Wh-in-situ
24.902, 2017

wh-movement doesn't always happen?

(1)   a.   Taroo-wa   ***nani -o***   katta   no?   [*Japanese*]
                 Taroo TOP what ACC bought Q
                 'What did Taroo buy?'

         b.   Bkrashis-lags-gi   ***gare*** gzigs-gnang-pa   -red   pas?   [*Tibetan*]
                 Tashi   HON ERG what buy   do   PAST AGR Q
                 'What did Tashi buy?'

         c.   C'am^{w}ɨt ***mir***   cək^{w}ərəcnɨm?   [*Chaha*]
                 C'am^{w}ɨt what cooked
                 'What did C'am^{w}ɨt cook?'

         d.   Qiaofong mai -le   ***sheme*** (ne)   [*Chinese*]
                 Qiaofong buy ASP what   Q
                 'What did Qiaofong buy?'

         e.   Ya um ***hakiy***   tuwa?   [*Hopi*]
                 Q   you who-ACC found
                 'Who did you find?'

- possibility 1: there is no wh-movement in these languages.
- possibility 2: there is wh-movement, but it's hard to see.

Some languages have multiple options…

(2) a. bí:ká dìg **ká bʷā:** [*Buli*]
        the.child cooked KA **what**
        'What did the child cook?'

   b. bí:ká tè **ká wānā** lāmmú:
        the.child gave KA **who** the.meat
        'Who did the child give the meat to?'

   c. bí:ká dìg lāmmú **ká bɛ̄:**
        the.child cooked the.meat KA **where**
        'Where did the child cook the meat?'

(3) a. **ká bʷā** ātì bí:ká dìgì:
        KA **what** C the.child cooked
        'What did the child cook?'

   b. **ká wà fõtõ kūnā** ati wà ɲà:
        KA **his picture which** C he saw
        'Which picture of him did he see?'

Buli islands…

(4) a. *Fí áyáalí [núrpók wāi āli dà **ká bʷā** lá:]?
        you love woman who C bought KA **what** PRT
        'What do you love [the woman who bought __]?'

   b. * Azuma dà [gbáŋ ālī **ká bʷā**]?
        Azuma bought book and KA **what**
        'What did Azuma buy [a book and __]?'

   c. *bí:ká à lā [John ali dà **ká bʷā** la ɲīŋ a]
        child AUX laugh John ALI bought KA **what** PRT because
        'What is the child laughing [because John bought __]?'

How to escape the islands…

(5)   a.   Fí áyáalí ***ká*** [núrpók wāi āli dà   ***bʷā***   lá:]?
             you love   KA   woman who C   bought **what**   PRT
             'What do you love [the woman who bought __]?'

       b.   Azuma dà   ***ká*** [gbáŋ ālī ***bʷā***]?
             Azuma bought KA   book   and **what**
             'What did Azuma buy [a book and __]?'

       c.   bí:ká à   lā   ***ká*** [John ali dà   ***bʷā***   la   ɲīŋ a]
             child AUX laugh KA   John ALI bought **what** PRT because
             'What is the child laughing [because John bought __]?'

We might imagine that what's going on here is 'covert pied-piping'. *Overt* pied-piping:

(6)   a.*<u>**Whose**</u> did he buy [_ car]?
       b. [<u>**Whose** car</u>] did he buy?

(7)   a. <u>**Čju**</u>   on kupil [_ mašinu]?   [*Russian*]
             whose he bought   car

       b. [<u>**Čju** mašinu</u>] on kupil?
             whose car   he bought

(8)   a. [<u>**What**</u>] do you think [that John bought _]?
       b.* [<u>That John bought **what**</u>] do you think?

(9)   a. [<u>**Ima -ta -taj**</u>] ya -ngui [Juan __ randi-shka-ta]?   [*Imbabura Quechua*]
             what ACC INT think 2   Juan   buy NLZ ACC
             'What do you think that Juan bought?'

       b. [<u>**Ima-ta**   Juan randi-shka-ta-taj</u>]   ya -ngui?
             what ACC Juan buy   NLZ ACC INT think 2
             '[that Juan bought what] do you think?'

→ pied-piping possibilities vary from language to language...

(10)   a.* [<u>**Ima-ta-taj**</u>] riku-rka-ngui [__ randi-shka runa-ta]?
             what ACC INT see PAST 2   buy NLZ   man ACC
             'What did you see [the man who bought __]?

       b. [<u>**Ima-ta**   randi-shka runa-ta-taj</u>] riku-rka-ngui?
             what ACC buy   NLZ man ACC INT see PAST 2
             '[the man that bought what] did you see?'

Meanwhile, in languages with no *ka*…

(11) a. Mary shuo [John mai **shenme**]?
      Mary say   John buy what
      'What did Mary say that John bought?'

    b. Mary [zai John mai **shenme** yihou] shengqi   le?
      Mary   at John buy what   after   get.angry Perf
      'What did Mary get angry after John bought?'

    c. Mary zui   xihuan [mai **shenme** de ren]?
      Mary most like   buy what   C   person
      'What does Mary like the person who bought?'

(12) a. Mary-wa [John-ga **nani**-o   yonda to] itta no?
      Mary TOP John NOM what ACC read   that said Q
      'What did Mary say that John read?'

    b. Mary-wa [John-ga   **nani**-o yondara] okoru   no?
      Mary TOP John NOM what ACC read-if get-angry Q
      'What will Mary get angry if John reads?'

    c. Mary-wa [**nani**-o   yonda] hito-to   atta no?
      Mary TOP what ACC read   person-with met Q
      'What did Mary meet a person who read?'

something not unlike *ka* in Japanese?

(13) a. Mary-wa [John-ga **ittai**   **nani-o**   yonda to] itta no?   [*Japanese*]
      Mary TOP John NOM on.earth what ACC read   that said Q
      'What on earth did Mary say that John read?'

    b.* Mary-wa [John-ga **ittai**   **nani-o**   yondara] okoru   no?
      Mary TOP John NOM on.earth what ACC read-if   get-angry Q
      'What on earth will Mary get angry if John reads?'

    c.* Mary-wa [kyonen **ittai**   **nani-o**   yonda] hito-to   atta no?
      Mary TOP last.year on.earth what ACC read   person with met Q
      'What on earth did Mary meet a person who read last year?'

(14)   a.   Mary-wa **ittai**   [John-ga **nani-o**   yondara] okoru   no?
              Mary TOP on.earth John NOM what ACC read-if   get-angry Q
              'What on earth will Mary get angry if John reads?'

        b.   Mary-wa **ittai**   [kyonen **nani-o**   yonda] hito-to   atta no?
              Mary TOP on.earth last.year what ACC read   person with met Q
              'What on earth did Mary meet a person who read last year?'

and another reason to believe in covert pied-piping: *intervention effects*

(15)   *_John-ka Bill-ga_   **nani**-o   katta no?
        John or Bill NOM what ACC bought Q
        'What did John or Bill buy?'

(16)   a.   Mary-wa [_John-ka Bill-ga_   **nani**-o   katta ato de] dekaketa no?
              Mary TOP John or Bill NOM what ACC bought after   left   Q
              'What did Mary leave [after John or Bill bought __]?'

        b.   *_John-ka Bill-wa_ [Mary -ga   **nani** -o   katta ato de] dekaketa no?
              John or Bill TOP Mary NOM what ACC bought after   left   Q
              'What did John or Bill leave [after Mary bought __]?'

on the other hand…
(17)   a.   Mary shuo [John **weishenme** mai shu]?
              Mary say   John why   buy book
              'What's the reason X such that Mary said that John, for X, bought the book?'

        b.*   Mary [zai John **weishenme** mai shu   yihou] shengqi   le?
              Mary at John why   buy book after   get.angry Perf
              'What's the reason X such that Mary got angry after John, for X, bought a book?'

        c.*   Mary zui   xihuan [**weishenme** mai shu   de ren]?
              Mary most like   why   buy book C person
              'What's the reason X such that Mary likes the person who, for X, bought the book?'

(18)   a.   Mary-wa [John-ga   sono hon-o   **naze** yonda to]   itta no?
              Mary TOP John NOM that book ACC why read   that said Q
              'What's the reason X such that Mary said that John, for X, read that book?'

        b.*   Mary-wa [John-ga sono hon-o   **naze** yondara] okoru   no?
              Mary TOP John NOM that book ACC why read-if   get-angry Q
              'What's the reason X such that Mary will get angry if John, for X, reads that book?'

        c.*   Mary-wa [sono-hon   -o **naze** yonda] hito-to   atta no?
              Mary TOP that   book ACC why read   person-with met Q
              'What's the reason X such that Mary met a person who, for X, read that book?'

English wh-in-situ:

(19)　　　**Who** bought **what**?

(20)　　a.* **Which book** did the senator deny [the rumor that he wanted to ban __]?
　　　　b.　**Which senator** denied [the rumor that he wanted to ban **which book**]?

(21)　　a. * **Koja kniga** otreče senatorăt [mălvata　če　iska　da zabrani __]? [*Bulgarian*]
　　　　　　which book denied the.senator the.rumor that wanted to ban
　　　　　　'Which book did the senator deny
　　　　　　　[the rumor that he wanted to ban __]?'

　　　　b.　**Koj senator koja kniga** __ otreče [mălvata　če iska da zabrani __]?
　　　　　　which senator which book denied the.rumor that wanted to ban
　　　　　　'Which senator denied
　　　　　　　[the rumor that he wanted to ban which book]?'