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The Impact of *IT*
on
Communication and Linguistics

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Outline

❖ Introduction

  ✳ Language, Information, Communication and Culture

❖ A general definition of information

❖ A general model of digitalization

❖ Concluding remarks

Introduction

❖ The concept of information

   ✴ Of our mundane and technical concepts, information is currently one of the most important, most widely used and least understood.

   ✳ Luciano Floridi, *Two approaches to the philosophy of information*, Forthcoming in *Mind and Machine*

   ✳ Luciano Floridi, *Open Problems in Philosophy of Information*, Forthcoming in *Metaphilosophy*, volume 35, no.3, April 2004

The concept of information…

❖ From the perspective of semiotics, "information" is an ambiguous theoretical concept because the word is used to represent both signifier and signified, both text and content.

✳ Douglas Raber & John M. Budd, *Information As Sign*, Journal of Documentation; 2003;59,5

…is an open problem

❖ The definition of Information is a problem over 50 years since before the term "Information Science" was coined in 1955.

✳ A.D. Madden, *A Definition of Information*, Aslib Proceedings vol. 52, No.9, p.343-, 2000.10

Information As…

❖ thing, goods

❖ knowledge, power

❖ resources

❖ part of communication

❖ part of a system

❖ …

➢ more than 40 different items are collected in

Alvin M. Schrader, *In Search of a Name: Information Science and Its Conceptual Antecedents*, Library and Information Science Research, 6:4, pp227-271, 1984

Information Science

"Information science, by nature and necessity, is interdisciplinary."

✳ Douglas Raber & John M. Budd, 2003, p.507

❖ The affinity among *Communication, Media, Language , Information* and *Culture* will be revisited in the following unities.

Communication and Information

❖ *No information, no communication*

❖ *No communication, no information*

❖ Therefore, information and communication always co-exist.

✳ How about Information Science and Communication Theories?

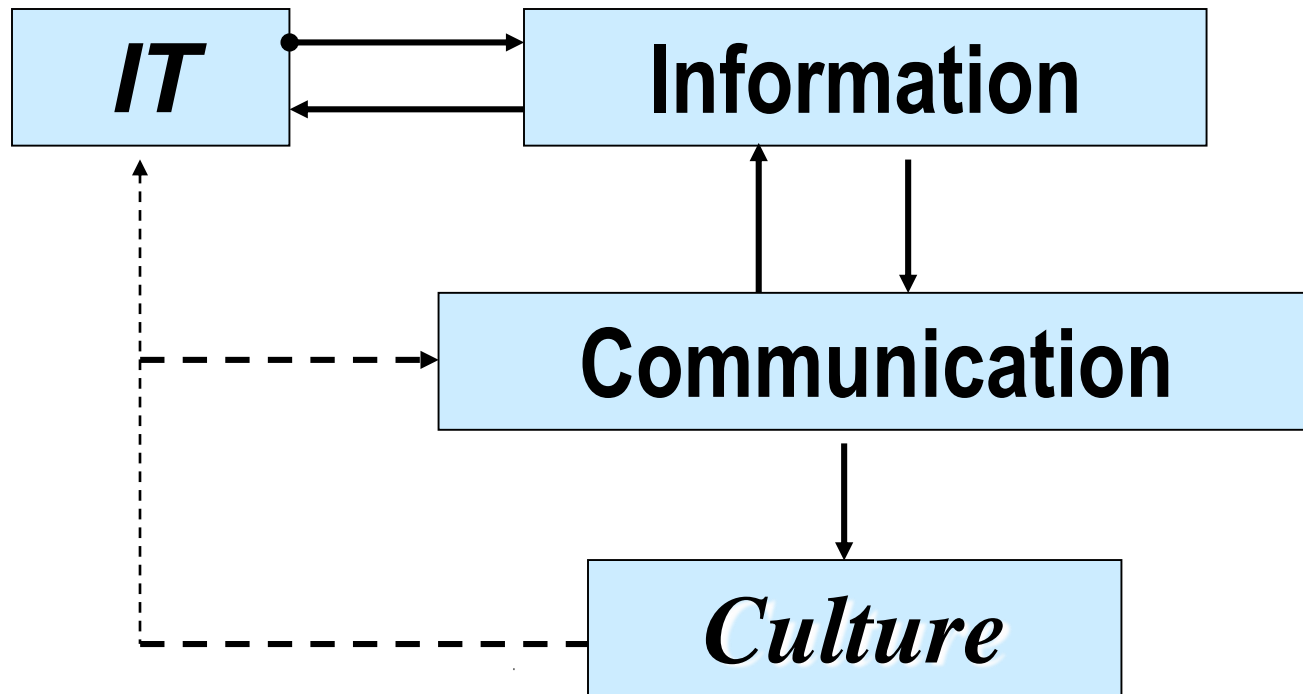# Communication and Culture

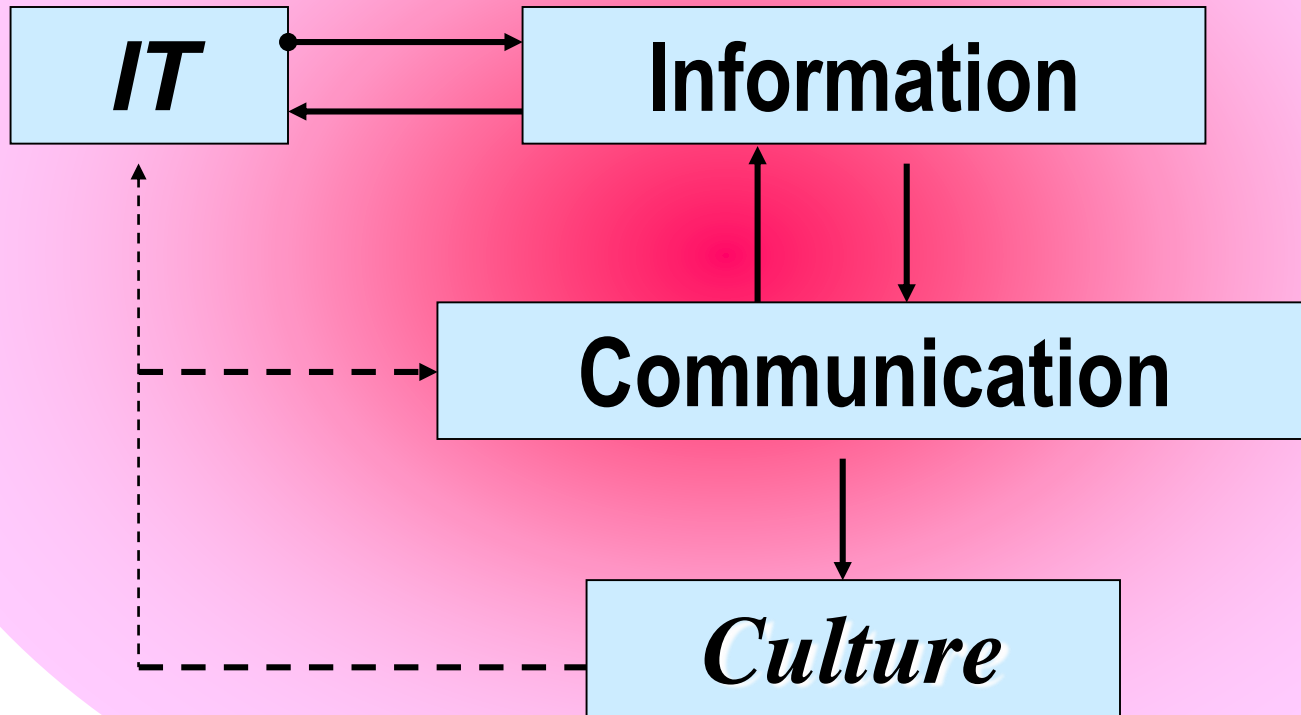❖ *No communication, no community*

✴ *No community, no culture*

❖ *Different communication behaviors leads to different cultures.*

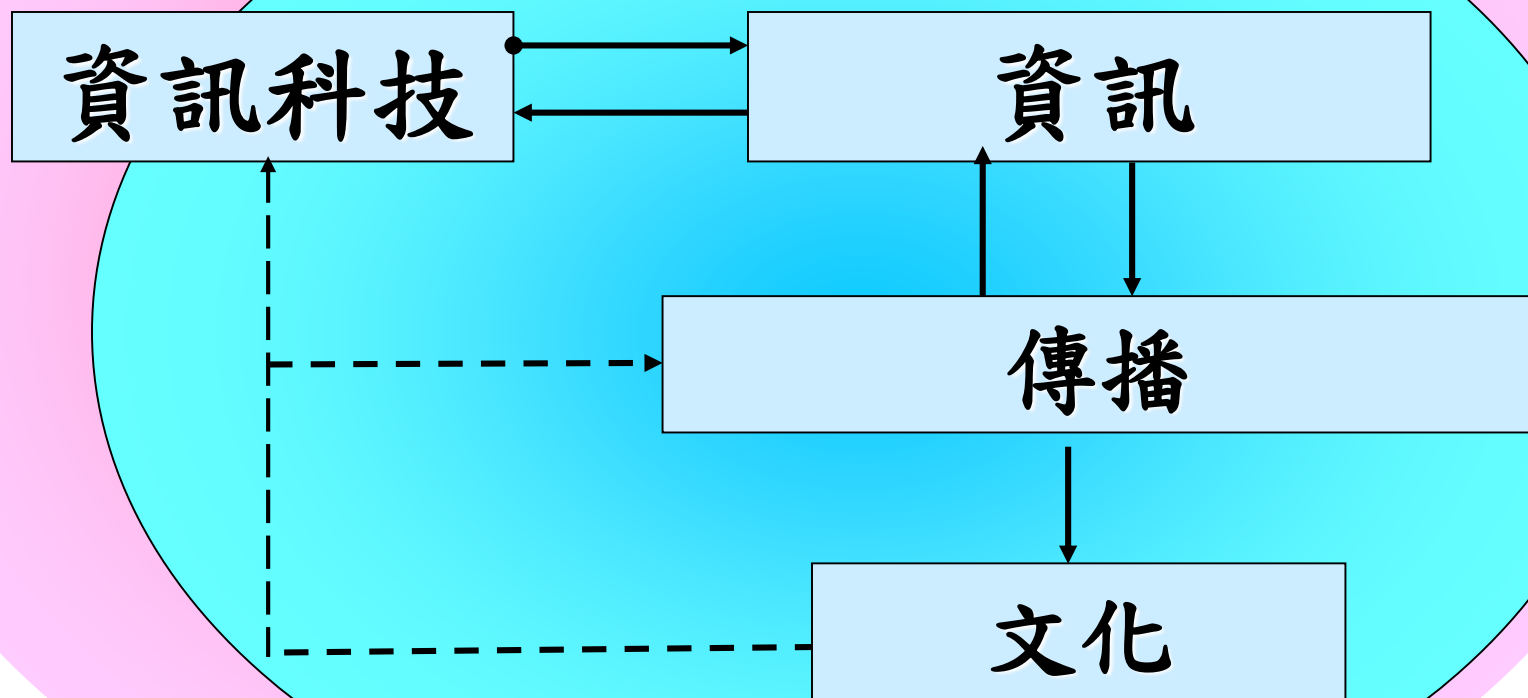❖ Therefore, communication is a necessity for culture.

IT and **Culture**

Media

| IT | Information |

Communication

Culture

媒介

表現系統

資訊科技 ←→ 資訊

傳播

文化

Media

- ❑ **material**

- ❑ **instruments and tools**

- ❑ **techniques/technology**

- ❑ **express system**

  - ❑ **languages**

  - ❑ **semiotic systems**

Digital Media

- ➢ energy-state media, instead of material media
  - ➢ *almost no material barrier*
- ➢ **the only medium**
- ➢ **Media are like the gene of information**
  - ➢ *Media do have effect of interpretation of information*
  - ➢ *"The media is the message"*

Media vs. culture development

The three stages of culture development

- ✹ **Audio world 口語文明**
- ✹ **Visual world 文字文明**
- ✹ **Audio world**
  - ➤ **Electronic Multimedia world**
  - ➤ **多媒體文明**

✱✱ **Marshall McLuhan**
Understanding Media,
McGraw-Hill, 1964

| Stage of Culture	Expression system	Media
Audio world	Spoken language	Sound Wave
↓	(literacy)	
Visual world	Written Text	Material Media
↓	(functional literacy)	
Audio world **Electronic world**	Multimedia	Energy-state Media

A definition of Information

- ❖ Some important concepts about information
- ❖ The definition
- ❖ Properties of information derived from this definition

The ambiguity of Information Concept

Information → 内容 *signified* 信息 → What is known (**content**)

→ 形式 *signifier* 資訊 → Form of expression
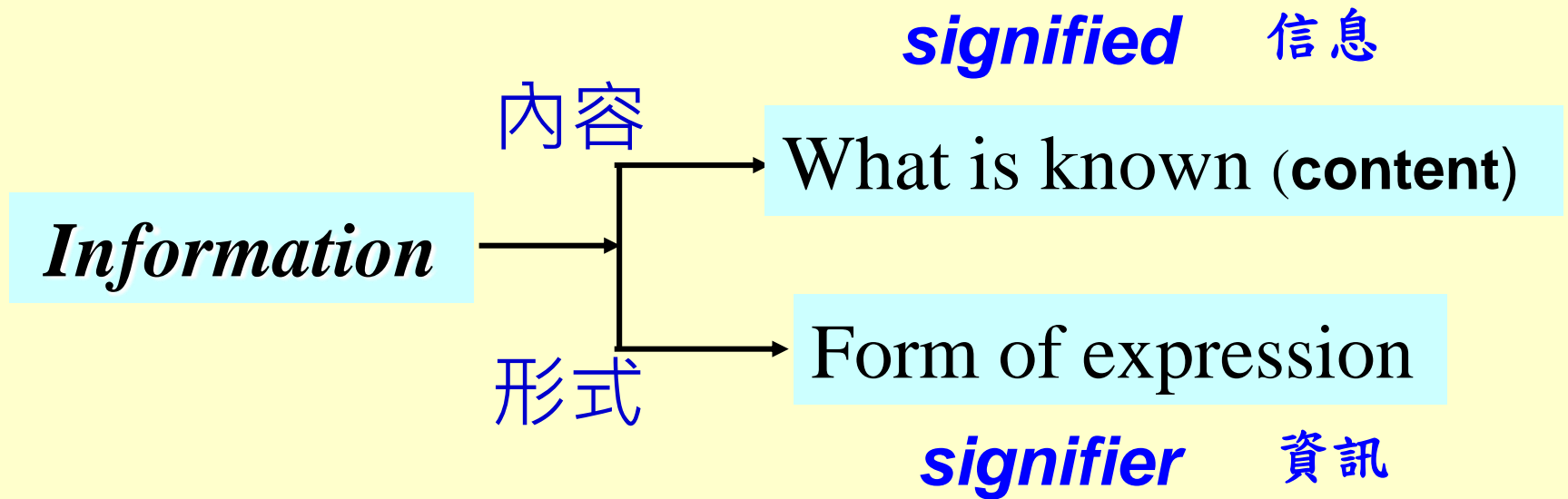
Some dualities

❖ Real existence vs. the mind

	the mind	physical
Aesthetics	Content	Form
Semiotics	Meaning, Ideas	Sign
Linguistics	Content, Meaning	Elements
Info. Science	information?	information?

The definition

❖At the information creation end, information is defined as :

"the form/sign of *what is known* expressed on media material"

The definition

❖ At the receiving end, information is defined as :

Sign/form that we can receive

❖ The interpretation of the sign/form depends on the expression system used, and the readership context.

Context vs. Meaning

❖ Authorial Context vs. Readership Context
- ♦ Madden, 2000
- ✷ The gap between readership context and authorial context is broadening.

❖ Context:
- ✷ intra-text context, Intertextuality
- ✷ personal context, social context, cultural context

Meaning

❖ The role of time regarding meaning

  ✸ synchronic vs. diachronic

  ✸ the shifting relation of signified and signifier

  ✸ Intertextuality is also at play in two ways.

❖ Intended communication vs. unintended communication at the receiving end.

"We cannot anticipate changes in the value and meaning of content, and so, to apprehend information as an object of control for access we must engage the synchronous aspects of information. On the other hand, to understand why a text relevant at one time and from one perspective may not be relevant at another time or when viewed from another perspective, we must ignore the synchronous aspects of information and instead engage the diachronous and intertextual relations of content."

Douglas Raber & John M. Budd, 2003, p.514

4 categories of Properties of Information

❖ Inherited from "What is known"

  ✴ "what is known" has a Sanskrit corresponding term "Jeana〔所知〕"

❖ By digital media

❖ By harness of digital instruments and related techniques

❖ By the applied expression system

An Example: Digitalization

❖ An object

❖ An Achieve

Digitalization of an object

- ❖ **Digitalization its appearance (form)**
  - ✳ **Text, figures…**
  - ✳ **Typesetting, binding…**

- ❖ **Digitalization background information**
  - ✳ **Bibliographic information**
  - ✳ **Metadata for various purposes**
  - ✳ **...**

- ❖ **Digitalization content related information**
  - ✳ **Interpretations**
  - ✳ **Explanatory notes**
  - ✳ **…**

A Model of Digitalization

文與物之參照　　　　情境之參照

Multimedia References　　　　**Context References**

Text to Objects and vise versa

背景資料　Background Info.

式形觀外字文
Appearance

內容詮注 Content Notes

互為文本　Intertextuality
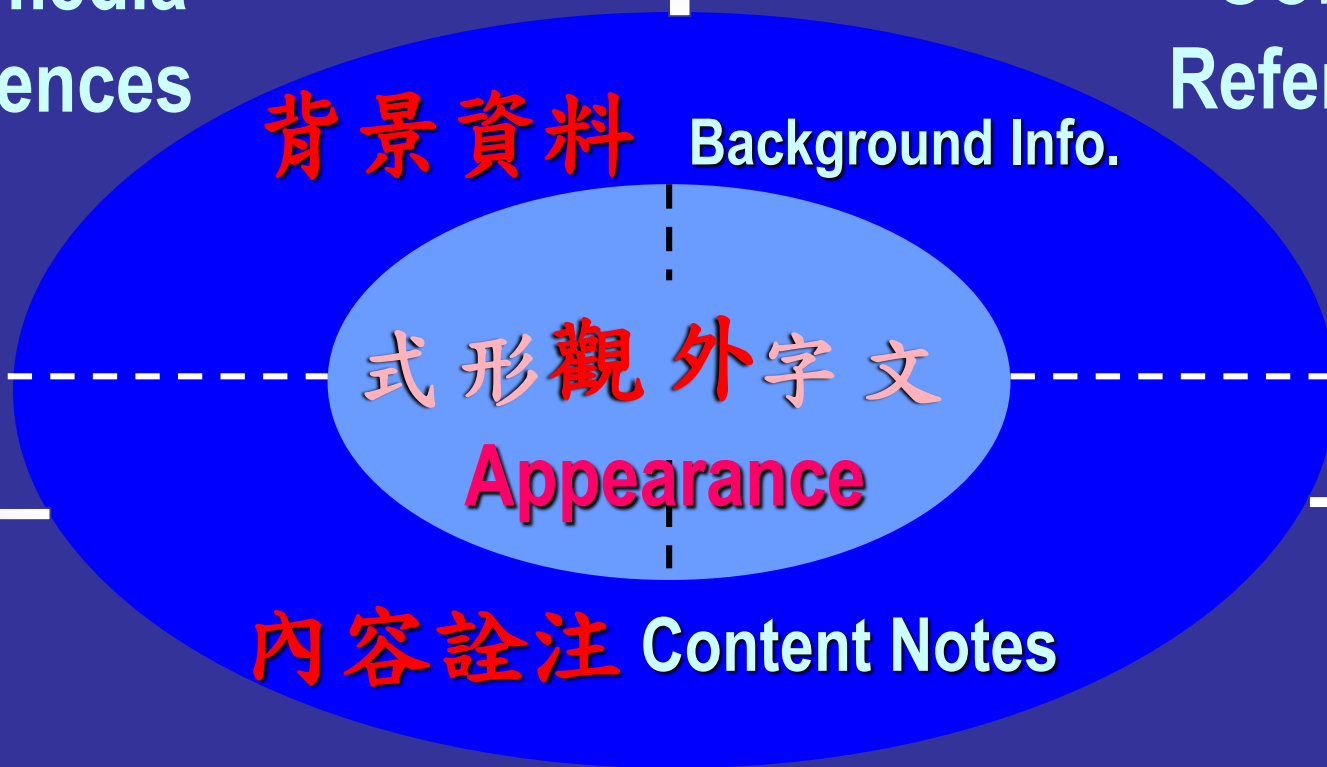
Reference Links

❖ *Inter-textuality* (互為文本)

  ✳ Between texts

    ✳ *Julia Kristeva*

  ✳ Between Disciplines

❖ *Context Reference Links* (情境之參照)

  ✳ Authorial Context, Readership Context
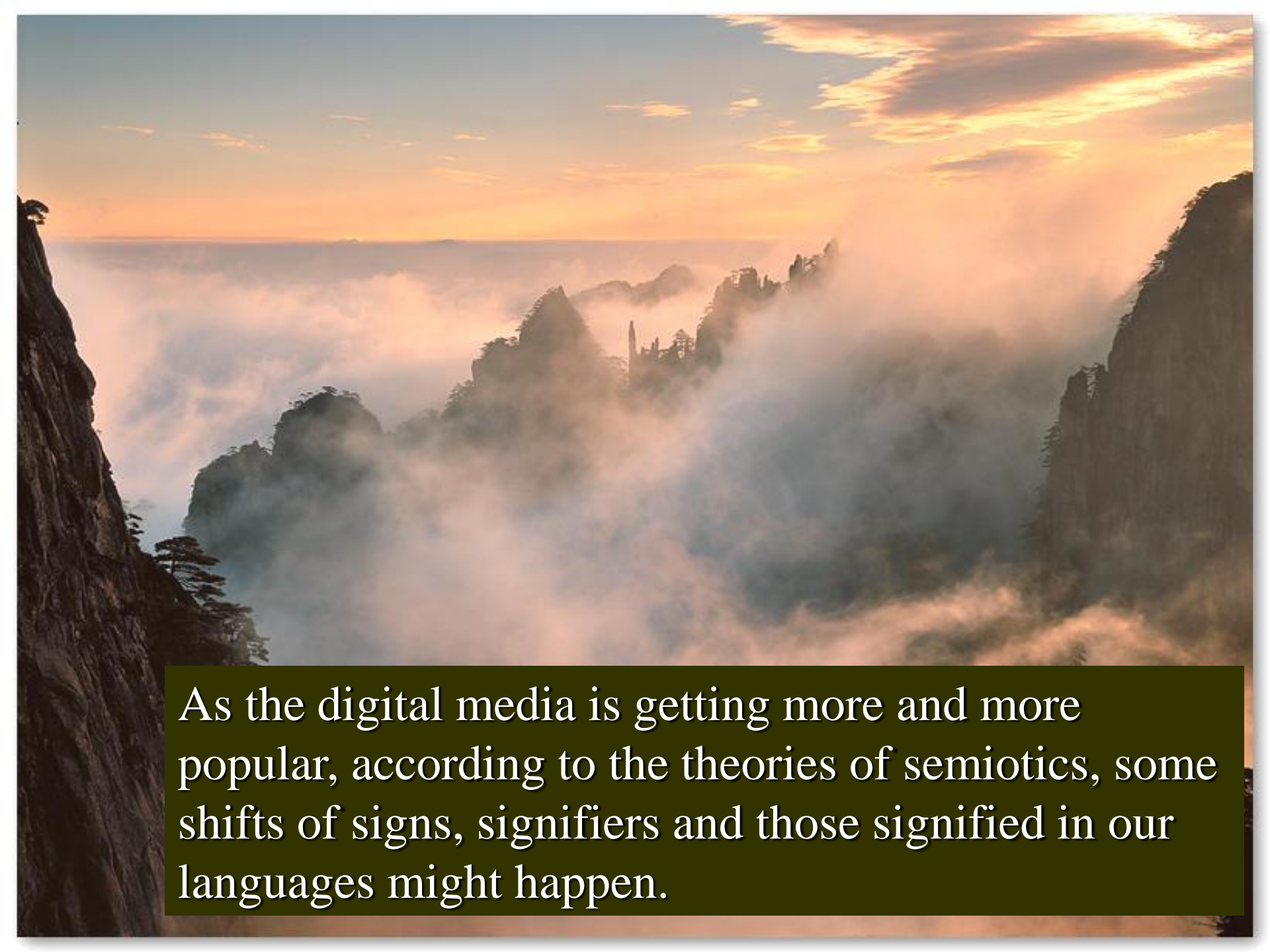
  ✳ personal, cultural, and social context

❖ *Multimedia Reference* (文與物之參照)

  ✳ Text to/from object

  ✳ Humanities vs. Nature

Concluding Remarks

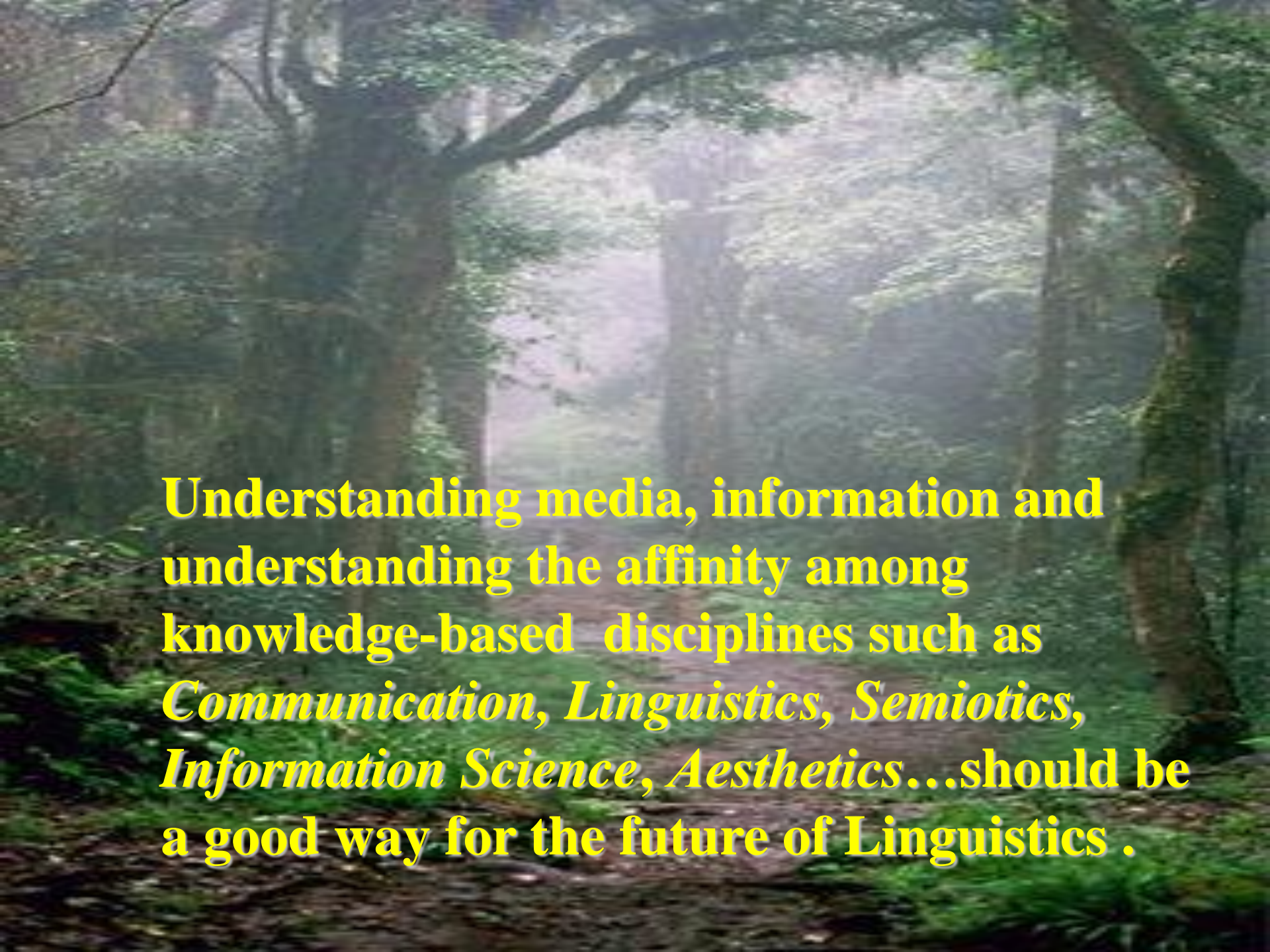Linguistic knowledge can be of great help to improve digitalization works.

As the digital media is getting more and more popular, according to the theories of semiotics, some shifts of signs, signifiers and those signified in our languages might happen.

Understanding media, information and understanding the affinity among knowledge-based disciplines such as *Communication, Linguistics, Semiotics, Information Science, Aesthetics…*should be a good way for the future of Linguistics .

The study of meaning provide a common-ground for collaboration among many fields, such as Linguistics, Semiotics(記號學或符號學), Aesthetics(美學), Communication(傳播學),Hermeneutics(釋義學或詮釋學), Information Science, etc.

The
End

Thank you !

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