Semantic and formal agreement features—Evidence from nominal ellipsis in German

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This talk

- ❖ Empirically…

  - ❖ Formal vs. semantic agreement: girls, glasses, and You
  - ❖ Agreement in predicative contexts: APs vs. DPs
  - ❖ German, Slovenian, Greek; initial evidence for Czech

- ❖ Theoretically…
  - ❖ Dual feature system
  - ❖ Some consequences for the Agreement Hierarchy
  - ❖ Choice between formal/semantic agreement: interaction of preference conditions, which can be overridden by certain factors

Formal vs. semantic agreement

Gender mismatches

Mädchen 'girl'

❖ Formal **NEUT**

❖ Semantic **FEM**

(G) Das **Mädchen** genießt **seinen** Urlaub
the.**NEUT** girl enjoys its vacation

Das **Mädchen** genießt **ihren** Urlaub
the.**NEUT** girl enjoys her vacation

Polite pronouns

You (polite)

❖ Formal **PL**

❖ Semantic **SG (one addressee) or PL (group)**

(G) Sie   sind   / *ist/*bist   nett

ADDR.POL.**3.PL** be.**3.PL** / *be.**3.SG**/**2.SG**   nice.Ø

Number mismatches

Comrie 1975, Corbett 1983, 2000, 2006, Hahm 2006, Wechsler 2011, Wechsler & Hahm 2011

(Cz) Vy   jste   čestn**ý**   /   čestn**í**

2.PL   be.**2.PL**   honest.**M.SG**   /   honest.**F.SG**

'You (one formal male addressee) are honest.'

Vy   jste   čestní   /   čestne

2.PL   be.**2.PL**   honest.**M.PL**   /   honest.**F.PL**

'You (multiple addressees) are honest.'

Number mismatches

(S1P) **Vi** ste bili dobri
ADDR.POL.**2.PL** AUX.**PL** been.**PL** kind.**PL**

(S1C) **Vi** ste bil**a** dobr**a**
ADDR.POL.**2.PL** AUX.**PL** been.**SG** kind.**SG**

(Cz) **Vy** jste byl**a** učitelka
ADDR.POL.**2.PL** AUX.**PL** been.**SG** teacher.**SG**

Table 1 Agreement with polite 2PL pronouns (Comrie 1975; Corbett 1983)

	FINITE VERB	PARTICIPLE	ADJECTIVE	NOUN
PERSON agreement?	yes	no	no	no
Romance:				
French	pl	sg	sg	sg
Romanian	pl	sg/(pl)[a]	sg	sg
Italian dialects[b]	pl	sg	sg	sg
Modern Greek	pl	sg	sg	sg
Icelandic[c]	pl	n.d.	pl/sg	n.d.
West Slavic:				
Czech	pl	(pl)/sg	(pl)/sg	sg
Slovak	pl	pl/(sg)	sg	sg
Lower Sorbian	pl	pl	pl/sg	sg
Upper Sorbian	pl	(pl)/sg	(pl)/sg	sg
Polish dialects[d]	pl	pl/sg	pl/sg	sg
South Slavic:				
Bulgarian	pl	pl (96%)	sg (97%)	sg
Macedonian	pl	pl	(pl)/sg	sg
Serbian/Croatian	pl	pl	pl/(sg) [e]	sg
Slovene	pl	pl/(sg)	(pl)/sg	sg
East Slavic:				
Ukrainian	pl	pl/(sg)	(pl)/sg	sg
Belorussian	pl	pl	sg	sg
Russian	pl	pl	SF: pl (97%)[f] LF: sg (89%)	sg

Pluralia Tantum

Hahm 2006, Wechsler 2011, Wechsler & Hahm 2011

- ❖ Formal **PL**

- ❖ Semantic **SG (one item) or PL (several items)**

(Cz) **Tyto brýle** jsou hezké / *hezká
these glasses.**PL** be.**PL** nice.**FEM.PL** / *nice.**SG**
'These glasses (one or multiple pairs) are nice.'

(Sl) **Vilice** so lepe / *lepa
fork.**FEM.PL** be.**PL** nice.**FEM.PL** / *nice.**FEM.SG**
'This fork (one item) is nice.'

Trigger & relation matter

Trigger = you.pol	T-agreement	Predicative A
German	formal	—
Slovenian (prescr.)	formal	formal
Slovenian (coll.)	formal	semantic
Czech	formal	semantic

Trigger = pluralia tantum	T-agreement	Predicative A
German	formal	—
Slovenian (prescr.)	formal	formal
Slovenian (coll.)	formal	formal
Czech	formal	formal

Target matters as well

Two types of nominal ellipsis

❖ N(P) ellipsis: deletion of a specific antecedent N(P)

❖ Deep ellipsis: abstract null *n*/N specified for [±ANIMATE]

(G) Dieser **Bub** ist der einzige ~~Bub~~ der traurig ist
this boy is the only ~~boy~~ who sad is

Der **Bub** ist der einzige Ø[+ANIM] der einen Löffel hat
the boy is the only ONE who a spoon has

This boy is the only one [~~boy~~] who is sad.

The boy is the only one [Ø$_{[+ANIM]}$] who has a spoon.

boys:

boy
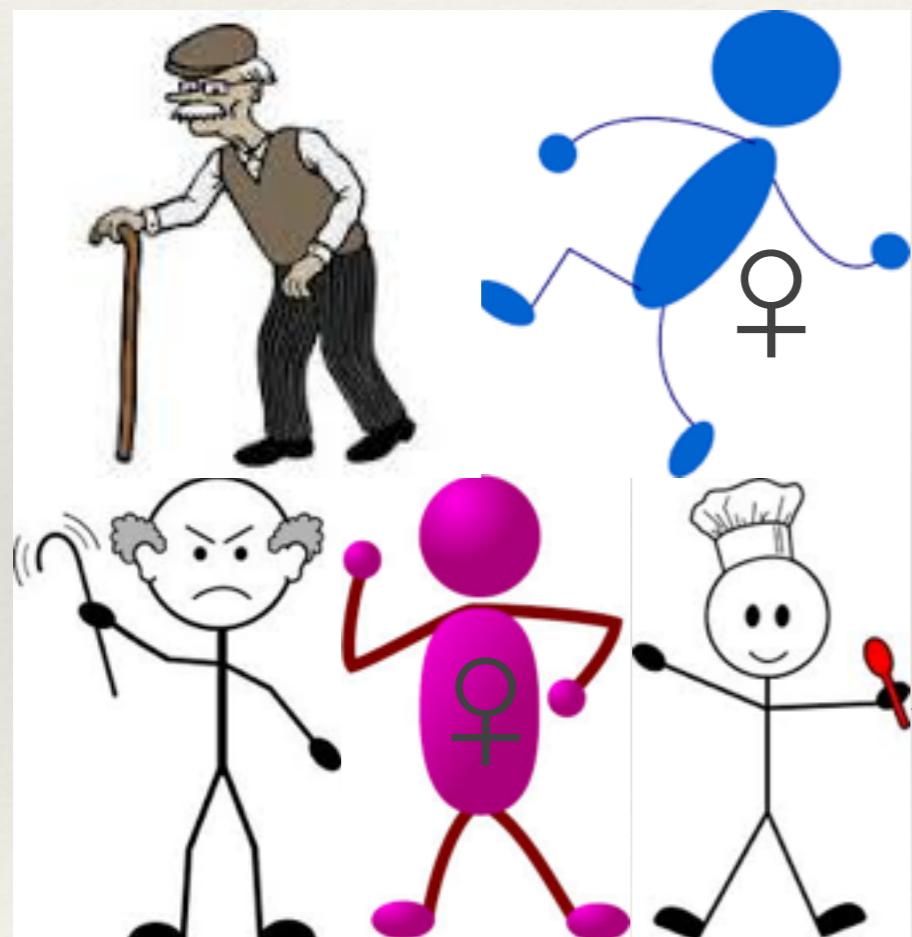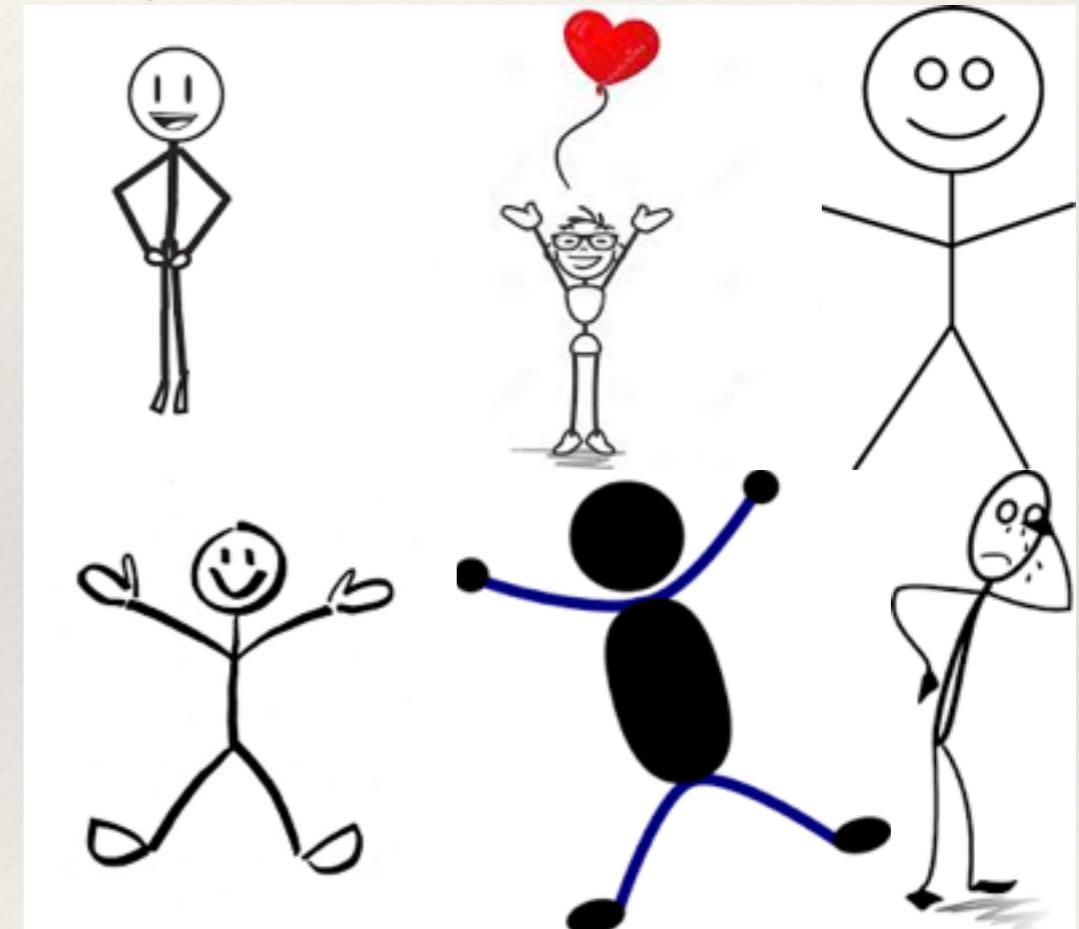
Agreement in ellipsis

NPE Dieser **Bub** ist [**der** einzige ~~Bub~~] [**der** traurig ist]
  this boy   is [the.MASC only ~~boy~~] [who.MASC sad   is]

(Ø) Der **Bub** ist [**der** einzige $\emptyset_{[+\text{ANIM}]}$] [**der** einen Löffel hat]
  the boy is [the.MASC only ONE   ] [who.MASC a spoon   has]

 * Der **Bub** ist [**die** einzige $\emptyset_{[+\text{ANIM}]}$] [**die** einen Löffel hat]
  the boy is [the.FEM only ONE   ] [who.FEM a spoon   has]

MM Der **Bub** ist [**die** einzige **Person**] [**die** einen Löffel hat]
  the boy is [the.FEM only person] [who.FEM a spoon   has]

Deep ellipsis in mismatch cases

(G) Das **Mädchen** ist **[die** einzige Ø[+ANIM] **] [die** … **]**
     the girl.**NEUT** is **[** the.**FEM** only ONE **] [** who.**FEM** … **]**

  * Das **Mädchen** ist **[das** einzige Ø[+ANIM] **] [das** … **]**
     the girl.**NEUT** is **[** the.**NEUT** only ONE **] [** who.**NEUT** … **]**

  blau angezogen ist 'is dressed in blue'

man **girl** boy boy man boy boy
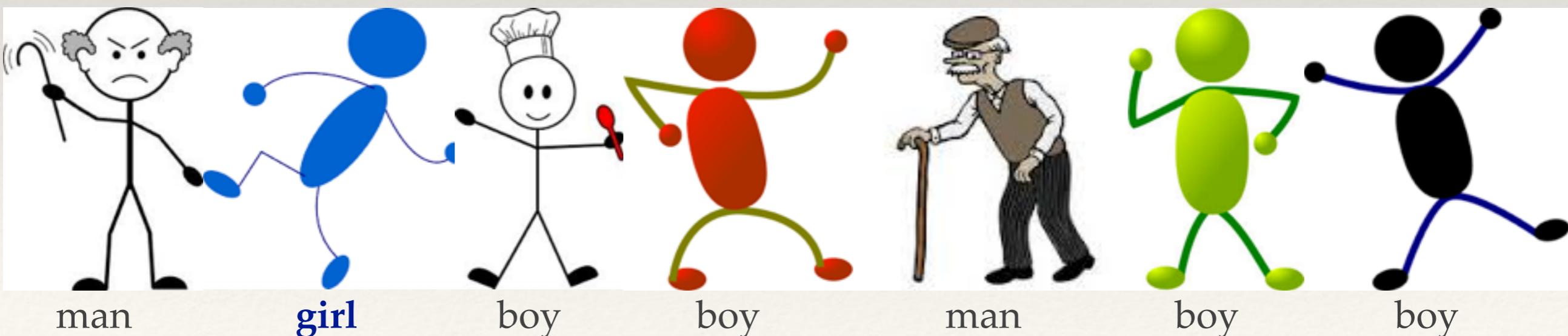
N(P) ellipsis in mismatch cases

(G) Das **2. Mädchen** ist **[die** einzige Ø[+ANIM] **] [die** … **]**
the 2nd girl.**NEUT** is **[** the.**FEM** only ONE **] [** who.**FEM** … **]**

Das **2. Mädchen** ist **[das** einzige ~~Mädchen~~ **] [das** … **]**
the 2nd girl.**NEUT** is **[** the.**NEUT** only ~~girl~~ **] [** who.**NEUT** … **]**

blau angezogen ist   'is dressed in blue'

Girls:
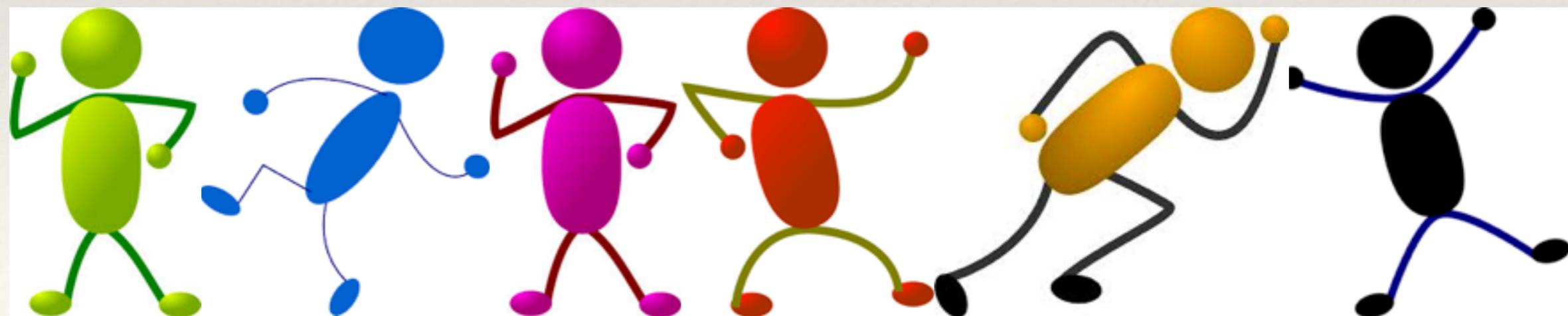
Generalization

❖ In predicate constructions, formal agreement between the subject and the ellipsis remnant is only possible when the interpretation is compatible with N(P) ellipsis.

[the N].**f≠s**   is **[** the only ~~N.formal~~ who **].formal**

[the N].**f≠s**   is **[** the only $\emptyset_{[+ANIM]}$ who **].*formal**/
✓semantic

Further evidence

(G) Die **Gabel** ist [**das** einzige Ø[–ANIM]] [**das/was** …]
the fork.**FEM** is [the.**NEUT** only ONE] [that.**NEUT** …]

* Die **Gabel** ist [**die** einzige Ø[–ANIM]] [**die** …]
the fork.**FEM** is [the.**FEM** only ONE] [that.**FEM** …]

niemand vergessen hat   'nobody forgot'

3/6   **5/6**   **6/6**   **4/6**   **2/6**

candle.FEM   napkin.FEM   fork.**FEM**   vase.**FEM**   bottle.**FEM**

Further evidence

(G) Die **Kuchengabel** ist [**die** einzige ~~Gabel~~] [**die** …]
the cake.fork.**FEM** is [the.**FEM** only ~~fork~~] [that.**FEM** …]

niemand erkannt hat 'nobody recognized'

menu fork   oyster fork   cake fork   fish fork   carving fork

Polite pronouns

(G) **Sie**   sind   **die** einzige   Ø   **die**   …
POL.**3.PL** be.**3.PL** the.**FEM** only.**SG**   ONE who.**FEM(.SG)** …

       Sie   sind   **der** einzige   Ø   **der**   …
POL.**3.PL** be.**3.PL** the.**MASC.SG** only.**SG** ONE who.**MASC.SG** …

 * **Sie**   sind   **die** einzige**n**   Ø   **die**   …
POL.**3.PL** be.**3.PL** the.**FEM** only.**PL**   ONE who.**FEM(.PL)** …

Pluralia tantum

(G) Die **Pommes** waren **das** einzige   Ø   **das**   … V.**SG**
the fries.**PL** were the.**NEUT.SG** only ONE that.**NEUT.SG** … V.**SG**

* Die **Pommes** waren **die** einzige**n**   Ø   **die**   … V.**PL**
the fries.**PL** were the.**PL** only.**PL** ONE die.**PL** … V.**PL**

geschmeckt hat/haben   'tasted good'

✘   ✘   ✔   ✘   ✘

Slovenian (with Marko Hladnik)

(Sl)	**Dekle**	je	**edina**	Ø	ki	je	oblečena	modro.
	the girl.**NEUT**	is	only.**FEM**	ONE	C.REL	is	dressed.**FEM**	blue
*	**Dekle**	je	**edino**	Ø	ki	je	oblečeno	modro.
	the girl.**NEUT**	is	only.**NEUT**	ONE	C.REL	is	dressed.**NEUT**	blue

man	**girl**	boy	boy	man	boy	boy
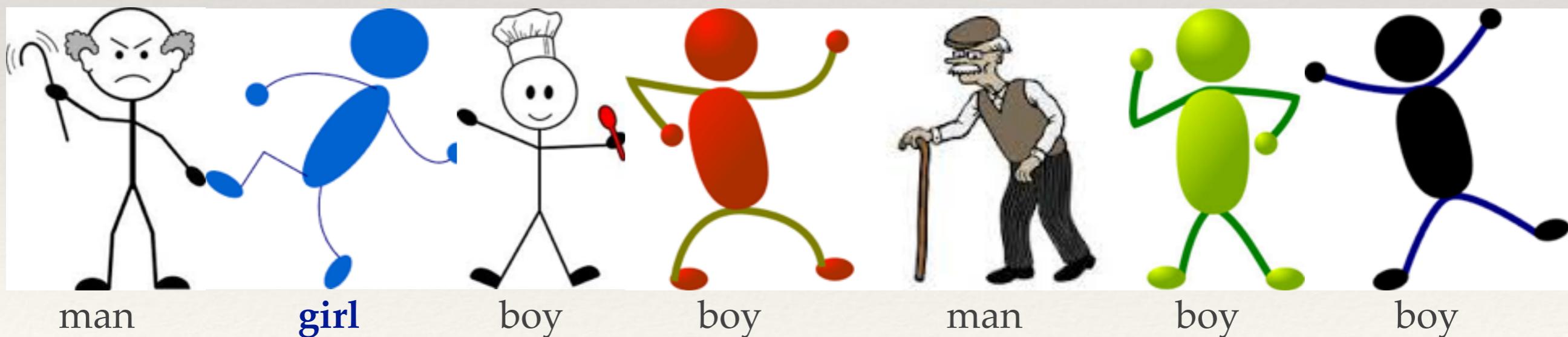
Slovenian forks (PT)

(Sl) **Vilice**   **so**   **edino**   Ø   česar

fork.**FEM.PL**   be.**PL**   only.**NEUT.SG**   ONE   which.**NEUT**

*   **Vilice**   **so**   **edino**   Ø   katerih

the girl.**NEUT**   is   only.**NEUT**   ONE   which.**FEM.PL**

ni nihče pozabil 'nobody forgot'

3/6   **5/6**   **6/6**   **4/6**   **2/6**

candle.**FEM**   napkin.**FEM**   fork.**FEM**   vase.**FEM**   bottle.**FEM**

Slovenian forks (NPE)

(S1) **Desertne vilice** **so** **edino** ~~vilice~~

dessert fork.**FEM.PL** be.**PL** only ~~fork~~

katerih ni nihče prepoznal

which.**FEM.PL** AUX.NEG no-one recognized

✓ ✓ ✗ ✓ ✓

menu fork   oyster fork   cake fork   fish fork   carving fork

Slovenian You

(Sl) **Vi**   ste   **edine**   Ø   ki   ste prijazne.
POL.2.**PL**   be.2.**PL** only.**FEM.PL** ONE C.REL is   nice.**FEM.PL**

'You (pol) are the only <u>ones</u> (group [>2] of females) who are nice.'
* 'You (pol) are the only <u>one</u> (female) who is nice.'

Vi   ste   **tá**   Ø   ki   … single addr.
POL.2.**PL**   be.2.**PL** that.**FEM/MASC.SG** ONE C.REL …

Vi   ste   **tí**   Ø   ki   … *single addr.
POL.2.**PL**   be.2.**PL** that.**MASC.PL**   ONE C.REL …
'You (pol) are the <u>ones/*one</u> (group [>2] of females) who…'

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Slovenian You: a glitch

(Sl) **Vi**ste   **edini**   Ø   ki   ste   prijazni.
POL.2.**PL**   be.2.**PL**   only.**???**   ONE   C.REL   is   nice.**MASC.PL**

'You (pol) are the only <u>ones</u> (group [>2]) who are nice.'
'You (pol) are the only <u>one</u> who is nice.'

-i: MASC.SG.DEF and MASC.PL are syncretic (note that the above cannot refer to a group of exactly 2 people)

Agreement on embedded predicative AP? Possibly with matrix subject directly as in fake indexical contexts:

I am the only one who takes care of **my** son.

Russian long/short form As

Comrie 1975, Corbett 1983, 2000, 2006, Hahm 2006, Wechsler 2011, Wechsler & Hahm 2011

(R) Vy   byli   ugrjum**y**
    2.PL   were.**PL**   morose.SHORT.**PL**

    Vy   byli   [DP/NP   ugrjum**oj**   ]
    2.PL   were.**PL**   [DP/NP   morose.LONG.**SG**]

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Summary

	T-agreement	Predicative A	Predicative D/N
German	formal	—	semantic
Slovenian (prescr.)	formal	formal	semantic
Slovenian (coll.)	formal	formal / semantic glasses / You	semantic
Czech	formal	formal / semantic glasses / You	semantic

❖ Nature (features) of the trigger (polite vs. pluralia tantum)

❖ Relation underlying agreement (T-agreement vs. predication)

❖ Nature (features) of the target (predicative AP vs. DP)

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Two types of features

Dual feature system

Pollard and Sag 1994, Wechsler and Zlatić 2000, 2003, Wechsler 2011, Wurmbrand 2012, Smith 2012, 2015

❖ Dual φ-feature system: formal **uφ** (≈ Concord; relevant for morphology) and semantic **iφ** (≈ Index; relevant for interpretation)

Feature distribution

Lexicon, numeration

Syntax:
uφ or iφ

PF: only uφ   **LF: only iφ**
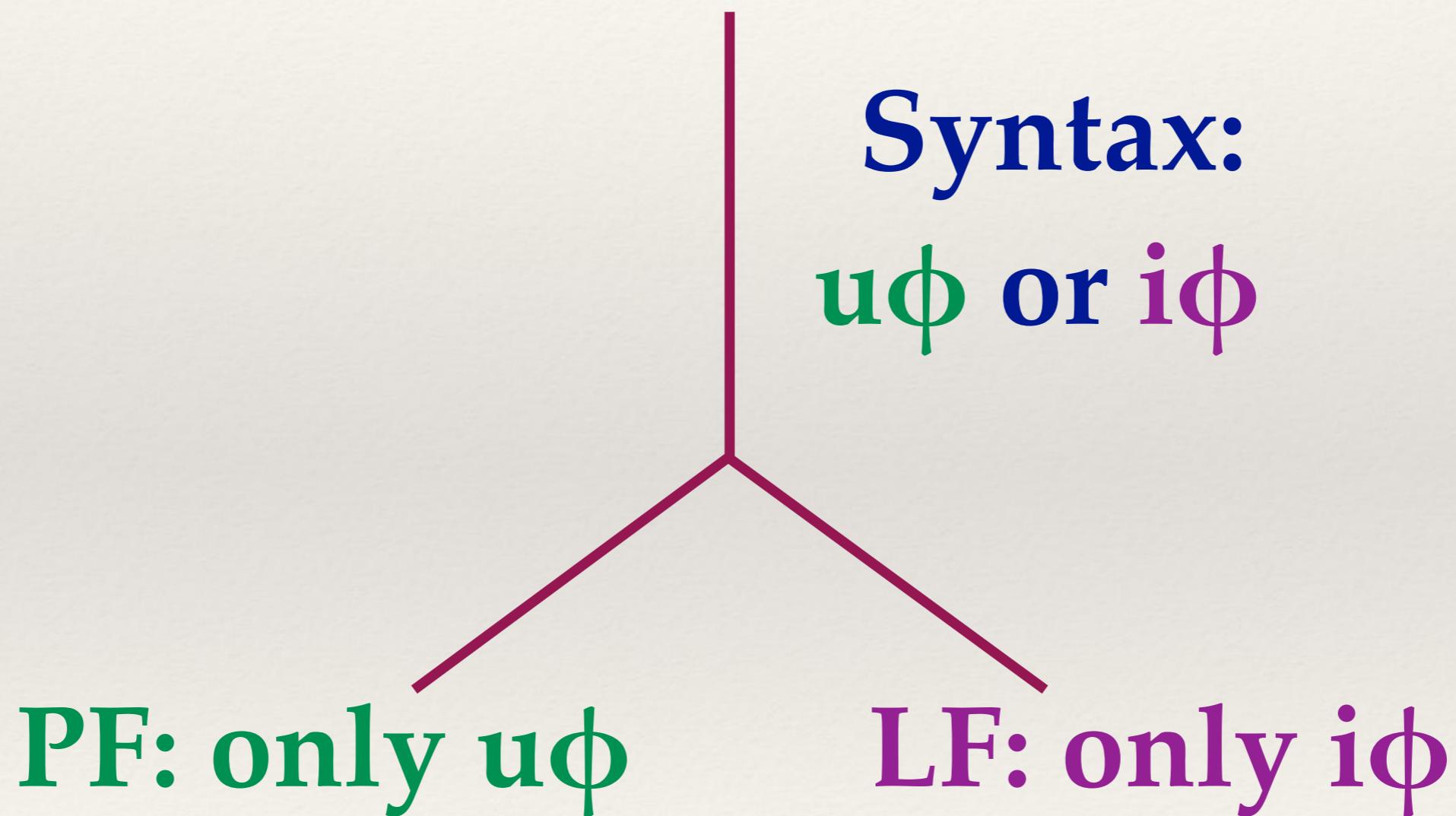
Formal vs. semantic agreement

❖ Inertness of one of the feature types on the controller

❖ Based on: features of the target, trigger, and certain preference settings

Formal agreement:

    controller [iϕ: val, **uϕ: val**]　←----→**Agree**　target [ϕ: ___]

Semantic agreement:

    controller [**iϕ: val**, uϕ: val]　←----→**Agree**　target [ϕ: ___]

Agreement Hierarchy

	T	Predicative A	Pronoun	Ø.N
Features of target	uφ	uφ	uφ and **iφ**	**iφ**
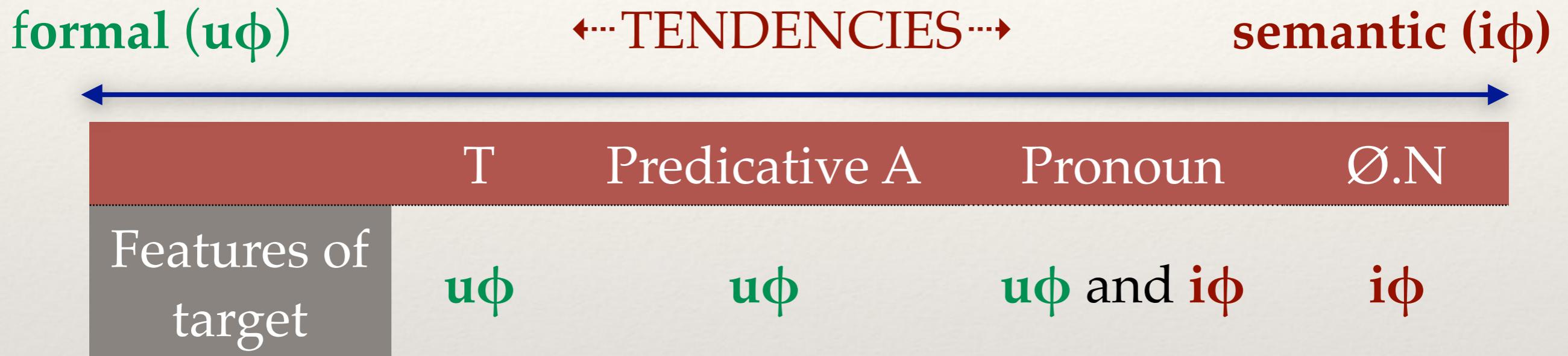
❖ Controller feature choice **PREFERENCE**: Match the feature type (uφ/iφ) of the target with the feature type of the trigger

controller [yφ: val, **xφ: val**]   ←---→**Agree**   target [xφ: ___]

Match feature type

Features of target	T **uφ**	Predicative A **uφ**	Pronoun **uφ** and **iφ**	Ø.N **iφ**
German	formal	—	formal or semantic	semantic
Slovenian (prescr.)	formal	formal	formal or semantic	semantic
Slovenian (coll.)	formal	formal / semantic glasses / You	formal or semantic	semantic
Czech	formal	formal / semantic glasses / You	formal or semantic	semantic

Match feature type

	T	Predicative A	Pronoun	Ø.N
Features of target	**uφ**	**uφ**	**uφ** and **iφ**	**iφ**
German	formal	—	formal or semantic	semantic
Slovenian (prescr.)	formal	formal	formal or semantic	semantic
Slovenian (coll.)	formal	formal / semantic glasses / You	formal or semantic	semantic
Czech	formal	formal / semantic glasses / You	formal or semantic	semantic

Feature choice = preference

Wechsler 2011, Wechsler & Hahm 2011

❖ Strategy: use Concord feature (uɸ) whenever you can, otherwise use the Index feature (iɸ).

Agreement Marking Principle:
An agreement target checks the trigger for a syntactic phi feature, assigning that feature's semantic interpretation to the trigger denotation if no syntactic feature is found.

❖ Ge/Slo/Cz: Use the preferred feature type whenever you can, otherwise use the other feature type.

Deficient feature structure

Wechsler 2011, Wechsler & Hahm 2011

❖ Polite pronouns (in mixed agreement languages): not specified for Concord features (but assumed to have a plural Index feature)

More transparent feature ≈ PF/semantic mapping:

i𝜙: [ADDRESSEE.POLITE; PL or SG; ⚥]

u𝜙: [π (=2 or 3); PL] �
⋯ no gender, possibly due to markedness constraints (Calabrese 2011)

Best matches

	iφ	uφ
'You'	[ADDRESSEE.POLITE; PL or SG; ⚥]	[π (=2 or 3); PL]
T uφ		[π __ # ___]
A uφ	[# ___ ⚥ ___]	

iφ are a better match for **A**, whereas only **u**φ match with **T** if **T** has person features (this obviously makes various predictions)

Formal vs. semantic agreement

Wechsler 2011: 1002

❖ The Polite Plural Generalization: A polite plural pronoun agreement controller determines plural number (i.e. syntactic rather than semantic agreement) on any agreement targets marked for person (and number).

Trigger: Polite 'you'	T with π	T without π	A without π
Features of target	formal	formal or semantic	formal or semantic

Going forward

Summary

Features of target	T **uφ**	Pred A **uφ**	Pronoun **uφ** and **iφ**	Ø.N **iφ**
Ge	formal	—	formal or semantic	semantic
SlP	formal	formal	formal or semantic	semantic
SlC, Cz	formal	PT: formal You: semantic	formal or semantic	semantic
Greek	formal	PT: formal You: semantic	formal or semantic	girl: formal / semantic PT: formal / semantic You: semantic
Overall	formal or semantic	formal or semantic	formal or semantic	formal or semantic
*	(formal or) semantic			formal

Conclusions

❖ Refined Agreement Hierarchy (predicative NPs/DPs)

❖ Ellipsis:

  ❖ 2 types: Ø (one) cannot always be an elided actual N

  ❖ Semantic agreement is always an option in predicate contexts (even in preferred formal agreement languages), in many the only option

❖ Choice between formal and semantic agreement depends on the properties of the target (preferred $i\phi$/$u\phi$ match), the trigger (underspecification, markedness), and possibly other languages specific preferences for agreement (e.g., formal»semantic)

Thank you!

Christos Christopoulos
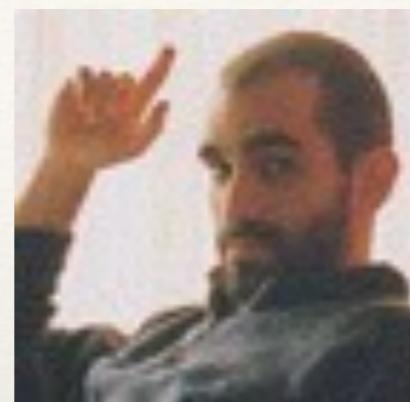
Sabine Laszakovits

Magda Kaufmann

Jonathan Bobaljik
& Leo
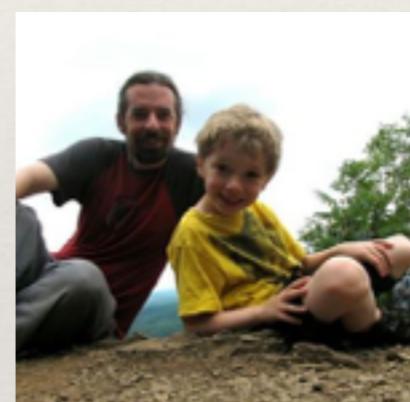
Heidi
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