

Exploring cross-cultural differences in information seeking behavior in a qualitative interview study

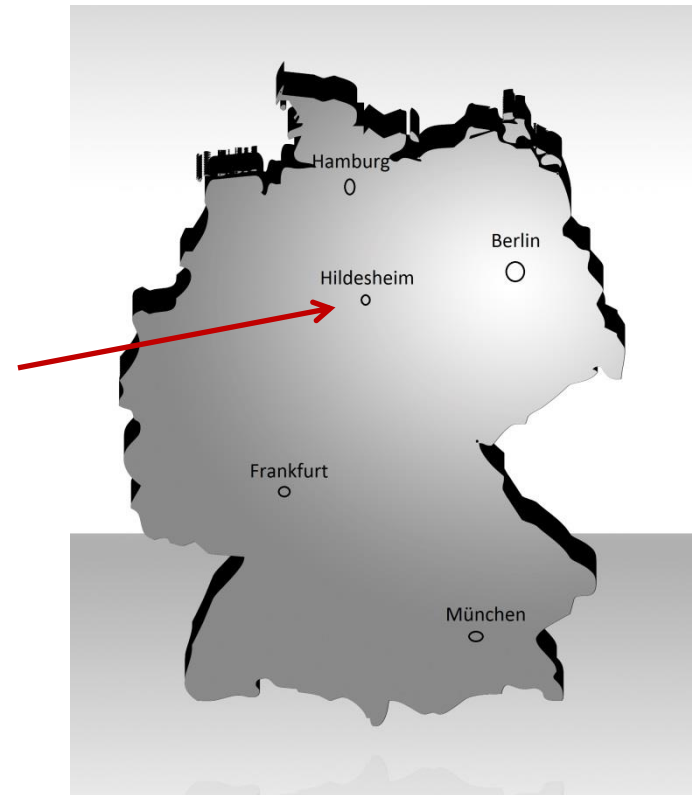
CRADLE Talk at the School of Information and Library Science, University of North Carolina at Chapel Hill
September 13, 2013

Overview

- Part I Information Science in Hildesheim
- Part II Culture and Cross-Cultural Comparisons
- Part III Information Science and Culture
- Part IV My PhD research

Part I

Information Science in Hildesheim

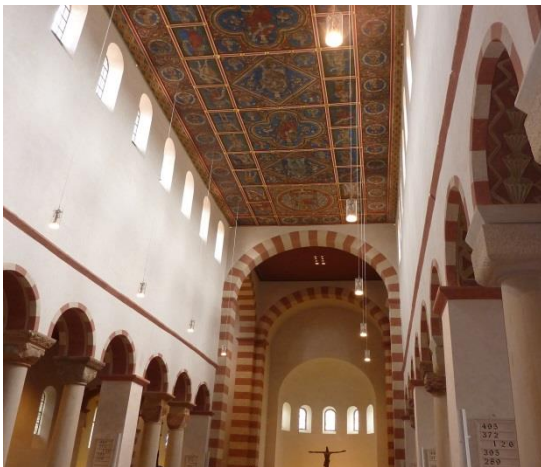


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Bachelor and Master Degrees

Bachelor of International Information Management

Methods,
Introduction to Applied Linguistics,
Introduction to Information Science,
Communication and Presentation,
HCI,
Natural Language Processing,
Information Retrieval,
Applied Linguistics II

Master of
International
Information
Management /
**Information
Science**

Master of Intern.
Inform. Management
/ **Linguistics and
Intercultural
Communication**

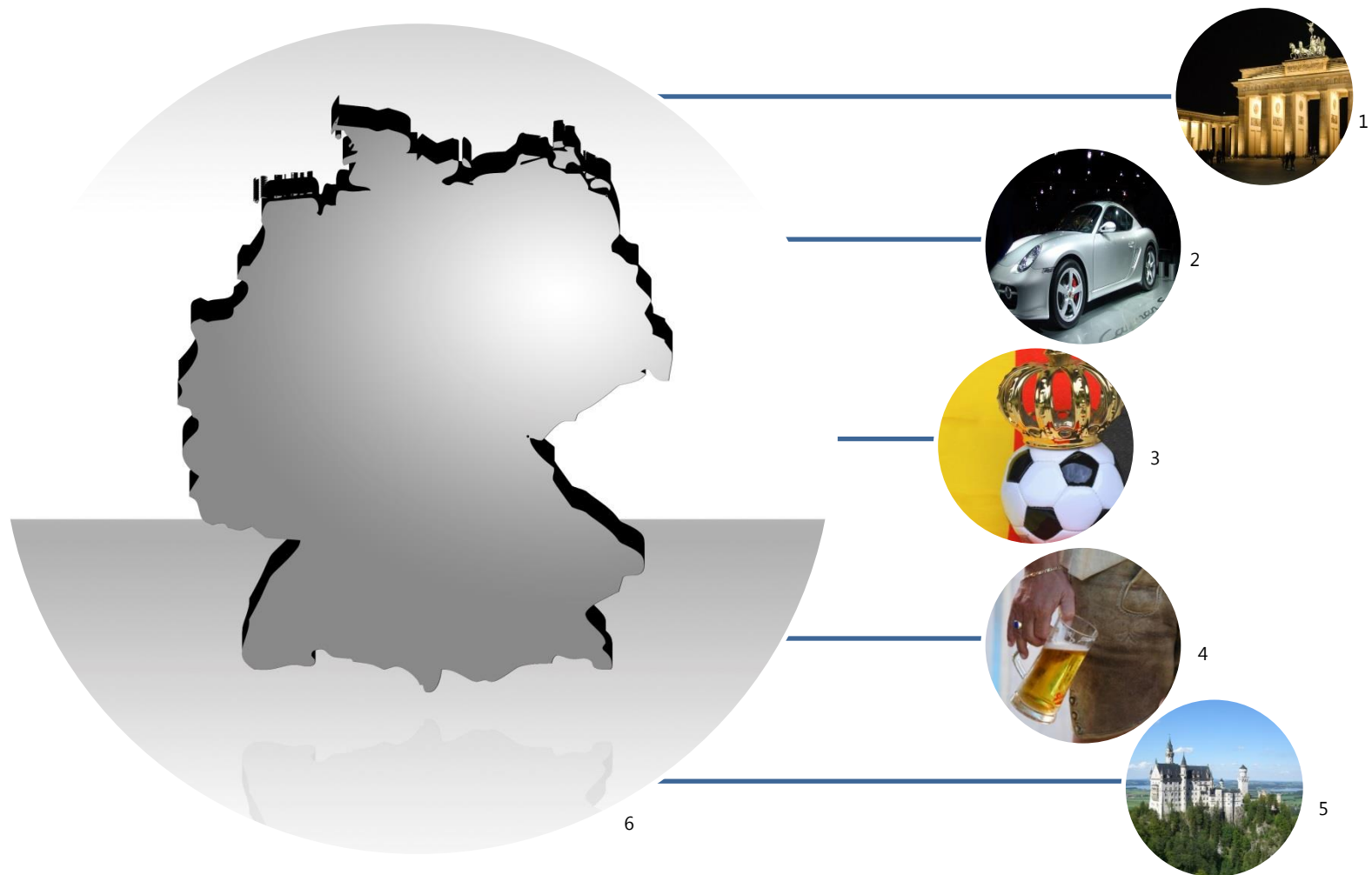
Master of International
Information
Engineering (Double
Degree Program with
Paichai University,
South Korea)

Part II

Culture and Cross-Cultural Comparisons

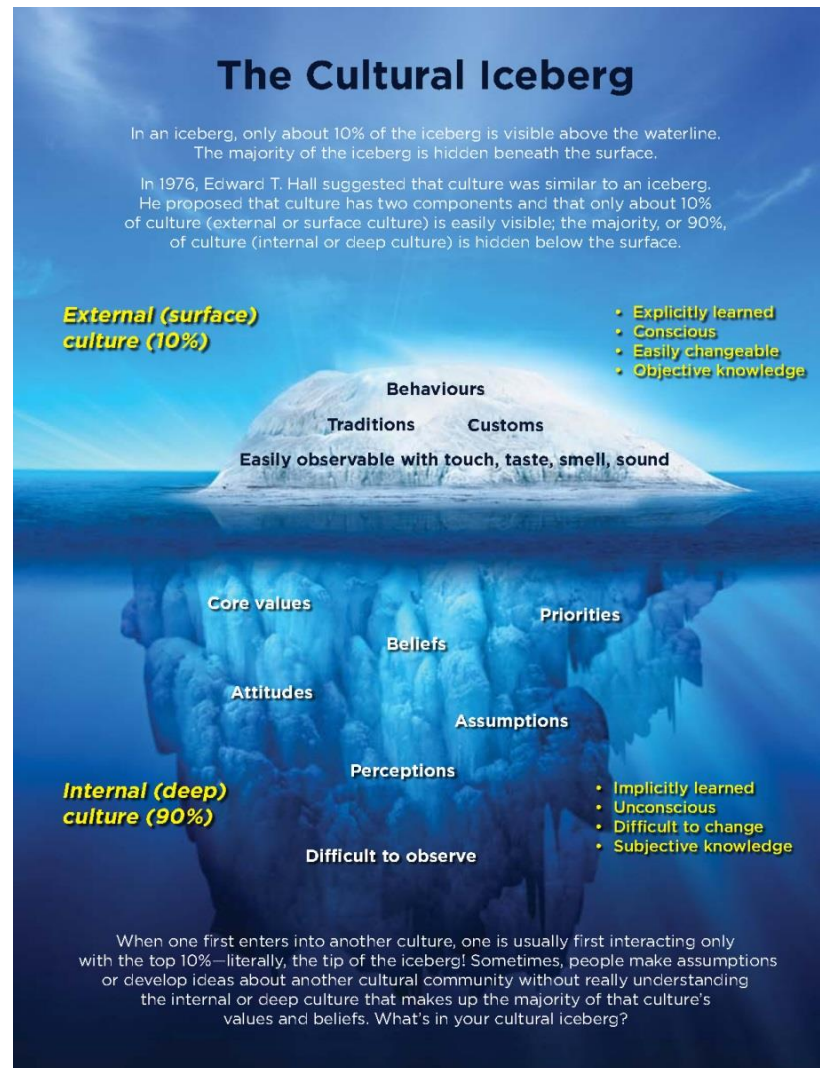


Culture is...



1) + 4) Guenter Hamich_pixelio.de; 2) Dieter
Kaiser_pixelio.de, 3) Rike_pixelio.de, 5) TS_pixelio.de,
6) Th. Kemnitz_pixelio.de

Culture is ... more



<http://img.docstoccdn.com/thumb/orig/85990913.png>

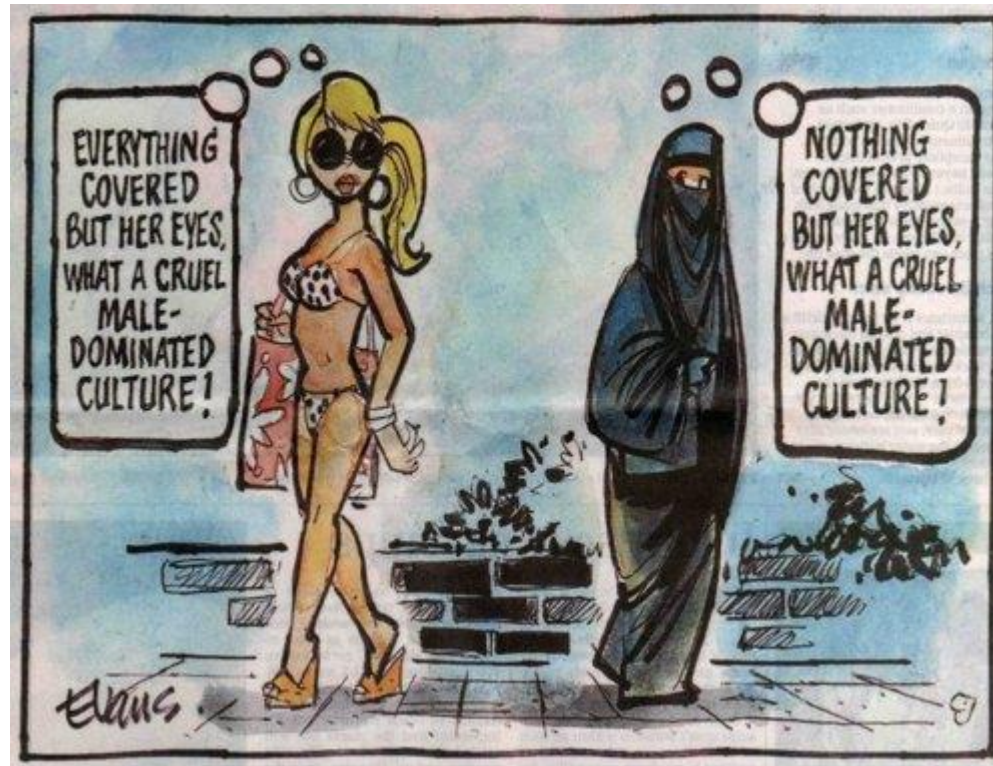
Definition

"Culture is a universal phenomenon. All human beings live within a specific culture and contribute to its development. Culture creates a structured environment within which a population can function. It encompasses **objects** we created and use in our daily lives, **as well as our institutions, ideas and values**. Culture is always manifested in a system of orientation **typical to a country, society, organization or group**. This system of orientation consists of specific symbols such as language, body language, mimicry, clothing and greeting rituals and is passed on to future generations from the respective society, organization or group.

This system of orientation provides all members with a sense of belonging and inclusion within a society or group and creates an environment in which individuals can develop a unique sense of self and function effectively. Culture has an **influence on the perception, thought patterns, judgment and action of all members of a given society**. The culture-specific system of orientation creates possibilities and motivation for action, but also determines the conditions and limits of the action"

Thomas 2003 (German psychologist)

My motivation: Understanding other's perspectives



<http://giazilo.blogspot.com/2012/01/cultural-relativism-and-human-rights.html>

Cross-cultural comparisons

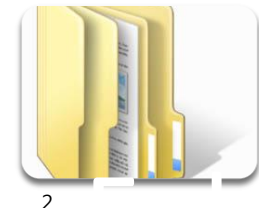
- Geert Hofstede's dimensions of culture
- About 117,000 questionnaires in 71 countries
- Employees of IBM
- 1970ies

	U.S.	Germany	Denmark	Japan
Power distance	40	35	18	54
Uncertainty Avoidance	46	65	23	92
Individualism / Collectivism	91	67	74	46
Masculinity / Femininity	62	66	16	95

Minkov and Hofstede 2013, p. 212-214

- Criticism: oversimplification; static (Jacob 2005)

Part III



Idea from: Duncker (2002)

Information Science and Culture

1) http://www.steubencountyida.com/wp-content/uploads/2011/11/bigstock__d_image_of_classic_file_cabin_16824443_sm2.jpg

2) <http://www.windows-vista-tips-and-tricks.com/image-files/vista-manage-folders-icon.jpg>

3) http://buero-direkt24.de/media/catalog/product/cache/1/image/9df78eab33525d08d6e5fb8d27136e95/b/_/b_oregal-aktenregal-3-ordnerh_hen-timo-schwarz-und-wei_-ordnerregal-fachbodenregal-buero-direkt24.jpg

Benefits of Culture-Related Research in Inf. Science

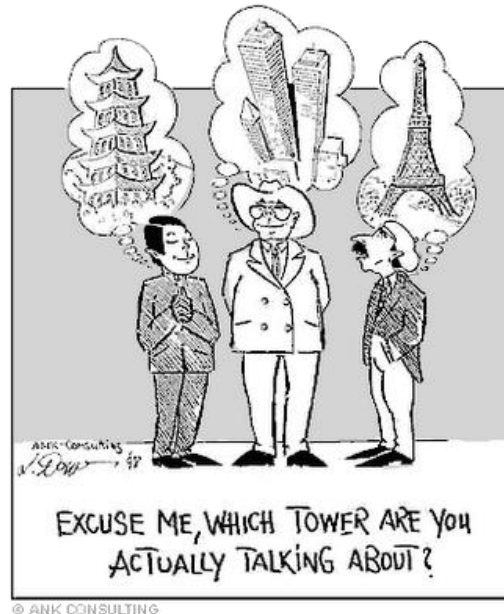
Cultural awareness in **products** (such as search engines or websites)

- Definitions by Duncker (2002, p. 223):
 - **“Internationalization** is aimed at the avoidance of culturally offending designs. **Globalization** is the term preferred over internationalization, because cultural boundaries do not necessarily coincide with national boundaries. National states often comprise multiple cultures and ethnicities.
 - **Localization** pertains to the re-representation of global technology into particular cultures, local markets or “locales”[10] . This includes the use of local (native) languages, and the design for local customs, beliefs, conventions and practices.”

Benefits of Culture-Related Research in Inf. Science

Cultural awareness in **research**

- Asking good questions:



http://2.bp.blogspot.com/_K5Vy1IHrlmw/S112tKhBfjI/AAAAAAAAA_c/LwKttszc7iY/s400/comic03.gif

- generalizability of research results
- choice of samples

Information Science Research about Culture

Design of websites: Davis et al. 2008

("When designing websites for an **individualistic** culture it is to the retailers' advantage to use low task relevant cues to balance both pleasure and arousal. However, in a **collectivist** culture the primary focus should be to increase arousal, which acts as a mediator for pleasure.")

Thinking-Aloud in Usability Tests: Clemmensen et al. 2009

("We illustrate the impact of cultural cognition on four central elements of TA: (1) instructions and tasks, (2) the user's verbalizations, (3) the evaluator's reading of the user, and (4) the overall relationship between user and evaluator.")

Libraries: Duncker 2002

("The ethnographic study examines relevant features of the Maori culture, their form of knowledge transfer and their use of physical and digital libraries.")

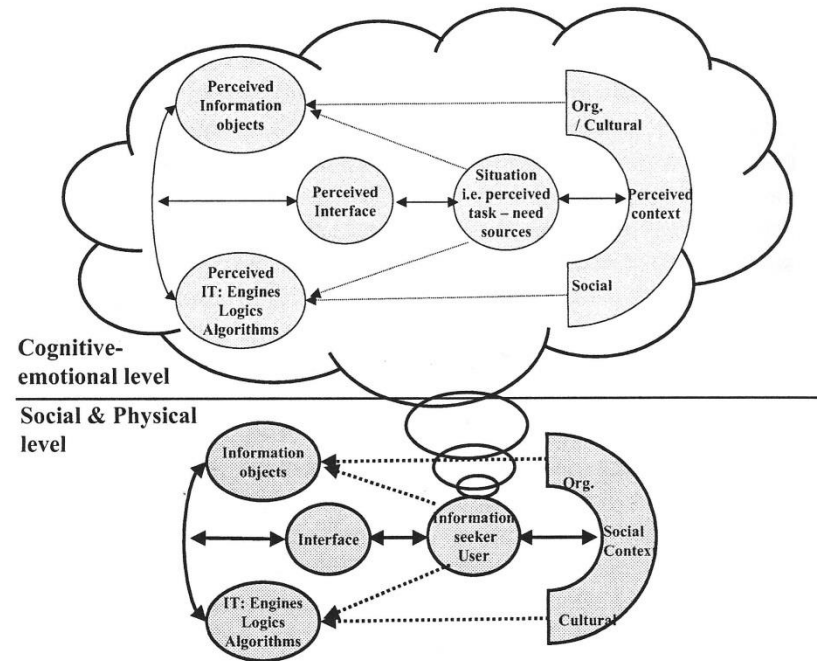
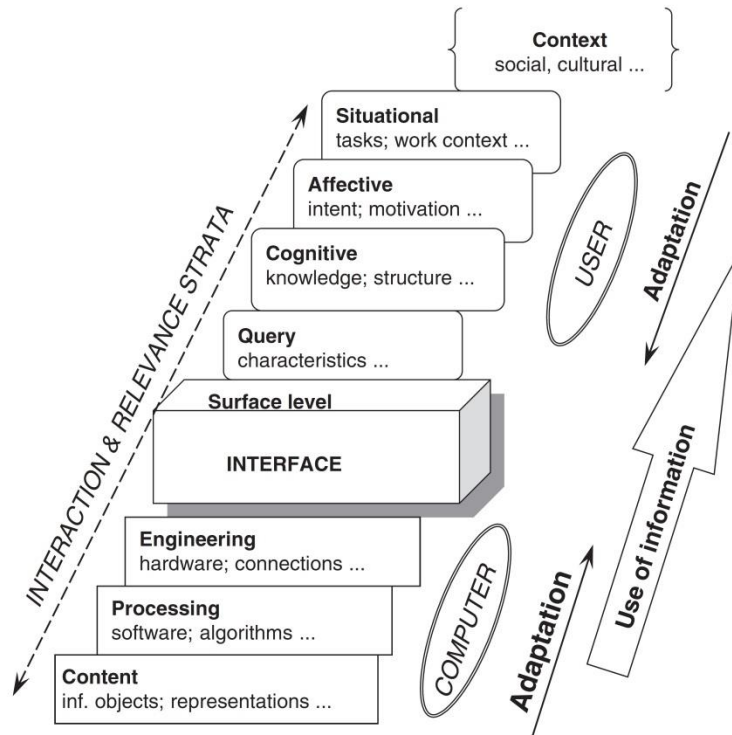
Technology-Use: Vishwanath and Chen 2008

("The results of the current research suggest that technologies that are closely cathected to the self are universally similar, while technologies that are farther from the self are universally different.")

Information Systems: Leidner and Kayworth (2006)

(literature review)

Culture's Influence on Search Behavior (I)



Stratified model of relevance interactions
(Saracevic 2007, p. 1927)

Ingwersen and Järvelin 2005, p. 278

Culture's Influence on Search Behavior (II)

	Info Need ID		Source Selection	Query Formulation	Query Execution	Examine, Interpret	Extract Information	Reflect, Stop	Other IS Areas
Hall:									
Message velocity continuum	S					S		S	
Context		S		S		S			
Time concept				W	W		W	W	W: Search, task techniques
Information flow									S: Expectations of info access
Action chains				S	S		S	S	S: Search, task techniques

S: strong influence; W: weak influence (Komlodi and Carlin 2004, p. 479)

“- Speed of Messages: speed at which people of various cultures decode and react to messages. [...]

- **Context:** A *High Context* culture places more emphasis on the unspoken meaning of a given situation. A *Low Context* culture places much more importance in an explicit message being transmitted. [...]

- **Time Concept:** *Polychronic Time* consists of multiple things going on at once. *Monochronic Time* consists of one thing at a time and is linear in nature. [...]

- Information Flow: how long it takes a message which is intended to produce a given effect to travel through an organization and produce the desired effect. [...]

- Action Chains: Cultures vary in the degree to which members are committed to complete an action chain in a certain amount of time and in a certain order.” (Komlodi and Carlin 2004)

Culture's Influence on Search Behavior (III)

	Info Need ID		Source Selection	Query Formulation	Query Execution	Examine, Interpret	Extract Information	Reflect, Stop	Other IS Areas
Hofstede:									
Power distance			S						S: Expectations of info access
Collectivism/ Individualism	S								S: Search, task techniques
Femininity/Masculinity			W						W: Search, task techniques
Uncertainty avoidance	S	S		S	S				S: Search, task techniques

S: strong influence; W: weak influence
 (Komlodi and Carlin 2004, p. 479)

“- Power Distance: A *Low Power Distance* society tends to be considerably more open to challenging of the status quo or superiors. The *High Power Distance* society tends to support inequality within the society. [...]

- Collectivism / Individualism: addresses whether a society supports individual or collective accomplishment and relationships. [...]

- **Femininity / Masculinity:** the degree the society reinforces, or does not reinforce, the traditional masculine work values of achievement, control, and power or focuses on traditionally female values such as family, quality of life, and collaboration. [...]

- **Uncertainty Avoidance:** focuses on the level of tolerance for uncertainty and vagueness within the society. [...]” (Komlodi and Carlin 2004)

Image Search

Dong 2011

- about main objects, background and contextual features
- 30 European American and 32 Chinese

Results:

- Chinese generated more search keywords describing the **overall features** of the ideal target image for the search tasks than EA.
- Both groups used a similar proportion of keywords describing **main and background objects**.

Uncertainty Avoidance & Masculinity / Femininity

Taksa and Flomenbaum (2009)

- 160 international students from 160 countries
- Relevance judgements and log data analysis

Results:

- Search engine users of **masculine cultures valued quantitative information more**
- People from cultures with **high uncertainty avoidance conducted more searches per task**

Time Concepts and Uncertainty Avoidance (I)

- Kralisch, Berendt and Eisend 2005
 - Log analysis of international website from health sector in four languages; users from 185 countries
 - Website navigation behavior
- Results:
 - members of **short-term oriented** cultures spent **less time** on visited pages than members of long-term oriented cultures.
 - The more a country is considered to be **uncertainty avoidant**, the **more information** is collected by members of these countries
 - **monochronic cultures** show more **linear navigation** patterns than polychronic cultures, and vice versa.

Time Concepts and Uncertainty (II)

■ Recommendations based on results:

Group 1	Group 2
Monochronic	Polychronic
<ul style="list-style-type: none"> information placed in linear order links emphasizing hierarchical structure 	<ul style="list-style-type: none"> design supporting navigational freedom cross-referencing links
High UA	Low UA
<ul style="list-style-type: none"> restricted information offer 	<ul style="list-style-type: none"> extensive exploration possibilities (e.g., many pages, pop-up windows, etc.)
STO	LTO
<ul style="list-style-type: none"> design minimizing time spent accessing information (e.g., search engines - see also Kralisch & Berendt, 2004) 	<ul style="list-style-type: none"> design may ignore time aspects (and e.g. favour sophisticated pictures with longer download times)

Conclusion from literature review

Few results about cultural influences on search behavior



My choice of a **data-driven** and **open** research design:

- No hypothesis
- qualitative guided interviews
- Grounded Theory Methodology
- Focus on search experience and feelings

Part IV

My PhD research

"I want to understand the world from your point of view. I want to know what you know in the way you know it. I want to understand the meaning of your experience, to walk in your shoes, to feel things as you feel them, to explain things as you explain them. Will you become my teacher and help me understand?"

Spradley 1979, p. 34

Research question and Schedule

The main **research question** being investigated in the study is:

- How does culture influence affective experiences during information search?

Schedule

- July 2013: 4 pilot interviews in Berlin
- Sept – Dec 2013: approx. 15 interviews at UNC
- Jan – May 2014: approx. 15 interviews in Berlin/ Hildesheim

Interview questions

This is a semi-structured interview. Not all questions will be asked of all participants. The questions are just avenues that the interviewer might explore.

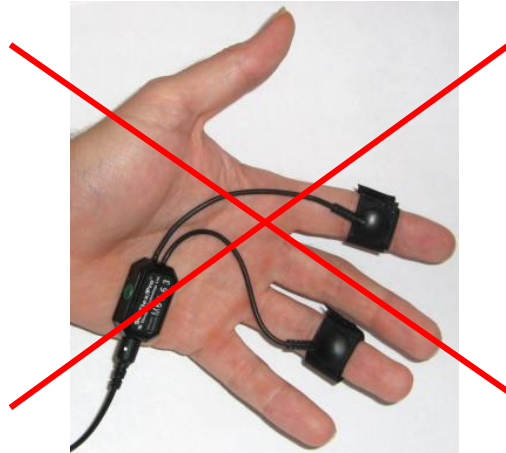
Process, considerations, obstacles, turning points of the search

- Can you tell me a little about <the search you just performed>?
- During the search, did you wonder about anything that concerned the search process? If so, tell me about your questions about the search process and your considerations.
- Did you experience difficulties during the search? If yes, could you tell me more about these difficulties? How was that for you, when <the problem you experienced> appeared?
- Can you identify moments during the search that were especially important? If so, could you tell me more about each of these moments? What did you experience at these moments?
- Did you make any decisions within the search? If so, tell me more about these decisions.

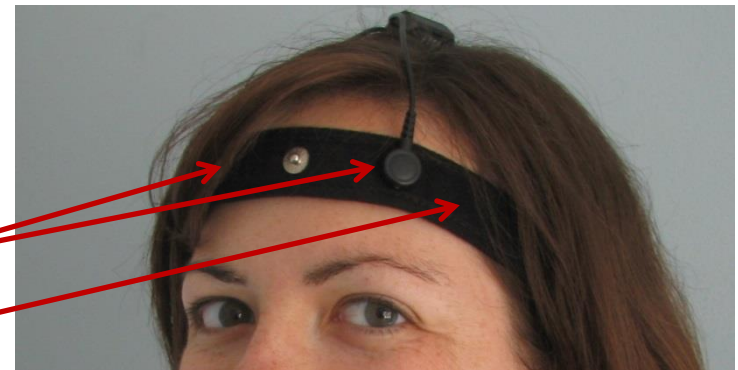
Feelings in the online search process

- Please tell me about how you experienced the situation when <the mentioned question / thought / difficulty / important moment appeared or happened> .
- Could you tell me more about <that feeling>?
- You've just described that you felt <a feeling>. Could you tell me more about how this <feeling> arose?

Scin Conductance Sensor

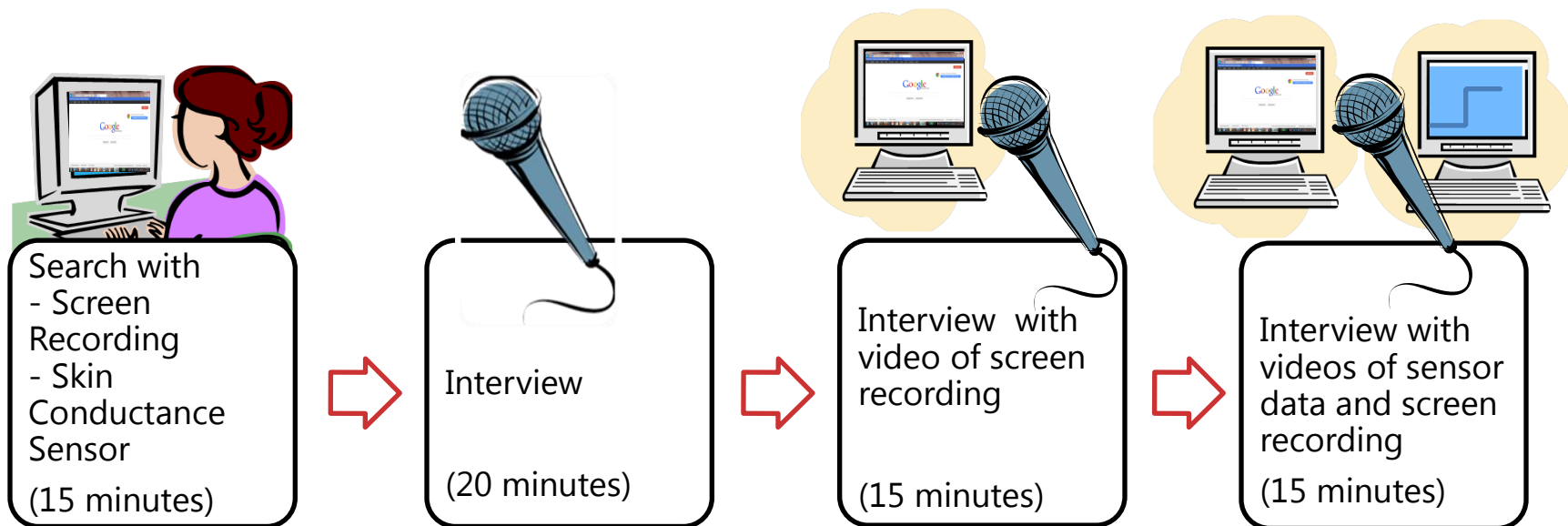


electrodes
headband



Course of Session

- Participants: Freshmen between 18 and 22 years
- Participants bring their own search tasks



Future

- How could an evolving theory could look like? I don't know **yet**.
- "Familiarity with the content of an investigation is not obtained only through literature and theoretical studies. Just **hanging out in the environment** where the interviews are to be conducted will provide the interviewer with an **introduction to the local language, the daily routines, and the power structures**, and so **provide a sense of what the interviewees will be talking about**, a situation not unlike that of the novice apprentices in a workshop." (Kvale 2009, p. 107)

- It is easy to draw the wrong conclusions... see:



so I might ask **you** for your opinion 😊



Dankeschön!

[Thank you!]

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