Chung et al 1995 (CLM) claim that adjunct ECP effects are ‘repaired’ <for them, there was no movement so no violation in the first place> p.274

(89) a. Sandy is very anxious to see if the students will be able to solve the homework problem in a particular way, but she won’t tell us (in) which (way).

b. Clinton is anxious to find out which budget dilemmas Panetta would be willing to tackle in a certain way, but he won’t say in which (way).

c. Sandy is wondering whether there will be students who have to drop the class for a certain reason, but she won’t reveal what (reason).

Again, while the examples in (89) may not be perfect (for reasons to which we return), they are clearly not as ungrammatical as those in (90):

(90) a.* In which way is Sandy very anxious to see if the students will be able to solve the homework problem ?

b.* In which way is Clinton anxious to find out which budget dilemmas Panetta would be willing to solve ?

c.* Why is Sandy wondering whether there will be students who have to drop the class ?

This cluster of observations poses a serious problem for the view that sluices are derived via routine application of Wh-movement, followed by deletion of everything but the moved Wh-phrase. It remains mysterious why deletion of IP should expunge or ameliorate violations of Subjacency, the ECP, or the Coordinate Structure Constraint.

They go on to say p.275

Deletion should in principle be blind to issues of interpretation, and incapable of rescuing violations of syntactic constraints (especially those plausibly due to LF constraints, such as the ECP).

The reasoning seems correct. What about the facts? Indeed, as they say, (89) are not perfect. Are they actually good? Not so easy to tell.

Is it significant that all the ex’s in (89) use the exact same island? Maybe. Let’s look at some other islands. In a 2005 LSA summer school class, I briefly looked at relative clause and subject islands, and claimed that Sluicing does not repair these:
(243) A student solved the problem (somehow), but I'm not sure exactly how
<And Mary hopes that a student will solve the problem somehow, but I'm not sure exactly how>

(244) *Mary met a student who solved the problem (somehow), but I'm not sure exactly how
(245) *That Susan will solve the problem (somehow) is unclear, and I think I know how

<<<Later, we’ll look at the ‘extraposed’ version of (245):
It is unclear that Susan will solve the problem somehow, and I think I know how>>>)

Nakao and Yoshida (2006) give further cases where ECP violations apparently cannot be repaired:

(3) a. John wants to hire [someone who fixes cars with something],
   but I don’t know what.

   b. *John wants to hire [someone who fixes cars {in a certain way/for a certain reason}], but I don’t know how/why.

Nakao (2007) gives more examples (p.59):

(74) a. John wants to hire [someone who fixes cars with something],
   but I don’t know what.

   b. *John wants to hire [someone who fixes cars for a certain reason],
   but I don’t know (exactly) why.

   c. *John wants to hire [someone who fixes cars in a certain way],
   but I don’t (exactly) know how.

(75) a. John will be mad [if Mary dances with a certain guy],
   but I don’t know who.

   b. *John will be mad [if Mary dances for a certain reason],
   but I don’t know why.

   c. *John will be mad [if Mary dances in a certain way], but I don’t know how.
So far then, there seem to be two claims about the phenomena: 1) That of CLM, that sluicing is fine with adjuncts, no matter the apparent distance, even if an island seems to be spanned; 2) that of Lasnik and Nakao and Yoshida, and Nakao, that adjunct sluicing is bad with island spanning. Why might (2) hold? All of the cited scholars suggest that it could be because ECP is an LF requirement, so a PF operation (deletion) could not help satisfy it.

But, interestingly, (2) is not actually the position of those scholars with respect to the whole range of data. (In fact, as far as I know, (2), while a priori quite plausible, hasn’t actually been advocated by anyone.) Rather, they claim, following an observation of Breuning’s, that ‘long distance’ readings of adjuncts are difficult to get altogether in sluicing constructions, even with no island. I gave the following:

(248) John left (for some reason), but I don't know [\text{CP exactly why [IP John left t]}]
(249)*Mary claimed that John left (for some reason), but I don't know [\text{CP exactly why [IP Mary claimed [that John left t]]}]
(250)*Bob thinks that Mary fixed the car (somehow) but I don't know exactly how [IP Bob thinks that Mary fixed the car t]

Nakao and Yoshida (2006) give these:

(9) *Mary said that John left for some reason, but I don’t know (exactly) why1.
   a. = *I don’t know [\text{CP why1 [IP Mary said [CP t1 that [IP John left t1]}}}]
   b. = I don’t know [\text{CP why1 [IP John left t1]]].
(10) [\text{IP Why1 did [IP Mary say [CP t1 that [IP John left t1]}}}]

(13) *Mary said that John left for a certain reason, but I don’t know why1 [Mary said that John left t].

Nakao and Yoshida (2006) and Nakao (2007) then suggest that this follows from the Fox and Lasnik (2003) account of sluicing parallelism. In particular, there can’t be intermediate traces in the target because there are none in the antecedent. But with no intermediate traces, long movement of adjuncts will always violate the ECP.

So the Fox and Lasnik (2003) analysis, motivated almost entirely by the sluicing/VP-deletion asymmetry noted by Merchant, has a surprising beneficial side effect.

References
Nakao, Chizuru. 2007. *Island repair and non-repair by PF strategies*. PhD, University of Maryland, College Park, MD.