd have to see. Can anyone come up with any such literature? (b) Suppose there were some general Talmudic principle to the effect that evidential considerations can have a bearing on the question whether  $p$  is true only if it is in principle possible to know – in some strong sense, and without divine intervention – whether  $p$  is true. If there were such a principle, that might explain why no Rishonim considered evidence with regard to what is on the cards. Does anyone know of any such principle? ]

I turn now to Hawthorne's questions and criticisms of Rashi's position on my interpretation (henceforth, simply "Rashi's position"). I agree with his first point: Rashi's position is not simply entailed by bivalence. If what I said suggested otherwise I'm sorry. In another paper, "Rashi's View of the Open Future" (Oxford Studies in Metaphysics 2, 2006), I say that central to Rashi's position (and not immediately derivable from bivalence) is a "principle of the permanence of indeterminateness" (PPI). I had thought that PPI was conveyed in "Talmudic Destiny", but perhaps not clearly enough. (Note that both Hawthorne and I are using "determinate" and "definite" interchangeably.)

PPI: If it is indeterminate at time  $t$  whether a proposition  $p$  is true at  $t$ , then it is always indeterminate whether  $p$  is true at  $t$ . In terms of facts, the principle says that if it is indeterminate at time  $t$  whether a certain fact obtains at  $t$ , then it is always indeterminate whether that fact obtains at  $t$ .

Although PPI is not entailed by bivalence there is an important connection. In Vagueness Williamson argues that we need to accept bivalence even in cases of vagueness, and once we accept bivalence there is no way to distinguish indeterminateness from ignorance. That is an essential move in his argument for epistemicism. As applied to the issue of the open future his point threatens any combination of bivalence and indeterminateness. My answer to this in behalf of Rashi is PPI. In the absence of PPI we have no way of understanding what the difference is between saying that it's indeterminate which house will be chosen and saying that we are ignorant which house will be chosen. But PPI is not merely an ad

hoc principle used to ward off Williamson's point. It is, I think, a principle bringing out the essential meaning of indeterminateness. If there was an objective muddle (superposition) last week with regard to the truth of  $p$  at that time, the truth of  $p$  at that time cannot become unmuddled at a later time. One has to carefully keep track of the different times mentioned in this formulation: the truth of  $p$  at that time cannot become unmuddled at a later time, but the truth of  $p$  at that later time may be quite unmuddled at that later time. Suppose someone were to say, "Last week there was an objective muddle with regard to the truth of  $p$  at that time, but it has now turned out that last week  $p$  was true." I think that would show us that this person has no intuitive sense of the difference between ignorance and indeterminateness. In saying that it has now turned out that last week  $p$  was true one seems to be ignoring the objective muddle of last week. Here is another way to look at it: If there was an objective muddle last week as to whether the proposition was true or false, then it's as if the proposition was muddledly true and muddledly false. How can one combine that with the assertion that it was true and not false? I am aware that I am presenting pictures that threaten to go out of control, and I certainly do not deny the obscurity of the notion of indeterminateness. I do not in fact have any personal commitment to the notion that the future is indeterminate. I do feel committed to bivalence for the reasons well argued by Williamson. My point, then, is that if one wants to hold on to the idea that the future is indeterminate, probably the best way to do it is in terms of PPI.

(A principle that goes beyond PPI and is not needed for Rashi's specific purposes but which seems to me quite plausible is this: If the fact that  $p$  is a hard fact about time  $t$ , then, if it is indeterminate at  $t$  whether  $p$  is true at  $t$ , it is indeterminate at any later time  $t'$  whether  $p$  is true at  $t'$ . For example, since the fact that an electron was spin up last week would be a hard fact about last week, if it was indeterminate last week whether it was true last week that the electron was spin up last week, then it is indeterminate today whether it is true today that the electron was spin up last week. On the other hand, since the fact that last week was a week before  $A$  is chosen is not a hard fact about last week, it may be indeterminate last

week whether it was true last week that last week was a week before A is chosen, and also determinate today that it is true today that last week was a week before A is chosen.)

Therefore, one has to apply PPI carefully. One can normally take “It is determinate at t that p” to imply “It is determinate at t that it is true at t that p”, but in other cases the two time slots in “It is determinate at t that it is true at t’ that p” have to be carefully noted. Because of this I’m having a bit of trouble following Hawthorne’s various remarks about commutation. Hawthorne says that “Last week it was the case that determinately next week it was going to be the case that there is a sea battle” commutes in Rashi into “Determinately last week it was the case that it was going to be the case that there is a sea battle.” This is correct if what it means is that, according to Rashi, “It was determinate last week that it was true last week that there was going to be a sea battle” entails and is entailed by “It is determinate now that it was true last week that there was going to be a sea battle”. Spelled out in that way, this doesn’t really look much like a typical instance of commuting. That doesn’t mean that Hawthorne has misunderstood Rashi’s position; it’s just that putting things in terms of commutation seems to me potentially confusing. And I do think Hawthorne goes wrong in what he claims is a difference between Rashi and Aristotle with regard to commuting, since, paralleling what Rashi says, Aristotle would say that we must reject both “It was a fact last week that it was true last week that there was going to be a sea battle” and “It is a fact now that it was true last week that there was going to be a sea battle.” But I suspect that the real problem here is something that I’m now going to get to.

I don’t think I understand what Hawthorne means by “Past Will P.” He offers this as an abbreviation for a (probably syntactically somewhat dubious) sentence in which the expression “it is the case that” occurs several times. My problem is in understanding what Hawthorne means by “it is the case that p.” Is this supposed to be equivalent to “it is true that p” (the latter assumed by both Hawthorne and me to be equivalent to “it is a fact that p”)? I can’t quite make this out. He starts out by

suggesting that Rashi will reject the following sentence (his (ii), but with the temporal modifier explicitly attached to the determinateness operator):

(1) It is determinate now that last week it was the case that it was going to be the case that there is a sea battle.

But he then supposes (in his B) that Rashi will be prepared to assert:

(2) Last week it was the case that it was going to be the case that there is a sea battle.

And this leads him to surmise that Rashi's position may have the "interesting feature" of allowing one to assert sentences of the form "P and it is not determinate whether P." Now my conjecture here has to be that Hawthorne was concerned that he might be accused of anti-Semitism if he expressed what he really feels about this. So I'll express it: it would be quite insane to suppose that one can assert such sentences. (Not only would Rashi not condone asserting such sentences, but PPI implies that one must not even assert sentences of the form "P was true last week and it was not determinate last week that P was true last week.") Let's see if we can straighten out some of the questions Hawthorne raises in B and C.

Rashi will consider (1) to be false and (2) to be not properly assertable if they are taken as equivalent respectively to:

(1') It is determinate now that last week it was true that it was going to be true that there is a sea battle.

(2') Last week it was true that it was going to be true that there is a sea battle.

The reason why (1') is false and (2') is not assertable is because (according to PPI) (1') entails the false sentence that results from replacing "it is determinate now" in (1') with "it was determinate last week". On the other hand, if there is some way of understanding (1) and (2) as not equivalent to (1') and (2') then Rashi may be quite happy to accept (1) and (2). In my paper on pp. 24-25 (see also note 9) I suggest that one reading of "A was going to be chosen" is "A prediction (that might

have been) made last week that A was going to be chosen has now come true". I assume that both Aristotle and Rashi have a way of explaining what it means for a prediction to have come true. One possibility is to understand (2) (and correspondingly (1)) as equivalent to:

(2'') A prediction made last week that there was going to be a sea battle has now come true.

Another simpler possibility is to understand (2) (and correspondingly (1)) as:

(2''') Last week was a week before there was a sea battle.

Rashi will accept (2'') and (2''') (and the corresponding version of (1)). Now if one were to understand (1) in the manner of (1') and (2) in the manner of (2'') or (2'''), one will say that (1) is false and (2) is assertable. Of course that would just amount to being confused by an ambiguity

Some of these same problems apply to Jeremy Goodman's comments. Goodman says that a startling conclusion of Rashi's position is that "it is not [now] determinate that, if Reuven's wife chose house A (and it's not now the beginning of time), then it was going to be the case that she chose house A." But this claim does not follow from Rashi's position unless it is read as a claim about what the truth (fact) was last week. As I've said, the sentence "it was going to be the case that she chose house A" need not be read as a claim about past truths or facts. Of course the conclusion may still seem startling if it is spelled out in terms of past truths; it is then simply PPI. Rashi's position is indeed a novel position not found elsewhere in the familiar literature. It may therefore not be very helpful to fault the position for not squaring well with "standard tense logic" (unless one believes that the latter was given to Moshe at Sinai).

I'm highly sympathetic to Jeff Russell's concerns about whether Aristotle, Occham, and Rashi are merely talking past each other. In my work in ontology I've argued that many disputes are in a sense merely verbal in that each side could charitably interpret the other side as speaking the truth in its own language. It's possible that the same reasoning ought to lead me to say that the disputes about the open future are merely verbal. I'm not going to try to resolve this here.

There is one point at which it appears to me that Russell may be a bit off the mark. Rashi's main point is that it is not now determinate that it was true last week that A was going to be chosen. Since that is so, it is not now determinate that Reuven's utterance last week of "the house that will be chosen" referred to (was true of) house A, and therefore it is not now determinate that A was purchased. That is the idea that is critical to Rashi's legal-Talmudic judgment. I added, however, that Rashi could agree with what I took to be a rather standard move in Aristotelian philosophy, that there is a sense in which "A was going to be chosen" has now turned out to be true. This is a sense not dependent on what the truths or facts were last week. That was my suggestion. Russell asserts, however, that whereas Aristotle can distinguish between "It was true last week that A was going to be chosen" and "Last week, A was going to be chosen", Rashi cannot make this distinction because Rashi is committed to disquotation. I think that is wrong. Rashi can make the distinction.

The disquotation principle says "p iff 'p' is true." (I'm also allowing it to say, "p iff it's true that p".) But there cannot be an "intertemporal" disquotation principle that says, "p iff 'p' was true at past time t." We cannot have "JFK is now alive iff 'JFK is now alive' was true in 1960." It is therefore perfectly consistent for Rashi to hold that whereas "It was true last week that A was going to be chosen" has no determinate truth-value, there is a sense in which "Last week, A was going to be chosen" is now determinately true. The determinate truth of the latter sentence entails by disquotation that "The proposition 'Last week, A was going to be chosen' is (now) true" is now determinately true. It does not entail anything about truths of last week. The disquotation principle does not say that "(It is true now that) last week, A was going to be chosen" entails "It was true last week that A was going to be chosen."

It may be noticed that, whereas I spoke in my paper of the sentence “A was going to be chosen” (or equivalently, as in Goodman, “It was going to be the case that she chose house A”), Russell speaks of “Last week, A was going to be chosen.” And Hawthorne spoke about the sentence “Last week it was the case that A was going to be chosen.” I’ve suggested in these comments that both these sentences can be treated in the same spirit as “A was going to be chosen”, that is, in the spirit of having a sense in which it does not say anything about past truths (but perhaps says something to the effect that a prediction made last week that A was going to be chosen has now come true). But I am not at all confident about this. As regards, “Last week, A was going to be chosen” I doubt that in the way that Russell intends this, the sentence is a grammatical and meaningful English sentence. Obviously he doesn’t mean “A was going to be chosen last week”, but rather “Last week, A was going to be chosen a week later.” Does that sound like a meaningful grammatical English sentence? Perhaps I can hear it as saying something along the lines of Hawthorne’s suggestion, “As of last week, A was on the cards to be chosen a week later”, but that reading does not serve Russell’s purposes. So I think that it’s really a bit confusing to consider such a sentence as “Last week, A was going to be chosen (a week later),” unless this is understood as a quasi-technical rendering of some symbolism of tense logic. And as regards Hawthorne’s sentence “Last week it was the case that A was going to be chosen”, I suppose that the most straightforward reading of that is “Last week it was true (a fact) that A was going to be chosen.” So I’m now thinking that maybe what I said in my paper about “A was going to be chosen” should not be extended to these other sentences, and they should simply be treated as statements about past truths, and hence subject to the differing evaluations of Aristotle, Occham, and Rashi.