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**A system of replicable constraints in the age of semiotic binge.  
On the complementarity of symbolic and dynamic aspects of language**

*1<sup>st</sup> Conference of the International Association for Cognitive Semiotics*

Lunds Universitet, Sverige

September 25-27, 2014

# An ecological view of language

- Nowadays, the traditional view of language as a “code”, made up of a list of abstract symbols and a set of formal rules to combine them (e.g. Pinker 1999) seems to be no longer tenable.
- An increasing number of studies demonstrate that language is characterized by several integrated dimensions, facets, and time-scales. Also, language **emerges** through intersubjective experience and evolves over time in an ongoing **self-organizing** process (Raczaszek-Leonardi and Kelso 2008; Thibault 2014).

# Interactive dynamics and linguistic symbols

- Language use is part of the dynamics of an interaction. The most basic function of language is to facilitate **interpersonal coordination** (e.g. Verhagen 2005).
- Linguistic symbols are **information-bearing entities** which emerge as a result of the pressure of communicative needs and serve as concrete constraints on the development of an interaction.
- Dynamic processes **shape** the symbolic structures of a language (Raczaszek–Leonardi and Kelso 2008).

# A system of replicable constraints

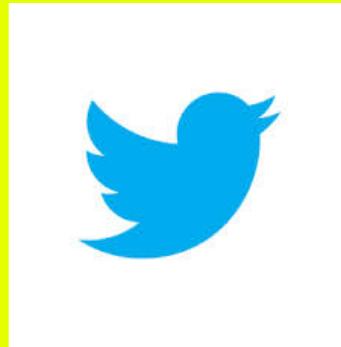
- Language is a **dynamic system** (e.g. Elman 1995; Raczaszek–Leonardi and Kelso 2008)
- The meaning of linguistic symbols arises through usage to constrain the dynamics of an interaction and becomes conventional after **successful repetition** over time.
- Linguistic symbols only provide a small part of the message, with rest of the communication being supplied by the specific **frame of reference** (Raczaszek–Leonardi 2009).

# Symbols as resources for action

- Performing a constraining rather than referential function, symbols are flexibly used to **act** in a specific situation.
- As a consequence, linguistic meaning cannot be found **either** in object of the external world **or** in individual minds.
- **Rather**, it flexibly **emerges** in context, because of the **tension** between the conventional function(s) of a symbol and the situational uniqueness of each communicative event (Torre 2013; Raczaszek–Leonardi 2014)

# The age of semiotic binge

- Nowadays, with the proliferation of media, we are constantly –and often, **simultaneously**– attending to **multiple stimuli**.



# Multi-modal integration

- I will address the **integration** of linguistic symbol and visual background in a series of memes published on Facebook® over the last year.
- HYPOTHESIS: the conventional semantic value of the linguistic symbol will **constrain** the range of the non-linguistic backgrounds it can be coupled to (without nonetheless being deterministic). The meaning of the memes will **emerge** from the symbol-background integration.

# DISCLAIMER

- I **apologize** for the bad language and/or explicit content contained in some of the following memes.
- Some of the memes may include non-politically correct views which **do not** necessarily reflect my beliefs.
- The choice of the memes to be included in the present contribution was **ONLY** driven by **explanatory purposes**.

# Facebook Meme 1 – text only

I've waited 13 years for this moment.

# Facebook meme 1 – text + image

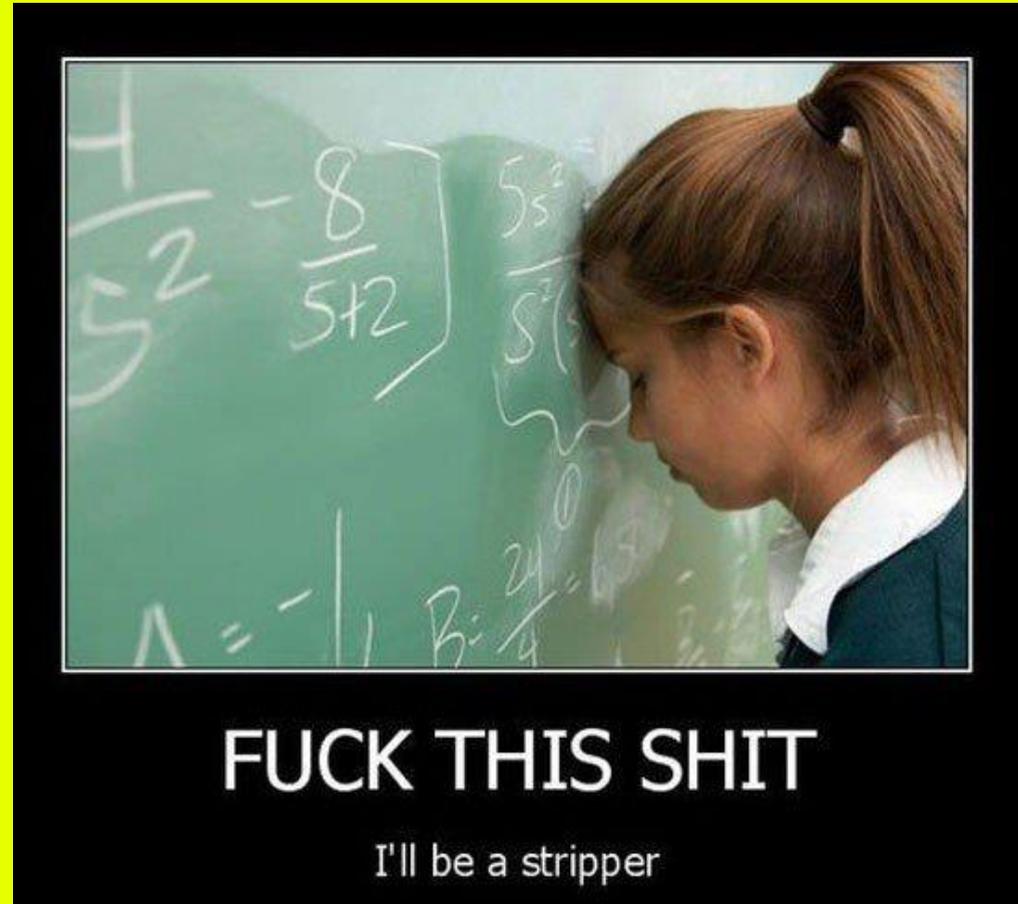


## Facebook meme 2 – text only

FUCK THIS SHIT.

I'll be a stripper.

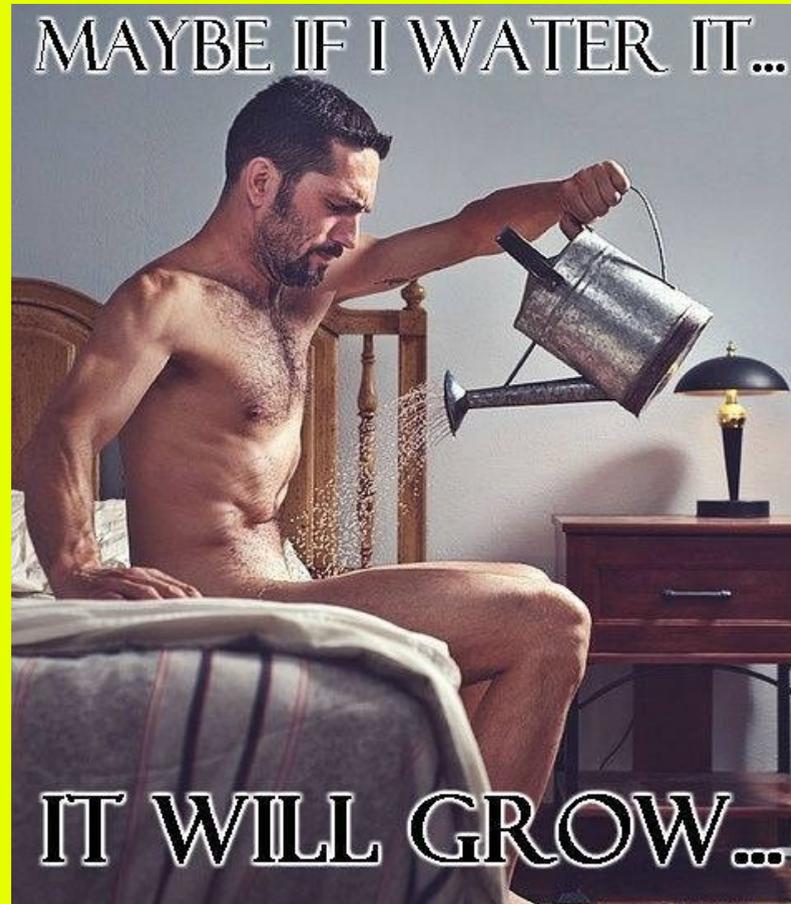
## Facebook meme 2: text + image



## Facebook meme 3 – text only

MAYBE IF I WATER IT...  
IT WILL GROW...

## Facebook meme 3: text + image



## Facebook meme 4 – text only

with breathless anticipation  
the crowd awaited  
the unveiling of the Bush statue

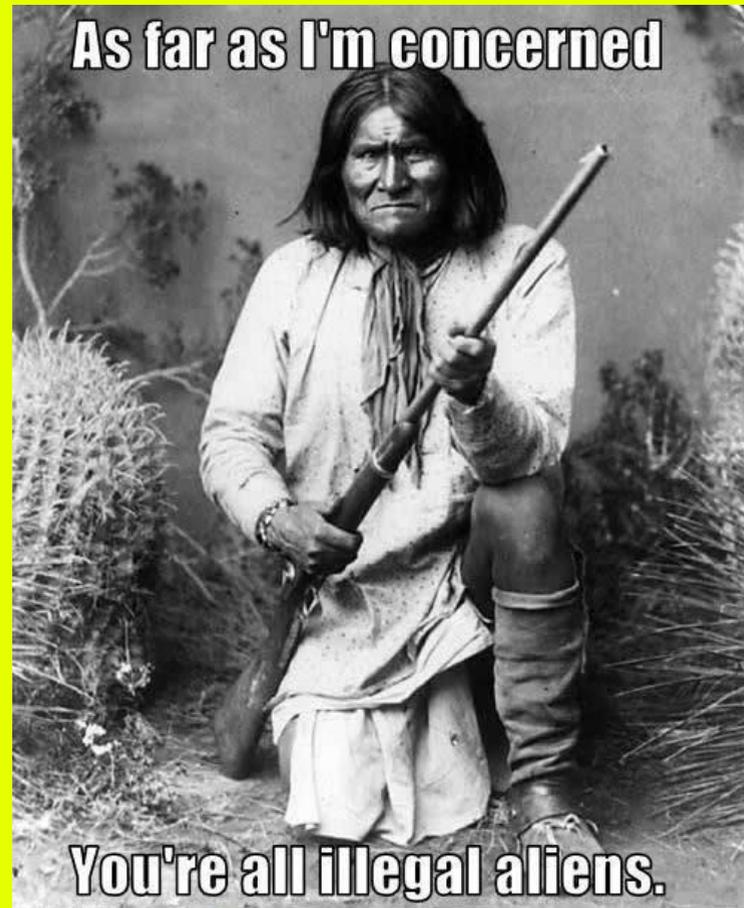
## Facebook meme 4: text + image



## Facebook meme 5 – text only

As far as I'm concerned  
You're all illegal aliens.

## Facebook meme 5: text + image



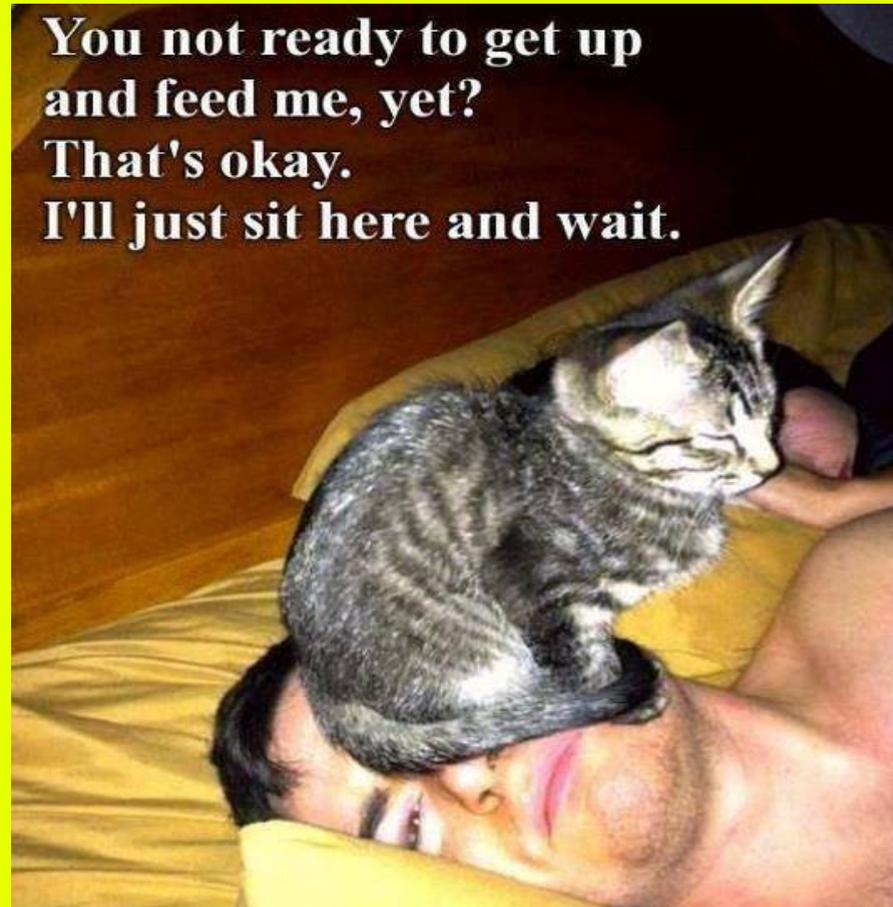
## Facebook meme 6 – text only

You not ready to get up  
and feed me yet?

That's ok.

I'll just sit here and wait.

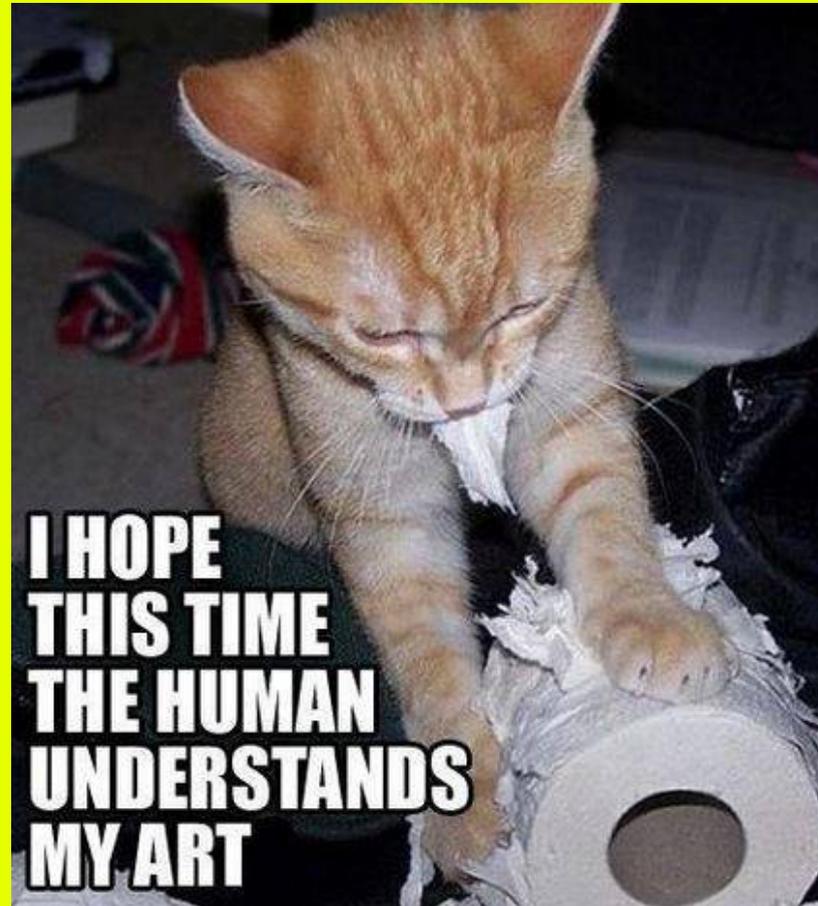
## Facebook meme 6: text + image



# Facebook meme 7 – text only

I HOPE  
THIS TIME  
THE HUMAN  
UNDERSTANDS  
MY ART

## Facebook meme 7: text + image



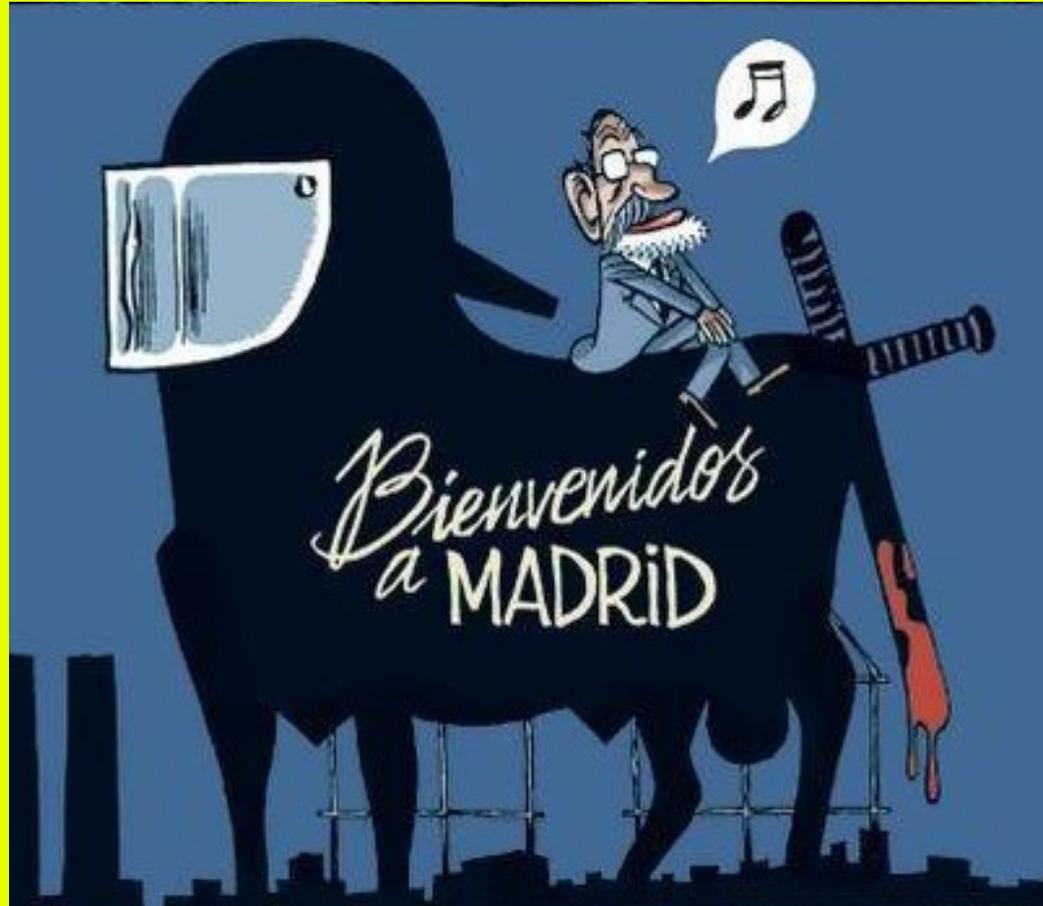
## Facebook meme 8 – text only

Bienvenidos a MADRID.

Welcome.mpl to MADRID

“Welcome to MADRID.”

## Facebook meme 8: text + image



# The bi-directionality of the process

- Consistent with the original hypothesis, the conventional semantic value of a linguistic symbol **constrains** the selection of the possible backgrounds it can be coupled to, leaving nevertheless room for possible alternative combinations.
- The process is **bi-directional** rather than one-way, with the non-linguistic background also constraining the choice of the linguistic symbols it can be coupled to.

# Collective influences on personal choices

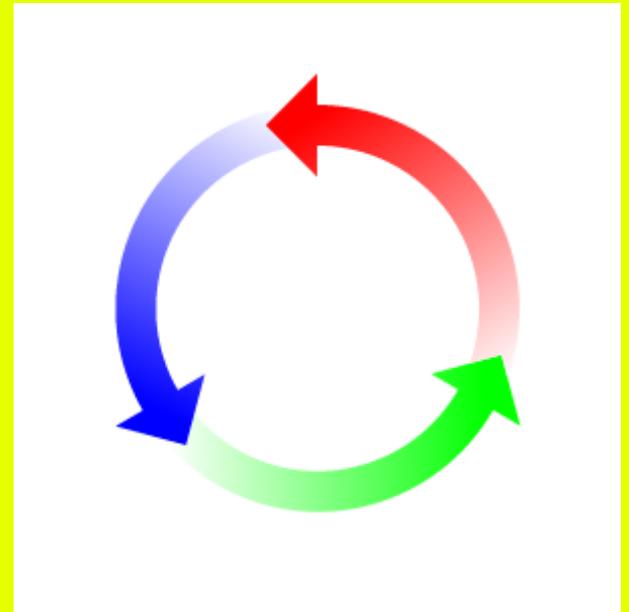
- **Intuitively**, the publication of a post in a social network may seem to be driven by individual choices.
- **Nevertheless**, social networks are virtual niches where communication is regulated by **collective dynamics** (Raczaszek-Leonardi and Cowley 2012; Torre 2014).
- Consequently, the choice to publish certain content can trigger an indefinite range of potential **reactions**, some of which are nevertheless more likely to occur than others.

# Symbolic and dynamic aspects of language

- Communication takes place in a **normative** context, where the relation between **action** and **reaction** is crucial in defining them both (e.g. Enfield 2011; Enfield and Sidnell 2014).
- A communicative move will trigger a **sign–response cycle**, fleshed out by an increasingly complex action–reaction **sequence** (e.g. Torre 2014).
- The intricacy of the context of language use supports Raczaszek–Leonardi's claim about the **complementarity** between **symbolic** and **dynamic** aspects of language.

# Causal Circularity

- It is possible to observe a principle of **causal circularity** in action (cf. Kelso 1995):
- On the one hand, the conventional values of a symbol **constrains** the range of meanings it can assume in context;
- At the same time, each occurrence of a symbol in context contributes to **re-define** its conventional value.



# The soft-assembly of meaning in context

- Due to the variation created by the persistent action of the principle of causal circularity, it seems reasonable to conceive meaning as **soft-assembling** in the “here and now”, rather than having a “pre-packaged” content (e.g. Torre 2013) .
- As a consequence, I would like to propose that each communicative event creates **its own meaning**, similarly to what Thelen and Smith (1994) proposed with reference to cognitive acts.

# Complexity as the key

- Valuable insights into the nature of linguistic meaning can only be gained by **doing away** with views which conceive language as an activity of encoding and decoding abstract symbols.
- Instead, it is necessary to embrace the nature of language as a manifestation of **human action and interaction**. As such, language is an inherently **complex** phenomenon which interacts with other aspects of cognition in the environment, being part of **exponentially more intricate** interactive processes.

# Conclusion

- “A **viable** theory of language **cannot** possibly be simple. (...) Just like other cognitive skills, language is (...) embodied, situated, and distributed, and thus linguistic structures, instead of being independent vessels for meaning, are seen as **immersed** in a variety of **dynamical events** that **give rise to** them and are, in turn, **controlled by** them.” (Raczaszek–Leonardi 2014: 37; emphasis added).
- The availability of social networks enables us to observe the phenomenon in an ecological niche characterized by the **creativity** of many users, **different degrees** of mutual knowledge between the interlocutors, and a certain level of indeterminacy of the environment, which makes it possible to fully appreciate the complexity of human interactions.

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THANK YOU!

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