

THE NARRATIVE DIMENSION OF PANTOMIME: AN EVOLUTIONARY PERSPECTIVE

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OVERVIEW

- ❑ Narrative thought
- ❑ Narrative language
- ❑ Isomorphism
- ❑ The narrative first hypothesis
- ❑ Pantomime as “storytelling without language”
- ❑ Pantomime as an evolutionary bridge from narrative thought to narrative language
- ❑ Multimodality as the evolutionary outcome of the coevolution between pantomime and speech
- ❑ Gestures as residual forms of pantomimic communication

Narrative-first hypothesis

- narrative representation without language

Isomorphism principle

- the form of thought constraints the form of expression of thought

TWO HYPOTHESES

1

If narrative is the specific way humans represent reality, then storytelling ability has to be the specific way humans express their thoughts.

2

Pantomimic storytelling (PS) is the expressive system used by our predecessors to share their narrative representations of reality. Pantomime gave rise to language because PS represents the bridge connecting the narrative thought with the narrative language.

HOMO NARRANS



Bruner (1991, p. 4): "we organize our experience and our memory of human happenings mainly in the form of narratives — stories, excuses, myths, reasons for doing and not doing, and so on"

Niles characterizes (1999) our species in terms of *Homo narrans* and Corballis (2014, p. 40) claims that "non human species do not seem to exchange information about events, or about the nature of the world; they do not tell stories"

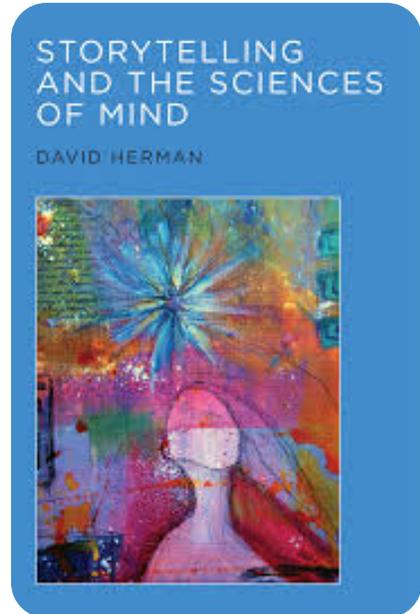
HOLISTIC SIMULATION OF EXPERIENCE

The highlight of narrative as an adaptive tool rests on the ability to convey a *holistic simulation* of human experience. Narrative, in effect, "may function as a virtual reality enabling humans to acquire knowledge useful to the pursuit of fitness without undertaking the risk of cost of first-hand experience" (Scalise-Sugiyama, 2000, pp. 223-4).



HOLISTIC SIMULATION OF SOCIAL EXPERIENCE

Narrative (...) constitutes a primary resource for configuring circumstances and events into more or less coherent scenarios involving the experience of persons. More than just requiring adoption of the intentional stance for its interpretation, storytelling also affords a basis for registering and making sense of the intentions, goals, feelings, and actions that emerge from intelligent agent's negotiation of appropriately scaled environment. (...) Stories allow (...) reasons, which are analyzable into interlocking set of beliefs and desires (...) to be configured into internally coherent and situationally appropriate accounts of why someone has acted – or failed to act – in the way he or she has (Herman, 2013, p. 74).



THE LANGUAGE-FIRST HYPOTHESIS

- Language is a necessary condition for storytelling. It is more than this, however: the verbalness of narrative is one of the things that distinguish it from other art forms and, thus, goes to the issue of design and function (Scalise-Sugiyama, 2005, p. 181).
- Language has an inherently narrative nature more than narrative has an inherently verbal structure

INDEPENDENCE OF NARRATIVE FROM LANGUAGE

Despite the "linguistic turn" of thought late in the twentieth century, narrative does not depend on language. It can be expressed through mime, dance, wordless picture book, or movies. And although such narratives are often predicated on or elaborated through language, they need not be. Languageless adults in Mexico – never taught sign language, living together on the fringes of society – mime narrative from one another (Schaller, 1991). They can do so only because even without language humans share an ability to understand and represent events in complex ways (Boyd, 2009, 130-131).



Pictures

- visual images can narrate without the help of words, yet bringing the viewer a meaning that goes beyond the sum of the depicted thing;

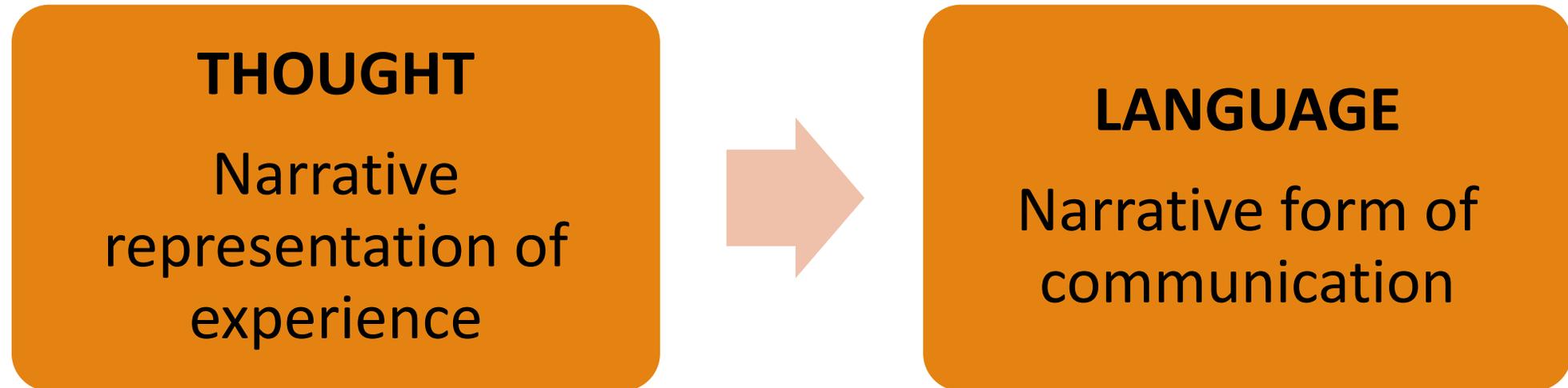


Pantomime

- it can be a medium for a fully-fledged narrative with just one actor with his rich repertoire of bodily expressions.

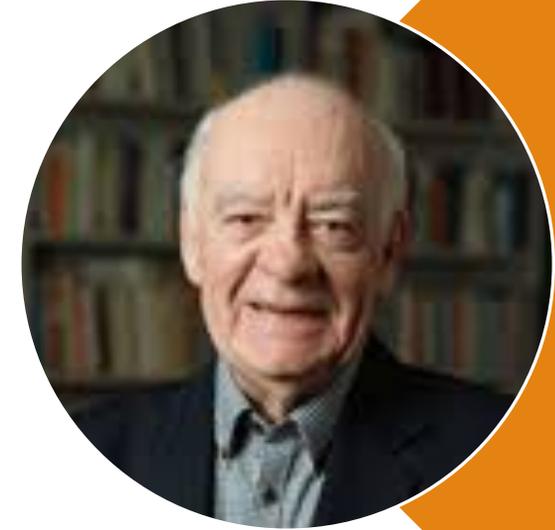


THE NARRATIVE FIRST HYPOTHESIS



The isomorphism principle

MIMETIC REPRESENTATION AT THE ORIGIN OF LANGUAGE



although it is logically prior to language, *mimetic representation* has characteristics that are considered essential to language and would thus have set the stage for the later emergence of speech (Donald, 1991, p. 171).



- ✓ Intentionality
- ✓ Generativity
- ✓ Communicativity
- ✓ Reference
- ✓ Autocueing
- ✓ The ability to model an unlimited number of objects

THE UNIQUENESS OF HUMAN BEINGS



If there is anything that defines our species as unique (...), it is the telling of stories, and the invention of language as the means of doing so (Corballis, 2015, p. 107).



If human communication differs from that of other animals because of its narrative character, pantomime could be considered as a precursor of language provided that it displays narrative features.



Storytelling, behavior planning, and language evolution in context

*Glen McBride**

Mimes are not language. The proposal is that mimes come into being as a way of telling stories long before any possibility of language existed or was even anticipated. Mime was a complete storytelling process well within the talents of the hominins in whose bands it occurred. These individuals had zero concept of language, but they could manage mimed stories and understand them (McBride, 2014, p. 3).

Defining Pantomime for Language Evolution Research

Przemysław Żywiczyński¹ · Sławomir Wacewicz¹  · Marta Sibierska¹

a non-verbal, mimetic and non-conventionalized means of communication, which is executed primarily in the visual channel by coordinated movements of the whole body, but which may incorporate other semiotic resources, most importantly non-linguistic vocalizations. **Pantomimes are acts of improvised communication that holistically refer to a potentially unlimited repertoire of events, or sequences of events, displaced from the here and now** (Żywiczyński et al., 2016, p. 9).

PANTOMIME: FOCUSING ON LIMITATIONS

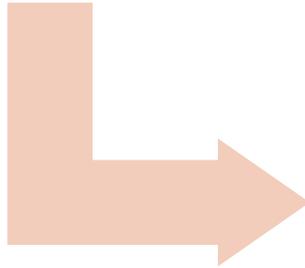
The passage from pantomime to symbolic language it is due to the *expressive limitations of pantomime*:

- ❑ Pantomime has limitations: it's hard to pantomime blue (Arbib, 2012, p. 219).
- ❑ In the early stages, perhaps, stories were told as pantomimes, as people acted out their experiences. But pantomime is inefficient and often ambiguous, and needed to be developed into a system of symbols whose meanings were clear, and understood by members of the community (Corballis, 2015, p. 91).

THE COST OF FOCUSING ON LIMITATIONS

Switch
Problem

- Verbalization have to replace pantomime because of the expressive limitations of bodily-visual communication



Abstract
symbols

- The advent of symbols is a breaking point with earlier communication

McNeill's proposal (against the gesture-first theories): multimodal theory of language origins

A GRADUAL TRANSITION: RECONSTRUCTION WITHOUT SUBSTITUTION



It is not possible fully to distinguish what is really symbolic communication and what is really gestural communication (e.g., presence of iconicity – sound symbolism –in abstract expressive codes; Zlatev 2014).

The evolution of speech would have implied not a “switch”, but a gradual shifting of the communicative load toward the vocal channel (Zlatev 2014, p. 206).

The multimodal nature of linguistic communication, with differential roles for speech and gesture, but with considerable degree of sound symbolism (Ahlner and Zlatev, 2010; Zlatev, 2014).

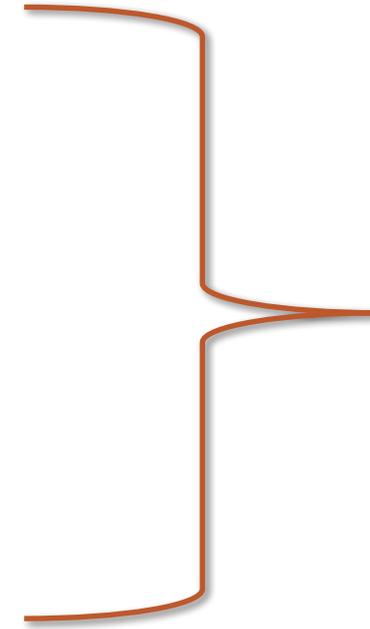
THE POSITIVE SIDE OF PANTOMIME



Pantomimic storytelling as a scaffolding for verbal language (verbal language does not replace pantomimic communication)



The narrative character of language represents the heritage of pantomimic storytelling



Global coherence:
temporal and causal relations of the narrated events in a story

AGAINST THE ROLE OF PANTOMIME IN LANGUAGE ORIGINS



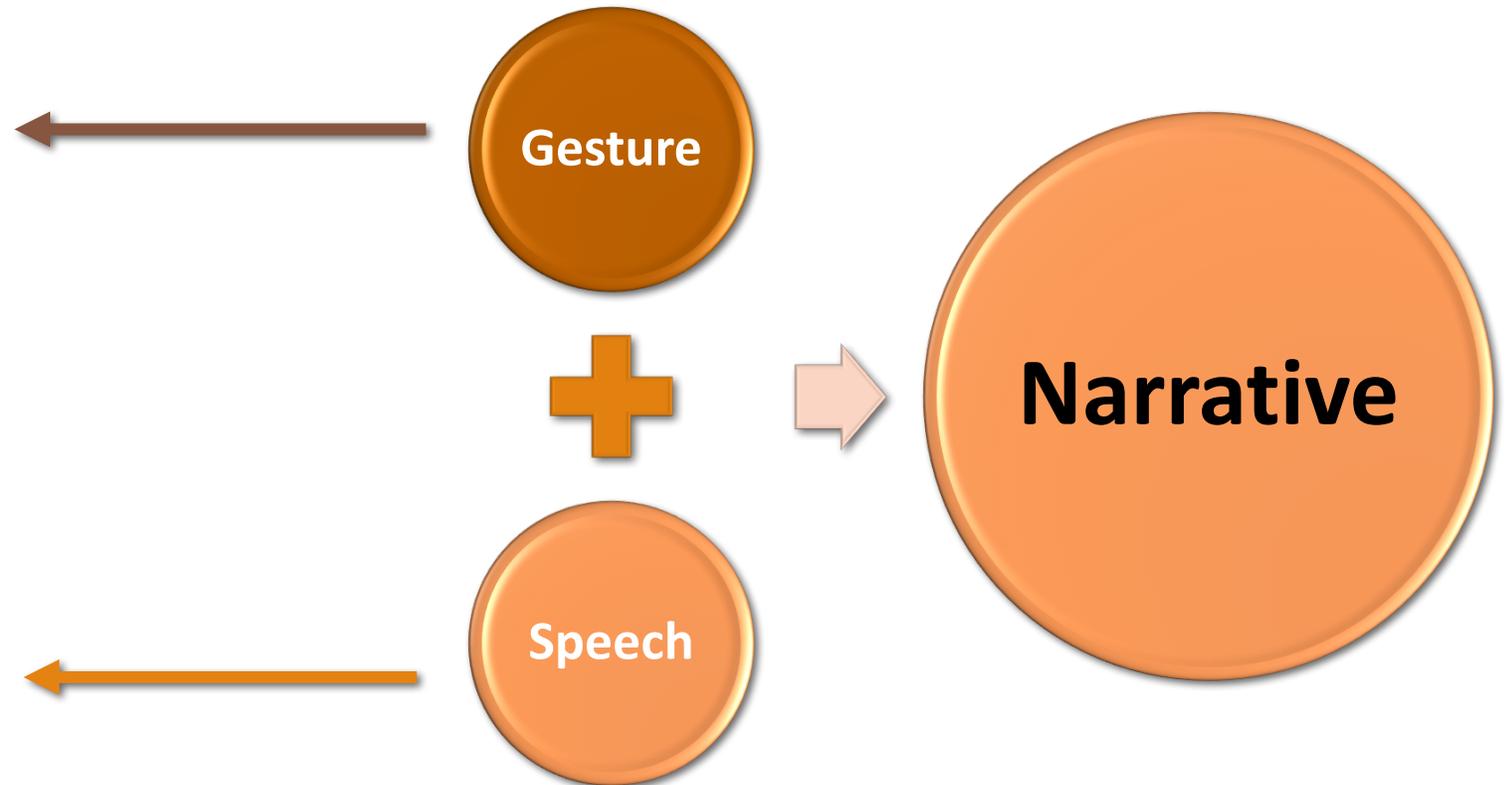
The second problem for gesture-first is that gestures ... would be pantomimes (2012, p.63)

Gesture and speech «comprise a single multimodal system, and (...) gesture is not an accompaniment, ornament, supplement, or “add-on” to speech but it is actually part of it» (1992, p. 64)

speech and gesture are elements of a single integrated process of utterance formation in which **there is a synthesis of opposite modes of thought – global-synthetic and instantaneous imagery with linear-segmented temporally extended verbalization. Utterances and thoughts realized in them are both imagery and language**

A DIVISION OF LABOR IN NARRATIVE

- Global-synthetic and instantaneous imagery;
- Prospective aspects: point of view, distance between narrator and narrated, etc.
- Linear-segmented temporally extended verbalization;
- Representation of temporal and causal links (global coherence).



A DIVISION OF LABOR IN NARRATIVE: IMPLICATIONS

1

Since narrative implies speech as well as gesture, pantomime cannot be a form of storytelling - without the verbal code pantomime is not able to represent the causal and temporal connections of the narrative plan.

2

Since pantomime is not a form of storytelling, it cannot be at the foundation of narrative origin of language

EQUIPRIMORDIALITY

Gestures offer one kind of symbol, language a different kind, and the two kinds of semiosis (...) are unified in GPs (Growth Point Hypothesis). (...) speech on the one hand and gesture on the other, when combined in a GP, bring semiotically opposite modes of thinking together at the same time. **This “unity of opposites (...) creates a new form of human cognition that animates language and gives it a dynamic dimension. (...). All of these features of language were built in by how language began** (McNeill, 2012, p. 3).



Pantomime is a dead-end street from an evolutionary point of view

EFFECTIVENESS OF BODILY-VISUAL COMMUNICATION

[P]antomime depends on a cognitive infrastructure that operates across sensory modalities, and on being able to combine different communicative modalities in the construal and expression of meaning (Zywiczynski, Wacewicz, & Sibierska, 2016). At the same time, pantomime is characterized by the dominance of the bodily-visual modality, due to its greater potential for iconic (resemblance-based) representations (Brown, 2012; Zlatev, 2014). **Hence in the case of pantomime, the role of modalities that are not bodily-visual, and specifically the input of non-linguistic vocalization, is not predicted to increase the effectiveness of bodily visual communication in referential terms (Zlatev et al. 2017, in press, p. 8).**



MULTIMODAL-FIRST THEORIES

- ❖ **Assumptions:** inseparable connections between speech and gesture/action in language use; bodily-visual and vocal-auditory signals were fully integrated from the onset of language (one single system).
- ❖ **Predictions:** More successful communication using multimodal performance than only bodily-visual pantomime in experimental studies.

PANTOMIME-FIRST THEORIES

- ❖ **Assumptions:** Bodily and vocal signals are integrated but distinct semiotic resources (two qualitatively different systems); the bodily-gestural system has been the breakthrough to human specificity .
- ❖ **Predictions:** There will be no differences between multimodal performance and only bodily-visual pantomime in experimental studies, or greater communicative success in the visual-only condition.



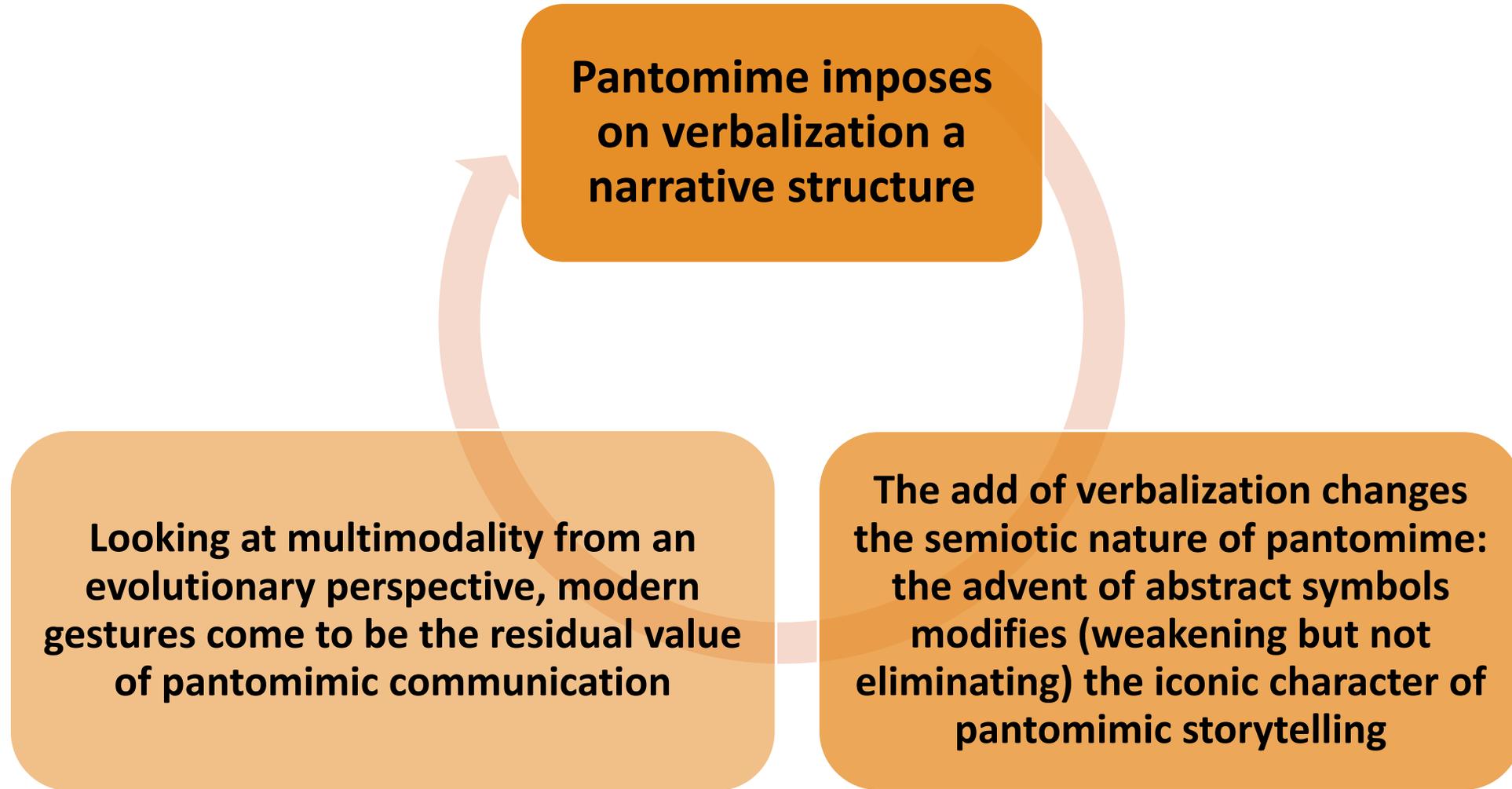
Main Results

“the overall results showed that not only did the combination of pantomime and vocalizations not facilitate correct identification, but that the overall proportion of correct results was lower for MULT (mean = 46.3%, SD=10.9%) than for the VIS condition (mean = 52.6%, SD=12.6%). [...] the condition effect was significant, with responses given to clips in the MULT condition being significantly less often interpreted correctly than those given to clips in the VIS condition.” (p. 18)

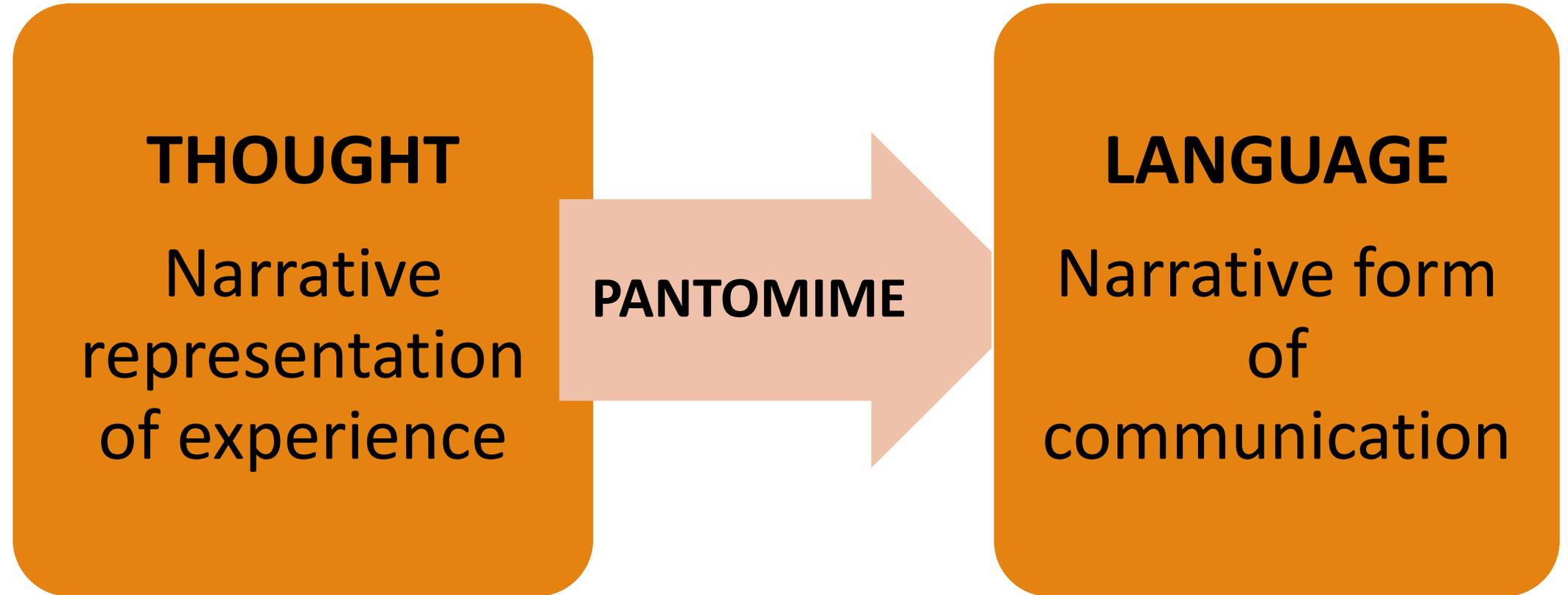
PANTOMIME-FIRST SCENARIO FOR LANGUAGE ORIGINS

[T]he multimodality of present-day linguistic communication, with a privileged role for speech (in hearing individuals) is most likely a consequence of the long process of language evolution, rather than a feature that was present in its onset (p. 24).

CONCLUSION: MULTIMODALITY AS FINAL OUTCOME



CONCLUSION



THANK YOU FOR YOUR ATTENTION!