



Pre-Thesis Proposal

To investigate the question:

Can Movement in Interface Convey Information?

Adopting Useful Possibilities for Action

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14 May 2008

Challenges

The ultimate question?

What is movement?

from the verb -

move:

to pass from one position to another

to advance or progress

to have a regular motion

to transfer a piece in a game

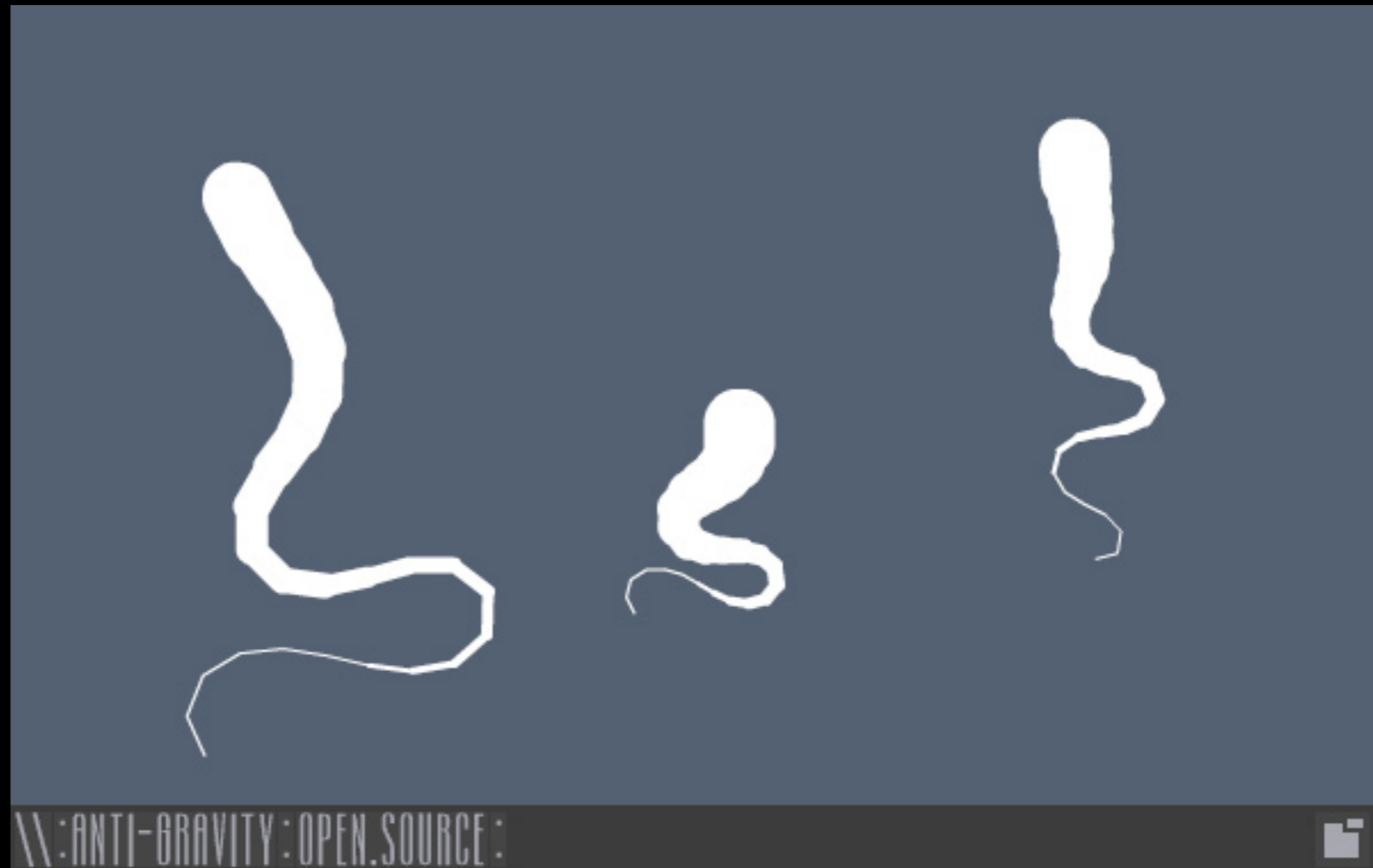
an action toward an objective or goal

on the move: busy or active

Think about how we understand the world

light must be heavy

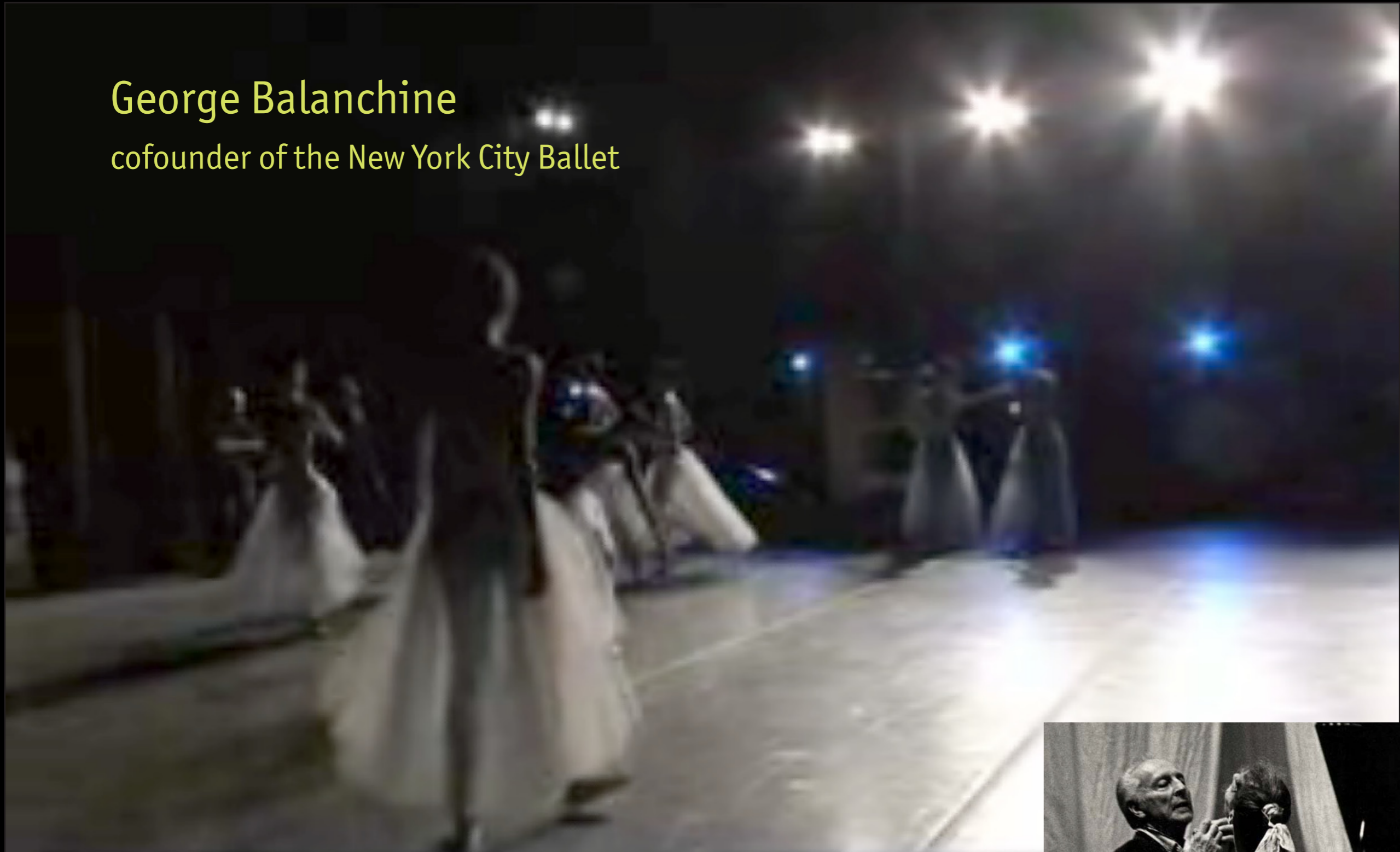
Think about how we understand the world



Born to run



George Balanchine
cofounder of the New York City Ballet



If movement communicates in real life, can we get it to communicate within the structure of an interface as well?

Why, after decades of using computers are we asking this question only now?

Elaine's abbreviated history

Let's review the past 20 years of desktop computers



apple IIc from wikipedia commons

Courtesy All About Apple, <http://www.allaboutapple.com> (photo by Marco Mioli).

Birth of the web - 1990


Tim Berners-Lee's NeXT cube became the first web server



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Pages and buttons and hyperlinks, oh my!

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Select a View

- Optimization Map
- Analysis
- Drive Options
- Schedule Options

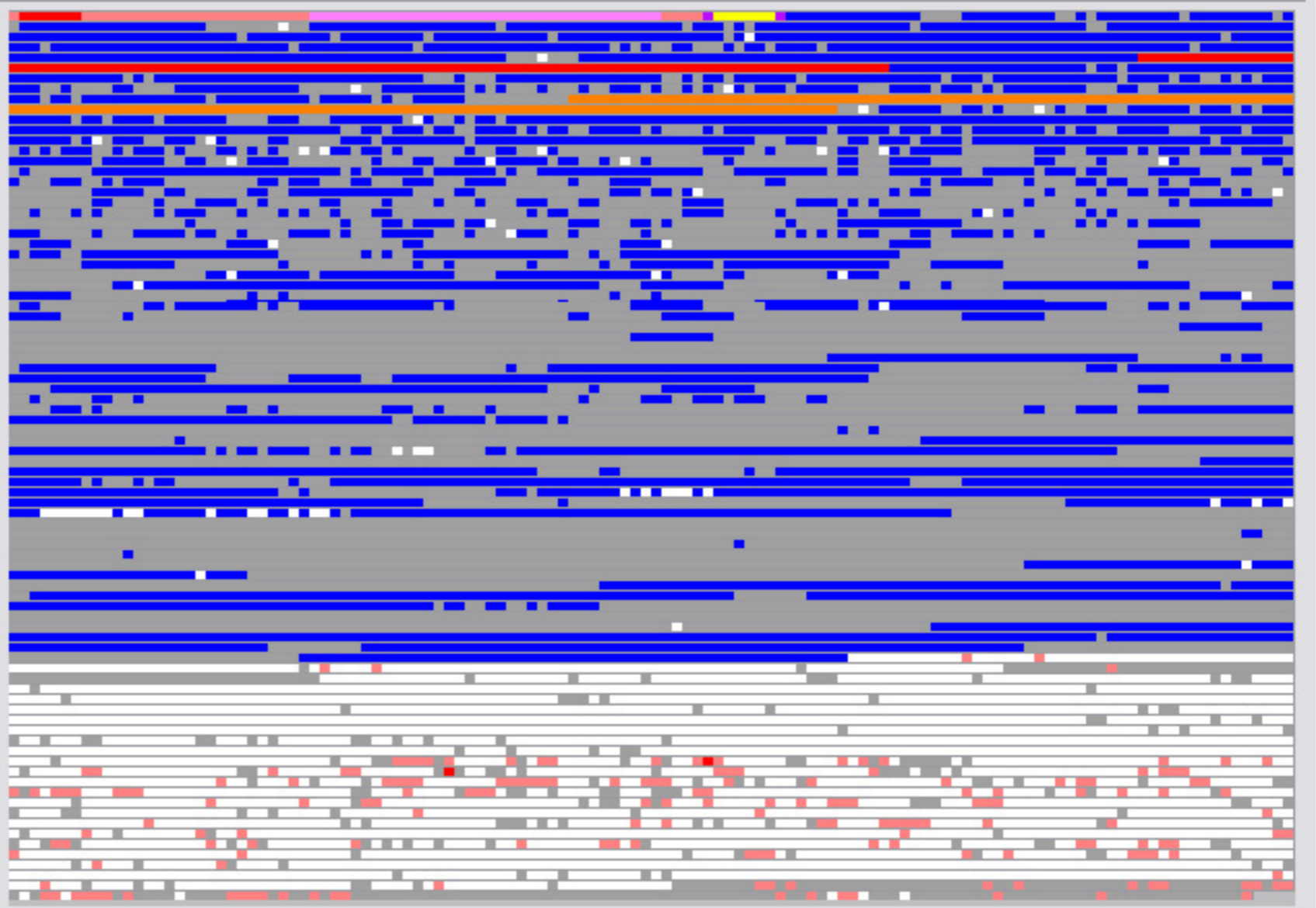
Optimization Map - Drive C:

Select a Drive

C: Sq003627 93.1GB Optimizing
Moving data: 4%

Stop Optimizing

- Legend
- Unused
 - Used
 - Partial
 - Unmovable
 - System File
 - Files Placed First
 - Pagefile
 - Directory
 - Frequently Accessed
 - Optimized



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consulting
by thomas fuchs



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[Blinksale](#) · [Backpack](#) · [Feedburner](#)
[Mailroom](#) · [Ruby on Rails](#)

And [many others](#).

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[drag'n'shop](#)

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I wonder...

*Is movement in interface storytelling
at a structural level?*



*Movement separated
into 3 general categories:*

initiated by the user

initiated by the computer

initiated by context

6 functions of movement in interface:

tell / communicate:

impart, transmit, express thoughts; give an account of

acquaint: introduce, make familiar

notify / apprise: inform someone about something

warn: give notice of danger

advise / instruct:

give council to; furnish knowledge through a systematic method

orient: set context

others possibly related... but how

Catalog of movement in interface

The language of movement categorized by description and origin							
movement description by function	tell / communicate: impart, transmit, express thoughts; give an account of	acquaint: introduce, make familiar	notify / apprise: inform someone about something	warn: give notice of danger	advise / instruct: give counsel to; furnish knowledge through a systematic method	orient: set context	related / but how? : these examples indicate ways we understand through movement but they don't fit easily into categories of movement within interface.
movement origination							
user initiated movement	<p>tell user initiated</p> <ul style="list-style-type: none"> lev analog floating bars mouse movement drag and drop scriptalicious sort order list 	<p>acquaint user initiated</p> <ul style="list-style-type: none"> mult-touch interface don't click it 	<p>notify user initiated</p> <ul style="list-style-type: none"> doc magnification add to dock dock removal show, hide dock snapz enlarge tool defrag hard drive rollover effect original fish-eye demo apple google finance chart china mobil finance chart scrolling examples: <ol style="list-style-type: none"> scroll using scroll ball scroll using arrow keys scroll by clicking on the scrollbar scroll by dragging the scroll blob scroll using end and home keys scroll in a popup selector 	<p>warn user initiated</p>	<p>advise instruct user initiated</p> <ul style="list-style-type: none"> terra terrain simulator 	<p>orient user initiated</p> <ul style="list-style-type: none"> Illustrator tearoff palette Illustrator tool palette submenu slide carousel andrei herasimchuck design by fire fade transition dino timeline manual left right scroll scriptalicious fade transitions effects engine, (these could also fall within notify / apprise.) yahoo pattern slide transition yahoo pattern self healing transition yahoo pattern expand transition yahoo pattern animate transition yahoo pattern browse carousel yahoo pattern collapse transition 	<p>related user initiated</p> <ul style="list-style-type: none"> levitated little legged creatures levitated orbiting networks levitated cylinder image display yahoo vote to promote trash a file trash from Fetch move mouse
computer initiated movement	<p>tell computer initiated</p> <ul style="list-style-type: none"> progress bar Illustrator handles Aaron Koblin video showing Internet traffic from New York to the world curevo flight video lovelines words, images, other dark poem 	<p>acquaint initiated</p> <ul style="list-style-type: none"> vancouver culture guide 	<p>notify computer initiated</p> <ul style="list-style-type: none"> iraq map, where animated explosions mark deaths menu graph glide website 	<p>warn computer initiated</p> <ul style="list-style-type: none"> dock bounce 	<p>advise instruct computer initiated</p>	<p>orient computer initiated</p> <ul style="list-style-type: none"> mac os user change widget zoom nora project scatter map, scroll to 2:15 in the demo to see a scatter map> 	<p>related computer initiated</p> <ul style="list-style-type: none"> levitated sea thing levitated tentacles levitated mandlebrot trema generator levitated iso blocks levitated cylinder image display unfinished game, try to hit the creatures by releasing the blue ball
context initiated movement	<p>tell context initiated</p> <ul style="list-style-type: none"> oceans 11, the movement informs the storyline 	<p>acquaint context initiated</p>	<p>notify context initiated</p> <ul style="list-style-type: none"> terminator point of view data feed, or imagine a system that augments human vision by superimposing data onto what a person sees; enabling a surgeon to see data read from the inside of someone's brain, for example. 	<p>warn context initiated</p>	<p>advise instruct context initiated</p> <ul style="list-style-type: none"> lernin is phun, applies properties of physics to drawn elements 	<p>orient context initiated</p> <ul style="list-style-type: none"> yahoo pattern page grids animation matrix titles, data feed 	<p>related context initiated</p> <ul style="list-style-type: none"> hunkin zoo clock, scroll down to the 3 minute video in the middle of the page cool dancer. OK, maybe this doesn't fit anywhere, but it intrigues me
personal movement explorations	<ul style="list-style-type: none"> put movement experiments here 	<ul style="list-style-type: none"> Vjacamp my blog is here 					

Apply the idea to interface
Example: Mac OS

notify:

dock mag

add to dock

remove from dock

show, hide dock

mac os user change

warn:

dock bounce

orient:

widget appearance animation

Thesis proposal is to investigate ways to implement movement within the context of an interface to create or augment understanding.

*What I need to learn, know
already know, do*

What I need to Read

Information Visualization
Colin Ware

The Creative Habit
Twyla Tharp

The Humane Interface
Jef Rsskin

Computers as Thearre
Brenda Laurel

The Art of Human-Computer
Interface Design
Brenda Laurel

Projects

The movement catalog is only started. There is much to be learned by more research.

But playing around with understand movement and properties of movement is all fun but in the end, I need an interface problem to solve in order to do something real.

more project ideas

orchid collection manager

news reader text display

personal portable scheduler

look for chances to include motion to inform the interface

Edit plant details

photo detail note potting size health location

Edit flower details

bloom dates scent photo colors note

Edit text

ABC abc note

name type

New orchid

+ add

Oncidium Sharry Baby



Navigation controls: play/pause, stop, previous, next, full screen.

Timeline: A horizontal timeline with various icons (flowers, leaves, pots, notes) and a blue playhead marker.

2007 09 16

examine information architecture for ways to address planning for motion in interface



news
reader

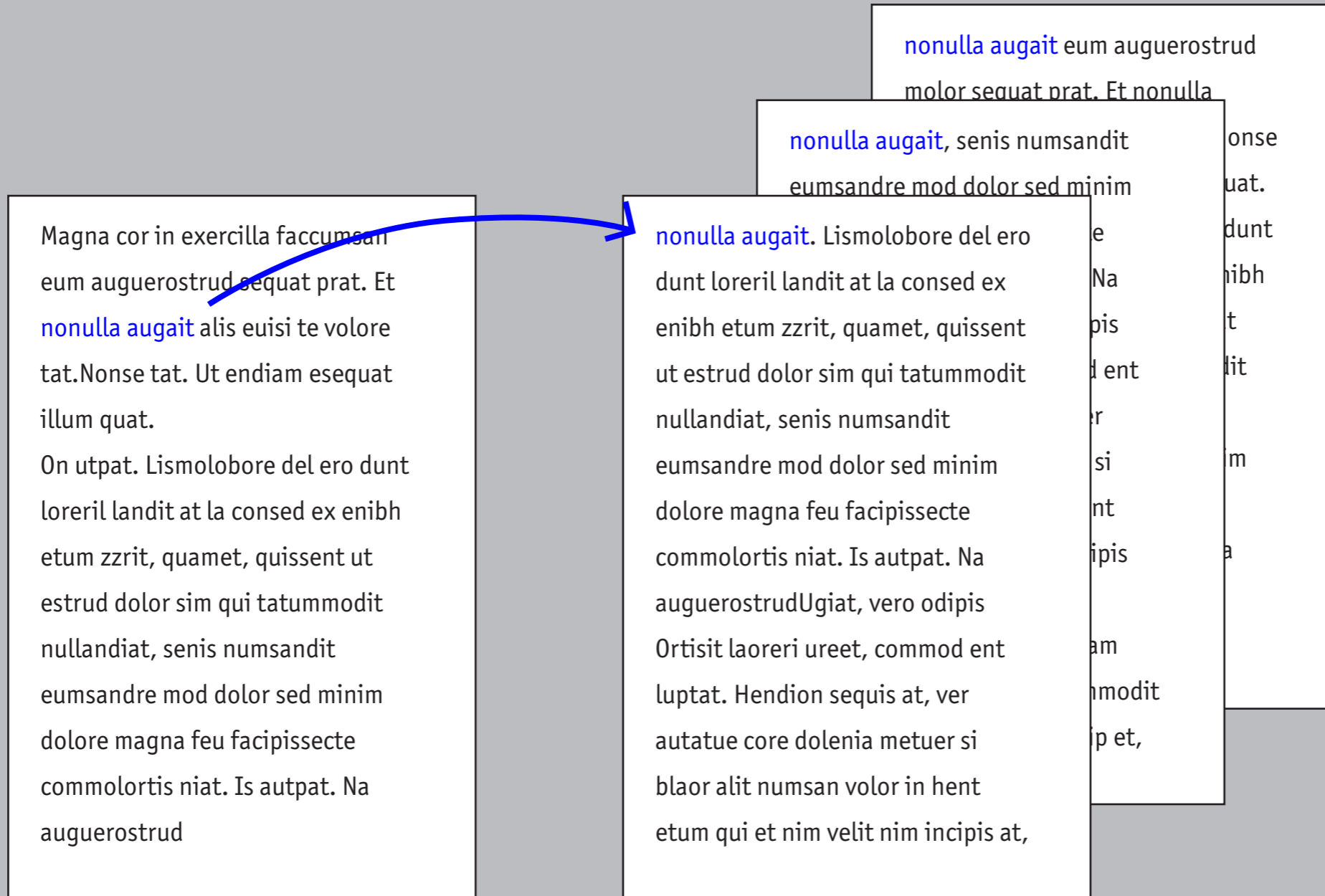


interactive text display

news reader

a text instrument exploring
human-computer coauthorship.
meant as playable instruments
based on repeated patterns in
text (n-grams).

source text bridges access to text from another article



click at the end of the text to be placed into the original article

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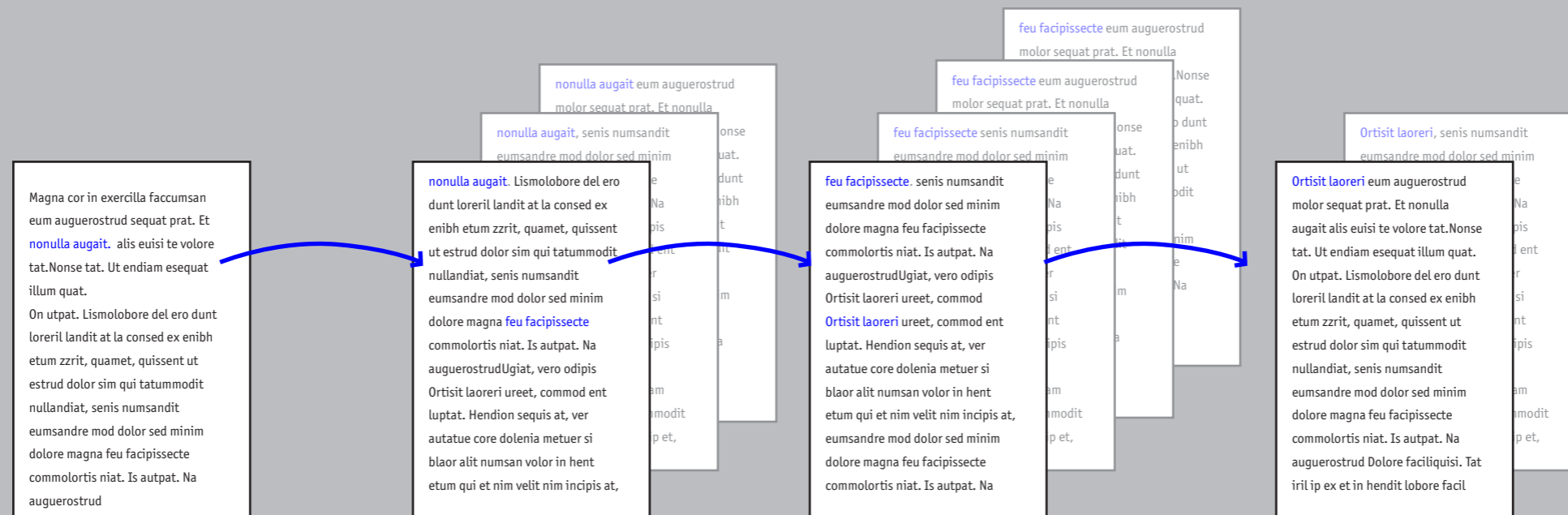
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p et,

bridges to new texts telescope infinitely

meaning display must accommodate the possibility for numerous nested texts



personal portable scheduler

my own schedule keeper

where I can keep track of multiple concurrent but not identical schedules

with events that repeat for various durations

and other unique events for specific days

in a portable, small device with limited screen space and possibly limited color space

Warning

