What are the different ways languages can form wh-questions?
First steps toward a typology.

For today, let’s concentrate on a subclass of questions, those questions formed with a “wh-word” (e.g., what, who, how, . . . ) and which have a sincere “information-seeking” meaning (as distinct from “quiz questions” or “echo questions”). We take them to be basic. First, in English. And, actually, first, yes/no questions.

1 Yes/no-question formation in English

It will be useful to look first at the formation of yes/no questions (a.k.a. “polar questions”) in English first, before turning to wh-questions. The recipe for simple main clause questions is:

a. Take a sentence (what will be a possible answer)

b. Insert do as an auxiliary (if there isn’t already one)

c. “Invert” the auxiliary and the subject, so that the subject follows the auxiliary

This procedure is usually referred to as Subject-Auxiliary Inversion (SAI), and it only happens in main clauses, not in embedded clauses.

(1) a. John will buy a book

\[ \text{will}_{i} \text{, John}_{t_i} \text{ buy a book} \]

b. *I wonder whether \[ \text{will}_{i} \text{, John}_{t_i} \text{ buy a book} \]

(2) a. I revealed whether John will buy a book

\[ * \text{I revealed whether will}_{i} \text{, John}_{t_i} \text{ buy a book} \]

(3) a. I revealed whether John will buy a book

\[ * \text{I revealed whether will}_{i} \text{, John}_{t_i} \text{ buy a book} \]

The basic syntax of SAI is generally taken to be movement of “I” to “C”:

(1) a. John will buy a book

\[ \text{will}_{i} \text{, John}_{t_i} \text{ buy a book} \]
2 *Wh*-question formation in English

We can think about the process of *wh*-question formation as a process of taking a sentence (essentially, a possible answer) and replacing one (or more) noun phrases with an appropriate *wh*-word.

(5)  
   a. John will buy a book  
   b. John will buy what  
   c. \( \text{will}_i \) John \( t_i \) buy what  
   d. \( \text{what}_j \) will John buy \( t_j \)  

(6)  
   a. What will John buy?  
   b. John will buy a book.  

(7)  
   a. Who will John persuade to buy what?  
   b. John will persuade Bill to buy a futon.

The basic pattern seems to be this:

- In a *wh*-question, move *one* *wh*-word to the front.
- Leave all other *wh*-words in place.
- Move an auxiliary to second position (insert *do* if no auxiliary).  

(SAI)
2.1 in Japanese

(9) Taroo-ga hon-o kaimasita ka?
Taro-NOM book-ACC bought.POL Q
‘Did Taro buy a book?’

(10) Taroo-ga nani-o kaimasita ka?
Taro-NOM what-ACC bought.POL Q
‘What did Taro buy?’

(11) Dare-ga nani-o kaimasita ka?
who-NOM what-ACC bought.POL Q
‘Who bought what?’
2.2 in Bulgarian

(12) John e vidjal Mary.
    John has seen Mary
    ‘John has seen Mary.’

(13) koj kogo e vidjal?
    who whom has seen
    ‘Who has seen whom?’

(14) ?* koj e vidjal kogo? (non-echo)
    who has seen kogo
    (‘Who has seen whom?’)

(15) koj kakvo na kogo e dal?
    who what to whom has given
    ‘Who gave what to whom?’

3 A rough typology of wh-movement

<table>
<thead>
<tr>
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<th>English</th>
<th>Bulgarian</th>
<th>Japanese</th>
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<tbody>
<tr>
<td>Parm. Q</td>
<td>Every question needs a wh-word in front?</td>
<td>Yes</td>
<td>??</td>
</tr>
<tr>
<td>Parm. W</td>
<td>Every wh-word needs to be in front?</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
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4 Oh, and French

(16) Qu’a-t-il donné à qui?
    what has-he given to whom
    ‘What did he give to whom?’

(17) Il a donné quoi à qui?
    He has given what to whom
    ‘What did he give to whom?’
5 Oh, and German

(18) Mit wem glaubst du dass Maria gespochen hat?
with whom believe you that Maria spoken has
‘Who do you think Maria has spoken to?’

(19) Was glaubst du mit wem Maria gespochen hat?
what believe you with whom Maria spoken has
‘Who do you think Maria has spoken to?’