

# Coevolution of Texts & Technology

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CASDW 2013

## Agenda

- The Academic Essay
- The Run Report Document
- The Palm Text
- Closing Thoughts

## The Academic Essay



## Character & History of the Academic Essay

### Character

- Intertextual
- “Creates a Research Space”

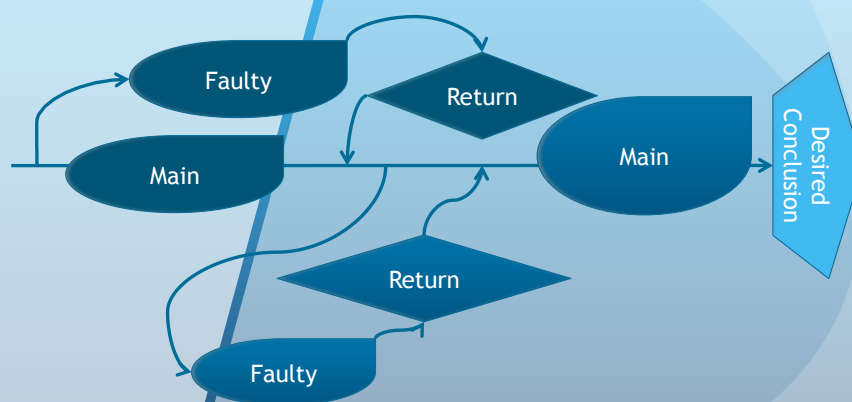
### History

- Rise of the research university
- Johns Hopkins 1876
- German model

## The Study: Expert-Novice

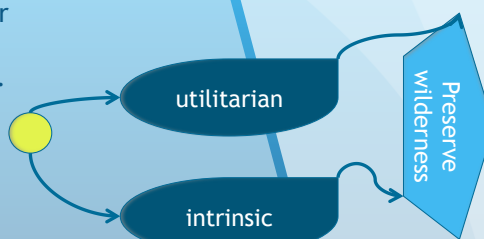
- PhD candidates in philosophy
- First-year college students
- Reading and writing from sources
- Example from Swain, “Wilderness and the Maintenance of Freedom”
- *Academic Literacy and the Nature of Expertise: Reading, Writing, and Knowing in Academic Philosophy*

## Main Path/Faulty Path Structure



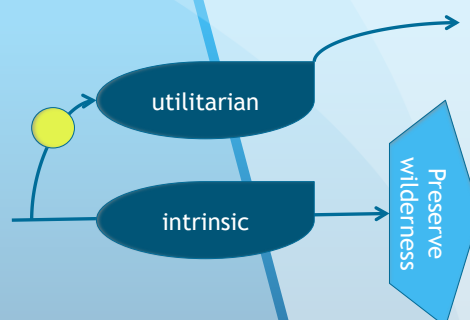
## Choice of paths

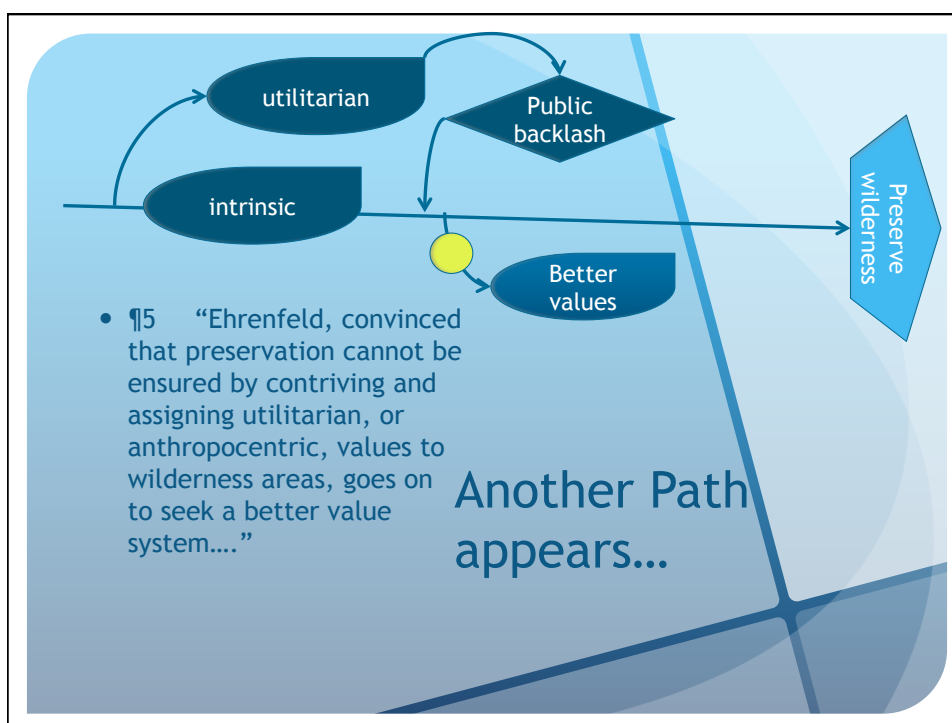
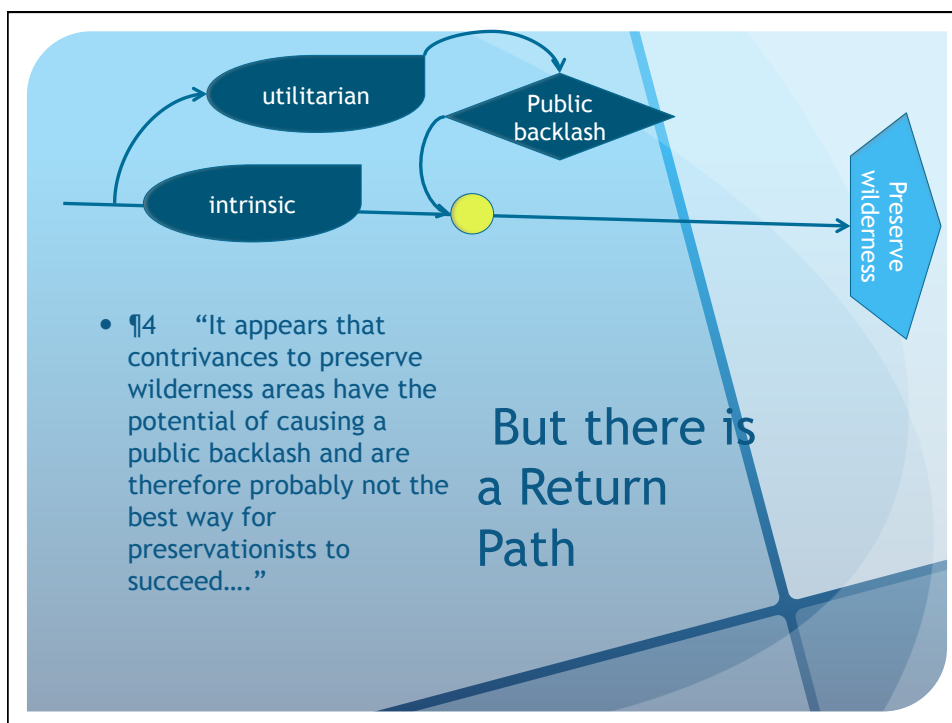
- ¶1 “It has not been clear why people argue for the preservation of wilderness. The stated reasons have usually taken one of two courses: arguing that wilderness areas and rare species have either *utilitarian* value or *intrinsic* value....”

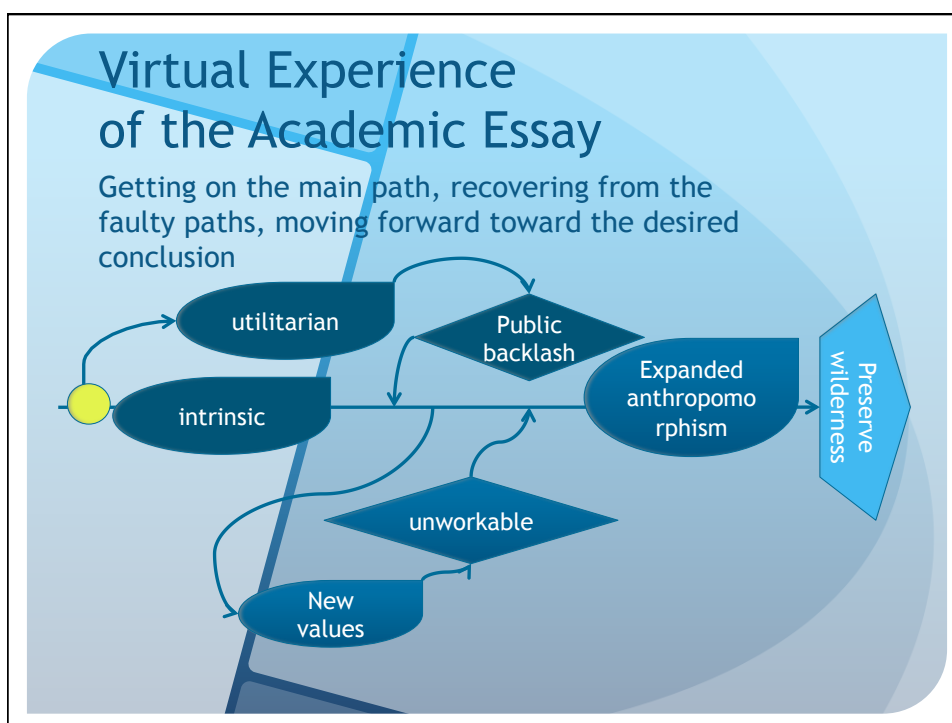
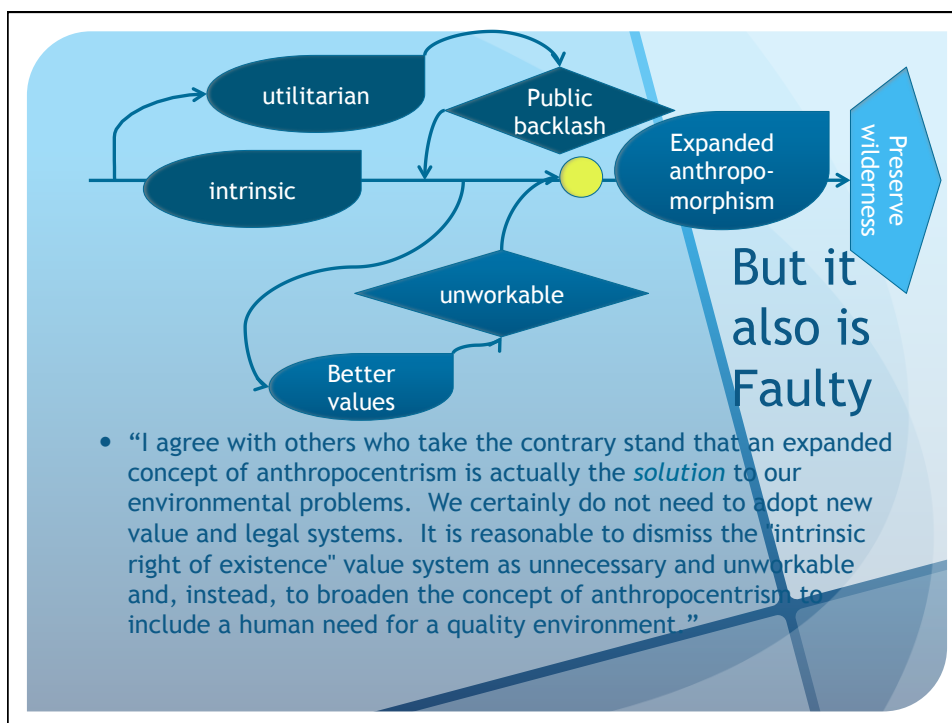


## One is Faulty

- ¶2 “In his book, *The Arrogance of Humanism*, zoologist David Ehrenfeld makes the perceptive observation that most of the utilitarian arguments are contrived....”
- ¶3 “It was not difficult for Ehrenfeld to demonstrate the weakness of these arguments....”

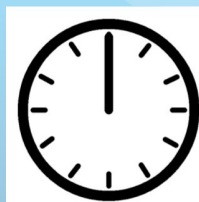






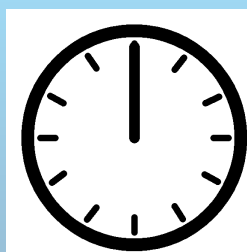
## Reading as a Virtual Experience

- Time stands still
  - Ehrenfeld “*makes observations*”
  - Swain “*agrees with others*”
  - others “*take a contrary stand*”
- Space expands
  - Over a main path
  - Avoiding or recovering from faulty paths
  - Moving closer to the truth



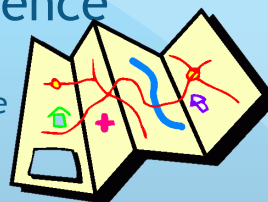
## Reading as an Actual Experience

- Times passes
- We stay put



## Composing as an Actual Experience

- Positions developed over space
  - I was at Chicago
  - I was at Yale
- Conversations held with others
  - I invited him to visit
  - We had some good conversations
- Positions that change
  - He argued that..
  - I suggested that ...



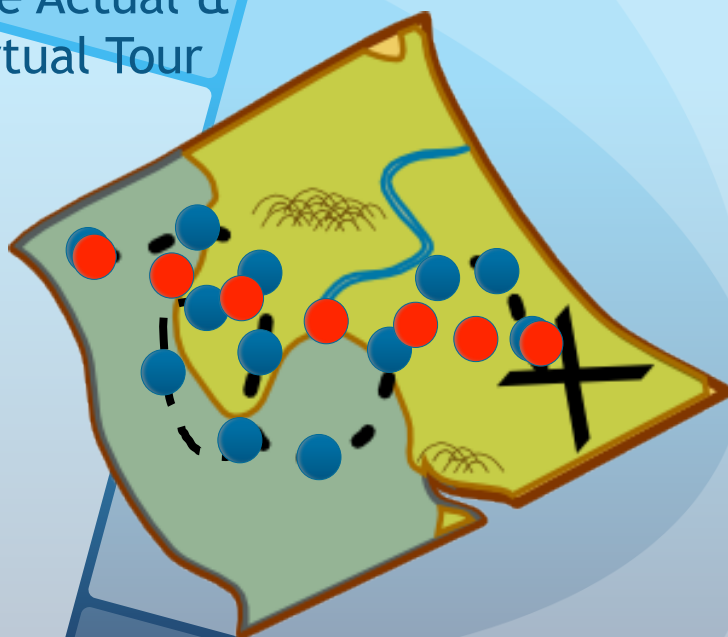
## Academic Essays Create Virtual Experiences

Academic essays create a virtual experience that

- Obscures the context of composing
- Ignores the private context of reading
- And presents a timeless public position

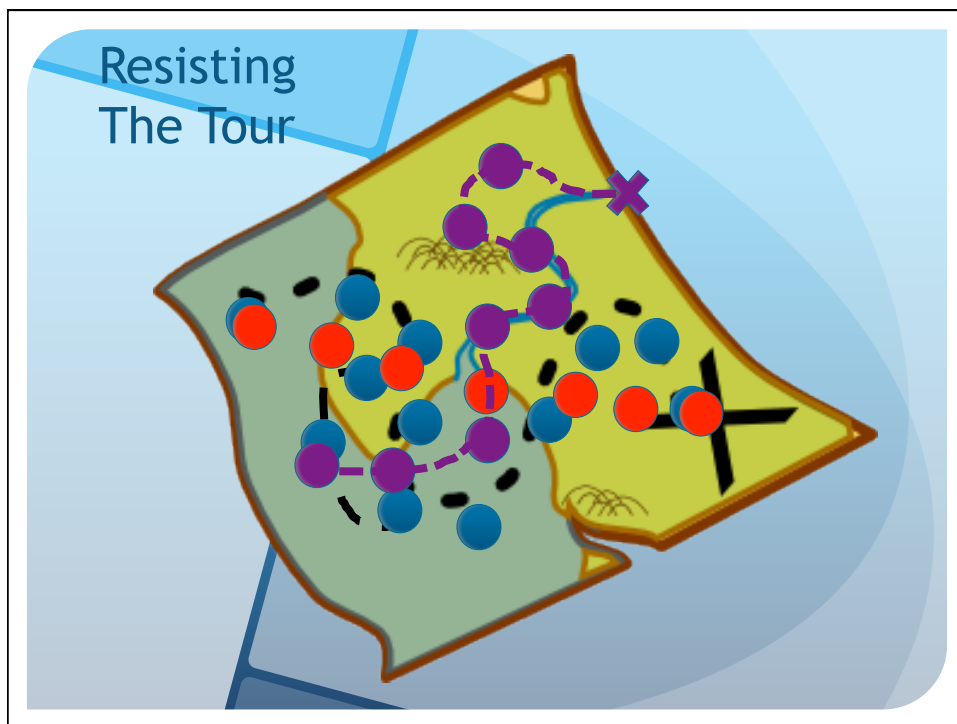


## The Actual & Virtual Tour



## Experts Resist

- Use Rhetorical Reading
  - Author's name and affiliation
  - Academic genealogy
  - Date of publication
  - Name of publisher or journal
  - Reference list
- Reconstruct context of invention
- Open up the argument to alternatives



## Academic Essays Do Boundary Work

- Create boundaries between actual and virtual experience of reading
- Create boundaries between actual and virtual experience of writing
- Reify boundaries between experts and laypersons
- Goal: Expert control

## The Run Report Document



## Character & History of the Document

### Character

- Lists & forms
- Non-continuous text
- 64% of everyday writing - nearly 90 minutes per day (prose: 21 minutes) (Cohen et. al. 2011)

### History

- Documentary reality (Smith, 1974)
- Monitoring in systematic management c. 1905 (Yates, 1989)

## The Study: The Genre of EMT Run Reports

- 17 EMTs at Skyview
- 200 run reports
- 150 hours of observations
- Munger, *Emergency Medical Technician Run Reports*, RPI dissertation, 1997
- Munger, *Business Communication Quarterly*, 1997
- Geisler & Munger, *Discourse Studies in Composition*, 2002

## EMTs as a Profession

- Regulated by physicians
- Limited by regulation in knowledge/care
- Run Report Document
  - Primary to litigation
  - Surprisingly secondary to care
  - Unrecognized role in professional development
- Increasing routinization



## Skyview Run Reports

Events

Assessment

Treatment

TRIP # Chapter 23										BILLING USE ONLY									
MEDIC # Rescue 3										DATE Monday									
BEGIN MILES										RECEIVED									
END MILES										DISPATCHED 2 2 0 0									
CODE / PAGE /										ON SCENE 2 2 0 6									
UNITS ON SCENE ALS										TO HOSPITAL									
EMERGENCY TRIP SHEET (7)										AT HOSPITAL									
NAME Carter										IN-SERVICE									
ADDRESS										CREW CERT STATE #									
CITY										THI IS									
STATE										MI									
ZIP																			
PHONE ( )																			
POP DR																			
RESPONDED FROM																			
TAKEN FROM 2235 Combee Rd																			
CITY																			
ZIP																			
DESTINATION																			
REASON																			
OSN																			
MEDICARE #																			
MEDICAID #																			
INSURANCE CO																			
GROUP #																			
RESPONSIBLE PARTY																			
ADDRESS																			
CITY																			
STATE																			
ZIP																			
PHONE ( )																			
EMPLOYER																			
ON SCENE (1)																			
ON SCENE (2)																			
ON SCENE (3)																			
EN-ROUTE (1)																			
EN-ROUTE (2)																			
AT DESTINATION																			
BP 140/70																			
PULSE 124 weak																			
RESP 20																			
MEDICAL HISTORY HTN																			
MEDICATIONS Macide																			
ALLERGIES NKA																			
CC "My stomach hurts."																			
EVENTS LEADING TO CC Sudden onset while taking out the trash @ 2000. Last P.O. @ 1930.																			
ASSESSMENT L/a found 70 y.o. male sitting upright in bed. Pt A&Ox3. Airway patent. Respirations present and adequate. Radial pulses present and weak. Skin pale & diaphoretic. PERRL. C: dryness. T: warm & dry. H: normal. S: normal. JVD. Trachea midline. C: Chest pain. Breath sounds clear and equal bilaterally. Chest symmetrical. C: abdominal pain. S: no rigidity. TREATMENT pain starting in lower abdomen and radiating to back. C: pulsating mass. Constant since onset. C: palliation/provocation. Pulse, movement, and sensation on all extremities. L: femoral pulse weaker than R. Initial assessment. High flow oxygen. Detailed assessment. ALS backup on scene. Pt placed on cot, secured c straps in position of comfort. Report to Paramedic. Pt placed in ALS unit for transport. Clear and in service.																			
GCS E 4 V 5 M 6 TOTAL 15																			
GCS E 4 V 5 M 6 TOTAL 15																			
HOSPITAL CONTACTED																			
CMS SIGNATURE																			
AED USED Y N BY																			
RESUSCITATION TERMINATED TIME																			
(X) OSHA REGULATIONS FOLLOWED																			

## Actual Path versus Virtual Path

### Virtual

- Injury Present ☐ yes ☐ no
- Cause on injury: see Ref sheet
- Type of injury: ☐ blunt, ☐ burn, ☐ penetrating ☐ not know
- Chief complaint:
- Condition Code: See Ref Sheet
- Prior Aid: Procedure
- Performed by

### Actual

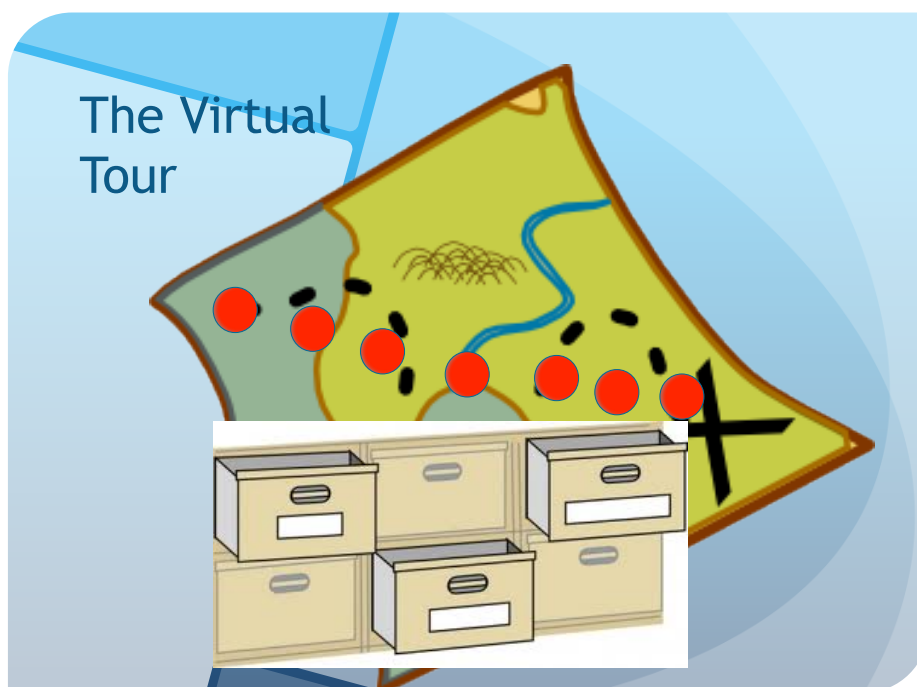
- Narrative
- 
-

## Documents Create Virtual Experiences

Documents create a virtual experience that

- Routinizes the context of creation
- Ignores the private context of interpretation
- And prioritizes public documentation

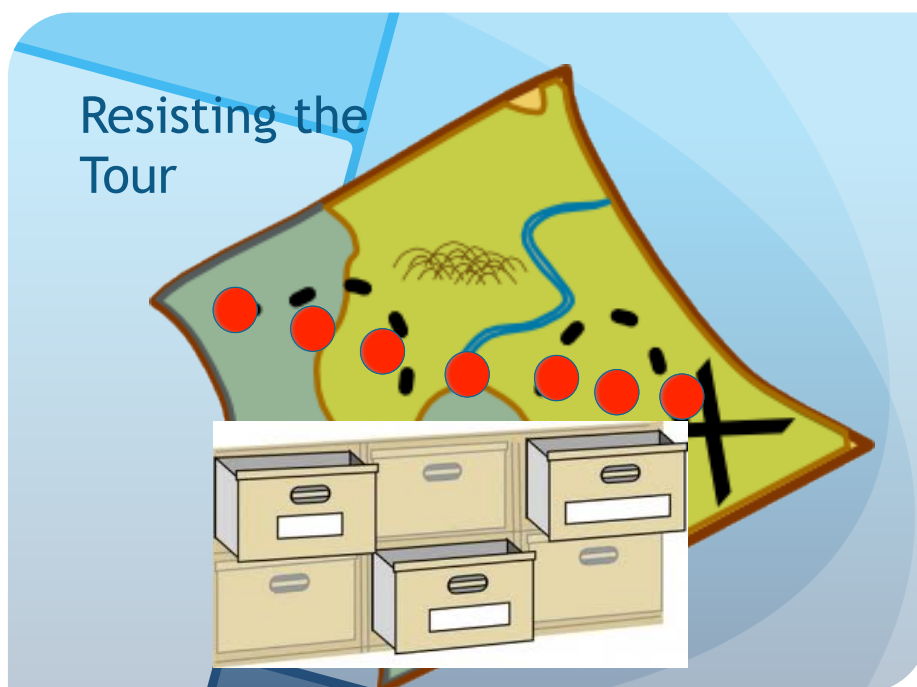
## The Virtual Tour



## EMTs resist

- Create a narrative across the white spaces
- Construct private interpretations
- Improve their professional practice

## Resisting the Tour

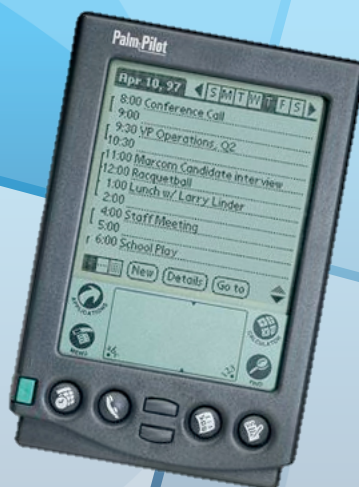




## Documents Do Boundary Work

- Create boundaries between virtual form and actual narrative
- Reify boundaries between doctors and EMTs
- Goal: Professional control

## The Palm Text



## Character & History of the Palm Text

### Character

- Personal Digital Assistant (PDA)
- Personal information management (PIM)
- Desktop and mobile
- Calendar, To Do List, Addresses, Notes

### History

- Paper-based Antecedents: Filofax (1921), Day-Timer (1947)
- Palm Pilot (1996): First major consumer electronic device
- 7 million sold between 1996 and 2000

## 1. Cultural Study

1997

- A technology for work

The connected  
organizer that keeps you in  
touch with your PC.

For more information, call 1.800.881.7236.



Robotics

**pilot** Slaying organized has never been this easy.

The new Palm Pilot P100 is the most powerful handheld organizer ever. It's the only one that can do everything you need to stay on top of your life. And it's the only one that can do it all in a single device.

**SAVE time with your computer and back it up automatically.** Pilot syncs with a standard software package containing everything you need to stay on top of your life. And it's the only one that can do it all in a single device.

**KEEP data on your Pilot safe by backing it up on your PC.** Choose from 3 different ways to enter data. Pilot syncs with a standard software package containing everything you need to stay on top of your life. And it's the only one that can do it all in a single device.

**ARCHIVE data on to your computer.** Pilot syncs with a standard software package containing everything you need to stay on top of your life. And it's the only one that can do it all in a single device.

**DOWN dates on the road, then later, sync and drop them into programs on your computer.** Pilot syncs with a standard software package containing everything you need to stay on top of your life. And it's the only one that can do it all in a single device.

**FIND any bit of stored information instantly.** Pilot syncs with a standard software package containing everything you need to stay on top of your life. And it's the only one that can do it all in a single device.

**RECORD what you have to do in a day.** Pilot syncs with a standard software package containing everything you need to stay on top of your life. And it's the only one that can do it all in a single device.

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1999

### A Technology for Work-Life

- “Stuck in a meeting. I’d better call that Italian place.”
- “My vacations for the next five years (ever the optimist)”
- “VC profiles - next hot companies”

**Simply Palm**

David Byrne  
Technology expert

Stuck in a meeting. It's 6:15 pm. I'd better call that Italian place.

My vacations for the next five years (ever the optimist).

VC profiles - next hot companies.

Pick up dry cleaning, new clubs for Kayak.

Synchronize and back up my Palm V organizer with my PC. No need for one touch.

**Simply Palm**

Palm Computing, Inc. is a leader in the world of handheld devices and software.

## 2000

- A technology for Work-Leisure
  - “1:37 Personal”
  - “Palm-powered handhelds can help you to do practically everything, even nothing. Email a memo then plan your getaway – take the net with you. Simply amazing. Simply Palm.”



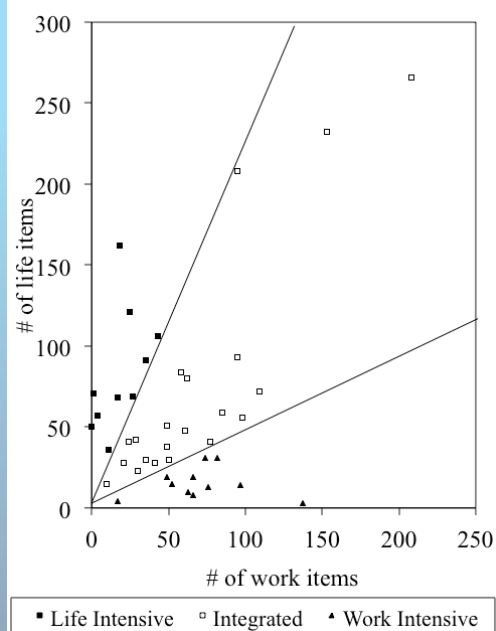
## 2. User Study

## Work-Life Boundaries

- 42 users
- Interviews
- Content classification task
- Golden and Geisler (2006), Flexible work, time, and technology, *Electronic Journal of Communication*

## Boundary Patterns

- **Life-Intensive Users** (10): 5-to-1 life related items
- **Work-Intensive Users** (11): 5-to-1 work related items
- **Integrated** (21): 1-to-1 work- to life-related items



### 3. Activity Analysis

#### Screen Capture

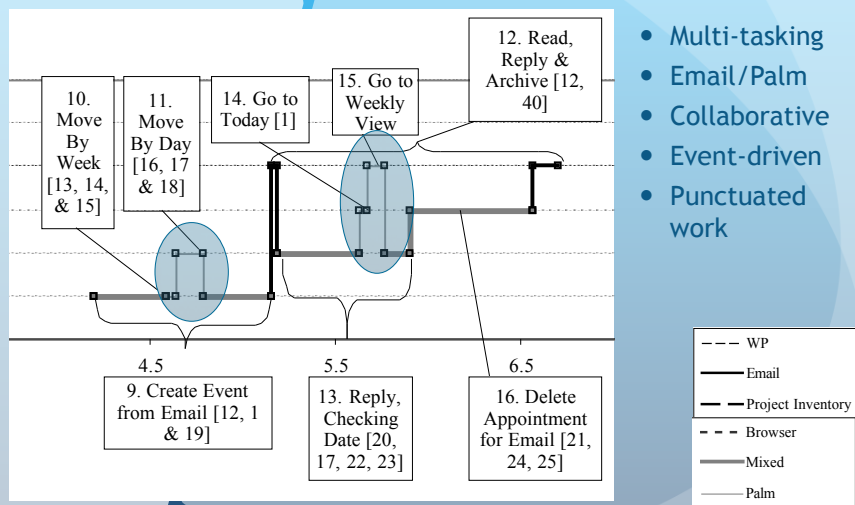
- 1 user
- Palm Desktop
- 97 minutes
- Geisler (2003), When management becomes personal, *Writing Selves and Societies*

## Palm Text in Activity

- Short: .2 minutes
- Private: 100%

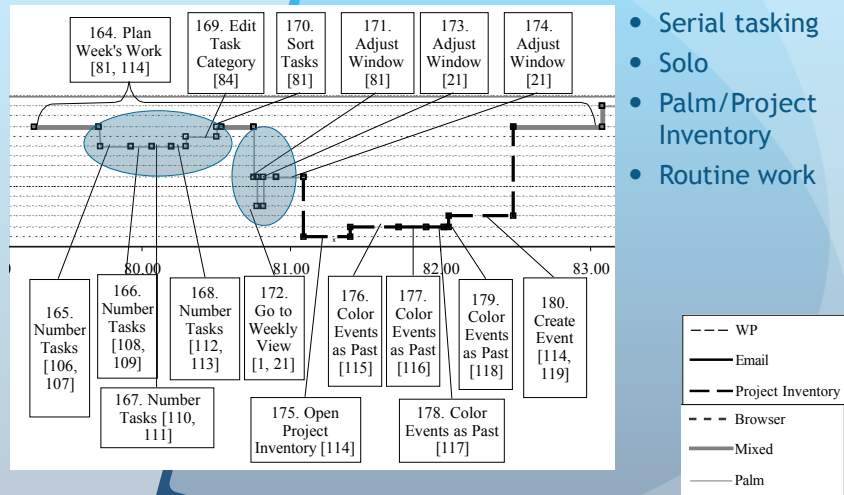
Application	No. Distinct Texts	No. Times Used	Average No. of Times Used	Average Duration of Use (minutes)	No. (%) Private
Email	41	66	1.6	.5	2 (5%)
PDA	32	67	2.1	.2	32 (100%)
Browser	2	2	1.0	5.1	0 (0%)
WP	7	7	1.0	1.1	0 (0%)
SS	8	10	.8	.3	8 (100%)
Total	90	152	1.7	.4	42 (47%)

## Palm Text in Doing Email



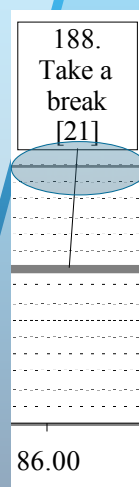
- Multi-tasking
- Email/Palm
- Collaborative
- Event-driven
- Punctuated work

## Palm Text in Planning Work

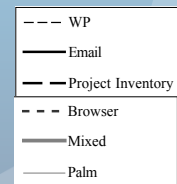


- Serial tasking
- Solo
- Palm/Project Inventory
- Routine work

## Palm Text in Taking a Break



- Unplanned
- Unscheduled
- Undocumented
- Bookmarked by Palm

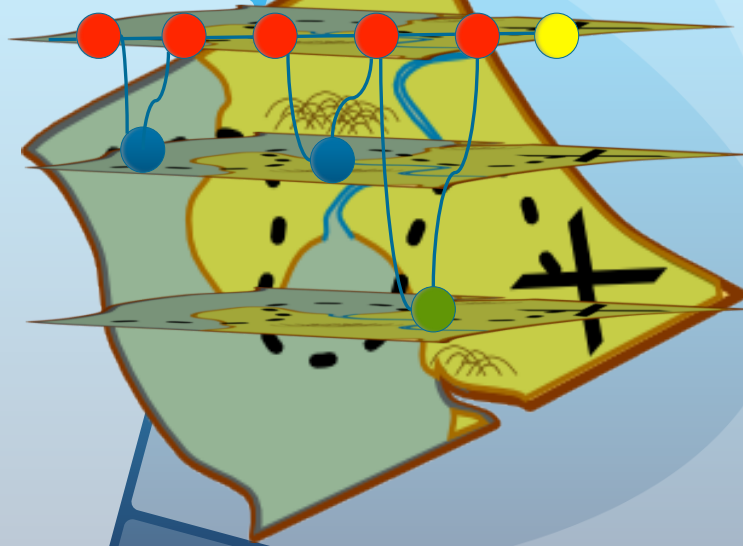




## Palm Texts create Virtual Experiences

- Masculine
- Mobile
- Multi-tasking
- Prioritizing Work
- Balancing Life & Leisure
- Worlds of Events

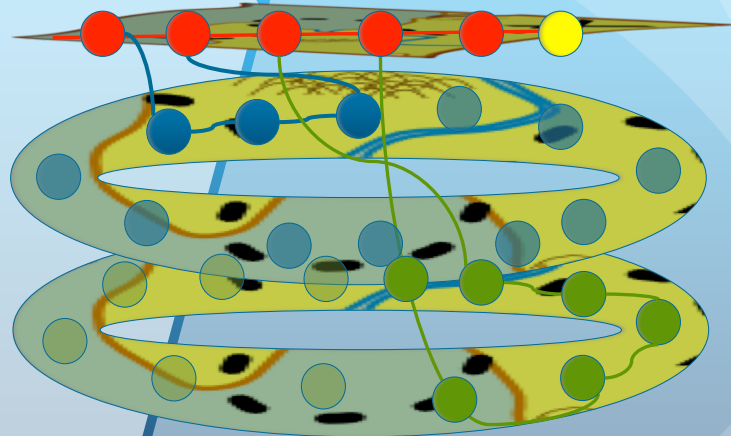
## The Virtual Path



## Users resist

- Female
- Tied Down
- Serial Tasks
- Balancing Work & Family
- Very Little Leisure
- Worlds of Routines

## The Actual Path(s)



## Palm Texts Do Boundary Work

- Serve as a resource to maintain boundaries between work and life
- Serve as a resource to link work & life
- Goal: Privilege work over life and leisure

## Closing Thoughts

## Texts & Technologies

- Texts are technologies, virtual experience machines
- Technologies obscure their contexts of design in favor of their contexts of use
- Example
  - Coffee maker in design
  - Coffee maker in use

## Texts & Privilege

- Texts have the capacity to obscure their contexts of design in favor of their contexts of use
- Academic essays use this capacity to privilege experts over laypersons
- Run report documents use this capacity to privilege doctors over EMTs
- Palm texts use this capacity to privilege work over home and leisure

## ITexts

ITexts are

- Information Technologies with texts at their core
- chats, tweets, blogs, email, wiki

ITexts are

- shorter
- more frequent
- less serial
- more multi-tasked
- less polished

## IText Shifts

ITexts erode traditional privilege

- removing the boundary between producers and consumers
- eroding the boundary between private and public
- privileging the amateur over the professional
- ITexts privilege the crowd, not the expert
- Example: Rhetorical Velocity
  - Devoss (2009)
  - Pantelides (2012) on informal posts: “pressure to say something useful that other classmates will agree with, consider, and incorporate in their own posts”

## The New Experience Machines

- Texts of the 20<sup>th</sup> century: experience machines
  - support privilege created by credentialism
  - by obscuring the context of creation
- Texts of the 20<sup>th</sup> century: experience machines to
  - support reputations created by rhetorical velocity
  - by revealing context of creation

## ITexts Show the Seams

20<sup>th</sup> Century

21<sup>st</sup> Century

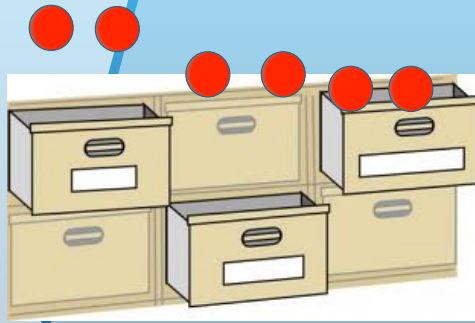


21<sup>st</sup> century writers...

No longer  
willing to be  
led...



No longer willing to be documented ...



No longer privileging work ...

