Contextually dependent reference to sets and categories

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Introduction

The aim of this paper is to examine the **role of context** in the

identification   construction

of ***exemplar-driven***

sets and categories

Part of a larger project:
LEAdhoC Project '*The linguistic expression of ad hoc categories*'
    - 4 years (2015-2019), Principal Investigator: *Caterina Mauri*
    - funded by the Italian Ministry of Education, University and Research
    - cross-linguistic, diachronic, corpus-based, psycholinguistic evidence

Introduction

E.g. *So they live in rivers and in swamps **etcetera/and in suchlike places.***

Exemplar-driven categorization strategies

Preliminary studies: Mauri (2014), Mauri and Sansò (2014), Barotto (2015):

✓ the process of category construction through exemplification represents a **basic communicative function** in human communication

✓ languages use recognizable linguistic strategies through which speakers perform such an operation.

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The linguistic constructions serving this function range from **inflectional...**

(1)   Classical Japanese (isolate; Vovin 2003: 40)

tani-no   *soko-**nado**-ni*   *fa*

valley- GEN   bottom-REPR-LOC   TOP

'at the bottom of valleys **and other places like that.**'

Associative plurals

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Associative plurals

Derivational affixes

(2)   Italian
*Dire che la Boldrini è uguale a Mastella, al figlio di Bossi o al **berluscon**-**ame** è una violenza ideologica che non porta da nessuna parte*
'to say that Boldrini is the same as Mastella, as Bossi's son or as **Berlusconi &co.** is an ideological violence that does not lead anywhere'
(http://forum.gamberorosso.it/)

Introduction

… to syntactic strategies

(3) Koasati (Muskogean; Kimball 1991: 413)

akkámmi-t   *ow-i:sá-hci*   *hahci-f-ó:t*   *oktaspi-f-ó:t*   *kámmi-fa*

be.so-CONN   LOC-dwell.PL-PROG   river-in-LIST   swamp-in-LIST   be.so-in

'So they live in rivers and in swamps and **in suchlike** places.'

(4) Japanese (isolate; Kuno 1973: 115)

[Biiru-ya   *sake-o]*drinks   *takusan nomimashita.*

beer-and   sake-ACC   lots   drank

'[I] drank lots of beer and sake **and stuff like that**.'

Exemplifying connectives

Introduction

- ✓ **Great formal variation** across languages

Different levels: DISCOURSE --------- LEXICON -------- MORPHOLOGY

Different domains: LISTS ----------- PLURALS -----------WORD FORMATION

- ✓ **Functional equivalence**:

  Constructions referring to sets and categories through exemplification

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- ✓ **Functional equivalence**:

  Constructions referring to sets and categories through exemplification

….What does all this have to do with Contextualism **?!**

Aims of the talk

We will argue that these constructions, despite their morpho-syntactic variability, *systematically* and *necessarily* require **access to context** in order to be interpreted

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✓ We aim to provide a detailed analysis of the role played by *i)* **context** and *ii)* **pragmatic inferences** in the interpretation of exemplar-driven categorization strategies

Aims of the talk

➡️ We will argue that these constructions, despite their morpho-syntactic variability, *systematically* and *necessarily* require **access to context** in order to be interpreted

✓ We aim to provide a detailed analysis of the role played by *i)* **context** and *ii)* **pragmatic inferences** in the interpretation of exemplar-driven categorization strategies

✓ We will address the following questions:

➤ what types of pragmatic mechanisms are at work?

➤ Are they necessary for interpretation (cf. **Primary pragmatic processes** Recanati 2004)?

➤ Can these constructions be considered **indexical** in some way?

What is said?

What is said?

1) *(they prefer to stay) at* [the bottom of valleys-*nado*] (Classical Japanese)
→ associative plural –*nado* [the bottom of valleys and other places like that/etc.]

2) *So they live in* [rivers-*ó:t* swamps-*ó:t*] (Koasati)
→ connective -*ó:t* [in rivers and in swamps and so on / and in suchlike places.]

3) *I drank lots of* [beer-*ya* sake] (Japanese)
→ connective –*ya* [beer and sake etcetera / and stuff like that.]

Saturation

1) *(they prefer to stay) at* [the bottom of valleys-*nado*] (Classical Japanese)
→ associative plural –*nado* [the bottom of valleys and other places like that/etc.]
   [the bottom of valleys] and other X*s*

2) *So they live in* [rivers-*ó:t* swamps-*ó:t*] (Koasati)
→ connective -*ó:t* [in rivers and in swamps and so on / and in suchlike places.]
   [rivers, swamps] and other X*s*

3) *I drank lots of* [beer-*ya* sake] (Japanese)
→ connective –*ya* [beer and sake etcetera / and stuff like that.]
   [beer, sake] and other X*s*

Reference is made to: Exemplar(s) AND some further X*s*

X = free variable, a slot to be saturated
X is characterized by plurality and non-exhaustivity → *this is encoded!*

What saturation?

How can X*s* be identified?

✓ The identification of X*s* is not strictly dependent on the identity of the participants, nor on the time and place of the speech act *strictu sensu*, like typical indexicals - personal pronouns (e.g. *he, you*) and other deictic elements (e.g. *here, there, now*).

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✓ **X*s*** can be identified through **SIMILARITY REASONING**

Associative reasoning

What properties are selected for similarity reasoning is crucially dependent on context!

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2) *So they live* [in rivers and in swamps and in suchlike places / etcetera.]

Context 1 → they = bacteria who live in water
Property → water
Truth conditions → X = swimming pools, X = the sea.

Context 2 → they = frogs
Property → freshwater
Truth conditions → X = ponds, *X = swimming pool, *X = sea

Context 3 → they = jellyfish
Property → natural, non-treated water
Truth conditions → X = the sea, *X = swimming pool

Associative reasoning

What properties are selected for similarity reasoning is crucially dependent on context!

3) *I drank lots of* [beer, sake etcetera / and such things]

Context 1 → at a Japanese restaurant
Property → alcoholic drink you may have at a Japanese restaurant
Truth conditions → X = shinshū wine, *X = RedBull

Context 2 → in my trip to Japan
Property → typical Japanese drink
Truth conditions → X = green tea, *X = vodka

Context 3 → I = speaker who does not like wine (the hearer knows it)
Property → the speaker would drink it
Truth conditions → *X = shinshū wine, *X = vodka

Associative reasoning

Similarity reasoning is based on those properties of the exemplar that are **more RELEVANT and ACCESSIBLE in the context**

→ **Top-Down ASSOCIATIVE REASONING**

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X*s* = only a **subset** of all referents sharing with the Exemplar(s) a similarity relation

→ **Subset** sharing those properties that are **contextually relevant**, based on associative reasoning

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? **Is that all** **?**

NO

Abstraction

The **INTUITIVE** selection of the **contextually relevant properties** of the explicit Exemplar(s) leads to

✓ Context-based associative reasoning

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and to

✓ **ABSTRACTION**
over the explicit Exemplar(s) **towards a set or category C comprising both the explicit Exemplar(s) and implicit X*s***

Abstraction

1) *(they prefer to stay) at* [the bottom of valleys-*nado*]

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2) *So they live in* [rivers-*ó:t* swamps-*ó:t*]

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Abstraction

1) *(they prefer to stay) at* [the bottom of valleys-*nado*]

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>> **reference to X***s* = **contextually associated to the bottom of valleys**

>> **reference to C** = [**LOWER and CLOSED PLACES**] (*X=mountain top)

2) *So they live in* [rivers-*ó:t* swamps-*ó:t*]

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>> **reference to X***s* = **contextually associated to rivers and swamps**

>> **reference to C** = [**WATERY and HUMID PLACES**] (*X=stony hill)

3) *I drank lots of* [beer-*ya* sake]

→ connective –*ya* [beer and sake etcetera / and stuff like that.]

>> **reference to X***s* = **contextually associated to beers and sake**

>> **reference to C** = [**ALCOHOLIC DRINKS Speaker DRINKS**] (*X=pepsi cola)

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- ✓ do not come with ready-made linguistic labels, but are conveyed through complex expressions and exemplification
- ✓ less established in memory, unlike stable categories
- ✓ context-dependent, both for their construction and interpretation

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→ **Croft & Cruse (2004): there are no stable categories.** All categories are the result of a process of construal, which is contextually determined (cf. ad hoc concepts, Wilson & Carston 2007, Carston 2010)

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→ The ad hoc category may be foregrounded or backgrounded in discourse: it may be what the speaker is talking about, or it may be instrumental to the identification of further X

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2) **Top-down associative reasoning**

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A2) **Exemplar(s) and some further X*s* showing the same contextually RELEVANT properties as Exemplar(s), resulting in the ad hoc category C**

3) **Abstraction**

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✓ **Are they equally part of the intuitions of those who fully understand the utterance?**

✓ **Do they affect the truth-evaluability of the sentences?** So that different processes of abstraction, associative reasoning and saturation (starting from the same exemplars) may lead to different truth-conditions?

What is said

5) [..] a lump sum to be held by the town council, to be used as a form of grant, or financial support

for [low income families, students, unemployed, <u>etcetera</u>],

on production of the relevant proof, erm, depending on the **individual's needs**, [...].

(BNC, hyjS_meeting)

Exemplars$_{[Low\ income\ families,\ students,\ unemployed]}$

and **further Xs** sharing with Exemplars the property **P**$_{[needing\ financial\ help]}$

which together constitute the **category C**$_{[people\ needing\ financial\ help]}$

[...] financial support for low income families, students, unemployed, and other people needing financial help

What is said

6) […] I think it's Sue that is supposed to be working with me cos I want to do something on [**recycling of rubbish <u>etcetera</u>**] within the school […]. Plus within **my environmental thing** I would like to be able to see if we can get four areas within the school

(BNC, hyjS_meeting) →]

Exemplar[recycling of rubbish]

and **further X*s*** sharing with Exemplar the property **P**[environment-friendly],

which together constitute the **category C**[environment-friendly activities]
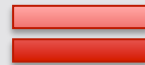
[…] do something on recycling of rubbish and other environment-friendly activities

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- The context-relevant properties of the Exemplar(s), identified through associative reasoning (*being in need of financial help*, *being environment-friendly*)

- Reference to a set or category comprising the Exemplar(s) and further elements sharing the context-relevant properties, identified through abstraction (*PEOPLE in need of financial help, environment-friendly ACTIVITIES*)

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- Reference to a set or category comprising the Exemplar(s) and further elements sharing the context-relevant properties, identified through abstraction (*PEOPLE in need of financial help, environment-friendly ACTIVITIES*)

✓ **The exact identification of X*s* is not part of the speaker's representation!**

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➢ We maintain that **we still need saturation,** because we have a slot Xs that has to be filled

BUT

what has to be filled is not the exact **Reference** of Xs, as in typical indexicals, but rather **the Category to which Xs belong**, leaving their reference non-specific.

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✓ The presence of a slot to be filled through context is linguistically encoded…

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✓ The presence of a slot to be filled through context is linguistically encoded…

?? **Should we ascribe this to an indexical component?**

To conclude

- **We argue that exemplar-driven categorization constructions systematically require three types of <u>primary pragmatic processes</u>, which affect the truth-evaluability of the propositions in which they occur:**

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  1) Saturation

  2) Top-down associative reasoning

  3) Abstraction

To conclude

The reason why processes 2) *associative reasoning* and 3) *abstraction* affect the truth-evaluability of the proposition is that they are necessary for 1) *saturation*

... that is, for the identification of the **Category to which X*s* belong**

... and the identification of the **Category to which X*s* belong** is more necessary to have a truth-evaluable proposition, than the identification of individual X*s.*

Next steps

- ✓ Psycholinguistic evidence

- ✓ In-depth corpus-based studies

- ✓ Wider cross-linguistic research

...coming soon
on the LEAdhoC project!

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