A large, fluffy feathered object, possibly a bird's nest or a decorative arrangement, resting on a dark wooden lattice background. The feathers are primarily white and yellow, with some brown feathers visible. The object is positioned on the right side of the frame, with its base on the left. The background consists of dark, horizontal wooden slats.

Two systems or one?:
a Canonical
Typology
approach

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With thanks to the AHRC (UK)

Outline

- Defining gender and classifiers: and the usefulness of Canonical Typology
- Mian
 - gender
 - classifiers
 - comparing the systems
- Conclusion

1. The challenge of definition

- Definition and description of nominal categorization systems is still difficult
- Progress needed to make possible meaningful comparison across languages

... and specifically

- Some familiar systems show peculiar combinations of elements
- These combinations are not necessary nor should they be definitional

(Whether our favourite system is found in Archi, Cree, Latin, Tidore or Zulu, we need a broad view.)

Criteria: Dixon (1986)

	Gender (noun class)	Noun classification (including numeral classifiers)
Size	All nouns classified Small number of classes (2 to around 20)	Some nouns not classified, almost always Fair number, at least a score, with 100+ being common
Realization	Always a closed grammatical system Coded as affixes or separate grammatical words	Always free forms Always a separate constituent
Scope	Never entirely within the noun word Little variation between speakers	Never any reference to them outside the NP Classifier use often indicates style/mode differences
Semantics	Affix has a fairly fixed meaning	Classifier is a lexeme, with greater possibilities

Canonical Typology

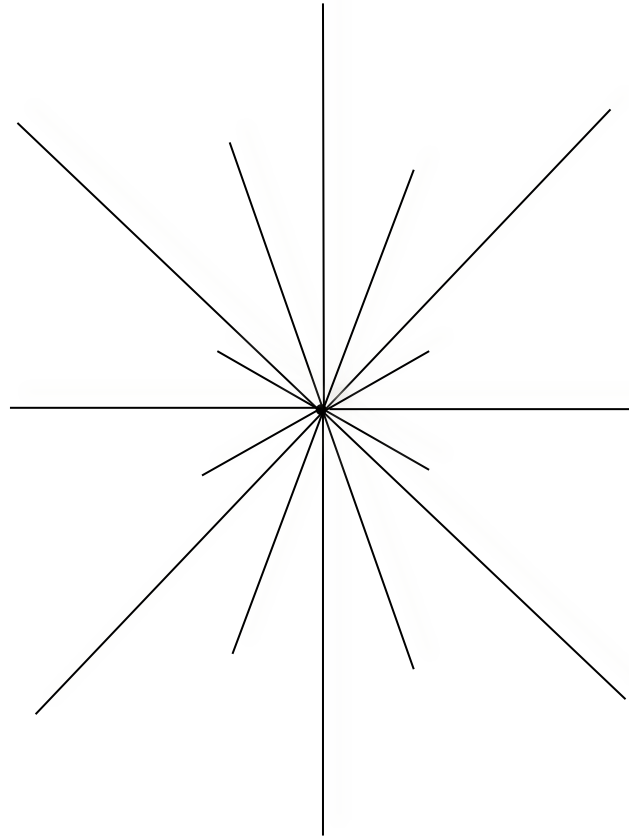
- Examine clusterings of properties (especially the problematic ones): meaningful or coincidental?
- Draw out the theoretical space to tease apart the clusters
- Use the canonical ideal as a yardstick from which we measure the actual examples we find

Corbett (2007, 2015); Brown, Chumakina & Corbett (2013). And see the bibliography at: <http://www.surrey.ac.uk/englishandlanguages/research/smg/canonicaltypology/bibliography/index.htm>

Canonical Typology

- The canonical ideal is defined
 - from a specific set of criteria
 - that can be used to project the theoretical space
 - which is then populated by real instances
- Notional point where all criteria converge
- Different from “typical”, “frequent” or “prototypical”

Canonical Typology



Criteria converging on the canonical

Relevance to gender and classifiers

- Construing the two as extremes of an opposition has not proved fruitful
- So we attempt a definition of one extreme (canonical gender)
- and we try it out on an intriguing language, Mian

Canonical morphosyntactic features

- The canonicity criteria are largely the same for:
 - gender
 - number
 - person
 - case

Corbett (2007, 2012: 156-199)

Principles for canonical features and their values

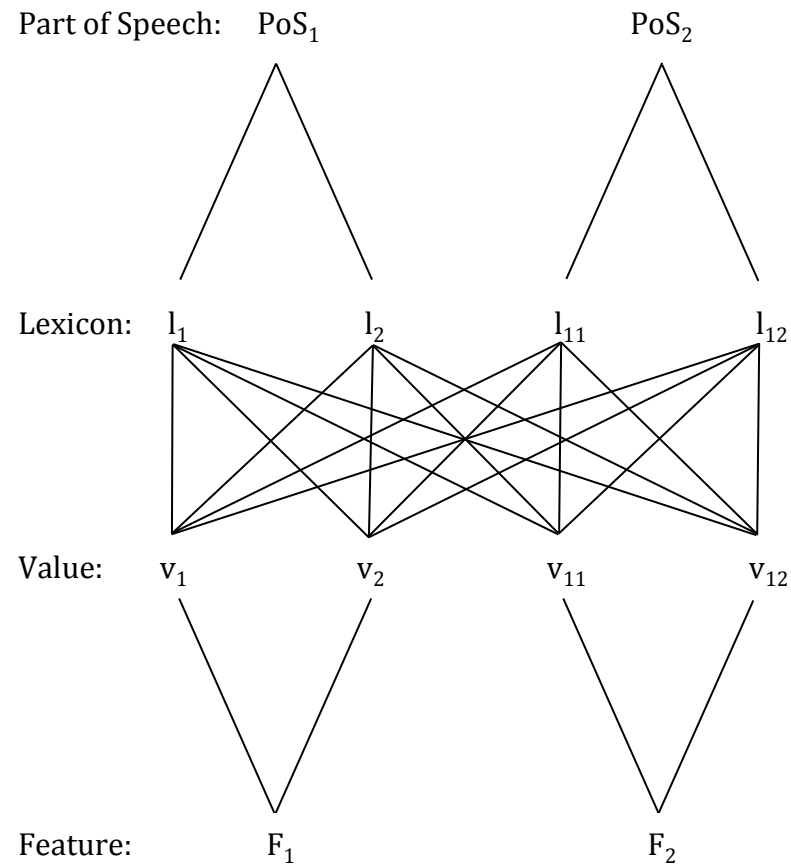
- I: Canonical features and their values are clearly distinguished by formal means.
- II: The use of canonical morphosyntactic features and their values is determined by simple syntactic rules.
- III: Canonical morphosyntactic features and their values are expressed by canonical inflectional morphology.

(Corbett 2012: 155-199)

Canonical morphosyntactic features

- Logical problem: If morphosyntactic features were fully canonical, they would be identical, no way of telling them apart
- Solution: examine the interaction of morphosyntactic features with canonical parts of speech
- In canonical parts of speech (Corbett 2013: 52; Spencer 2005: 102) the semantics, syntax and morphology align
- For example, a canonical noun would
 - denote an entity
 - head a nominal phrase
 - take the appropriate inflectional morphology

Canonical parts of speech and canonical morphosyntactic features



Canonical parts of speech and canonical morphosyntactic features

Four criteria:

C-1. exclusiveness:

- a lexical item belongs to just one part of speech
- a value belongs to just one feature

Corbett (2013)

Canonical parts of speech and canonical morphosyntactic features (2)

C-2. exhaustiveness:

- every lexical item of every part of speech has available all values of all features
- (alternatively: every feature value applies to all lexical items)

(Thus if there is a number feature with the values singular and plural, then in the canonical situation every lexeme would have singular and plural available to it.)

Canonical parts of speech and canonical morphosyntactic features (3)

C-3. open and closed:

- All classes are closed, except the class of lexical items.

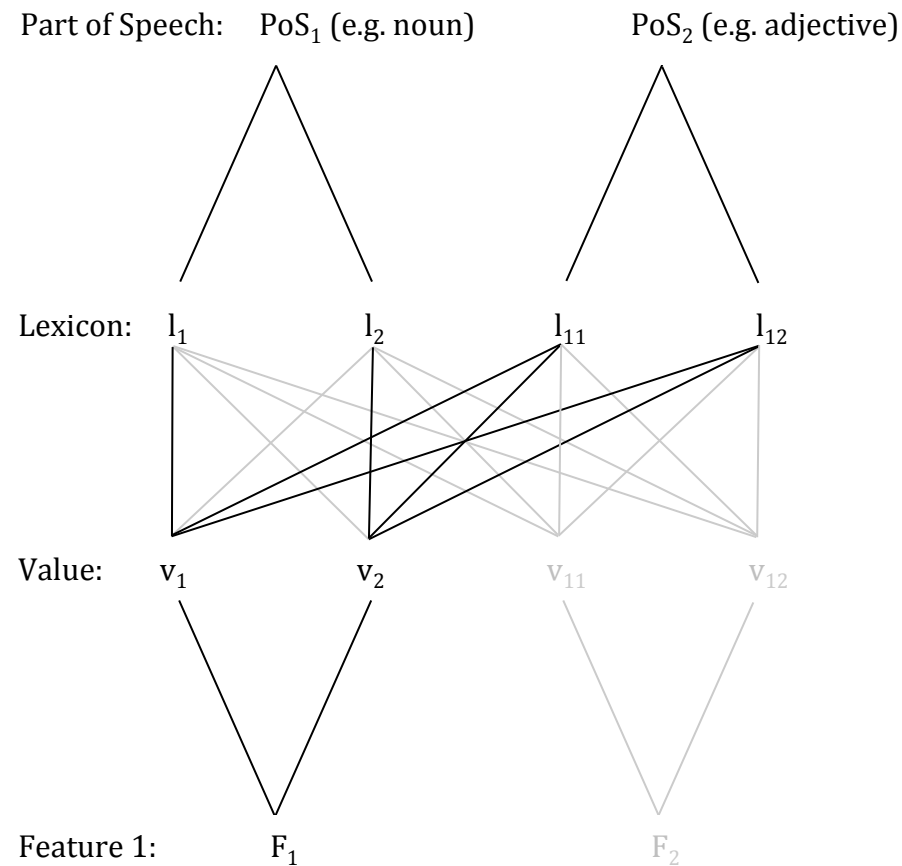
(Canonical parts of speech have open membership.)

Canonical parts of speech and canonical morphosyntactic features (4)

C-4. compositionality:

- given the lexical semantics of a lexical item and a specification of its feature values, the meaning of the whole is fully predictable.

Canonical parts of speech and canonical morphosyntactic features: weakening



Canonical parts of speech and canonical morphosyntactic features

- Weakening of canonical exhaustiveness: nouns select one of the values (gender)
- Gender is not a fully canonical morphosyntactic feature, since controllers do not have all values available
- but it is the canonical *agreement* feature, for this same reason, since it is a lexical feature.

2. Why Mian?

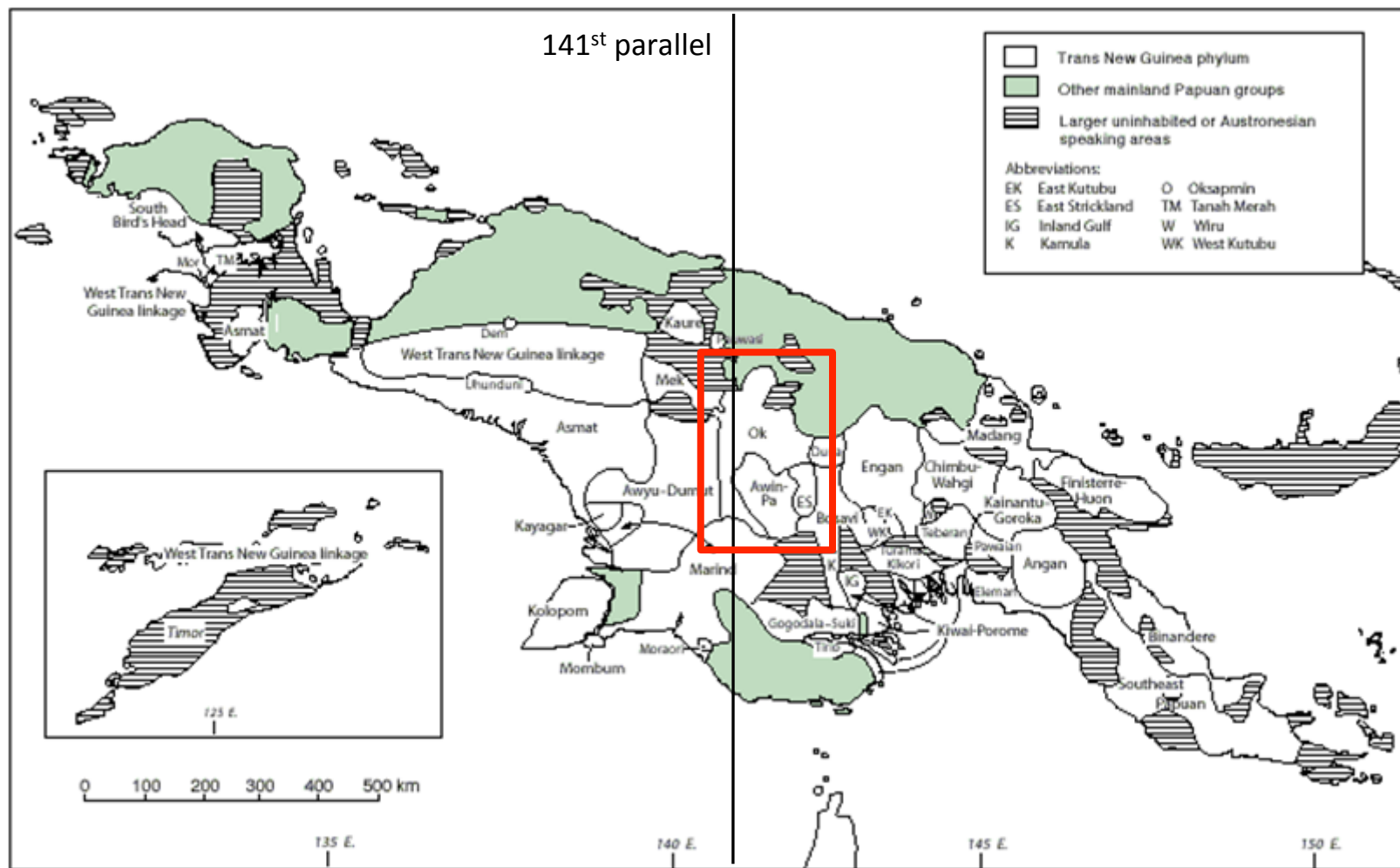
- Relation of gender and classifiers:
 - an opposition?
 - part of the same space?
- Gender and classifiers are often thought of as mutually exclusive systems of categorization
- Mian has both (Fedden 2011)

Combining gender and classifiers: our sample

- South America
 - Miraña (Witotoan; Seifart 2005)
 - Paumarí (Arawá; Chapman and Derbyshire 1991; Aikhenvald 2000)
 - Tariana (Arawak; Aikhenvald 1994, 2000)
 - Retuarã (Tucanoan; Strom 1992)
 - Yagua (Peba-Yaguan; Payne 1986)
 - Ayoreo and Chamacoco (Zamucoan; Bertinetto 2009, Ciucci 2013).
- Algonquian
 - Innu (Montagnais) (Drapeau and Lambert-Brétière 2011)
- Papuan
 - Mian (Trans New Guinea; Fedden 2011)
 - Tidore (West Papuan; Van Staden 2000)
- Australian
 - Enindhilyakwa (Non-Pama-Nyungan; van Egmond 2012)
- Austroasiatic
 - Pnar (Ring 2015)
 - Khasi (Rabel-Heymann 1977)

Mian

- Ok family (*ok* 'water, river') (Healey 1964)
- Trans New Guinea (Pawley 2005; Ross 2005; Wurm 1982)
- Telefomin District, Sandaun Province, Papua New Guinea
- Two dialects
 - Eastern dialect has around 1,400 speakers (Fedden 2011)
 - Western dialect (aka Suganga) has around 350 speakers



Putative subgroups within Trans New Guinea (from Ross 2005: 34)

2.1 “Gender” in Mian

- M, F, N1, N2 in the 3rd person singular
 - Targets: free pronouns, articles, demonstratives, verb
 - All finite verbs have subject agreement
 - Object agreement with these only:

-e	‘hit, kill (IPFV)’
-fû’	‘grab (PFV)’
-lò	‘hit, kill (PFV)’
-nâ’	‘hit, kill (PFV)’
-ntamâ’	‘bite (PFV)’
-têm’	‘see (PFV)’
-temê’	‘look at (IPFV)’

“Gender” in Mian

(1) ē unáng=o wa-têm'-∅-e=be
3SG.M woman(F)=ART.SG.F 3SG.F.OBJ-see.PFV-REAL-3SG.M.SBJ=DECL
'He sees the woman.' (SF field notes)

(2) ō naka=e a-têm'-∅-o=be
3SG.F man(M)=ART.SG.M 3SG.M.OBJ-see.PFV-REAL-3SG.F.SBJ=DECL
'She sees the man.' (SF field notes)

“Gender” in Mian

(1) \bar{e} unáng=o wa-têm'- \emptyset -e=be
3SG.M woman(F)=ART.SG.F 3SG.F.OBJ-see.PFV-REAL-**3SG.M.SBJ**=DECL
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3SG.F **man(M)=ART.SG.M** **3SG.M.OBJ**-see.PFV-REAL-**3SG.F.SBJ**=DECL
'She sees the man.' (SF field notes)

Agreement target: article

a. *naka=e* 'a/the man'

naka=i '(the) men'

b. *unáng=o* 'a/the woman'

unáng=i '(the) women'

c. *tóm=e* 'a/the stone'

tóm=o '(the) stones'

d. *káawa=o* 'a/the steel axe'

káawa=o '(the) steel axes'

Mian gender values

	SINGULAR	PLURAL	assignment
MASCULINE	= <i>e</i>	= <i>i</i>	males
FEMININE	= <i>o</i>	= <i>i</i>	females
NEUTER 1	= <i>e</i>	= <i>o</i>	inanimates
NEUTER 2	= <i>o</i>	= <i>o</i>	inanimates: locations, body decoration, weather phenomena, illnesses, abstract nouns, some tools and weapons

- All Mian genders are non-autonomous values
(Zaliznjak 1973[2002]: 69-74)
- Assignment is predominantly semantic

2.2 “Verbal classifiers” in Mian

(3) nē memâlo fút=e
1SG now tobacco=SG.N1

tob-ò-n-i=a

3SG.LONG.O-take.PFV-SS.SEQ-1SG.SBJ=MED

‘Now I take the tobacco leaf and then I ...’ (Rolling smokes)



Dried *Nicotiana*
leaves bound
together

Source: SF fieldnotes

“Verbal classifiers” in Mian

- Prefixed to verbs of object handling and movement, e.g. ‘give’, ‘take’, ‘put’, ‘throw’, ‘lift’, ‘turn’, ‘fall’ (about 50 verbs)
- Absolute basis

“Verbal classifiers” in Mian

	SINGULAR	PLURAL	assignment
M-CLASSIFIER	<i>dob-</i>	<i>dol-</i>	males (M); plate, clothes, mosquito net, some bananas, some pandanus (N1)
F-CLASSIFIER	<i>om-</i>	<i>dol-</i>	females (F); inanimates: all nouns of N2 gender
LONG	<i>tob-</i>	<i>tebel-</i>	inanimates: arrow, pen, tobacco leaf, bone, tongs, bush knife, nail, belt (all N1)
COVERING	<i>gam-</i>	<i>gemel-</i>	skin, palm bark, blanket (all N1)
BUNDLE	<i>gol-</i>	<i>gulel-</i>	string bag, bundles (all N1)
RESIDUE	<i>ob-</i>	<i>ol-</i>	tortoises (F); rest of inanimates (N1)

While strongly based on semantics, assignment is less semantically transparent than in the gender system

Interaction with number

	SINGULAR	PLURAL	
M-CLASSIFIER	<i>dob-</i>	<i>dol-</i>	<i>dob+el > dol</i>
F-CLASSIFIER	<i>om-</i>		
LONG	<i>tob-</i>	<i>tebel-</i>	<i>tob+el > tebel</i>
COVERING	<i>gam-</i>	<i>gemel-</i>	<i>gam+el > gemel</i>
BUNDLE	<i>gol-</i>	<i>gulel-</i>	<i>gol+el > gulel</i>
RESIDUE	<i>ob-</i>	<i>ol-</i>	<i>ob+el > ol</i>

Interaction “gender” and “verbal classifiers”

	MASCULINE	FEMININE	NEUTER 1	NEUTER 2
M-classifier	man, boy, boar	---	sleeping bag, plate, mosquito net	---
F-classifier	---	woman, girl, sow	---	house, steel axe, money (kina note)
Long	---	---	tobacco, eating implement, bush knife	---
Bundle	---	---	string bag (large), tobacco pouch, plastic bag	---
Covering	---	---	blanket, band aid	---
Residue	---	tortoise	cassowary egg, plane, hat	---

2.3 Comparing the two systems

- Criteria for canonical gender
 - controllers
 - targets
 - domains

Controllers

- In a canonical gender system, each controller has a single gender value
- Source of non-canonicity: Common gender nouns, e.g. Mian *éil* 'pig', *tíl* 'dog', and about a dozen others
 - *éil=e do-fâ!* 'Put down the male boar!'
 - *éil=o om-fâ!* 'Put down the female boar!'

=> THIS AFFECTS BOTH SYSTEMS IN A SIMILAR WAY

Assignment

- The canonical gender assignment rule is semantic
- Gender can be read off the lexical information (i.e. the semantic specification of the noun)
- Principle of Canonical Typology: In canonical systems everything lines up

=> THE GENDER SYSTEM IS CLOSER TO THE CANONICAL IDEAL

Assignment

- This goes against a widely held belief that gender “should” be opaque; but that’s when it’s easier to spot, but not when it’s canonical

Recategorization

(4) mēn=e yē
child=M.SG there

dob-ò-n-e=a

3SG.M_CL.OBJ-take.PFV-SEQ-3SG.M.SBJ=MED

‘There he takes the boy and then ...’ (SF field notes, elicited)

(5) mēn=e yē
child=M.SG there

gol-ò-n-e=a

3SG.BDL.OBJ-take.PFV-SEQ-3SG.M.SBJ=MED

‘There it (wild boar) takes the boy (with the umbilical cord) and then ...’ (SF field notes, Afoksitgabaam)

Recategorization

- In a canonical gender system, nouns select *one* of the values
- Recategorization - source of non-canonicity

MIAN

- Gender system doesn't allow this
- Classifier system does

=> THE GENDER SYSTEM IS CLOSER TO THE CANONICAL IDEAL

Targets

- Canonical features and their values are distinguished consistently across relevant parts of speech
- Intuition: The more evidence there is for gender the more canonical the system (“the more targets the better”)

MIAN

- Gender system targets: article, verb, pronoun
- Classifier system target: verb (subset only)

=> THE GENDER SYSTEM IS CLOSER TO THE CANONICAL IDEAL

Syntactic domains

- Related to the intuition about targets is the following about syntactic domains: “The more domains the better.”
- Gender system domains: NP (article), clause (verb), extra-clausal (free personal pronoun)

Syntactic domains

(6)

Futaman	mín=e
Fu.valley	son=ART.SG.M

baa-n-e=o=le
say.PFV-SEQ-3SG.M.SBJ=N2=TOP

ībo wan-ībt=e
2PL who-2/3PL.AN.EMPH=CQ

ge baa-s-e=ta [intervening material]
say.PFV say.PFV-DS.SEQ-3SG.M.SBJ=and [...]

ē as=o hà'-n-e=o=le [...]
3SG.M firewood=ART.N2 break.PFV-REAL-3SG.M.SBJ=N2=TOP [...]

‘The man from the Fu river valley said, “Who are you?” and ...
when he [i.e. the man from the Fu river valley] cut the firewood ...’
(Fedden 2011: 530)

Syntactic domains

- Gender system domains: NP (article), clause (verb), extra-clausal (free personal pronoun)
- Classifier system domain: clause (verb), no system of free personal pronouns

=> THE GENDER SYSTEM IS CLOSER TO THE CANONICAL IDEAL

Inequality of values

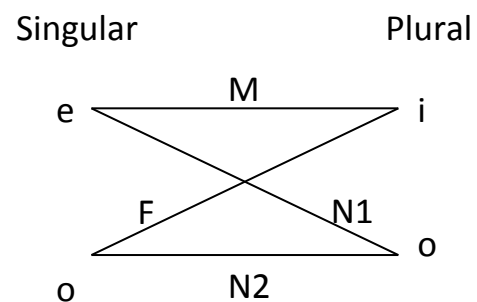
- In any canonical situation, mappings are one-to-one. Specifically for gender, controller genders map to target genders one-to-one
- Any discrepancy here is a source of non-canonicity

Inequality of values

	SINGULAR	PLURAL	Assignment
MASCULINE	= <i>e</i>	= <i>i</i>	Males
FEMININE	= <i>o</i>	= <i>i</i>	Females
NEUTER 1	= <i>e</i>	= <i>o</i>	Inanimates
NEUTER 2	= <i>o</i>	= <i>o</i>	Inanimates: locations, etc.

Mian	SG	PL
M	A	C
F	B	C
N1	A	B
N2	B	B

Target genders in Mian



Andi	SG	PL
I	A	A
II	B	B
III	C	C
IV	D	D

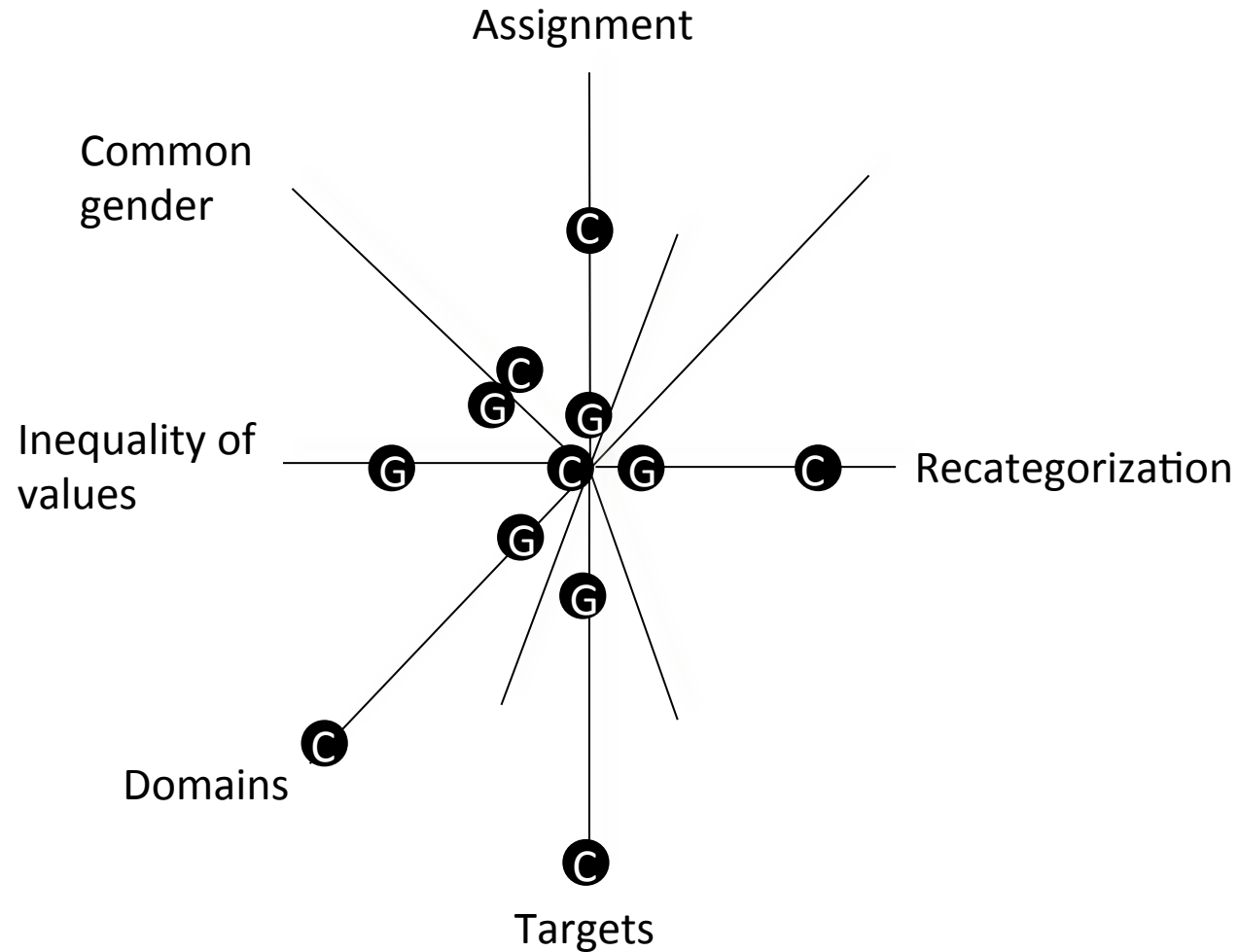
Corbett
(1991: 198)

Inequality of values

- Mismatch between controller and target genders
- No such mismatch in the classifier system

=> THE **CLASSIFIER** SYSTEM IS CLOSER TO THE CANONICAL IDEAL

Calibration (first attempt)



Conclusions

- Specifically on Mian:
 - a fairly canonical gender system
 - a system of verbal classifiers further away from the canonical ideal (but not for all criteria)
- More generally:
 - noun categorization systems are not discrete
 - they have components which are more or less close to a canonical ideal
- This makes possible a typology able to incorporate the intermediate cases we find in the languages of the world

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