

# Interaktive multimediale Lerninhalte

DI Dr. Alexander K Nischelwitzer

FH JOANNEUM  
Informationsmanagement  
Digital Media Technologies

**INIT**

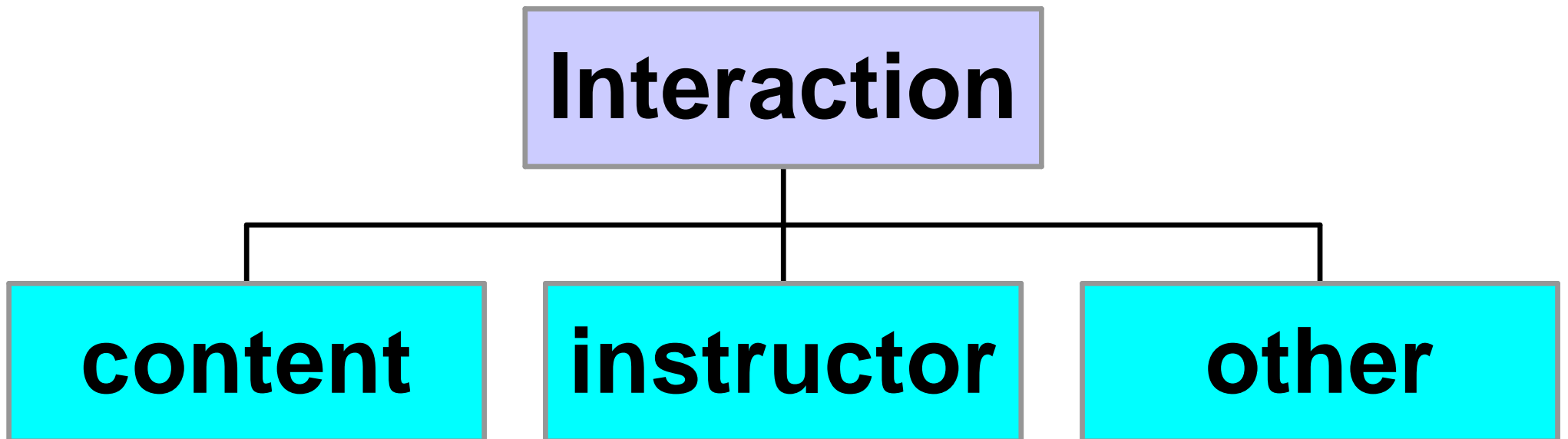
# These 1: eLearning

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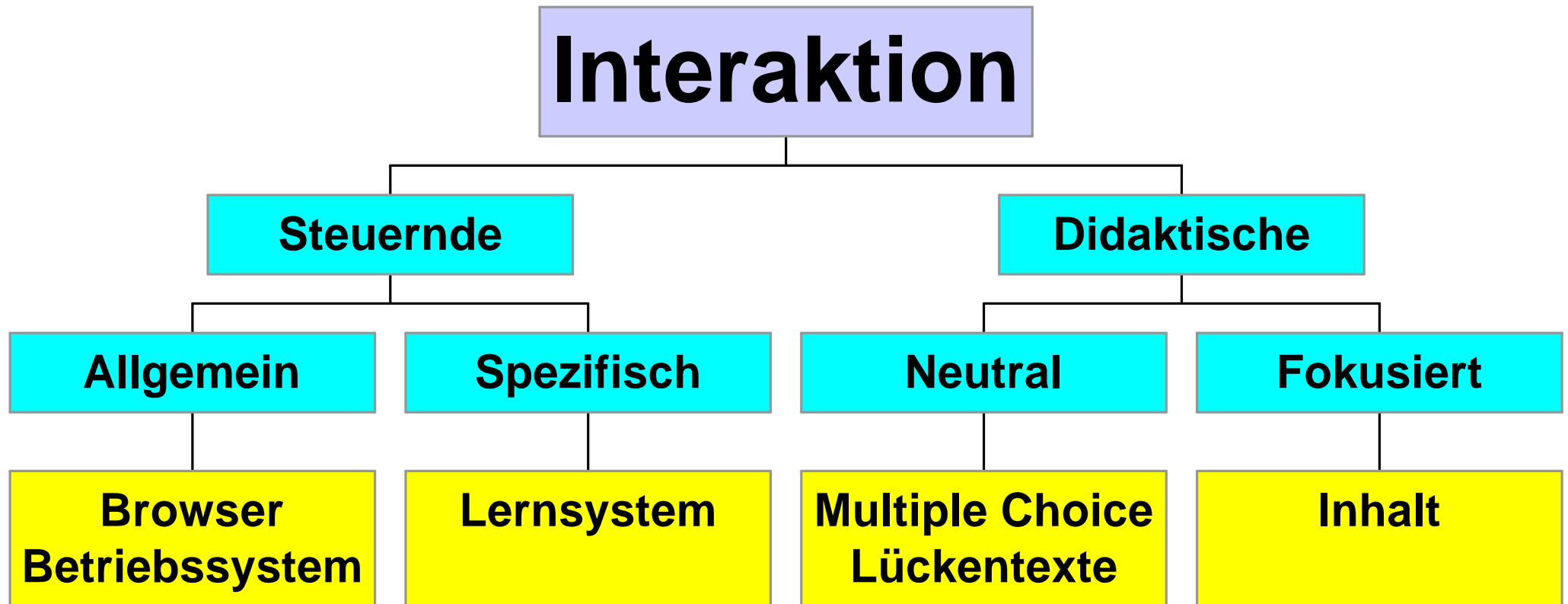
Wissen ? Können

“Tell me and I will forget,  
show me and I may remember,  
**involve** me and I will understand.”

# Interaktion [1] – 3 Arten



# Interaktion [2] – Unterteilung



# Interaction

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- Interaction is **involvement**.
- Involvement teaches
- remember 20% of what they see
- 40% of what they see and hear
- 70% of what they see, hear, and **do**

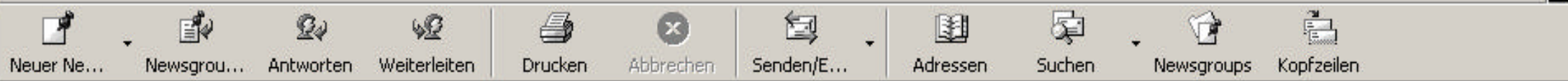
# Types of Content Interactivity

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- simple question and response
- complex question streams
- decision-making in work processes
- process simulations
- work simulations / case studies

**APP**





dmt.nmt4-projekt

- Ordner
- dmt.fh-joanneum.at
  - bst.linux
  - bst.unix
  - bst.windows
  - db.dban2.jv0
  - db.dban2.jv1
  - dmt.infowiss
  - dmt.nmt1-flash
  - dmt.nmt1-photoshop
  - dmt.nmt1-projekt
  - dmt.nmt1-vorlesung
  - dmt.nmt2-video (1)**
  - dmt.nmt3-audio
  - dmt.nmt3-video (3)**
  - dmt.nmt4-director
  - dmt.nmt4-projekt**
  - dmt.nmt5-3d
  - edv.forum
  - fh.test (1)**
  - ima.airnet
  - ima.allgemein
  - ima.anzeigen
  - ima.da (1)**
  - ima.dp
  - ima.efprak
  - ima.flames (14)**
  - ima.jg01.diskussion

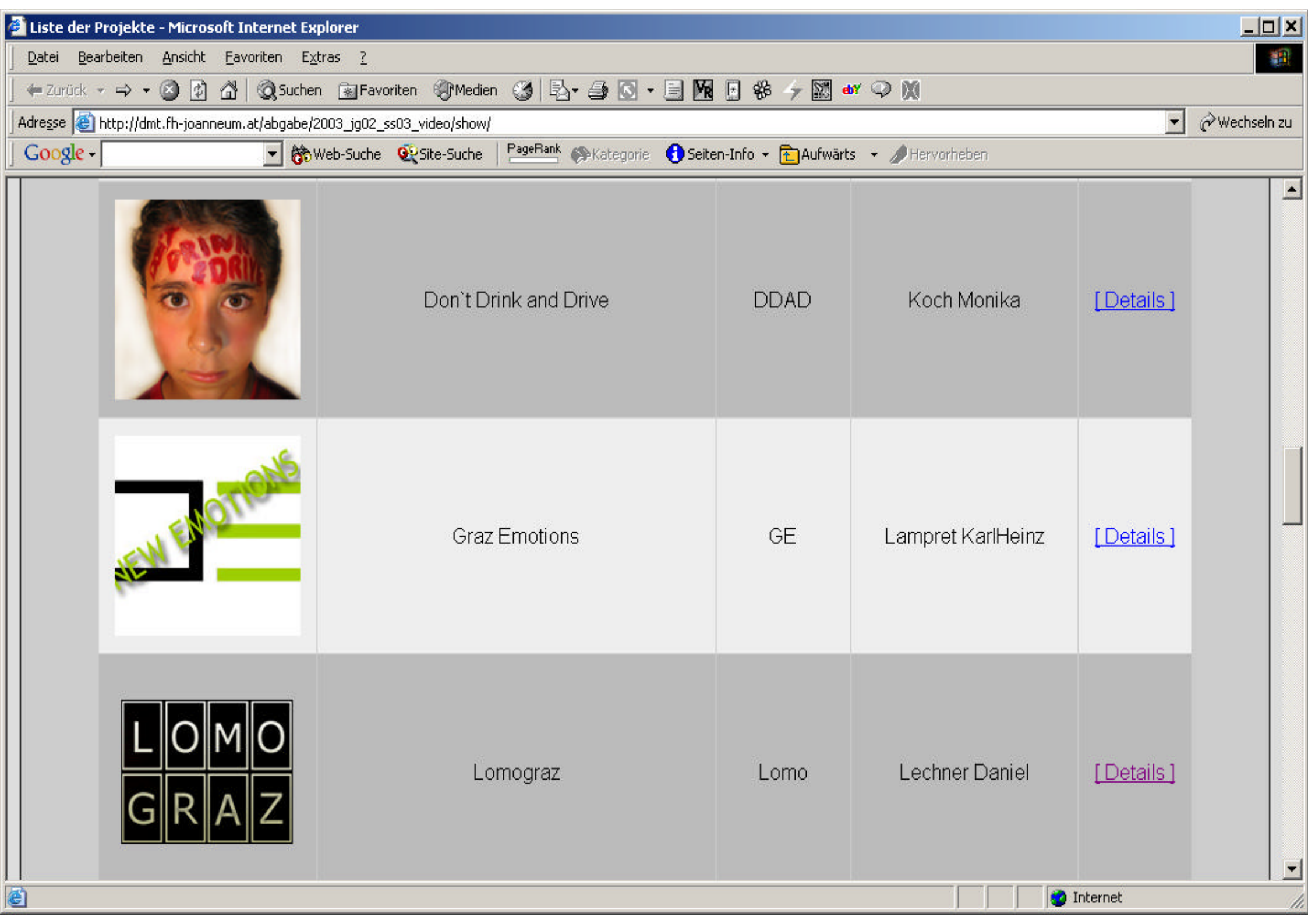
Betreff	Größe	Gesendet	Von
⊕ texte im template	1 KB	10.07.2003 19:40	Isabella Pichler
⊕ fileio extra	1 KB	10.07.2003 21:22	Robert Wildburger
fileio	1 KB	10.07.2003 21:24	Robert Wildburger
⊕ radiobutton aktiv setzen	1 KB	11.07.2003 00:14	Robert Wildburger
⊕ Vorlage zu TS	2 KB	11.07.2003 09:43	Bergthaler Wolfgang
⊕ Escape Sequenzen (vgl. java)	2 KB	11.07.2003 10:18	Bergthaler Wolfgang
⊕ kerning	51 KB	11.07.2003 11:04	Wolfgang Rumpf
⊕ buttons	200 KB	11.07.2003 11:47	Wolfgang Rumpf
<b>removing a cast</b>	<b>1 KB</b>	<b>11.07.2003 12:55</b>	<b>ASW / Hye Florian</b>
⊕ Text in Grafik	6 KB	11.07.2003 17:26	Timbo
⊕ Newline - Zeilenumbruch	1 KB	11.07.2003 18:16	Bergthaler Wolfgang
⊕ Forecolor/Backcolor bei Bitmaps	1 KB	12.07.2003 02:25	Martin Maier
⊕ Transparenzstufen via PNG	1 KB	12.07.2003 02:54	Martin Maier

**Von:** ASW / Hye Florian **An:** dmt.nmt4-projekt  
**Betreff:** removing a cast

Hallöchen,

weil kurz die Frage aufgekommen ist, wie man eine Cast wieder rausbekommt. Es hilft leider nichts, die entsprechende cast im cast-window "nur" zu closen.

Um sie restlos aus einem File zu entfernen müsst ihr in der Menüführung unter MODIFY - MOVIE - CASTS die entsprechende markierne und diese dann mit "remove" entfernen. Wenn das dann abgespeichert wird, sollte sie wirklich endoältig nicht mehr zur Verfügung stehen und das File beim neuen Öffnen



Don't Drink and Drive

DDAD

Koch Monika

[\[Details\]](#)



Graz Emotions

GE

Lampret KarlHeinz

[\[Details\]](#)



Lomograz

Lomo

Lechner Daniel

[\[Details\]](#)

# Abgabe NMT1

robert.ladstaetter@fh-joanneum.at

Allgemeine Informationen | NMT1

[Abgabe] Status der Abgabe												
(Smileys zeigen Status für jedes einzelne Projekt)												
Status der Abgabe	Projektname	Kürzel	Projektleiter	Letzte Änderung	Zusammenfassung	Details	Probleme	Sonstiges	Screenshot	Icon	Link	Gesamtstatus
[Projekte] NMT1 Projekte	Fighters for independence	FFI	Gernot Reiber	26. 1. 2003								
	Che Guevara	Che	Gernot Reiber	26. 1. 2003								
[Studenten] Beteiligte Studenten	Austrian Writers	AW	Johannes Rumpf	26. 1. 2003								
	Austrian Painters - Oskar Kokoschka	KOK	Petra Prutsch	26. 1. 2003								
	Sportsmen - Franz Klammer	FKL	Evelin Strasser	26. 1. 2003								
	Austrian Writers - Rainer Maria Rilke	AW-RR	Michael Rinnhofer	25. 1. 2003								
	The Habsburger	THABS	Simon Pucher	25. 1. 2003								
	Stefan Zweig	SteZw	Simone Eder	24. 1. 2003								
	Franz Kafka - Austrian Writers	AW	Clara-Maria Deutschmann	23. 1. 2003								
	Napoleon Bonaparte	FMA-NB	Monika Koch	22. 1. 2003								
	Cold war	CW	Markus Weimann	22. 1. 2003								
	Beispielprojektname	BPN	Robert ...	22. 1. 2003								

/data/home/ima02/Radoch/public\_html/flash/nmt1/info.xml  
<http://dmt.fh-joanneum.at/~Radoch/flash/nmt1/info.xml> Last modified: 16. 01. 2003, 11:50



**Bericht für Radocha Elisabeth**

19

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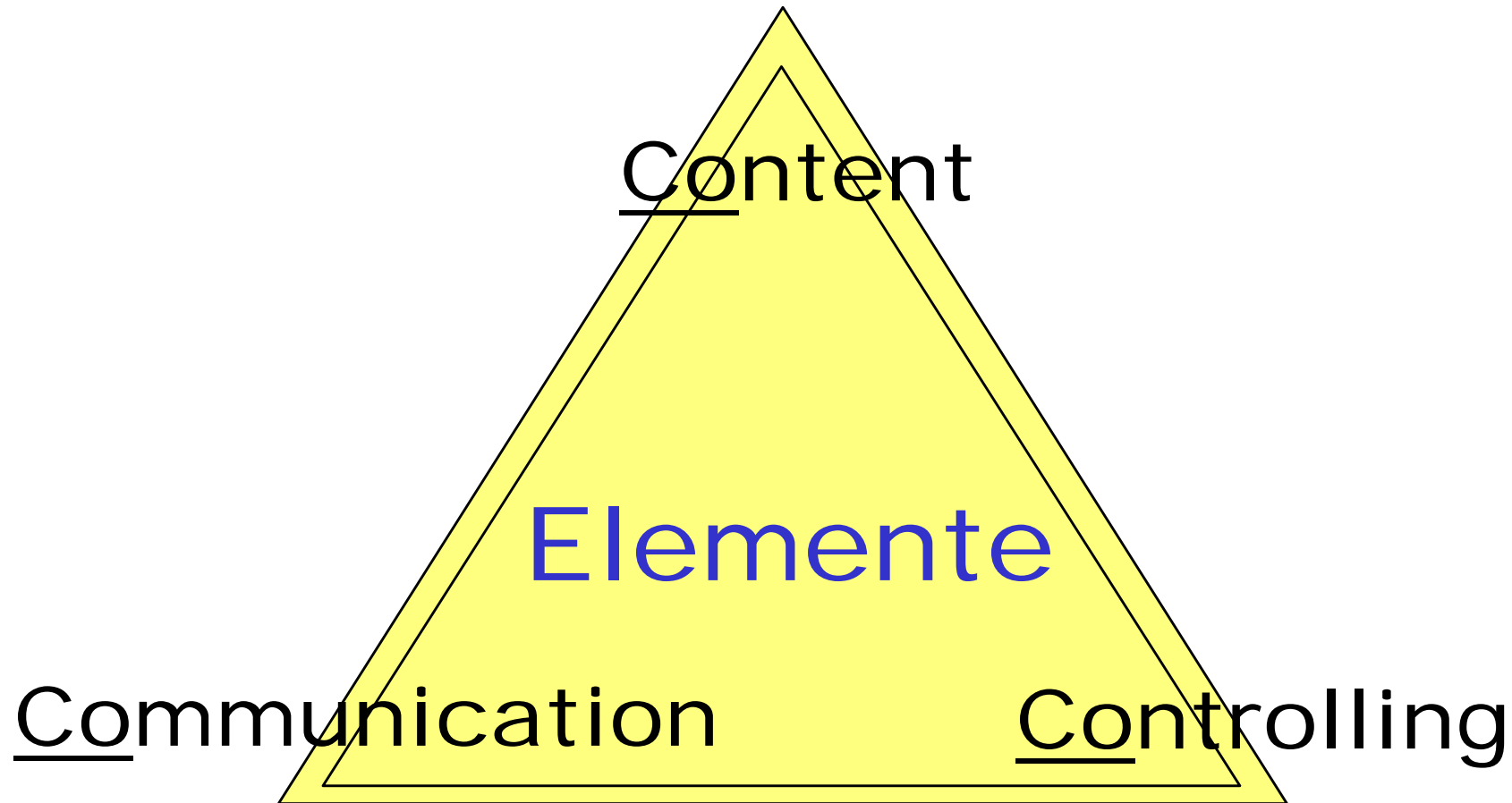
**Bericht für Haselsteiner Michael**

20

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<http://dmt.fh-joanneum.at/~Hasels/flash/nmt1/index.html> Last modified: 17. 01. 2003, 03:03



# „3 CO“ – eLearning Dreieck





*enjoy the knowledge*



## Welcome to TrainIT.org

trainIT.org is an interactive learning platform for various IT topics. It is based on user interaction, provides helpful tools and utilizes new ways of learning.

Learning with trainIT.org is fun! What are you waiting for?

**trainIT.org - enjoy the knowledge**

## White Illusion

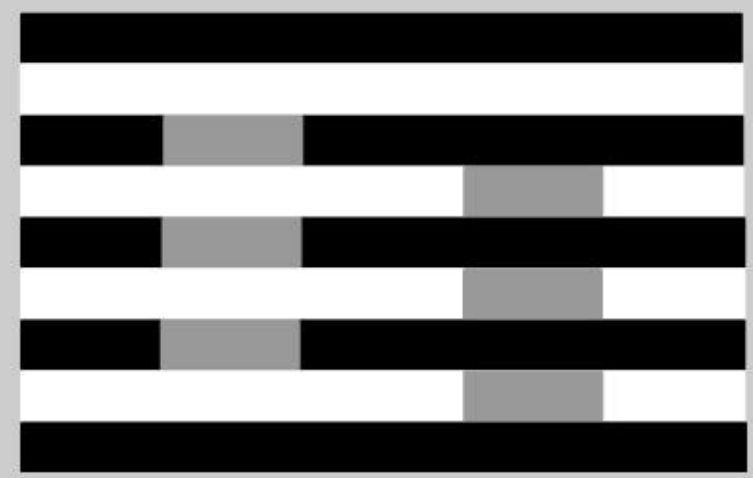
The White's Illusion is an illusion caused by contrast. But this illusion is counterintuitive. When a grey rectangle is surrounded mainly by black regions it should look lighter in accord with simultaneous contrast and vice-versa when they are mainly surrounded by white. But here the grey bars between two white bars look light, while the grey rectangles between two black bars look darker.

Some people argue that this is because of the fact that our brain groups objects with the regions touching the shorter side. In this case the grey bars on the left side are being compared to the black bars flanking their left and right side, so they look lighter. The same applies to the other rectangles with the white bars, which look darker.

Other people say that effect is caused by transparency mechanisms.

Do not believe your eyes. Every grey rectangle is of the same shade of grey!

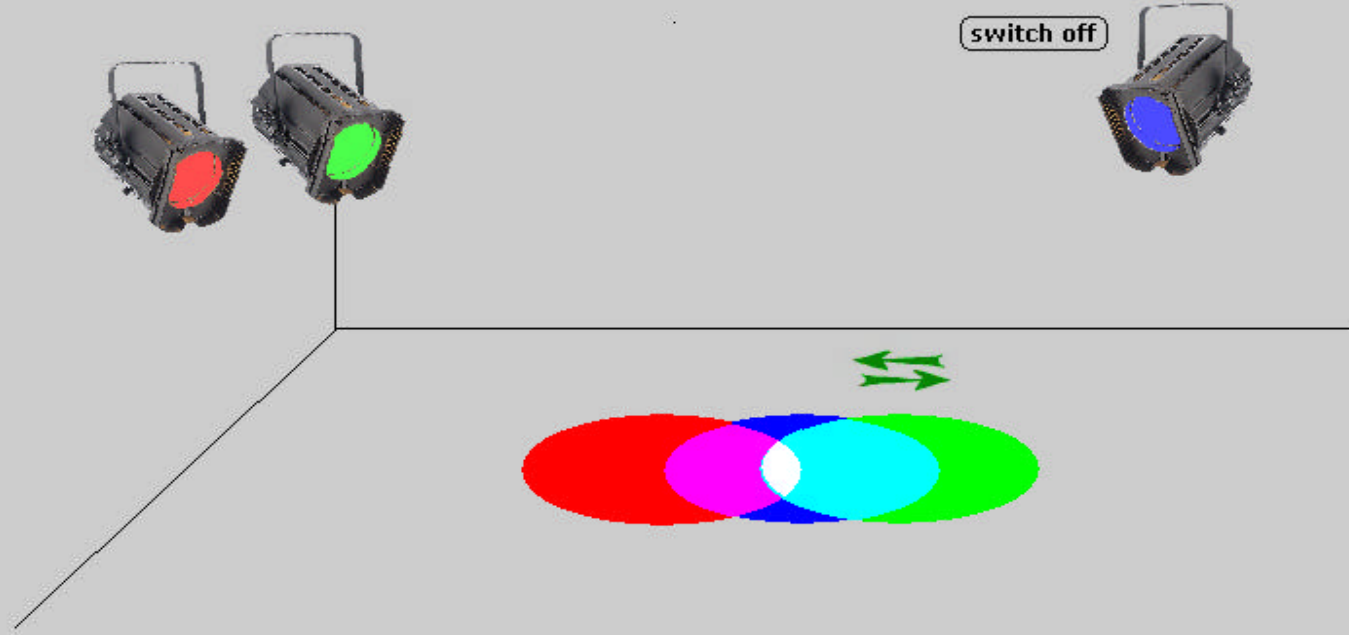
HINT: When you press the "manual" button you can move the grey bars to compare them.



Show seperated  Show combined  Manual

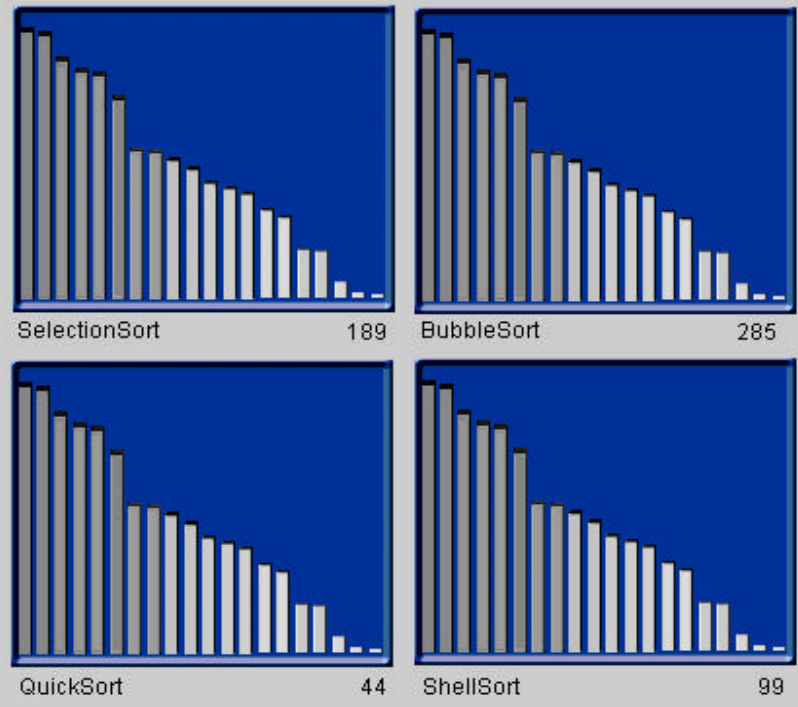
### additive colour mixing - RGB

2/5



Test the behavior of the RGB colour mixing. Move the green oval and switch the blue spot on and off.

### Competition Stage



amount of bars: 20  
sorting speed: 30

Full-Random Data  
Pre-Sorted Data  
Sorted Data

Reset  
 ascending  
**Start**

drag from here

- Bubble Sort
- Selection Sort
- Insertion Sort
- Shell Sort
- Radix Sort
- Quick Sort



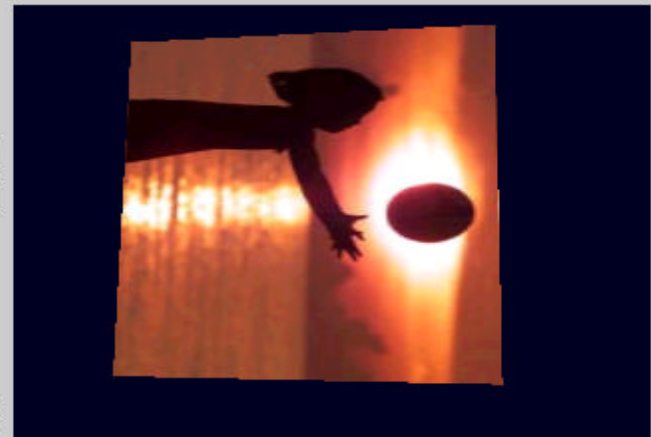
3D

# Textures



4/4

zoom +  
zoom -



reset

add texture



+ zoom  
- zoom

reset

renderer  
switcher

You are using OpenGL.



Texture effects:

- diffuse LightMap
- reflexionmap
- gloss map
- specular LightMap

Texture effects additive

- YES
- NO



A virtual whiteboard interface with various elements:

- Top Left:** A yellow sticky note with "lalelu" and a sad face emoji.
- Top Center:** A purple thought bubble with "ich tu euch auspionieren und bin grantig" and a sad face emoji.
- Top Right:** A blue sticky note with "enter text" and a magnifying glass icon.
- Middle Left:** A blue sticky note with "enter text" and a magnifying glass icon.
- Middle Center:** An orange thought bubble with "sehr gut gemacht!".
- Middle Right:** A blue sticky note with "Hil!" and a magnifying glass icon.
- Bottom Left:** A blue sticky note with "Ich bin auch da!" and a magnifying glass icon.
- Bottom Center:** A purple thought bubble with "enter text" and a magnifying glass icon.
- Bottom Right:** A yellow sticky note with "coole sache" and "Ig Robert".
- Center:** A heart-shaped sticky note with "digital" and "eLearning Day" and a smiley face emoji.
- Right Side:** A blue sticky note with "Halo" and a magnifying glass icon.
- Far Right:** A yellow sticky note with "was tust denn du da Lissi?" and a magnifying glass icon.
- Bottom Right:** A vertical sidebar with "online: digital" and a scroll bar.

A virtual desk area at the bottom of the whiteboard:

- Left:** A stack of blue papers.
- Center:** A yellow pencil.
- Right:** A trash can filled with colorful items.

## Polygon vs Bezier vs B-Spline

Which color belongs to which type of line?  
Choose between Polygon, Bezier Curve and B-Spline!  
Move the rectangles into the appropriate boxes!

■

■

■

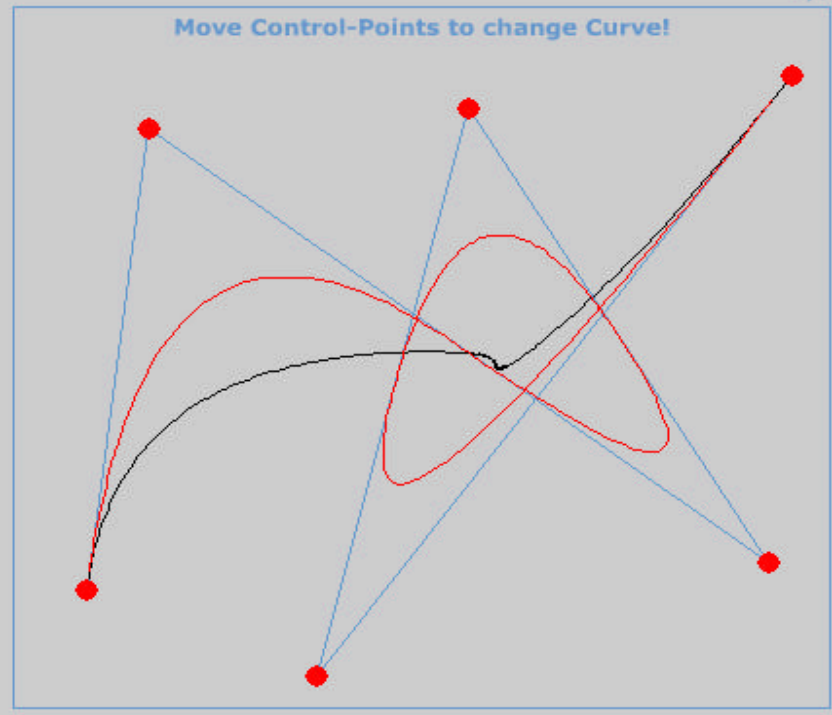
Poly

Bezier

B-Spline

checkIT  
**Wrong!**

Hint: Move the Control-Points and see how the curve is effected. Bezier Curves have a bad and B-Splines a good continuity of end-points. See also Section x.x!



# nis, what have you trainED so far?

Topic	1			2			3			4			5			trainIT
	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	
2D Pixel	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2DVector	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Bauernhof	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Compression	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
DreiD	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
ECreativity	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Hardware	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Internet	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Maths	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Programming	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Typography	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

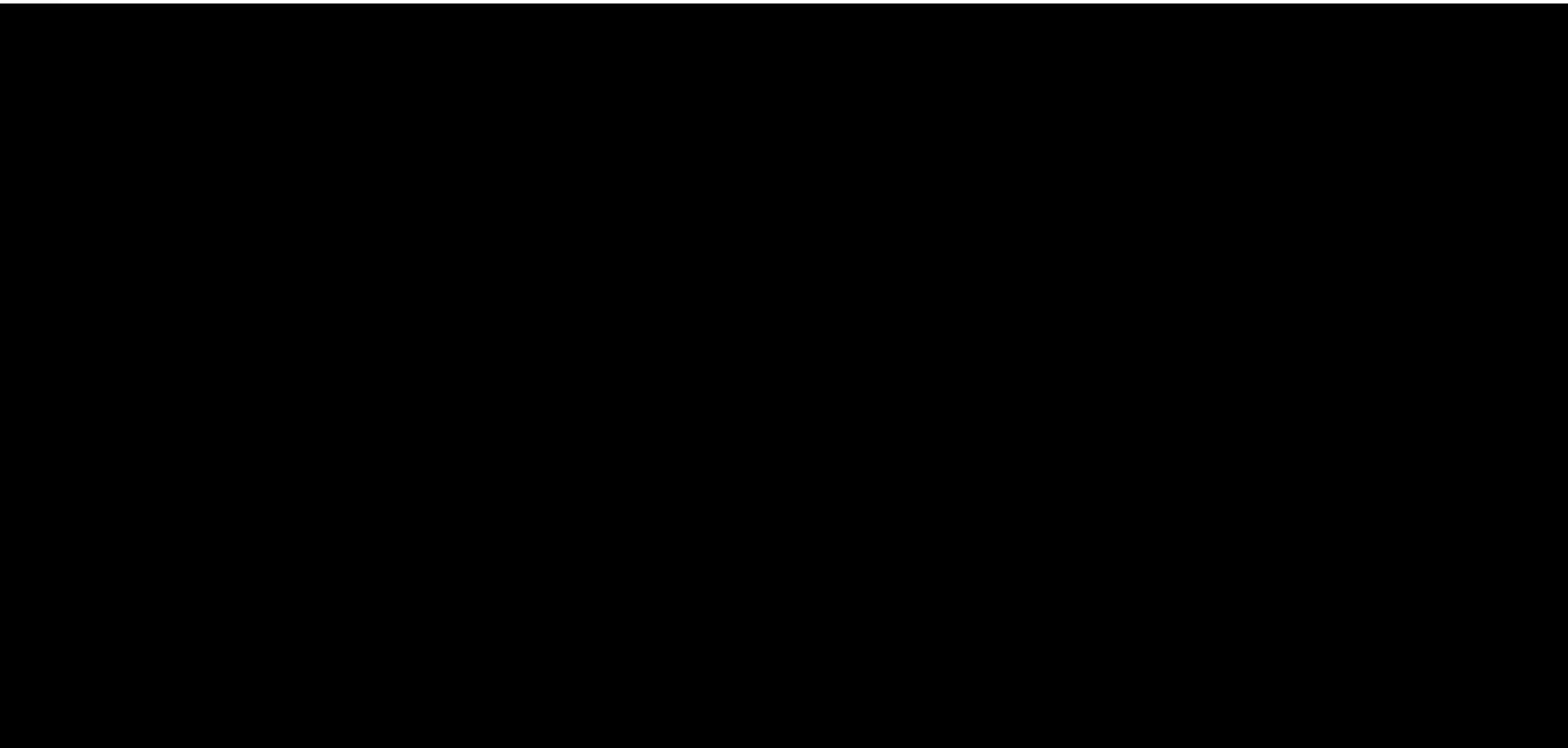
■ already trainED
 ■ not yet trainED
 ■ n/a

## These 2: „Interaktion“

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Wissen + Interaktion

⇒ Können



# About

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END