

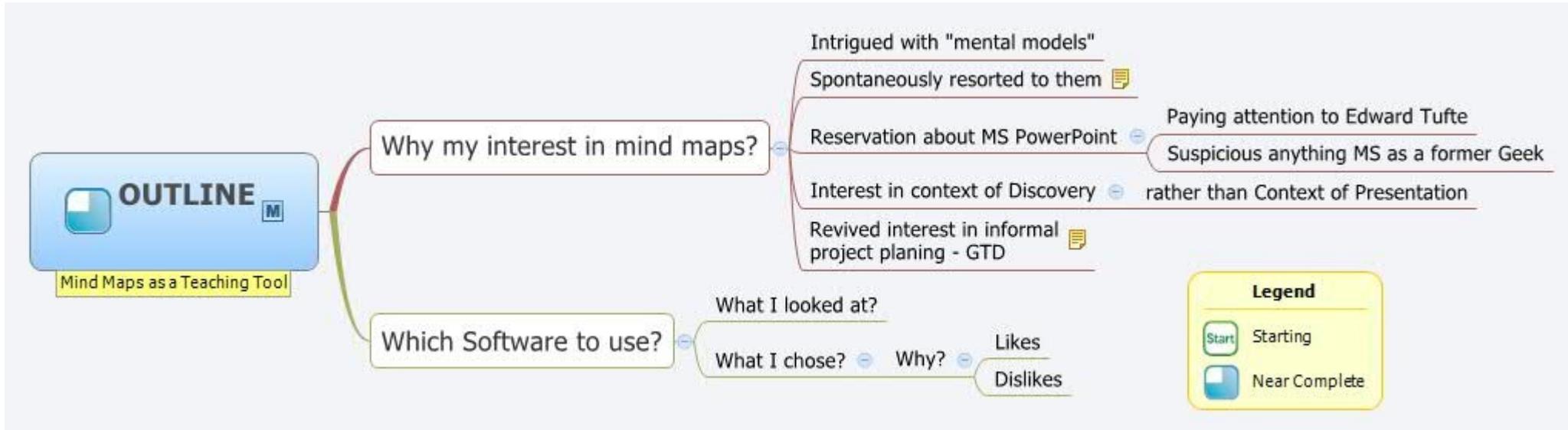
Mind Maps as a Teaching Tool

Is there a life after PowerPoint?

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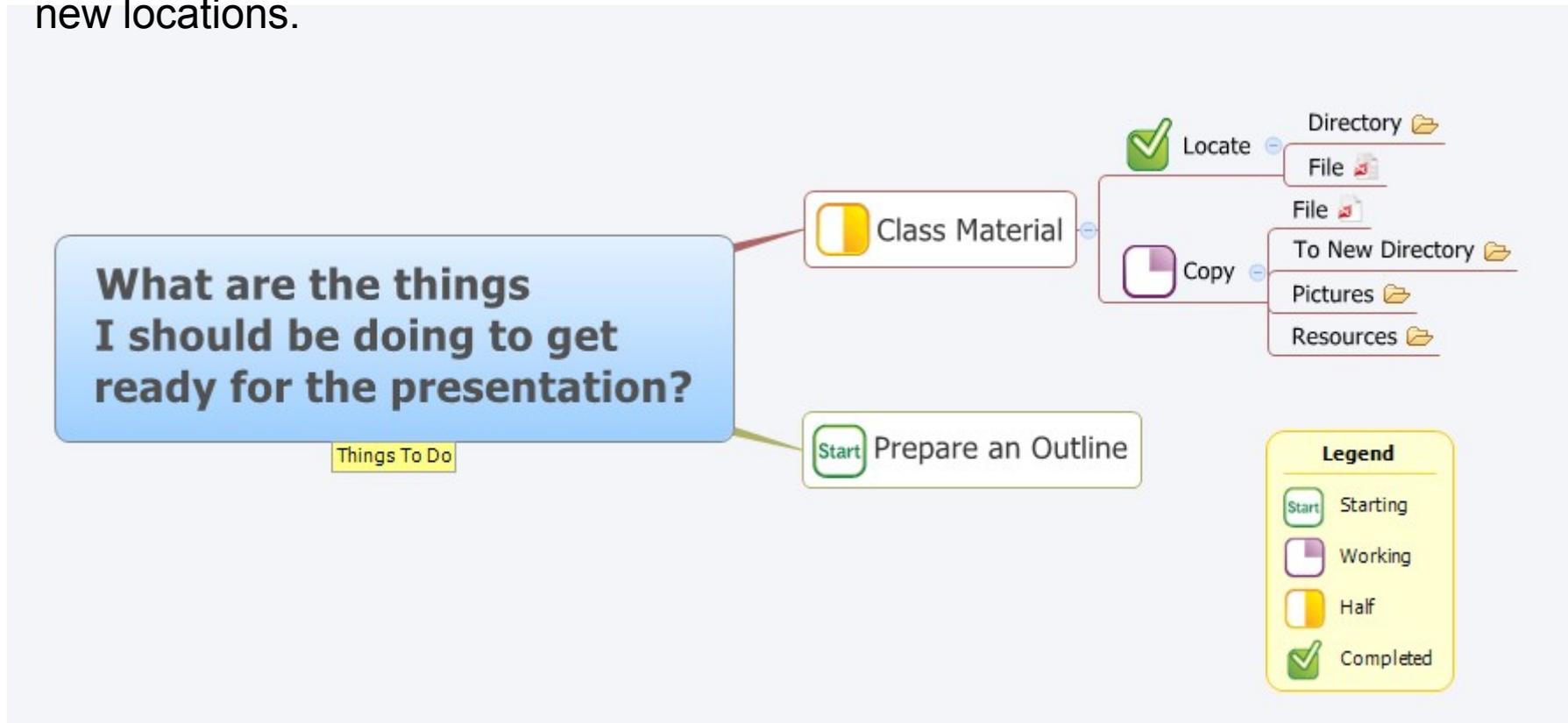
This is how I started my preparation for this talk: I sketched an outline by drawing a simple mind map. Yes: this can be also done by an outliner software, or a word processor (MS Word has a good outliner built-in) or by the outline view of a presentation application – such as MS PowerPoint)



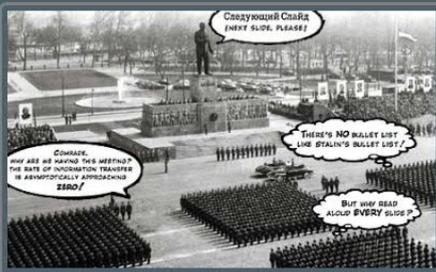
But there is an ease doing this using a mind mapping application. The point of my talk is to explore whether there is an advantage in using such applications as a teaching tool.

To this effect, I describe the sources of my interest in mind mapping, my reservations about PowerPoint; I enumerate some existing free applications, indicate the one I chose for my course MET HI 480 Panorama of Islamic Ideas, and give a detailed descriptions of it and highlight the advantages and disadvantages this kind of software as a teaching tool.

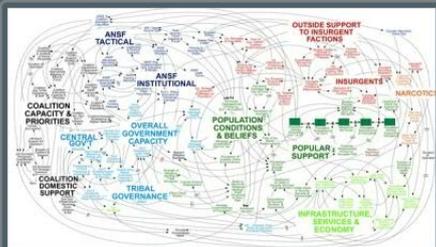
Actually before drawing the outline, I had to brainstorm a little bit. I remembered that I had presented to my students the tools we were about to use. This material could be a good starting point. I located the old directories and copied them to a new location.



Note that the icons for the folders and files depict *hot-links*. By clicking on them, you can see the contents of the folders or open the files using the applications associated with them. This diagram will expand as the work will progress. Using the same tool for managing the task as well as the task itself has some advantages: it indicates that the tool operates in the *context of discovery*, in contrast many of the software tools being in the *context of presentation*.



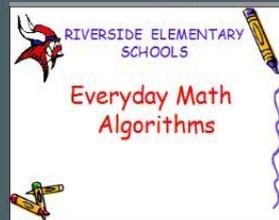
Strong Criticism from Edward Tufte



We Have Met the Enemy: He is PowerPoint

PowerPoint in Classroom

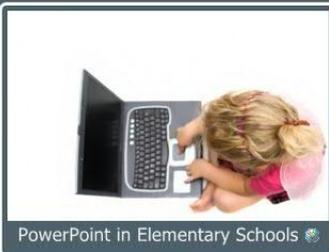
Instructional PowerPoint



PowerPoint & Math



Poetry in PowerPoint



PowerPoint in Elementary Schools




Mind Maps as a Teaching Tool
Is there a life after PowerPoint?



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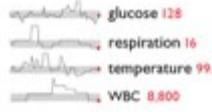
In Defense of PowerPoint

Really?

PowerPoint

Wikipedia Article

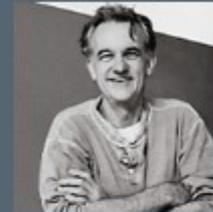
ET WEB site



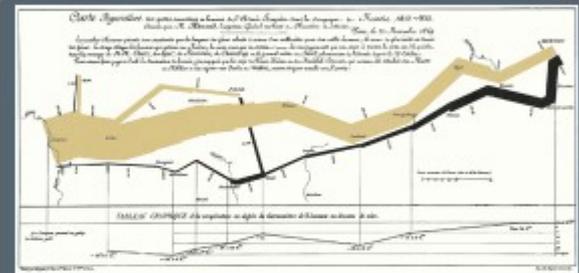
glucose 128
respiration 16
temperature 99.2
WBC 8,800

These little data lines, because of their active quality over time, are called *sparklines*: small, high-resolution graphics embedded in a context of words, numbers, images. Sparklines are data-intense, design-simple, word-sized graphics.

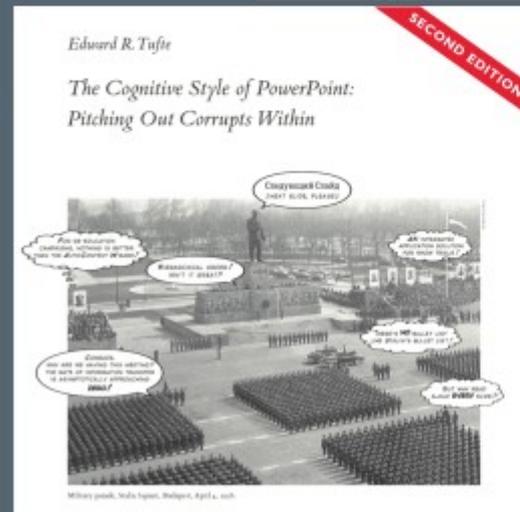
Inventor of Sparklines



Who is ET?



The man who let Napoleon march to Moscow



Against PP

Summary of ET Criticism in Wikipedia

Wired Article: PowerPoint is Evil

Power Corrupts - PowerPoint Corrupts Absolutely

PowerPoint Essay

Is PowerPoint Evil?

FreeMind was the first mind map application. I drop it because I was not happy about visual properties. The tool didn't look expressive enough.

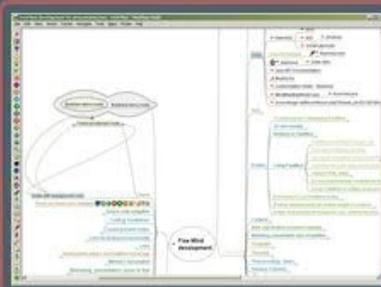
I used Compendium in the corporation context for various purposes. It wasn't easy to use to support the dynamism of brainstorming.

Considered Applications

All Open Source or Free

I found Personal Brain's look and feel pleasing, its usage model flexible, but its free version's features were less than satisfactory

Never found quality time to explore Vue. Its support for semantic web constructs is of some interest

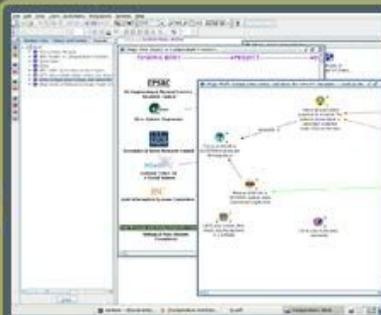


FreeMind

[WEB Site](#)

[Wikipedia Article](#)

[Screenshot](#)



Compendium

[WEB Site](#)

[Wikipedia Article](#)

[Screenshot](#)



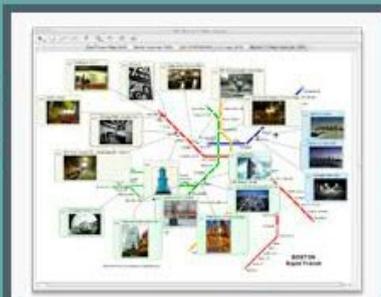
Personal Brain

[WEB Site](#)

[Wikipedia Article](#)

[Screenshot](#)

[WEB Site](#)



Vue

[WEB Site](#)

[Wikipedia Article](#)

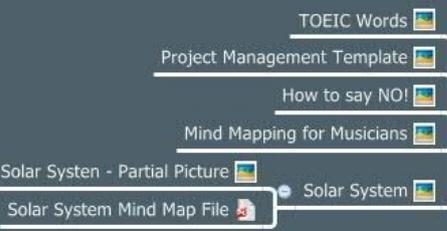
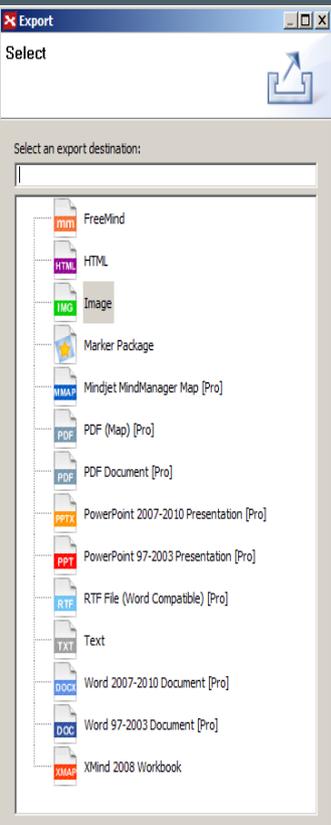
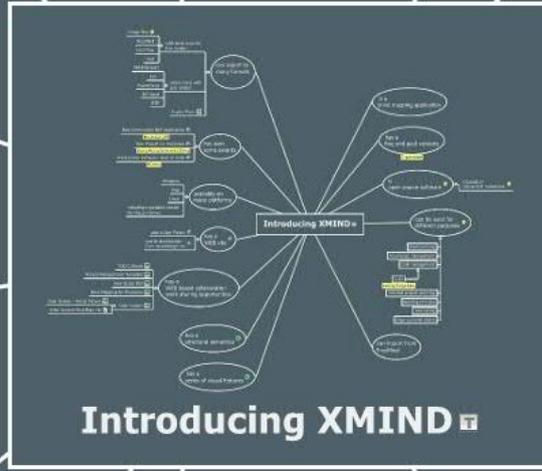
[Screenshot](#)

[Semantic WEB](#)

[Wikipedia Article](#)



AT-A-GLANCE



- brainstorming
- knowledge management
- task management
- GTD
- Getting Things Done
- informal project planning
- meeting minutes
- note taking
- organizational charts

- has a structural semantics
- has a series of visual features

- is a mind mapping application
- has a free and paid versions
- CrippledWare

- Best Commercial RCP Application
- EclipseCon 2008
- Best Project for Academia
- Source Force Community Choice
- Productivity Software: Best of 2010
- PCWorld

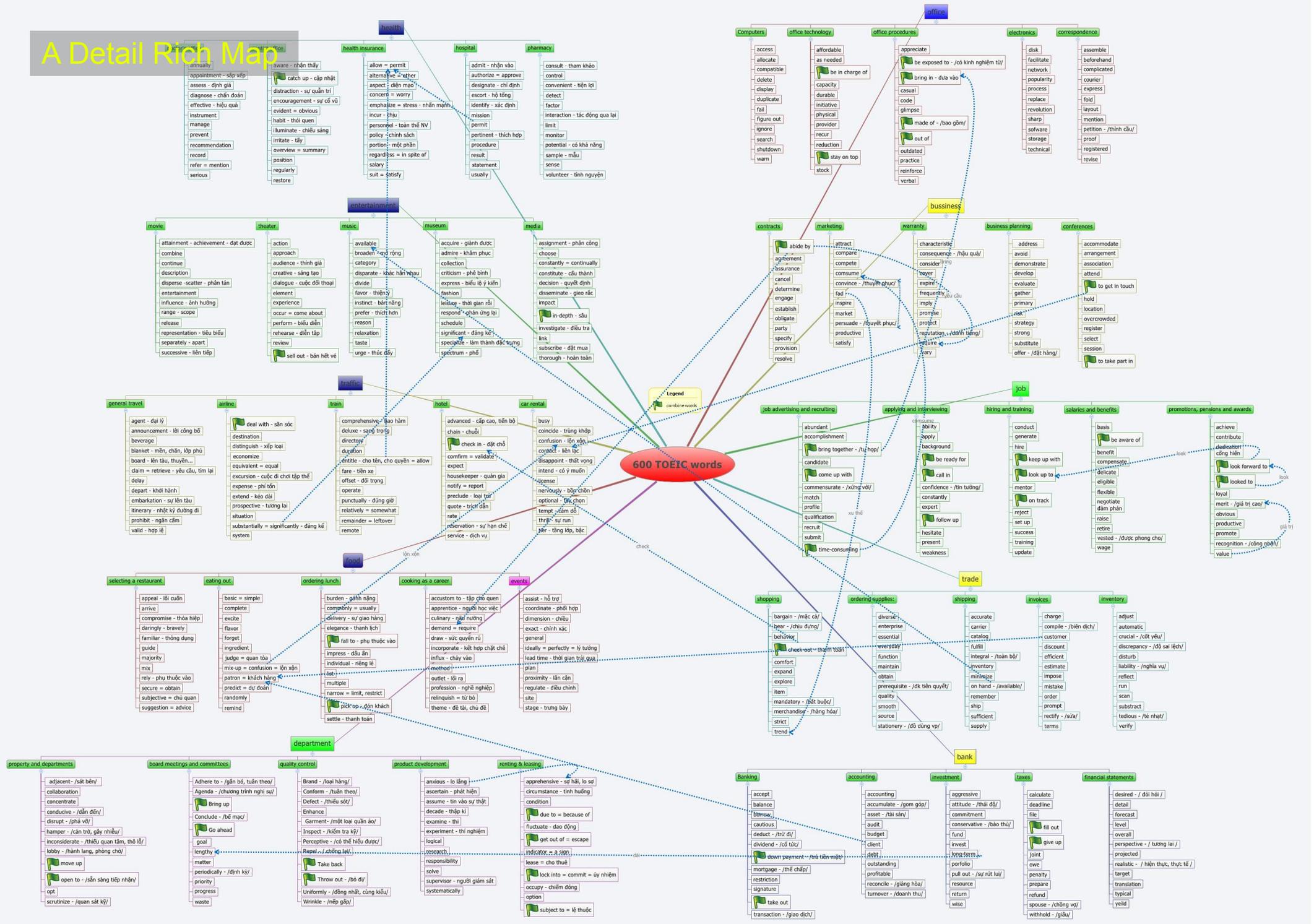
- Windows
- Mac
- Linux
- including a portable version for the ZIP drives

- also a User Forum
- can be downloaded from sourceforge too

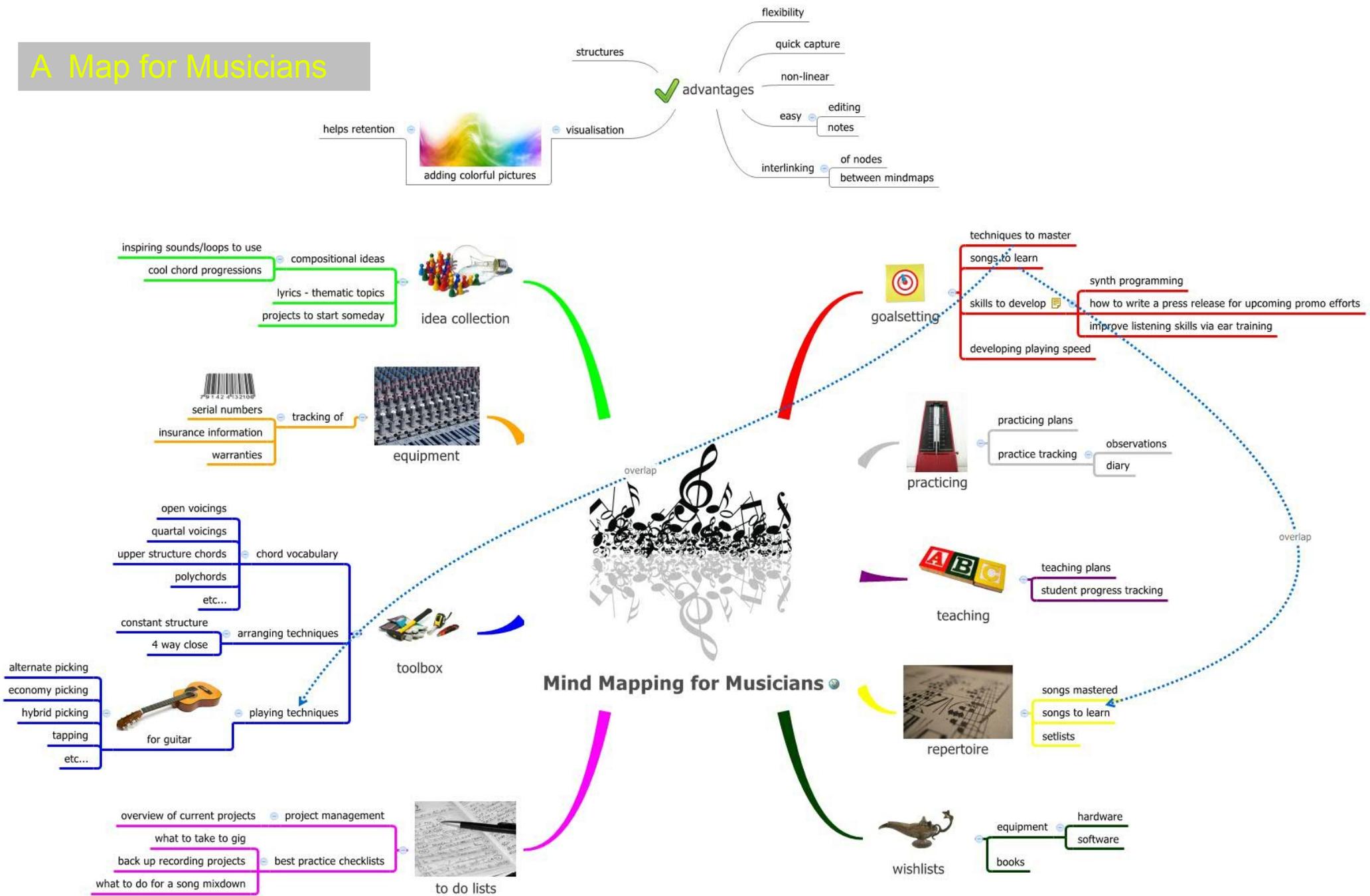
is based on Eclipse IDE framework

can import from FreeMind

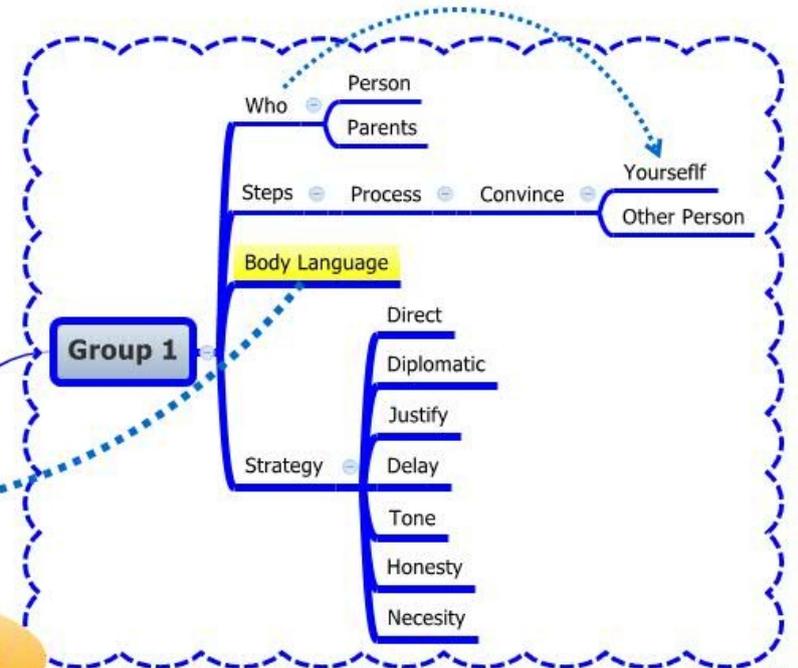
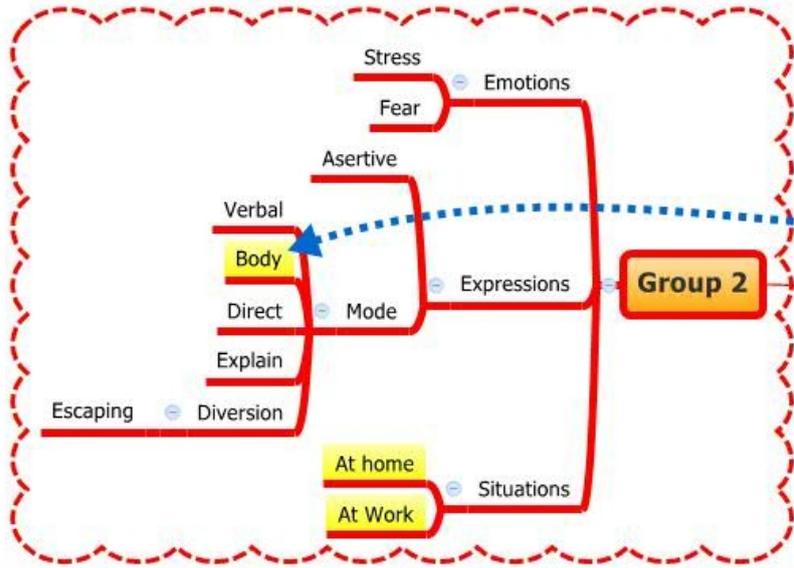
A Detail Rich Map



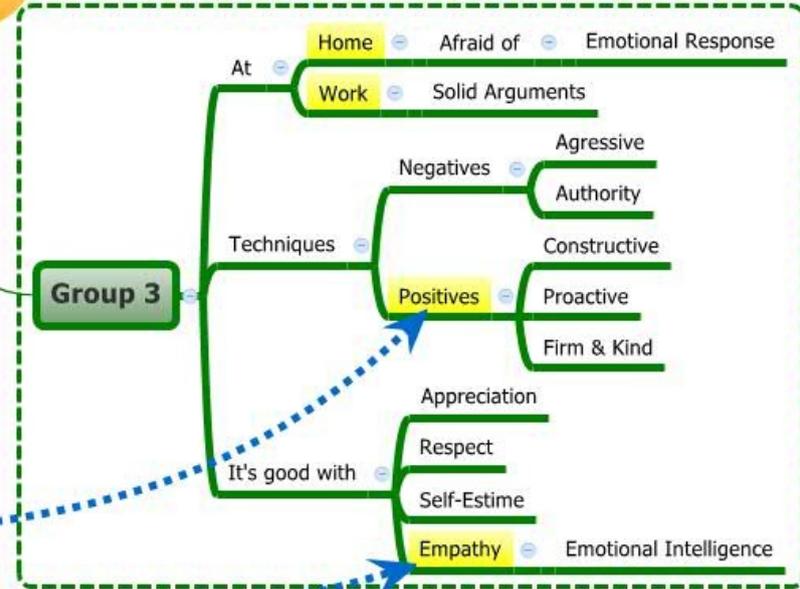
A Map for Musicians



Capturing a Study



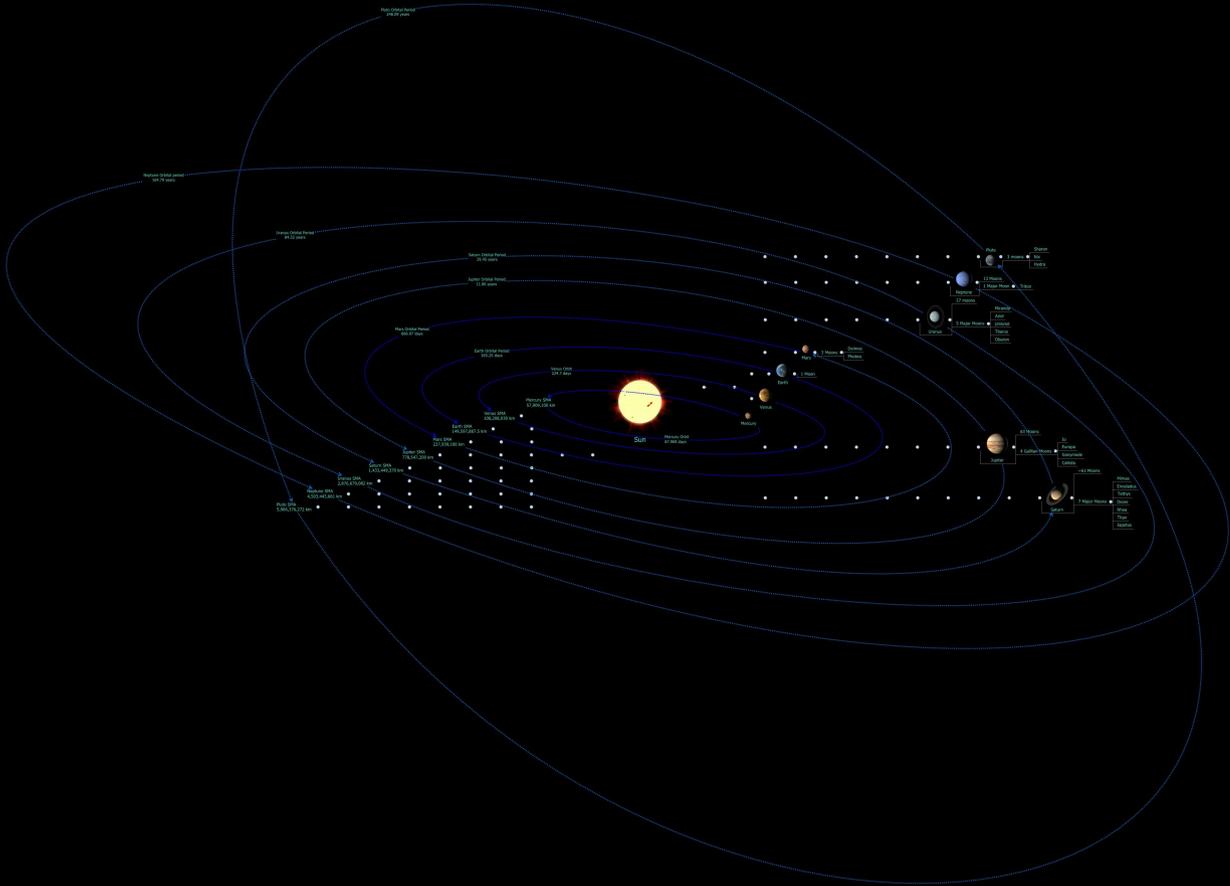
How to say NO



I believe it is not so much the outcome, the product, the diagram; but the process, the tool's support for the dynamism of thinking is the point

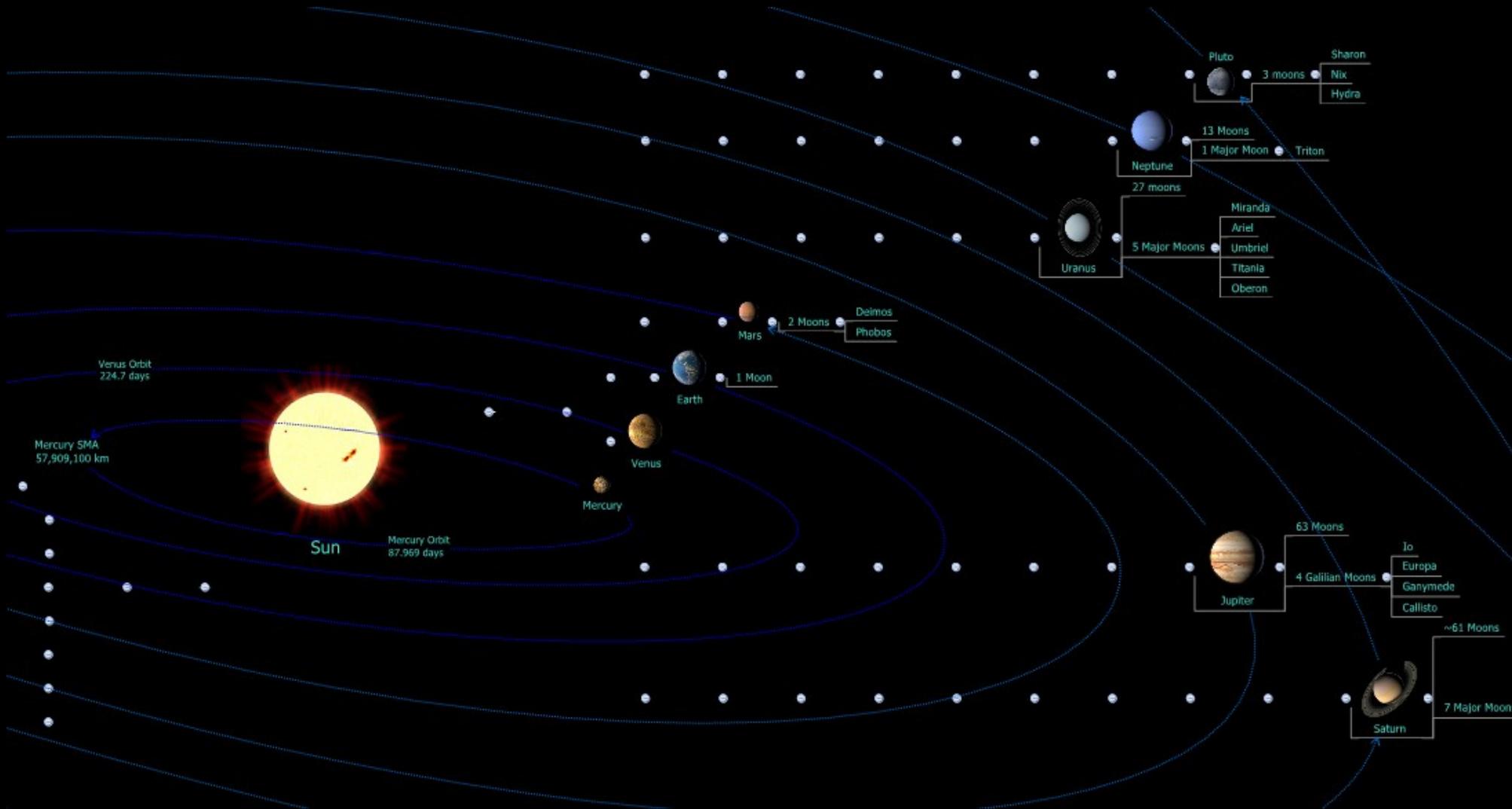
Positive Arguments
Empathy

Le silence eternel des ces espaces infinis
m'effraie – Blaise Pascal



The eternal silence of these infinite spaces
frightens me – Blaise Pascal.

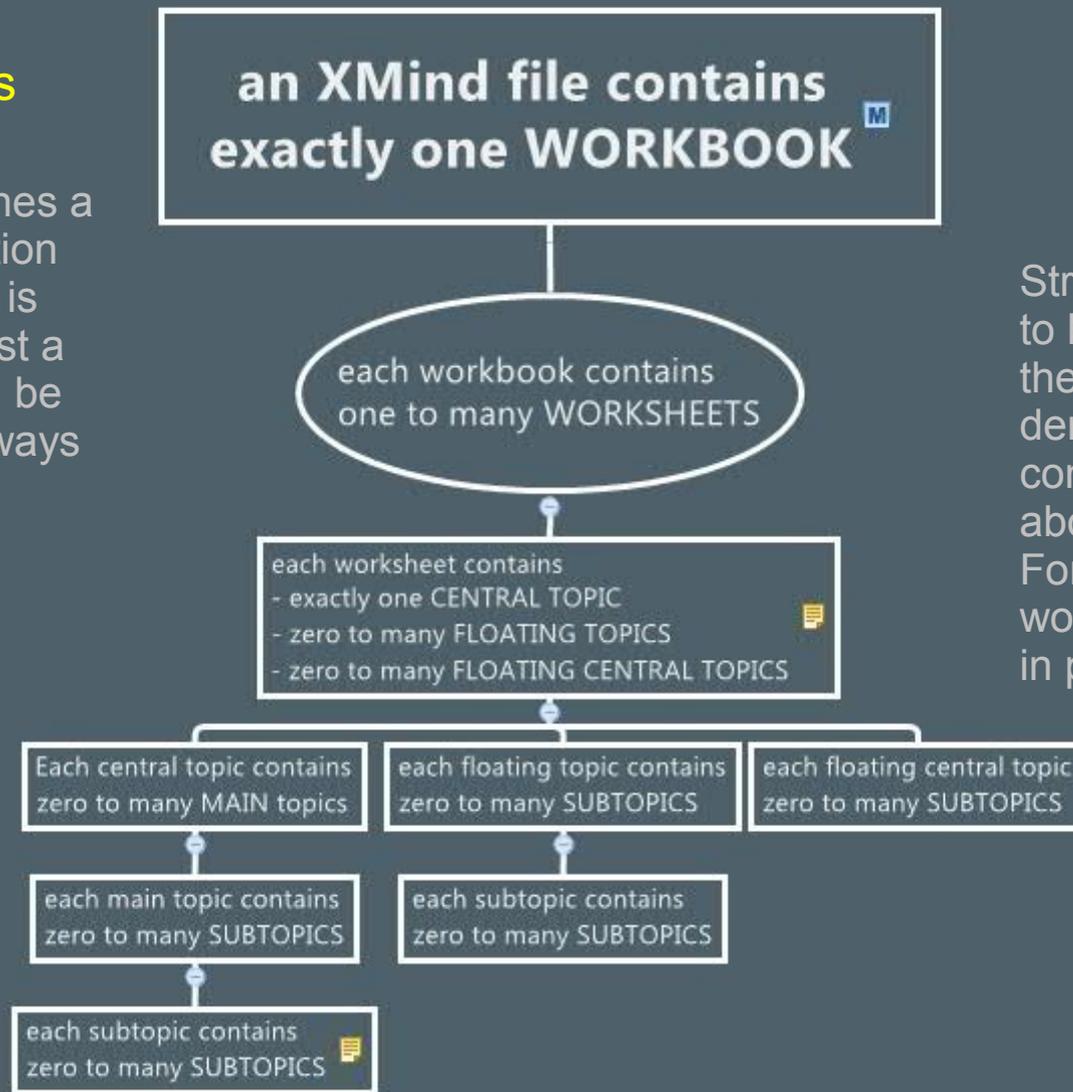
Solar System – A Closer Look



I included the **Solar System** to show the topical expressivity of the tool

Structural Semantics

This is what distinguishes a mind mapping application from a drawing tool: It is designed around almost a formal system that can be interpreted in various ways

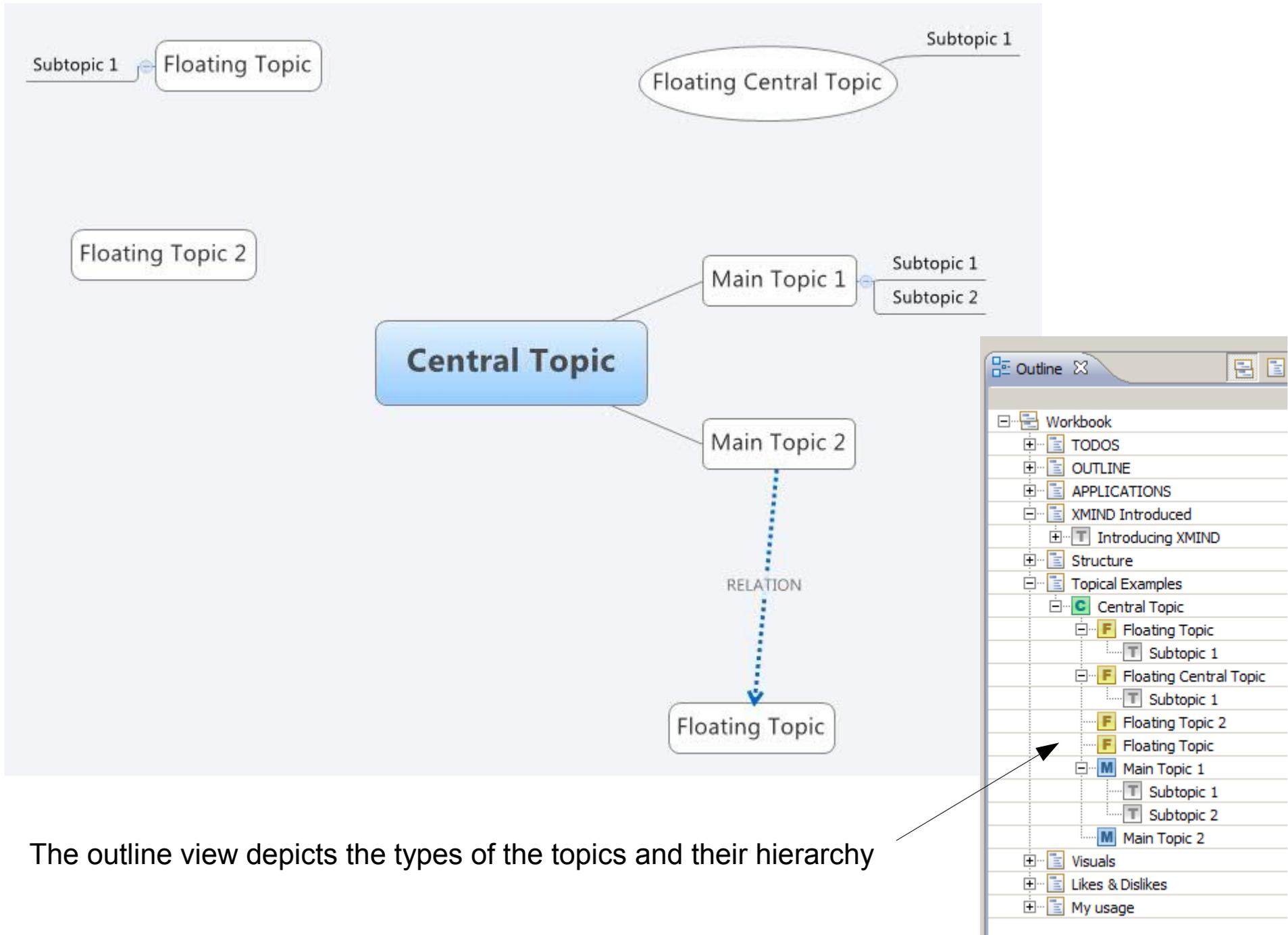


Strictly speaking, one needs to be careful in segregating the references and sense or denotations and connotations while talking about computation artifact: For example file and workbook might be a case in point.

a TOPIC can have a relat
zero to many TOPICS

We call containment relations among TOPICS
SUBORDINATION

Structural Semantics - Exemplified



The outline view depicts the types of the topics and their hierarchy

Visual & Associative Properties

XMind artifacts have many visual properties that can be changed under user control



each WORKSHEET

has a background with a selected color

can have a wallpaper

can show the legends (the meaning of markers)

can have the properties of the subordination lines defined

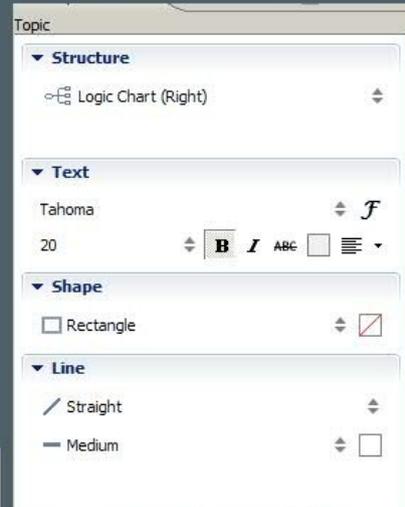
each subordinaic



has a THEME for the whole MAP

xMind components has visual and associative M properties

each TOPIC

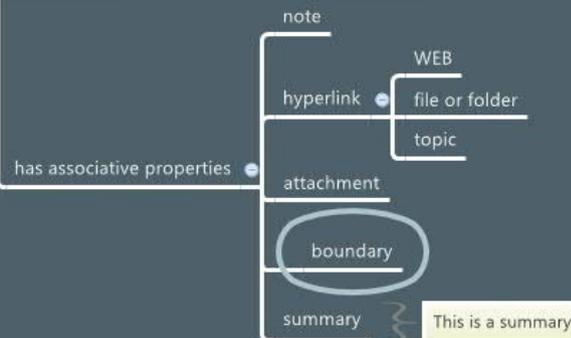


has visual properties

XMind with its support for links to WEB, local files & folders as well as its own topics presents a unified interface to the computing environment

[SMALL PRINT]
But one needs to be careful about local links:
- they get broken easily if files and folders are copied elsewhere
- they make sharing of the XMind files difficult
Using relative links are helpful
Relying on folders as mounted volumes (under windows) also helps

Additional visual tools such as boundary and summary brings additional expressiveness to XMind



has associative properties

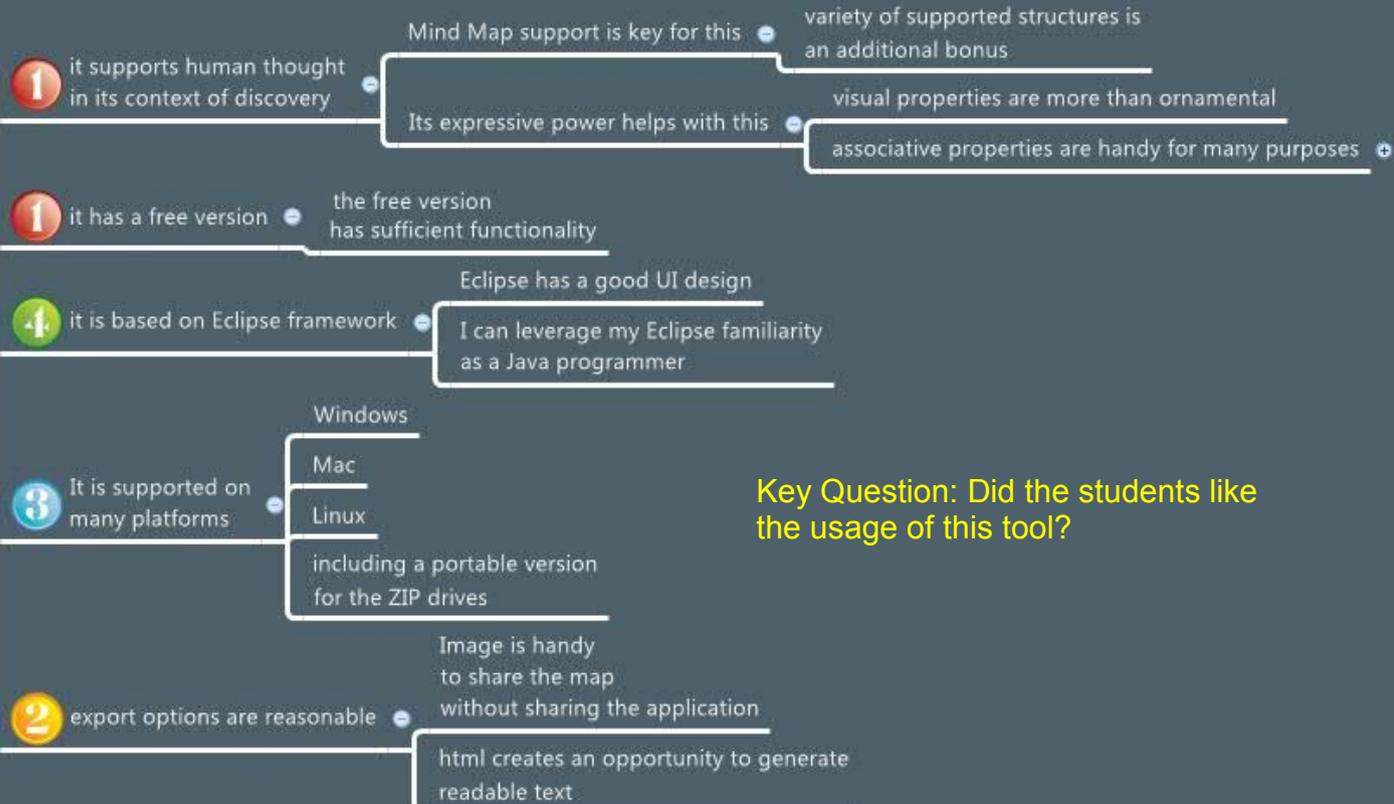
The So-Called PRO & CON's

Legend

- 1 Priority 1
- 2 Priority 2
- 3 Priority 3
- 4 Priority 4
- 5 Priority 5
- 6 Priority 6

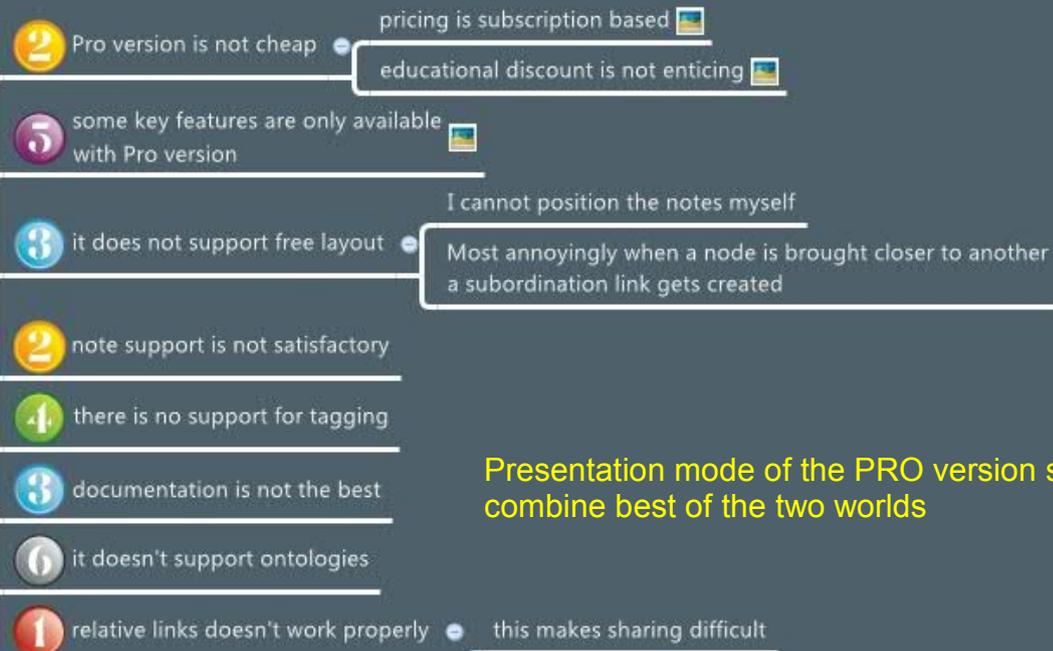
About XMind

I like that



Key Question: Did the students like the usage of this tool?

I don't like that



Are mind map tools handy outliners?
Do they help with high-resolution information relay or sharing?

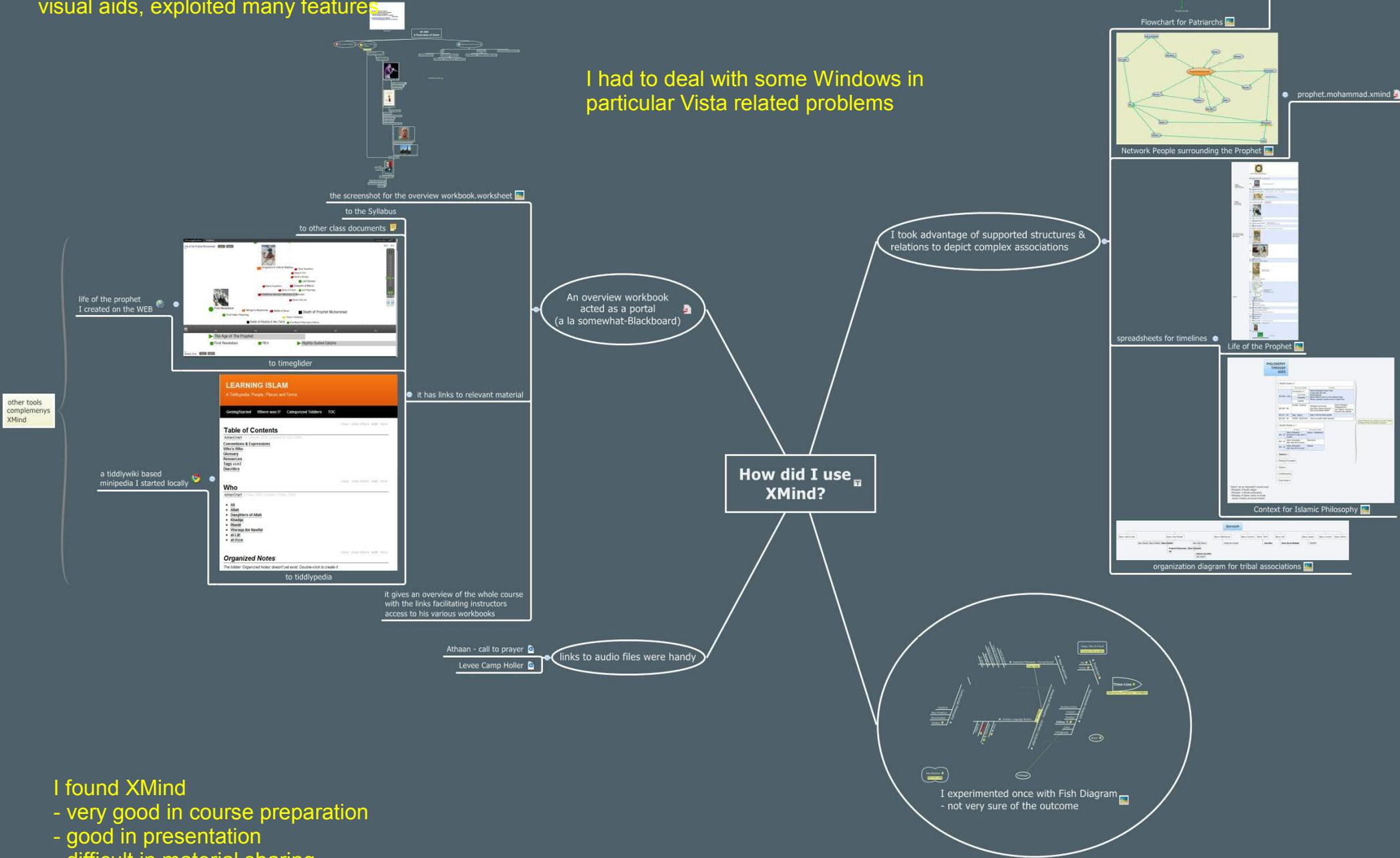
Presentation mode of the PRO version seems to combine best of the two worlds

My Usage Pattern

relied extensively on linkages & visual aids, exploited many features

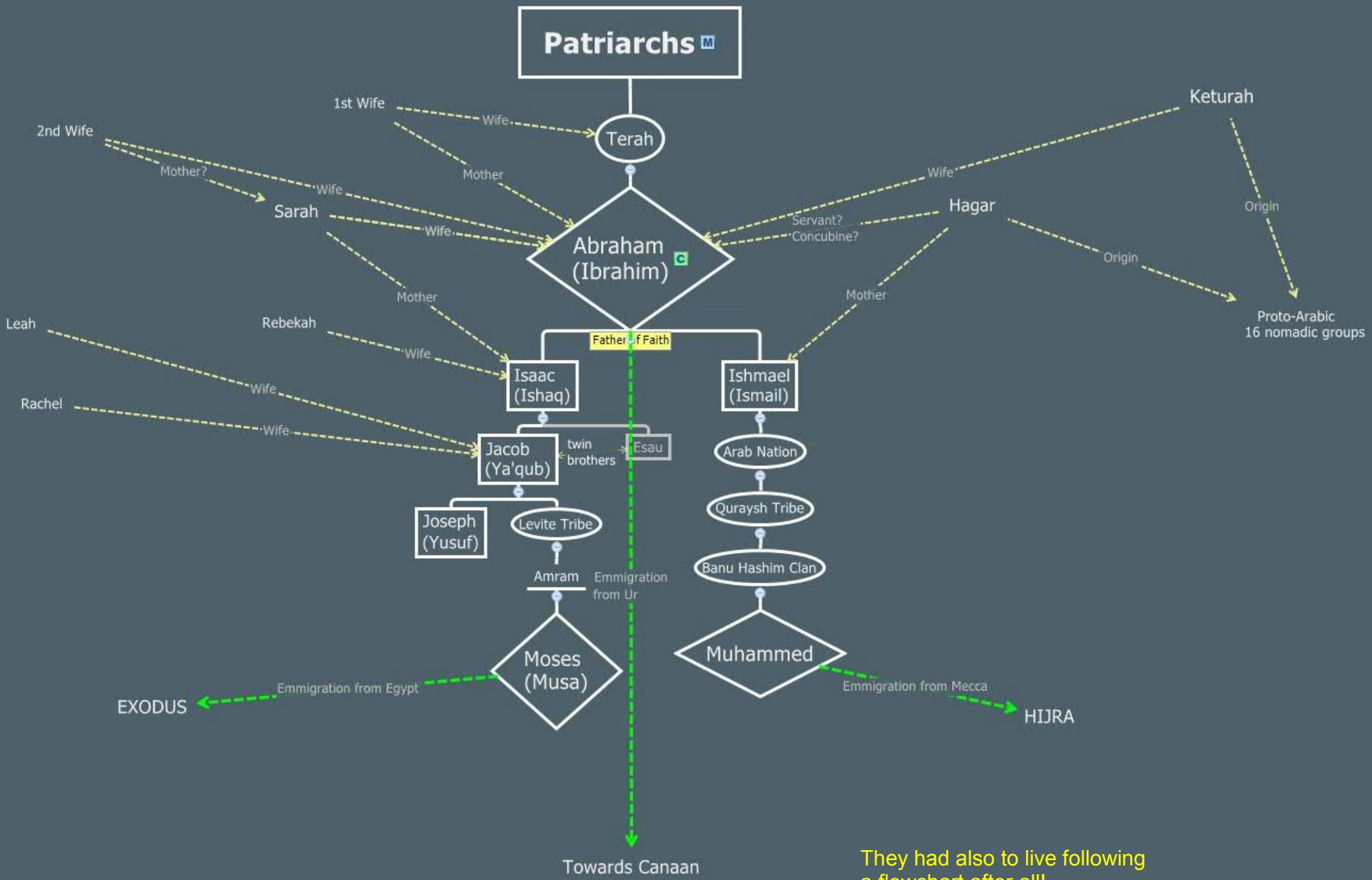
I have been a happy camper because of ECLIPSE based UI design

I had to deal with some Windows in particular Vista related problems



other tools complemenys XMind

- very good in course preparation
- good in presentation
- difficult in material sharing



They had also to live following a flowchart after all!

To understand these people is the basis for understanding the history of Islam

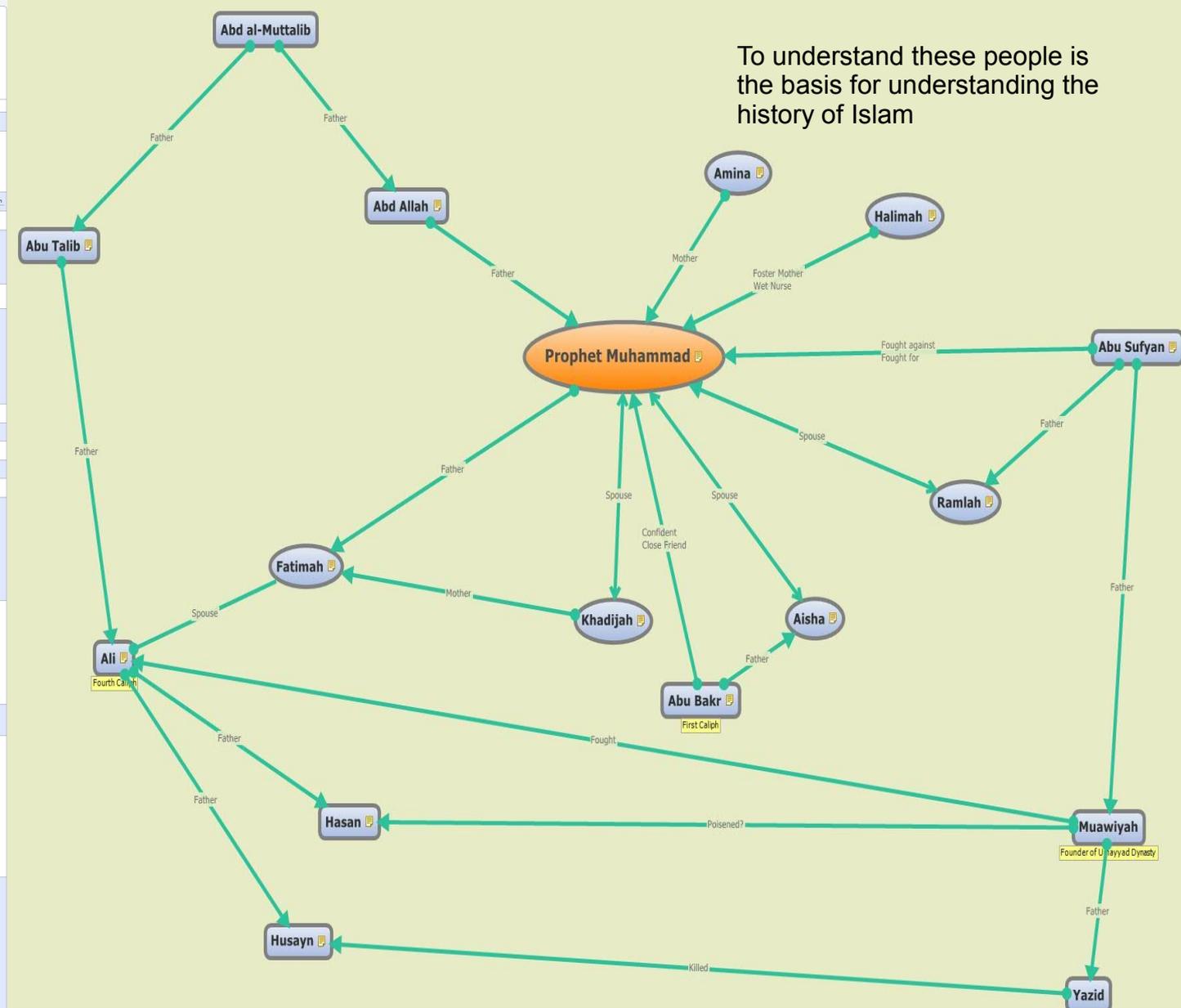
Life of Prophet Muhammad ﷺ	
569	Death of his father -> Abd Allah bin al-Muttalib
570	Birth in Mecca
575	Death of his mother -> His grandfather becomes his guardian -> Abdul Al-Muttalib -> the leader of the clan, Banu Hashim of the tribe Quraysh
578	Death of his grandfather -> His uncle becomes his guardian -> Abu Talib -> He is the new leader
595	Marriage with Khadija -> starts a happy family with two sons and in infancy four daughters survive
610	First Revelation
613	First public preaching
615	Difficult Years
615	Taking refuge in Abyssinia -> in the Ethiopian Aksumite Empire -> led by the Christian emperor Ashama ibn Abjar
618	Civil war in Medina
619	Death of Khadija & Abu Talib -> attributed to the restriction imposed by the adversaries
621	Night Journey
622	HIJRA: Emigration
623	Nakhia Expedition Constitution of Medina established
624	Battle of Badr -> Expulsion of Banu Qaynuqa The MAP of Battle of BADR
625	Battle of Uhud -> Picture of the Mountain of Uhud

Orphan, Shepherd & Caravan Manager

Prophet, Messenger & Social Activist

Community Organizer, Commander in Chief & Nation Builder

Unifier



Life of the Prophet

Quraysh



Tribes & Clans

PHILOSOPHY THROUGH AGES

Ancient Greek 🏛️

	Philosopher or School	Comments
BCE 600's - 400's	Pre-Socratics 🏛️	Islamic philosophers doesn't seem to have dealt with them MAYBE BECAUSE Natural Sciences were at a more advanced stage Rhetoric, grammar, linguistic were at a higher level
	Sub-Divisions	
	Naturalists ...	
	Sophists	
BCE 469 - 399	Socrates - Σωκράτης	Distinguish real Socrates from Plato's fictional character? Was he just another sophist? Islamic Philosopher distinguished him from "Platonic" character & found him more spiritual
BCE 427 - 347	Plato - Πλάτων	Keep in mind his various periods
BCE 384 - 322	Aristotle - Αριστοτέλης	Tutor to so-called "Great" Alexander

Islamic Philosophy was a bridge from Ancient Thinking to Medieval Europe, Renaissance and beyond

Ancient Roman 🏛️

	Comments	Philosopher or School
BCE - CE	Islamic Philosopher attributed his major book to Aristotle	Plotinus - NeoPlatonism
BCE - CE	Islamic philosophers didn't deal with this school	Epicuranism
BCE - CE	Islamic philosophers didn't deal with this school	Stoicism

Islamic 🕌

Medieval European

Modern

Contemporary

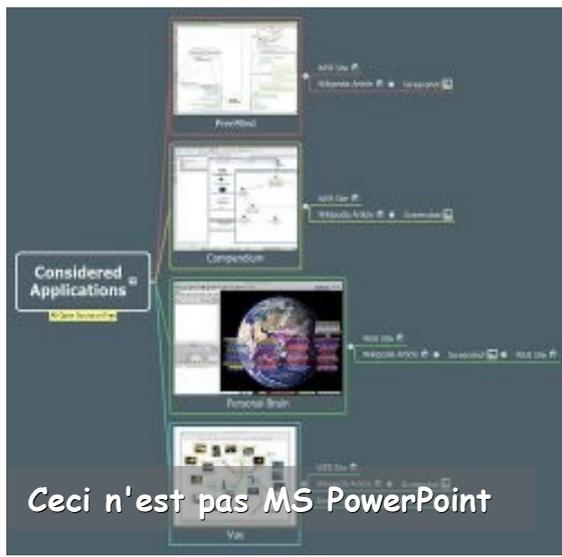
Post-Modern

Islamic Philosophy is the bridge between the old & new and an original contributor to both

"Islamic" can be interpreted in several ways:

- Philosophy of Muslim religion
- Philosophy of Muslim philosophers
- Philosophy of Islamic culture to include Jewish, Christian and secular thinkers

**Can we talk?
PowerPoint...
Mind Maps...
with or
without...**



WITH MY THANKS
TO THE STUDENTS OF MET HI 480
FALL 2009, 2010



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