

Move and Agree Forum



(31 May to 04 June 2021)

Setting the scene

(J. Crippen, H. Keupdjio, R.-M. Déchaine)

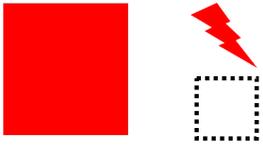
- The broad view of feature **integration**
 - the “binding problem”: feature **segregation** versus feature **combination**
- The language-centric view of feature integration
 - Move = feature integration with complete match
 - Agree = feature integration with partial match
- Perspectives on Move and Agree
 - Typology of Move & Agree
 - Move conditions (phasal) A'-agreement: Medumba
 - Functor dependencies condition (upward): Tlingit:
 - ...
 - Retrospective view: geometry of Agree
 - Prospective view: Move & Agree = feature integration



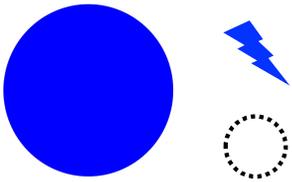
1. Broad view

the problem of

(1) the red square, and



(2) the blue circle

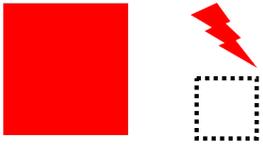


Feature integration — here COLOUR and SHAPE — is called the **binding problem**. It divides into two subproblems:
How is **segregation** achieved?
How is **combination** achieved?

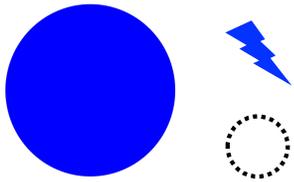
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Note: these are set partitions

(1) she {SENTIENCE:animate,human,

(2) he {SENTIENCE:animate,human,

PERSON:3,

GENDER:male}

PERSON:3,

GENDER:male}

Feature integration is omnipresent in natural language, e.g. pronouns and pronominal agreement.

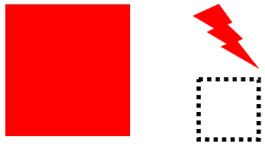
It likewise can be divided into two subproblems:

How is **segregation** achieved? How do we come to re-cognize features such as SENTIENCE, PERSON & GENDER?

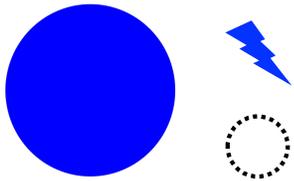
How is **combination** achieved? How do we come to re-cognize combinations of features such as SENTIENCE, PERSON & GENDER?

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Note: these are set partitions

(1) **she** {SENTIENCE:animate,human,

PERSON:3,

GENDER:female}

(2) **he** {SENTIENCE:animate,human,

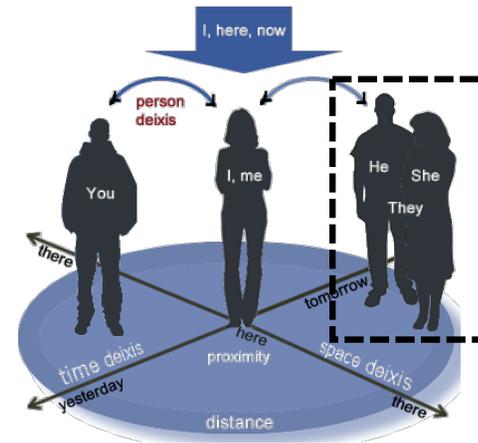
PERSON:3,

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she



he



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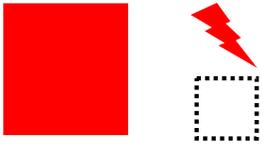
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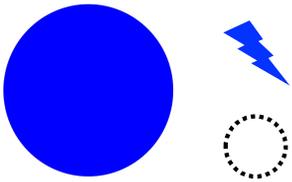
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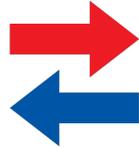


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2. Language-centric view: Move and Agree as feature integration

- **Move**: features of two distinct syntactic positions **match**
limiting case is “copy movement”, where feature integration is (complete) feature matching



(3) **rightward** non-local dependency

Lucy gave ~~<all of her books>~~ to her friends **all of her books**.

(4) **leftward** non-local dependency

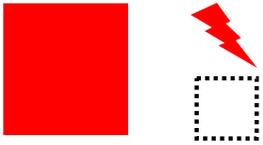
What did Lucy give ~~<what>~~ to her friends?

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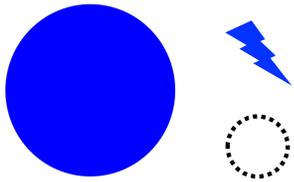
In human language, feature integration likewise divides into two subproblems:
How is **segmentation** achieved?
How is **composition** achieved?

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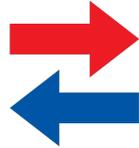
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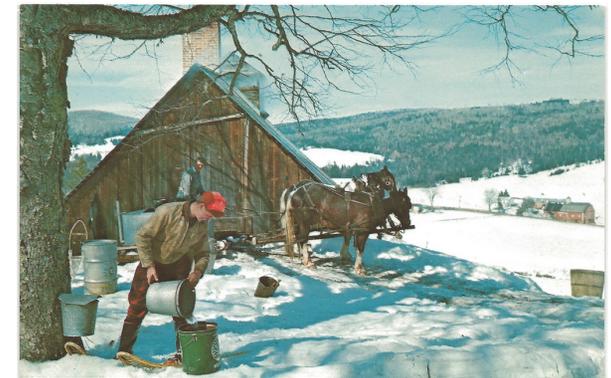
- **Agree**: features of two distinct syntactic positions **overlap**; i.e. partial match



(5) feature co-occurrence

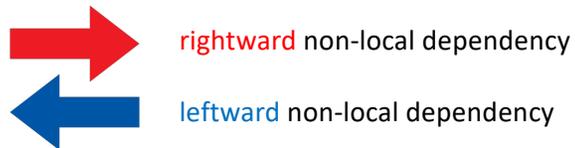
- a. **Luke** *tap-s maple syrup.*
{HUM, MS, SG} {SG}
- b. **He** *taps-s maple syrup.*
{HUM, MS, SG} {SG}
- c. [CONTEXT: add for itinerant maple-tapper]
pro *taps-s maple syrup, **pro** will travel.*
{SG}

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2. Language-centric view

- **Move**
feature integration = complete match



- **Agree**
feature integration = partial match
(5) *He* *tap-s maple syrup.*
{HUM, MS, SG} {SG}



In human language, feature integration also divides into two subproblems:

- How is **segmentation** achieved?
- How is **composition** achieved?

3. Perspectives on Move & Agree

3.1 Typology of Move & Agree

form (i.e. morphosyntax) is source of evidence for how feature integration proceeds

Finding 1: leftward **Move-WH conditions** (phasal) **Agree** (Keupdjio 2020)

- Medumba A'-agreement is phasal
- (6) A'-agr = HL tonal allomorphy on verb, e.g. Medumba (Grassfields Bantu) (counterpart to concordial agreement found in other Bantu languages)

<p>a. <i>Nù mí jún b-ún tʃ-á</i> Numi see PL-child PL.C6-3POSS H Numi saw his children</p>	<p>b. <i>á wú Nù mí jún <á-wú> á</i> FOC WH Numi see Q HL Who did Numi see?</p>
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Finding 2: various dependencies condition (upward) **Agree** (Crippen 2019)

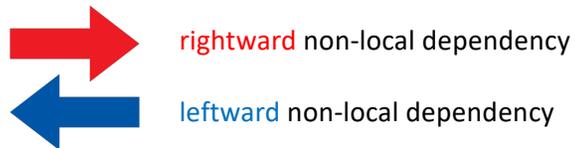
- Tlingit (Na-Dene) plural-agreement = suppletive verbal allomorphy {D,
- (8) a. *Neil-dé pro woo-goot.* b. *Neil-dé has woo-aat.*
 [pp home-to] PFV-go·SG [pp home-to] 3PL·HUM=PFV.go·PL
 'S/he went home.' 'They went home'

Open question:

What is the (theoretical/conceptual/empirical) motivation for modelling (non)-local dependencies with upward/downward Agree?

2. Language-centric view

- **Move**
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- **Agree**
feature integration = partial match
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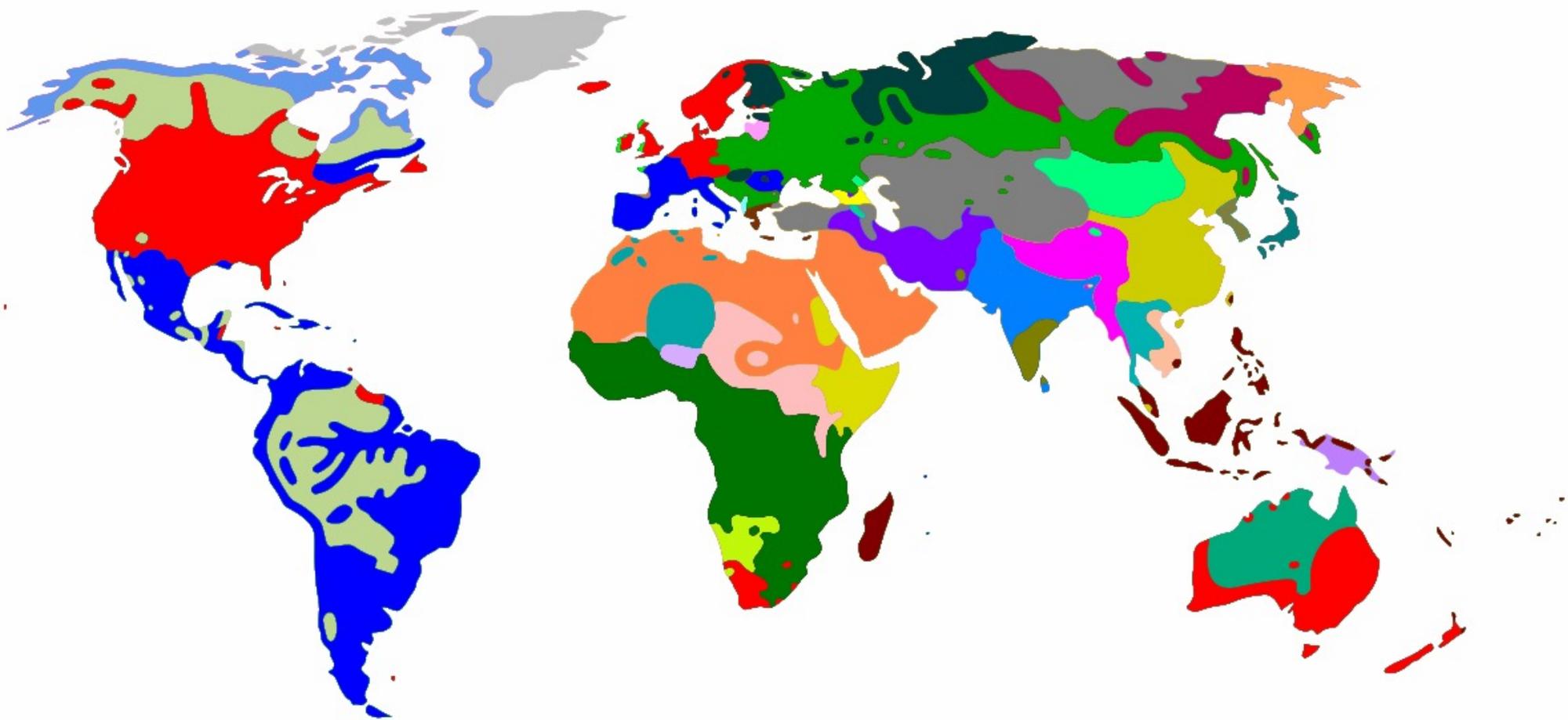
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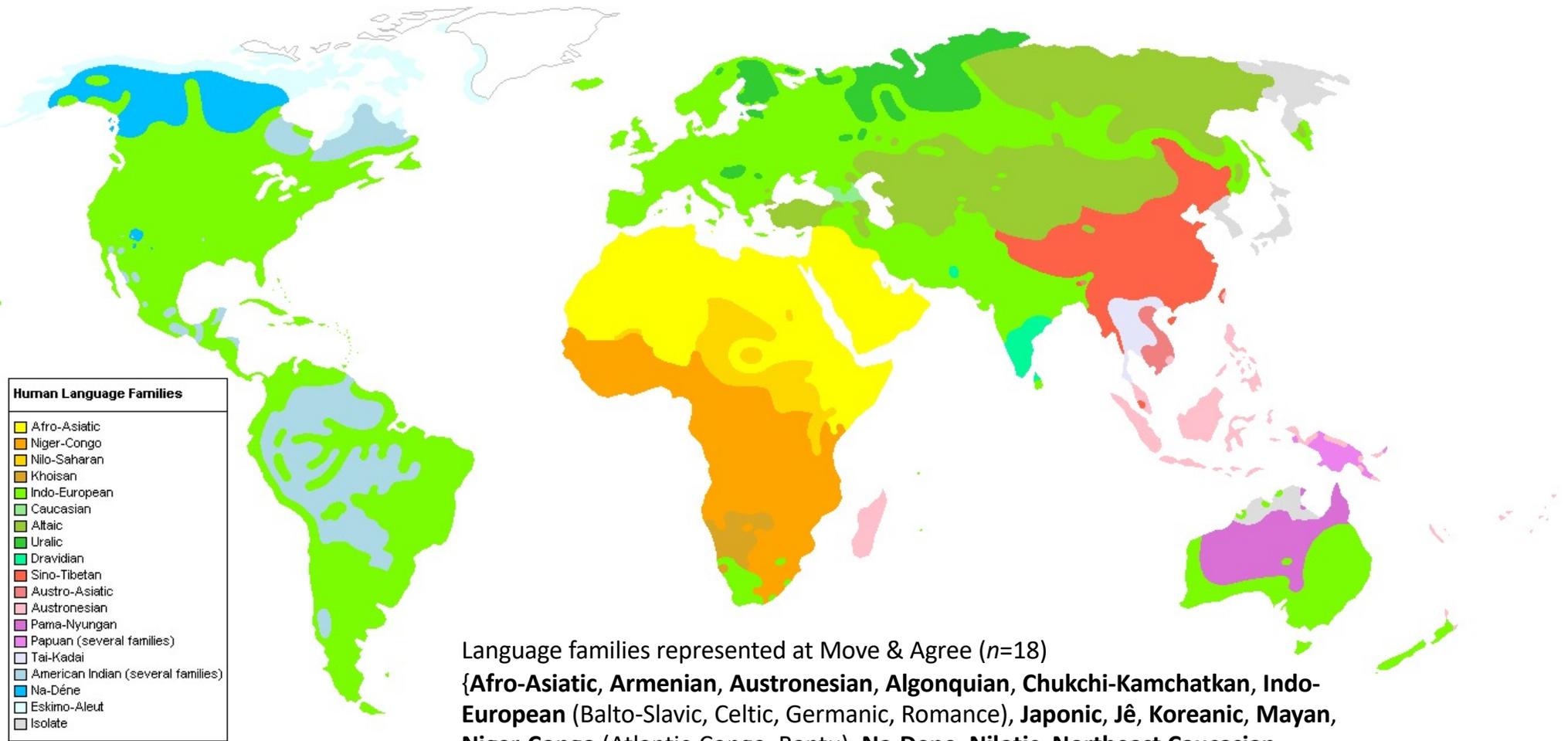
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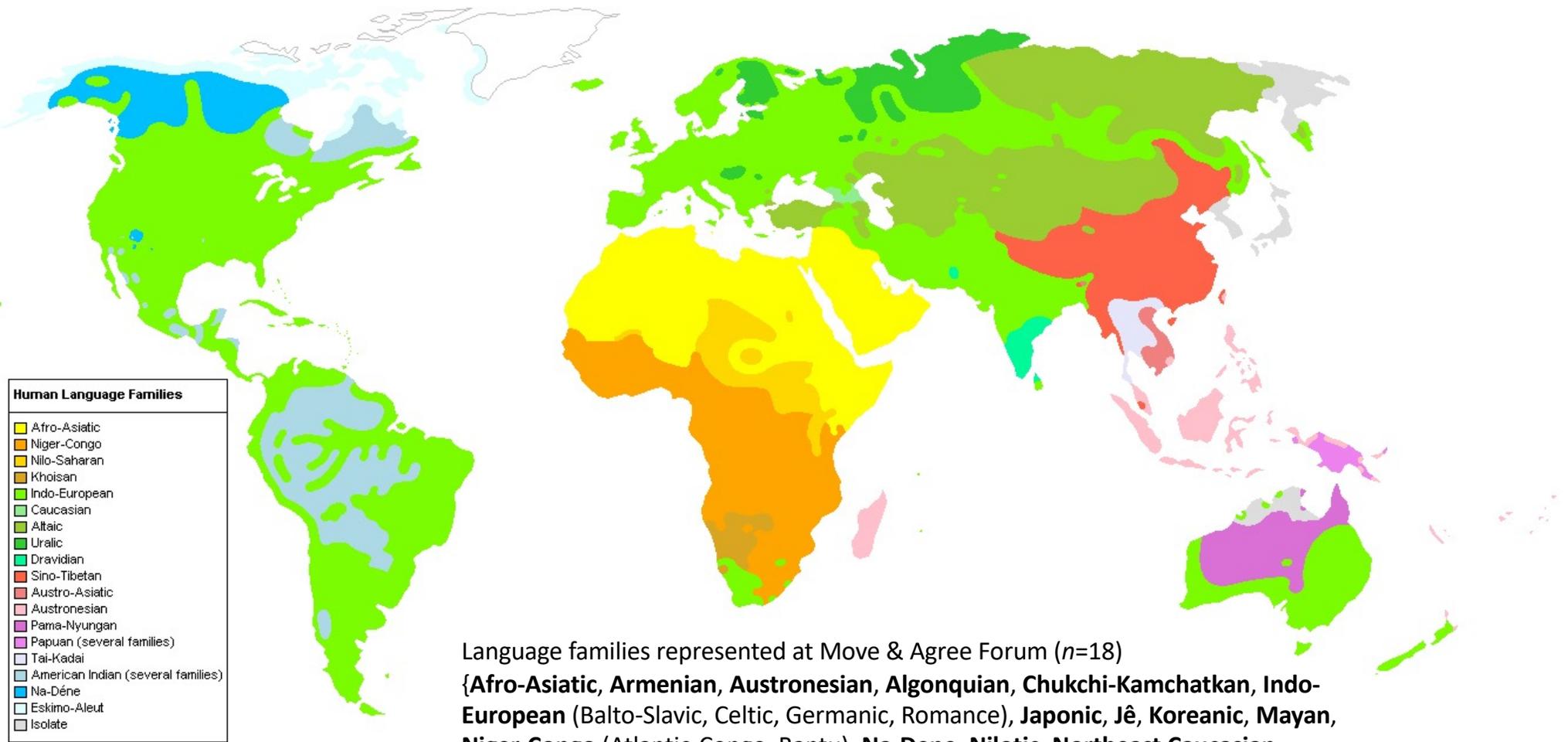
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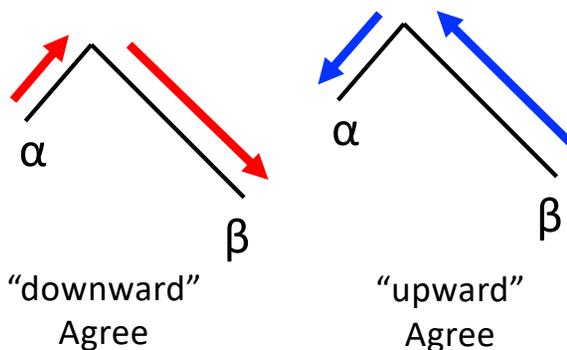
3. Perspectives on Move & Agree

3.1 Retrospective view: geometry of Agree

- **data sources**

- (i) agreement conditioned by **binding** dependencies
- (ii) agreement conditioned by **movement** dependencies
- (ii) **morphologically conditioned** pro-drop
 - agreement of verb with subject,
e.g. Romance, Germanic,...
 - agreement of verb with subject and object
e.g. Iroquoian, Algonquian,...
- (iii) discourse conditioned pro-drop
e.g. Sinitic, Japonic

- **tree geometry**



Open question:

Are both “downward” and “upward” Agree necessary?

3.1 Prospective view: feature-integration

- **findings: agreement is Janus-like in that it has two faces**

- (i) agreement can be interpretable
- (ii) agreement can be purely structural, a.k.a. “uninterpretable”

- **attending to feature integration** allows us to better understand the two faces of agreement

- **Speculation 1:** syntax-semantics mapping

interpretable agreement reduces to compositional feature-integration; mechanisms are predicted to be uniform in all human languages

- **Speculation 2:** syntax-morphology mapping

- **one-to-one:** concordial
only one exponent per feature
e.g. Bantu N-classes
- **one-to-many:** suppletive
one exponent maps onto several features
e.g. Indo-European
- **many-to-one:** prolific
person, number, and gender are compositional;
map onto one argument via restriction
Iroquoian, Algonquian

- **Speculation 3:** (uninterpretable) structural agreement is the syntactic version of “the emergence of the unmarked”; should show last resort conditioning