

Conversational Exploratory Search via Interactive Storytelling

Outline

1. Interactive Storytelling Introduction
2. Illustrative Example
3. Experimental Setup

Interactive Storytelling

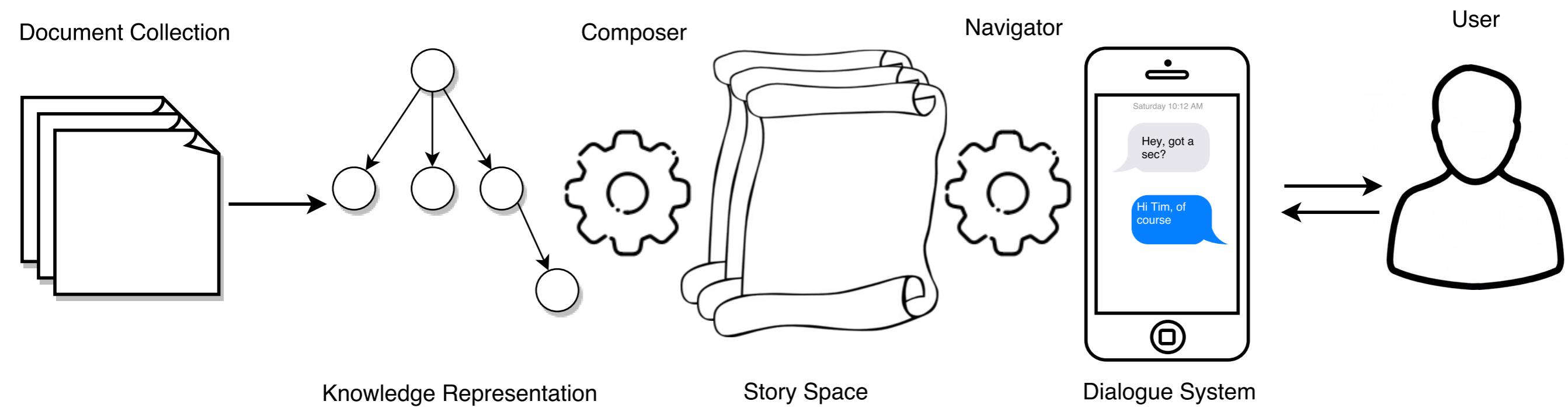


Figure. 1. Communicating knowledge via an interactive storytelling process

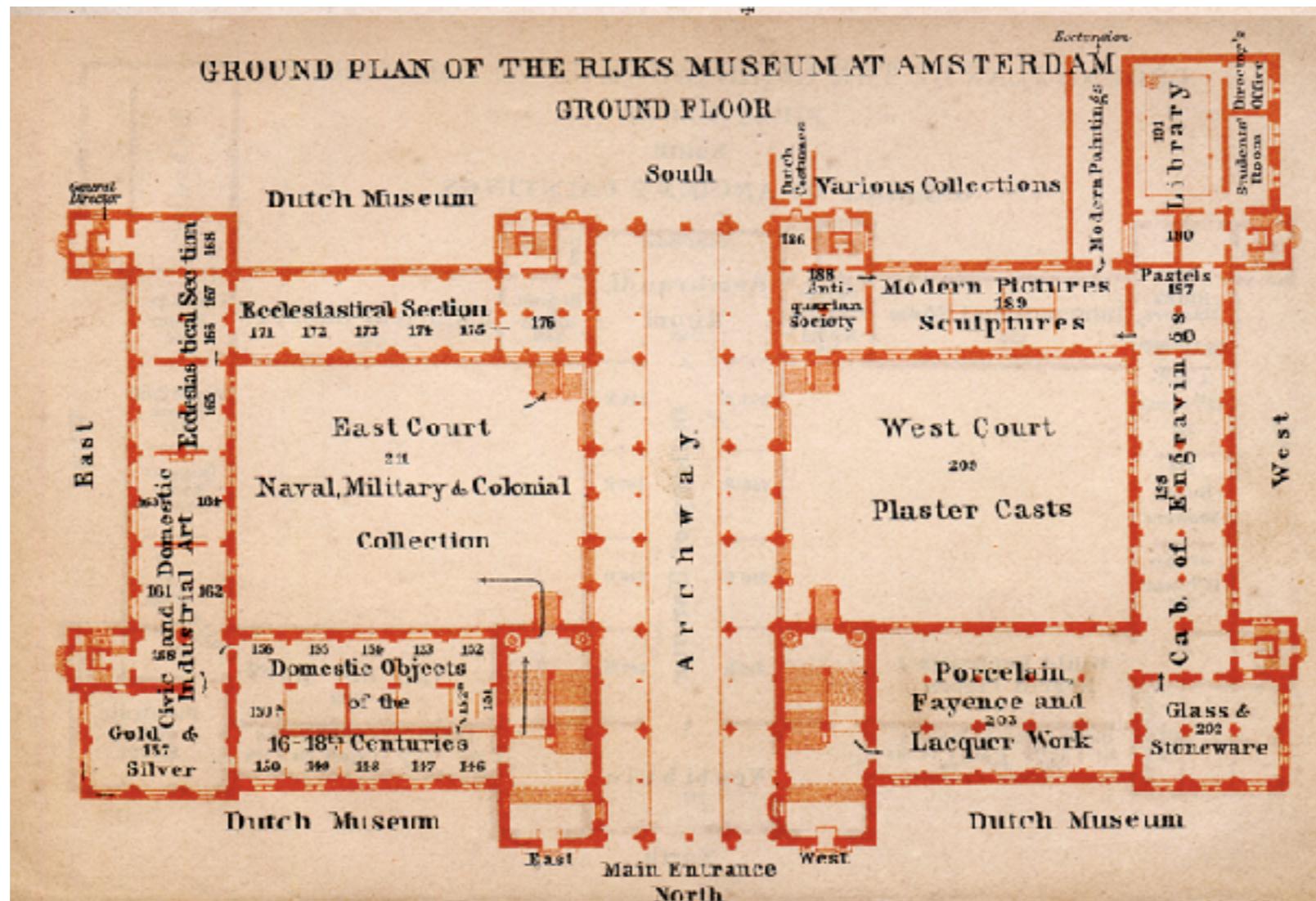
Museum Collection



https://upload.wikimedia.org/wikipedia/commons/4/48/Yosemite_Museum_Artifacts.jpg

Rijksmuseum Optimisation Problem

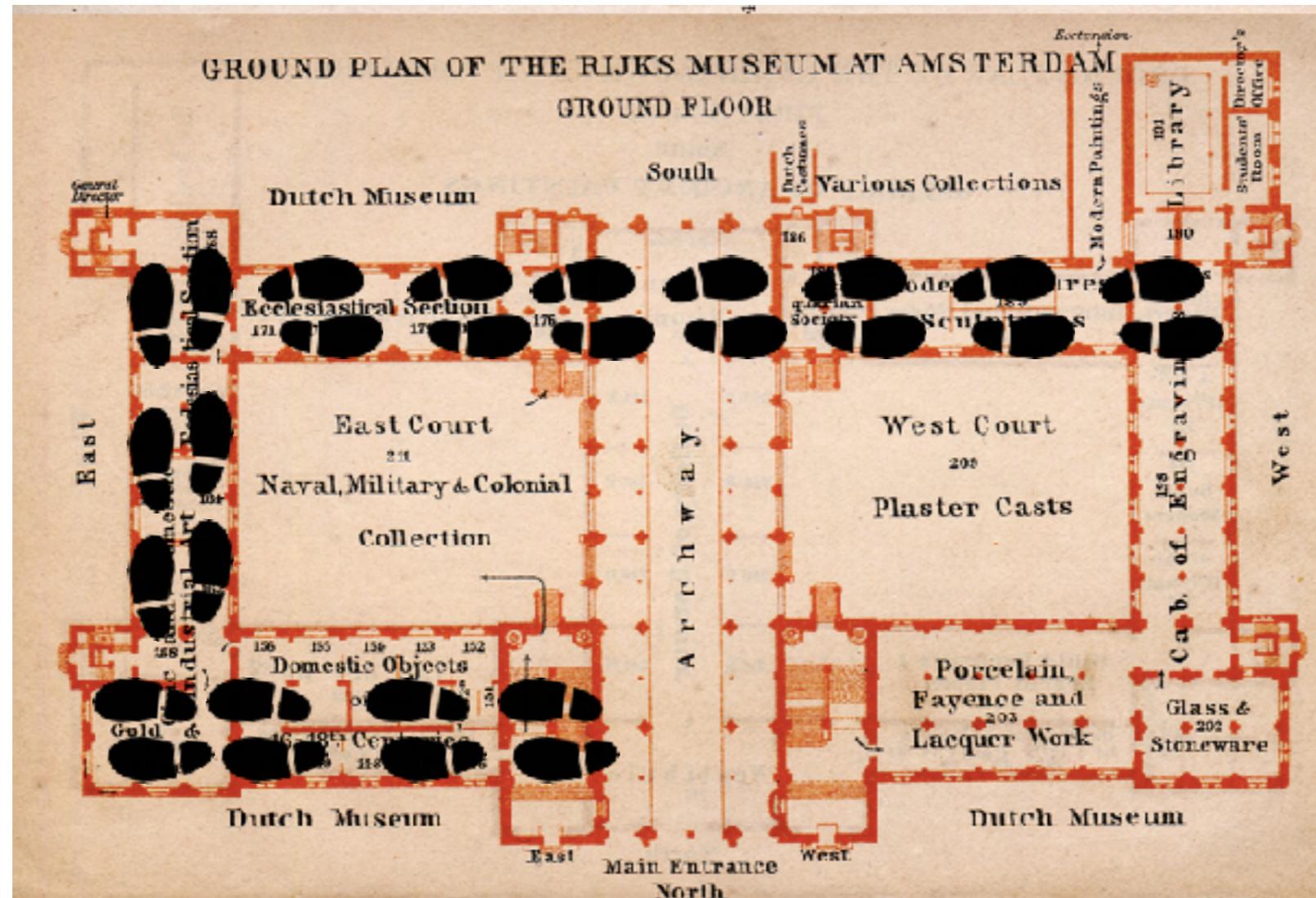
The museum has **on display 8,000 objects** of art and history, from their total collection of **1 million object**



Royalty free map of Amsterdam's Rijksmuseum in public domain. <http://www.tourvideos.com/Images/maps-big/Holland/Amsterdam-Rijksmuseum.jpg>

Rijksmuseum Optimisation Problem

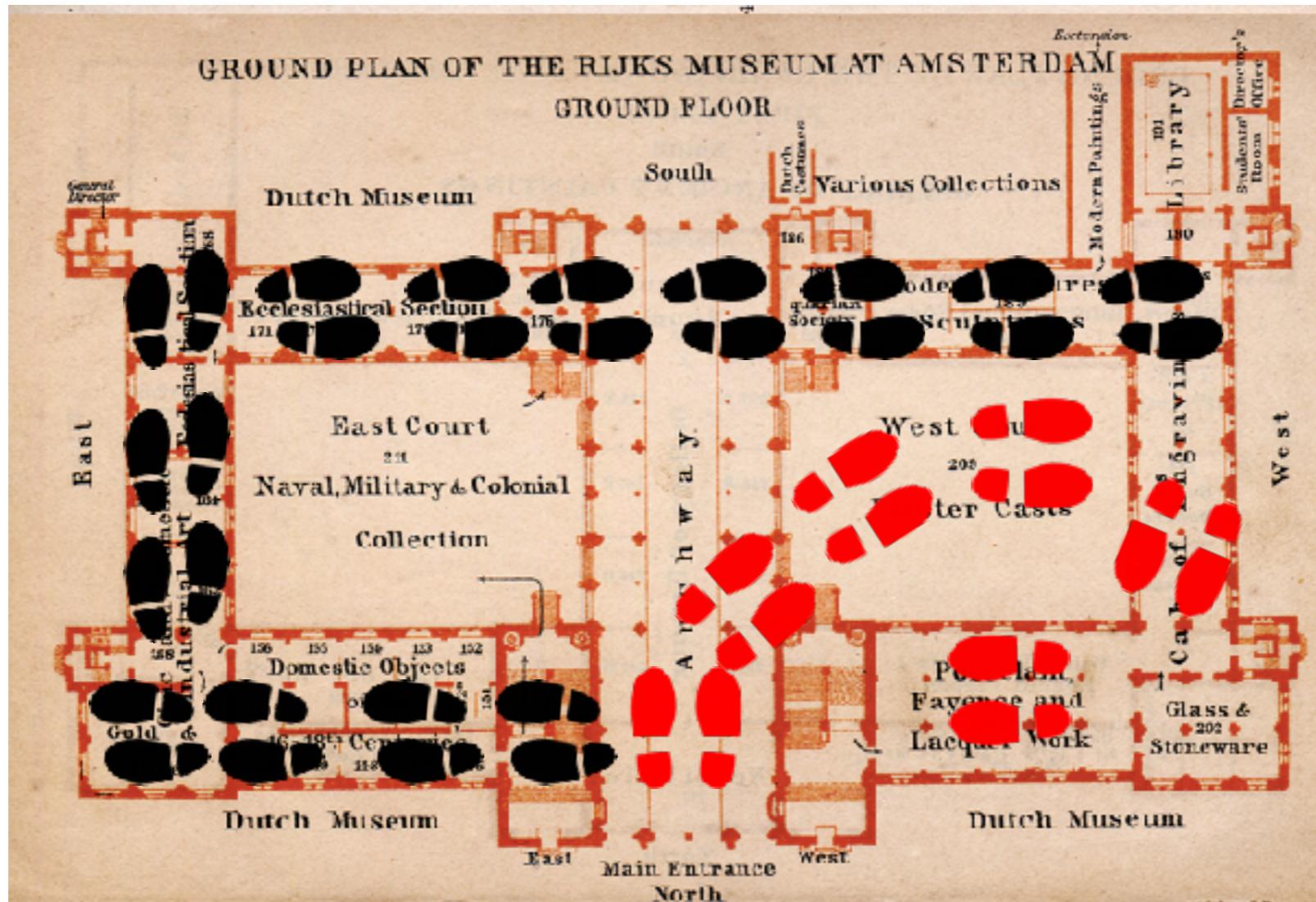
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Royalty free map of Amsterdam's Rijksmuseum in public domain. <http://www.tourvideos.com/Images/maps-big/Holland/Amsterdam-Rijksmuseum.jpg>

Rijksmuseum Optimisation Problem

The museum has **on display 8,000 objects** of art and history, from their total collection of **1 million object**



Royalty free map of Amsterdam's Rijksmuseum in public domain. <http://www.tourvideos.com/Images/maps-big/Holland/Amsterdam-Rijksmuseum.jpg>

Rijksstudio

- Browse 609,537 works of art and 355,663 Rijksstudios



Paintings

RIJKS MUSEUM

[More works of art >](#)



The Hague School

RIJKS MUSEUM

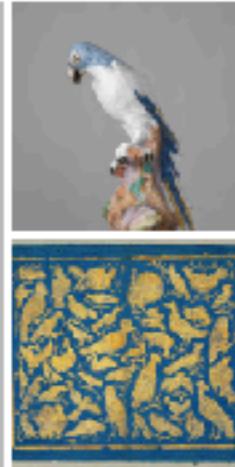
[More styles >](#)



Birds

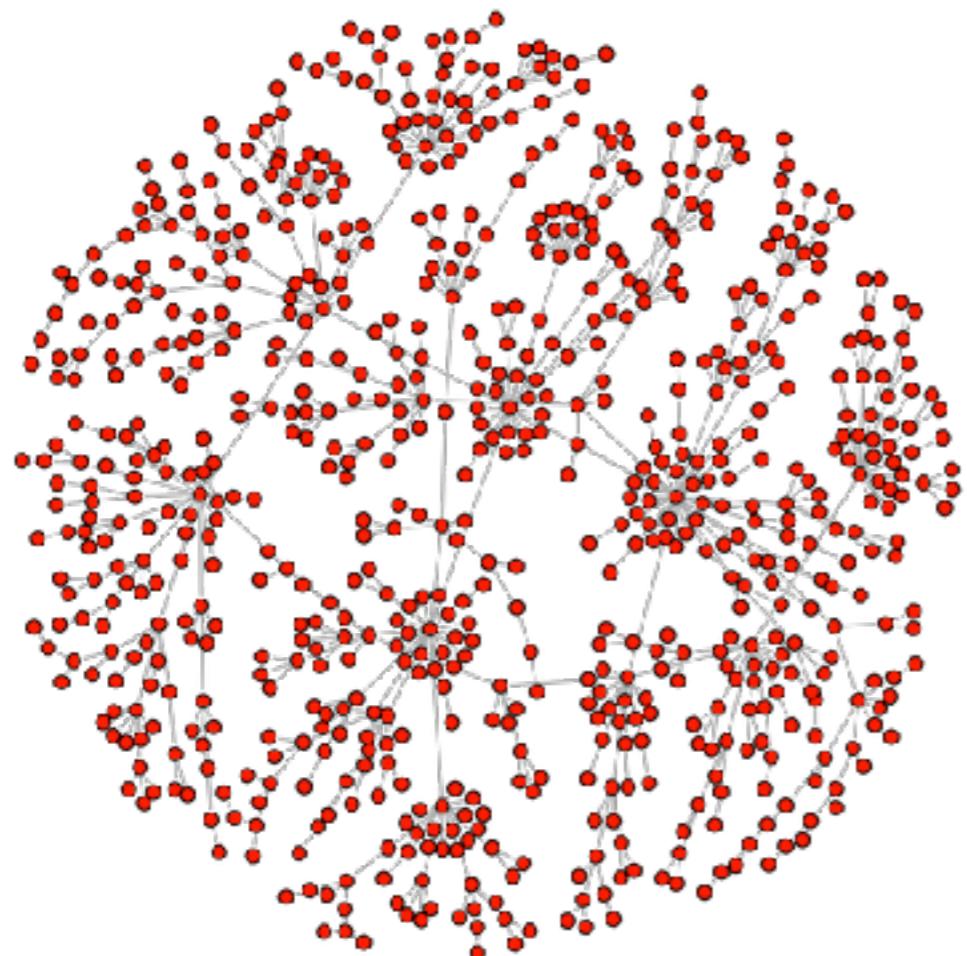
RIJKS MUSEUM

[More subjects >](#)

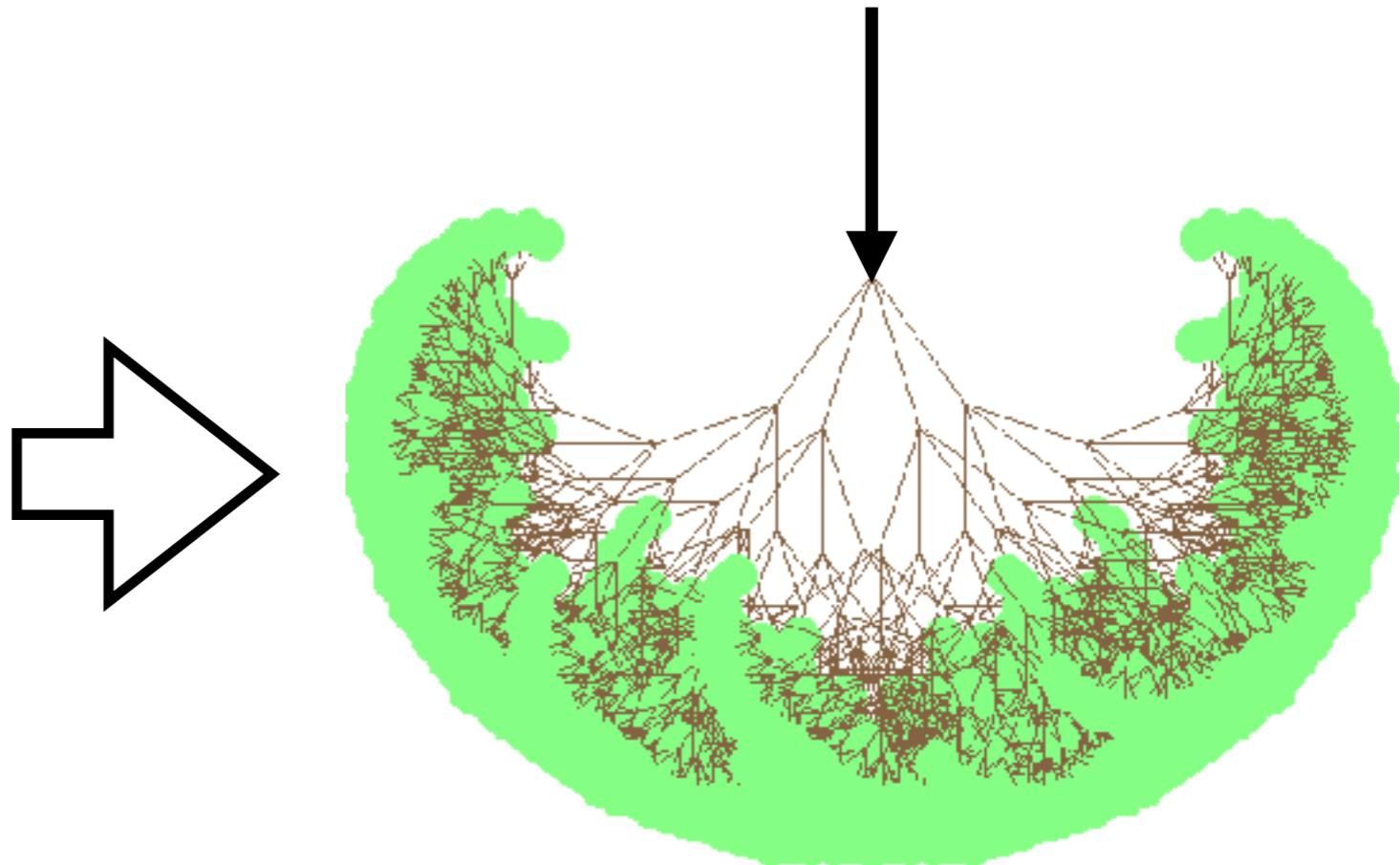


<https://www.rijksmuseum.nl/en/rijksstudio>

Knowledge Graph -> Story Graph

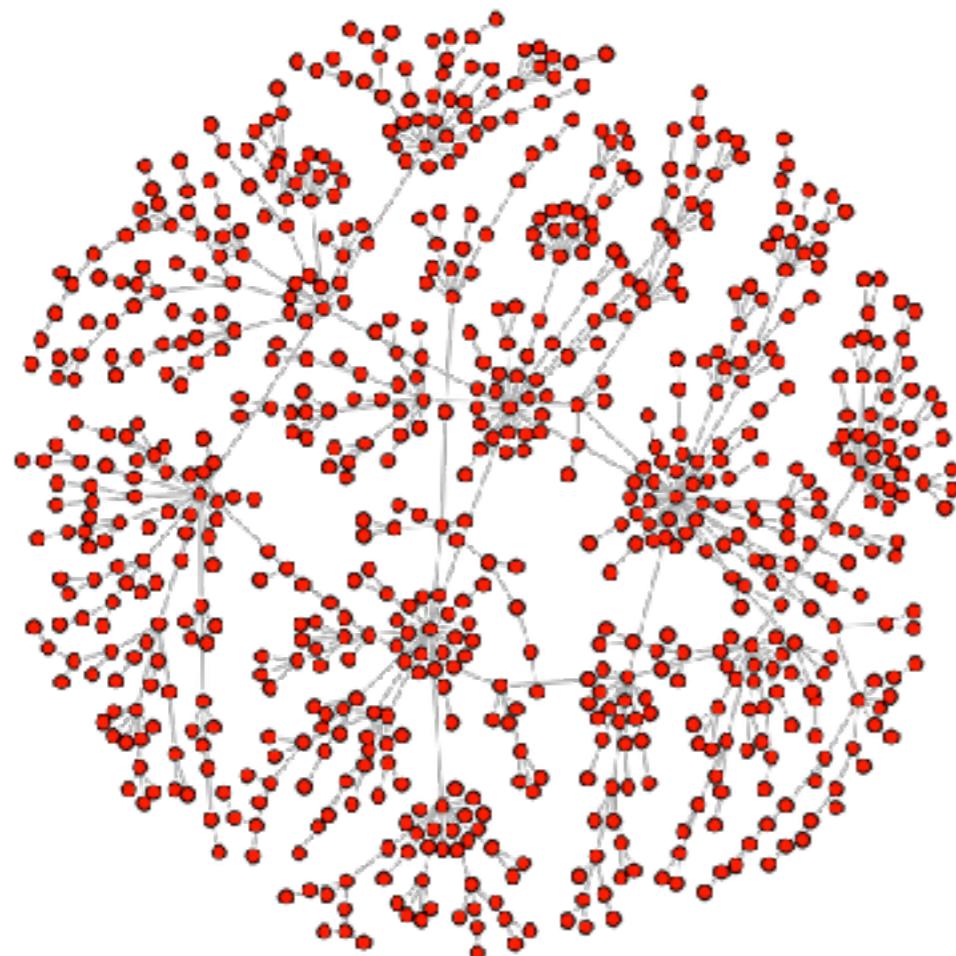


http://www.dianliwenmi.com/postimg_8035910_5.html

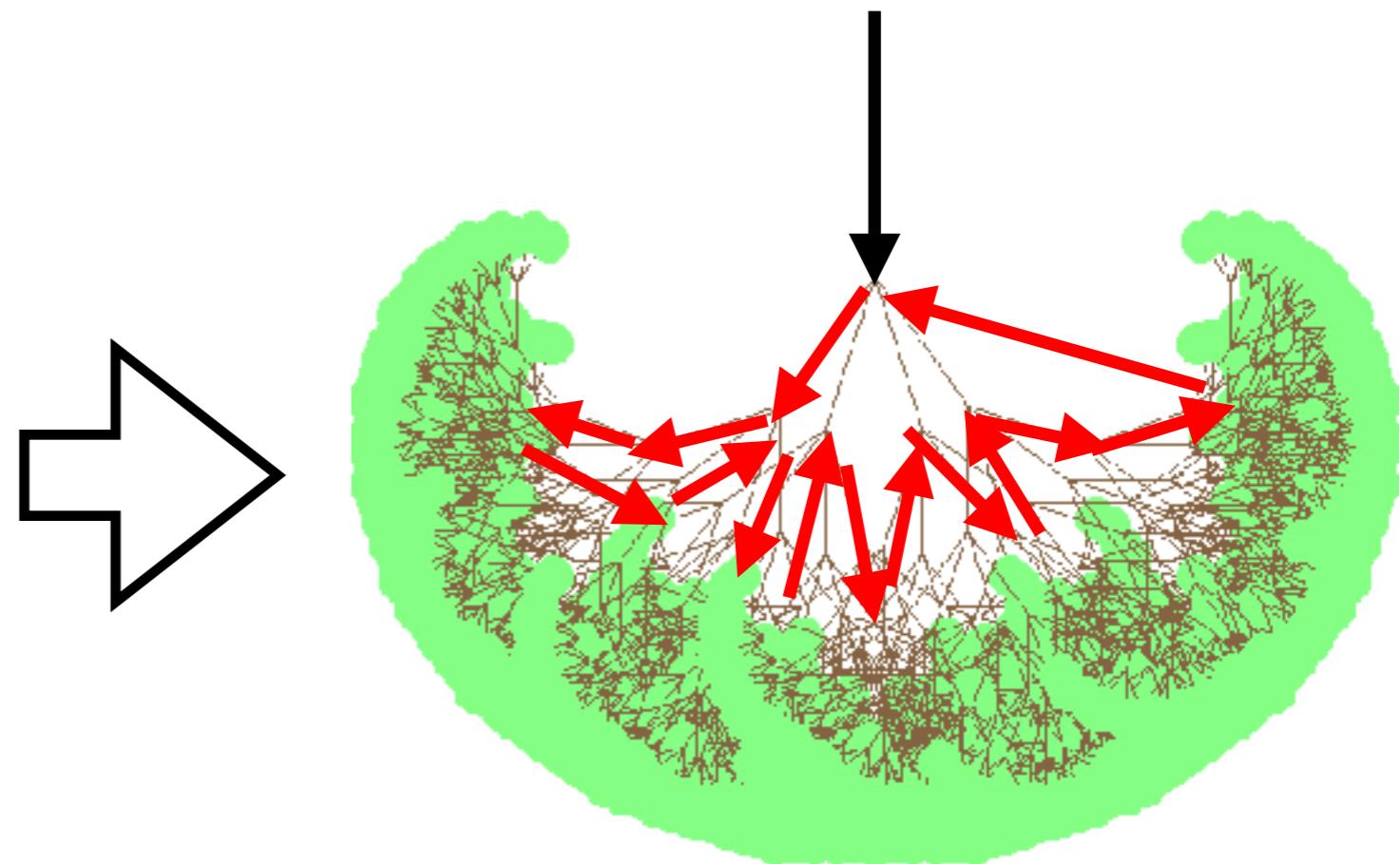


<http://lodev.org/cgtutor/recursiontrees.html>

Knowledge Graph -> Story Graph

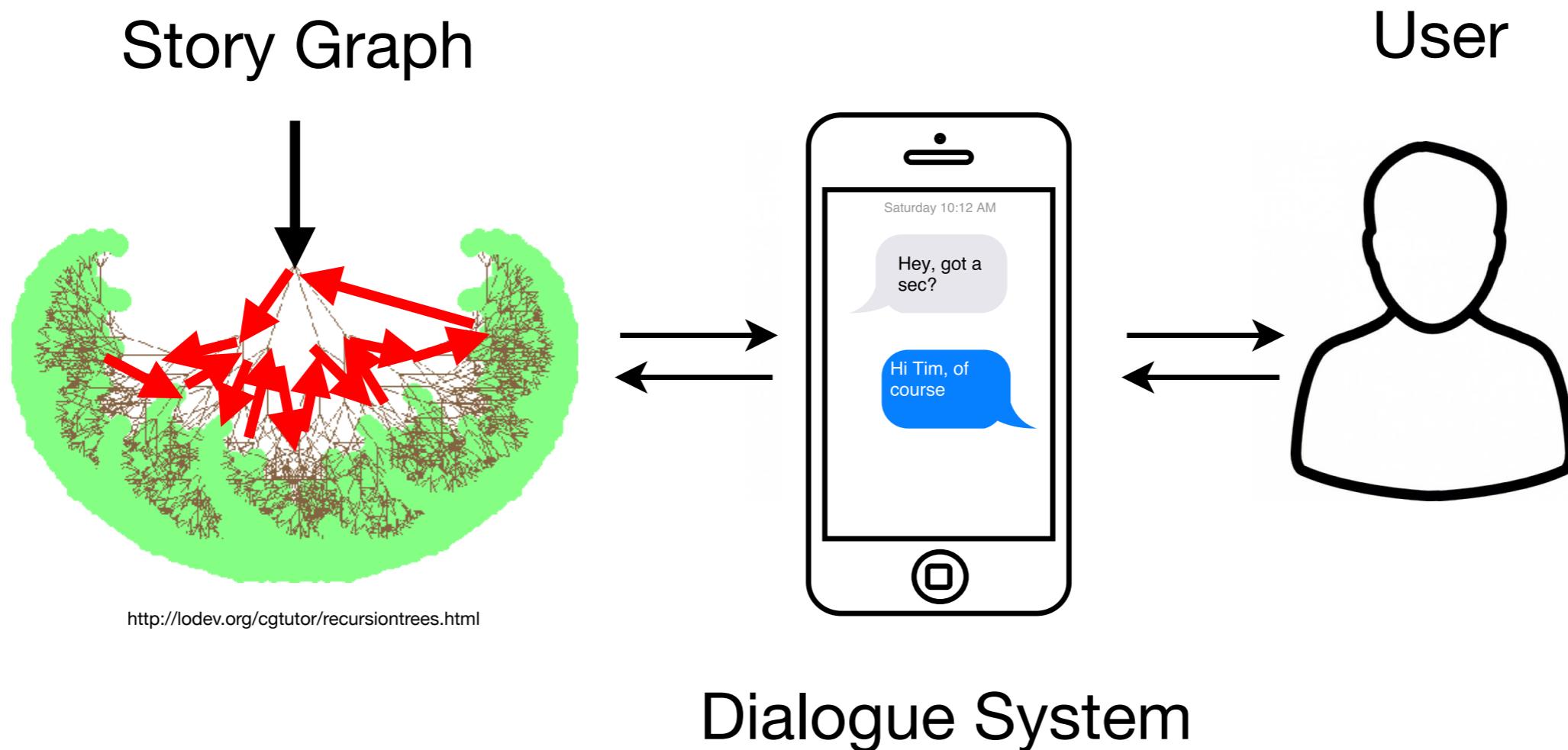


http://www.dianliwenmi.com/postimg_8035910_5.html



<http://lodev.org/cgtutor/recursiontrees.html>

Conversational Assistant



Interactive Storytelling

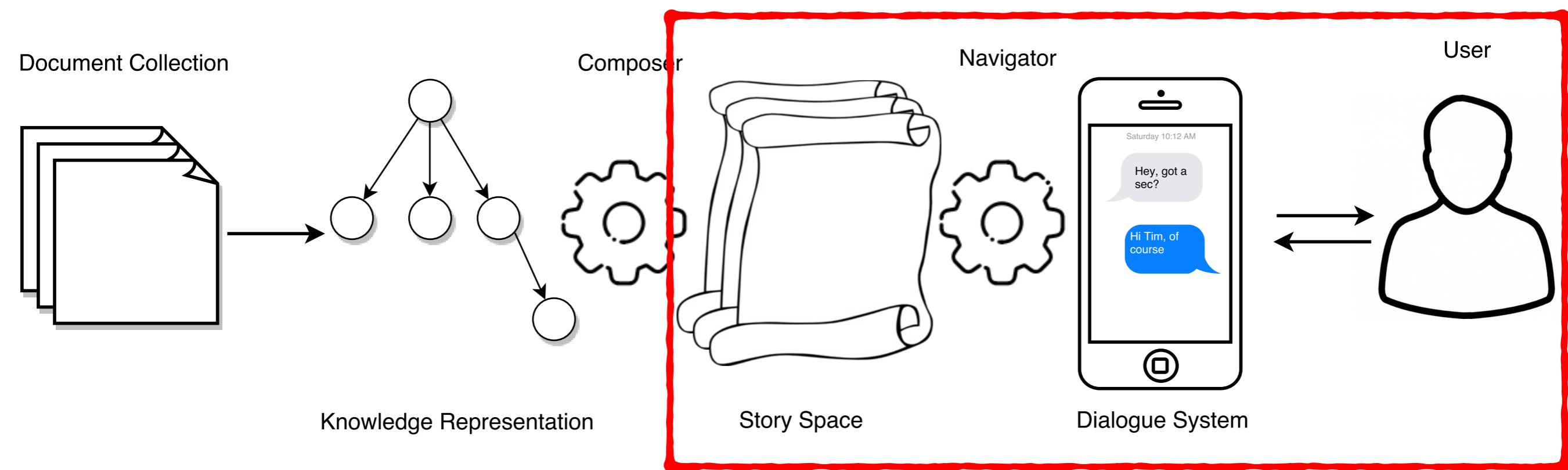


Figure. 1. Communicating knowledge via an interactive storytelling process

Experiment

Use Case: Open Data Portals

The screenshot shows the homepage of the data.gv.at portal. At the top left is the logo 'data.gv.at' with a stylized map of Austria. To the right is a search bar with the placeholder 'Suchbegriff (z.B. Finanzen, Wahlen)' and a blue 'Suche starten' button. Below the search bar are two radio buttons: 'Daten & Dokumente' (selected) and 'Apps & News'. To the right is a link '→ Katalog durchstöbern'. The top navigation bar includes links for 'Startseite', 'Daten', 'Dokumente', 'Anwendungen', and 'Infos'. Below the navigation is a section titled 'Themen durchsuchen' featuring a grid of 14 icons representing various themes: Arbeit, Bevölkerung, Bildung & Forschung, Finanzen & Rechnungswesen, Geographie & Planung, Gesellschaft & Soziales, Gesundheit, Kunst & Kultur, Land- & Forstwirtschaft, Sport & Freizeit, Umwelt, Verkehr & Technik, Verwaltung & Politik, and Wirtschaft & Tourismus.

data.gv.at – offene Daten Österreichs

Suchbegriff (z.B. Finanzen, Wahlen)

Daten & Dokumente Apps & News → Katalog durchstöbern

Startseite Daten Dokumente Anwendungen Infos

Themen durchsuchen

Arbeit	Bevölkerung	Bildung & Forschung	Finanzen & Rechnungswesen	Geographie & Planung	Gesellschaft & Soziales	Gesundheit
Kunst & Kultur	Land- & Forstwirtschaft	Sport & Freizeit	Umwelt	Verkehr & Technik	Verwaltung & Politik	Wirtschaft & Tourismus

Faceted Search

Katalogsuche

Suchbegriff (z.B. Finanzen, Wahlen)

Wildcards (*) für Suche nach Wortteilen werden unterstützt.

Filter

[↑ Filter ausblenden](#)

Verknüpfung der Filterkriterien: UND ODER

Kategorien	Veröffentlichende Stelle	Häufigste Schlagworte	Format
<input type="checkbox"/> Arbeit (6)	<input type="checkbox"/> Land Salzburg (39)	<input type="checkbox"/> Bevölkerung (124)	<input type="checkbox"/> CSV (205)
<input checked="" type="checkbox"/> Bevölkerung (276)	<input type="checkbox"/> Stadt Wien (38)	<input type="checkbox"/> Geschlecht (51)	<input type="checkbox"/> csv (60)
<input type="checkbox"/> Bildung und Forschung (7)	<input type="checkbox"/> Stadt Linz (34)	<input type="checkbox"/> Alter (39)	<input type="checkbox"/> PDF (41)
<input type="checkbox"/> Finanzen und Rechnungswesen (2)	<input type="checkbox"/> Stadt Innsbruck (30)	<input type="checkbox"/> Gesellschaft (38)	<input type="checkbox"/> json (38)
<input type="checkbox"/> Geographie und Planung (6)	<input type="checkbox"/> Land Niederösterreich (28)	<input type="checkbox"/> Einwohner (37)	<input type="checkbox"/> TXT (3)
<input type="checkbox"/> Gesellschaft und Soziales (17)	<input type="checkbox"/> Land Steiermark (17)	<input type="checkbox"/> Demographie (32)	<input type="checkbox"/> pdf (2)
<input type="checkbox"/> Gesundheit (3)	<input type="checkbox"/> Land Oberösterreich (15)	<input type="checkbox"/> Hauptwohnsitz (22)	<input type="checkbox"/> xlsx (2)
<input type="checkbox"/> Kunst und Kultur (1)	<input type="checkbox"/> Stadt Graz (13)	<input type="checkbox"/> Herkunft (22)	<input type="checkbox"/> MDB (1)
<input type="checkbox"/> Land und Forstwirtschaft (1)	<input type="checkbox"/> Amt der Bgld. Landesregierung (9)	<input type="checkbox"/> Demografie (19)	<input type="checkbox"/> XLSX (1)
<input type="checkbox"/> Sport und Freizeit (3)	<input type="checkbox"/> Land Tirol (9)	<input type="checkbox"/> Gemeinden (19)	<input type="checkbox"/> ZIP (1)
<input type="checkbox"/> Umwelt (5)	<input type="checkbox"/> Stadt Klagenfurt (9)	<input type="checkbox"/> wahlen (19)	<input type="checkbox"/> aspx (1)
<input type="checkbox"/> Verkehr und Technik (5)	<input type="checkbox"/> Land Vorarlberg (7)	<input type="checkbox"/> Ausländer (17)	<input type="checkbox"/> txt (1)
<input type="checkbox"/> Verwaltung und Politik (7)	<input type="checkbox"/> Land Kärnten (6)	<input type="checkbox"/> Geburtsland (17)	
<input type="checkbox"/> Wirtschaft und Tourismus (6)			

[↓ Alle Stellen einblenden](#)

[↓ Alle Formate einblenden](#)

[↓ Alle Schlagworte einblenden](#)

Entgelt

kostenfrei (276)

Lizenz

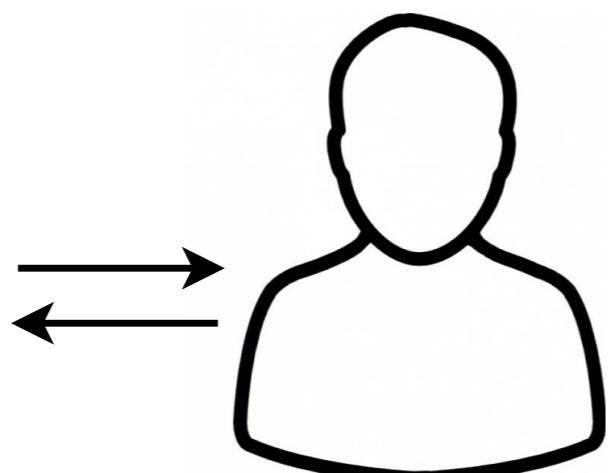
cc-by (38)
 cc-by-at-30 (238)

Seeker-Intermediary Game

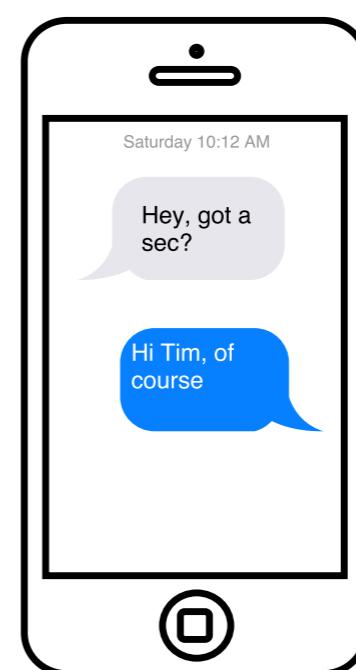
Open Data Portal



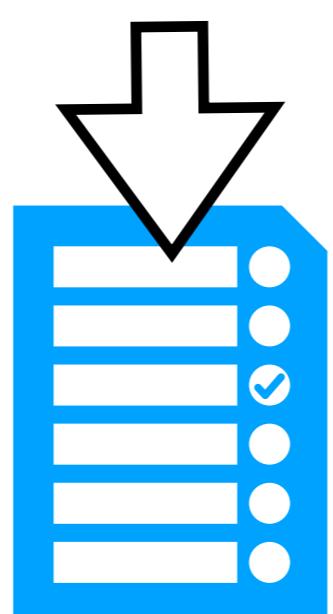
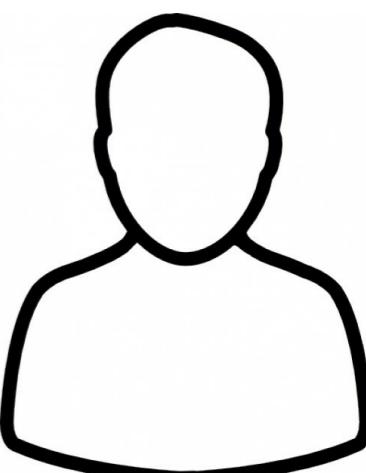
Intermediary



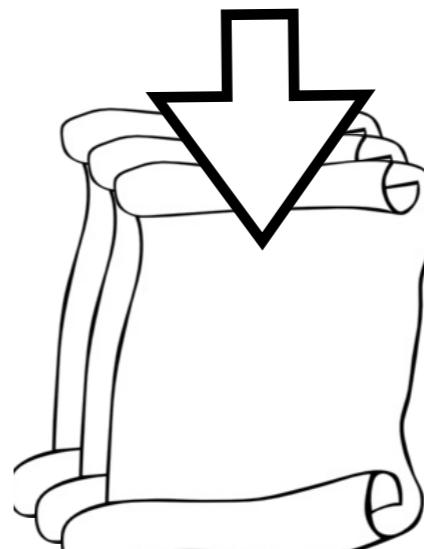
Chat



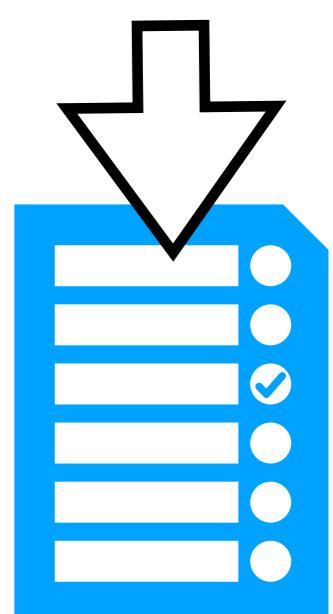
Seeker



Quizz

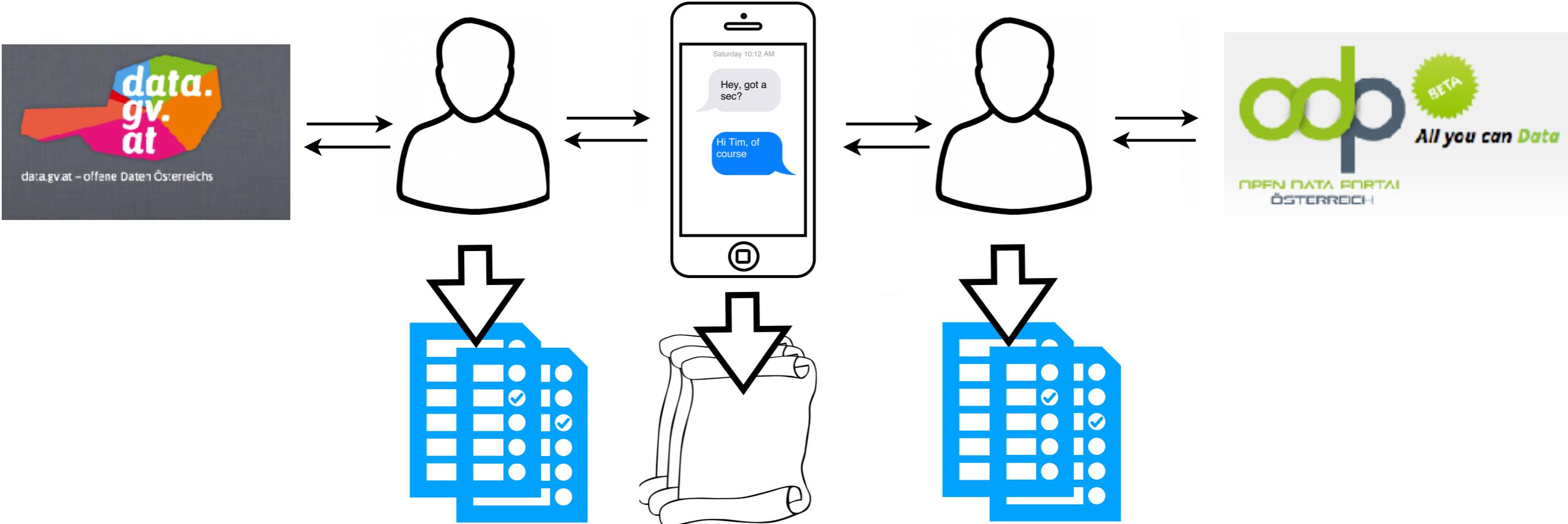


Transcripts

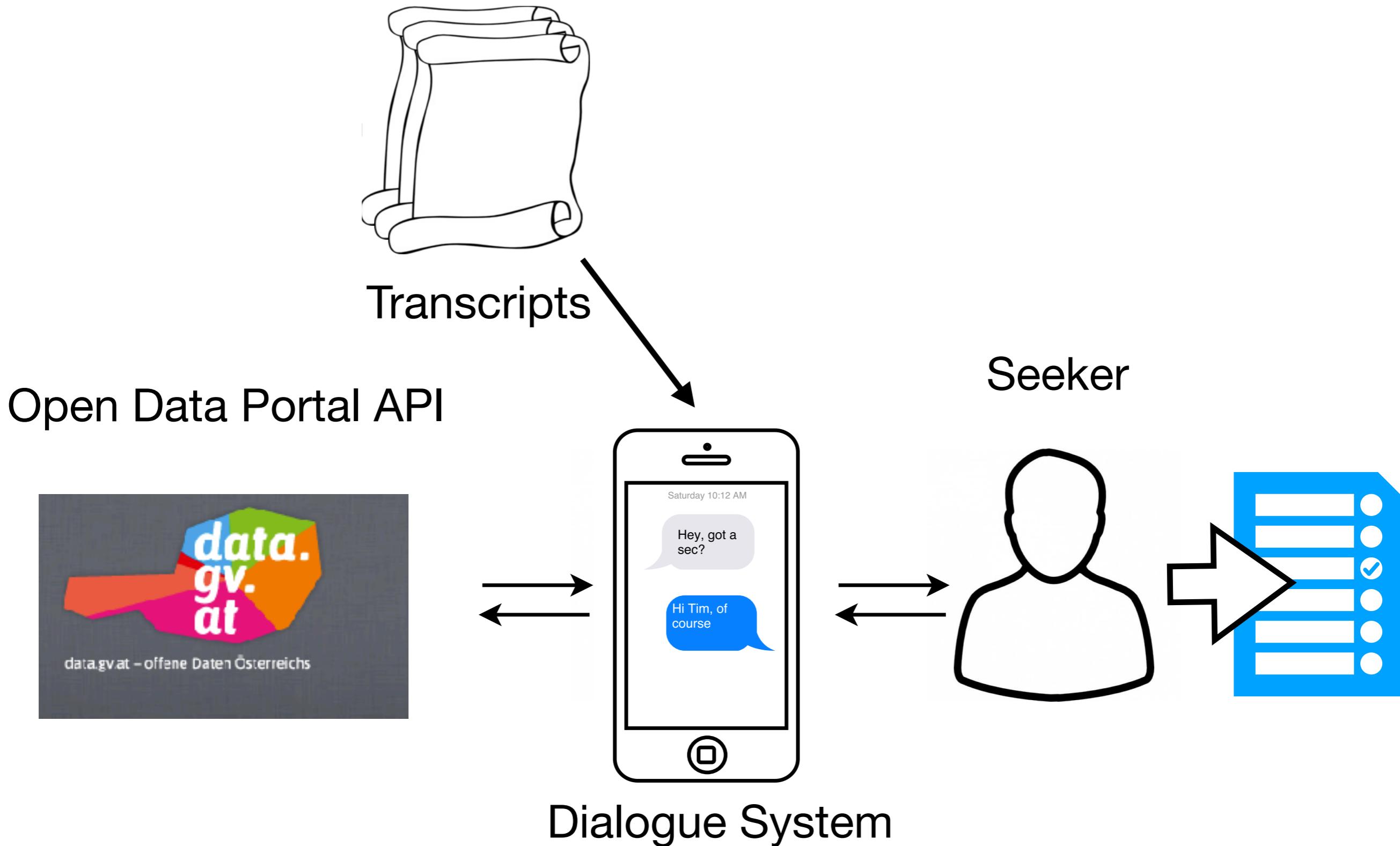


Quizz

Game with a Purpose

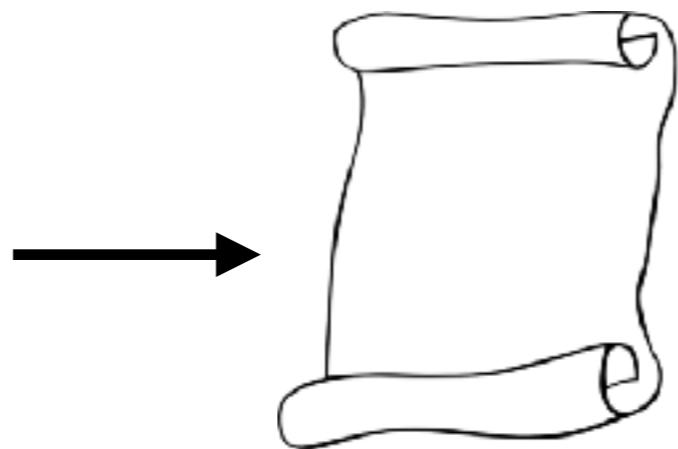


Supervised Learning



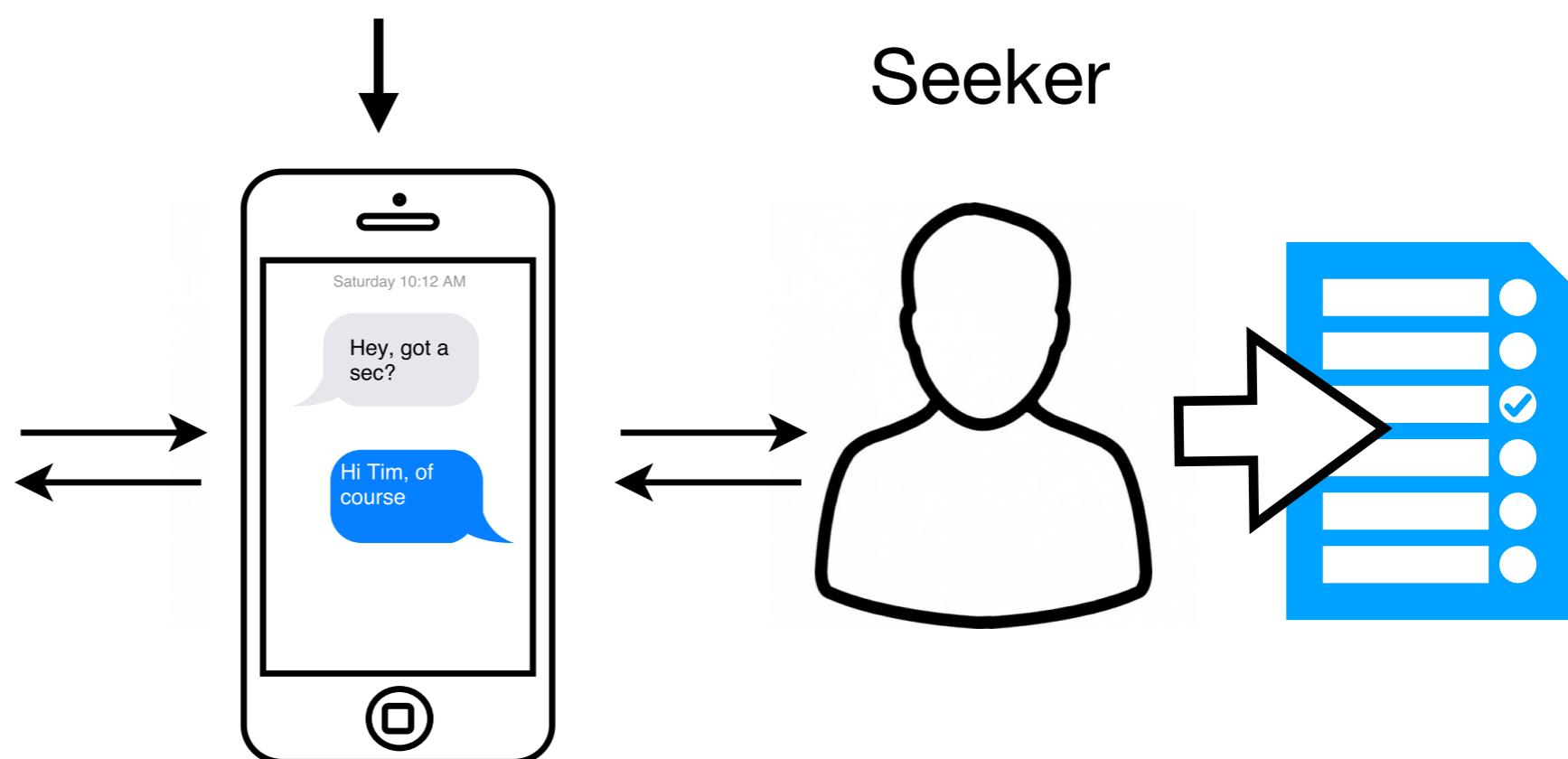
Baseline

Open Data Portal



Template

Open Data Portal API



Dialogue System

Thank you!

Questions:

1. Does it make sense?
2. How to set up the experiment?