

# Information Visualization Tutorial

WS 2009 / 2010

# Organisation

# Was muss ich dafür tun?

- \* Bring dich in den Diskussionen ein!
- \* Kein unentschuldigtes Fehlen! (bitte vorherige Ankündigung bzw. Attest)
- \* Bearbeite die gestellten Aufgaben!  
*(Lesen von wissenschaftlichen Arbeiten,  
Programmieraufgaben, Präsentationen)*

(\* für benoteten Schein/ECTS: Mündl. Prüfung)

# Wozu Übungen?

InfoVis/z

Die Vorlesung zeigt was es *ist*.

Die Übung zeigt wie man es *macht*.

# Welche Themen sind geplant?

- \* Introduction to InfoVis (*IBM ManyEyes, Wordle*)
- \* Data sets (How and where to get them? *Web APIs, Dapper, Python*)
- \* Design (Human perception, Requirements, *Processing*)
- \* Prototyping/Implementation (*Processing, ProtoVis, prefuse (flare)* )
- \* Evaluation (mostly theoretical)

# Wie werden die Termine aussehen?

30

\* Brainstorming zu einem InfoVis Problem

\* Diskussion über das aktuelle Paper

15

(\* Präsentationen )

45

\* Überblick über ein neues Thema

# Brainstorming

## Worüber?

- \* Jede Woche wird ein Datenset vorgegeben, sowie Aufgaben die sich mit der Visualisierung erfüllen lassen sollen
- \* Basierend darauf sollen Visualisierungskonzepte entworfen werden
- \* Achtet auf Codierung und Interaktion!

## Wie?

- \* 10 Minuten Brainstorming
- \* 5 Minuten Zusammenfassen
- \* 15 Minuten Präsentation / Diskussion

# Regeln

- \* Deferred judgment
- \* Build on the ideas of others
- \* Quantity matters
- \* Encourage wild ideas
- \* Stay on topic
- \* Only one person speaks

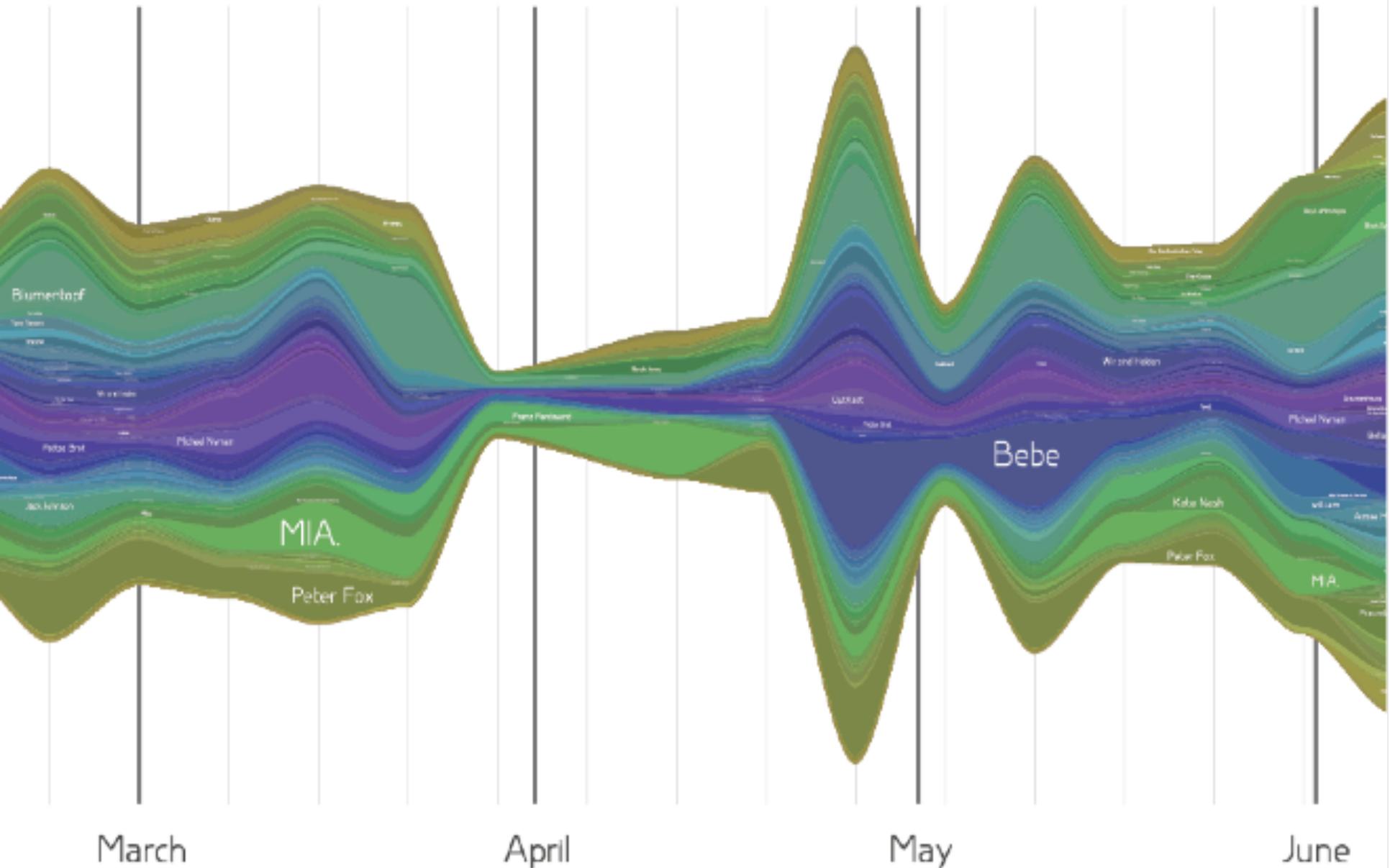
# Thema

## Datenset:

- \* komplette Webhistorie einer Menge von Benutzern
- \* Persönliche Mitteilungen von Benutzer zu Benutzer und darin enthaltene URLs
- \* Timestamps für jedes Objekt

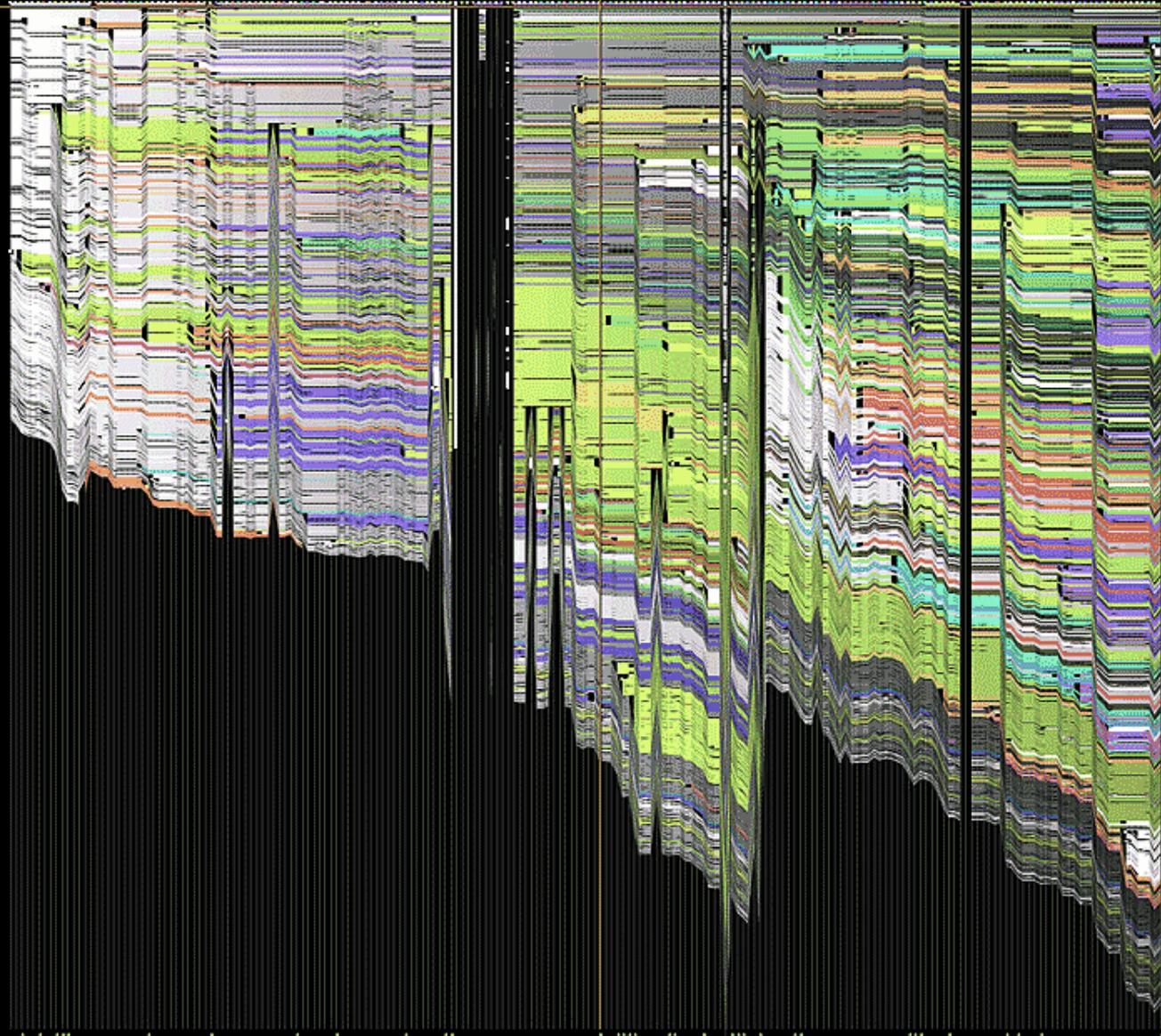
## Aufgaben:

- \* Finde die am häufigsten besuchte Seite allgemein/pro Benutzer!
- \* Finde Gruppen von Benutzern die sich kennen und Gruppen die einen ähnlichen Geschmack haben!
- \* Verfolge wie sich eine neue URL über das soziale Netzwerk verbreitet!
- \* etc.



| author             | posts |
|--------------------|-------|
| RK                 | 34    |
| Dmerril            | 1     |
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| Josh Gresse        | 1     |
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| Tarquin            | 1     |
| Coreosa            | 2     |
| Gabbe              | 1     |
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| Mimccorn           | 5     |
| MyRedDice          | 9     |
| Jaez               | 2     |
| Heron              | 2     |
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| Alorson            | 1     |
| Tim Starling       | 1     |
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| Brettz9            | 3     |
| Alex756            | 1     |
| JohnOwens          | 1     |
| Michael Voytrinsky | 1     |
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| Patrick            | 1     |
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| Wahoh              | 1     |

RK "Continual tensions between Islam and Judaism"



Islam is a **monotheistic religion** founded in the 7th century based on the religious text known as the Quran. According to Islam, the religion was revealed to the Prophet Muhammad when Allah sent an angel to dictate a series of revelations to him, which Muhammad memorized. Muhammad was illiterate, and his followers later wrote down Muhammad's memorized revelations to form the Quran. Muhammad is considered to be the chief and final prophet.

Adherents of Islam are called **Muslims** (sometimes spelled "Moslem"). In some older English texts they are referred to as "Muhammadans" or "Mohammadan"; however this term is not commonly used because Muslims find it offensive, as this term implies that they worship Muhammad, which they do not.

The meaning of the word **Islam/Islam** is an Arabic word meaning "submission (to Allah)". It also has an etymological relationship to other Arabic words, such as "peace". The word **Muslim** is derived from Islam and means "one who surrendered" or submitted (to Allah).

**Teachings of Islam**Muslims believe in one God, the God of Adam, Noah, Moses, and Jesus, who are all regarded as prophets or "Messengers" before Muhammad. Muslims believe that Muhammad came to bring the final message of God, the correct path and true knowledge of the afterlife to pagan polytheists and to the Christians and Jews -- monotheists who had deviated from the correct path.

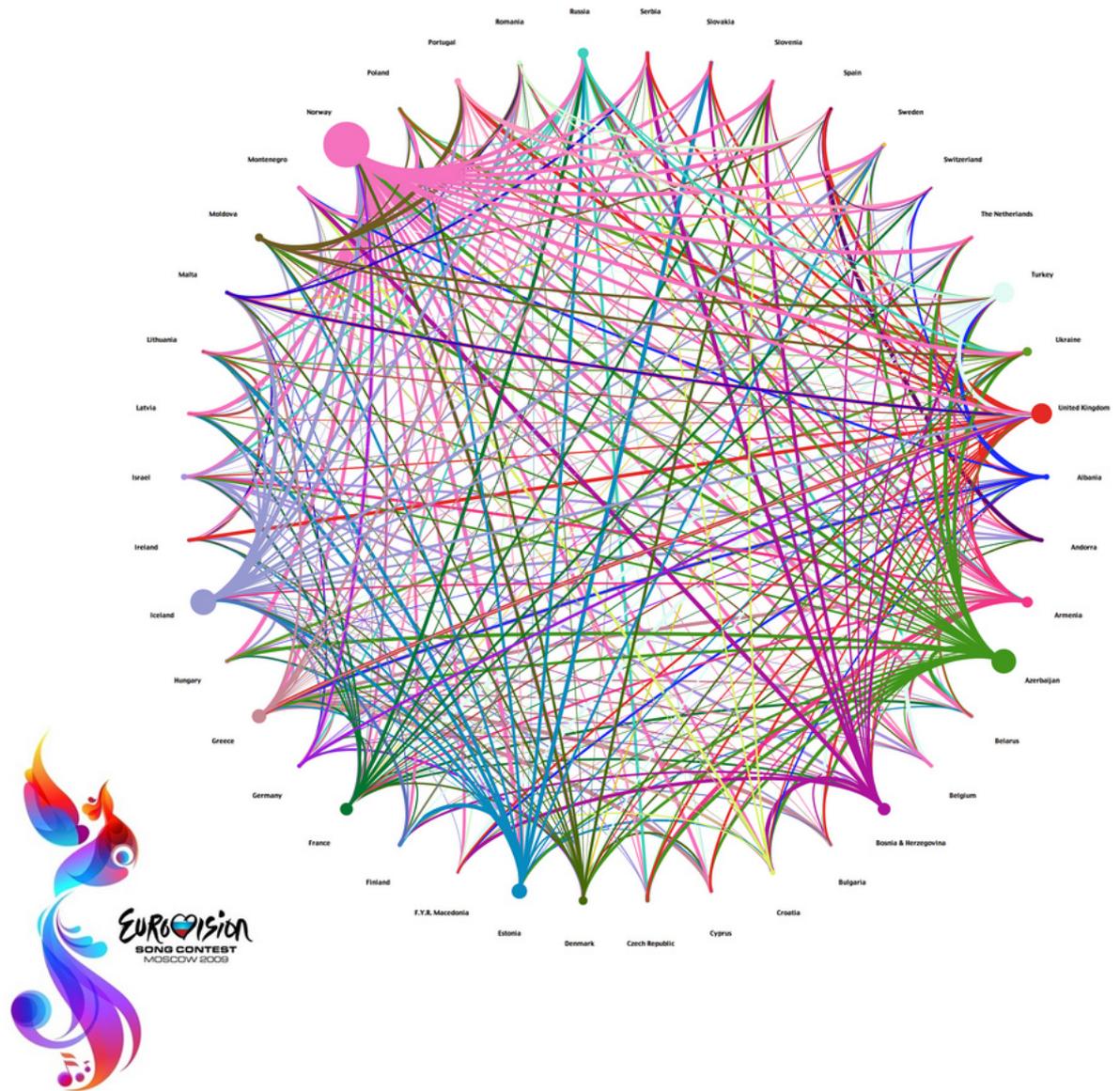
For Muslims, the Qur'an answers questions about daily needs, both spiritual and material. It discusses God and God's Names and attributes; believers and their virtues, and the fate of non-believers (kafir); Mary, Jesus, and all the other prophets; and even scientific subjects. Sunni Muslims (the majority of world's Muslims) do not follow the laws of the Quran exclusively; they also follow the understanding of the Quran contained in the teachings of the prophet known as the Hadith.

Muslims are taught that God sent down 4 books and 100 pages. Besides the Qur'an, the others are the Law of Moses (the Taurah), the Psalms of David (the Zabur) and the Gospel of Jesus (the Injil). The Qur'an describes Christians as "the people of the Book" (ahl al Kitāb).

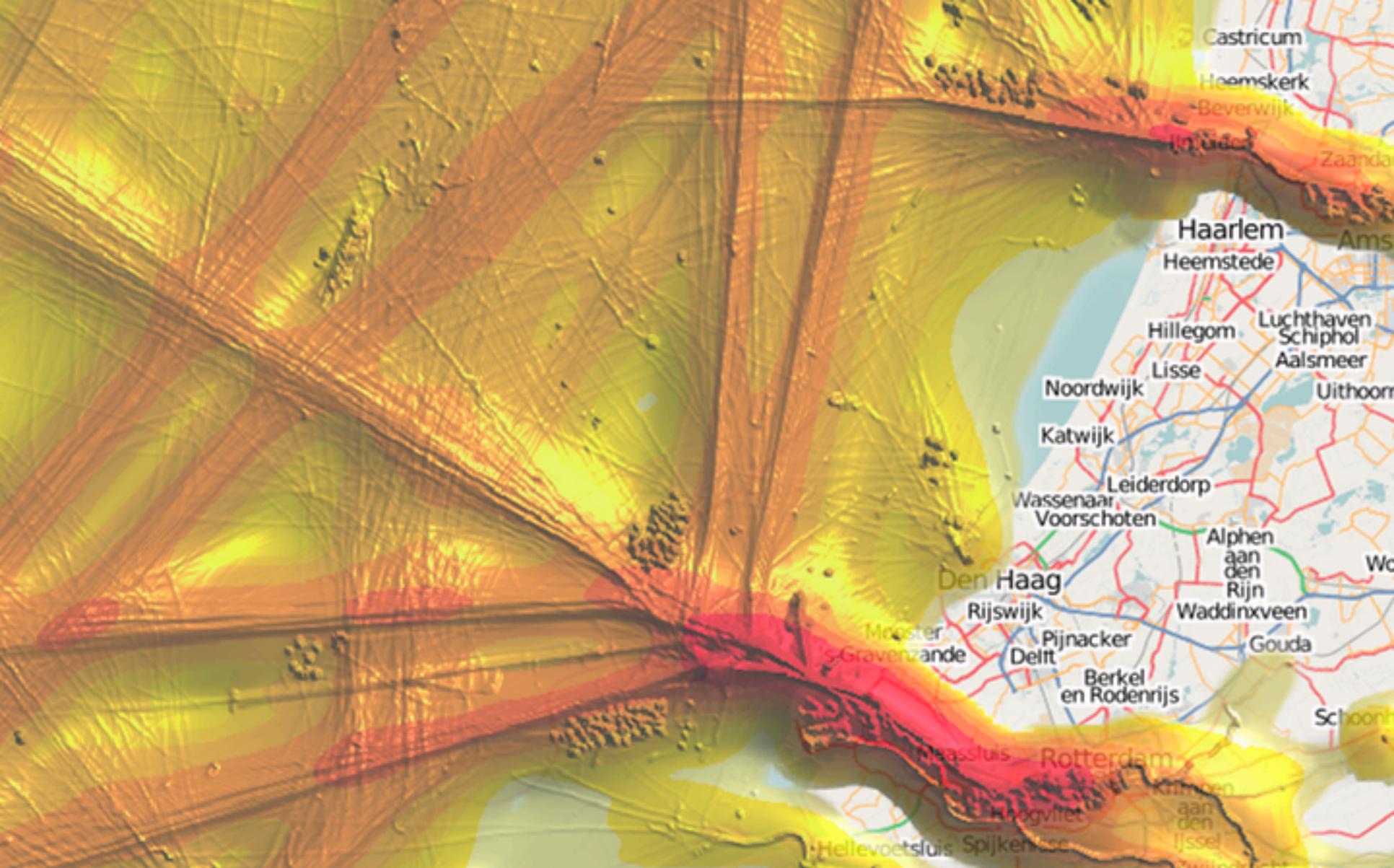
The teachings of Islam concern many of the same personages as those of Judaism and Christianity. However, Muslims frequently refer to them using Arabic names which can make it appear they are talking about different people: e.g. Allah for God, Iblis for Satan, Ibrahim for Abraham, etc. A belief in a day of judgment and an afterlife are pivotal to Islam.

**The Six Elements of Belief**A moslem believes the following:

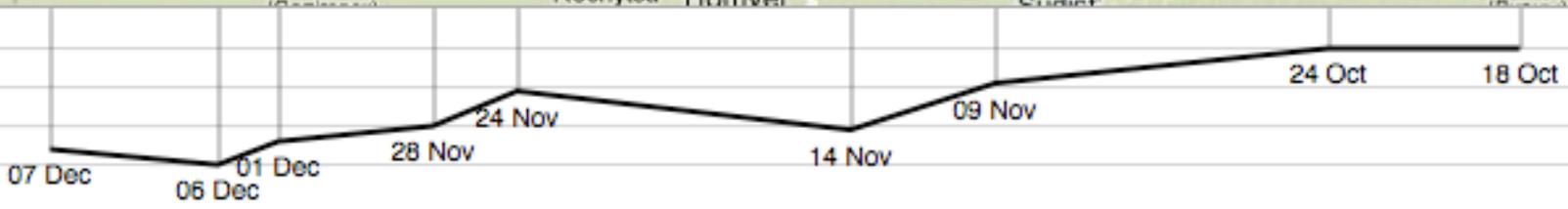
- God
  - Angels
  - Books (sent by God)
  - Messengers (sent by God)
  - Day of Judgment
  - Both good and bad (or more precisely, what people call good and bad) come from God.
- There is no authority that can decide whether a person is accepted to, or dismissed from, the community of believers. It is enough to believe with one's heart and recite with one's tongue the above, or the even shorter version contained in shahada. As no one can split open another's heart to see what's inside, it is enough to say that you are a moslem to be treated as a moslem by the moslems.









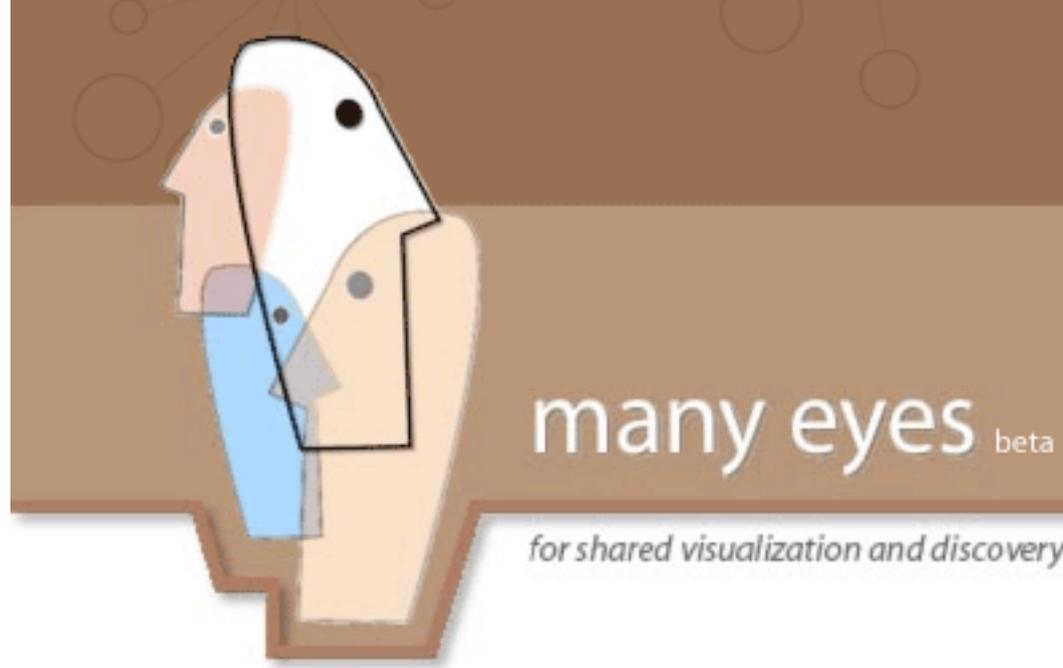


"The purpose of Information Visualization is  
**Insight** not pictures."

Shneiderman  
(1999)



<http://www.cs.umd.edu/~ben/>



<http://manyeyes.alphaworks.ibm.com/manyeyes/>