

# Demo of “Weblinks”:

**A Rich Linking Layer Over the Web**

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# Outline

- i. What is a link?**
- ii. Augment the Web: why and how?**
- iii. Demo**
- iv. Future work**

# i. What is a Link?

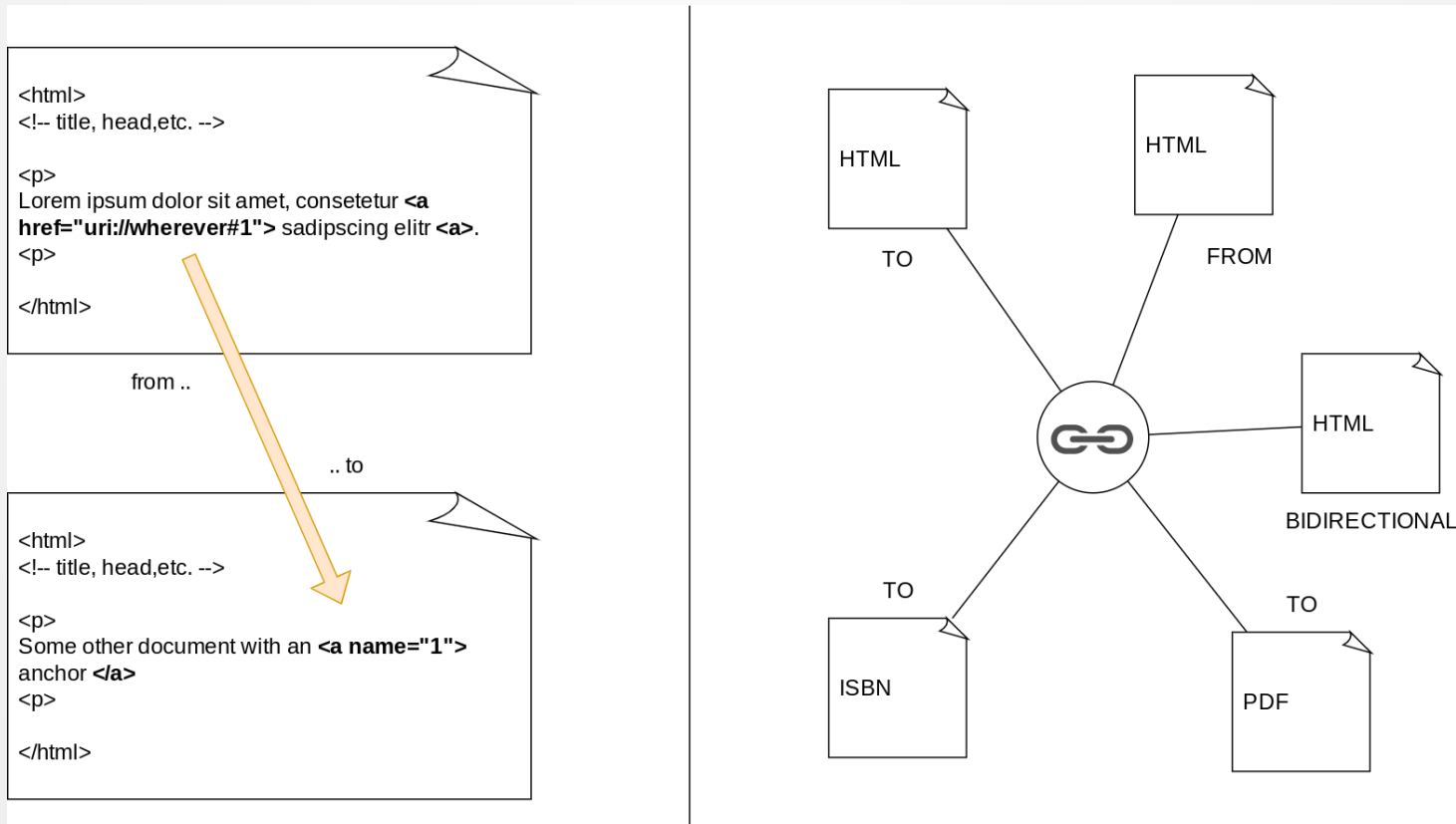
## **Web**

- unidirectional
- unary
- embedded in the document

## **“Weblinks” (Dexter)**

- can be bidirectional
- unlimited arity
- first-class objects

# i. What is a Link?



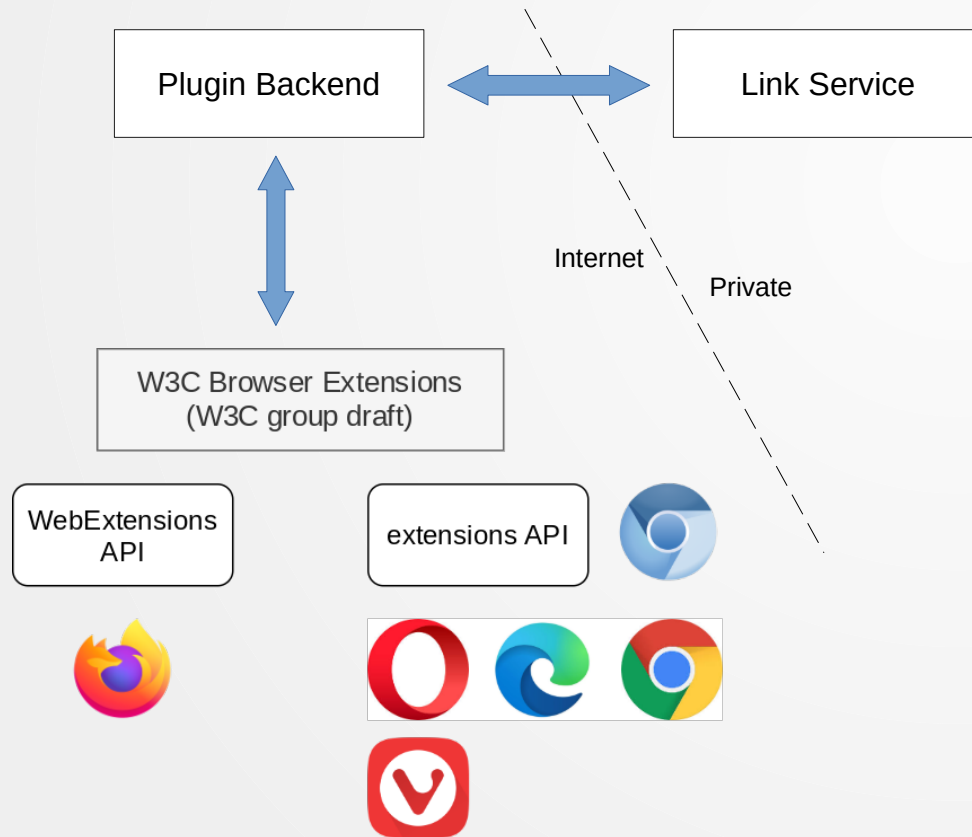
## ii. Augment the Web: Why?

- “The process of tying two items together is the important thing” (Bush 1945)
- Links are mainly consumed, rather than authored.
- Technological refresh on older attempts.
- Study the application of rich linking in the Web.

## ii. Augment the Web: How?

- As web pages and document are not controlled by consumers, a general functioning extension has to implemented by the clients.
- Web browser (or: OS)
- **Plugin for Web browsers**
- **Link service to manage link objects**

# ii. Extend the Web: Why and How?



## Link Service

RESTful with HATEOAS

## Plugin Backend

- Adds meta data (author, date, etc.)
- Access management
- Social features (sharing etc.)

# ii. Augment the Web: How?

## Web Annotation Data Model (W3C Recommendation)

“a common model and syntax to express and possibly combine selections”

Selector	Description
Fragment Selector	Fragment selection as defined by the corresponding MIME type
XPath Selector	XPath selection for resources that supports the DOM (HTML, XML)
Text Quote Selector	Range of text by quoting it; prefix and suffix text can be defined
Text Position Selector	Range of text by defining character numbers of the resource
Range Selector	Range of text by defining start and end with other selectors
Refinement of Selection	Composition of selections, which refine the selection



# iii. Demo

## iv. Future Work

- Use **and** test the plugin in various application domains (teaching and research, law – legal texts)
- Go open source
- Grow a reasonable large user base
- Get some insights on how such a link service is used
  - Link structures
  - Arity, Directions
  - Intented communication when sharing links