Classifiers: A typological overview

Colette Grinevald,
University of Lyon, DDL CNRS
1969-2019... Fifty years of living with classifiers!

CRAIG on Noun Classifiers of Jacaltec Maya (FW between 1969-79)

1977 syntax (as Pro... pro drop rule), in Harvard/MIT Phd
1979 as categorization system, in Shopen’s college textbook!
1986 in cognitive approach (UofO conf: Lakoff, Givon, Dixon, RUDE!)

GRINEVALD on a Typology of Classifiers (first version)

2000 Morphosyntactic Typology, in Senft, ed. (MPI conference)
2001 in Elsevier Encyclopedia (first edition)
2004 in Lehmann encyclopedic “Morphology Handbook”
2006 Goldwasser meets Grinevald

GRINEVALD & GOLDWASSER

on Ancient Egyptian Determinatives being Classifiers

2012 ‘Determinatives’ as ‘Classifiers’ (from COST conference 2009)

GRINEVALD

2015 typology revised, Elsevier Encyclopedia (2d ed),
+ new system N&V = root ..... TYPO 2

SELZ, GRINEVALD, GOLDWASSER

2017 Sumerian cuneiforms have noun classifiers
1. About doing ‘linguistic typology’ ...
   • ... in a “functional typological” framework
   • ... through a process of “working typology”

2. Morphosyntactic Typology of classifiers
   • “classifiers” as one of the systems of classification
   • identification of subtypes of classifiers of NOUN entities

3. As categorization systems of human language cognition
   • of different scope

Conclusion: studying classifiers across modalities: Ancient Egyptian
   • From oral tradition contemporary languages to an ancient script
1. About doing ‘linguistic typology’...

- An intense dialogue of linguists doing description and typology today,
  - whose new descriptions are fed by, and feed into, typology
  - (Some call it doing ‘typo-description’)

- An explosion in the last decades of the descriptions
  - of oral tradition un(der)described (and endangered) languages
  - showing the true meaning of ‘linguistic diversity’

- From different parts of the world
  - the (N.S)Americas, Australia, (S.E.) Asia, Africa...
1. About doing ‘linguistic typology’... ... in a functional-typological framework

A la “West Coast functionalists”: UofO Givon, deLancey... (Grinevald) Craig
And now also ... DDL Lyon

• Description of a language in its **natural state**: importance of TEXT approach
• Of **speaker/hearer communication**:
  explicit/inferred
• Expressing **basic functions**:
  ex here: CATEGORIZATION
• At all levels of grammar:
  morphology, syntax, discourse
• With an eye for **grammaticalization processes**:
  ex of “CLASSIFIER systems”
1. About doing ‘linguistic typology’... through a process of ‘working typology’

• Language descriptions... feed a **typology of X at time 1**
• This typology of X at time 1... guides **new language descriptions**
• Allowing for discoveries of **new (aspects) of phenomena**
• Producing a **revised Typology of X at time 2**

The dynamics used over the last decades for the description of linguistic phenomena of hundreds of oral languages of **Australia, the Americas, Asia** etc... have been more recently turning to **languages of ancient scripts**.
2. A Linguistic Typology of ‘classifiers’

• Classifiers as one of the systems of nominal

  *see Goldwasser’s presentation
  and Grinevald guide to lexical classification systems.*

• Arguments for morphosyntactic typology
2. A Linguistic Typology of ‘classifiers’
Classifiers as one of the systems of nominal classification

Table 3
Different systems of overt linguistic categorization

<table>
<thead>
<tr>
<th>Overt linguistic categorization of nominal entities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lexical</td>
</tr>
<tr>
<td>Derivation</td>
</tr>
<tr>
<td>Class terms</td>
</tr>
<tr>
<td>Measure terms</td>
</tr>
<tr>
<td>Grammatical</td>
</tr>
<tr>
<td>Noun classes</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>concordial</td>
</tr>
</tbody>
</table>

- worker
- Blueberry
- Strawberry
- cup of flour
- pile of books
- PLANT tomato
- ANIMAL cat
- Nclass-child
- prince
- princess

2. A Linguistic Typology of ‘classifiers’
Three Arguments for a morphosyntactic typology of classifiers of NOUNS

1. Locus

2. Semantic profile

3. Co-occurrence in the same language
ARG 1. Morphosyntactic argument: position, ie ‘LOCUS’

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Loci of major subsystems of nominal classifiers</th>
</tr>
</thead>
</table>

*nime-i*  
CL[DRINKING-THING]-my  
‘my coconut’  
(Ponapean)

*uhpw*  
coconut

*bir nafar*  
one CL[HUMAN] person  
‘one person’  
(Uzbek)

*âdam*  
person

*ixim wahr*  
tortilla  
‘tortillas’  
(Jakaltek)

*Ohon’atatke:*  
It-potato-rotten past.1-CL[POTATO]-eat  
‘I ate a rotten potato’  
(Caguya) (Mithun 1986: 386-388)

all classifying a noun!
ARG 2. Semantic arguments
Different “semantic profiles” of their inventories


1. **Numeral** = physical categories
   - two-[ROUND] oranges
   - three-[LONG RIGID] pencils

2. **Genitival** = functional categories
   - his-[DRINKABLE] potion
   - their-[TRANSPORT] canoe

3. **Noun** = material/essence categories (+physical categories?)
   - [MAN] John
   - [ANIMAL] deer
   - [ROCK] cave
ARG 3. Co-occurrence in same language : ex Ponopean

<table>
<thead>
<tr>
<th>Table 5</th>
<th>Examples of major subtypes of nominal classifier systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Noun classifiers; Jakaltek-Popti' (Craig, 1986, p. 264)</td>
</tr>
<tr>
<td></td>
<td>a. xil naj xuhan no7 lab'a</td>
</tr>
<tr>
<td></td>
<td>saw CL John CL snake</td>
</tr>
<tr>
<td></td>
<td>‘(man)John saw the (animal)snake’</td>
</tr>
<tr>
<td>2.</td>
<td>Numeral classifiers; Ponapean (Rehg, 1981, p. 130)</td>
</tr>
<tr>
<td></td>
<td>a. pwhik rimen</td>
</tr>
<tr>
<td></td>
<td>pig 2+CL: animate</td>
</tr>
<tr>
<td></td>
<td>‘two(-animate) pigs’</td>
</tr>
<tr>
<td></td>
<td>b. tuhke niapwoat</td>
</tr>
<tr>
<td></td>
<td>tree 2+CL: long</td>
</tr>
<tr>
<td></td>
<td>‘two(-long) trees’</td>
</tr>
<tr>
<td></td>
<td>a. kene-i mwenge</td>
</tr>
<tr>
<td></td>
<td>CL-GEN.1 food</td>
</tr>
<tr>
<td></td>
<td>‘my(-edible) food’</td>
</tr>
<tr>
<td></td>
<td>b. were-i pwoht</td>
</tr>
<tr>
<td></td>
<td>CL-GEN.1 boat</td>
</tr>
<tr>
<td></td>
<td>‘my(-transport) boat’</td>
</tr>
<tr>
<td>4.</td>
<td>Verbal classifiers; Cayuga (Mithun, 1986, pp. 386–388)</td>
</tr>
<tr>
<td></td>
<td>a. ohon’atatke: ak-hon’at-a:k</td>
</tr>
<tr>
<td></td>
<td>it-potato-rotten past.I-CL-eat</td>
</tr>
<tr>
<td></td>
<td>‘I (potato-)ate a rotten potato’</td>
</tr>
</tbody>
</table>
2. A Linguistic Typology of ‘classifiers’

...and another type of classifiers on locus of verb “verbal classifiers” of NOUNS vs “VERB classifiers”
2. A Linguistic Typology of ‘classifiers’
Another type of classifiers on locus of verb
“verbal classifiers” of NOUNS vs “VERB classifiers”

**Verbal classifiers** = several types of semantic categories possible

<table>
<thead>
<tr>
<th>PHYSICAL</th>
<th>I- [LONG RIGID] – put the knife on the table</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUNCTIONAL</td>
<td>you-[DOMESTIC PET]- have a dog</td>
</tr>
<tr>
<td>MATERIAL</td>
<td>he-[POTATO]- ate a rotten potato</td>
</tr>
</tbody>
</table>

**VERB classifiers** = major verbal semantics

<table>
<thead>
<tr>
<th>ACTION</th>
<th>[DO] hunt, cook, cut</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOTION</td>
<td>[GO] go, arrive, travel</td>
</tr>
<tr>
<td>SPEECH</td>
<td>[TALK] talk, yell, repeat, shout</td>
</tr>
</tbody>
</table>
2. A Linguistic Typology of ‘classifiers’
Another type of classifiers on locus of verb
“verbal classifiers” of NOUNS vs “VERB classifiers”

<table>
<thead>
<tr>
<th>Verbal CL (classifier of patient object)</th>
<th>Verb CL (classifier of verb semantics)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I [LONG RIGID]-put a knife on the table</td>
<td>c. You shout-[SAY] to me (Intransitive)</td>
</tr>
<tr>
<td>b. I [VEHICLE]-have a canoe</td>
<td>d. Put-[DO] a knife on the table! (Transitive)</td>
</tr>
</tbody>
</table>
3. As categorization systems of human language cognition

• of different scope

• in different modalities
  - oral tradition contemporary languages
  - ancient scripts
    here Ancient Egyptian, i.e. *silent ‘determinatives’
3. A categorization approach to classification systems of NOUNS

• Now turning to their **classification** processes, and their **categorization** principles

• And how they provide **cognitive insight** into how speakers organize their world, from **most universal to most culturally specific** categories
3. A categorization approach to classification systems of NOUNS

« classifier systems » are built around central elements that operate semantic classification mostly around prototypes, at different levels:

*Jakaltek system*

**Generic (superordinate) classifiers:** head large heterogeneous classes
   Ex:  MAN  WOMAN  ANIMAL  PLANT  MINERAL

**Specific classifiers:** head smaller classes with cultural highlighting
   Ex:  CORN  MEDICINAL PLANT  THREAD

**Unique classifiers:** for classes of one item! very specific cultural highlighting...
   Ex:  DOG  SALT
3. A categorization approach to classification systems with extreme cases of levels of categorization

**Default classifier** (ex Chinese & Ancient Egyptian, does not exist in Jakaltek)

- semantically empty
- from total loss of semantic motivation ‘THING X’
- marking a class encompassing from general to the most specific nouns.
3. A categorization approach to classification systems
Special classifiers: the case of ‘repeaters’

A questions of FORM vs CATEGORIZATION

• The term ‘repeater’ coined by Allan 1977, called ‘eco classifier’ by Senft
  - qein ta qein  ‘one CL house’ (Burmese) (Allan 1977:292)

• A fairly common phenomenon,
• showing the nominal origin of many classifiers.
• Warning: Repeaters may appear at all levels of categorization!
  ⇒ generic, special, unique
3. A categorization approach to classification systems
More about repeaters: keeping questions of FORM vs. CATEGORIZATION separated!

<table>
<thead>
<tr>
<th>CL</th>
<th>Repeater</th>
<th>Unique</th>
<th>CL</th>
<th>Repeater</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>atz’am</td>
<td>‘Salt’</td>
<td>+</td>
<td>atz’am</td>
<td>‘(The) salt’</td>
<td></td>
</tr>
<tr>
<td>metx’</td>
<td>‘Dog’</td>
<td>-</td>
<td>metx’</td>
<td>‘The/a dog’</td>
<td></td>
</tr>
<tr>
<td>ha</td>
<td>‘Water’</td>
<td>+</td>
<td>ha</td>
<td>‘The water’</td>
<td></td>
</tr>
<tr>
<td>etc.</td>
<td></td>
<td></td>
<td>ha</td>
<td>‘The rain’</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ha</td>
<td>‘The/a lake’</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>nhab’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>pam</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. A categorization approach to classification systems
An extreme case of ‘repeaters’: the ‘phonetic classifiers’

The case of the Movima numeral classifiers (Bolivia): ‘partial repeaters’ since they consist of
the LAST SYLLABLE of the noun being counted
the LAST TWO SYLLABLES for non native noun

<table>
<thead>
<tr>
<th>Nb-CL Noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native words: a. oy-d’o chad’o ‘2 plates’ a’ oy-pi sukapi ‘2 belts’</td>
</tr>
<tr>
<td>Borrowed words: b. oy-misa kamisa ‘2 shirts’ b’ oy-sasa mesa ‘2 tables’</td>
</tr>
</tbody>
</table>

Hence: no categorizing/classifying value per se!
although confusing effect of categorization because of homophonous syllables!

After Grinevald 2012, in Goldwasser and Grinevald 2012
By way of conclusion.
Linguistic typology as a way to study classifiers across modalities

• The study of the silent determinatives as ‘classifiers’

• Leading to a new version of a typology of classifier systems
A case study - the Aten hymn TEXT

Step 1: « determinatives » identified by O. Goldwasser
The TEXT approach: ‘Fieldnotes’ of analysis

Notes from working sessions of text analysis:

Grinevald ‘field linguist’
Golwasser ‘speaker/informant/expert’
= source of knowledge
Step 2. first evidence of a « system »: the density of occurrence

1. Density of classifier per column (represented by letters)

Columns: M L K J I H G F E D C B A
Tokens: 12 14 24 24 22 24 24 21 19 29 21 18 18

2. TOTAL TOKENS 266

3. Even distribution per column:
   Maximum 29
   Average 22
   Minimum 12
Hymn classifiers in Gardiner’s list

Step 3: their inventory

- 52 out of the 90 in Gardiner’s list
- 15 additional ones not in the list

After A. Gardiner, Egyptian Grammar, 1957
step 4: token frequency reflect the themes and topics of the text.

<table>
<thead>
<tr>
<th>sign</th>
<th>Gardiner no.</th>
<th>No. of tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Y1 [&quot;ABSTRACT&quot;] [DEFAULT] sealed papyrus with text.</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>N5 [SUN, TEMPS] solar disc</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>D54 [MOVEMENT] walking legs (human)</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>O1 [HABITAT] house</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>N21 [LAND] piece of land</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>N8 [LIGHT] solar disk with rays</td>
<td>7</td>
</tr>
</tbody>
</table>
DETERMINATIVES‘, as CLASSIFIERS of N & V & N/V

**Noun**
- sdm [HUMAN & MALE] judge
- irp [JAR] wine
- sSn [LOTUS] lotus
- 3tw [WOOD] bed

**Verb**
- pr [MOVEMENT] to enter
- fd [ACTION OF FORCE] to pluck/pull out

**Noun/Verb**
- Itn [SUN] sun
- wbn [SUN] shine
- dpt [BOAT] boat
- n’ [BOAT] travel
OUTCOME: review of the typology of classifier systems, adding the Ancient Egyptian ROOT subsystem

And where did the help come from? Oral tradition languages. Native languages of America ..... and ...... Australia

Noun classifiers vs Verb classifiers vs Root classifiers
ON A WORKING LINGUISTIC TYPOLOGY OF CLASSIFIERS:
THE CONTRIBUTION OF ANCIENT WRITINGS

1. A «fieldwork approach» for an ancient language script

2. A demonstration of productive back and forth between description & typology

3. Opening perspectives on new «fieldwork» situations of other ancient language classifiers…

Gebhard Selz, Colette Grinevald & Orly Goldwasser. 2017
Sumerian and Egyptian classifier systems in a comparative perspective
CAVEAT what there was no time to talk about

More aspects of a linguistic typology of classifiers:

• the inherent dynamics of such systems, demanding a multidimensional approach

• the issue of boundaries/overlap of systems:
  the challenge of analysis of the Amazonian systems
  classifiers, noun classes, mixed systems?

• an a priori basic posture of ‘lumpers’ and ‘non lumpers’
Selected References  Craig, Grinevald

Craig, C. 1977. The Structure of Jacaltec. University of Texas Press, Austin. xi+432pp
Selz, G, Grinevald, C & Orly Goldwasser. 2017 The Question of Sumerian “Determinatives”. Inventory, Classier Analysis, and Comparison to Egyptian Classifiers from the Linguistic Perspective of Noun Classification. Lingua Aegyptia. 25. Pp281-344
Merci!
Thank you!

Yuch’an tiyox teyet!

Special thank you to Orly Golwasser
For getting us all together here!