A few thoughts written down in haste as this was already late – I apologize in advance for any misunderstandings and/or sloppiness.

Lets compare the Aristotelian position that Hirsch discusses with the position Hirsch ascribes to Rashi. The Aristotelian can accept excluded middle but rejects bivalence. If its not settled whether the wife will choose house A, then it is not true that she will choose A and 'That house that she will choose' does not refer to anything. (I note in passing that there is a different kind of Aristotelian position that accepts bivalence and excluded middle but denies that negation commutes with various tense operators. Its not the case that she will in a day choose A and its false that she will in a day choose A but its also false/not the case that that she will in a day not choose A.) Hirsch's Rashi, on the other hand, accepts both bivalence and excluded middle (and presumably also that negation commutes with tense operators in the way disputed by the second kind of Aristotelian). Either she will choose house A or it is not the case she will choose A. Either it is true that she will choose A or it is false that she will choose A (and if it is false that she will choose A then it is true that she will not choose A). But it is indeterminate whether she will choose house A. And, presumably, it is indeterminate whether 'That house that she will choose' refers to house A. In this respect Rashi is like those supervaluationists who refuse to identify supertruth with truth and allow 'true' to obey various standard disquotational schemas. (See, for example, McGee and McLaughlin's 1995 'Distinctions without a difference' Southern Journal of Philosophy. Note that Hirsch's generalization on pg 32 that supervaluationists deny bivalence is an overgeneralization.)

So far so good. Hirsch glosses Rashi's position as deriving from two ideas: First, that the future is indefinite. Second, that both bivalence and excluded middle still holds. But it seems to me that there is at least two important extra idea introduced into the discussion that cannot be derived from these. The first I have already mentioned – that negation commutes with tense operators in the ways gestured at. I will not discuss this further. Let me turn to the second idea. Suppose it is not settled whether there will be a sea battle next week. Then the two aforementioned ideas tell us that (i) There will be a sea battle in a week or It is not the case there will be a sea battle in a week and (ii) The statement that there will be a sea battle in a week is either true or false and (iii) It is indeterminate whether there is a sea battle. Suppose now we wait a week and see a sea battle going on. Now it is presumably definitely true that there is a sea battle going on. But how do we now evaluate

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

And

(ii) Definitely last week it was the case that it was going to be the case that there is a sea battle?

It seems like Hirsch's Rashi rejects both of these claims and this is presented as the key to the contrast between Rashi's 'definitely' and the Ockhamist's 'It is settled that': While Rashi rejects both (i) and (ii), the Ockhamist only rejects (i) when 'definitely' is interpreted as 'It is settled that'. In short, while 'It is settled

that' /'It is unsettled whether' does not commute with 'Last week it was the case that', 'Definitely' and 'Indefinitely' does commute. But the idea that 'Definitely'/'Indefinitely' commutes with such operators as 'Last week it was the case that' cannot be extracted from the initial two ideas. It is a further idea.

Some comments relevant to that idea:

A. Hirsch somewhat mischaracterizes the difference between Rashi and the Aristotelian. We get the impression that we can transform the Aristotelian position into Rashi's by saying 'It is indeterminate whether' whenever the Aristotelian says 'It is not a fact that P and not a fact that not-P' and sticking to disquotational principles for 'fact' and 'true'. But this overlooks an important contrast. The Aristotelian 'It is a fact that' does not commute with tense operators. Lets introduce 'Factually' as short for 'It is a fact that' and 'Past' as short for 'Last week it was the case that' and 'Will' as short for 'It is going to be the case in a week that' and 'P' as short for 'There is a sea battle. Now that the sea battle is happening the Aristotelian, while denying

Past Factually Will P

Will accept

Factually Past Will P

It strikes me that this failure to commute marks an important contrast between 'Factually' and the 'Definitely' of Hirsh's Rashi.

B. Now that the sea battle is happening will Hirsch's Raschi be prepared to assert

Past Will P?

I got the impression that Hirsch's Rashi would be willing to assert this sentence, free as it is from definiteness ideology. (If not then we would get a fourth and more radical idea, one that one doesn't need definiteness ideology to express, namely that P does not entail Past Will P. (For an interpretation along these lines see below). Purveyors of indefiniteness ideology typically assume that statements of the form 'P and it is not definite whether P' are assertable. One interesting feature of Hirsch's Rashi is that he is prepared to assert statements of that form, at least assuming that 'Past Will P' is assertable in the situation envisaged.

C. Consider the following:

P iff Past Will P

One would think it pretty obvious that this biconditional is definitely true. But if Rashi were to agree then his definitely operator would be

nonstandard in the following respect. It is typically assumed that this operator obeys the following distribution principle:

(Definitely $(P \supset Q)$) \supset (Definitely $P \supset$ Definitely Q)

But assuming we accept (i) Definitely (P iff Past Will P), (ii) Definitely P and (iii) Indefinitely Past Will P, we can't accept that principle. When the sea battle is going on it is pretty clear Hirsch's Rashi will accept both (ii) and (iii). But I am unclear whether he will want to deny (i) or instead deny the distribution principle.

I don't have much to go on but I wonder whether there is another way of reading Rashi's discussion. In English we have a use of 'is going to' where 'X is going to happen' does not entail 'x will happen'. The sort of use I have in mind is one where we say things like 'He was going to get killed. Thankfully someone stepped in and saved him' and 'We had better do something about that asteroid because it is going to hit the earth.' Now the key translational issue concerns 'p is rauy to happen' which in footnote 2 gets glosses by various commentators as 'p is fit to happen' and 'p is set to happen'. Hirsch tells us that 'fit to' is not amenable to a probabilitic, aesthetic or ethical gloss. Still, the key issue is whether 'P is rauy to happen' entails 'P will happen'. The glosses 'P is set to happen' and 'P is fit to happen' do not clearly vindicate this entailment. Indeed they encourage rejecting it.

An alternative interpretation of Rashi's approach goes in outline like this: At any point in time there is a future that is 'on the cards' and it is a hard fact (in the Ockhamist sense) what is on the cards. We cannot however know except by prophecy what is 'on the cards' since such facts are not recoverable by ordinary epistemic powers. (This kind of ignorance is not 'straightforward contingent ignorance' -- cf p.21 -- as it can only be overcome by prophets.) Moreoever we can't know what was 'on the cards' by letting time pass: That P is set to happen does not entail that P will happen. So just because it turned out that P does not show that, back then, it was P that was on the cards (rather than not P). Perhaps not-P was on the cards but some intervention or other 'change of destiny' produced P. Cases of bererah are valid insofar as the relevant elements of the transaction are determined by hard facts. Since what is on the cards is a hard fact, transactions determined by what is on the cards are valid. In the house case, one of the houses is sold. But we can never know which since even if house A is chosen it may be that this was due to an intervention that altered what was on the cards at the time of the transaction. (Note that this view could, but doesn't have to be combined with a Aristotelian view about 'will be' statements.) Obviously this view is very schematic --- to flesh it out one would have to put interpretive flesh on the bones of the admittedly mystical sounding 'on the cards'. The key to this kind of view is to deny that Past Matter of Destiny Will P entails P. Hirsch's Rashi appears to accept this.

In fn 37 Hirsch says that he can't make good sense of Aharon's statement that a case of *bererah* can be resolved by prophetic revelation. The kind of interpretation just described is designed, inter alia, to make perfectly good sense

of that claim. I'm in no position to judge whether it has much more than that going for it.

(Another kind of approach to the future is one that combines bivalence with an indefinite future but denies that Indefinitenes commutes with Past. The kind of view I have in mind would, having observed the sea battle, affirm Past Indefinitely Will P but also affirm Definitely Past Will P. And if one is thinking disquotationally about truth, it is natural to say in regard to reference in the house case that 'That house that she will choose' definitely refers to something but that there is nothing that it definitely refers to (at least if the choice is in our future). (Referential issues are more complex in the case of a sea battle since the sea battle has not yet occurred --- in the house case, the candidate houses already exist.) This kind of view as applied to cases of *bererah* would have us say in the house case that a house was validly purchased and that one will know the relevant element of the transaction in due course (assuming that the law requires reference and not determinate reference). On the interpretative side, I take it to be clear that this package is not Rashi's view. From a philosophical point of view, as Hirsch is aware, the central challenge for such a view is to distinguish itself from a much more boring view according to which the future is not settled by the present and past. After all, the logical behavior of this definitely operator of this view is surprisingly similar to the logical behavior of the 'It is settled that' operator. There are various strategies for answering this challenge. One kind of strategy points to a difference in attitudes towards indeterminacy and mere unsettledness. (Recall, for example, Field's idea that in a case of indeterminacy one's credences over P and Not-P do not add up to 1. Mere unsettledness would not generate this nonstandard credal behavior.) I am unsure whether any of these strategies are satisfactory.)

Really enjoyed the paper!