The role of passives in the formation of hierarchical systems in Northern California

Carmen Jany
cjany@csusb.edu
Starting point

• **Hierarchical systems** express a scale in their grammatical marking **governed by the referential properties of event participants**, including person, animacy, and topicality (Silverstein 1976; Bickel and Nichols 2007:228).

• Hierarchy may determine **the choice and/or order of person indices** on the predicate

• A **sub-category** of such languages additionally **overtly signals event direction** (whether the agent or the patient in an event is ranked higher) => **direct vs. inverse**
Starting point

- **Passive constructions** have been considered as **possible sources** for the development of hierarchical systems (Mithun 2007, 2010, 2012)
- Mithun (2012:285) shows how such patterns could be the **result of language contact** in Northern California: bilingual speakers may have **borrowed** certain **discourse behaviors** (i.e. an **increased exploitation of passives**; a tendency to favor certain persons over others as subjects), which then crystallized in the grammar as hierarchical systems
  - Elimination of low-ranking agents through obligatory passivization or by simply leaving them unmentioned
  - Languages studied by Mithun (2012): Chimariko, Yana, Yurok, Karuk
Some view such systems in terms of voice (Givón 1994, Klaiman 1991, Shibatani 2006) pointing to their potential diachronic development (linking inverse grammatical systems to passives).

This functional perspective highlights the fact that inverse systems may fulfill similar functions to passives in other languages.

Cristofaro (2013): patterns may not originate from the mechanisms postulated to dominate systems on synchronic grounds (e.g. animacy, etc); same pattern may originate from different mechanisms in different languages.
Starting point

• Present paper
  • Builds on Mithun’s work & analyzes passive constructions in 10 Northern California languages/language families with and without hierarchical systems
  • Goal: to examine why in some languages passives have led to hierarchical systems and, in some cases, incipient inverse systems, but not in others
• Languages examined: Chimariko, Karuk, Yana, Yurok, Shasta, Achumawi, Atsugewi, Wintu, Pomoan, and Yuki
• Why these? Geographically contiguous area; potential language contact effects
• Presentation: Core arg. patterns, Diachrony, Passives, Chimariko, Shasta, Wintu
The studied languages

- Chimariko
- Karuk
- Shasta
- Achumawi
- Atsugewi
- Yana
- Pomoan
- Yurok
- Wintu
- Yuki
Core argument patterns

• **Basic system**
  • **Agent/patient**: Chimariko, Pomoan, Yuki
  • **Nominative/accusative**: Yana, Pomoan, Yurok, Wintu, (Karuk)
  • **Unclear**: Shasta, Achumawi, Atsugewi

• **Locus**
  • **Head**: Chimariko, Karuk, Shasta, Achumawi, Atsugewi, Yana, Yurok, (Wintu)
    • Arguments on predicate: 1: Karuk, Shasta, Yana, (Wintu)
      1 or 2: Chimariko, Achumawi, Atsugewi, Yurok
  • **Dependent**: Pomoan, Yuki, Wintu

• **Hierarchical**: Chimariko, Karuk, Yana, Yurok
Core argument patterns

- **Hierarchical systems**
  - All hierarchical systems are head-marking [unlike agent/patient systems]
  - Hierarchical systems can have an agent/patient or a nom/acc underlying system
  - Sometimes 2 participants are overtly indexed on predicate (Chimariko, Yurok)
  - Hierarchical languages vary in how they rank speech-act participants with respect to one another:
    - Karuk favors 1 over 2, but ranks 2pl highest
    - Chimariko/Yana select the single marked core argument in local relations by ranking agent and patient (Chimariko: agent > patient; Yana: patient > agent)
Core argument patterns

- **Unmarked arguments**
  - 3rd person (undergoer/object): Chimariko, Karuk, Shasta, Achumawi, Atsugewi, Yana, Yurok, (Wintu)
  - 3rd person actor/agent: Yana, (Yurok), (Wintu)
  - Agents: Yuki
  - Nominative case/subject: Pomoan, Wintu

- **Event direction (direct/inverse) marked:**
  - Traces of such a system: Karuk, Yana, Yurok, Chimariko (?)

- **Possession:** all hierarchical systems mark possession on the possessed
Diachrony in hierarchical systems

• Potential sources for hierarchical systems (Gildea and Zúñiga 2012)
  • Reanalysis of deictic verbal morphology (cislocatives) – Shasta (3/1,2; 1/2; 2/1)
  • Reanalysis of zero 3rd person forms – Chimariko, Karuk, Yana, Yurok & others
  • Person-sensitivization of passive constructions – Yana, Yurok
• Diachrony determines synchronic outcomes (rather than a universal hierarchy)
Passives in the languages

- Each of the studied languages features **some verbal affixes creating passive-like constructions** in their semantic function.
- Some use passive(-like) constructions for:
  - **Patient foregrounding**: Yana, Yurok, Wintu, Pomoan
  - **Agent backgrounding** or rendering the agent **unspecified or defocused**: Chimariko, Karuk, Shasta, Yana, Yurok, Wintu, Pomoan
- For some languages only a **medio-passive** has been reported: Achumawi, Atsugewi, Yuki
- Both passive and medio-passive in Wintu
Passive versus inverse

• Passive clauses, unlike most inverse clauses, are intransitive
• Major difference between passive and inverse systems: active/passive distinction involves changes in the alignment of semantic roles and grammatical relations and the direct/inverse opposition does not
• The two systems are formally distinct, but functionally similar
  • Patient is more topical than the agent
• The two systems potentially originate from one another in both directions: passive to inverse and inverse to passive (Givón 1994:36)
Passive/inverse in the languages

- **Karuk**: 2pl > 1 > 2sg > 3
  - -ap as a somewhat defective inverse marker (Macaulay 1992, Mithun 2012)
  - -ap in 3/2 (with 2 indexed); 1/2pl (with 2pl indexed) & some other instances
  - ’iin functions like oblique agent marker in passives (Macaulay 2000, Mithun 2012)
  - no modern passive construction in Karuk
  - Example 1: (Macaulay 1992:195)

Example 1:

```
INVERSE (3sg > 2sg, POSITIVE):
ʔi-m ?o· ke-miša ?i-n ?ʔáve·šap
ʔi-m ?o·k ke-miša ?i-n ?ʔaʔ-aviš-ap
outside here monster SUBJ 2sg>3sg(POS)-eat-FUT-INV
‘A monster outside here is going to eat you’. (Bright 1957:T3:22)
```
Passive/inverse in the languages

- **Yana**: 1, 2 > 3 & patient > agent
  - obligatory passive marker –wa if hierarchy violated (Mithun 2012)
  - -wa also present is all local relations (1>2 & 2 > 1, with patient indexed)
  - -wa matches the modern passive marker
  - Paradigms show traces of proximal & distal demonstratives for 1<sup>st</sup> and 2<sup>nd</sup> person and cislocative for 1<sup>st</sup> pl (Mithun 2012)
- **Yurok**: 1pl > 2 > 3sg > 3pl
  - Selective passivization: -y passive with 3<sup>rd</sup> p. transitive agents (regardless of patient)
  - -y also functions as regular passive (like in other languages)
Chimariko

- **Chimariko**: 1, 2 > 3 & agent > patient
- Basic *agent/patient system* (distinction only for 1st person)

**Examples 2a/b**: Agent-patient system in intransitive clauses

<table>
<thead>
<tr>
<th>Chimariko</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harrington 020-1118</td>
<td>‘I was talking’</td>
</tr>
<tr>
<td>no'ot 'ik'onip</td>
<td>Harrington 020-1113</td>
</tr>
<tr>
<td>no'ot 'ik'o-nip</td>
<td>no'ot teu'buxcanat</td>
</tr>
<tr>
<td>1SG 1SG.A-talk-PST</td>
<td>no'ot teu-čhu-xən-a-t</td>
</tr>
<tr>
<td>‘I was talking’</td>
<td>1SG big-1SG.P-FUT-ASP</td>
</tr>
</tbody>
</table>

**Example 3**: Agent-patient system in transitive clauses

‘Woman wanders’

<table>
<thead>
<tr>
<th>Chimariko</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>no'ot ibuβembendw k'otibun, ?awa bida imandw</td>
<td>‘They took me off, I fled, I saw lots of houses’</td>
</tr>
<tr>
<td>no'ot eβi-sebe-m-đw k'ot-i-bu-t</td>
<td>1SG 1SG.P-take-DIR-DER flee-1SG.A-CONT-ASP house lots 1SG,A-see-ASP</td>
</tr>
</tbody>
</table>

?awa bida i-mam-da

1SG
Chimariko

- **Chimariko**: agent/patient distinction for 2pl?

**Example 4a/b:**

Agent-patient distinction with second person plural

<table>
<thead>
<tr>
<th>Harrington 020-1126</th>
<th>Harrington 020-1126</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>qhuk'o?nan</em></td>
<td><em>qbak'o?nan</em></td>
</tr>
<tr>
<td><em>qha-k'o?na-n</em></td>
<td><em>qha-k'o?na-n</em></td>
</tr>
<tr>
<td><strong>2PL</strong>-talk-APPL-ASP</td>
<td><strong>2PL.P</strong>-talk-APPL-ASP</td>
</tr>
</tbody>
</table>

‘You talked to him’

‘He talked to you’
Chimariko

- **Chimariko**: agent/patient distinction for 2pl?
- **Example 5:**

  No agent-patient distinction with second person plural in intransitives

  Harrington 020-1113
  mamqbedot tewqboxanat
  mamqbedot tew-qbo-xana-t
  2PL big-2PL-FUT-ASP
  ‘You are going to be big’

  - 2nd pl patient form would need to be \(-qha\)
  - verb stem \textit{tew}- requires patient forms
  - \(\Rightarrow\) distinction only in transitives for 2pl
  - \(\Rightarrow\) actor/undergoer distinction
Chimariko

- **Chimariko**: only core argument higher on hierarchy overtly indexed
- **Example 6**:

Hierarchical system: 1>3 => 1; 3>1 => 1

‘Fugitives at Burnt Ranch’

phaʔasitaʔče yekbotinda, čhaxaduʔxakon, wisseeda čhumčaxa
phaʔasitaʔče y-ekbo-tinda čha-xaduʔx-akon wisseeda čhu-m-čaxa

that.why 1SG.A-kill-PROG 1PL.P-?-FUT downstream IMP.PL-DIR-COMP

‘That’s why I killed him, they will kill us, you all move down to B. Noble’s place.’
Chimariko

- **Chimariko**: But both core arguments indexed in 2>1
- **Example 7**: Hierarchical system: 2>1 => 2 + 1 undergoer; 2>3 => 2

  a. *mixota*
    
    *m-e-xota*
    
    2SG-1SG.P-look.at
    
    ‘You look at me’

  b. *mixota*
    
    *m-i-xota*
    
    2SG-look.at
    
    ‘You look at it’

  c. *mekboxana?*
    
    *m-e-kbo-xana?*
    
    2SG-1SG.P-kill-FUT-Q
    
    ‘Are you going to kill me?’

  d. *makboxana?*
    
    *m-akbo-xana?*
    
    2SG-kill-FUT-Q
    
    ‘Are you going to kill him?’
Chimariko

- Chimariko: Summary of system

Table 1:

<table>
<thead>
<tr>
<th>Actor &gt; Undergoer</th>
<th>Affix on predicate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&gt;1</td>
<td>1 agent</td>
</tr>
<tr>
<td>1&gt;2</td>
<td>1 agent</td>
</tr>
<tr>
<td>1&gt;3</td>
<td>1 agent</td>
</tr>
<tr>
<td>2&gt;1</td>
<td>2 + 1 undergoer¹</td>
</tr>
<tr>
<td>2&gt;2</td>
<td>2</td>
</tr>
<tr>
<td>2&gt;3</td>
<td>2</td>
</tr>
<tr>
<td>3&gt;1</td>
<td>1 patient</td>
</tr>
<tr>
<td>3&gt;2SG</td>
<td>2</td>
</tr>
<tr>
<td>3&gt;2PL</td>
<td>2PL patient</td>
</tr>
<tr>
<td>3&gt;3</td>
<td>3</td>
</tr>
</tbody>
</table>

¹ The affix for the first person undergoer is different from the first person patient form.
Chimariko

- **Chimariko: Personal pronouns & discussion**
- 1 undergoer ≠ 1 patient form (1 undergoer: -e)
- 2pl patient form qha-/qha only in transitives (=undergoer, not patient)
- Sources for forms unclear
- Undergoer forms = vowels; pron. affixes = consonants

<table>
<thead>
<tr>
<th>Verbal prefixes</th>
<th>Singular agent</th>
<th>Plural agent</th>
<th>Singular patient</th>
<th>Plural patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>First person</td>
<td>y-, ?-</td>
<td>ya-</td>
<td>ēh-</td>
<td>ēha-</td>
</tr>
<tr>
<td>Second person</td>
<td>m-</td>
<td>qh-</td>
<td>m-</td>
<td>qha-¹</td>
</tr>
<tr>
<td>Third person</td>
<td>h-</td>
<td>h-</td>
<td>h-</td>
<td>h-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Verbal suffixes</th>
<th>First person</th>
<th>Second person</th>
<th>Third person</th>
</tr>
</thead>
<tbody>
<tr>
<td>First person</td>
<td>- (i)</td>
<td>ya-</td>
<td>- ēh</td>
</tr>
<tr>
<td>Second person</td>
<td>-m</td>
<td>-qh</td>
<td>-m</td>
</tr>
<tr>
<td>Third person</td>
<td>-h/∅</td>
<td>-h/∅</td>
<td>-h/∅</td>
</tr>
</tbody>
</table>

¹ Occurs only in transitive sentences with third person actors.
Chimariko

**Chimariko: Discussion**

- Could vowels (-e-, -a-) eventually be reanalyzed to signal event direction in 2>1 & 3 > 2pl?
- Unclear whether 1st person singular is ye-
- qha- could also simply parallel form of 1st person plural agents and patients which contain vowel /a/
- The forms do not stem from passives
Chimariko

- **Chimariko**: passive-like constructions semantically; no syntactic impact

- Ex. 8a: 
  - `-te`
  - signals indefinite third person actor
  ```
  ‘Crawfish’
  hoputeʔ w ?ama, txol makumčaxat q’eḥčaxat
  h-opu-teʔ w ?ama txol makum-čaxa-t q’e-h-čaxa-t
  3-mine-DER land crawfish perish-COMP-ASP die-3-COMP-ASP
  ‘They mined the land, all crawfish perished, they died all’
  ```

- Ex. 8b: 
  - `-tta`
  - foregrounds patient
  ```
  ‘Crawfish’
  ?aqʔa ?elohqʰut ?ixaʔyta, memat txolop ?iwinqʰutta
  ?aqʔa ?eloh-qʰut ʔ-ixaʔy-تا memat txol-op ʔ-iwin-qʰut-ta
  ‘I made the water hot, I dumped them alive, the crawfish, immersingly’
  ```
Chimariko

**Chimariko: Summary**

- Hierarchical system
  - Did not originate from passives or passive-like constructions (markers not apparent & have no syntactic impact)
  - No traces of deictic verbal morphology apparent in forms
  - Likely source: zero-marked third persons
  - Irregularity: 1st person & 2 plural undergoers marked
Shasta

• **Shasta**: portmanteau prefixes encoding subject person, modality, number, tense, evidentiality (Silver 1966:116-7)
  • **Modality**: hortative, imperative, volitional, potential, subjunctive, declarative
  • **Number**: singular, plural, undifferentiated
  • **Tense in the declarative mode**: present, near past, distant past, undifferentiated
  • **Person**: 1\textsuperscript{st}, 2\textsuperscript{nd}, 3\textsuperscript{rd}, and undifferentiated
  • **Evidentiality**: 3\textsuperscript{rd} person discerns direct evidential, inferential, reportative, (and gerundial, passive, & undifferentiated)
Shasta

- **Shasta**: portmanteau subject prefixes
- **Example 9**: 1st person **tá-**, **t’á-**, **s**-

**Shasta grammatical marking: portmanteau prefixes**

<table>
<thead>
<tr>
<th>Hortative</th>
<th>Volition</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>táhu’sá’</td>
<td>t’áhu’sá’</td>
<td>sáhu’sá’</td>
</tr>
<tr>
<td>tá-hu’sá’</td>
<td>t’á-hu’sá’</td>
<td>s-áhu’sá’</td>
</tr>
<tr>
<td>1.SG.HORT-talk</td>
<td>1.SG-talk</td>
<td>1.U-talk</td>
</tr>
<tr>
<td>“Let me talk!”</td>
<td>“I will talk”</td>
<td>“I might talk”</td>
</tr>
</tbody>
</table>
Shasta

- **Shasta**: Only one core argument indexed: subject
  - Presence of a 3rd person object indicated by transitivizing suffixes: applicative suffix added, but 3rd person object is left unmarked
  - Presence of 1st or 2nd person object indicated by presence of cislocative in all local relations (1/2 & 2/1) (in addition to subject marker)
  - Example 10: (from Mithun 1996:420)

```
Shasta cislocative as indicator of object
kwáhus-i-k  ‘He talked.’ (Silver 1966: 127)
kwáhus-ayant-i-ka? ‘He talked to me/you (sg).’ (Silver 1966: 59)
```
Shasta

- **Shasta: Passives**
- Shasta has a passive construction similar to that of Chimariko: there are prefixes on the verb indicating a third person indefinite actor.
- Only the third person discerns passive in the portmantaueu paradigms.
- Passive only occurs in the volitional (intention to do sth, translated by 'will' or 'going to'), potential, and declarative modes (Silver 1966:121).
Shasta

**Shasta: Passives**

Three 3\textsuperscript{rd} person prefixes in the declarative are considered passive markers: < č>, <y>, <h̓v̓> (verbs occurring with these forms are translated either as passive or as transitive)

- /čis·antaʔ/ = /yis·antaʔ/ = /hís·antaʔ/ “He was told” or “They/he told him”
- /čís·a·kentaʔ/ “They were told” or “They/he told them”
Shasta

- **Shasta: Summary**
- No person hierarchy: subject is indexed
- Different developments for local (1/2 & 2/1) and non-local (3/3) relations
  - Local relations: cislocative
  - Non-local relations: applicative (3rd p. object), passive (3rd p. indefinite actor)
- No pervasive passive, only in 3/3 (=> could develop into obviative system)
Wintu

- **Wintu**: Nominal case marking following nominative/accusative pattern
- Nouns and pronouns are treated as either particular or generic in aspect (a contrast often reflected in specificity or animacy; Golla 2011:146)
- Nouns and pronouns are inflected for accusative case; nominative is unmarked

Table 3: Wintun nominal inflection for aspect and case (Golla 2011:147)

<table>
<thead>
<tr>
<th>Gloss</th>
<th>Aspect</th>
<th>Subject (nominative; unmarked)</th>
<th>Object (accusative: -(u)m, -l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>“stone”</td>
<td>generic</td>
<td>son</td>
<td>sonum</td>
</tr>
<tr>
<td>“stone”</td>
<td>particular</td>
<td>sob</td>
<td>sobum</td>
</tr>
<tr>
<td>“fingernail”</td>
<td>generic</td>
<td>k’abay</td>
<td>k’abayum</td>
</tr>
<tr>
<td>“fingernail”</td>
<td>particular</td>
<td>k’abab</td>
<td>k’ababum</td>
</tr>
<tr>
<td>“older sister”</td>
<td>generic</td>
<td>lay</td>
<td>layat</td>
</tr>
<tr>
<td>“older sister”</td>
<td>particular</td>
<td>lab</td>
<td>labat</td>
</tr>
</tbody>
</table>
Wintu

- **Wintu**: Dependent marking (Pitkin 1984:138-142)
- Optional 1\textsuperscript{st} person subject suffix \textit{–da} on predicate (possibly related to the substantival emphatic and intensifying suffix \textit{–da})
  - Syntactically it participates in the system of evidentials \(\rightarrow\) visual evidence
  - Co-occurring with an evidential it is used to express first person
  - When marking person, it contrasts with 2\textsuperscript{nd} and unmarked 3\textsuperscript{rd} person
- Optional 2\textsuperscript{nd} person subject suffix \textit{–sken}
  - Resembles combination of generic aspect \textit{–s} & noun \textit{ken} or auxiliary \textit{keneh}
  - Suffixixed only to 4 auxiliaries and 3 suffixes: the passive \textit{–bire}, the hearsay evidential \textit{–kele}, and the nonvisual evidential \textit{–ntbele}
Wintu

- **Wintu: Passive**
- Inflectional suffix {here} or hE (Pitkin 1984:115)
- Followed by 5 suffixes: 1st person -da, 2nd person -sken, generic aspect -s, inevitable future -le, hortative -di
- Seems that *here* was historically a stem available for compounding
- Shepherd 2006:28: passive *-her* parallels the other auxiliaries in form and function
- **Examples (Pitkin 1984:116):** λey-hi-da ‘I just got hit’; λey-here-sken ‘you just got hit’; λey-here-s ‘the one who got hit’, doyu-here-sken ‘it is being given to you’, doyu-hi-da ‘it is being given to me’
Wintu

- **Wintu: Summary**
- Dependent case marking with some (optional) head marking
- Optional indexing of 1st and 2nd person on predicates in certain instances
- Optional indexing also occurs in passive constructions
Conclusions

- Certain factors seem to come together in hierarchical systems
  - Head-marking for grammatical relations
  - Zero-marked 3rd person
  - Head-marking for possession
  - Some form of event direction marking (except Chimariko)
- Passive constructions are not necessarily responsible
  - In languages with no pervasive or syntactic passives (Chimariko, Shasta, Wintu), passive constructions are either not responsible for the formation of a hierarchical system or such system does not occur
Conclusions

- Results show that systems have crystallized in different stages of development which explains many of the irregularities.
- Language contact may contribute to the origin of a particular grammatical system (as shown in Mithun 2007, 2010, 2012), but language-internal underlying mechanisms are crucial.
- Overall, each system/language is studied best individually.
Thank you!

(see handout for references)
<table>
<thead>
<tr>
<th>Grammatical relations</th>
<th>Chimariko</th>
<th>Karuk</th>
<th>Shasta</th>
<th>Palaihn, Achumawi</th>
<th>Palaihn, Atsugewi</th>
<th>Yana</th>
<th>Pomoan</th>
<th>Yurok</th>
<th>Wintu</th>
<th>Yuki</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic system</td>
<td>Agt/patient</td>
<td>mixed</td>
<td>N/a</td>
<td>N/a</td>
<td>N/a</td>
<td>N/a</td>
<td>Nom/acc</td>
<td>N/a</td>
<td>N/a</td>
<td>N/a</td>
</tr>
<tr>
<td>Locus</td>
<td>Head</td>
<td>Head</td>
<td>Head</td>
<td>Head</td>
<td>Head</td>
<td>Head</td>
<td>Dependent/Head</td>
<td>Dependent</td>
<td>Dependent</td>
<td>Dependent</td>
</tr>
<tr>
<td>Form</td>
<td>Prefixes or suffixes</td>
<td>Prefixes</td>
<td>Portmanente prefixes</td>
<td>Portmanente pre-/suffix combinations</td>
<td>Suffixes</td>
<td>Enclitics/suffixes</td>
<td>Suffixes + some prefixes</td>
<td>Suffixes</td>
<td>Suffixes</td>
<td></td>
</tr>
<tr>
<td>Number of core arguments on predicate</td>
<td>1 (except 2/1 = 2 + 1)</td>
<td>1</td>
<td>1 (subject)</td>
<td>1 or 2</td>
<td>1 or 2</td>
<td>1</td>
<td>0</td>
<td>2 or 1</td>
<td>0 (1 for 1st &amp; 2nd p. sometimes)</td>
<td>0</td>
</tr>
<tr>
<td>Hierarchical system</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Person &amp; role or person on only on pronominal affixes</td>
<td>person (+ role 1st &amp; 2pl)</td>
<td>person (+ some role)</td>
<td>person only</td>
<td>person &amp; subj/obj comb.</td>
<td>person only</td>
<td>N/a</td>
<td>person + role</td>
<td>N/a</td>
<td>N/a</td>
<td></td>
</tr>
<tr>
<td>Agentive system</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>(entire paradigm)</td>
<td>no</td>
<td>no</td>
<td>Yes (patient case; only for humans)</td>
</tr>
<tr>
<td>Inverse system (local, non-local, mixed)</td>
<td>no (incipient?)</td>
<td>yes (incipient; 1st person)</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>-y passive</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Zero-marked arguments</td>
<td>3rd person</td>
<td>3rd person</td>
<td>3rd person</td>
<td>3rd person</td>
<td>3rd person</td>
<td>3rd person</td>
<td>nominative case (South-eastern Pomo)</td>
<td>3rd person</td>
<td>Nominative case (subjects); 3rd person on verbs</td>
<td>agents</td>
</tr>
<tr>
<td>Nominal core case</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Passive markers</td>
<td>-te &amp; -ta</td>
<td>-t passive (irregular; not throughout)</td>
<td>(j_3, y_3, h_3g e)-passives</td>
<td>(d_3)-medio-passive</td>
<td>(d_3)-medio-passive</td>
<td>(-\text{aw} ) passive</td>
<td>(-\text{y} ) defocus ; (-\text{aw} ) unspec. agent</td>
<td>j passive (Mithun 2012)</td>
<td>(-\text{aw} ) mediopassive</td>
<td>-il mediopassive</td>
</tr>
<tr>
<td>Word order*</td>
<td>Verb-final</td>
<td>free</td>
<td>Pragmatically based</td>
<td>Verb-initial</td>
<td>free</td>
<td>Verb-initial</td>
<td>Verb-final</td>
<td>Verb-final</td>
<td>free</td>
<td>Verb-final</td>
</tr>
<tr>
<td>Possession</td>
<td>Head: pre- or suffixes on possessed</td>
<td>Head: pre-fixes on possessed</td>
<td>Dependent: suffixes on possessor noun or pronoun</td>
<td>Dependent: suffix on possessor; special set of independent pronouns</td>
<td>Head: suffixes on possessed; Dependent: possessive demonstratives; (k(i)) particle</td>
<td>Dependent: suffixes on possessor; special set of indep. pronouns; Head: prefixes on possd. kinship</td>
<td>Head: prefixes on possessed</td>
<td>Dependent: suffix on possessor noun or pronoun**</td>
<td>Head: prefix on kinship terms</td>
<td>Head: prefix on kinship terms</td>
</tr>
<tr>
<td>Shape of possessive affixes (same or different from pron. affixes)</td>
<td>Yes</td>
<td>Some similarity, but generally different</td>
<td>N/a</td>
<td>N/a</td>
<td>N/a</td>
<td>Yes</td>
<td>N/a (diff.)</td>
<td>No (but similar to forms of independent pronouns)</td>
<td>N/a (diff.)</td>
<td>N/a (diff.)</td>
</tr>
</tbody>
</table>

* no everyday conversational data for most languages, only oral narratives

Wintu: **genitive case marks nouns as possessors and as agents of passive verbs

Hierarchies (from Mithun 2012)
Chimariko: 1, 2 > 3 & agent/patient
Karuk: 2pl > 1 > 2sg > 3
Yana: 1, 2 > 3 & patient/agent
Yurok: 1pl > 2 > 3sg > 3pl
REFERENCES


