SimSelect: User Feedback

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This document is provided as a supplemental material to the paper "SimSelect: Similarity-based selection for 3D surfaces [Emilie Guy, Jean-Marc Thiery, Tamy Boubekeur] - Computer Graphics Forum (Proc. Eurographics 2014)".

In the following, we report initial user feedback gathered after an interactive session. We provide to users a short demonstration video (A), a simple user guide (B) and a description of tasks to perform (C: training instructions) . After the interactive session we ask them to fill a form (D: SimSelect user feedback). Finally, we report users selection results (D) and statistics (E: SimSelect user feedback Statistics).

A formal user study is beyond the scope of this work, however, we believe that the following data can be instrumental in calibrating an initial pilot study.

A. Demonstration video

B. Simple User Guide

inverse current selection

improve selection boundaries

erase all selections

change the number of similar selections

SELECTION   TYPE   EDIT   EXPANSION

1

selection mode

validate the selection

select patches

select parts

select components

remove faces from the selection

erase a selection

Find similar selections
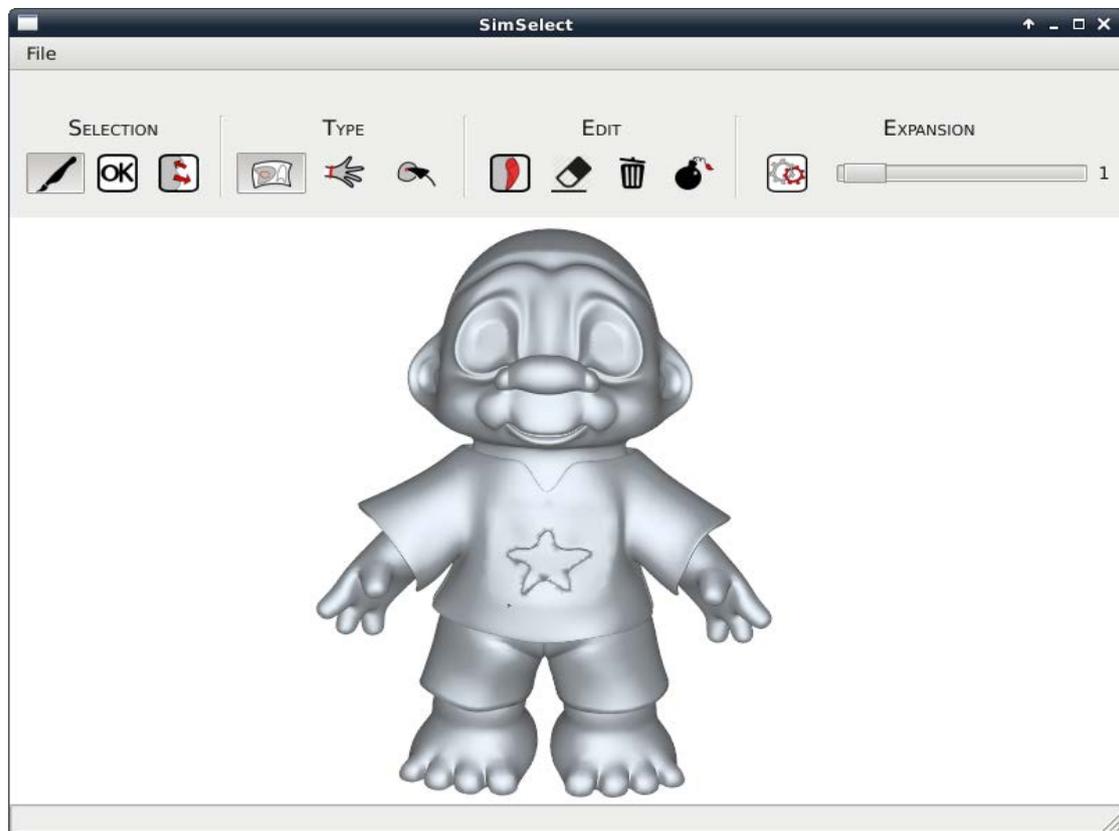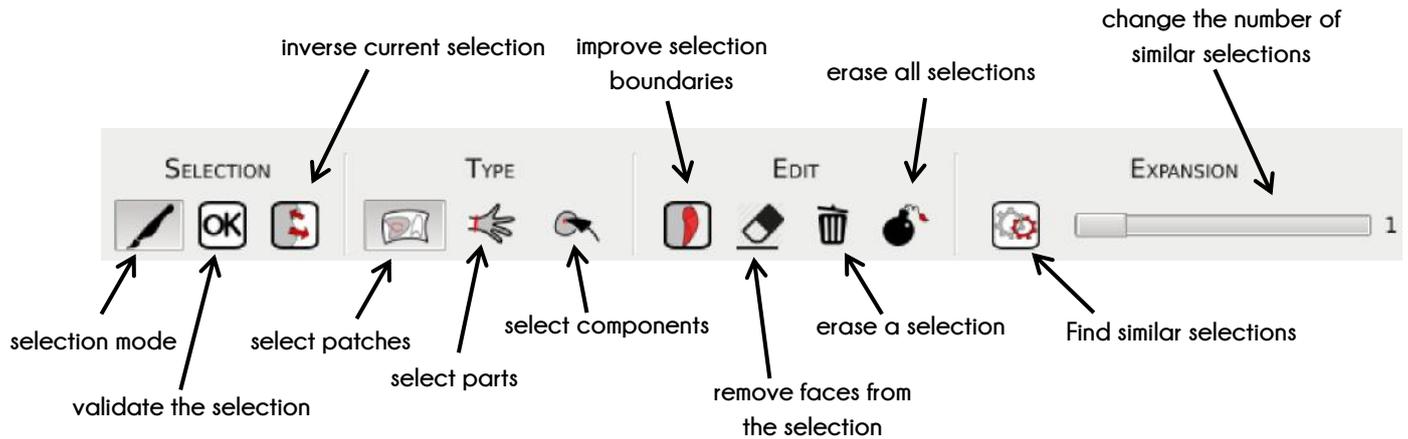
- Move around the object: use the mouse on the background.
  - wheel : zoom
  - LMB : rotate
  - RMB : translate
- Change the tool size : use the mouse wheel on the object
- User interaction:
  - Click on connected components
  - Brush over patches
  - Cut along parts boundaries

C. Training Instructions

Thank you for participating to this training session. During the following, you will be able test our SimSelect tool that allows to perform selections on models and to find similar selections.

1) Please, watch the small video above (A. Demonstration Video) to learn more about our tool.
2) Perform the following selections on these different models. When you are satisfied with your selection, validate it by clicking the "ok" button, or by pressing "Enter" :

- on the **ant** model
  - select the six legs
- on the **sphere with many ears** model
  - select all the ears of average size
- on the **mickey** model
  - select the two eyes
  - select the two hands
- on the **troll** model
  - select the two eyes
  - select the pants
  - select the two hands

3) Thanks you for your participation, please answer the following form to give us your personal feedback.

D. SimSelect User Feedbacks

How often do you use graphics softwares ? *

| 1 | 2 | 3 | 4 | 5 |

never ◯ ◯ ◯ ◯ ◯ always

Your experience with the SimSelect tool

How many selections have you performed? *

☐ less than 5

☐ between 5 and 10

☐ between 10 and 20

☐ more than 20

Which type of selection is the most usefull for you? *

[▾]

Why?

[   ]

Have you been annoyed by something during your selection? *

☐ yes

☐ no

If yes, please give us more details.

[   ]

How many times have you used the expansion tool? *

[▾]

How usefull is the expansion process? *

| 1 | 2 | 3 | 4 | 5 |

not usefull ◯ ◯ ◯ ◯ ◯ very usefull

Do you have any additional comments on the selection tool?

[   ]

Do you have any additional comments on the expansion tool?

[   ]

Comparison with existing softwares

Do you prefer an other selection tool available in an existing software? *

☐ yes

☐ no

☐ I also like an other tool

If you didn't say no, please explain why.

[   ]

Would you use such a selection system if it was available in your favorite CG software?

       1   2   3   4   5

never ○ ○ ○ ○ ○ always

Other general comments ?

[   ]

# E. User Selection Results

	task 1	task 2	task 3	task 4
user 1				
user 2				
user 3				
user 4				
user 5				
user 6				
user 7				
user 8				

components parts patchs
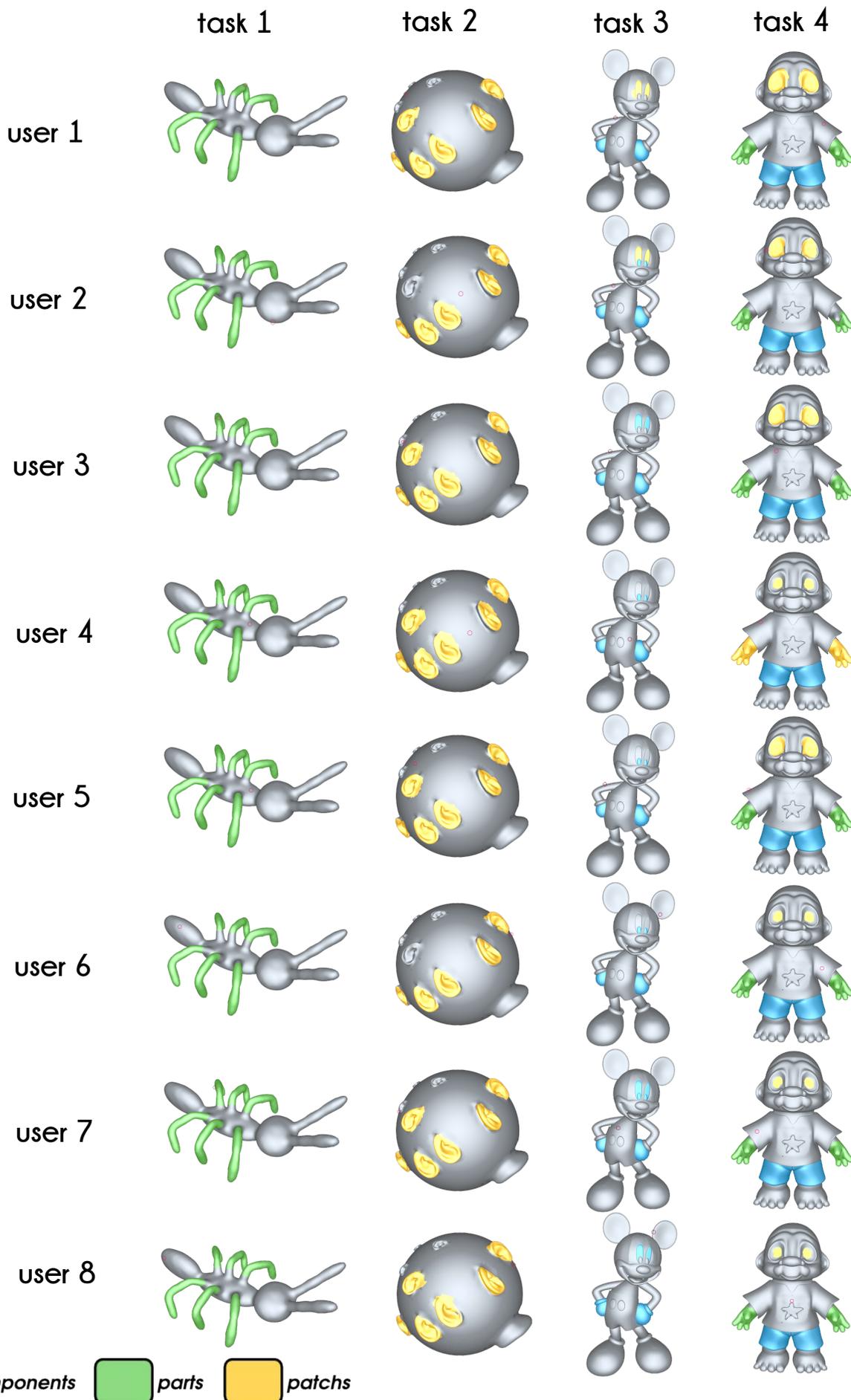
user 9
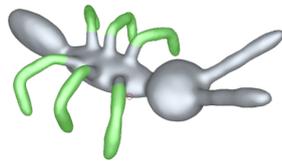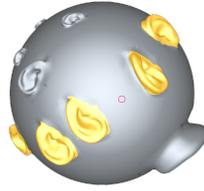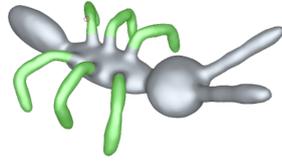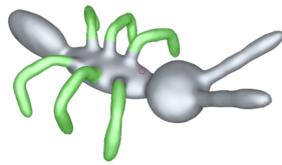
user 10

user 11

user 12
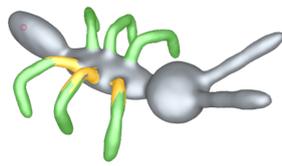
user 13
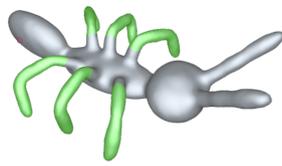
user 14
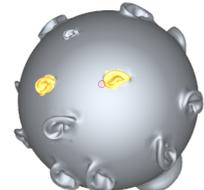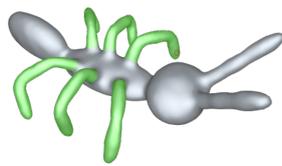
user 15
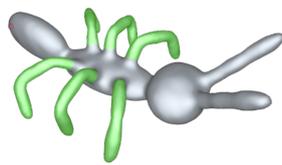
user 16
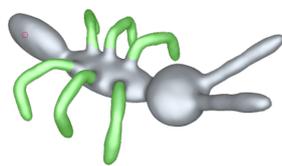
E. SimSelect User Feedback Statistics

Summary   16 responses

How often do you use graphics softwares ?
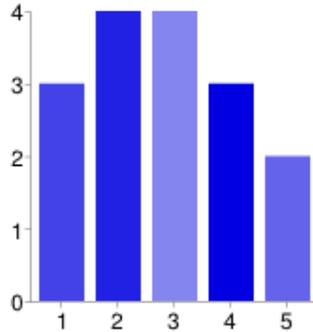
1	**3**	19%
2	**4**	25%
3	**4**	25%
4	**3**	19%
5	**2**	13%

Your experience with the SimSelect tool

How many selections have you performed?
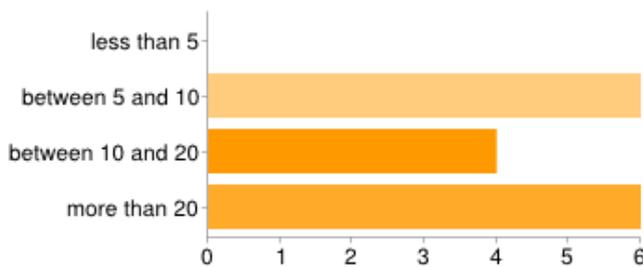
less than 5	**0**	0%
between 5 and 10	**6**	38%
between 10 and 20	**4**	25%
more than 20	**6**	38%

Which type of selection is the most useful for you?
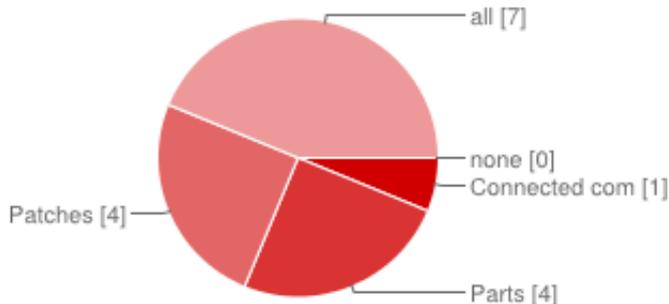
Connected components	**1**	6%
Parts	**4**	25%
Patches	**4**	25%
all	**7**	44%
none	**0**	0%

Why?

because it allows to select a component by indicating its limit (part) / Each type has its flaws and strengths(all) / They are useful for different types of features(all) / Because it's a tool I understand (part) / they complete each others weaknesses(all) / easier to use compare to the parts(patch) Very handy and fast(patch) / Even if it doesn't work every where, it is the fastest tool(part)

Because selection is often tedious, even on simple objects(all)

Have you been annoyed by something during your selection?


yes **9** 56%
no **7** 44%
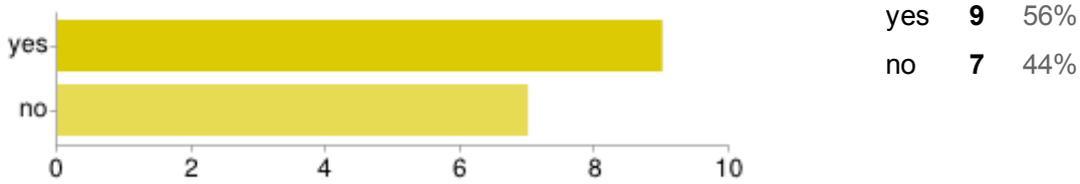
If yes, please give us more details.

 boundary improvement / Unexpected app crashes / sometimes difficult to understand the similar selections done automatically / While rotating the view, it is not handy to have to focus on clicking outside the object / he slider does not reset to 0 / the navigation mode is not handy (you can modify the selection by mistake) / the expansion slider!! / Need to test if the part is connected or not / Usual camera motion control are used to perform the selection

How many times have you used the expansion tool?

0	**0**	0%
less than 2 times	**1**	6%
less than 5 times	**1**	6%
more than 5 times	**14**	88%
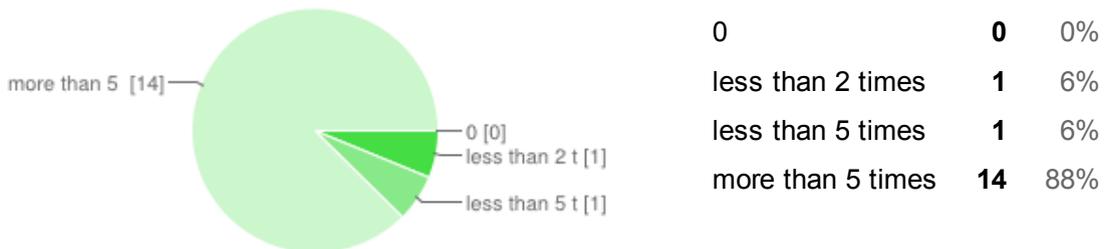
How useful is the expansion tool?

| 1 | **0** | 0% |
2	**0**	0%
3	**0**	0%
4	**3**	19%
5	**13**	81%
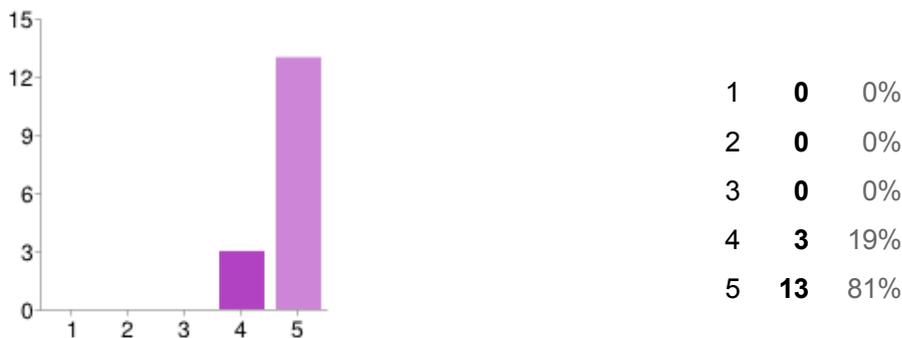
Do you have any additional comments on the selection tool?

 no / Nice user experience. / Good tool

Do you have any additional comments on the expansion tool?

 no / Great tool / not always intuitive

Comparison with existing softwares

Do you prefer an other selection tool available in an existing software?

yes	**2**	13%
no	**10**	63%
I also like an other tool	**4**	25%
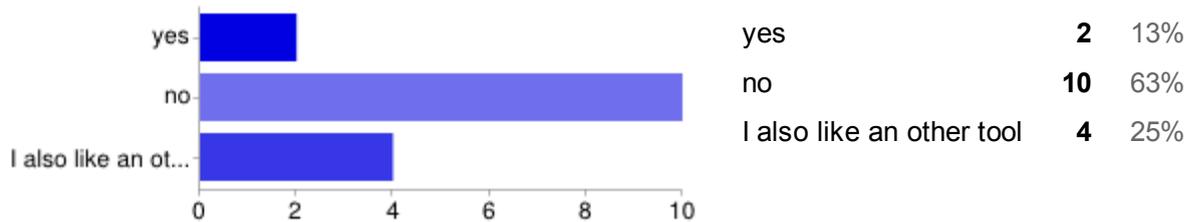
If you didn't say no, please explain why.

 to be more accurate, i think other selection tools are complementary of these ones (eg lasso for vertex' selection) / I don't know many selection tools / I also like the lasso / I don't know any selection tools / I don't use other selection tools / auto boundary improvement / No need to switch to wireframe mode to adjust the selection. / A selection looking more like the one in Photoshop / Because i don't use any other software.

Would you use such a selection system if it was available in your favorite CG software?

1	**0**	0%
2	**0**	0%
3	**1**	6%
4	**6**	38%
5	**9**	56%
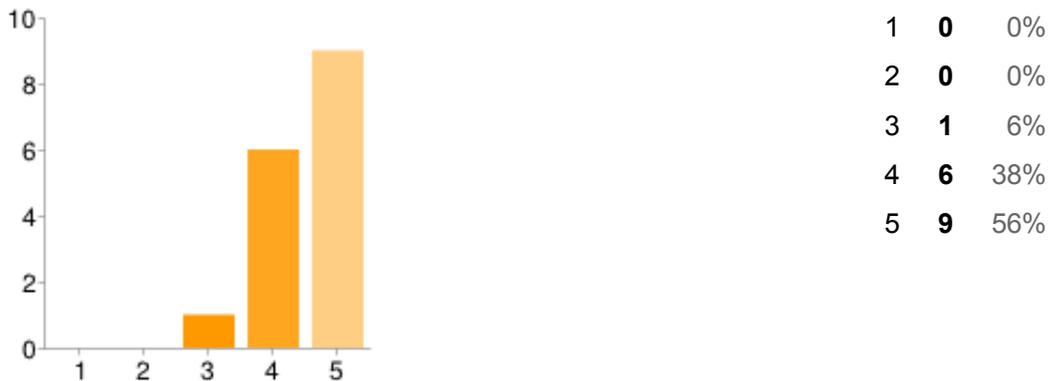
Other general comments ?

 Hope to see that in Blender soon ! / no / I'am not really a user of CG softwares / Would be nice to separate selection from view control (with Alt-key for example)