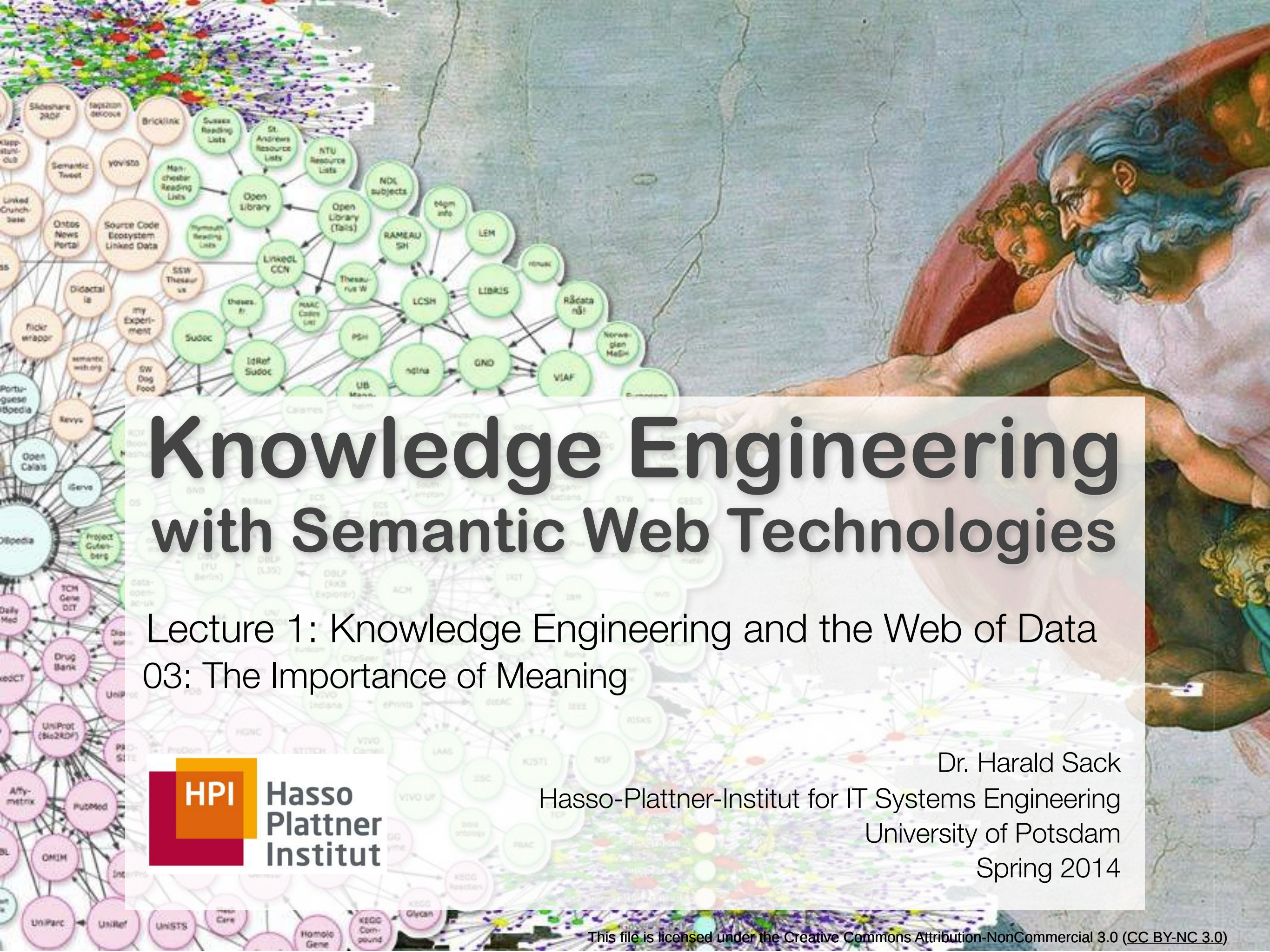




Knowledge Engineering with Semantic Web Technologies

Lecture 1: Knowledge Engineering and the Web of Data
03: The Importance of Meaning



Dr. Harald Sack
Hasso-Plattner-Institut for IT Systems Engineering
University of Potsdam
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Lecture 1: Knowledge Engineering and the Web of Data

Open HPI - Course: Knowledge Engineering with Semantic Web Technologies

WHAT IS THE MEANING

03: The Importance of Meaning

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Lecture 1: Knowledge Engineering and the Web of Data

WHAT IS THE 
LEARNING

Syntax
Semantics
Context
Pragmatics
Experience

Syntax

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*Semantics:
Determining Meaning*

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- In **formal languages**, syntax is just a set of rules, by which well formed expressions can be created from a fundamental set of symbols (alphabet).
- In **computer science**, syntax defines the normative structure of data.

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- Semantics asks, how sense and meaning of complex concepts can be derived from simple concepts based on the **rules of syntax**.
- The semantics of a message depends on **context** and **pragmatics**.

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 - **personal or social contexts:**
relation between sender and receiver of a message

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- In linguistics pragmatics denotes the **study of applying language in different situations**.
- It also **denotes the intended purpose** of the speaker.
- Pragmatics studies **the ways in which context contributes to meaning**.

Experience

- **Experience** considers all information that you have learned and put in context with the world you are living in.
- Experience in this sense also often is referred to as **comon sense knowledge** or **world knowledge**.

Successful

Communication

For **successful communication**,

- information has to be correctly transmitted (**Syntax**)
- the meaning (**Semantics**) of the transmitted information must be interpreted correctly (= **understanding**)

Understanding depends on

- the **context** of both sender and receiver and
- the **pragmatics** of the sender
- the **context** of sender and receiver depends on
- the **experience** (knowledge of the world) of both sender and receiver

Meaning



sender

Experience

Concept

symbolizes

refers to

Symbol

stands for

Object

"Jaguar"



Pragmatics



In the (traditional) Web there is no explicit semantics

Next section

http://

04: The Limits of the (current) Web Pt.2

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