Wh in situ in French is optional, (1), but barred from subject position (Koopman 1983). This is not easy to show, given the string vacuity of movement to the left periphery of a preverbal subject, but several empirical arguments are brought to bear on this point, among which the ungrammaticality of quoi in subject position and the distribution of the discourse particle ça, Cheng & Rooryck (2000), both of which are only possible in situ.

Wh in situ is grammatical in complement clauses, both finite, (3a), and non-finite, (4a) (contra e.g., Bošković (2000), Cheng & Rooryck (2000),) but not in indirect questions, (3b), (4b). This distributional pattern is not unique to French. It shows up in many unrelated languages which have optional, as opposed to obligatory wh in situ (Sabel (1998), Sabel & Zeller (2006).)

My hypothesis is that these distributional restrictions are traceable to the fact that optional wh in situ (OWIS) involves movement of a minimal lexical item.

Evidence for movement comes from intervention effects, well-documented in e.g., Mathieu (1999) and Starke (2001). Since the wh phrase does not move overtly, the question arises as to what exactly does move. OWIS is blocked by c-commanding negation, a diagnostic for movement of non-arguments (Rizzi (1990)). Perhaps, then, the target of movement is the wh feature and not the phrase containing it. Feature movement in the sense of Chomsky (1995), Pesetsky (2000) is formally indistinguishable from Agree (Roberts (2010)), but it is useful to maintain the distinction between Agree and Move, be it only for the fact that they are subject to different locality restrictions. Suppose, then, that there is no feature movement but only movement of phrases and of lexical items (LIs). In OWIS, the target of movement is a LI composed of the wh feature (and, where D-linked wh is involved, whatever feature(s) characterize D-linkedness), plus a minimal set of features necessary for the identification of the wh expression as a LI (in the sense of Chomsky' s work from 2002 onwards). The moved part of e.g., qui 'who' is [N (or D), WH, HUMAN] and that of quel linguist 'which linguist' is [WH, M, S], etc.

Wh in situ is barred from subject position by Criterial Freezing (CF) (Rizzi (2010), Rizzi & Shlonsky (2007)): An element which satisfies a Criterion (here, the Subject Criterion,) is frozen and cannot move further. Although sub-extraction from the subject position is perhaps marginally possible, Obenauer (1994) - on the condition that the moved sub-constituent is featurally-independent of the criterial subject feature - the minimal LI moved in wh in situ structures has both phi and categorial features in addition to [WH] and thus participates in the criterial relation. Hence, no movement is possible from subject position and a wh in situ is ruled out.

In indirect questions, wh is targeted by Foc₀ in the embedded left periphery. In its turn, Foc₀ is probed by interrogative Force (the technical implementation of which is fairly controversial.) Overtly moved wh is a phrase which goes into Spec/Foc, satisfying the Wh-Criterion. Foc₀, the criterial probe, is unfettered and can be probed by Force₀. In situ wh however, involves movement of a LI, not a phrase, which incorporates to Foc₀, thus satisfying the Wh-Criterion. Foc₀ is a criterial probe which comes to contain the criterial goal. It thus becomes criterially-frozen. CF should, I believe, be strengthened from a ban on movement to a ban on probe-ability: It is as if CF sends the criterial goal to the interface right away, even if the (strong) phase is not complete, (although the consequences of that are only evaluated once the phase is complete.) Wh in situ in root clauses is possible because unselected Force₀ never actually reaches the interfaces, as only the complement of a phase head undergoes Transfer.

To conclude, wh in situ in OWIS languages involves wh-movement, although neither of a wh-phrase nor of a wh feature. This idea, coupled with an explicit implementation of CF, yields an explanation for the distribution of French wh in situ.
(1.a) Tu as vu qui?
you have seen who

(2.a) Tu as fait quoi?
you have done what?

(3.a) Tu penses que Jean a vu qui?
you think that Jean has seen who

(4.a) Tu penses parler à qui?
you intend to speak to whom?
  b. Qui, tu as vu t?!
      who you have seen
  b. *Quoi flotte dans l'eau?
      what floats in the water
  b. *Tu te demandes Jean a vu qui.
you wonder Jean has seen who
  b. *Tu te demandes parler à qui.
you wonder to speak to whom


