

Proposal for 2.5 UI evolution

I think a lot has been done to the UI in a very good direction, and since I know that there are further plans for enhancing the UI, I decided to write down the main points I see as a possible problems of the current solution and possible directions in which the UI could go.

Main focus of this proposal is on the speed of access to properties and tools.

The proposal practically is: remove panel order reshuffling possibility, make a new tab system with only 1 active panel visible, remove list boxes and put their functionality into outliner, replace buttons in tools panel with submenus.

Key concept: no visual searching if possible.

Searching is the moment when you are looking for the button you want to click instead of being able to click it blindfolded. It can sometimes take the most time of the actual interaction with the property window, and also with others. Why I consider searching unhealthy for a UI - my experience is that I (and possibly other users) have a muscle memory for what is located where, specially with a tablet. This memory helps access tools and properties with a speed exceeding the time needed to look at the buttons and read the text. Of course this kind of sense for an application evolves only when you use the app for some time. I think it's the inability to use this memory in some cases which caused some of the experienced users to call the new ui less effective(I definitely don't have this opinion). This special ability gets currently useless for me especially in the cases when this happens: scrolling,mixed panel order, uneven height of a panel stack(some panels are open while others aren't).In other words, you have to read before clicking/tweaking.While scrolling is in some cases probably unavoidable, the other two aren't.

this are solutions I thought about for panels, which could avoid panel trouble as well minimize scrolling:

mixed panel order

the possibility of blender to reorder panels with the mouse is something which I never understood. It's fancy, it's fun, it's from the very first blender ui recode many years ago. If somebody (possibly often accidentally me)really uses the feature and reshuffles panels order, working with such file becomes a pita. Imagine reshuffled panels in material or texture properties - scroll down, look for panel with mapping, scroll up, look for preview, scroll down, look for mapping again... possibly close inbetween panels just to have both preview and mapping in 1 scope, then again arrange the stack just to access another of the many panels....The annoyance is not only the scrolling, this is mainly about the order of the panels. In gimp and photoshop, you can also reshuffle panels(I am not fond of it), but there it's not a tragedy - these softwares are much simpler than blender, and have much less panels.

Solution:

make panels order hardcoded, wheter it is in stack or in tabs. It's really that simple, kill a feature. Exception is modifier stack, but if exposed in outliner(proposal lower in this text), changing of order of modifiers could be done there.

uneven height of a panel stack

is less bad as previous, but still adds a lot to "searching time" - the fact that some panels are open and some are closed often causes a lot of searching too. I'd think this would be best solved

with a radical but clean solution - not to have the old style tabs, but have everything tabbed on top of property window, with just 1 panel visible. Exception would be preview of textures/materials, which is so far in each prop section just once and would be over the tabs, not foldable(who DOESN'T want to see what he's actually doing?). This would save a lot of scrolling and searching time. Also, this would logically remove panel folding possibility in property window.

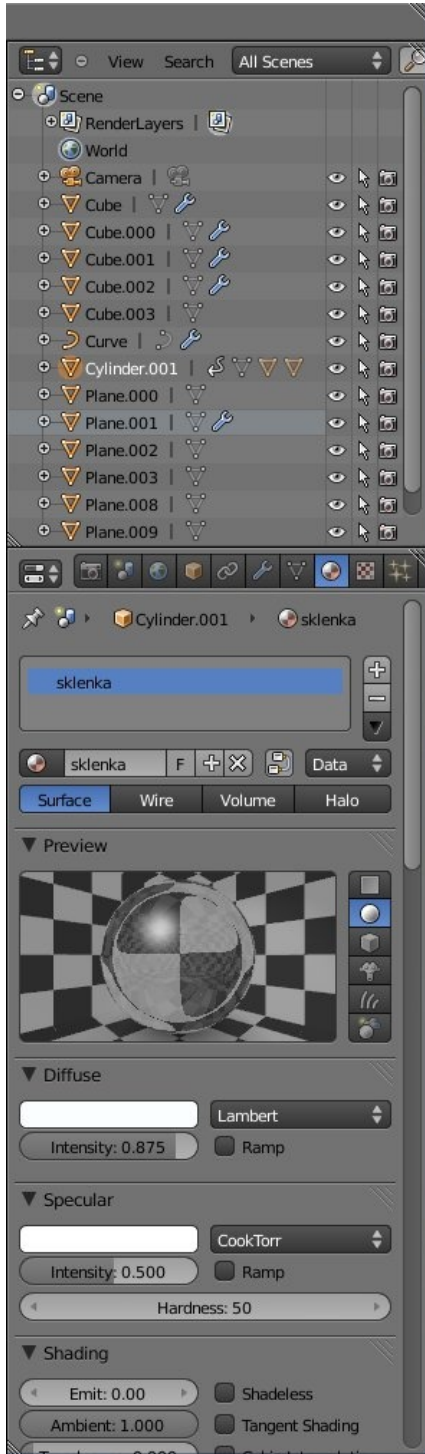
All interactions can be transcribed into interaction steps, these are the current and proposed ones:

possibly worst scenario now(image 2): tweak property → scroll → search panel → click to open other panel → click to close original panel(to still see preview on top) → tweak another property

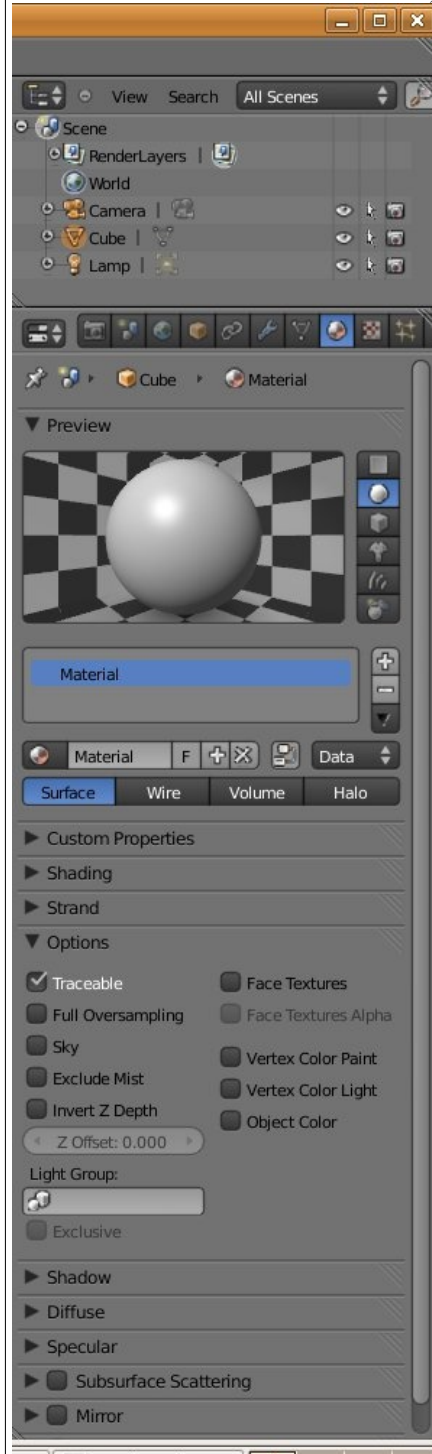
another current scenario(image 1): tweak property → scroll up to see preview → scroll down, search for another property → tweak property → scroll up to see effect.

proposed solution: tweak property → click tab → tweak another property , see preview all the time

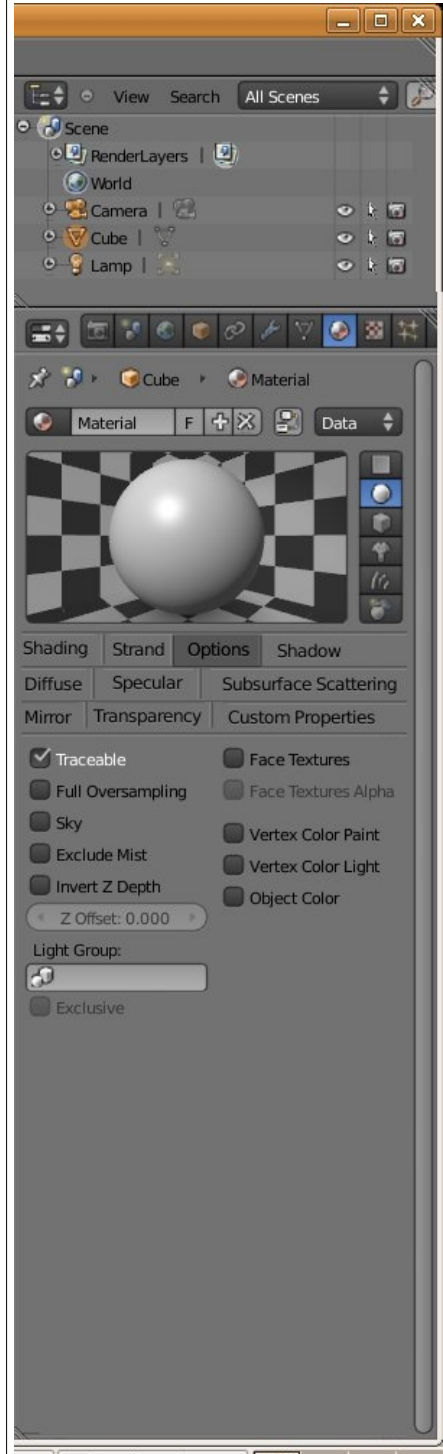
Img. 1
 Current solution – worst case with all panels open(notice the scrollbar)



Img. 2 Current solution – with one open panel, you can see the preview while tweaking, but there are too many interaction steps. notice the squished and thus useless outliner(default so far in 2.5)



Img. 3
 proposed solution – clean, access to any property is with 1 click, would also allow larger outliner window



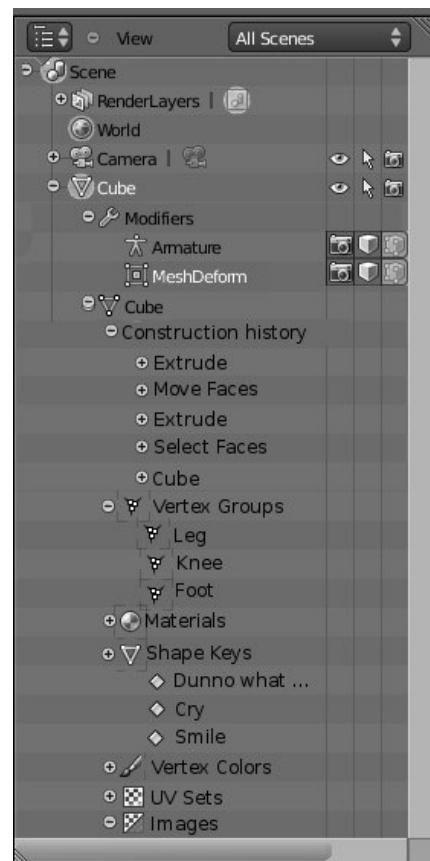
Solutions for Tools access

I think tools access needs a different approach than properties, since the tools are first triggered, then tweaked. Submenus could solve this - the buttons in the current toolbar currently still seem more as a testing area, since just a tiny amount of available tools is accessible there and in some modes there is already an unbearable amount of scrolling needed. Instead, space for these buttons(primary) should be used for unfolding submenus. Again, we would get from scroll-> click(if you're lucky and the tool you're looking for is one of the exposed ones, otherwise you have to go to the menu afterwards). Proposed solution targets a click->click solution. This way, most of the menus now accessible with the object or mesh menu in header, could get exposed(thus switch from click-click-click in header to click-click in tools tab)

Besides that, the radial menus have been suggested by users many times, there is already a script available which does this, which everybody can test preinstalled in some of the graphical builds. I don't have longer experience with radial menus, but I guess the reason they are so popular for switching Maya users is again the same - faster access of tools, use of muscle memory instead of reading and looking for choices.

List boxes -> Outliner

List boxes do select data - vertex groups, shapes, uvlayers, vcols, ptex layers, materials, textures, and more. All these listboxes are placed in the properties window. They are quite big (have decoration), so they take space and they are... scrollable! so we have tiny scrollable(I'd say rather unscrollable)windows inside the property window. On the other side, outliner is a window by itself, and with proper tweaking(e.g. setting it to display only current object), it could be used to access literally anything within the application. I proposed this solution a rather long time ago, so just repeating the picture here:



Here are more notes I did write down, not so important and some of them have already been discussed:

Context movement

one more little idea for properties window: "Browsing"

Property window is actually data browser right? Forward/backward button, just to the left from the current pin button, would greatly help in some cases. Then the user can easily switch to property window which just got lost because of some selection he did etc.

More properties should move in the property window, the side spaces should be used to expose the most often used properties, like transform e.t.c.:

Node properties, sequencer strip properties, operator properties(it's tools right, but with the possible construction history in mind, they actually become part of the scene data, and thus also properties of the objects they have been applied to).

Final word

Please take this as an analysis based on my everyday experience which I spent quite some time with and ask you to look at and discuss about.