The Survey document on Wings3D 1.5.3.

written by tkbd

Note: Including the mock-up of the user interface in Screen shot .
Note: This document is a survey by one Wings user. It is one of the information source for the brainstorming.

2015.01. 0.1

The present conditions of Wings3D 1.5.3.

Light source object is displayed in any case.

Image: Screenshot [536x350x24]

70.45%
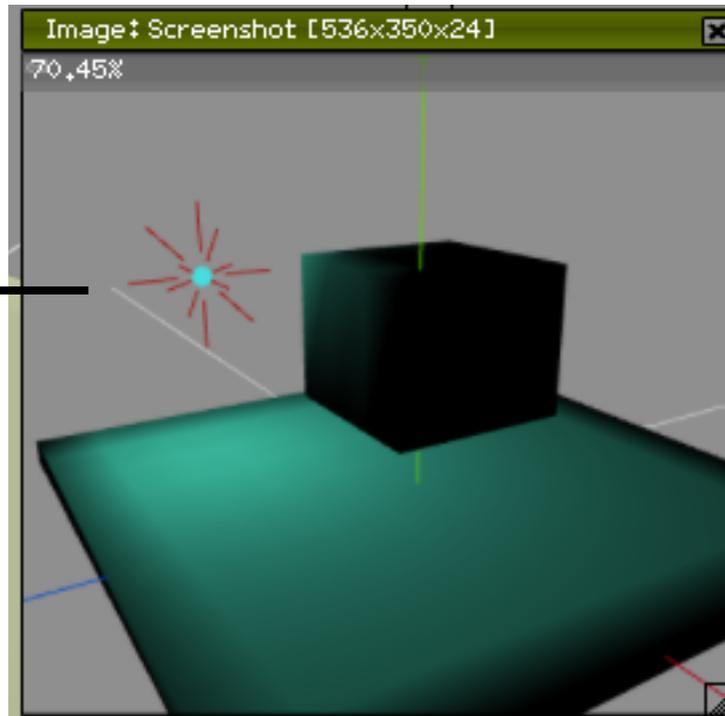
When the rendering by Wings3D view only,

there is that the gizmo(for light sphere) gets in the way.

1. Add ON/OFF for Light Sphere display
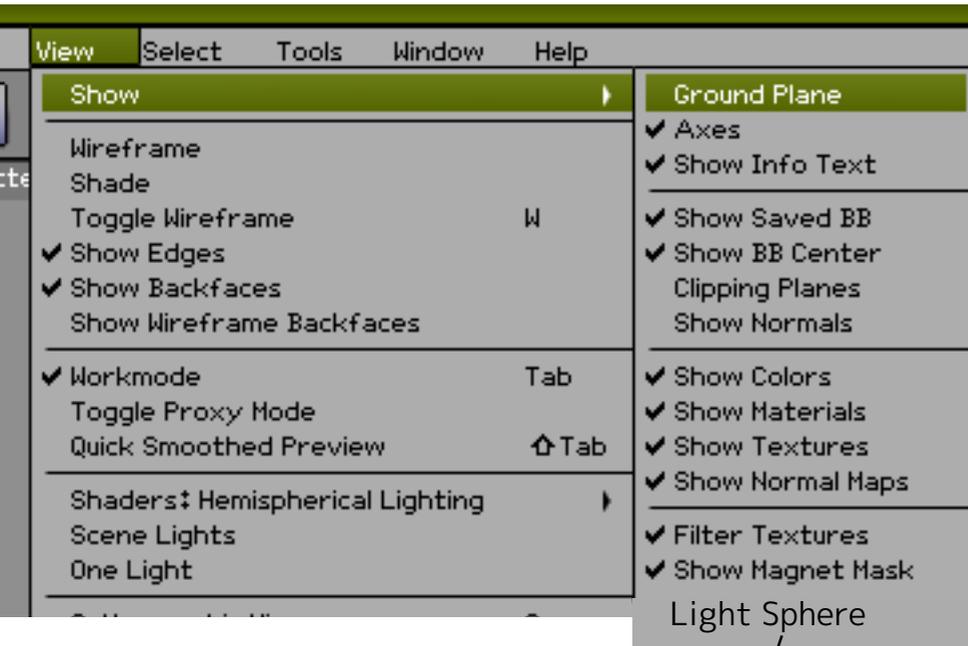
I wish this feature….
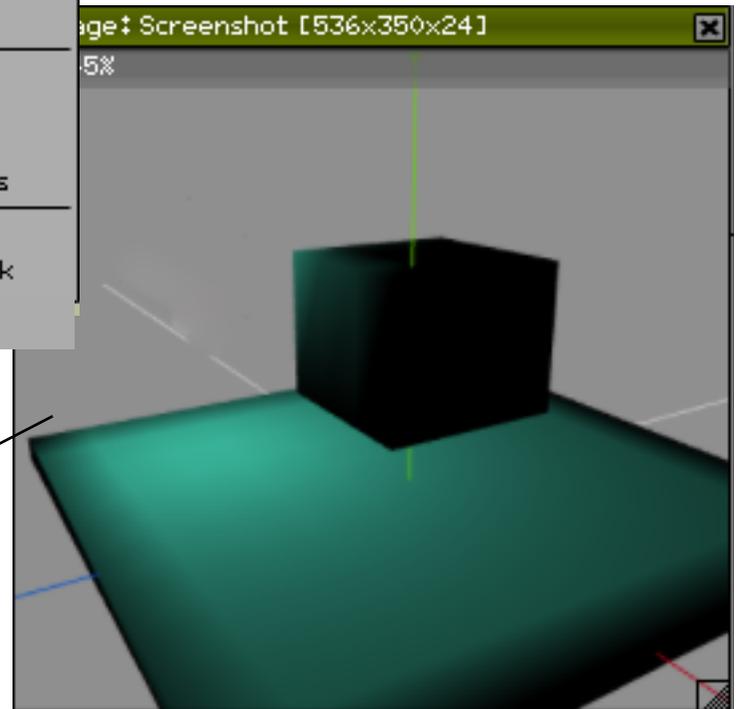
Light Sphere

The display when "Light Sphere" turned off.

But the lighting has been keeping.

2. Why Light color setting is tricky?

Beginner can't forecasted that how it works.

What is these values mean ?

100,55° 100,00% 0,00%

This command is
make to lightcolor by
(HSV:Hue,Satulation,Value)

.Move.
Absolute Commands

Position Highlight
Color
Attenuation

Edit Properties...

Numeric Input

A 102,547 °
   98,0   %
   4,0   %
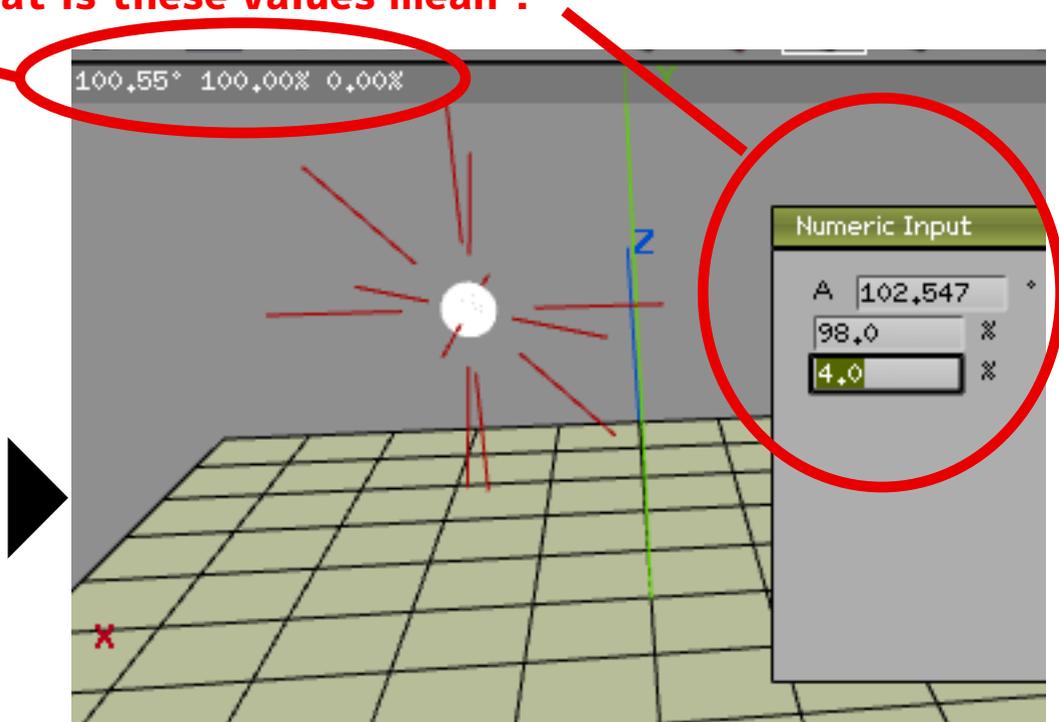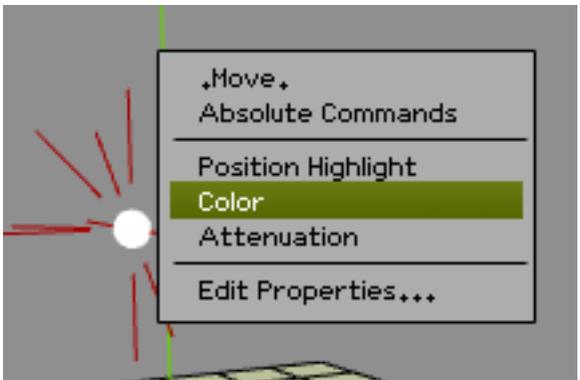
The Information Line text also not user's help

L: Accept L+Drag: Adjust 2nd value R: Cancel [Tab] Numeric Entry [Shift]+[Tab] Switch Constraint Set

Mouse Move x,y LMB Drag ...etc

2. Why Light color setting is tricky?

If improve current specification (change by mouse biaxial movement amount), there are ideas to add color pane.

Value

Saturation

(L+Drag) Hue

Light Properties

Colors
Diffuse
Ambient
Specular

Choose Color

R 0.678
G 0.678
B 0.678

H 180.0
S 0.000
V 0.678
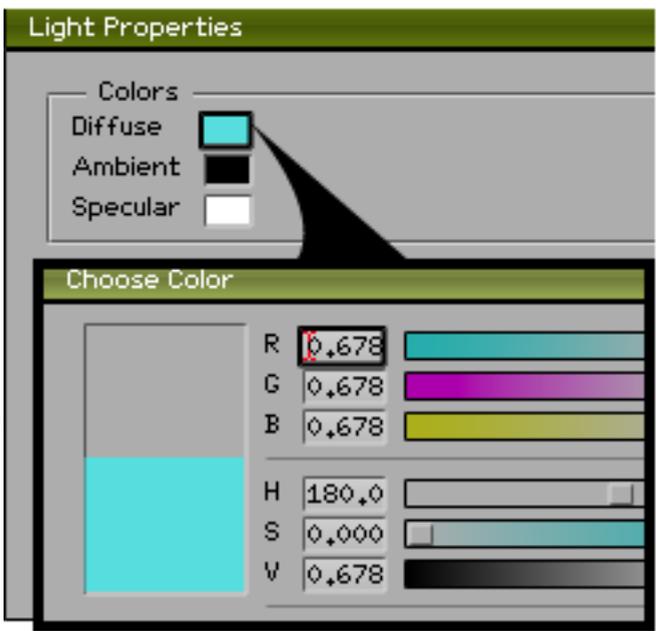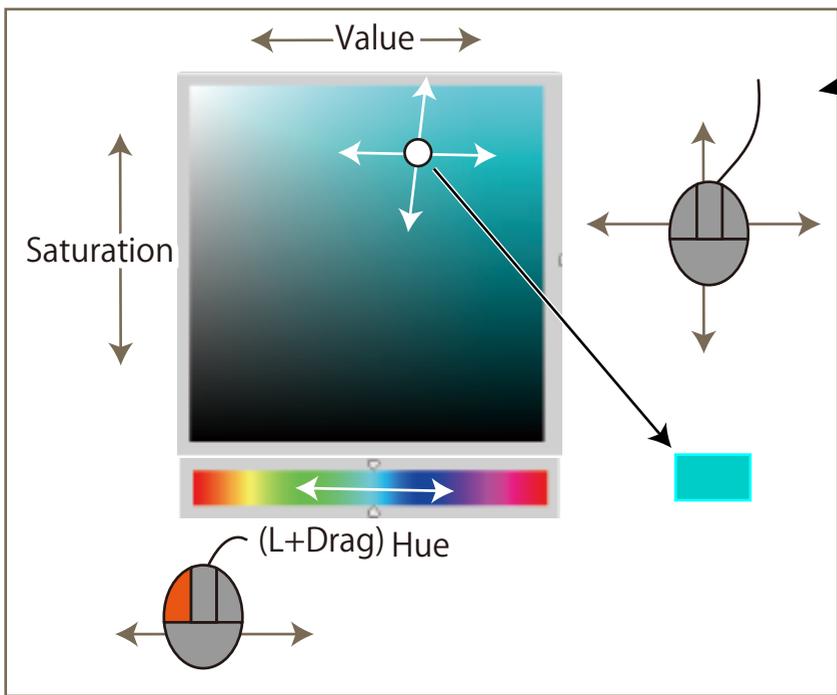
By the way, look at this screen shot that a color-setting from Outliner Window

This way is easy to understand.

3. One Light ? Two Light

Beginner can't forecasted that how it works.
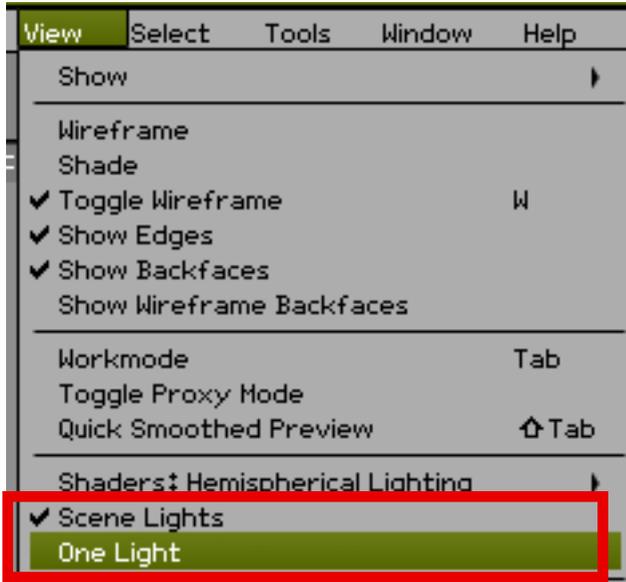
Toggle

One Light <--> two Lights

What Mode is now?

Also Scean Light not work

on Shader Mode.

In order to try the combination,

the User will also trial and error many times.

3. One Light ? Two Light

More Infomation line follow
It needs some screenshot for this.

4. Better safe than sorry.

Beginner can't forecasted that how it works.
User will also trial and error many times.
Information line isnt tell about these.

Edge > Circularlize

Edge > Bridge

Exactly two face regions must be selected.
OK

Selected edge loops may not share vertices
OK

Vertex > Weld

You can weld only one vertex
OK

Selections including single edges cannot be processed
OK
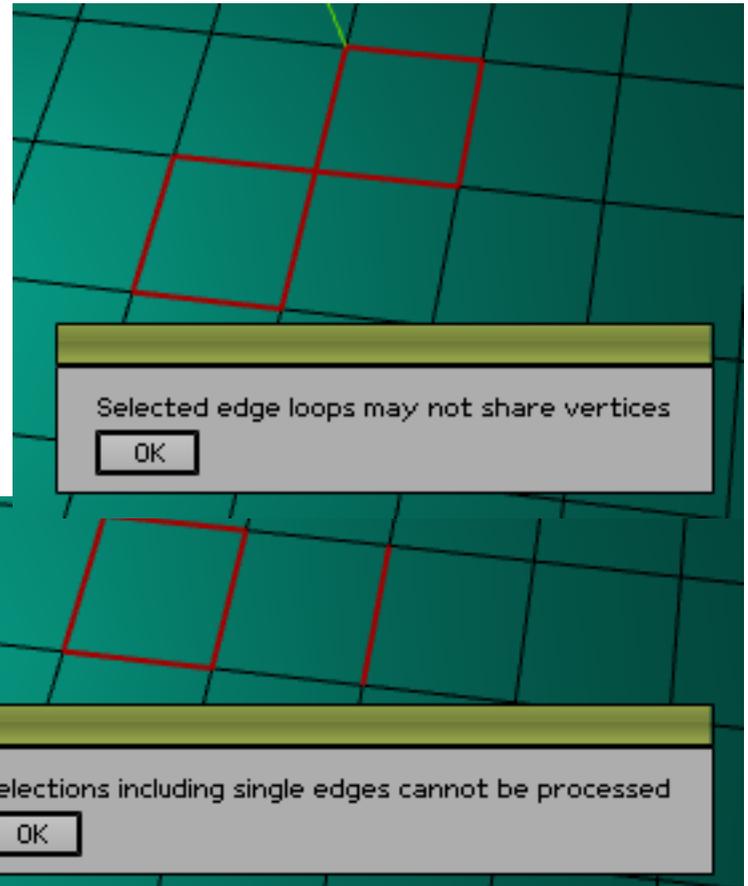
4. Better safe than sorry.

About Important thing,please tell User at first.
Need document's update.

if this problem occuer on a command in the deep location of menu.

For example.... Vertex＞Deform＞shear>RMB
Vertex>intersect>MMB

5. A command that has many 2nday selections will be difficult.

Wings3D Wish list

*Hansel and Gretel had put **the bread scraps** as signpost.*
*But they had been **eaten by the birds**.*
*They were **lost** in the deep forest after all.*

(From Grimm's Fairy Tales)

Secondary selection marker(Green arrow/Point)....

When in next step , previous marker disappear immediately from an user's sight.

So,before and after the 2nday selection process has always been hidden from the user. **And it is difficult to understand the whole.**

As a result, fail to correct assembly of the secondary selection, unnecessary trial and error will occur.

For example
Vertex > Bend
Vertex > Bend Clamp
Vertex > Deform
> Shear
Vertex > Intersect >RMB
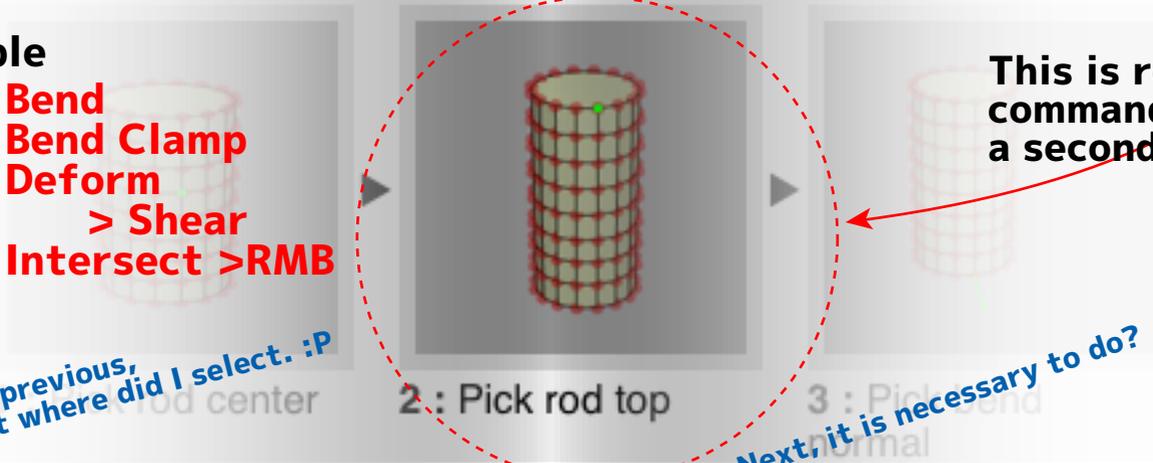
This is referred to all commands that have a secondary selection.

In the previous,
Forgot where did I select. :P

2 : Pick rod top

Next,it is necessary to do?

Improve the Document or Visual feedback is necessary.

To can understand if User knows the whole of the process.

- L : Plastic Bend

@

[Before]   1 : Pick rod center   2 : Pick rod top   3 : Pick bend normal   4 : [Numeric input/Drag Arg]   [After]
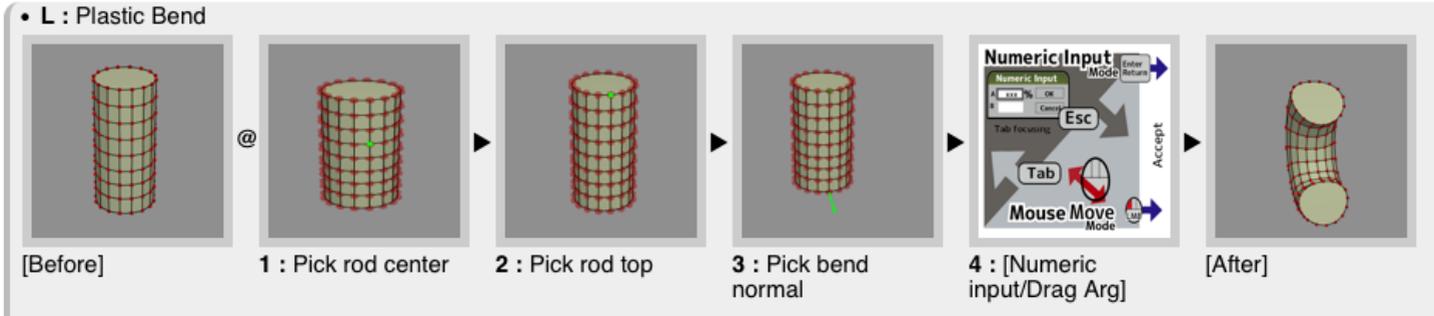
For example, It is that remain display the past 2ndary selections on the CURRENT operation. as like a foot print.

Status quo
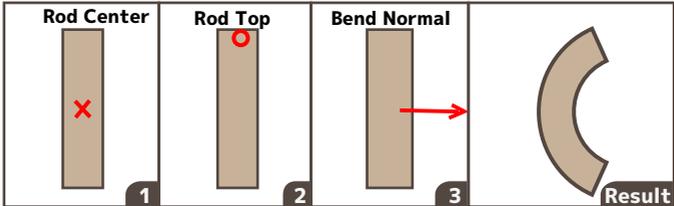
Improve
(It leaves the previous 2Sel marker..)

Rod Center   Rod Top   Bend Normal

1   2   3   Result
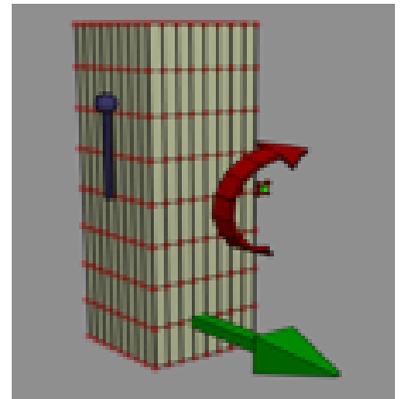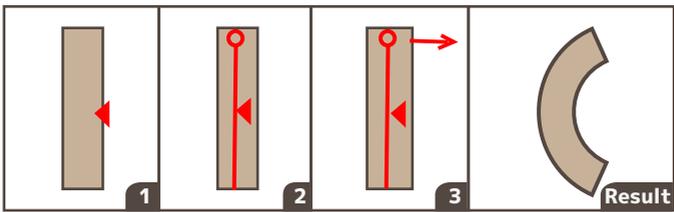
Of course, it is necessary to test and allow ON / OFF this feature from the configuration.

Snap Image Mode is a very useful feature.

But in that mode is always overlapping images.
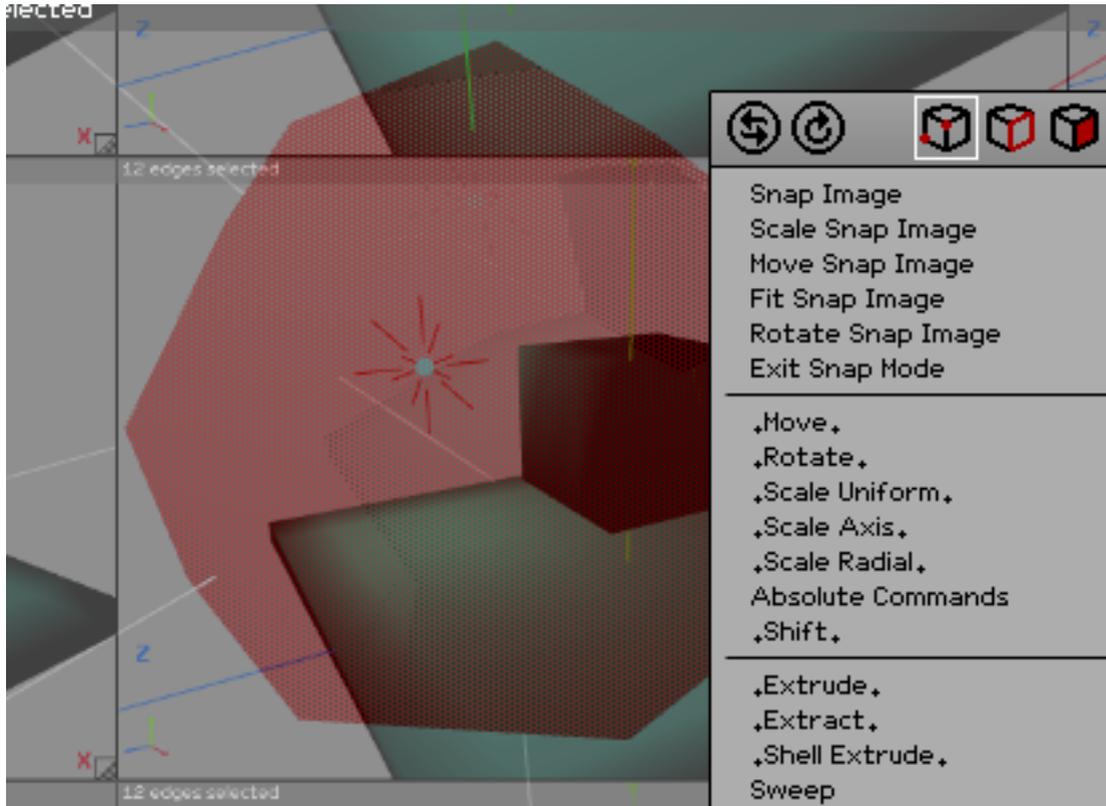
This is inconvenient to see the results!!   **Once ,Exit this mode?**
A few clicks it is necessary to to enter the SnapImage mode as we know.

6. Users want to see the results immediately.

For example …   overlap display on/off command

Snap Image
Scale Snap Image
Move Snap Image
Fit Snap Image
Rotate Snap Image
Exit Snap Mode
display on/off
↓Rotate↓
↓Scale Uniform↓
↓Scale Axis↓
↓Scale Radial↓
Absolute Commands
↓Shift↓

↓Extrude↓
↓Extract↓
↓Shell Extrude↓
Sweep

Toggle

◄━━━━━━►

**Default:
display on**

Snap Image
Scale Snap Image
Move Snap Image
Fit Snap Image
Rotate Snap Image
Exit Snap Mode
display on/off
↓Rotate↓
↓Scale Uniform↓
↓Scale Axis↓
↓Scale Radial↓
Absolute Commands
↓Shift↓

↓Extrude↓
↓Extract↓
↓Shell Extrude↓

It to be well-known.
 "Snap Image" command appear only Face select mode.

7. Depth of a menu hierarchy.

About Menu bar

So far, **Camera View** and **Selection Groups** features are **improved.**
These are improved and easier to use. It became accessible from each palette window.

But...

Still ,there is a hard-to-use feature deep menu hierarchy.
For example **Bounding Box commands**, **Set Constraint**,
Magnet mask commands ,it is too far to reciprocate.

About RMB menu for command

Some commands in **Vertex>Deform menu**. **Face>Sweep command**.

Why RMB menu not indicate for submenu symbol?
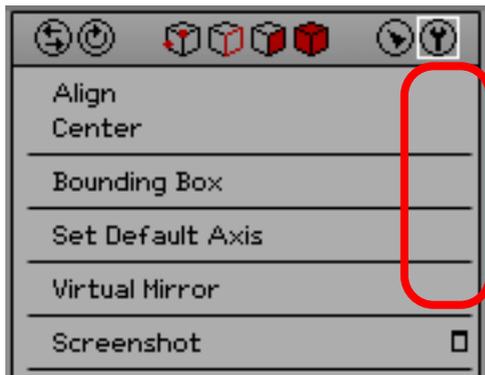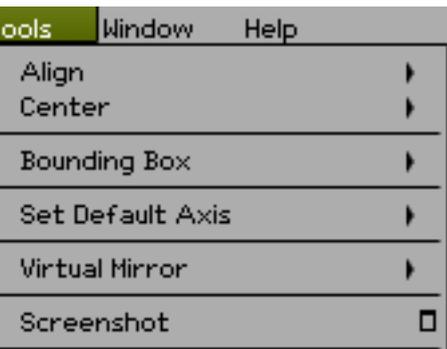
There do not know
what sub-menu exists.

7. Depth of a menu hierarchy.

About User interface design,Complex look, but that it is easy to use.
On the contrary, Simple look but difficult to use it too. (Flat design for smart phone)

Changing the UI design frequently is responsible for exhausting the user.(iTunes/iWork)
To renew all the UI when the user is familiar with the work is not a good idea.

(Ubuntu-unity,Win8,MSOffice)

Be carefully...

It would be better to be able to some extent to customize the UI in the user side.

In Wings3D's RMB menu, for the order in which items appear.It has decided to it from each plug-in program side.

So, it is considered a method that reconstructs a menu for customization after once aggregating RMB menu.But useless processing occurs in this.

To solve this problem, it is necessary to properly modify the number of plug-in program.

PlaneCut or Slice RMB command

At first , Information line says "Pick Axis" simply.   What axis is it?

I want cut this line on object

Hum... I pick here.
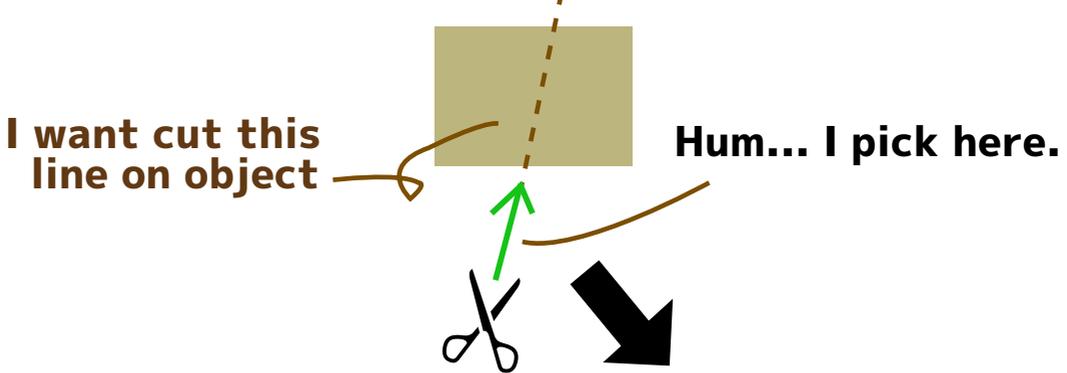
Next, Information line says "Pick Point" .

I decided to here

**Point + Axis
What would how to do?**
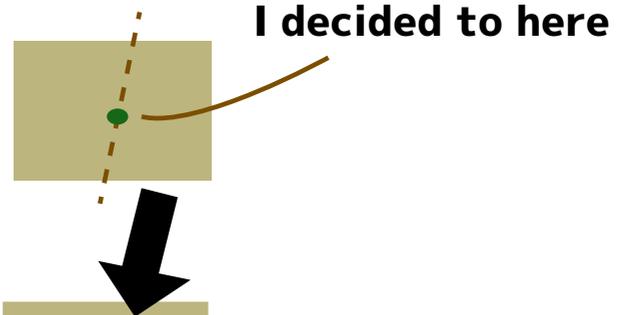
I got a result which is not desired.
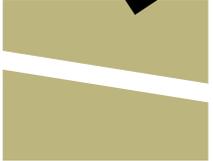
It is not possible to return to the previous process.

8. The difference of recognition.

Users can trial and error many many times, get to the correct answer.
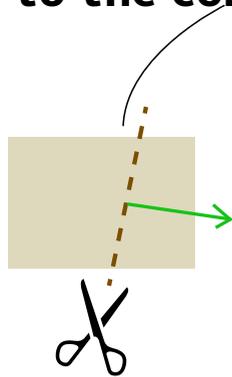
Infomation line

How to express this in the help text?
*Direction of the knife/sissor.
*Normal for Cutting
etc...

Solution

*Clarity of the help text.
*Improve the document.
or
*Interactive feedback
*Improve the usability.
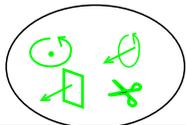
Similar problems in other case

Tools> Align command

This feature is handy to be able to immediately access.
But I often to misunderstand the **"x"** and **"radial x"**.
So,It may not work in my expectations.

Align	▶	All
		X
		Y
		Z
		Radial X
		Radial Y
		Radial Z

Align and Center

Align
X Y Z

Align Radial
X Y Z

All   Distribution

Center

Align   X Y Z

Radial   X Y Z

All   All
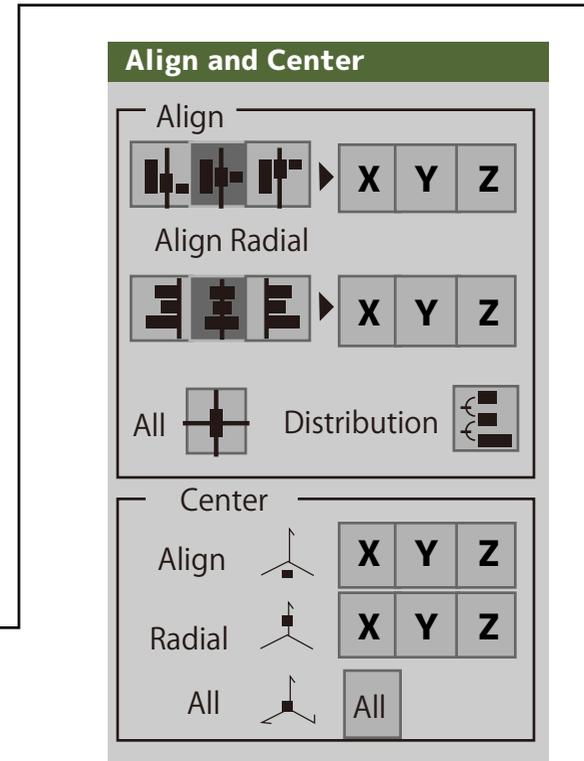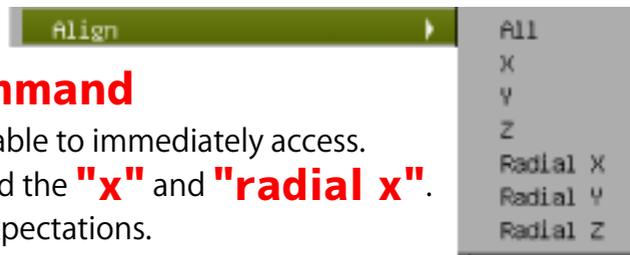
This problem can be resolved document or UI improvement.

Icon or illustration is going to help the user to understand the function.

9. The ruler does not exist.

Is there is no clue to a need to specify a numeric value.

Users feel frustrating.

D: 0.0212

Absolute command

Numeric Input

D 0.021234   OK

Cancel

Move >Y

Absolute move options

Set position:
X: -3.805271
Y: 0.0
Z: 0.0
0   Duplicates

Reference point is: (-3.805271, 0.0, 0.0)
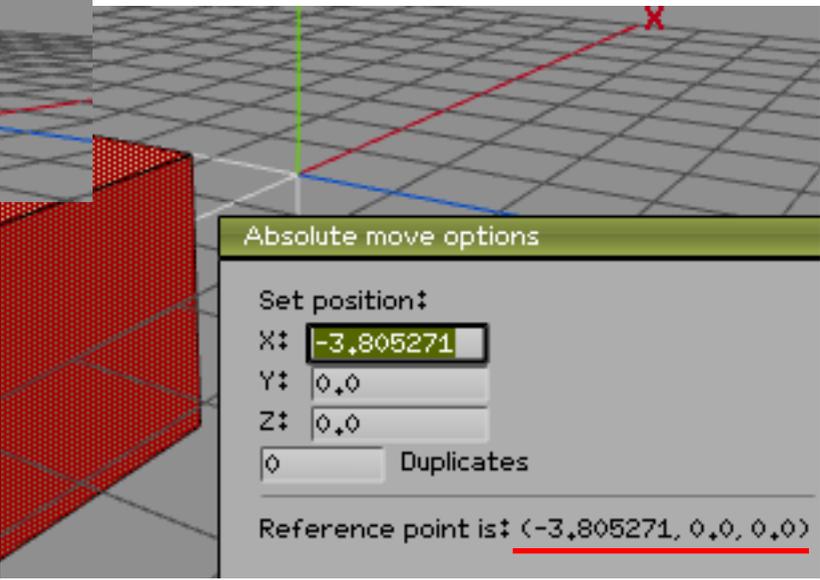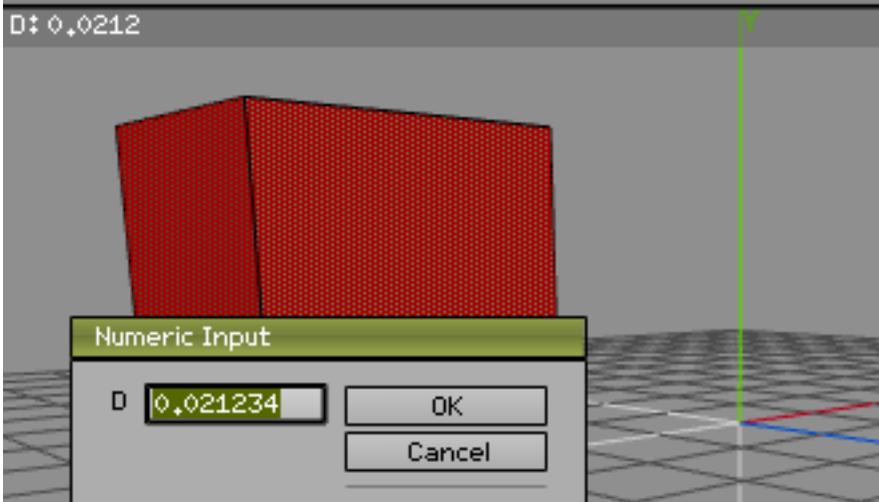
**Can you point to a reference point
in 3D Geomety window?**

Display a virtual rular in temporary.

D: 0.0212

3.0

Numeric Input

D 0.021234   OK

Cancel

X

10

5

Absolute move options

Set position:

X: -3.805271

Y: 0.0

Z: 0.0

0   Duplicates

Reference point is: (-3.805271, 0.0, 0.0)

10. Shader and Image compositing

Overlapping by
flipped normal
object

(bad knowhow,not best way....)

OpenGL
Shader

It is an ideal way.
Wings3d Toon shader (but,it is not display contour)

Composition
by AutoUV
Editor

Screenshot
Shader:vertex Nomal

Apply Laplacian filter

outline
effect

composit

Toon rendering
on Wings3D

1. Wings3D shader is not enough.

Please increase the more various types of shaders.
for example "Object Contour" etc...

1-1. Shader Programmers does not come.

Because it is not easy to add a shader to menu.
(Menu data is hard coded in Wings source code
and need Build Wings3D)

How can we do to get their cooperation?

2. Lack of image compositing function.

You can apply filters using AutoUV.
(see screenshot)
However Image composite can't.

If we can synthesize the two images,
We'll be able to or baking ambient
occlusion texture.
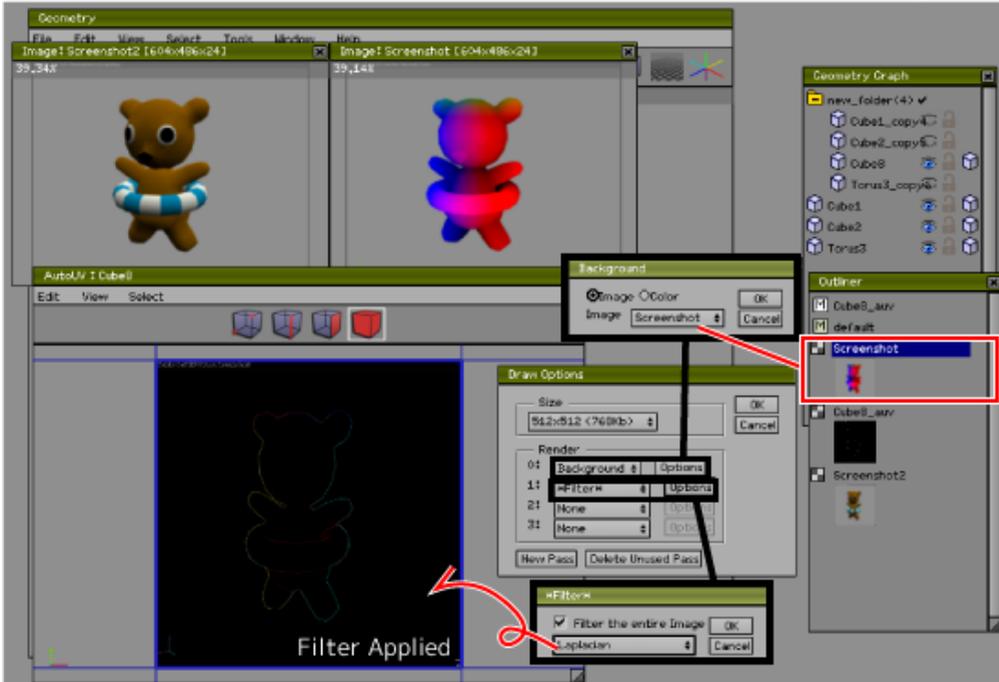
10. Shader and Image compositing

Shader 2D Effect
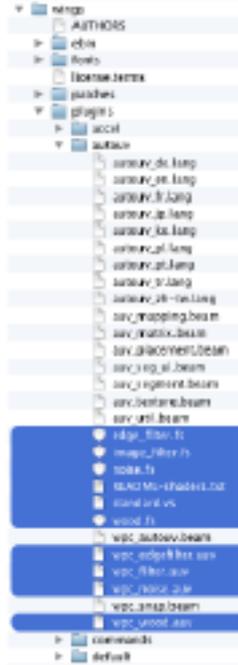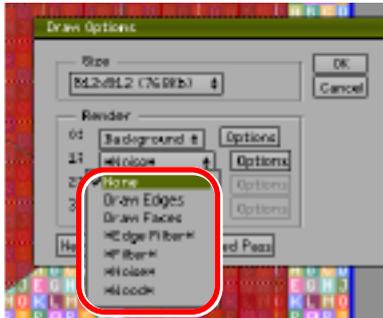
wpc_SHADERNAME.auv

{name, "Shader"}.

{vertex_shader, "vertexshader_file.vs"}.

{fragment_shader, "fragmentshader_file.fs"}.

vertexshader_file.vs
fragmentshader_file.fs

Shader 3D Effect
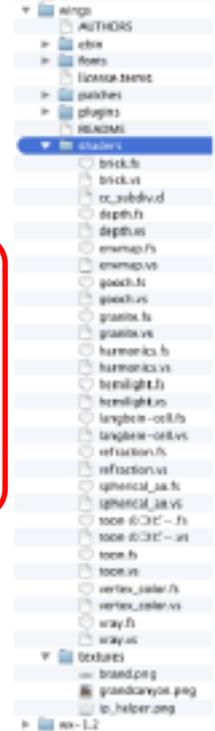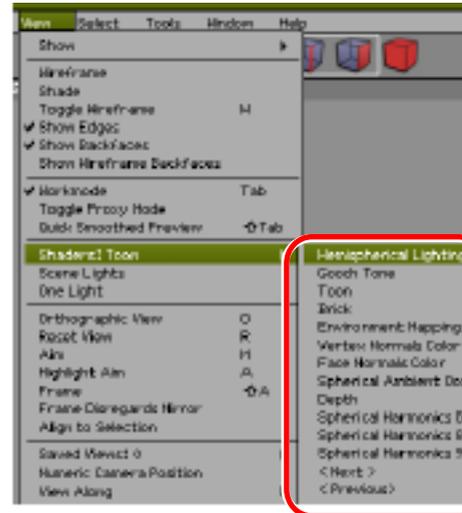
Currently it is possible to modify the existing shader.
However, to be registered in the menu, it is necessary to compile the Wings3D.
It is to the menu structure data to an external file.
So, it can shorten the cycle of trial and error.

Game or OS(Operation System) are worth to study.

In FPS or Minecraft and Wow such as a game, these has palettes for quick access to items and current equipment. They are dealing with a large amount of items. Users are able to perform the work quickly.

Mac OSX has launcher too.

This is a hot key dedicated alt + 1~alt + 9 only.
The hot key string must be always displayed to the user.

An idea of additional QuickLauncher.
It's idea to use efficiently the hot key with limited.

User will be able to have some of the settings as Folder , and could switch them

Drag & Drop for resister it.
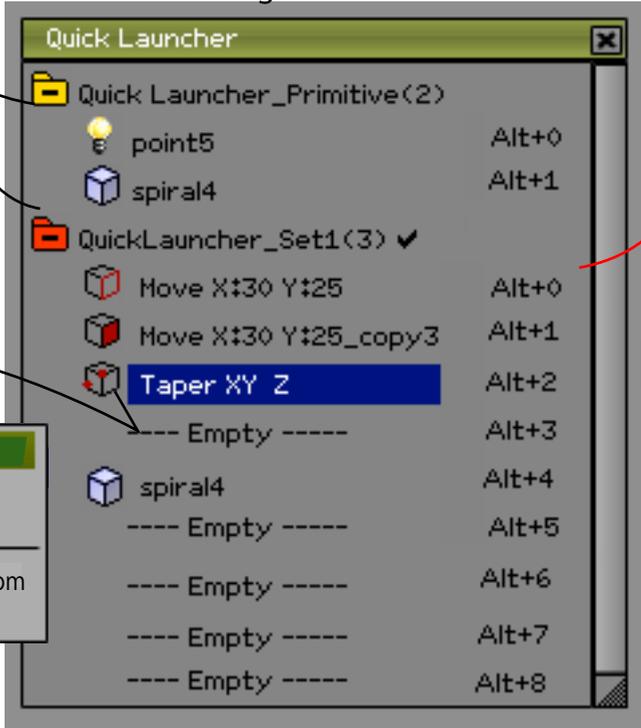
Quick Launcher

📁 Quick Launcher_Primitive(2)	
💡 point5	Alt+0
📦 spiral4	Alt+1
📁 QuickLauncher_Set1(3) ✔	
📦 Move X:30 Y:25	Alt+0
📦 Move X:30 Y:25_copy3	Alt+1
📦 Taper XY Z	Alt+2
---- Empty -----	Alt+3
📦 spiral4	Alt+4
---- Empty -----	Alt+5
---- Empty -----	Alt+6
---- Empty -----	Alt+7
---- Empty -----	Alt+8

Undo History

📦 Move X:30 Y:25
📦 Move X:30 Y:25
📦 Taper XY Z

Execute
Delete
↵Rename
Run from top to bottom
Remove

11. User Interface: Launcher

The Launcher which finding to commands immediately by search text input.
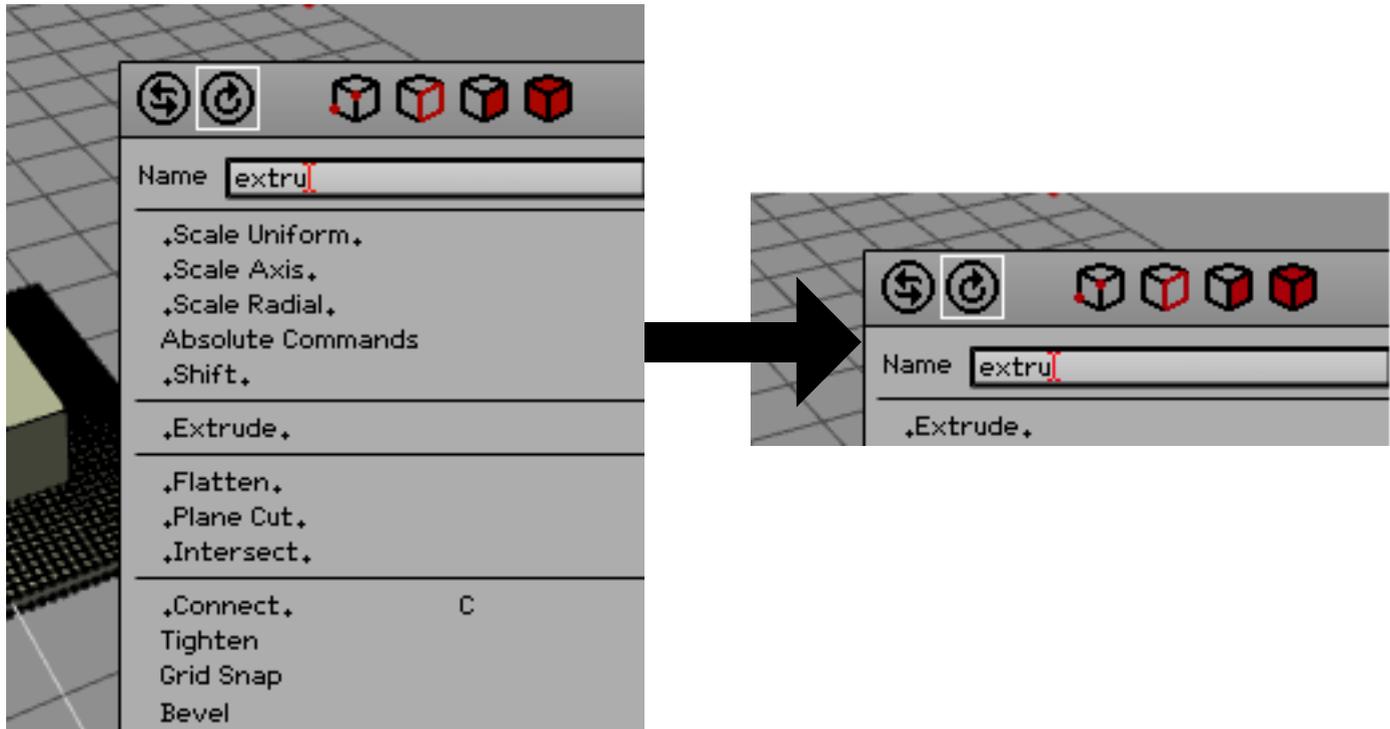
12. Put a Prmitive in the Screen's center.

I understand that Wings3D hasn't 3D Cursor.

Probably User must create something in around of (0,0,0) always.

However, I sometimes would like to place the primitive in a location that is away from the origin.
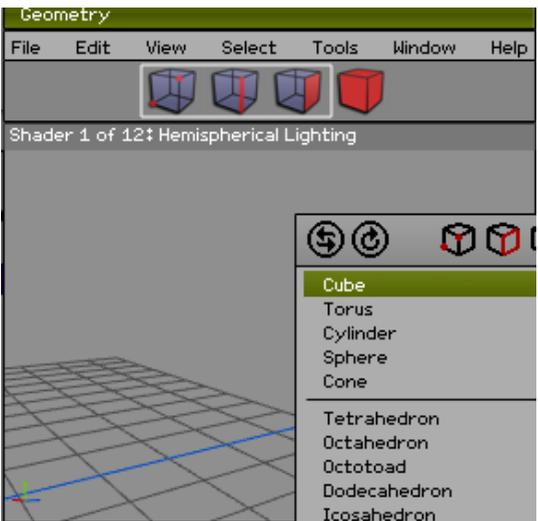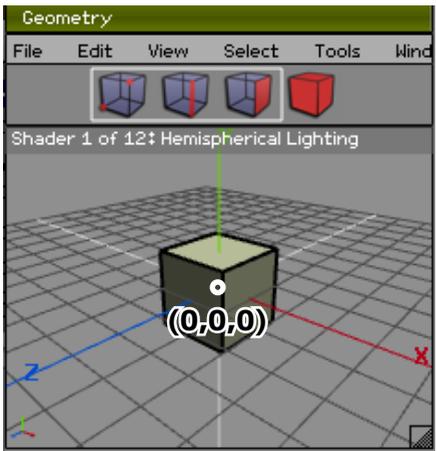
The Ideas that little attentive.
What do you think?
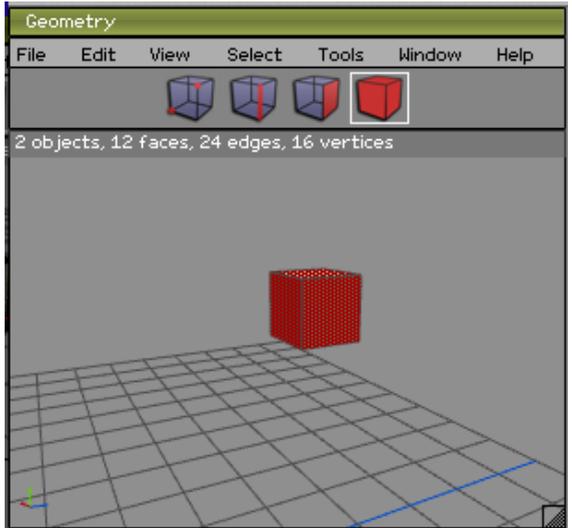
if (0,0,0) can't see in current view when make primitive ,then the Primitive generate in the screen's center.

Rotate
Move
Scale
⎫
⎬
⎭

Copy
extend
Random

feature

It such a thing is possible.

Move copy

Rotate copy

When Tab key input mode.

Numeric Input

A `27.708` °

Copy
`0` Times

Random
`0` %

OK
Cancel

Preview
○ Auto
○ Delayed
◉ Manual
Update

Reset
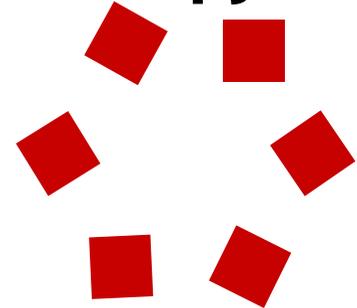
Scale copy
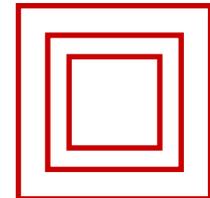
This solution doesn't messed up in the command menu.

Realtime key monitor is nessesary(this indicate in Wings3D's window).
When key press now?, which mouse button push now?

	alt	X

or

RMB　x　+　SHIFT
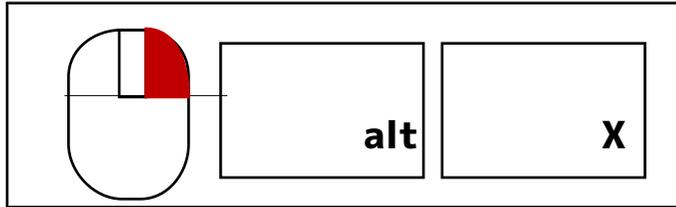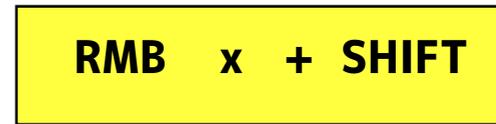
Graphical type?   **Simply text?**

Why need this?

*Wings3D has a user interface that the mouse button switch frequently .

It display what kind of operation you did.

it is help to people which make Wings3D's tutorial movie.

The fall back to another software?

* No, There is no monitor software that can display of
the mouse button in Windows/MacOSX.

15. Avoid the conflict of Data and UI string

An advice that to plugin developers from a translator.

Please provide each resources for a new object name and for interface string.

In other words, it should not be finished in one Data. It requires two data for i18n .

For example, It assume to transfer files between users who has different language settings.

An user using Japanese ui

ジオメトリグラフ

シリンダー

New Data

Menu Interface

立方体
トーラス
シリンダー
球
錐体

正四面体
正八面体

Reference to same resource.

save

"シリンダー"

xxxx_jp.lang

"シリンダー"

xxxx_en.lang

"cylinder"

Open

An user using English ui

Geometry Graph

New Data

Mojibake

Menu Interface

Cube
Torus
Cylinder
Sphere
Cone
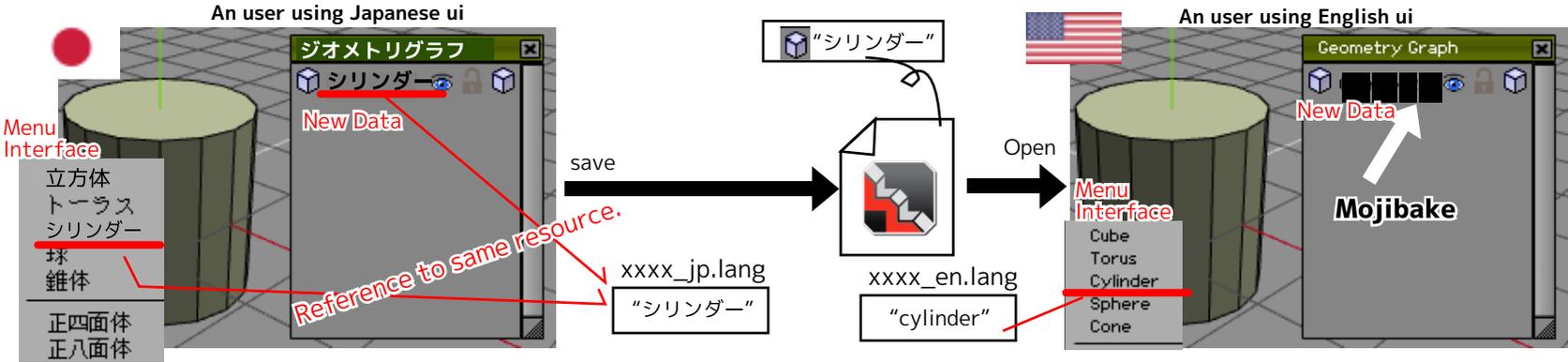
So, I don't translate some object name DATA.

Blender2.73 has a great solution to this problem.

International Fonts

Language: English (English)

Translate:

Interface | Tooltips | New Data

Translate new data names (when adding/creating some)
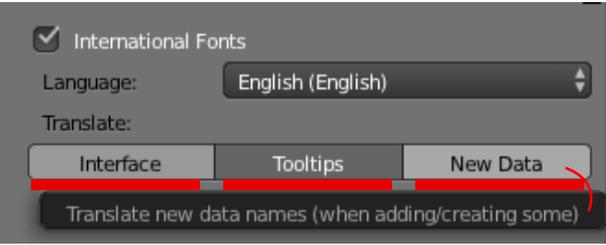
This image from Preference Window

It is suitable to each user's different learning/using styles.

*The File management on between different language.("new data" to English)

*Set to User interface by English , but the help string is in native language.