Complexification/simplification in gender emergence, loss and expansion

Francesca Di Garbo

University of Helsinki

Stockholm WS on “Grammatical Gender and Linguistic Complexity”
Aim

To investigate the complexity of gender *dynamically*:

- By exploring patterns of gender emergence, loss and expansion cross-linguistically
- By investigating how these developments intersect with language ecology.
To investigate the complexity of gender *dynamically*:

1. By exploring patterns of gender emergence, loss and expansion cross-linguistically
2. By investigating how these developments intersect with language ecology.
Background
The puzzle

Gender is a cluster phenomenon (Nichols 2003: 300), a minority feature worldwide whose tokens mostly cluster in adjacent or nearby languages.

Gender ... is a puzzle: most of its tokens are the result of inheritance, and even those need outside help to survive; it is easier to explain its loss than its rise (Nichols 2003: 303).
Gender is a cluster phenomenon [...], a minority feature worldwide whose tokens mostly cluster in adjacent or nearby languages (Nichols 2003: 300).
Gender is a cluster phenomenon [...], a minority feature worldwide whose tokens mostly cluster in adjacent or nearby languages (Nichols 2003: 300).

Gender [...] is a puzzle: most of its tokens are the result of inheritance, and even those need outside help to survive; it is easier to explain its loss than its rise (Nichols 2003: 303).
Hypotheses and assumptions

1. Gender inheritance is facilitated within gender hotbeds.

2. Gender emergence is facilitated within gender hotbeds.

3. Instances of gender loss (partial and/or total) are overwhelmingly more frequent than instances of gender emergence.
Hypotheses and assumptions

1. Gender *inheritance* is facilitated within gender hotbeds.
Hypotheses and assumptions

1. Gender **inheritance** is facilitated within gender hotbeds.
2. Gender **emergence** is facilitated within gender hotbeds.
Hypotheses and assumptions

1. Gender **inheritance** is facilitated within gender hotbeds.
2. Gender **emergence** is facilitated within gender hotbeds.
3. Instances of gender loss (partial and/or total) are overwhelmingly more frequent than instances of gender emergence.
Hypotheses and assumptions

1. Gender **inheritance** is facilitated within gender hotbeds.
2. Gender **emergence** is facilitated within gender hotbeds.
3. Instances of gender loss (partial and/or total) are overwhelmingly more frequent than instances of gender emergence.

**Gender loss:** simplification

**Gender emergence:** complexification
Exploring complexification/simplification of gender *within* and *across* language families.
Method

- Exploring complexification/simplification of gender *within* and *across* language families.
- Small scale intragenealogical typology

The smallest sample unit is not one language but a pair/set of closely related languages (cf. also Kusters 2003; Maitz & Németh 2014).

Convenience sampling, the selected language pairs/sets instantiate:

- Gender loss (total/partial)
- Gender emergence
- Gender expansion

⇒ Data: collected through a questionnaire as well as descriptive resources.
Exploring complexification/simplification of gender *within* and *across* language families.

Small scale intragenealogical typology

- The smallest sample unit is not *one language* but *a pair/set* of closely related languages (cf. also Kusters 2003; Maitz & Németh 2014).
Method

- Exploring complexification/simplification of gender *within* and *across* language families.
- Small scale intragenealogical typology
  - The smallest sample unit is not *one language* but *a pair/set* of closely related languages (cf. also Kusters 2003; Maitz & Németh 2014).
- Convenience sampling,
Method

- Exploring complexification/simplification of gender *within* and *across* language families.
- Small scale intragenealogical typology
  - The smallest sample unit is not *one language* but *a pair/set* of closely related languages (cf. also Kusters 2003; Maitz & Németh 2014).
- Convenience sampling, the selected language pairs/sets instantiate:
  - Gender loss (total/partial)
  - Gender emergence

Data: collected through a questionnaire as well as descriptive resources.
Method

- Exploring complexification/simplification of gender within and across language families.
- Small scale intragenealogical typology
  - The smallest sample unit is not one language but a pair/set of closely related languages (cf. also Kusters 2003; Maitz & Németh 2014).
- Convenience sampling, the selected language pairs/sets instantiate:
  - Gender loss (total/partial)
  - Gender emergence
  - Gender expansion

Data: collected through a questionnaire as well as descriptive resources.
Method

- Exploring complexification/simplification of gender *within* and *across* language families.

- Small scale intragenealogical typology
  - The smallest sample unit is not *one language* but a *pair/set* of closely related languages (cf. also Kusters 2003; Maitz & Németh 2014).

- Convenience sampling, the selected language pairs/sets instantiate:
  - Gender loss (total/partial)
  - Gender emergence
  - Gender expansion

⇒ Data:
  - collected through a questionnaire as well as descriptive resources.
The sample
12 sets/pairs; 24 lngs.

The language sample

Legend
- Balto-Slavic
- Bantu
- Basque
- Chamorro
- Central Gunwinyguan
- Germanic
- Greek
- Tati (NW Iranian)
- Khasian (Pnaric-War-Lyngam)
- Lezgic
- Mek
- Michif
- Thebor
The evolutionary dynamics of gender systems: overview

Emergence, loss, reduction, expansion, retention lack of gender

Legend
- Emergence
- Loss
- Expansion
- Reduction
- Retention
- Lack
Gender loss
Crosslinguistic regularities in gender loss

Phenomenon

Languages

Innovations in the gender agreement system

Cappadocian Greek, Gunwinggu

involve/start from agreement targets

Kinshasa Lingala, Pharasiot Greek, Pontic Greek, Tamian Latvian

(e.g., personal pronouns, verbs).

Gender marking on nouns or NP-internal

Kinshasa Lingala, Gunwinggu,

agreement targets is more conservative.

Pharasiot Greek, Pontic Greek,

Tamian Latvian

The most innovative agreement targets

Kinshasa Lingala, Pharasiot Greek,

index new types of gender-like distinctions,

Pontic Greek, Tamian Latvian

often based on animacy.

Other

Kelasi, Standard Swedish, Udi

Francesca Di Garbo
Crosslinguistic regularities in gender loss

<table>
<thead>
<tr>
<th>Phenomenon</th>
<th>Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovations in the gender agreement system</td>
<td></td>
</tr>
<tr>
<td>involve/start from agreement targets</td>
<td></td>
</tr>
<tr>
<td>far away from nouns</td>
<td></td>
</tr>
<tr>
<td>(e.g., personal pronouns, verbs)</td>
<td></td>
</tr>
</tbody>
</table>

Francesca Di Garbo

Complexification/simplification in gender emergence, loss and expansion

7 / 24
Crosslinguistic regularities in gender loss

<table>
<thead>
<tr>
<th>Phenomenon</th>
<th>Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovations in the gender agreement system involve/start from agreement targets far away from nouns (e.g., personal pronouns, verbs).</td>
<td>Cappadocian Greek, Gunwinggu Kinshasa Lingala, Pharasiot Greek, Pontic Greek, Tamian Latvian</td>
</tr>
</tbody>
</table>
Crosslinguistic regularities in gender loss

<table>
<thead>
<tr>
<th>Phenomenon</th>
<th>Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Innovations in the gender agreement system involve/start from agreement targets far away from nouns (e.g., personal pronouns, verbs).</em></td>
<td>Cappadocian Greek, Gunwinggu Kinshasa Lingala, Pharasiot Greek, Pontic Greek, Tamian Latvian</td>
</tr>
<tr>
<td><em>Gender marking on nouns or NP-internal agreement targets is more conservative.</em></td>
<td></td>
</tr>
<tr>
<td>Phenomenon</td>
<td>Languages</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Innovations in the gender agreement system involve/start from agreement</td>
<td>Cappadocian Greek, Gunwinggu</td>
</tr>
<tr>
<td>targets far away from nouns (e.g., personal pronouns, verbs).</td>
<td>Kinshasa Lingala, Pharasiot Greek, Pontic</td>
</tr>
<tr>
<td></td>
<td>Greek, Tamian Latvian</td>
</tr>
<tr>
<td>Gender marking on nouns or NP-internal agreement targets is more</td>
<td>Kinshasa Lingala, Gunwinggu, Pharasiot Greek,</td>
</tr>
<tr>
<td>conservative.</td>
<td>Pontic Greek, Tamian Latvian</td>
</tr>
</tbody>
</table>
Crosslinguistic regularities in gender loss

<table>
<thead>
<tr>
<th>Phenomenon</th>
<th>Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovations in the gender agreement system involve/start from agreement</td>
<td>Cappadocian Greek, Gunwinggu</td>
</tr>
<tr>
<td>targets far away from nouns (e.g., personal pronouns, verbs).</td>
<td>Kinshasa Lingala, Pharasiot Greek, Pontic Greek, Tamian Latvian</td>
</tr>
<tr>
<td>Gender marking on nouns or NP-internal agreement targets is more</td>
<td>Kinshasa Lingala, Gunwinggu, Pharasiot Greek, Pontic Greek, Tamian Latvian</td>
</tr>
<tr>
<td>conservative.</td>
<td></td>
</tr>
<tr>
<td>The most innovative agreement targets index new types of gender-like</td>
<td></td>
</tr>
<tr>
<td>distinctions, often based on animacy.</td>
<td></td>
</tr>
</tbody>
</table>
Crosslinguistic regularities in gender loss

<table>
<thead>
<tr>
<th>Phenomenon</th>
<th>Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Innovations in the gender agreement system involve/start from agreement</em></td>
<td><em>Cappadocian Greek, Gunwinggu</em></td>
</tr>
<tr>
<td><em>targets far away from nouns (e.g., personal pronouns, verbs).</em></td>
<td><em>Kinshasa Lingala, Pharasiot Greek, Pontic Greek, Tamian Latvian</em></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Gender marking on nouns or NP-internal agreement targets is more</em></td>
<td><em>Kinshasa Lingala, Gunwinggu, Pharasiot Greek, Pontic Greek, Tamian Latvian</em></td>
</tr>
<tr>
<td><em>conservative.</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><em>The most innovative agreement targets index new types of gender-like</em></td>
<td><em>Kinshasa Lingala, Pharasiot Greek, Pontic Greek, Tamian Latvian</em></td>
</tr>
<tr>
<td><em>distinctions, often based on animacy.</em></td>
<td></td>
</tr>
</tbody>
</table>
Crosslinguistic regularities in gender loss

<table>
<thead>
<tr>
<th>Phenomenon</th>
<th>Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Innovations in the gender agreement system involve/start from agreement targets far away from nouns (e.g., personal pronouns, verbs).</em></td>
<td>Cappadocian Greek, Gunwinggu Kinshasa Lingala, Pharasiot Greek, Pontic Greek, Tamian Latvian</td>
</tr>
<tr>
<td><em>Gender marking on nouns or NP-internal agreement targets is more conservative.</em></td>
<td>Kinshasa Lingala, Gunwinggu, Pharasiot Greek, Pontic Greek, Tamian Latvian</td>
</tr>
<tr>
<td><em>The most innovative agreement targets index new types of gender-like distinctions, often based on animacy.</em></td>
<td>Kinshasa Lingala, Pharasiot Greek, Pontic Greek, Tamian Latvian</td>
</tr>
</tbody>
</table>

Other
### Crosslinguistic regularities in gender loss

<table>
<thead>
<tr>
<th>Phenomenon</th>
<th>Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Innovations in the gender agreement system</strong></td>
<td>Cappadocian Greek, Gunwinggu</td>
</tr>
<tr>
<td><strong>involve/start from agreement targets</strong></td>
<td>Kinshasa Lingala, Pharasiot Greek, Pontic Greek, Tamian Latvian</td>
</tr>
<tr>
<td>far away from nouns</td>
<td></td>
</tr>
<tr>
<td>(e.g., personal pronouns, verbs)</td>
<td></td>
</tr>
<tr>
<td><strong>Gender marking on nouns or NP-internal agreement targets is more</strong></td>
<td>Kinshasa Lingala, Gunwinggu, Pharasiot Greek, Pontic Greek,</td>
</tr>
<tr>
<td><strong>conservative.</strong></td>
<td>Tamian Latvian</td>
</tr>
<tr>
<td><strong>The most innovative agreement targets</strong></td>
<td>Kinshasa Lingala, Pharasiot Greek, Pontic Greek, Tamian Latvian</td>
</tr>
<tr>
<td><strong>index new types of gender-like</strong></td>
<td></td>
</tr>
<tr>
<td><strong>distinctions, often based on animacy.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>Kelasi, Standard Swedish, Udi</td>
</tr>
</tbody>
</table>
Gender loss: some examples

The Asia Minor dialects of Greek (Greek Greece; Karatsareas 2014)
Gender loss: some examples

The Asia Minor dialects of Greek (Greek Greece; Karatsareas 2014)

(1) Argyroúpolis Pontic

*i pórtα* (...) móno ímoson
DEF.F.SG door.F.SG (...) only half.N.SG
óran estéknen *anixtón*
hour.F.SG stay.PST.3SG open.N.SG

‘The door would stay open for only half an hour’.

(2) Standard Greek

*i pórtα* móno misí óra
DEF.F.SG door.F.SG only half.F.SG hour.F
émene *anixtí*
stay.PST.3SG open.F.SG

‘The door stayed open for only half an hour.’
Gender loss: some examples

The Asia Minor dialects of Greek (Greek Greece; Karatsareas 2014)

(1) Argyroúpolis Pontic

-door.

móno

ímoson

óra.

estéken

anixton

‘The door would stay open for only half an hour’.

(2) Standard Greek

móno

misí

óra.

emene

anixtí

‘The door stayed open for only half an hour.’

(3) Pharasiot

ad

Zión

neka

xortáre

‘that woman used to bring herbs.’

(4) Standard Greek

‘that woman’

‘The walls are built’

(5) Axó Cappadocian

spícú

ta

xtizménata

‘The walls of the house (are) built.’

(6) Standard Greek

ta

xtixméni

‘the walls are built’
Gender loss: some examples

The Asia Minor dialects of Greek (Greek Greece; Karatsareas 2014)

(1) Argyro´ upolis Pontic

Argyro¯ u pole door. m. sg
m¯ ono only. n. sg
órana hour. f. sg
esteknen stay. post. 3sg
anixt¯ on open. n. sg
‘The door would stay open for only half an hour’.

(2) Standard Greek

i pole door. f. sg
m¯ ono only. n. sg
mis¯ i half. f. sg
óra hour. f
¯ emene stay. post. 3sg
anixt¯ i open. f. sg
‘The door stayed open for only half an hour.’

(3) Pharasiot

férinke adzíno i
bring. post. 3 sg dem. dist. n. sg def. f. sg
nêka xortáre
woman. f. sg herb. pl
‘that woman used to bring herbs.’

(4) Standard Greek

ecíni i jinéka
dem. dist. f. sg def. f. sg woman. f. sg
‘that woman’

RESHUFFLING OF GENDER AGREEMENT/ASSIGNMENT CRITERIA RESTRICTED BY ANIMACY AND TYPE OF TARGET
Gender loss: some examples

The Asia Minor dialects of Greek (Greek Greece; Karatsareas 2014)

(1) Argyroúpolis Pontic

\(\text{ı def.f.sg pörta door. f.sg (...) (......) móno only } \) 'The door would stay open for only half an hour'.

(2) Standard Greek

\(\text{ı def.f.sg pörta door. f.sg móno only } \) 'The door stayed open for only half an hour.'

(3) Pharasiot

\(\text{férinke bring. pst.3.sg ad Z ìno dem.dist.n.sg i def.f.sg neka woman. f.sg xortáre her. pl } \) 'that woman used to bring herbs.'

(4) Standard Greek

\(\text{ecíni dem.dist.f.sg i def.f.sg J iní neka woman. f.sg } \) 'that woman'

(5) Axó Cappadocian

\(\text{spítcı spit.ı def.sg.gen spítcı house. sg.gn ta def.pl ndix(u)s wall. pl xtizmena built. pl } \) 'The walls of the house (are) built.'

(6) Standard Greek

\(\text{ıtı¸ ci wall. m.pl ine be. prs.3pl xtixmeni built. m.pl } \) 'the walls are built.'
Gender loss: some examples

The Asia Minor dialects of Greek (Greek Greece; Karatsareas 2014)

(1) Argyro´ upolis Pontic

Argyro` upoli,i,def.f.sg,p` orta,door.f.sg,

i,def.m.pl

m` ono,only

`ımon,`ımos,`ımoson,half.n.sg

`oran,hour.f.sg

`emene,stay.pst.3sg

`emene,stay.pst.3sg

anixt´ı,open.f.sg

‘The door would stay open for only half an hour’.

(2) Standard Greek

p` orta,door.f.sg

m` ono,only

mis´ı,`ımos,`ımoson,half.f.sg

`ora,`ıron,hour

`emene,stay.pst.3sg

anixt´ı,open.f.sg

‘The door stayed open for only half an hour.’

(3) Pharasiot

f´erine,bring.pst.3.sg

ad,Z,`ıno,`ıno,`ıno,`ıno,dem.dist.n.sg

i,def.f.sg

n´eka,woman.f.sg

xort´are,herb.pl

‘that woman used to bring herbs.’

(4) Standard Greek

ec´ıni,dem.dist.f.sg

i,def.f.sg

J,`ıno,`ıno,`ıno,`ıno,woman.f.sg

‘that woman’

(5) Ax´o Cappadocian

t,spitçú,spitçú,DEF.SG.GEN

ta,`ındíx(u)s,house.SG.GN.

def.pl,wall.PL

xtizména,built.PL

‘The walls of the house (are) built.’

(6) Standard Greek

i,tiçi,`ıno,`ıno,`ıno,DEF.M.PL

ine,wall.M.PL

xtixméni,be.PRS.3PL

xtixméni,built.M.PL

‘the walls are built’
Gender loss: some examples

The Asia Minor dialects of Greek (Greek Greece; Karatsareas 2014)

(1) Argyroúpolis Pontic

<table>
<thead>
<tr>
<th>Gender</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>def.f.sg</td>
<td>πόρτα door. f.sg</td>
</tr>
<tr>
<td>m.f.g.</td>
<td>μόνο only</td>
</tr>
<tr>
<td>n.m.g.</td>
<td>έναντι one</td>
</tr>
</tbody>
</table>

‘The door would stay open for only half an hour’.

(2) Standard Greek

<table>
<thead>
<tr>
<th>Gender</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>def.f.sg</td>
<td>πόρτα door. f.sg</td>
</tr>
<tr>
<td>m.f.g.</td>
<td>μόνο only</td>
</tr>
<tr>
<td>n.m.g.</td>
<td>έναντι one</td>
</tr>
</tbody>
</table>

‘The door stayed open for only half an hour.’

(3) Pharasiot

<table>
<thead>
<tr>
<th>Gender</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>def.f.sg</td>
<td>πόρτα door. f.sg</td>
</tr>
<tr>
<td>m.f.g.</td>
<td>μόνο only</td>
</tr>
<tr>
<td>n.m.g.</td>
<td>έναντι one</td>
</tr>
</tbody>
</table>

‘that woman used to bring herbs.’

(4) Standard Greek

<table>
<thead>
<tr>
<th>Gender</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>def.f.sg</td>
<td>πόρτα door. f.sg</td>
</tr>
<tr>
<td>m.f.g.</td>
<td>μόνο only</td>
</tr>
<tr>
<td>n.m.g.</td>
<td>έναντι one</td>
</tr>
</tbody>
</table>

‘The door stayed open for only half an hour.’

(5) Axó Cappadocian

<table>
<thead>
<tr>
<th>Gender</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>def.sg.gen</td>
<td>σπίτι house. sg.gn</td>
</tr>
<tr>
<td>def.pl</td>
<td>τοίχους wall. pl</td>
</tr>
<tr>
<td>m.pl</td>
<td>τείχει μένει built. m.pl</td>
</tr>
</tbody>
</table>

‘The walls of the house (are) built.’

(6) Standard Greek

<table>
<thead>
<tr>
<th>Gender</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>def.m.pl</td>
<td>τοίχος wall. m.pl</td>
</tr>
<tr>
<td>m.pl</td>
<td>μένει be. m.pl</td>
</tr>
<tr>
<td>m.pl</td>
<td>τείχει μένει built. m.pl</td>
</tr>
</tbody>
</table>

‘the walls are built’

RESHUFFLING OF GENDER AGREEMENT/ASSIGNMENT CRITERIA RESTRICTED BY ANIMACY AND TYPE OF TARGET

RESHUFFLING OF GENDER AGREEMENT/ASSIGNMENT CRITERIA RESTRICTED BY TYPE OF TARGET

NEUTER AGREEMENT GENERALIZED TO ALL NOUNS, IRRESPECTIVE OF ANIMACY AND TYPE OF TARGET: COMPLETE LOSS OF GENDER
Gender loss: some examples

Tamian Latvian (Balto-Slavic, Latvia; Koptjevskaja-Tamm & Wälchli 2001)

Stage 1: Loss of agreement with personal and demonstrative pronouns
Stage 2: Loss of agreement with predicative adjectives and predicative participles
Stage 3: Loss of agreement with attributive adjectives
Stage 4: Loss of gender-based nominal inflectional class.

A diachronic and synchronic cline.

Pronouns develop a gender-like distinction of their own, based on animacy.

Legend

- Gender loss
- Gender retention
- Lack of gender
Gender loss: some examples

Tamian Latvian (Balto-Slavic, Latvia; Koptjevskaja-Tamm & Wälchli 2001)

Stage 1: Loss of agreement with personal and demonstrative pronouns

Stage 2: Loss of agreement with predicative adjectives and predicative participles

Stage 3: Loss of agreement with attributive adjectives

Stage 4: Loss of gender-based nominal inflectional class.
Gender loss: some examples

Tamian Latvian (Balto-Slavic, Latvia; Koptjevskaja-Tamm & Wälchli 2001)

Stage 1: Loss of agreement with personal and demonstrative pronouns

Stage 2: Loss of agreement with predicative adjectives and predicative participles

Stage 3: Loss of agreement with attributive adjectives

Stage 4: Loss of gender-based nominal inflectional class.

A diachronic and synchronic cline.

Pronouns develop a gender-like distinction of their own, based on animacy.
Gender emergence
## Patterns of gender emergence attested in the sample

<table>
<thead>
<tr>
<th>Type of gender emergence</th>
<th>Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact-induced</td>
<td>Chamoro (Chamorro), Lekeitio Basque (Basque), Shumcho (Tibeto-Burman)</td>
</tr>
<tr>
<td>Language-internal development</td>
<td>Nalca (Mek)</td>
</tr>
</tbody>
</table>
Patterns of gender emergence attested in the sample

<table>
<thead>
<tr>
<th>Type of gender emergence</th>
<th>Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact-induced</td>
<td>Chamoro (Chamorro), Lekeitio Basque (Basque), Shumcho (Tibeto-Burman)</td>
</tr>
<tr>
<td>Language-internal development</td>
<td>Nalca (Mek)</td>
</tr>
</tbody>
</table>

Main characteristics

- Minimal and non-systematic gender agreement: Chamorro, Lekeitio Basque, Nalca, Shumcho
- Adnominal modifiers as gender agreement targets: Chamorro, Lekeitio Basque, Shumcho
- NP markers as agreement targets: Nalca
- Marginal gender agreement in the verbal domain: Lekeitio Basque.
Contact-induced gender emergence: Chamorro
(Austronesian, Northern Marian Islands; Stolz 2012)

Sex-based gender distinctions on adnominal modifiers as a result of borrowing of nouns and adjectives from Spanish.

Modifiers in -a = the NP-referent is a female entity
Modifiers in -o/-u = the NP-referent is a male or an inanimate entity.
Sex-based gender distinctions on adnominal modifiers as a result of borrowing of nouns and adjectives from Spanish.
Sex-based gender distinctions on adnominal modifiers as a result of borrowing of nouns and adjectives from Spanish.

Feminine vs. Non-Feminine type of opposition:
- Modifiers in -a = the NP-referent is a female entity
- Modifiers in -o/-u = the NP-referent is a male or an inanimate entity.
(7) Chamorro Feminine Gender (Stolz 2012: 123)

Ma-nobena-na-ye i **mi-milagros-a** na **Bithen**.
PASS-novena-RED-REF DEF abound-miraculous-F LINK Virgin

‘A novena is being conducted for the abundantly miraculous Virgin.’
(7) Chamorro Feminine Gender (Stolz 2012: 123)

Ma-nobena-na-ye i mi-milagros-a na Bithen.
PASS-novena-RED-REF DEF abound-miraculous-F LINK Virgin

‘A novena is being conducted for the abundantly miraculous Virgin.’

(8) Chamorro Non-Feminine Gender (Stolz 2012: 125)

desde antitites na tiempo esta gof bunit-u na siuda i
since RED:before LINK time already very nice-NF LINK town DEF
ya Hagåtña.
TN Hagåtña

‘A very long time ago, Hagåtña was a very pretty town already.’
Language-internal development of gender: Nalca
(Mek, Indonesia; Wälchli & Svärd 2015; Erik Svärd, p.c.)

Nalca is a gender outlier: none of the other Mek languages has gender.

5 genders

Nearly all genders are inquorate

Strong connection between gender marking, proper names and nominalizations.

Gender agreement:

Agreement target: NP markers that cumulate the expression of gender, case and deixis

Gender agreement sensitive to syntactic properties of NPs (switching on and off of gender)
Nalca is a gender outlier: none of the other Mek languages has gender.

- 5 genders
- Nearly all genders are *inquorate*
Nalca is a gender outlier: none of the other Mek languages has gender.

- 5 genders
- Nearly all genders are *inquorate*
- Strong connection between gender marking, proper names and nominalizations.
Nalca is a gender outlier: none of the other Mek languages has gender.

- 5 genders
- Nearly all genders are *inquorate*
- Strong connection between gender marking, proper names and nominalizations.

**Gender agreement:**

- Agreement target: NP markers that cumulate the expression of *gender, case* and *deixis*
- Gender agreement sensitive to syntactic properties of NPs *(switching on and off of gender)*
The emergence of gender in Nalca
(Svärd 2015; Wälchli & Svärd in preparation)
The emergence of gender in Nalca
(Svärd 2015; Wälchli & Svärd in preparation)

- Young gender system
- The Nalca gender markers have cognates in the other Mek languages.
The emergence of gender in Nalca
(Svärd 2015; Wälchli & Svärd in preparation)

- Young gender system
- The Nalca gender markers have cognates in the other Mek languages.
- Nalca has innovated *functions* not *forms*.
Gender expansion
When gender systems expand

<table>
<thead>
<tr>
<th>Type gender expansion</th>
<th>Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in the number of agreement targets</td>
<td>Eshtehardi (Northwestern Iranian), Kafteij (Northwestern Iranian), Khasi (Pnaric), Pnar (Pnaric)</td>
</tr>
<tr>
<td>Two coexisting systems gender systems (depending on type of target)</td>
<td>Michif (Mixed language)</td>
</tr>
</tbody>
</table>
Increase in number of targets: “Khasian”
(Pnaric-War-Lyngngam)

The gender system (Daladier 2011; p.c.): Gender distinctions on 2nd and 3rd pronouns: an innovation within a few Austrasiatic lngs Khasi, Lyngngam, Pnar. Deictic bases develop from gendered personal pronouns: Khasi, Lyngngam, Pnar. Pronominal and deictic gender markers are used as pre-nominal gender clitics: Khasi, Pnar. Verbal bases index gender/number distinctions: Khasi. The more grammaticalized the system (in terms of number of targets), the more bleached the semantics of gender assignment (Anne Daladier, p.c.).
Increase in number of targets: “Khasian” (Pnaric-War-Lyngngam)

The gender system (Daladier 2011; p.c.):
- Gender distinctions on 2nd and 3rd pronouns: an innovation within a few Austrasiatic lngs Khasi, Lyngngam, Pnar.
Increase in number of targets: “Khasian”
(Pnaric-War-Lyngngam)

The gender system (Daladier 2011; p.c.):

- Gender distinctions on 2nd and 3rd pronouns: an innovation within a few Austrasiatic lngs Khasi, Lyngngam, Pnar.
- Deictic bases develop from gendered personal pronouns: Khasi, Lyngngam, Pnar.
Increase in number of targets: “Khasian”
(Pnaric-War-Lyngngam)

The gender system (Daladier 2011; p.c.):

- Gender distinctions on 2nd and 3rd pronouns: an innovation within a few Austrasiatic lngs Khasi, Lyngngam, Pnar.

- Deictic bases develop from gendered personal pronouns: Khasi, Lyngngam, Pnar.

- Pronominal and deictic gender markers are used as pre-nominal gender clitics: Khasi, Pnar.
Increase in number of targets: “Khasian” (Pnaric-War-Lyngngam)

The gender system (Daladier 2011; p.c.):

- Gender distinctions on 2nd and 3rd pronouns: an innovation within a few Austrasiatic Lngs Khasi, Lyngngam, Pnar.

- Deictic bases develop from gendered personal pronouns: Khasi, Lyngngam, Pnar.

- Pronominal and deictic gender markers are used as pre-nominal gender clitics: Khasi, Pnar.

- Verbal bases index gender/number distinctions: Khasi.
The gender system (Daladier 2011; p.c.):
- Gender distinctions on 2nd and 3rd pronouns: an innovation within a few Austrasiatic lngs Khasi, Lyngngam, Pnar.
- Deictic bases develop from gendered personal pronouns: Khasi, Lyngngam, Pnar.
- Pronominal and deictic gender markers are used as pre-nominal gender clitics: Khasi, Pnar.
- Verbal bases index gender/number distinctions: Khasi.

- The more grammaticalized the system (in terms of number of targets), the more bleached the semantics of gender assignment (Anne Daladier, p.c.).
Gender expansion in “Khasian” (Pnaric-War-Lyngngam)

Gender development (Daladier 2011; p.c.):

- Gender distinctions on 2nd and 3rd pronouns: an innovation within a few Austrasiatic lngs Khasi, Lyngngam, Pnar.
- Deictic bases develop from gendered personal pronouns: Khasi, Lyngngam, Pnar.
- Pronominal and deictic gender markers are used as pre-nominal gender clitics: Khasi, Pnar.
- Verbal bases index gender/number distinctions: Khasi.

- The more grammaticalized the system (in terms of number of targets), the more bleached the semantics of gender assignment (Anne Daladier, p.c.).

Gender expansion occurs in the demographically stronger varieties (Pnar, Khasi).
Two coexisting gender systems: Michif

The mare had a foal.

Noun-phrase gender (Maculine vs. Feminine, based on French) and verb-phrase gender (Animate vs. Inanimate, based on Cree). The emergence of this unique type of expanded gender system can be understood only within the unique contact dynamics that characterize the origin of Michif as a mixed language.
Two coexisting gender systems: Michif

(9) Michif (Canada, USA; Bakker 1997: 87)

la žyма: ki:aja:w-e:w ĕ pći pulăe
DAFS mare PST-have-TA.3→3I IAMS little foal

‘The mare had a foal.’
Two coexisting gender systems: Michif

(9) Michif (Canada, USA; Bakker 1997: 87)

la žyma: ki:aja:w-e:w ãe pči pulãe
DAFS mare PST-have-TA.3→3° IAMS little foal

‘The mare had a foal.’

- Noun-phrase gender (Maculine vs. Feminine, based on French) and verb-phrase gender (Animate vs. Inanimate, based on Cree).
(9) Michif (Canada, USA; Bakker 1997: 87)

la žyma: ki:aja:w-e:w ñe pći pulñe
DAFS mare PST-have-TA.3→3¹ IAMS little foal

‘The mare had a foal.’

- Noun-phrase gender (Maculine vs. Feminine, based on French) and verb-phrase gender (Animate vs. Inanimate, based on Cree).
- The emergence of this unique type of expanded gender system can be understood only within the unique contact dynamics that characterize the origin of Michif as a mixed language.
Gender loss and expansion within 12 km!
Gender loss, retention, expansion: Tati (NW Iranian)

Legend
- Gender loss
- Gender retention and expansion

Kafteji
Kelasi

(10) Kafteji Feminine Gender
´ æm-æ
this-[^fd]
æm´ æd-
@
P.N-
mő
d´ et-æ
daughter-[^fd]
n
e-´ aya.
ng.be-3sf
'This (or 'she') is not Ahmahd's daughter.'

(11) Kelasi
´ æm
this
æm´ æd-e
P.N-
so
d´ et-Ø
daughter-[^sd]
n´ ı-æ.
ng.be-3s
'This (or 'she') is not Ahmahd's daughter.'
Kafteji and Kelasi
(North Western Iranian, Iran; Stilo to appear; p.c.)

(10) Kafteji Feminine Gender

äm-æ  æmæ̱d-ə  dét-æ
this-FD  P.N-MO  daughter-FD
n^{e}-áya.
NG.BE-3SF

‘This (or ‘she’) is not Ahmahd’s daughter.’
Kafteji and Kelasi
(North Western Iranian, Iran; Stilo to appear; p.c.)

Gender loss, retention, expansion: Tati (NW Iranian)

(10) Kafteji Feminine Gender

áem-æ æmáed-ə dét-æ
this-FD P.N-MO daughter-FD
n³-áya.
NG.BE-3SF

‘This (or ‘she’) is not Ahmahd’s daughter.’

(11) Kelasi

áem æmáed-e dét-Ø ní-æ.
this P.N-so daughter-SD NG.BE-3S

‘This (or ‘she’) is not Ahmahd’s daughter.’
Grammatical gender in the area

- Great deal of intragenealogical variation.

Language ecology

- Complete mutual intelligibility.
- Most Kaftejis and Kelasis are quadrilingual. Most men also speak Azerbaijani and (possibly) Talyshi.
- All contact languages are genderless.
- Gender retention as a linguistic feature for self-distinction? Possible but difficult to prove.

Figure 1: Gender isoglosses within Tati (Northwestern Iranian)
Grammatical gender in the area

- A robust feature within Tati. But: \(~ 40\% \) Tati lngs lost gender.
- Great deal of intragenealogical variation.

Language ecology

- Complete mutual intelligibility.
- Most Kaftejis and Kelasis are quadrilingual. Most men also speak Azerbaijani and (possibly) Talyshi.
- All contact languages are genderless.
- Gender retention as a linguistic feature for self-distinction? Possible but difficult to prove.
- Expansion and loss as language-internal developments.
Loss/emergence/expansion of gender and language ecology
<table>
<thead>
<tr>
<th>Type of change</th>
<th>Conspiring factors (internal and external)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1) Language-internal developments (mainly morphophonological)</td>
</tr>
<tr>
<td></td>
<td>(2) Isolation from gendered languages ∼ prolonged contact/extensive bilingualism with genderless languages</td>
</tr>
<tr>
<td></td>
<td>(3) Increased number of L2 speakers at some point in the history of the speech community</td>
</tr>
<tr>
<td></td>
<td>(1) Contact-induced emergence of gender as the result of extensive borrowing in the nominal domain</td>
</tr>
<tr>
<td></td>
<td>(2) Language-internal emergence of gender and system emergence (paradigmaticalization).</td>
</tr>
<tr>
<td></td>
<td>(1) Language-internal developments are relatively easy to trace.</td>
</tr>
<tr>
<td></td>
<td>(2) External factors are more difficult to pin down (except for Michif). More work needed.</td>
</tr>
<tr>
<td>Type of change</td>
<td>Conspiring factors (internal and external)</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Loss of gender</td>
<td></td>
</tr>
</tbody>
</table>

Language-internal developments (mainly morphophonological)
Isolation from gendered languages (prolonged contact/extensive bilingualism with genderless languages)
Increased number of L2 speakers at some point in the history of the speech community

Emergence of gender
Contact-induced emergence of gender as the result of extensive borrowing in the nominal domain
Language-internal emergence of gender and system emergence (paradigmaticalization).

Expansion of gender
Language-internal developments are relatively easy to trace.
External factors are more difficult to pin down (except for Michif).
More work needed.
<table>
<thead>
<tr>
<th>Type of change</th>
<th>Conspiring factors (internal and external)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of gender</td>
<td>(1) Language-internal developments (mainly morphophonological)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of change</td>
<td>Conspiring factors (internal and external)</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------------</td>
</tr>
</tbody>
</table>
| Loss of gender | (1) Language-internal developments (mainly morphophonological)  
(2) Isolation from gendered languages ~ prolonged contact/extensive bilingualism with genderless languages |
<table>
<thead>
<tr>
<th>Type of change</th>
<th>Conspiring factors (internal and external)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of gender</td>
<td>(1) Language-internal developments</td>
</tr>
<tr>
<td></td>
<td>(mainly morphophonological)</td>
</tr>
<tr>
<td></td>
<td>(2) Isolation from gendered languages ∼</td>
</tr>
<tr>
<td></td>
<td>prolonged contact/extensive bilingualism with genderless languages</td>
</tr>
<tr>
<td></td>
<td>(3) Increased number of L2 speakers at some point in the history of the speech community</td>
</tr>
<tr>
<td>Type of change</td>
<td>Conspiring factors (internal and external)</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Loss of gender</td>
<td>(1) Language-internal developments (mainly morphophonological)</td>
</tr>
<tr>
<td></td>
<td>(2) Isolation from gendered languages $\sim$ prolonged contact/extensive bilingualism with genderless languages</td>
</tr>
<tr>
<td></td>
<td>(3) Increased number of L2 speakers at some point in the history of the speech community</td>
</tr>
<tr>
<td>Emergence of gender</td>
<td></td>
</tr>
</tbody>
</table>

Francesca Di Garbo
<table>
<thead>
<tr>
<th>Type of change</th>
<th>Conspiring factors (internal and external)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of gender</td>
<td>(1) Language-internal developments (mainly morphophonological)</td>
</tr>
<tr>
<td></td>
<td>(2) Isolation from gendered languages ~ prolonged contact/extensive bilingualism with genderless languages</td>
</tr>
<tr>
<td></td>
<td>(3) Increased number of L2 speakers at some point in the history of the speech community</td>
</tr>
<tr>
<td>Emergence of gender</td>
<td>(1) Contact-induced emergence of gender as the result of extensive borrowing in the nominal domain</td>
</tr>
<tr>
<td>Type of change</td>
<td>Conspiring factors (internal and external)</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Loss of gender      | (1) Language-internal developments (mainly morphophonological)  
|                     | (2) Isolation from gendered languages ~ prolonged contact/extensive bilingualism with genderless languages  
|                     | (3) Increased number of L2 speakers at some point in the history of the speech community                                      |
| Emergence of gender | (1) Contact-induced emergence of gender as the result of extensive borrowing in the nominal domain  
<p>|                     | (2) Language-internal emergence of gender and system emergence (paradigmaticalization).                                      |</p>
<table>
<thead>
<tr>
<th>Type of change</th>
<th>Conspiring factors (internal and external)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of gender</td>
<td>(1) Language-internal developments (mainly morphophonological)</td>
</tr>
<tr>
<td></td>
<td>(2) Isolation from gendered languages ~ prolonged contact/extensive bilingualism with genderless languages</td>
</tr>
<tr>
<td></td>
<td>(3) Increased number of L2 speakers at some point in the history of the speech community</td>
</tr>
<tr>
<td>Emergence of gender</td>
<td>(1) Contact-induced emergence of gender as the result of extensive borrowing in the nominal domain</td>
</tr>
<tr>
<td></td>
<td>(2) Language-internal emergence of gender and <em>system emergence</em> (paradigmaticalization).</td>
</tr>
<tr>
<td>Expansion of gender</td>
<td></td>
</tr>
<tr>
<td>Type of change</td>
<td>Conspiring factors (internal and external)</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Loss of gender</td>
<td>(1) Language-internal developments (mainly morphophonological)</td>
</tr>
<tr>
<td></td>
<td>(2) Isolation from gendered languages \sim prolonged contact/extensive bilingualism with genderless languages</td>
</tr>
<tr>
<td></td>
<td>(3) Increased number of L2 speakers at some point in the history of the speech community</td>
</tr>
<tr>
<td>Emergence of gender</td>
<td>(1) Contact-induced emergence of gender as the result of extensive borrowing in the nominal domain</td>
</tr>
<tr>
<td></td>
<td>(2) Language-internal emergence of gender and <em>system emergence</em> (paradigmaticalization).</td>
</tr>
<tr>
<td>Expansion of gender</td>
<td>(1) Language-internal developments are relatively easy to trace.</td>
</tr>
<tr>
<td>Type of change</td>
<td>Conspiring factors (internal and external)</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------------------</td>
</tr>
</tbody>
</table>
| Loss of gender         | (1) Language-internal developments (mainly morphophonological)  
                           | (2) Isolation from gendered languages ∼ prolonged contact/extensive bilingualism with genderless languages  
                           | (3) Increased number of L2 speakers at some point in the history of the speech community |
| Emergence of gender    | (1) Contact-induced emergence of gender as the result of extensive borrowing in the nominal domain  
                           | (2) Language-internal emergence of gender and system emergence (paradigmaticalization) |
| Expansion of gender    | (1) Language-internal developments are relatively easy to trace.  
<pre><code>                       | (2) External factors are more difficult to pin down (except for Michif). |
</code></pre>
<table>
<thead>
<tr>
<th>Type of change</th>
<th>Conspiring factors (internal and external)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of gender</td>
<td>(1) Language-internal developments (mainly morphophonological)</td>
</tr>
<tr>
<td></td>
<td>(2) Isolation from gendered languages  ~ prolonged contact/extensive bilingualism with genderless languages</td>
</tr>
<tr>
<td></td>
<td>(3) Increased number of L2 speakers at some point in the history of the speech community</td>
</tr>
<tr>
<td>Emergence of gender</td>
<td>(1) Contact-induced emergence of gender as the result of extensive borrowing in the nominal domain</td>
</tr>
<tr>
<td></td>
<td>(2) Language-internal emergence of gender and system emergence (paradigmaticalization).</td>
</tr>
<tr>
<td>Expansion of gender</td>
<td>(1) Language-internal developments are relatively easy to trace.</td>
</tr>
<tr>
<td></td>
<td>(2) External factors are more difficult to pin down (except for Michif). More work needed.</td>
</tr>
</tbody>
</table>
Discussion
Hypotheses

1. Gender **inheritance** is facilitated within gender hotbeds.

2. Gender **emergence** is facilitated within gender hotbeds.

3. Instances of gender loss (partial and/or total) are overwhelmingly more frequent than instances of gender emergence.
Hypotheses

1. Gender **inheritance** is facilitated within gender hotbeds. **True!**

2. Gender **emergence** is facilitated within gender hotbeds.

3. Instances of gender loss (partial and/or total) are overwhelmingly more frequent than instances of gender emergence.
Hypotheses

1. Gender *inheritance* is facilitated within gender hotbeds. **True!** Complete gender loss in the absence of gendered linguistic neighbors is not infrequent.

2. Gender *emergence* is facilitated within gender hotbeds.

3. Instances of gender loss (partial and/or total) are overwhelmingly more frequent than instances of gender emergence.
Hypotheses

1. Gender *inheritance* is facilitated within gender hotbeds. **True!**
   Complete gender loss in the absence of gendered linguistic neighbors is not infrequent.

2. Gender *emergence* is facilitated within gender hotbeds. **True!**

3. Instances of gender loss (partial and/or total) are overwhelmingly more frequent than instances of gender emergence.
1 Gender **inheritance** is facilitated within gender hotbeds. **True!** Complete gender loss in the absence of gendered linguistic neighbors is not infrequent.

2 Gender **emergence** is facilitated within gender hotbeds. **True!** This type of gender emergence appears to be contact-induced. Newly emerged gender systems (contact-induced and not) are always somewhat marginal (both in terms of crosslinguistic frequency and pervasiveness of the system).

3 Instances of gender loss (partial and/or total) are overwhelmingly more frequent than instances of gender emergence.
Hypotheses

1. Gender **inheritance** is facilitated within gender hotbeds. True!
   Complete gender loss in the absence of gendered linguistic neighbors is not infrequent.

2. Gender **emergence** is facilitated within gender hotbeds. True! This type of gender emergence appears to be contact-induced. Newly emerged gender systems (contact-induced and not) are always somewhat marginal (both in terms of crosslinguistic frequency and pervasiveness of the system).

3. Instances of gender loss (partial and/or total) are overwhelmingly more frequent than instances of gender emergence. True!
Hypotheses

1. Gender **inheritance** is facilitated within gender hotbeds. **True!** Complete gender loss in the absence of gendered linguistic neighbors is not infrequent.

2. Gender **emergence** is facilitated within gender hotbeds. **True!** This type of gender emergence appears to be contact-induced. Newly emerged gender systems (contact-induced and not) are always somewhat marginal (both in terms of crosslinguistic frequency and pervasiveness of the system).

3. Instances of gender loss (partial and/or total) are overwhelmingly more frequent than instances of gender emergence. **True!** But another dimension needs to be taken into account: gender expansion
Hypotheses

1. Gender inheritance is facilitated within gender hotbeds. **True!** Complete gender loss in the absence of gendered linguistic neighbors is not infrequent.

2. Gender emergence is facilitated within gender hotbeds. **True!** This type of gender emergence appears to be contact-induced. Newly emerged gender systems (contact-induced and not) are always somewhat marginal (both in terms of crosslinguistic frequency and pervasiveness of the system).

3. Instances of gender loss (partial and/or total) are overwhelmingly more frequent than instances of gender emergence. **True!** But another dimension needs to be taken into account: gender expansion (more agreement targets, multiple principles of categorization, etc.).
Complexification vs. simplification

**Gender loss:** simplification

**Gender emergence:** complexification

But simplification in gender loss is not necessarily incremental → Violations of complexity principles (Audring in preparation; Di Garbo under review) in gender loss: hybrid controllers; mismatching inflections on agreement targets; new (often animacy-based) parameters of classification.

Complexification in gender emergence → Starting point (absence of gender) and arrival point (presence of gender).

→ Only a subset of lexical items within a given word class is sensitive to gender distinctions (Audring in preparation).

→ Gender marking can be optional (Audring in preparation).
Gender loss: simplification

Gender emergence: complexification

But
Complexification vs. simplification

Gender loss: simplification

Gender emergence: complexification

But

- Simplification in gender loss is not necessarily incremental
Complexification vs. simplification

Gender loss: simplification

Gender emergence: complexification

But

- Simplification in gender loss is not necessarily incremental

  → Violations of complexity principles (Audring in preparation; Di Garbo under review) in gender loss: hybrid controllers; mismatching inflections on agreement targets; new (often animacy-based) parameters of classification.

Gender loss: simplification

Gender emergence: complexification

But

- Simplification in gender loss is not necessarily incremental
  - Violations of complexity principles (Audring in preparation; Di Garbo under review) in gender loss: hybrid controllers; mismatching inflections on agreement targets; new (often animacy-based) parameters of classification.

- Complexification in gender emergence
Complexification vs. simplification

**Gender loss:** simplification

**Gender emergence:** complexification

But

- Simplification in gender loss is not necessarily incremental
  - Violations of complexity principles (Audring in preparation; Di Garbo under review) in gender loss: hybrid controllers; mismatching inflections on agreement targets; new (often animacy-based) parameters of classification.

- Complexification in gender emergence
  - Starting point (absence of gender) and arrival point (presence of gender).
Gender loss: simplification

Gender emergence: complexification

But

- Simplification in gender loss is not necessarily incremental
  - Violations of complexity principles (Audring in preparation; Di Garbo under review) in gender loss: hybrid controllers; mismatching inflections on agreement targets; new (often animacy-based) parameters of classification.

- Complexification in gender emergence
  - Starting point (absence of gender) and arrival point (presence of gender).
  - Only a subset of lexical items within a given word class is sensitive to gender distinctions (Audring in preparation).
Gender loss: simplification

Gender emergence: complexification

But

- Simplification in gender loss is not necessarily incremental
  - Violations of complexity principles (Audring in preparation; Di Garbo under review) in gender loss: hybrid controllers; mismatching inflections on agreement targets; new (often animacy-based) parameters of classification.

- Complexification in gender emergence
  - Starting point (absence of gender) and arrival point (presence of gender).
  - Only a subset of lexical items within a given word class is sensitive to gender distinctions (Audring in preparation).
  - Gender marking can be optional (Audring in preparation).
Complexification vs. simplification

Gender loss: simplification

Gender emergence: complexification

But

- Simplification in gender loss is not necessarily incremental
  - Violations of complexity principles (Audring in preparation; Di Garbo under review) in gender loss: hybrid controllers; mismatching inflections on agreement targets; new (often animacy-based) parameters of classification.

- Complexification in gender emergence
  - Starting point (absence of gender) and arrival point (presence of gender).
  - Only a subset of lexical items within a given word class is sensitive to gender distinctions (Audring in preparation).
  - Gender marking can be optional (Audring in preparation).
The mapping between gender complexification/simplification and language ecology is not exactly deterministic. Good news! Developing typologies of patterns of complexification/simplification in individual domains of grammar (such as gender) is possible by combining intragenetic and intergenetic sampling. Feeding language ecology into the analysis of these patterns of language change is possible, but it cannot be a one person's task. Team work and adequate resources are needed to engage language experts in cooperation!

Call for discussion: tools and methods for large-scale crosslinguistic research on language ecology and its implications for grammatical typology and the study of linguistic complexity.
The mapping between gender complexification/simplification and language ecology is not exactly deterministic.
The mapping between gender complexification/simplification and language ecology is not exactly deterministic. Good news!
The mapping between gender complexification/simplification and language ecology is not exactly deterministic. **Good news!**

Developing typologies of patterns of complexification/simplification in individual domains of grammar (such as gender) is possible by combining *intragenealogical* and *intergenealogical* sampling.

Call for discussion: tools and methods for large-scale crosslinguistic research on language ecology and its implications for grammatical typology and the study of linguistic complexity.
The mapping between gender complexification/simplification and language ecology is not exactly deterministic. **Good news!**

Developing typologies of patterns of complexification/simplification in individual domains of grammar (such as gender) is possible by combining **intragenealogical** and **intergenealogical** sampling.

Feeding language ecology into the analysis of these patterns of language change is possible,
The mapping between gender complexification/simplification and language ecology is not exactly deterministic. **Good news!**

Developing typologies of patterns of complexification/simplification in individual domains of grammar (such as gender) is possible by combining **intragenealogical** and **intergenealogical** sampling.

Feeding language ecology into the analysis of these patterns of language change is possible, but it cannot be a **one person’s task**.
The mapping between gender complexification/simplification and language ecology is not exactly deterministic. **Good news!**

Developing typologies of patterns of complexification/simplification in individual domains of grammar (such as gender) is possible by combining **intragenealogical** and **intergenealogical** sampling.

Feeding language ecology into the analysis of these patterns of language change is possible, **but it cannot be a one person’s task.** Team work and adequate resources are needed to engage language experts in cooperation!
Methodological considerations

- The mapping between gender complexification/simplification and language ecology is not exactly deterministic. **Good news!**
- Developing typologies of patterns of complexification/simplification in individual domains of grammar (such as gender) is possible by combining *intragenealogical* and *intergenealogical* sampling.
- Feeding language ecology into the analysis of these patterns of language change is possible, but it cannot be a *one person’s task*. **Team work and adequate resources are needed to engage language experts in cooperation!**
- **Call for discussion**: tools and methods for large-scale crosslinguistic research on language ecology and its implications for grammatical typology and the study of linguistic complexity.
Thank you!

francesca.digarbo@helsinki.fi

Thanks are also due to:

All questionnaire respondents and language experts:
P. Bakker (Michif), Ö. Dahl (Elfdalian), A. Daladier (Khasian), M. Daniel (ArchI), N. Evans (Central Gunwinyguan), C. Huber (Shumcho), A. Kalnaca (Latvian), P. Karatsareas (Asia Minor Greek dialects), M. Parkvall (Standard Swedish), I. Rodriguez (Basque), W. Schulze (Udi), D. Stilo (Tati), B. Wälchli and E. Svärd (Nalca).
Audring, Jenny. in preparation. Calibrating complexity: How complex is a gender system?


Stilo, Donald. to appear. Loss vs. expansion of gender in Tatic languages: Kafteji (Kabatei) and Kelasi.


Wälchli, Bernhard & Eric Svärd. in preparation. The insidius emergence of a gender system in Nalca (Mek, Irian Jaya): inquorate noun classes, adjacency agreement, and switching on and off gender in syntax.