

Here are some simple grammatical and ungrammatical sentences of Icelandic.

- (1) a. \* Helgi ekki hefði lesið þessa bók áður gær.  
Helgi not had read this book before yesterday  
'Helgi hadn't read this book before yesterday.'
- b. Helgi hefði ekki lesið þessa bók áður gær.  
Helgi had not read this book before yesterday  
'Helgi hadn't read this book before yesterday.'
- c. \* Helgi hefði lesið ekki þessa bók áður gær.  
Helgi had read not this book before yesterday  
'Helgi hadn't read this book before yesterday.'
- d. \* Helgi ekki las þessa bók áður gær.  
Helgi not read this book before yesterday  
'Helgi didn't read this book before yesterday.'
- e. Helgi las ekki þessa bók áður gær.  
Helgi read not this book before yesterday  
'Helgi didn't read this book before yesterday.'
- f. Áður gær hefði Helgi ekki lesið þessa bók.  
before yesterday had Helgi not read this book  
'Helgi hadn't read this book before yesterday.'
- g. \* Áður gær Helgi hefði ekki lesið þessa bók.  
before yesterday Helgi had not read this book  
'Helgi hadn't read this book before yesterday.'
- h. Þessa bók hefði Helgi ekki lesið áður gær.  
this book had Helgi not read before yesterday  
'Helgi hadn't read this book before yesterday.'
- i. \* Þessa bók Helgi hefði ekki lesið áður gær.  
this book Helgi had not read before yesterday  
'Helgi hadn't read this book before yesterday.'
- j. Áður gær las Helgi ekki þessa bók.  
before yesterday read Helgi not this book  
'Helgi didn't read this book before yesterday.'
- k. \* Áður gær Helgi las ekki þessa bók.  
before yesterday Helgi read not this book  
'Helgi didn't read this book before yesterday.'

- l. Þessa bók las Helgi ekki áður gær.  
this book read Helgi not before yesterday  
'Helgi didn't read this book before yesterday.'
  - m. \*Þessa bók Helgi las ekki áður gær.  
this book Helgi read not before yesterday  
'Helgi hadn't read this book before yesterday.'
  - n. Hefði Helgi lesið þessa bók áður gær?  
Had Helgi read this book before yesterday  
'Had Helgi read this book before yesterday?'
  - o. Las Helgi þessa bók áður gær?  
read Helgi this book before yesterday  
'Did Helgi read this book before yesterday?'
- (2)
- a. \*Ég spurði af hverju Helgi ekki hefði lesið þessa bók áður gær.  
I asked whether Helgi not had read this book before yesterday.  
'I asked whether Helgi hadn't read this book before yesterday.'
  - b. Ég spurði af hverju Helgi hefði ekki lesið þessa bók áður gær.  
I asked whether Helgi had not read this book before yesterday.  
'I asked whether Helgi hadn't read this book before yesterday.'
  - c. \*Ég spurði af hverju Helgi hefði lesið ekki þessa bók áður gær.  
I asked whether Helgi had read not this book before yesterday.  
'I asked whether Helgi hadn't read this book before yesterday.'
  - d. \*Ég spurði af hverju Helgi ekki las þessa bók áður gær.  
I asked whether Helgi not read this book before yesterday.  
'I asked whether Helgi didn't read this book before yesterday.'
  - e. Ég spurði af hverju Helgi las ekki þessa bók áður gær.  
I asked whether Helgi read not this book before yesterday.  
'I asked whether Helgi didn't read this book before yesterday.'
  - f. \*Ég spurði af hverju áður gær las Helgi ekki þessa bók.  
I asked whether before yesterday read Helgi not this book.  
'I asked whether Helgi didn't read this book before yesterday.'
  - g. \*Ég spurði af hverju þessa bók las Helgi ekki áður gær.  
I asked whether this book read Helgi not before yesterday.  
'I asked whether Helgi didn't read this book before yesterday.'
  - h. \*Ég spurði af hverju áður gær hefði Helgi ekki lesið þessa bók.  
I asked whether before yesterday had Helgi not read this book.  
'I asked whether Helgi hadn't read this book before yesterday.'
  - i. \*Ég spurði af hverju þessa bók hefði Helgi ekki lesið áður gær.  
I asked whether this book had Helgi not read before yesterday.  
'I asked whether Helgi hadn't read this book before yesterday.'

- j. \*Ég spurði af hverju hefði Helgi ekki lesið þessa bók áður gær.  
I asked whether had Helgi not read this book before yesterday.  
'I asked whether Helgi hadn't read this book before yesterday.'
- k. \*Ég spurði af hverju las Helgi ekki þessa bók áður gær.  
I asked whether read Helgi not this book before yesterday.  
'I asked whether Helgi hadn't read this book before yesterday.'

You can treat “af hverju” as a single word, equivalent to the complementizer *whether* in English. You can also assume that each of the Icelandic words has the same kind of properties that their English translation has; that is, you can assume that they belong to the same categories and have the same meanings.

Based on these sentences, provide the following things.

- The Phrase Structure rules of Icelandic
- The Head Movement rule of Icelandic
- Any other rules that you see evidence that Icelandic has
- A derivation of (1h)
- A derivation of (2b)