Today’s topics and goals

• Formalization of Agree
• Two theories of agreement
  1. Agree as an infallible operation.
  2. Agree as a fallible, but obligatory operation.
• Agreement pattern in Kichean Agent Focus constructions
The operation **Agree**

(1) \[ \begin{array}{cc}
\text{XP} & \text{YP} \\
\text{X} & \text{[}\_\text{]} \\
\text{[}\_\text{]} & \text{YP} \\
\text{[}\_\text{]} & \text{[}\_\text{]} \\
\end{array} \]

**Agree**: operation that involves a Probe and a matching Goal in its c-command domain, supplying a feature value to the Probe.
The operation Agree

(1) Agree

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The operation Agree

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The operation **Agree**

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Agreement

(2) Agreement (or $\varphi$-agreement) is morphophonologically overt covariance in $\varphi$-features between a verb-like element and one or more nominal arguments, where:

a. verb-like element = a lexical verb, auxiliary verb, or tense/aspect/mood marker

b. $\varphi$-features = some nonempty subset of \{person, number, gender/noun class\}

[Preminger 2014]
(3) Hebrew

a. ha-necig-im dibr-u.
   the-representative-PL spoke-3PL
   ‘The representatives spoke.’

b. * ha-necig-im diber.
   the-representative-PL spoke.3SG.MASC
(4) 

```
(4)  
  TP  
   /   \  
  T    vP  
     /   \  
    [φ : __]  
        /       \  
       DP       v'  
              /   \  
            the-representatives  
                  /   \  
                 [φ : 3PL]  
                      /   \  
                     v    VP  
                        /  
                       spoke
```
(4)

```
(\text{TP})

\text{T} \quad \text{vP}

[\varphi : \_]

\text{DP} \quad \text{v}'

\text{the-representatives}

[\varphi : 3PL]

\text{v} \quad \text{VP}

\text{spoke}
```
(4) $\begin{array}{c}
\text{TP} \\
\quad \text{T} \\
\quad \quad \left[ \varphi : 3PL \right] \\
\quad \quad \quad \text{the-representatives} \\
\quad \quad \quad \quad \left[ \varphi : 3PL \right] \\
\quad \quad \quad \quad \quad \quad v' \\
\quad \quad \quad \quad \quad \quad \quad \quad \quad \quad v \\
\quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \text{VP} \\
\quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \text{spoke}
\end{array}$
1. Agree as an **infallible** operation: if an unvalued feature survives until the end of the derivation, the derivation crashes.

2. Agree as a **fallible**, but obligatory operation: Agree must occur if the context of application is met, but otherwise unvalued features can survive until the end of the derivation without causing it to crash.
• According to this view, (3b) is ungrammatical because T’s \([\varphi : \_\_]\) remains unvalued throughout the derivation, causing it to crash.

(3) Hebrew

a. ha-necig-im dibr-u.
   the-representative-PL spoke-3PL
   ‘The representatives spoke.’

b. * ha-necig-im diber.
   the-representative-PL spoke.3SG.MAS
Agree as a fallible operation

According to this view, it is okay that \( \varphi : \__ \) in (3b) remains unvalued until the end of the derivation.

\[
(3) \quad \text{Hebrew}
\]

a. ha-necig-im dibr-u.
   the-representative-PL spoke-3PL
   ‘The representatives spoke.’

b. * ha-necig-im diber.
   the-representative-PL spoke.3SG.MAS

The issue is that the context of application of Agree is met, but this operation is not performed.
• According to this view, it is okay that \([\varphi : \_\_]\) in (3b) remains unvalued until the end of the derivation.

(3) Hebrew

a. ha-necig-im dibr-u.
the-representative-PL spoke-3PL
‘The representatives spoke.’

b. * ha-necig-im diber.
the-representative-PL spoke.3SG.MAS

• The issue is that the context of application of Agree is met, but this operation is not performed.
• What does it mean to say that the context of application of Agree is met/not met?

• Analogy with the application of phonological rules:

  (5)  *Final devoicing*

  $$C_{[-\text{son}]} \rightarrow [-\text{voice}] /___\#$$

  (a word-final obstruent is obligatorily devoiced)
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• Analogy with the application of phonological rules:

  (5)  *Final devoicing*

  \[ C_{[-\text{son}]} \rightarrow [-\text{voice}] / \_\_\# \]

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• What does it mean to say that the context of application of Agree is met/not met?

• Analogy with the application of phonological rules:

\[(5) \quad \text{Final devoicing} \]
\[C_{[-\text{son}]} \rightarrow [\text{–voice}] / \_\# \]

(a word-final obstruent is obligatorily devoiced)
(5) *Final devoicing*

\[ C_{[-son]} \rightarrow [-\text{voice}] / \_\_\# \]

(a word-final obstruent is obligatorily devoiced)

- What happens if:
  - The final consonant is not an obstruent?
  - The obstruent is in word-medial position?
  - . . .
(5) *Final devoicing*  
\[ C_{[-\text{son}]} \rightarrow [-\text{voice}] / __# \]  
(a word-final obstruent is obligatorily devoiced)

- What happens if:
  - The final consonant is not an obstruent?
  - The obstruent is in word-medial position?
  - …
Final devoicing

C\([-\text{son}]\) → \([-\text{voice}] / ___#

(a word-final obstruent is obligatorily devoiced)

- What happens if:
  - The final consonant is not an obstruent?
  - The obstruent is in word-medial position?
  - ...

- The rule (5) does not apply in these cases because the requirements for its application are not met. Otherwise, the rule is **obligatory**.
• It is in this sense that, Agree is a fallible, though obligatory operation.

(3) **Hebrew**

a. ha-necig-im dibr-u.
   the-representative-PL spoke-3PL
   ‘The representatives spoke.’

b. * ha-necig-im diber.
   the-representative-PL spoke.3SG.MAS

• In (3), a probe (i.e. [\( \varphi : \_\_ \)] in T) is present and so is a goal (ha-necig-im), so it must occur.
  
    ▶ Under the view that Agree is a fallible, though obligatory operation, (3b) is ungrammatical because there is no possible derivation that yields it.
• It is in this sense that, Agree is a fallible, though obligatory operation.

(3) *Hebrew*

a. ha-necig-im dibr-u.
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• In (3), a probe (i.e. [φ : __] in T) is present and so is a goal (ha-necig-im), so it must occur.

  Under the view that Agree is a fallible, though obligatory operation, (3b) is ungrammatical because there is no possible derivation that yields it.
• It is in this sense that, Agree is a fallible, though obligatory operation.

(3) Hebrew

a. ha-necig-im dibr-u.
   the-representative-pl spoke-3pl
   ‘The representatives spoke.’

b. * ha-necig-im diber.
   the-representative-pl spoke.3sg.mas

• In (3), a probe (i.e. [φ : __] in T) is present and so is a goal (ha-necig-im), so it must occur.
  ▶ Under the view that Agree is a fallible, though obligatory operation, (3b) is ungrammatical because there is no possible derivation that yields it.
We are comparing two views about the obligatoriness and fallibility of the operation Agree:

1. Agree as an **infallible** operation
2. Agree as a **fallible**, but obligatory operation

Next up:
- Data to distinguish between the two views
- What it means to say that Agree can be a fallible operation.
Taking stock

• We are comparing two views about the obligatoriness and fallibility of the operation Agree:
  
  1. Agree as an **infallible** operation  
  2. Agree as a **fallible**, but obligatory operation

• Next up:
  ▶ Data to distinguish between the two views  
  ▶ What it means to say that Agree can be a fallible operation.
Agent focus in Kichean

(6) a. rat x-Ø-aw-ax-aj ri achin. you.sg com-3sg-2sg-hear-ACT the man ‘You(sg) heard the man.’

b. ri achin x-a-r-ax-aj rat. the man com-2sg-3sg-hear-ACT you.sg ‘The man heard you(sg).’

(7) a. ri achin x-Ø-uk’lun. the man com-3sg-arrive ‘The man arrived.’

b. rat x-at-uk’lun. you.sg com-2sg-arrive ‘You(sg) arrived.’
Agent focus in Kichean

(6)  a. rat x-Ø-aw-ax-aj   ri achin. you.sg com-3sg.abs-2sg.erg-hear-act the man ‘You(sg) heard the man.’
    b. ri achin x-a-r-ax-aj   rat. the man com-2sg.abs-3sg.erg-hear-act you.sg ‘The man heard you(sg).’

(7)  a. ri achin x-Ø-uk’lun. the man com-3sg.abs-arrive ‘The man arrived.’
    b. rat x-at-uk’lun. you.sg com-2sg.abs-arrive ‘You(sg) arrived.’
• Agreement in Kichean: ABS–ERG agreement alignment.
• Order of morphemes: ABS > ERG.

• Coming up: what happens in agreement in the Agent Focus (AF) construction.
Taking stock

- Agreement in Kichean: ABS–ERG agreement alignment.
- Order of morphemes: ABS > ERG.

- Coming up: what happens in agreement in the Agent Focus (AF) construction.
(8)  a. ja  ri  tz’i’ x-Ø-etzel-[an]  ri  sian.
    FOC the dog  COM-3SG.ABS-hate-AF the cat
    ‘It was the dog that hated the cat.’

    b. ja  ri  xoq  x-Ø-tz’et-[ö]  ri  achin.
    FOC the woman COM-3SG.ABS-see-AF the man
    ‘It was the woman who saw the man.’

• Two 3rd person arguments: one agreement slot, from the ABS series.
Agent Focus in Kichean

(8)  a. ja ri tz’i’ x-Ø-etzel-[an] ri sian.
FOC the dog COM-3SG.ABS-hate-AF the cat
‘It was the dog that hated the cat.’

b. ja ri xoq x-Ø-tz’et-[ö] ri achin.
FOC the woman COM-3SG.ABS-see-AF the man
‘It was the woman who saw the man.’

• Two 3rd person arguments: one agreement slot, from the ABS series.
(9) rat x-e’-aw-ax-aj rje’.
you.SG COM-3PL.ABS-2SG.ERG-hear-ACT them
‘You(sg) heard them.’

(10) a. ja rat x-at/*Ø-ax-[an] ri achin.
FOC you.SG COM-2SG/*3SG.ABS-hear-AF the man
‘It was you(sg) that heard the man.’

b. ja ri achin x-at/*Ø-ax-[an] rat.
FOC the man COM-2SG/*3SG.ABS-hear-AF you.SG
‘It was the man that heard you(sg).’
(9) \text{rat } \text{x-e'-aw-ax-aj rje'}. \\
\text{you.SG COM-3PL.ABS-2SG.ERG-hear-ACT them} \\
\text{‘You(sg) heard them.’}

(10) a. \text{ja rat x-at/*Ø-ax-} \text{an} \text{ ri achin}. \\
\text{FOC you.SG COM-2SG/*3SG.ABS-hear-AF the man} \\
\text{‘It was you(sg) that heard the man.’}

b. \text{ja ri achin x-at/*Ø-ax-} \text{an} \text{ rat}. \\
\text{FOC the man COM-2SG/*3SG.ABS-hear-AF you.SG} \\
\text{‘It was the man that heard you(sg).’}
(9) rat x-e’-aw-ax-aj rje’.
you.sg com-3pl.abs-2sg.erg-hear-act them
‘You(sg) heard them.’

(10) a. ja rat x-at/*Ø-ax-[an] ri achin.
FOC you.sg com-2sg/*3sg.abs-hear-AF the man
‘It was you(sg) that heard the man.’

b. ja ri achin x-at/*Ø-ax-[an] rat.
FOC the man com-2sg/*3sg.abs-hear-AF you.sg
‘It was the man that heard you(sg).’

• If the arguments are in the 3rd and 2nd person, agreement is always with 2nd person, irrespective of grammatical function.
(11)  a. ja  yîn x-in/*Ø-ax-[\text{an}] ri  achin.
    FOC  me  COM-1SG/*3SG.ABS-hear-AF  the  man
    ‘It was me that heard the man.’

    b. ja  ri  achin x-in/*Ø-ax-[\text{an}]  yîn.
    FOC  the  man  COM-1SG/*3SG.ABS-hear-AF  me
    ‘It was the man that heard me.’
(11)  a. ja  [yïn x-in/*Ø-ax-[an]]  ri  achin.
    FOC  me  COM-1SG/*3SG.ABS-hear-AF  the  man
    ‘It was me that heard the man.’

    b. ja  ri  achin  x-in/*Ø-ax-[an]  yïn.
    FOC  the  man  COM-1SG/*3SG.ABS-hear-AF  me
    ‘It was the man that heard me.’

• If the arguments are in the 3rd and 1st person, agreement is always
  with 1st person, irrespective of grammatical function.
• What the data in (10) and (11) have in common: 1st and 2nd take precedence over 3rd person, irrespective of grammatical function.

• Why do 1st and 2nd person pattern alike, to the exclusion of 3rd person?
  ▶ They are discourse participants.
  ▶ Technical implementation: [Part], which 3rd person lacks.
What the data in (10) and (11) have in common: 1st and 2nd take precedence over 3rd person, irrespective of grammatical function.

Why do 1st and 2nd person pattern alike, to the exclusion of 3rd person?

- They are discourse participants.
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• What the data in (10) and (11) have in common: 1st and 2nd take precedence over 3rd person, irrespective of grammatical function.

• Why do 1st and 2nd person pattern alike, to the exclusion of 3rd person?
  ▶ They are discourse participants.
  ▶ Technical implementation: [Part], which 3rd person lacks.
Omnivorous agreement (Nevins 2011)

Agreement pattern in which an agreement marker can be triggered by a given feature whether it is found on the subject or on the object
• Premises:
  ▶ [φ : __] features can be relativized for a particular value, e.g. [Part].
  ▶ Potential goals that lack the feature sought for are skipped over.
• Premises:
  ▶ \([\varphi : \__]\) features can be relativized for a particular value, e.g. \([\text{Part}]\).
  ▶ Potential goals that lack the feature sought for are skipped over.
(12) What did Faatu eat ___?
(13)  
\[
\text{CP} \quad \text{TP} \\
\text{C}_{\text{FOC}} \quad \text{TP} \\
\text{T} \quad \text{vP} \\
\text{vP} \quad \text{v}_{'} \\
\text{DP}_{\text{subj}} \quad \text{v}_{'} \\
\text{v} \quad \text{VP} \\
\text{v} \quad \text{DP}_{\text{obj}} \\
\text{VP} \quad \text{V} \\
\]

(10)  a. ja rat x-at/*Ø-ax-[an] ri achin.
   FOC you.SG COM-2SG/*3SG.ABS-hear-AF the man
   ‘It was you(sg) that heard the man.’

   b. ja ri achin x-at/*Ø-ax-[an] rat.
   FOC the man COM-2SG/*3SG.ABS-hear-AF you.SG
   ‘It was the man that heard you(sg).’
(10a')

```
(10a')
CP
  C_{FOC}
  TP
    T
    [φ : __]_{Part}
      DP_{subj}
        you
          [Part]
            v
            VP
              V
              heard
              DP_{obj}
                the man
```
(10a')

```
(10a')
CP
  C_FOC
  TP
    T
      [φ : ___]_Part
        DP_{subj}
          you
            [Part]
        v'
          v
            VP
              V
                heard
              DP_{obj}
                the man
```
(10a')

```
(10a')
CP
  /
C_{FOC}  TP
    /
   T  vP
      /
     [φ: 2SG]_{Part}
      /
      /
      /
     DP_{subj}
     /
     you
     /
     [Part]
     /
     v
     /
     v'
     /
     v
     /
     V
     /
     heard
     /
   DP_{obj}
   /
   the man
```
(10b')

\[
\begin{align*}
\text{CP} & \rightarrow \text{C}_{\text{FOC}} \ 	ext{TP} \\
\text{TP} & \rightarrow \text{T} \ 	ext{vP} \\
\text{vP} & \rightarrow [\varphi : \_]\text{Part} \ 	ext{DP}_{\text{subj}} \ 	ext{v'} \\
\text{DP}_{\text{subj}} & \rightarrow \text{the man} \\
\text{v'} & \rightarrow \text{v} \ 	ext{VP} \\
\text{VP} & \rightarrow \text{V} \ 	ext{DP}_{\text{obj}} \\
\text{DP}_{\text{obj}} & \rightarrow \text{heard} \ 	ext{you} \\
\end{align*}
\]
(10b′)

```
CP
  \rightarrow C_{FOC}
  \rightarrow TP
    \rightarrow T
    \rightarrow [\varphi : \_]_{Part}
      \rightarrow DP_{subj}
        \rightarrow \text{the man}
          \rightarrow v'
            \rightarrow v
              \rightarrow VP
                \rightarrow V
                  \rightarrow \text{heard}
                    \rightarrow DP_{obj}
                      \rightarrow \text{you}
```

\[
\text{the man}
\]

\[
\text{you}
\]
(10b′)

```
CP
  C_{FOC}
  TP
    T
    vP
      [φ : __]_{Part}
      DP_{subj}
        the man
      v'
        v
        VP
          V
          heard
          DP_{obj}
            you
            [Part]
```
(10b′)

```
(10b′)  CP
       /   \  
      /     \ 
     C_{FOC} TP
      /     \  
     /      \ 
    [φ: 2SG]_{Part} vP
      /     \  
     /       \
   DP_{subj} v'
     /     \  
    /      \ 
   the man v  
      /     \  
     /      \ 
    v       VP
     /     \  
    /      \ 
   V heard DP_{obj}
       /     \
      /      [Part]
    you
```
The same analysis applies for the examples where the arguments are in the 1st and 3rd person.

(11) a. ja yïn x-in/*Ø-ax-[an]  ri achin.
    FOC me COM-1SG/*3SG.ABS-hear-AF the man
    ‘It was me that heard the man.’

b. ja  ri  achin x-in/*Ø-ax-[an] yïn.
    FOC the man  COM-1SG/*3SG.ABS-hear-AF me
    ‘It was the man that heard me.’
• But what about the sentences where both arguments are in the 3rd person?

\[(8)\]

(a) \(\text{ja ri tz’i’ x-Ø-etzel-} \underline{\text{an}} \text{ ri sian.} \)
   \(\text{FOC the dog COM-3SG.ABS-hate-AF the cat} \)
   ‘It was the dog that hated the cat.’

(b) \(\text{ja ri xoq x-Ø-tz’et-} \underline{\text{ö}} \text{ ri achin.} \)
   \(\text{FOC the woman COM-3SG.ABS-see-AF the man} \)
   ‘It was the woman who saw the man.’

• There is no [Part] argument here.

\[(14)\]

(i) In the absence of a [Part] argument, [\(\varphi : \_\)] can Agree with the highest DP bearing some \(\varphi\)-feature.

(ii) In the absence of a [Part] argument, [\(\varphi : \_\)] remains unvalued and it is exponed as ‘3sg’ (cf. our discussion of unmarked cases).
• But what about the sentences where both arguments are in the 3rd person?

(8) a. ja ri tz’i’ x-Ø-etzel-[an] ri sian.  
FOC the dog COM-3SG.ABS-hate-AF the cat  
‘It was the dog that hated the cat.’

b. ja ri xoq x-Ø-tz’et-[ö] ri achin.  
FOC the woman COM-3SG.ABS-see-AF the man  
‘It was the woman who saw the man.’

• There is no [Part] argument here.

(14) i. In the absence of a [Part] argument, [φ : __] can Agree with the highest DP bearing some φ-feature.

ii. In the absence of a [Part] argument, [φ : __] remains unvalued and it is exponed as ‘3sg’ (cf. our discussion of unmarked cases).
• But what about the sentences where both arguments are in the 3rd person?

(8) a. ja ri tz’i’ x-Ø-etzel-[an] ri sian.
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   ‘It was the dog that hated the cat.’

   b. ja ri xoq x-Ø-tz’et-[ö] ri achin.
   FOC the woman COM-3SG.ABS-see-AF the man
   ‘It was the woman who saw the man.’

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(14) i. In the absence of a [Part] argument, [φ : __] can Agree with the highest DP bearing some φ-feature.

   ii. In the absence of a [Part] argument, [φ : __] remains unvalued and it is exponed as ‘3sg’ (cf. our discussion of unmarked cases).
What is crucial for our purposes is the following conflict:

- Sentences where there is a 1st/2nd and a 3rd person argument: we have to postulate that T in Kichean AF is specifically looking for a \[\text{Part}\] value.
- Sentences where both arguments are 3rd person: nothing satisfies this valuation requirement and yet the result is grammatical.
Distinguishing between two views of Agree

1. Agree as an **infallible** operation: if an unvalued feature survives until the end of the derivation, the derivation crashes.

2. Agree as a **fallible**, but obligatory operation: Agree must occur if the context of application is met, but otherwise unvalued features can survive until the end of the derivation without causing it to crash.
Distinguishing between two views of Agree

1. Agree as an **infallible** operation: if an unvalued feature survives until the end of the derivation, the derivation crashes.

2. Agree as a **fallible**, but obligatory operation: Agree must occur if the context of application is met, but otherwise unvalued features can survive until the end of the derivation without causing it to crash.

1. If Agree is an infallible operation, the sentences with only 3rd person arguments (i.e. non-**Part** arguments) should be ungrammatical.

2. If Agree is a fallible, but obligatory operation, these sentences are still allowed to converge.
