

Conflictive and Faulty Animations

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Back in Tanzania

Conflictive Animations

The Next Experiment

Back in Tanzania

Free Time

Duties

The Experiment

Preliminary
Results

Conflicting
Animations

The Next
Experiment

- Swimming in waterfalls
- Swimming in the Indian Ocean

Back in Tanzania

Free Time

Duties

The Experiment

Preliminary
Results

Conflicting
Animations

The Next
Experiment

- Swimming in waterfalls
- Swimming in the Indian Ocean
- Not swimming in Lake Malawi

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Free Time

Duties

The Experiment

Preliminary
Results

Conflicting
Animations

The Next
Experiment

- Teaching programming to B of Education students.
- Teaching programming to B of IT students.
- Installing stuff...

The Experiment

Back in Tanzania

Free Time

Duties

The Experiment

Preliminary
Results

Conflicting
Animations

The Next
Experiment

- 6 students
- 3 Jeliot sessions
- Task:
 1. Verbally describe Jeliot animation of a program.
 2. Modify program.
 3. Describe animation again.

Preliminary Results

From first session transcription.

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Free Time

Duties

The Experiment

Preliminary
Results

Conflictive
Animations

The Next
Experiment

Preliminary Results

Back in Tanzania

Free Time

Duties

The Experiment

Preliminary
Results

Conflicting
Animations

The Next
Experiment

From first session transcription.

Students describe the animation steps:

- before the animation happens if they think they know what is going to happen.
- after they have seen the animation if they don't have it clear.

Preliminary Results

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Free Time

Duties

The Experiment

Preliminary
Results

Conflictive
Animations

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Experiment

From first session transcription.

Students describe the animation steps:

- before the animation happens if they think they know what is going to happen.
- after they have seen the animation if they don't have it clear.

Only in few cases they acquire deeper knowledge/understanding after viewing the animation.

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Conflicting
Animations

On errors

Idea

Example

Alternatives

The Next
Experiment

Conflicting Animations

“We can see error, read it, hear it.
And it is possible to reduce its
presence.”

by Neil Postman, in *The End of Education*
(1998)

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Conflictive
Animations

On errors

Idea

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Alternatives

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Conflicting Animations

On errors

Idea

Example

Alternatives

The Next Experiment

1. Animations are not to be trusted!

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Conflictive
Animations

On errors

Idea

Example

Alternatives

The Next
Experiment

1. Animations are not to be trusted!
2. Conflictive animations force student to stop and think in every step.

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Conflictive
Animations

On errors

Idea

Example

Alternatives

The Next
Experiment

1. Animations are not to be trusted!
2. Conflictive animations force student to stop and think in every step.
3. New dimension of interaction and engagement.

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Conflictive
Animations

On errors

Idea

Example

Alternatives

The Next
Experiment

We can see them in action in Jeliot ConAn

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Conflicting Animations

On errors

Idea

Example

Alternatives

The Next Experiment

Conflicting animations can be faulty at several levels:

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Conflictive Animations

On errors

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Conflictive animations can be faulty at several levels:

Graphically The fault is a “glitch in the matrix”

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Conflictive animations can be faulty at several levels:

Graphically The fault is a “glitch in the matrix”

Semantically The animation is the result of a incorrectly interpreted program.

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Conflictive animations can be faulty at several levels:

Graphically The fault is a “glitch in the matrix”

Semantically The animation is the result of a incorrectly interpreted program.

Also incorrect code could be animated as if it were correct.

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Conflicting
Animations

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Questions

The Setting

The Tasks

Which
Procedure?

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Conflictive Animations

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Questions

The Setting

The Tasks

Which Procedure?

- Are Conflictive Animations promoting critical thinking and learning?

Questions

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Questions

The Setting

The Tasks

Which Procedure?

- Are Conflictive Animations promoting critical thinking and learning?
- Is the resulting knowledge less fragile?

Questions

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Questions

The Setting

The Tasks

Which Procedure?

- Are Conflictive Animations promoting critical thinking and learning?
- Is the resulting knowledge less fragile?
- Are the Conflictive Animations an improvement over classical Jeliot?

Questions

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Questions

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The Tasks

Which Procedure?

- Are Conflictive Animations promoting critical thinking and learning?
- Is the resulting knowledge less fragile?
- Are the Conflictive Animations an improvement over classical Jeliot?

The Setting

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Confictive Animations

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Questions

The Setting

The Tasks

Which Procedure?

1. Programming 2 course.
2. 50 students.
3. Inheritance.
4. 2 demo groups.
 - They are supposed to complete the weekly exercises during the demo.

The Tasks

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Experimental 2 out of 3 of the given programs are incorrectly animated. Report the errors you find!

Control Complete the programming task using Jeliot 3.

Which Procedure?

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Questions

The Setting

The Tasks

Which
Procedure?

1. Present task to both groups at the beginning of the demo session.

Which Procedure?

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The Setting

The Tasks

Which Procedure?

1. Present task to both groups at the beginning of the demo session.
2. Present task to both groups at the end of the demo session.

Which Procedure?

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The Setting

The Tasks

Which Procedure?

1. Present task to both groups at the beginning of the demo session.
2. Present task to both groups at the end of the demo session.
3. Present experimental task to lecture attendees.

Which Procedure?

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The Setting

The Tasks

Which Procedure?

1. Present task to both groups at the beginning of the demo session.
2. Present task to both groups at the end of the demo session.
3. Present experimental task to lecture attendees.
4. Other?

Thanks!

Comments?