



# Interfacing generic and specialized search engines on the user side

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Mercedes-Benz



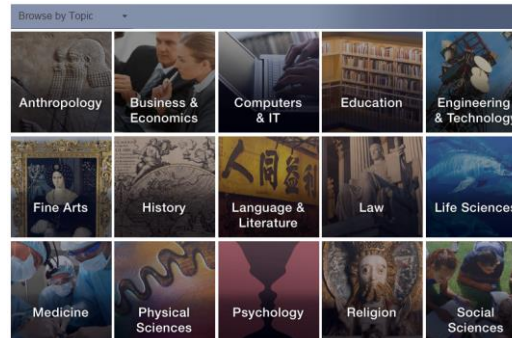
# Concept

- Dynamic, transparent and efficient **integration of independent, distributed and domain-specific search engines into the browsing context.**
- **Notification and navigation in the Open Search ecosystem.**



# Where we come from

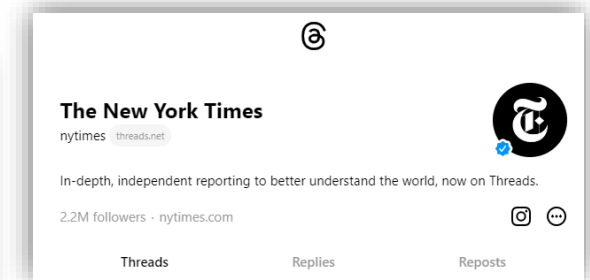
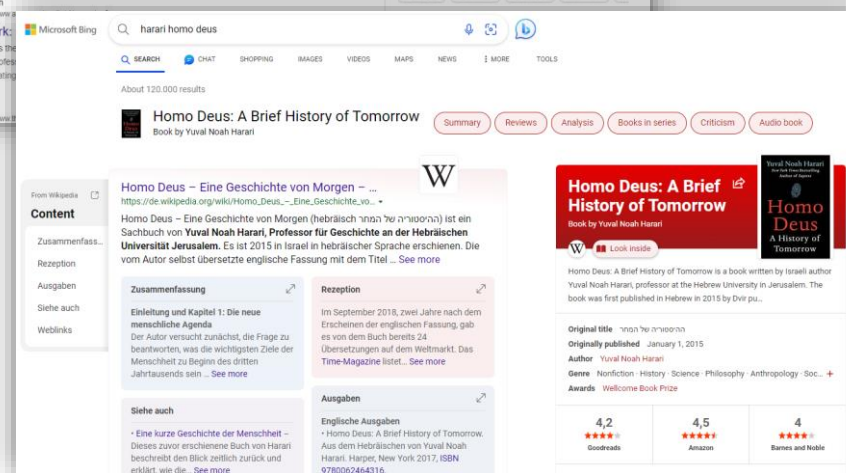
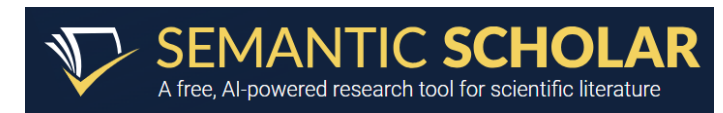
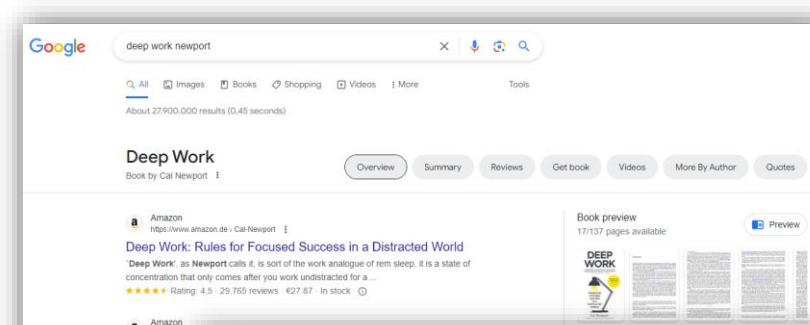
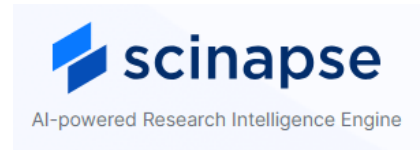
- The users of our platform, a **digital library** of the most diverse **professional information resources**, are on the go on the internal company platforms and intranets
- but also "out in the wild", where all kinds of **platforms** and **search systems** and, above all, the **big top dogs** operate.
- Extending the closed silos with "Open Searches"





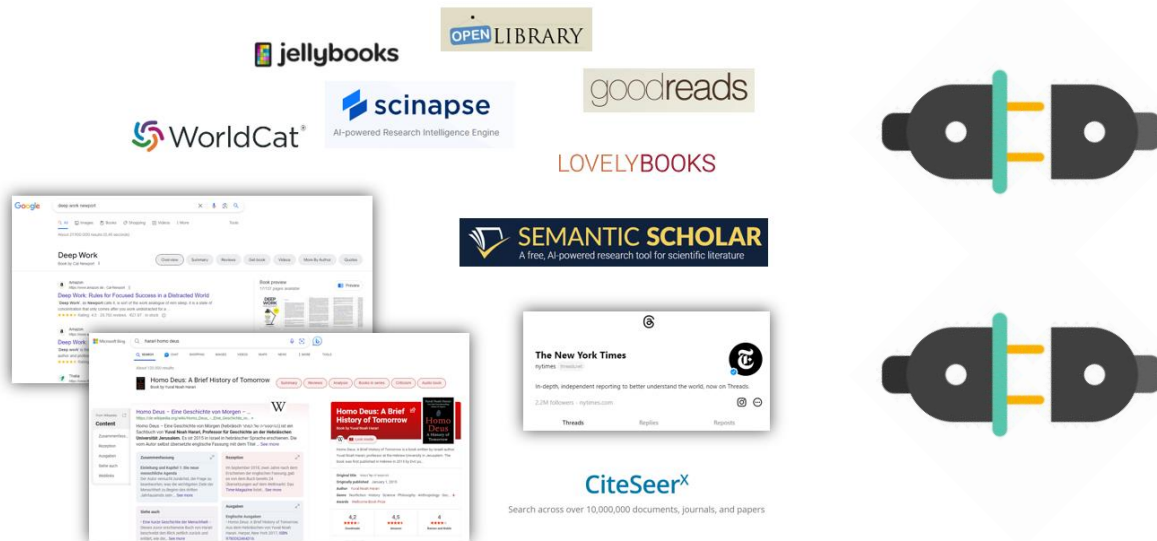
# Out in the wild: the Open Infrastructure

- **Advantage** for the users of our platform to use diverse external platforms, as these provide **unique added value**
- It's a **valuable Open World**
- It can be commercial or somehow “problematic”, as long as there is functional added value



Search across over 10,000,000 documents, journals, and papers

# The users always find their way home



- Besides of the added value of external resources, the users need access to licensed full texts of the internal platforms
- let users intentionally and actively operate in a different context of the info resources like in social reading
- verify the certified content at a SPOT@home

# Content Categorization

- **Microdata:** OpenGraph, Twitter Cards, META-Description, Schema.org
- by **URL-Mapping**
- by **DOI-Resolving**
- **Classification**
  - **Vocabulary** like IAB-Categories
  - proprietary **databases**
  - **AdHoc** via Concept Detection mit **NLP: Semantic Browser Context**
- direct **search** for text / data in homebase index

## Book

A Schema.org Type

Thing > CreativeWork > Book

A book.

Property	Expected Type
<b>Properties from Book</b>	
<code>abridged</code>	Boolean
<code>bookEdition</code>	Text
<code>bookFormat</code>	BookFormatType
<code>illustrator</code>	Person
<code>isbn</code>	Text
<code>numberOfPages</code>	Integer



`article` - Namespace URI: <https://ogp.me/ns/article#>

- `article:published_time` - datetime - When the article was first published.
- `article:modified_time` - datetime - When the article was last changed.
- `article:expiration_time` - datetime - When the article is out of date after.
- `article:author` - profile array - Writers of the article.
- `article:section` - string - A high-level section name. E.g. Technology
- `article:tag` - string array - Tag words associated with this article.

`book` - Namespace URI: <https://ogp.me/ns/book#>

- `book:author` - profile array - Who wrote this book.
- `book:isbn` - string - The ISBN
- `book:release_date` - datetime - The date the book was released.
- `book:tag` - string array - Tag words associated with this book.



## URL Category Check

Results for your request:

URL: <https://www.researchgate.net>

Categories: **Education**

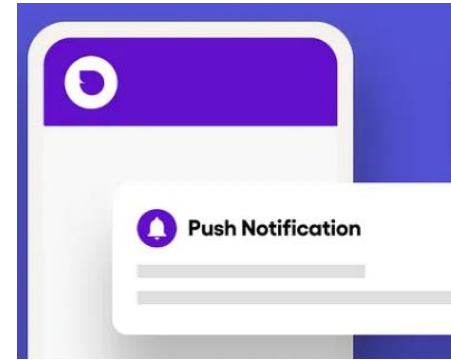
Your API response:

```
{
  "domain": {
    "categories": [
      {
        "confidence": 0.75,
        "name": "/Books & Literature",
        "IAB1-1": "Books & Literature"
      },
      {
        "confidence": 0.7,
        "name": "/Reference/Libraries & Museums"
      }
    ],
    "domain_url": "https://openlibrary.org/"
  }
}
```

# Notification - Redirection - Navigation

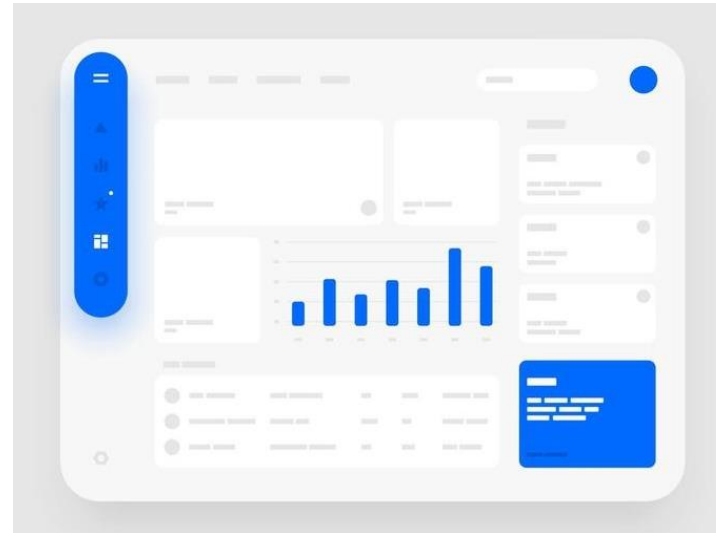
## Notification

- green glowing buttons in toolbars or injected in Content
- Coloured themes
- push notifications

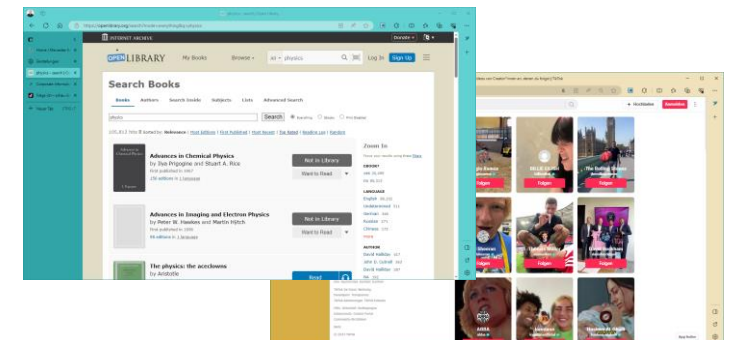
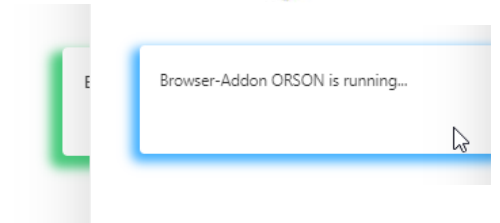


## Redirection & Navigation

- Opening sidebars in browser or injected in content
- Dialogs
- Information and Linking



Chrome Browser Addon ORSON  
*Open Resources Online Navigation*  
on internal Webstore



# Idea concept:

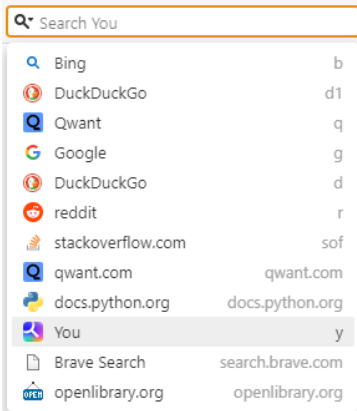
## Home Zone as a directory of open custom search engines

- **Access Broker** for showing not alternative platforms, but for **alternative search systems**.
- **Connection** to the **Open Search** infrastructure
- Starting from the two pillars **browsing and search queries**
- the appropriate special open search engines can be determined using **semantic analysis of the browsing context and search queries**.



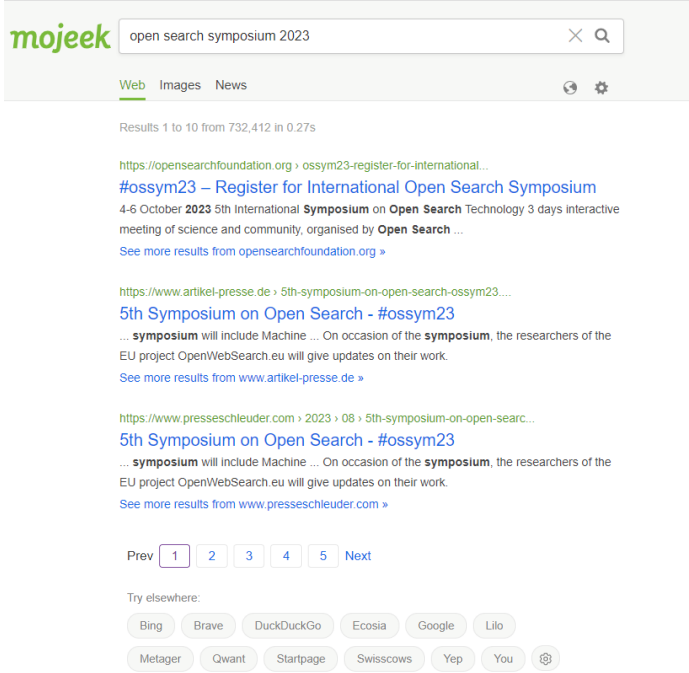


# Search engine selections



```
<OpenSearchDescription xmlns="http://a9.com/-/spec/opensearch/1.1/"
                        xmlns:moz="http://www.mozilla.org/2006/browser/search/">
  <ShortName>[SNK]</ShortName>
  <Description>[Search engine full name and summary]</Description>
  <InputEncoding>[UTF-8]</InputEncoding>
  <Image width="16" height="16" type="image/x-icon">[https://example.com/favicon.ico]
</Image>
  <Url type="text/html" template="[searchURL]" />
  <Url type="application/x-suggestions+xml" template="[suggestionsURL]" />
  <moz:SearchForm>[https://example.com/search]
</OpenSearchDescription>
```

```
JSON
{
  "chrome_settings_overrides": {
    "search_provider": {
      "name": "Discogs",
      "search_url": "https://www.discogs.com/search/?q={searchTerms}",
      "keyword": "disc",
      "favicon_url": "https://www.discogs.com/favicon.ico"
    }
  }
}
```

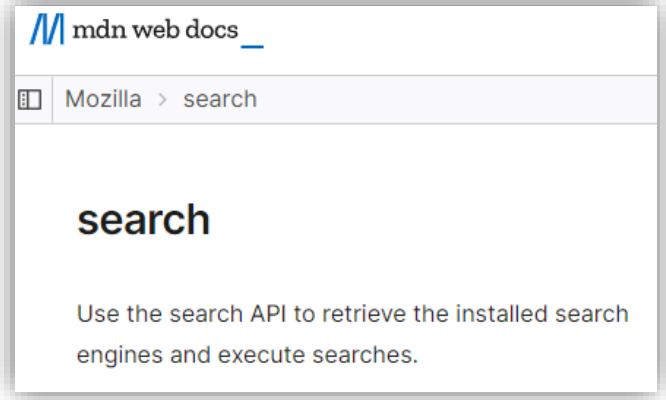
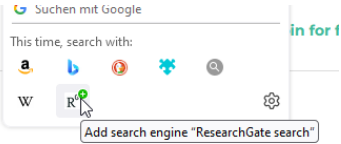


ResearchGate



## Discover research

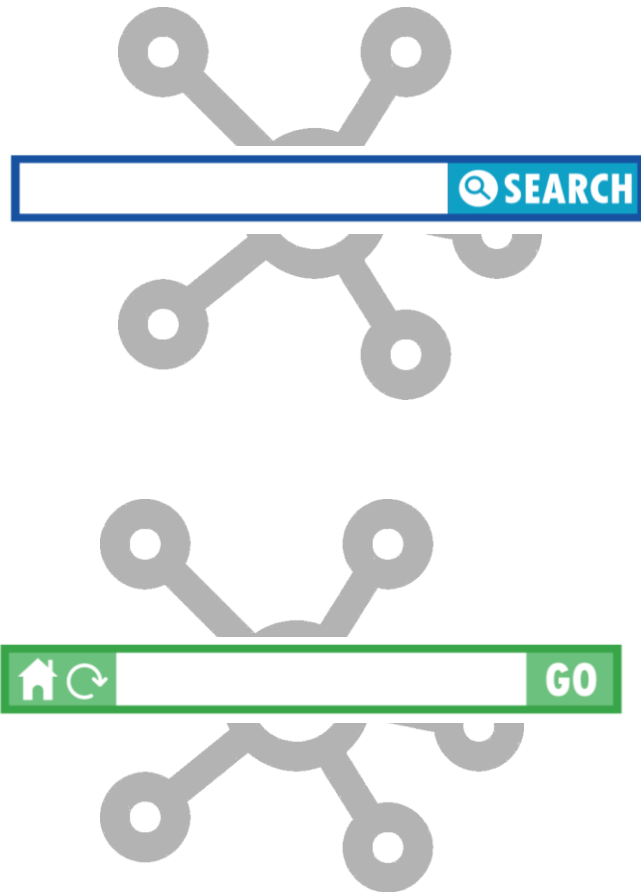
Access over 160 million publication pages and stay up to date with what's happening in your field.



# Automation of query and content categorization and search engine selection

- Semantic Search Entry knows what you are looking for
- Semantic Browsing Addon knows which content you are on

Both select the appropriate search engine.



# Thank you

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