Tami is the name we have given the database we are developing from dstc. Tami stands for ‘Texts, Audio, Movies, Images’

Tami interface discussions.

Trying to move along the development of the ‘user-friendly interface’ for tami. Waymamba has her resources on the dstc database. Kieran is talking to her about how she uses it. We have developed a few principles and have done some drawings arising from discussions with Waymamba several months ago.

Basic database icon for computer desktop.

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desktop icon. shows resources with luggage tags. Idea here to have recognizable resource and metadata icons (resource is a ball, metadata attached like a luggage tag)
at all stages of use (ie even on the desk top icon, you can still see the resources with their metadata tags). Click on the icon and it opens up to
full screen with choices to ADD or FIND. FIND - magnifying glass, ADD - hand inserting object into computer. Click FIND (3) and you get to
search screen. Basic principle here is to populate the text box (2) - CHOOSE LIST - with words. Behind the screen there is a list of words which has been glossarised by a machine. The texts which are glossarised are the metadata for existing resources. Every word which appears in that list is already in the database. If someone is searching the metadata it’s best that they are only able to use text strings which are guaranteed to find resources (ie words which have already been given as metadata for particular resources.)

How do you populate the CHOOSE LIST? by a) typing or b) fuzzy search as in the dictionary or c) drop down menu. This could be called ‘progressive selective search. It is selective, because it is choosing words from a list which has already been compiled inside the machine. It is progressive because as you key in (or click) options, the list is progressively refined to give a limited number of options. ( eg if you press b on the keyboard, all the b words appear, then if you type i, all the bi words appear and so on.) All of these options populate the CHOOSE BOX.

The search is activated by (?double) clicking on one of the words in the CHOOSE BOX. Any resource which has that word in its metadata (*or in its data) appears as an icon on the next screen along with its metadata.

* need to think about how to give the options of searching the metadata only, or both data and metadata. (Maybe all can always be searched but items with the key word in the data only are listed beneath those with the key word in the metadata)
All this depends upon making the lemmatiser work well. In the early stage, the lemmatiser for Yolŋu languages will just produce whole words, so a word like buku will also appear with bukunydjja, bukuna, bukulili, bukuŋura. Later we might be able to work out a machine which will strip off the suffixes. (Could talk to Ferdi about that because he has lists of thousands of words which I have morphed.)

This spelling side of things needs to be really flexible to allow literate people to make spelling corrections wherever and whenever they like. To keep the system safe from kids, then, it needs good backup.
Metadata appear as a luggage tag. All associated resources are joined to it. Different icons for different sorts of resources.

NB: MC later (ie as of late Sept 2004) unhappy with the idea of a one-to-many relation being encoded in the db. There is a continuum of possible solutions here:

- Ultra simple: each resource has either no metadata or one metadata file. There are no one-to-many relations. Even with a transcription of a video, the video and the transcription each have their own metadata file, they don’t share one. This makes upload easier, it makes presenting related objects difficult, but I think we can find canny ways of bringing related objects together (through metadata cues) without having to hard wire connections between related objects. This is the view MC currently favours because it is easier and more faithful to the philosophy that we are creating an environment, not a journey. Journeys needs the engagement of people’s intentions and reflexivity, and we can’t encode these into the database so they should work in a space outside it.

- Current: One metadata to many objects (As displayed in the drawing). This is what Waymamba currently has and it is useful for a database which has lots of related objects (eg a video with audio file, transcription, translation and glossary) MC’s point is that we should be able to find ways of presenting related objects without wiring them together.

- Richly related. Not only does one metadata file have the possibility of being connected to many resources, but each resource has the opportunity to be connected to many metadata files. There are two ideas at work here; 1 to
allow the database to start telling stories so that sets of resources can be put together in labeled folders (contra Bowker: narratives and databases are natural enemies because on depends on the connectivities which the other resists) 2 Bryce’s experience with Ganhdhuwuy and other from the GIKC who really want to use their computers for arranging resources into DVDs or powerpoint presentations. The way Bryce thinks of it now is hugely complex. I’m not sure we have the resources to develop such a thing, but if we agree it’s a good idea, we can at least investigate how much work and cost it would entail.

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related point. dstc database has possibility for voice annotations to be linked straight to resources (ie their own kind of metadata not accessible through text searching.) Little speaker icons indicate that voice annotations are avialble. They must have to put some text metadata there as well saying who it is that’s speaking? MC thinks this greatly complicates things for rather a small enrichment.

This reminds us that the form of the database is dependent upon some quite localized contingencies:

- How many objects are likely to be there? The system we are thinking about at the moment will work well with small amounts of resources. As the number increase I guess users will need to depend more on text-based searches.
- Will the user know what they are looking for?
- Will they mostly be looking at things one at a time?
- Can we expect that they will be wanting to use other software like iDVD to put things together, and just use the database for finding individual objects?
Search results. In this case dharpa has been selected. The top of this list is a single photo with a metadata tag. Then comes a story with a video, a transcribed text, and a glossary list. Then an illustrated text with glossary. You have to click on one of the icons or make a presentation (see 6) to view it.

This is essentially a three stage process
1 generate a search string in the CHOOSE LIST and select one to activate search
2 look at the metadata you have found, choose to view an item or a collection of items.
3 look at them on a presentation screen.

Bryce’s new interface collapses those three stages into a single screen which has resources, search and view together. **Top of the Document**
found screen (presentation) several resources viewable contemporaneously along with their metadata.
Upload screen for new resources.

- you can make up metadata by choosing words already in the glossary list (spelling aid)
- metadata tag gives the illusion that the metadata is being sequestered into fields, but this is not really the case. It is just structured to help people think of good recall words.*

* an important principle here is that the metadata is not structured so as to describe the object, as it is developed to increase retrievability. (not 'how would I describe this object?', but 'how would I find it?')

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Advanced search. This is the text-free search. Centre screen can be populated with resources by clicking on icons on lhs.

Latest ideas (Sept 04)
- the text-free search is first, and the text-based search is a second level option
- should expect resources to be stored in the database and to be found and used without any metadata. This means that search helps like 'most recently used stays at top of pile' or 'most frequently used stays at top of pile' or 'most recently uploaded stays at top of pile'.
8a
Notes.

This screen wrestling with the idea of how metadata can be enriched without too much complication. (Not sure which screen this is mc)

Can we find a way of enriching the metadata while resources are being viewed?

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Second lot of drawings

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basic icons version 2  Desktop icon now looking like small version of 10. Ideas for icon display. (Bryce?)
new opening screen. Text-free searching.

Option for text-based search available from here, but first search options are text free.

Four columns with sound files, videos, images and texts. (Bryce later added another column for folders (which contain collections of resources - see pic 13). If we pursue this option (see discussion in section 4), we need to think how it can be organized, and whether to folders have logical arrangements (sequences, time lines etc possible - to recreate journeys through the environment)

Each stack can be clicked up top somewhere so it opens out to a wider view (so user can search only for texts, videos etc if that’s what s/he knows s/he is looking for) as displayed on rhs of graphic.

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View and add metadata.

This screen enables the user to enrich the metadata or simply to view resources. Trying to keep the interface simple but allow for view and changing metadata as well.

Note the drag and drop facility allowing users to find words already in the database which will people to enrich metadata without spelling.
Bryce works on computer

need to discuss issues about complexity with first introduction to interface. Users will soon enough become familiar and have visual prompts at all times, starting to think about the object of the database to be arrangements of resources. focussing on ideas of how to include the maximum number of resources into the simplest most possible interface, and incorporating searchability and display into this.

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then we started thinking about putting it all together and how folders might be created.

13 resources, (currently audios movies photos text), folders and workspace arranged from left to right. buttons along rhs*. 
BAK: An item from any of these resource banks can be selected and moved into the collection panel on the rhs. at which point metadata can be added specifically for each collection. (It should be noted that metadata for any particular resource can be added using the same metadata screen on the lower rhs. ) * Once collections of resources are considered complete buttons on the far rhs indicate whether a folder, CD rom, DVD, or other export presentation is required to be produced.

Example, selection of the DVD export function produces a DVD which incorporates a slideshow of photographs, option for movie play, text scrolling, (including separate text scrolling for metadata and this possibility of listening to any audio files which have been included. Software limitations would presume a basic template for this function. Similarly a CD rom could be produced. or VCD.

BAK: The concept of a database has its substrate predetermined by past models of databasing. Experience with indigenous people over the last few months in the project has informed us that requirements of continuing narrative uploading (or something like that) are desirable. MC: by ‘narrative uploading’ do you mean resources connected by some sort of narrative logic which is encoded in the metadata?

Discussion about whether we need one to one or one to many relations, what is a relational database? See section 4

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Modes of visual and audio search such as continuing rotations of photographs, and audio metadata possibilities - see notes on local contingencies in section 4

undecided about the usefulness of the fuzzy search, maybe key in would suffice. MC maybe only reason Waymamba uses the drop down is because the dictionary doesn’t have a key-in. BAK no, no, drop down is actually very useful because it allows you to use digraphs in the search. If you pick the wrong first letter but the others are okay, you can change the first one until you come up with what you’re looking for. This works particularly well if you are only selecting from the limited list provided by the lemmatizer. (MC to do more work on text entry)

BAK interface 13 is assuming that resources have been uploaded with software which incorporates basic metadata and organisation. such as iphoto itunes etc. and is referring to these rather than having them all stored in the database. (not sure what you mean here)

puzzles about this: are people only going to add things to their computer that they want to see in their database? or are particular resources to remain separate from the database. MC yes everything in your database has to have been put there by you, even if it doesn’t have any metadata. It should be easy to upload anything, and you put it there simply because you know that you’re going to be able to find it.
On interface 13 there is a small slider button below the workspace. Currently thinking about incorporating map interface as a way to locate particular collections of resources in folders referring to their location. tba
Do we have a picture for the new upload? Well sort of there’s this..

MC reckons for upload the database screen should be about half size and resources can be dragged from the desktop and dropped into the stacks. Option to add metadata is given but can be ignored.

Bryce reckons that’s a good idea but compromised between being able to resize the database interface to many size and being able to drag and drop from desktop or elsewhere into the required slots, and another option of just having a database icon on the desktop to drag things into which organizes by file type or/and just gets left in the work area and worry about later.
This one involved discussions of many to one and one to one (which doesn’t exist in my opinion bk)
1 most searches are done without text ie, scanning of image files and placements from memory or
thumbnails which are ordered for maximum convenience.
2 text based searches depend upon finding the word in the choose box and double clicking on it
choose box already populated by a glossary of existing words
key in and drop down searches progressively refine list
3 word in choose box double clicked
4 all resources which contain that string in metadata rise to top of pile and get highlighted
5 one click on resource and it and it’s metadata appears
6 any resources can be dragged into workspace
7 extra metadata can be added at any stage
click and type or drag and droop.

just pt this in temporarily to think about text and metadata resize function as away of coping with everything on one interface. Questions about having sound record function as a part of the galloping featureparatis set. The order of resource banks is now changed to text audio movies images to align with the name which seems to be the way our world is working.

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