Pachyderm Templates and What They Do
Why pick a template? What interaction style does it support?

Context screen (the "phone dial")

Overview:
This is a visual Table of Contents screen about an idea, a subject area, or even a curriculum. As you mouse over each image on the dial, that image comes up in the center and a text label appears. This serves as a sort of visual table of contents for a set of related objects or artifacts. Clicking on any thumbnail takes you directly to the Artwork Screen.

Further Observations:
This table of contents accommodates up to 10 "artwork screens," and each of those accommodates as many as six "exploration screens"—which means that you can link up to sixty exploration screens and literally hundreds of media files from this one interface. (I'm not recommending that degree of saturation—just saying it's possible.)

If you look at Wayne Hodgins's Content Object Model:
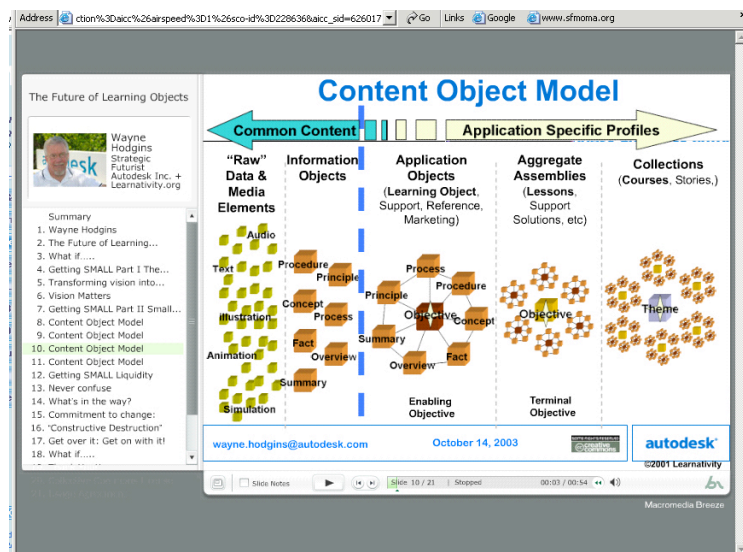
the middle picture *looks* like a context screen, but really it's the right hand one that *functions* like one—if I'm not mistaken. The middle picture better represents the underlying relations within an artwork screen, organized around a central question.

You can also link up to two intro overview screens, treating concepts shared by all the artworks in the circles, over on the left above the paragraph of text. (Examples of this are on the Post-Revolutionary Mexico and Rauschenberg Case Study screens of MSoMA.) We tend not to do it anymore, because we found people don't click on those text links. They're drawn to the links with images attached (on the phone dial) instead. That said, if those overview questions were accompanied by images, they'd probably get traffic. (In the Wattis feature we placed an Intro video for the whole feature in that position: you can see it at www.sfmoma.org/wattis.)

What's good about this screen is that it encourages browsing—you can mouse over each artwork, preview a little information about it, and decide if you want to jump in. It also gives you two short text intros to the topic at hand (one in the phone dial, the other lower left.)

Finally, this is the kind of screen that can be redesigned to reflect the look-and-feel/branding strategy of any university or department. The Ansel Adams "context" screen is a good variant with the same functionality (www.sfmoma.org/adams).

Artwork screen

Overview:
One of our fundamental components—an organizing principle of the program—is the Artwork Screen, with the artwork at its center. You can either click directly on the artwork or object and go into the work to examine it more closely using zoom and pan functionality, or you can select one of the questions that surround the work to explore the context.

Further Observations: That pretty much sums it up: Go *into* the object, artifact, document for a close-up (the zoom screen), or build a context around it by clicking on one of the other exploration templates. That said, you could also use that central image for a person giving an oral history, and go into the zoom to hear two prize audio clips, then use other templates to bring in additional documentary evidence and artifacts. I'm sure there are other uses… following a molecular chain?

BTW, you don't *have* to link a zoom screen to an artwork screen. You can link just the Exploration screens.

Another important point here: the range of between 1-6 linked screens. With six linked screens, you have a *lot* of depth. We usually aim for 2-3 exploration screens per artwork.

Zoom screen

Overview: I mentioned when we were back at the artwork screen that you can click directly on the work and go into a zoom. This is a pan and zoom close-up of a room-scaled Robert Gober installation. We can append up to two audio commentaries, as well as the museum credit line, which always travels with the image.

Further Observations: For artworks, this is essential. Maybe not for other subjects. We chose not to couple the audio with the pan-and-zoom feature because we felt a guided pan-and-zoom "movie" would be too passive. So you can listen to the commentaries and explore the image in your own way. We hope that's more engaging!

I imagine this zoom could find a variety of uses in a variety of subjects, with or without narration.

Variety of Media screen

Overview: The closest thing to a coffee table book online. You can lead off with a video clip in the upper left, as we have here with Jonathan Katz talking about the Gober installation. You can also associate up to three other thumbnails in the right hand slots, each leading to enlargements with additional text, or alternatively to other media files like movies, animations, documents, or URLs. The overview commentary for this screen appears scrolling down the middle.

Further Observations: There is no particular pedagogical strategy here (for instance no timeline or visual analysis tools built in), and yet this remains our workhorse of a screen. We use "VOMs" a lot. It's a very manageable quantum of information about a subject.

Onion Skin screen

Overview: We call this screen the Onion Skin because it treats multiple "layers" of a single topic. The overview intro is on the upper right. The arrows middle right refer to different dimensions of the topic: clicking on any one of them refreshes the media on the left and the commentary below. You can pack a lot of information into this screen—up to 5 layers comprising 15 images and/or videos, documents, etc., each accompanied by its own specific commentary.

Further Observations: Because each thumbnail can be linked to an enlargement with accompanying text, you can spend a half hour exploring one of these screens—or so it seems! Right now, the type is too small. As for the images, we have recently increased the size of the upper thumbnail, but the lower ones could be larger, too.

We choose this screen when we want to convey multiple dimensions of a single idea/phenomenon. Right now, we're about to publish one-stop guides to Surrealism and De Stijl, two 20th century art movements, with onion skin layers devoted to Painting, Sculpture, Poetry/Manifestos, or Architecture & Design within each movement.

Book Viewer screen

Overview: The Book Viewer is our document viewer for paper-based media: books, letters, manuscripts, ephemera. The opening screen provides an overview of the book and thumbnails of its pages. Clicking on any thumbnail brings it up in a pan and zoom format permitting easy reading.

Further Observations: The zoom view also supports a small pop-up transcript (or translation) window for documents that are handwritten or in foreign languages. This is obviously a great resource. (We did a whole previous CD-ROM back in the '90s exclusively based on primary source materials, and in Pachyderm for anything longer than a page, you need the book viewer to achieve a similar effect.)

Note that my colleague John Weber, frustrated by the small size of the images in the Slider gallery, has taken to using the Book Viewer to bring up a succession of large images of abstract expressionist paintings, with a simple introductory overview on the first screen.

Collaboration Web screen

Overview: This screen is especially good for showing relations between different artworks or creators. Clicking on any of the side thumbnails refreshes the content at the center of the screen, both top and bottom. In this case, we are hearing painter Gerhard Richter's comments about each of the different styles in which he has worked. Conversely, this can used as a "Critical Response" screen, in which six different opinions are expressed about a single catalytic object.

Further Observations: This screen does not function exactly as it was conceived. The idea was that you would drag the upper middle thumbnail to any of the peripheral thumbnails and that would cause a "reaction" to take place in the lower center of the screen. So it was an impact/response, or cause-and-effect model. In user testing we found no one was actually doing this, so we've come to rely on people just clicking the thumbnails. I think supporting both behaviors would be ideal.

Another improvement that needs to be made here is to allow more room for text at the top. Right now you have to scroll far too often, and the scroller can get away from you, interfering with your comprehension of the text.

Formal Analysis screen

Overview: This screen enables the viewer to mouse over red circles to reveal close-up details of the image along with a commentary about that part of the image. This could be used equally well for maps or diagrams or biological specimens—any visual document that repays close scrutiny and is full of zoned information.

Further Observations: The Formal Analysis is the counterpart to the Zoom screen: the other screen that allows for close visual inspection. Here there is written text accompaniment wedded to specific regions; on the zoom it is audio decoupled from an even greater close-up. We have considered adding audio to the regions here; it might be a good idea. We have also considered adding links to related documents for specific zones.

Slider Gallery screen

Overview: We use the Slider Gallery to create either a chronology or a typology. In this case we see a sequence of works by artist Jeff Koons. As you pass your mouse over the circles on the bottom line, the screen above refreshes with new images and texts in sequence. There are five stops on this slider; we often use as many as seven.

Further Observations:
This is a great screen-type. It's multi-functional and we use it a lot. The text can be a single overview for all the stops, or it can refresh with each new image. Videos tend to get lost here unless they're in the first stop. It would be better if the images were larger.

Timeline screen

Overview: As you mouse over each circle on this timeline, the artwork comes up in a square with its full image and title. If you then click on the artwork or the object, other artworks or objects that share a common keyword or concept come near it from across the Timeline. Mousing over each one of these identifies it; if you then drag a comparison work to the central image, you will arrive at a comparison screen.

Further Observations: People love this screen. The good (and bad?) thing about it is that it is auto-generated. We haven't predicted in advance all the relationships it will cause to occur through shared keywords. The problem we have encountered is that if the keywords are applied too broadly, they diffuse the impact of the juxtapositions. A greater variety of keywords linked in precise ways provides a more rewarding experience.

Comparison screen

Overview: Here you see both objects on equal footing, united by the keyword/concept at the top. Mousing over each of the artworks will change the text at the top to reflect how that particular artwork reflects that keyword or concept.

Further Observations: We need an exploration screen like this, too. (Right now, it is only generated from the Timeline.) Ideally, you could bring a number of objects into "second position" and compare them to one original choice.

Video Focus screen

Further Observations: I didn't even mention this in the NMC Presentation because it's so simple: the Variety of Media without the links. Just a single media file and a text. Simple, straightforward. Often it might be enough: I suppose you could launch a Learning Object (animation, movie, etc.) from it.