



# Interactions between Semiotic Modes in Multimodal Texts

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HELPING WHITE GUYS  
DAN SINCE 1842!

*perfekt*

# Overview

1. Why investigate intermodal interactions?
2. Theoretical approaches
3. Layers of texts
4. Intermodal interaction types (IITs)
5. Some examples

# What are intermodal relations?

- In multimodal texts, different semiotic modes are used together
- Modes can be considered in terms of their relations to each other
- Semiotic modes can be differentiated into various layers (expression, content, intended effects, style)
- All these layers can interact with layers of other modes

*> Not all of this is always relevant!*

# Intermodality

- Intermodal relations are a very complex problem in multimodality research
- In a multimodal text, each mode contributes to overall **meaning**, **form**, and **style**!
- Textual inferences are often based on information given in various modes (cf. Wildfeuer 2012)
- There are additional textual properties that are caused by relations between modes

# Intermodality

- **Intermodal relation**: relations found between modes
  - > IIT: an “intermodal interaction type” definable by logical properties
- **Intermodal interaction**: changes in one mode caused by the presence of another mode
  - > a definable change in expression, meaning, and/or style

# Example: Intermodal deixis

Example from *Gattaca* (1997, A. Niccol), 00:39:40

[Jerome:] “I’m gonna finish **this**.”

[Vincent:] “Titan is exactly like **this**. All the time it’s got a cloud around it.”

*Intermodal deixis (a.l, v.i)*

a.l = perceptual mode: **auditory** semiotic mode: **language**

v.i = perceptual mode: **visual**  
semiotic mode: **image**

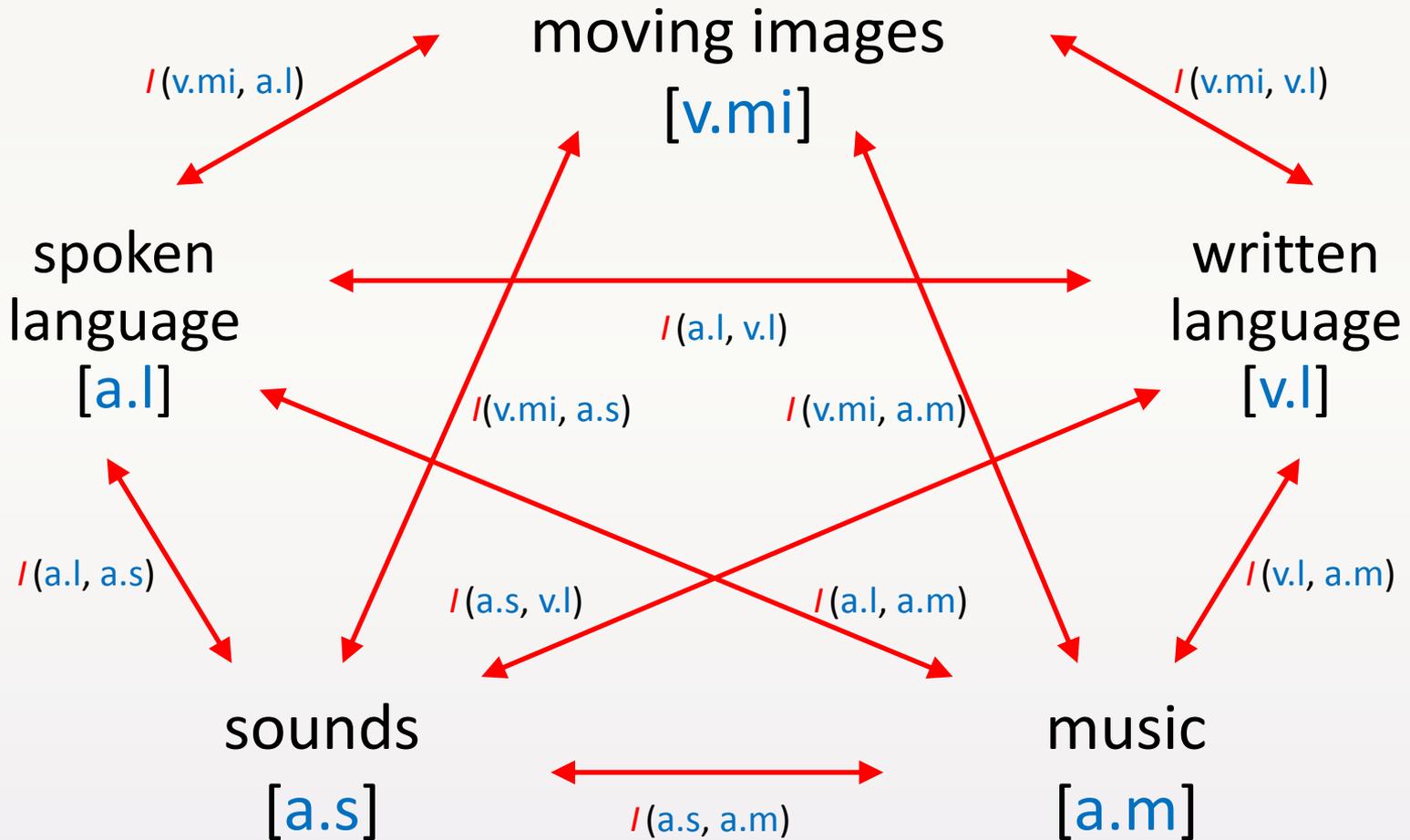
# Intermodality

- **Intermodality** or **intersemiosis**
- Modes: **sign systems**  
⇒ *semiotics, linguistics, image studies, ...*
- and **perceptual modes**  
⇒ *psychology, cognitive science, neuroscience*

# Basic idea

- Set of **intermodal interaction types** (IITs)
- Descriptive categories (e.g. system networks) are usually area-specific
- **Often-neglected part** of multimodal meaning
- Limited by demand for generality

# 5 modes and their interactions in a film



# Intermodality and Multimodality

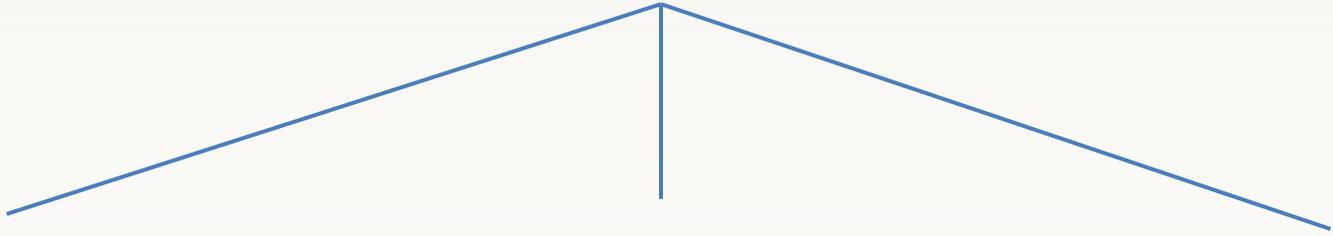
- For all these interactions, we can distinguish between *perceptual mode* (**auditory**, **visual**, ...) and *semiotic mode* (**language**, **images**, ...)
- Furthermore: modes such as **images** comprise submodes such as **color**, **lighting**, **clothing**, **gesture** and **mimics** of characters
- Intermodality considers aspects which cannot be found by looking at the modes separately
- Thus, monomodal and multimodal analysis complement each other!

# Three **layers** of text / discourse

- Layer of **Form / Expression**
- Layer of **Content / Semantics**
- Layer of **Style**

# Three **layers** of text / discourse

Textual layer



**Form /  
Expression**

- Segmentability
- Spatial relations
- Time relations
- Combination rules

**Content /  
Semantics**

- Discourse referents
- Propositions
- Inferences

**Style**

- Choice-related aspects
- Patterns not caused by function or content

# Interactions and other structure

Text with modalities

$M_1, \dots, M_n$

Monomodal  
structure  
for  $M_1, \dots, M_n$

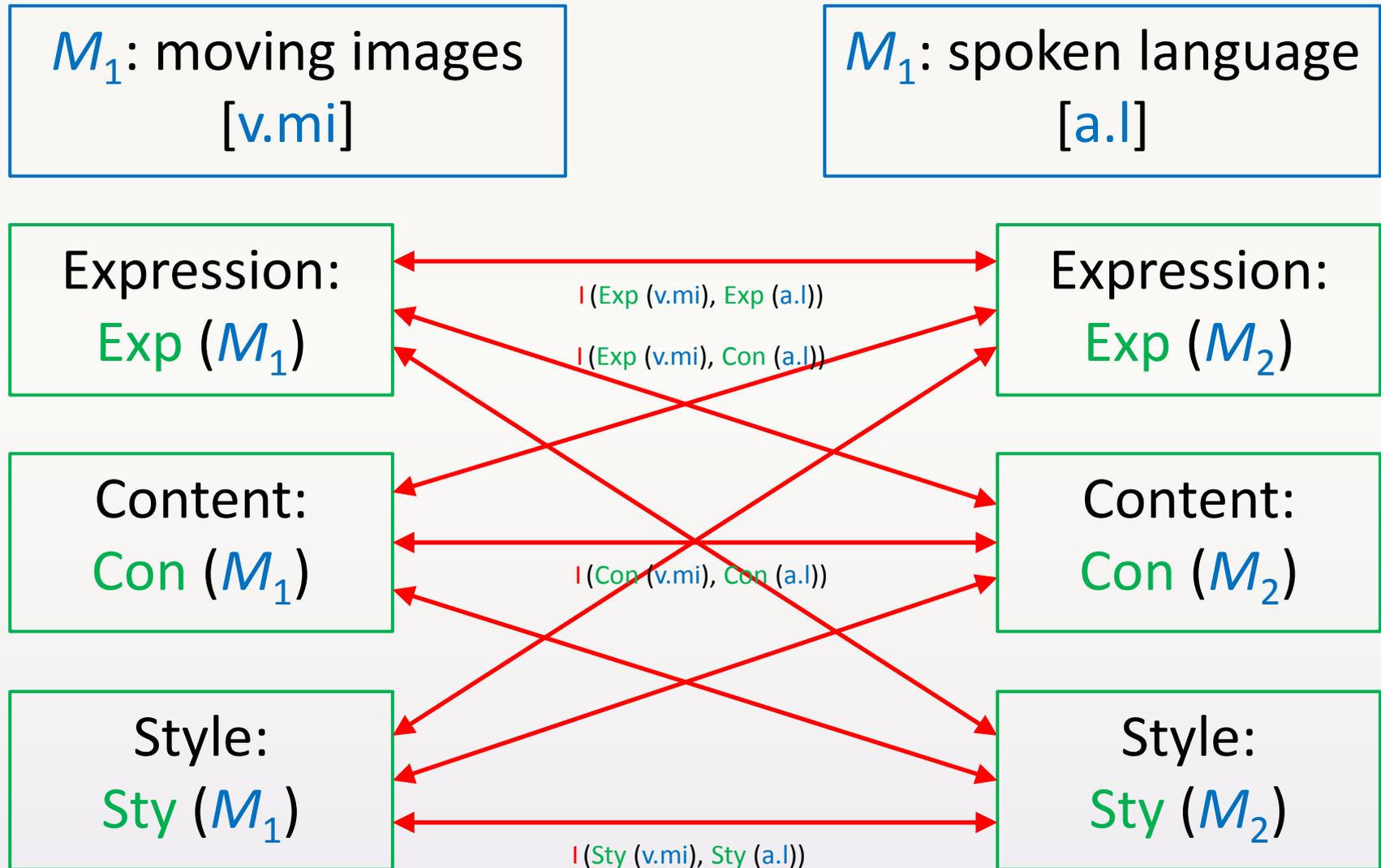
All interactions

$I(M_i, \dots, M_j)$

for  $i, j \in n; i \neq j$

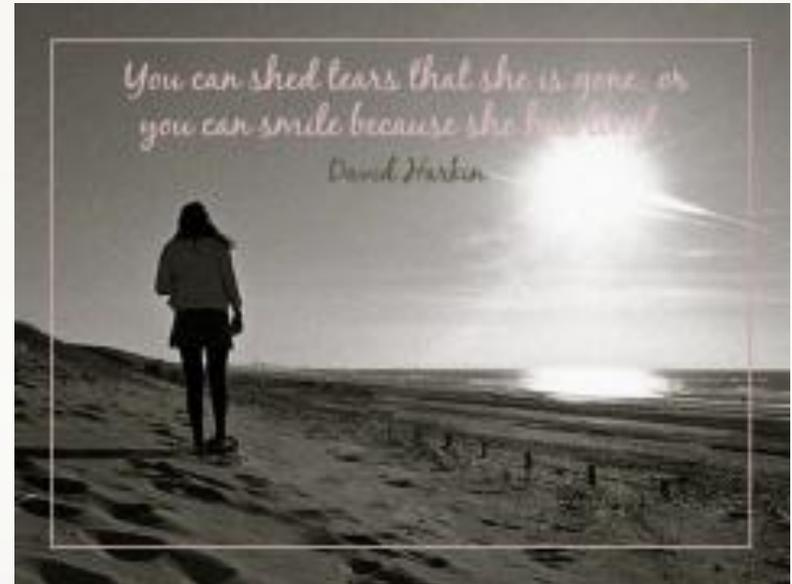
Holistic  
structure (?)

# Layers of two interacting modes



# Expression / form relations

- **Overlap**  
a spatial and/or temporal overlap between expressions (= form; sign carriers) of two modes
- **Occlusion**  
an overlap where the expression of one mode becomes partially occluded



Formal notation example:

**Occlusion** ( $\pi_i$ ,  $\text{Exp}(M_1)$ ,  $\text{Exp}(M_2)$ )

# Expression / form relations



- **Integration**  
the expressions of  $M_1$  and  $M_2$  are integrated, i.e. cannot be separated
- **Parallelism**  
a parallel organization of material in two modes: e.g. one utterance [v.l] for one panel [v.i]



# Content relations

- Similarity
- Contrast
- Contradiction
- Background

Formal notation example:

Similarity ( $\pi_j$ , Con( $M_1$ ), Con( $M_2$ ))

# Intermodal predication

Example from *Spirited Away* (2001, dir. Hayao Miyazaki),  
00:56:10

“You got a really good one. [...] This one has  
dried worm salts. With water this murky, ...”

*Intermodal predication (a.l [v.l], v.i)*

a.l = perceptual mode: auditory semiotic mode: language

v.i = perceptual mode: visual  
semiotic mode: image

# Contradiction

*Intermodal  
contradiction (v.l, v.i)*

v.i = perceptual mode: visual  
semiotic mode: image

v.l = perceptual mode: visual  
semiotic mode: language



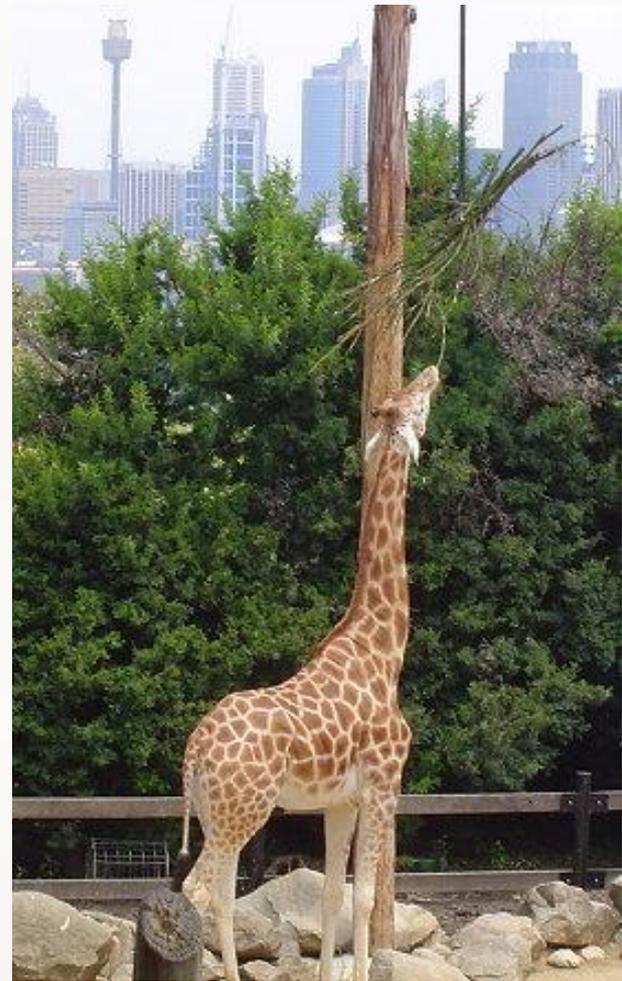
[Subtitle:]  
*The protest march was non-  
violently dissolved by the police.*

# Typification

*Reference modification:*  
*Typification (a.l, v.i)*

v.i = perceptual mode: visual  
semiotic mode: image

a.l = perceptual mode: auditory  
semiotic mode: language



[Narrator's voice:]  
*"The giraffe is the largest  
land animal."*

# Further content relations

- Intermodal deixis
- Intermodal predication
- Exemplification
- Disambiguation
- [Reference modification:] Typification
- [Reference modification:] Tokenization

# Stylistic relations

- Similarity
- Varying complexity
- Varying time of production
- Varying (implied) producer
- Parody

Formal notation example:

Varying complexity ( $\pi_i$ , Sty( $M_1$ ), Sty( $M_2$ ))

# Important points

1. Intermodal analysis poses highly complex problems
2. Important for practical results
3. Three distinctions:
  - (i) Modes present in a text      images, language, music, ...
  - (ii) Levels of text / discourse      form / expression, content, style, ...
  - (iii) Types of interactions      intermodal deixis, predication, typification, ...
4. Methods are available in semiotics & multimodality research!

# Research questions

- **Role** of interactions in multimodal texts
- Which **list of interaction types (IITs)** should we assume?
- How to **represent** interaction types?  
⇒ inclusion in a discourse representation model
- When can interaction types be defined in a **logical** discourse model?  
⇒ conditions for their presence
- How can their presence be **empirically** determined?  
⇒ annotation in corpus studies

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