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<http://www.oii.ox.ac.uk/microsites/eresearch08/>

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# Digital and Heritage

## Vast and Not so Simple

### Expectations

(the case Derry/Londonderry)

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# Overview: Three Points\*Four Fragments

- ◆ Three Points = Presentation Structure
  - ◆ Start - Mid - End (Open)
- ◆ Four Fragments = Background
  - \*Technology\*Memory\*Logic\*Knowledge\*Loss
  - [1] Western Philosophy
  - [2] Computer Science (AI/CBR)
  - [3] Anthropology
  - [4] Literature, Poetry and Common Sense

# Three Points

[1] **Start-Point:** We know we could save things, but what? [...] But why should things be saved? [...] Everything is **deeply intertwined** [...]

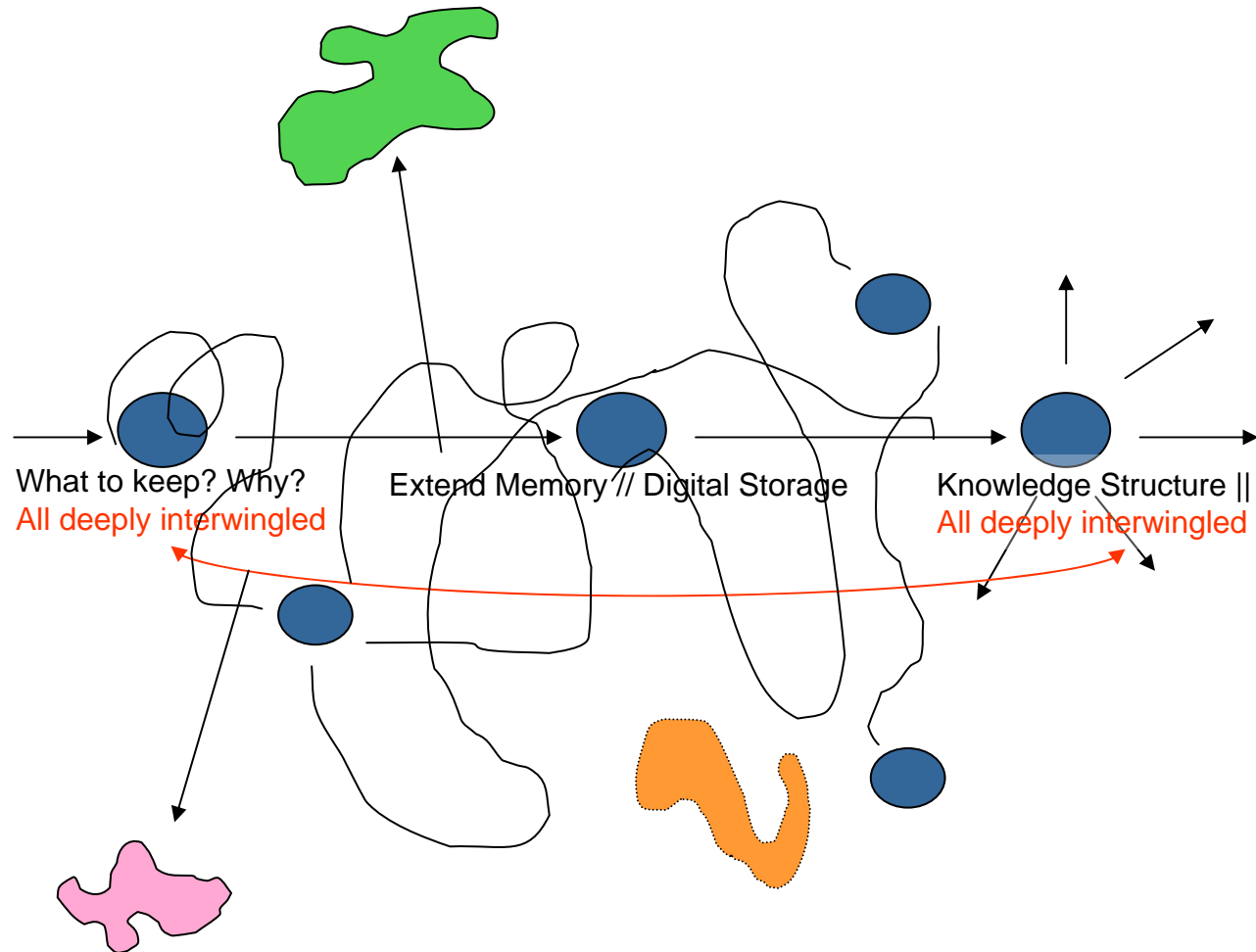
[2] **Mid-Point:** Computers offer an interesting day-dream: that we may be able to **store things** digitally instead of physically

[3] **End Point (Open):** Knowledge is a vast **cross-tangle of ideas** [...] not a pyramid of truth. So that **preserving its structure** and improving its **accessibility** is important to us all

Quotes From...



# Presentation Structure, the Truth



# Fragments [1] – Western Philosophy

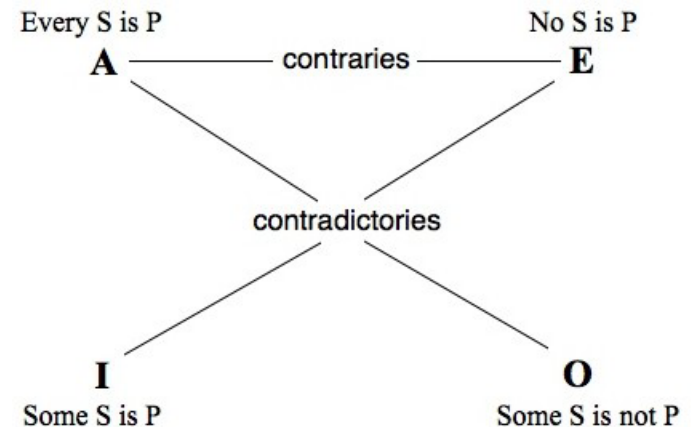
‘If men learn this (*writing*), it will implant **forgetfulness** in their souls’ ‘what you have discovered is a recipe not for **memory**, but for **reminder** ‘

[Plato, Phaedrus 275a-b]

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## Square of Opposition

[Aristotele, De Interpretatione 6-7 17b.17–26]



# Fragments [2] – Computer Science

‘Any form of learning is essentially a form of investment’ and ‘there are circumstances in which it is better to dispose of an item of knowledge than retain it’

[Markovitch & Scott 1988]



[www.flickr.com/photos/davidmasters/2600273251/](http://www.flickr.com/photos/davidmasters/2600273251/)

## Fragments [3] - Anthropology



M.A.F.'s ©wn desk

A society's material technologies of memory are always also its technologies of forgetting'

[Rowlands 1999;  
King 1999]

## Fragments [4] - Life

Ever Increasingly, the old, wild weird places become **inaccessible except to imagination**'

[Robinson 2006]



Crom Estate – Walled Garden. Co. Fermanagh. MAF's ©wn

# START POINT

We know we could save things, but what? [...] But why should things be saved? [...] Everything is deeply intertwined [...]

# Memory Knowledge Property

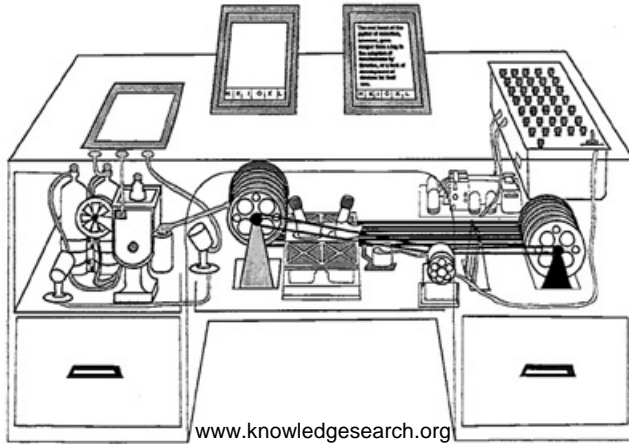
1

- ◆ Heritage:
  - ◆ Cultural Assets...
  - ◆ The Need to Preserve...
  - ◆ Is it about objects for safe keeping **AND/OR** values for sharing?
  
- ◆ Digital Devices
  - ◆ Designed for storing **AND/OR** fast processing?
  - ◆ Leverage on human motivation for maintaining large on-line knowledge repositories

[Collaborative Maintenance – Ferrario & Smith 1999]

# Memory Extension – Internet - Connections

1

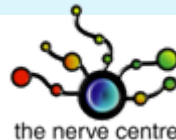


‘A record, if it is useful to science must be continuously **extended**, stored and above all **consulted**.

‘The human mind [...] operates by **association**, in accordance with some **intricate web of trails** [Vannevar Bush]

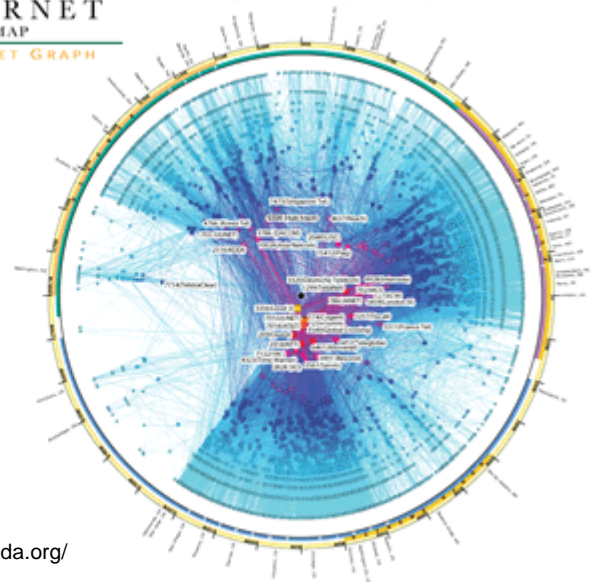
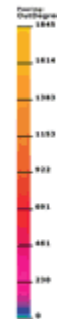
‘It is all **Intertwined** [Ted Nelson]

‘The world of multimedia is the metaphor for the **medium that connects**, video, music, animation... we were just waiting for the **non linear** to happen’ [Martin Melarkey]



IPv4 INTERNET  
TOPOLOGY MAP  
AS-level INTERNET GRAPH

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<http://www.caida.org/>

# Are We Asking the Right Questions?

1

## Line of Inquiry – Digital//Heritage

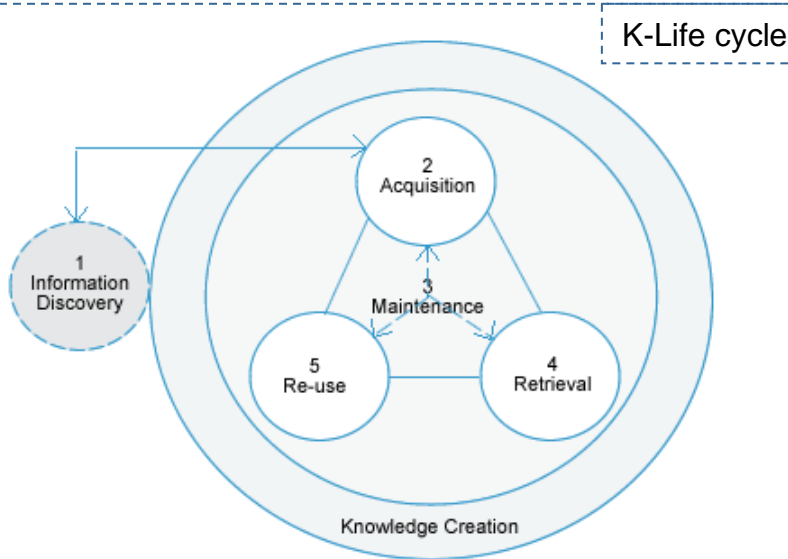
- ◆ Is it about inadequate **tools** or unreasonable expectations?
- ◆ How do we go about **preserving** knowledge, **preparing** it for storage, and re-use?

## Approach

- ◆ **Look at** previous research on ‘on-line Intelligent systems’ using both content-based (**CBR**) and content-free (**UP, CF**) methods
- ◆ **Apply to North West Film Archive**

# A Fast Spin on The Knowledge Life Cycle

1



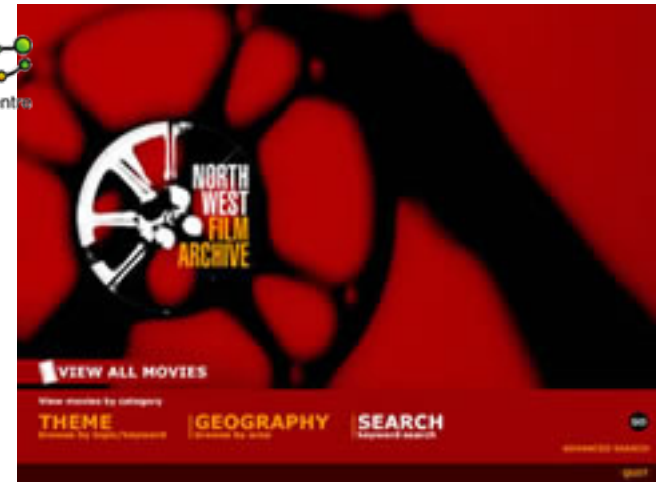
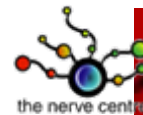
The five-step model of K-life Cycle (as in Ferrario 2001 see also Roth-Berghofer and Ioannis Iglezakis, 2001)

1. **Information Discovery**,
2. **Acquisition** (inc. Representation)
3. **Maintenance**
4. **Retrieval** (or Access)
5. **Re-use**

Knowledge Creation not a separate step but = output of the overall cycle.

North West Film Archive

**Digital collection** of cinematographic material from counties (Derry&Donegal) **Free public access** to footage from BBC, UTV, RTE, and private collections. **Launched** in June 2007, **Crossborder** partnership lead by the Nerve Centre **Funded by** Co-Operation Ireland and EU Peace II



1

2

## MID POINT

**‘Computers offer an interesting day-dream: that we may be able to store things **digitally instead of physically**’**

# First Findings: Preserves Don't Keep

1

Questions Opened by First Research

2

[1] The *Discovery* of Physicality

- ◆ Objects, people, dates and places

[2] The *Acquisition* of a Head Space

- ◆ The Mindscape of the stories we tell

[3] The *Maintenance* of a Short Life

- ◆ Mortality hopping by technology transfer

[4] Access to Local(s)

- ◆ The curse and the blessing of being local

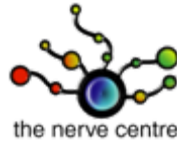
[5] The *Right* to Reuse

- ◆ Knowledge as property and the value of identity

# Myth Symbols and Cultural Cybotage

1

## The Symbols Series (the Nerve Centre)



the nerve centre

2

1916 The Easter Rising || Battle Of the Somme

1798 Irish Rebellion

1690 Battle of the Boyne



1916. Lest We Forget



1798. Myth and Memory



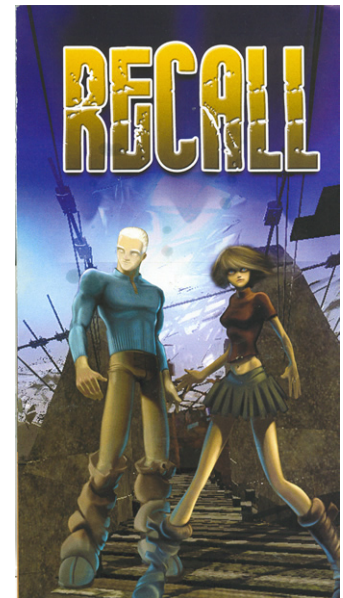
1690. Culture On Parade

## RECALL (Phooka Entertainment)



<http://www.youtube.com/watch?v=EIMkeOZIOng&feature=related>

<http://www.nwrc.ac.uk/downloads/recall/>



# The Physicality of Information Objects

1

- ◆ Objects

- ◆ Symbols Exhibit

2

- ◆ People

- ◆ Personal Experiences

1916 1798

- ◆ Dates

- ◆ Symbols  $\leq$  events  $\leq$  dates

1690

- ◆ ~~Dates~~  $\Rightarrow$  set in future

- ◆ Place

- ◆ Buildings (Nerve Centre)

- ◆ Derry/Londonderry



[www.flickr.com/photos/rachelcreative/2696618594/](http://www.flickr.com/photos/rachelcreative/2696618594/)

Derry/Londonderry



## PLACE (location and locality)

546AD St Colmcille founded its first Abbey - Doire (in Irish the place of oaks) -- Foyle estuary attracted as many merchants as invaders -1613 the city of London responsible for the settlement of the city => Londonderry 1618 the walls are completed -- 1689 Siege of Derry -1790 the first bridge across the River Foyle - Over time, and especially during the Troubles (70s-90s), the Protestants community drifted over to the Waterside leaving the City side predominantly Catholic



The Walled City



The Guildhall



Magee campus



The Bog Side

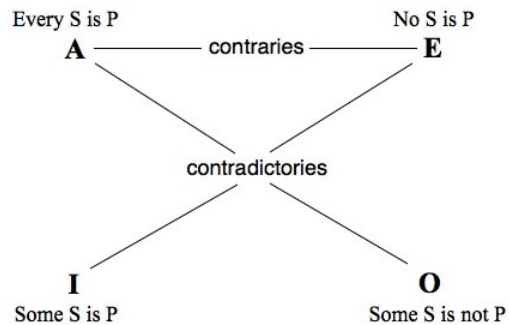


The Foyle

# \*2 The Mindscapes of the Stories We Tell

1  
2  
‘This history is not crystallised, people are still arguing over it. How do you crack open the monolith? How to develop some empathy for the other side? [Melarkey in interview 2008]

- ◆ Recurring structures
  - ◆ Symmetries
  - ◆ Juxtapositions
  - ◆  $\Leftrightarrow$  Freedom of connections



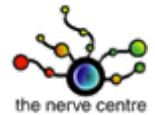
1916. Lest We Forget



1798. Myth and Memory

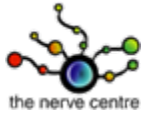


1690. Culture On Parade



# \*2 Mindscapes: Change in Plans

## 1 Expectations/Attitudes



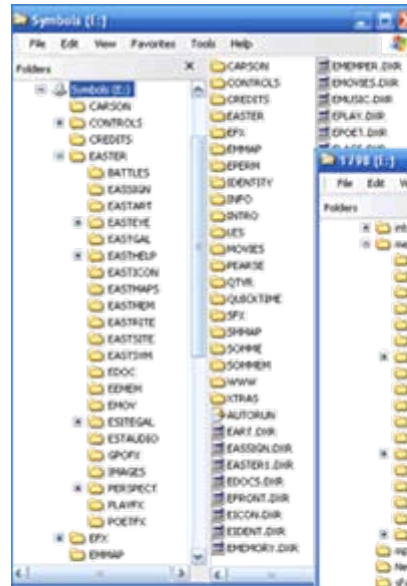
2

- ◆ Strict structure (no scrollbars ...)
- ◆ Beyond multimedia
- ◆ Non 'proper use'

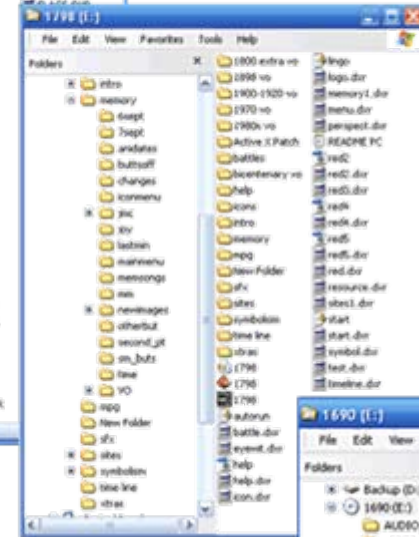


## Time/Budget Constraints

- ◆ From multi-players game to single player
- ◆ High/lower resolution
- ◆ First 3D game in NI



1916



1798



1690



## \*3 Mortality Hopping by Technology Transfer

1  
2  
Digitally information ++ highly re-usable and exportable - - its supporting media (hardware/software) have quite a short life span; avg. the life span of a web page = 44days = home fly

- ◆ Extension of life-span by hopping in & out the digital box
- ◆ **NWFA:** an example of knowledge gain by technology transfer

Next, a quick drill on mortality hopping

- ◆ The spec is the limit
- ◆ A classroom with a view
- ◆ Digital migration & convergence

## \*3 Mortality Hopping – The Spec is the Limit

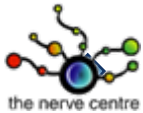
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Recall (released in 2005) still doesn't run well on most medium/ above average spec computers

- ◆ Extensive distribution//poor feedback

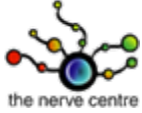
2



Symbols (1999/2001) ideal was the web

- ◆ CDrom => DVD
- ◆ The 'compromise' opened new doors

## \*3 Mortality Hopping – a Classroom with a View



### 1 Symbols Series

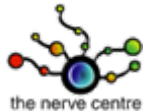
- ◆ Use in the classroom (McCully et al 2002), Symbol 1916 = ‘the database for inquiry’ in history teaching lessons on the Rising with pupils of loyalist background.
- ◆ New production to match school curriculum
- ◆ Diversity on Line <http://www.diversityonline.org/>
- ◆ Pupils use archived material to create own stories

2

## \*3 Mortality Hopping – Migration & Convergence

1 ♦ Digital aging || digital ageism

2 To escape from oblivion, digital-born babies migrate, converge and get out their boxes



**Nerve Centre** (Symbols) experience

♦ TV => *Kings Wake* animation => 3D asset computer game?



**Recall**

- ♦ Collaboration in the classroom, physical maps, real actor characters/plays
- ♦ Bebo, Youtube

## \*4 So Far So Close So Local

### Symbols Series

- ◆ Abandoned plan: Battle of the Bogside (1969) paired with the Siege of Derry (1689). Too close too controversial

### RECALL

- ◆ -- market potentials: 'too local in its settings even the voice-acting is *very Derry*'

Being local is culturally charged and can be dangerous.  
*'Symbols are still expression of social division'*

[Buckley1998]

They need to be mediated and understood before they can move to the global stage.

**Vice-versa:** could they be mediated on the global stage in order to be understood by the locals?

## \*5 Knowledge As Property | The Value of Identity

1  
2  
'Coming from a Republican background, this play is my attempt to comprehend the diversity and the *spirit of identity* that there is in the Ulster Protestant community and to celebrate its genuine past heroism and courage'

[McGuinness 1995]

- ◆ How does an event become the exclusive **property** of a community?
  - ◆ Cultural Selection and Forgetfulness
- ◆ Who produces the **values** that a community owns and worships?
  - ◆ Symbols and Recall: past events, **interpretation** and memory

1

2

3

## END POINT (Open)

Knowledge is a vasty cross-tangle of ideas  
[...] not a pyramid of truth. So that preserving  
its structure and improving its accessibility is  
important to us all

# Access || Sharing || Reinterpreting || Reuse

1

The Nerve Centre = culture-factory leveraging the ease of use and re-use of digital material  
*'once you create one copy, you can make many and so you keep the message alive'*  
[Melakey]

3

Recall *'everything in the game is reusable, one could strip the story out and reuse the assets [..] in a different conflict scenario. [...] the basic story line would work'* [Gilmore]

# Access || Sharing || Reinterpreting || Reuse

- ◆ Digital technologies are **high-complexity, energy-dependent, research-hungry** tools that are still not accessible to a large portion of the world population (800k people with no phone – source: I.T.U.)
- ◆ **Access**, it seems, is the keyword for a democratic **knowledge society**.
- ◆ Access to **what** knowledge? **Whose** values?

# Access || Sharing || Reinterpreting || Reuse

1

**RISK:** To loose sight of the complexity of our technological achievements and their instability

2

**GROUNDING FORCE:** Heritage - as both individual and collective memory

3

**A DISSERVICE:** to expect to preserve heritage as a digitised fossil. The sharing, re-use and exposure of heritage to re-interpretation and change is what make it valuable and strong.

The ways of doing so are many and varied: the use of digital technologies combined with human resourceful imagination is a very powerful one indeed.

# Conclusions - next

Web01  $\neq$  Web02 move 'from linking information to linking people' [Wesch 2007]

Current trend people create – interpret – reshape knowledge

=> focus on language...ontologies/metadata/myBlahBlah

=> focus on content...life stories, (H)history, places & planet

=> focus on people...at the edge, between the gaps, on the move



Harvest, Package, Distribute and Sow  
(lets do viral education!)

e.g. Life Stories -> re-mapping recent History  
Look at Spontaneous Community-Based Collaborative  
Projects ([www.springtowncamp.com](http://www.springtowncamp.com))

# Contacts

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