

# Task-Based Design for Digital Scholarly Editions

Stan Ruecker

Associate Professor

Institute of Design

Illinois Institute of Technology

Chicago IL USA

[sruecker@id.iit.edu](mailto:sruecker@id.iit.edu)















**Implementing New Knowledge Environments (INKE)** is a collaborative group of researchers and graduate research assistants working with other organizations and partners to explore the digital humanities, electronic scholarly communication, and the affordances of electronic text.

**Engagement**



**Modelling**



**Interface**



**Integration**



## 6 1/2 YEARS OF INKE

OVER 140 SCHOLARLY PUBLICATIONS  
(ARTICLES, BOOK CHAPTERS AND BOOKS)



AN AVERAGE OF  
**1 EVERY 17 DAYS**

OVER 450 PRESENTATIONS  
(CONFERENCE PAPERS AND TALKS)



AN AVERAGE OF  
**1 EVERY 5.27 DAYS**

15 WORKING TOOLS AND PROTOTYPES



AN AVERAGE OF  
**2.3 PER YEAR**



**53 GRA'S, 19 POSTDOCS  
AND 4 STAFF MEMBERS HIRED**



**42 RESEARCHERS AND CONSULTANTS**



**30 PARTNERS AND ASSOCIATES**



**1.5 GATHERINGS PER YEAR  
HELD IN 4 CONTINENTS**

## **Goals of the presentation:**

- Review digital scholarly editing insights
- Consider experience of scholarly readers
- Provide examples of possible interfaces

Since it is not always possible to predict all of the reader's tasks in advance, one suggestion is that we attempt to allow dynamic construction of pages, where there are some stable “templates” but also the ability to create custom ones.



Since it is not always possible to predict all of the reader's tasks in advance, one suggestion is that we attempt to allow dynamic construction of pages,

**Too skeuomorphic?**

while this requires some stable “templates” but also the ability to create custom ones.

Since it is not always possible to predict all of the reader's tasks in advance,

one suggestion is that we attempt to allow dynamic construction of pages, where there are some stable “templates” but also the ability to create custom ones.

## 7 Scholarly Primitives

- Discovering
- Annotating
- Comparing
- Referring
- Sampling
- Illustrating
- Representing

“My list of scholarly primitives is not meant to be exhaustive,”

- John Unsworth (2000)



# Scholarly reading

“Above all, slow and methodical, aiming at in-depth understanding of the document itself...”

“Often linked to writing and working on the texts... the reader interposes between the text and himself grids or filters, in order to select data and impose a specific point of view on the text.”

- Jacob (1987) qtd in Hillesund and Bélisle “What digital remediation does to Critical Editions and Reading Practices.” (2014)

Editing is the affordance  
that most defines scholarly writing.

- Susan Brown, “Remediating the Editor” (2015)



Entities Structure Relations



TEI

teiHeader



text



body



div



head



title

persName

persName



opener



note

p

p



p



dateline

salute



p

placeName



p

pb

choice

placeName

pb

p

p



closer

Tags



TEI » text » body » div » head » title » persName

## Sample Letter - Bertrand Russell to Patricia Spence - October 21, 1935

Bad writing due to shaky train

In train

to Bergen

21.10.35

arest -

I have had no letter from you since I left Stockholm, but I had a nice one from John in an envelope you had sent him. I had sent him one dressed to Copenhagen but he hadn't used it.

When I reached Oslo yesterday evening, Brynjulf Bull should have been there to meet me, but wasn't. He is not on the telephone, so I took a taxi his address, which turned out to be a students' club with no one about on Sundays, so I went to a hotel feeling rather non-plussed. But presently he ned up. He had got the time of my arrival wrong, and when he had found he had missed me he phoned to every hotel in Oslo till he hit on the right e. He left me at 10, and then I had to do a Sunday Referee article. Today my journey lasts from 9 till 9 - fortunately one of the most beautiful way journeys in the world. Tomorrow I lecture at Bergen to the Anglo-Norwegian Society. Next day I go back to Oslo, lecture there Fri. and Sat. I then start for home via Bergen.

Bull is a nice young man but incompetent - can't quite stand the communists, but finds the socialists too mild.

I am unhappily wondering what you are feeling about me.

I love you very much -

B



CWRC-Writer

apps.testing.cwrc.ca/editor/dev/editor\_dev.htm#templates/sample\_letter

AppsG DriveUGUG LibG DirG MailGScholarCLinkCollaboratorybetacwrc-docCWRC-Writer DevDTocG BooksHuvisDoc Archive» Other Bookmarks

CWRC-Writer v0.8

Edit HeaderSettingsHelp

EntitiesStructureRelations

TEI

teiHeader

text

body

div

head

title

Tags

TEI » text » body » div » head » title

Sample Letter - Bertrand Russell to Patri

Bad writing due to shaky train

In train

[Oslo](#) to Bergen

Dearest -

I have had no letter from you since I left [Stockholm](#) addressed to Copenhagen but he hadn't used it.

When I reached Oslo yesterday evening, Brynjulf Bull to his address, which turned out to be a students' club with turned up. He had got the time of my arrival wrong, and w one. He left me at 10, and then I had to do a Sunday Re railway journeys in the world. Tomorrow I lecture at [Berg](#) and then start for home via Bergen.

Bull is a nice young man but incompetent - can't quite

I am unhappily wondering what you are feeling about

I love you very much -

Search Person

Bertrand Russell

CWRC

VIAFResults: 1 - 10 of 18

12»

Bertrand Russell

Ludwig Wittgenstein

Heisenberg, Werner

Born, Max

Klossovski, Pierre

Kotarbinski, Tadeusz

Art Ross

Berns, Bert

CancelCreate New PersonEdit PersonSelect

The practice of editing is ineluctably social

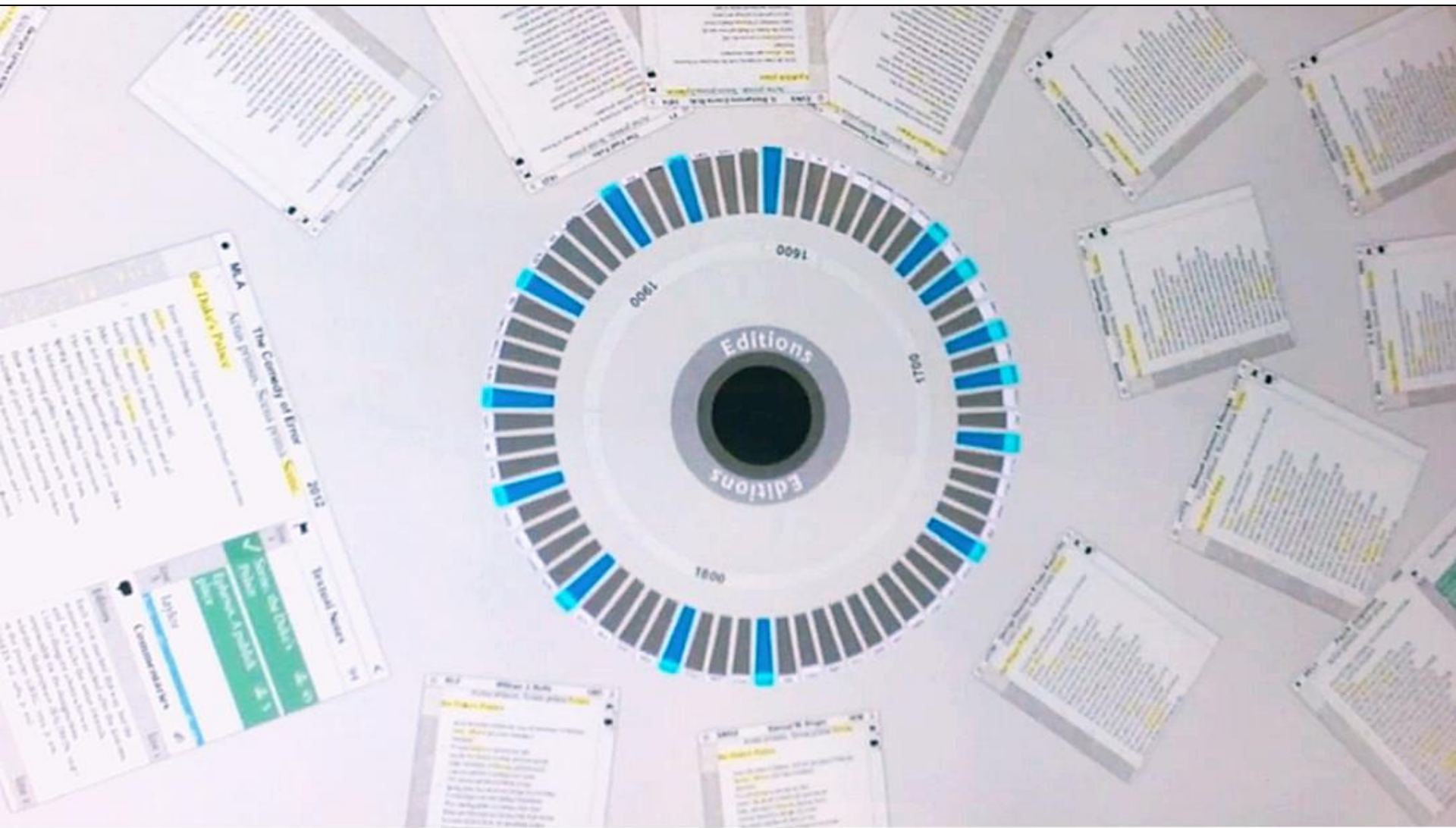
- Susan Brown, “Remediating the Editor” (2015)

The challenges are therefore social rather than technical:

1. individualism vs. collaboration in relation to credit;
2. the shift towards dynamism vs. practices built on resource stability;
3. swift dissemination vs. scholarly quality control;
4. simplicity vs. complexity in data models and interfaces;
5. the benefits of standards vs. disciplinary resistance to systematization.

- Susan Brown, "Remediating the Editor" (2015)



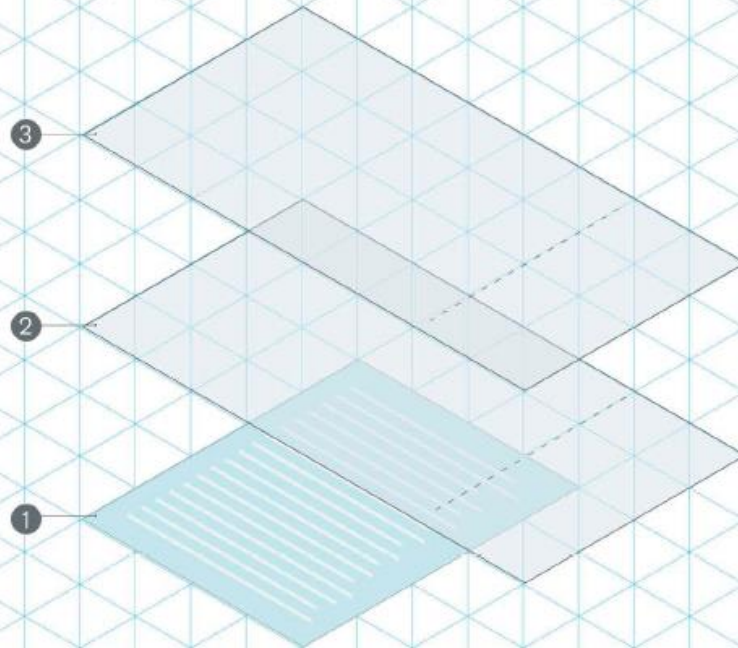
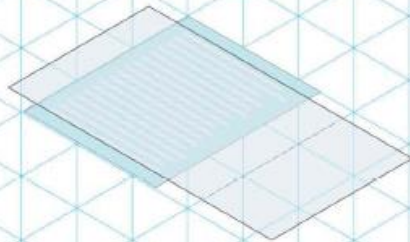


- Luciano Frizzera et al. "Multi-Touch Surfaces as Social Reading Environments" (2013)



# Digital Interleaves Core Conception

A page in a PDF (1) can be interleaved with a transparent overlay (2), allowing a reader's annotations three levels of textual proximity: directly on top of the text, beside the text with increased margins, and alongside the text with an extended flap. The transparency of the overlays allows multiple annotations to be interchanged or stacked (3).



Navigating a digitally interleaved book is based on two core gestures. The pages of the text are scrolled through vertically (4). The interleaves of a page are scrolled through horizontally (5). Any given page can be read with multiple interleaves that can be swapped, layered or hidden (6).





search

sort by: author title date

1 Delehay, Hippolyte. *Les Origines du culte des martyrs*. 1933.

4 \*\*\*\*\*. *The Jews among Pagans and Christians in the Roman World*. 1992.

1 North, John. *The Development of Religious Pluralism*. n.d.

2 Saller, Richard, Shaw, Brent D.. *Tombstones and Roman Family Relations in the Principate: Civilians, Soldiers and Slaves*. 1984.

1 Shaw, Brent D.. *Latin Funerary Epigraphy and Family Life in the Later Roman Empire*. 1984.

1 Martin, Dale B.. *The Construction of the Ancient Family: Methodological Considerations*. 1996.

1 Perry, Jonathan S.. *A Death in the 'Familia': The Funerary Colleges of the Roman Empire*. 1996.

2 Burkert, Walter. *Ancient Mystery Cults*. 1987.

1 Cumont, Franz. *Les mystères de Mithra*. 1913.

1 Cumont, Franz. *Textes et monuments figures relatifs aux*

136 references

**1 Add comparison set**

language

DE EN ES FR HE  
IT LA

country

BEL GBR USA FRA  
ITA NLD DEU ISR  
VAT AUT

publication type

BOOK BSEC JART  
DISS CORP EXCV  
CODX OTHR SCHE  
REVV CONF COMM  
LETR MNSC

period

year to year

function

primary source  
secondary source  
further reading

author

author name

**2 Add comparison set**

language

DE EN ES FR HE  
IT LA

country

BEL GBR USA FRA  
ITA NLD DEU ISR  
VAT AUT

publication type

BOOK BSEC JART  
DISS CORP EXCV  
CODX OTHR SCHE  
REVV CONF COMM  
LETR MNSC

period

year to year

function

primary source  
secondary source  
further reading

author

author name

**3 Add comparison set**

language

DE EN ES FR HE  
IT LA

country

BEL GBR USA FRA  
ITA NLD DEU ISR  
VAT AUT

publication type

BOOK BSEC JART  
DISS CORP EXCV  
CODX OTHR SCHE  
REVV CONF COMM  
LETR MNSC

period

year to year

function

primary source  
secondary source  
further reading

author

author name

In *Les Origines du culte des martyrs*, Hippolyte Delehay writes, "The custom that quickly spread of not mingling Christian tombs with pagan ones, but instead setting aside separate areas, was hardly unprecedented. Other associations or groups had introduced this type of solidarity in death into their practices." This statement needs verification, for, besides the obvious relevance to Christianity, it raises the issue of the social behavior of religious groups whose differentiation is one of the characteristics of late antiquity.

Religious development in Late Antiquity is often described as an inevitable movement toward monotheism, according to a point of view that approaches religion on the basis of beliefs. By adopting a point of view based instead on social practice, we shift the emphasis to the development of religious pluralism. Without attempting to go back to the origins of this phenomenon, we can say with confidence that in the third century the Roman Empire was a true "marketplace of religions." Not only were Jews, Christians, and pagans competing with each other but, within paganism, a plurality of religious groups appeared, weakening the monopolistic position of civic religion.

From this standpoint, John North has noted that one of the most sensitive criteria for evaluating the impact of these groups in traditional Greco-Roman society involves tracing areas of conflict with members' families. Here, the study of funerary practices is decisive. Statistical studies regarding burial inscriptions of civil populations in the Western Roman Empire have shown that, when the relationship was mentioned, 80 percent of commemorators were wives, parents, children, or cousins of the deceased individual honored in the epitaph. This percentage increased in the fourth century, but the samples used for Late Antiquity were all Christian and therefore less representative. Even if commemoration with an epitaph did not extend to every level of Roman society, the numbers allow us to conclude that it was traditional in the Roman Empire for the family, in fact the nuclear family, to maintain the

Index	Tags	Stats	Annotations
Filter		Filter by Chapter	
anthologization		1	
archival location		13	
archive		17	
attitudes to women writing		4	
authority		6	
authorship		12	
bibliographical entry		387	
canon formation		21	
class issue		9	
close reading		51	
collaboration		39	
date		926	
economics		23	
editions		5	
education		20	
event		46	
formal response		16	
gender issue		20	
gendered response		7	
genre		179	
genre fiction		11	
genre issue		28	
genre journalism		12	
genre life writing		29	

Table of Contents

Search

Clear

- ▲ Au fil de la narration et des générations

gender issue

Mais il est rare que nous puissions nous rappeler comment ...

gender issue

Et dire que pendant des siècles, et encore aujourd'hui, nous ...
- Women Who Invite Collaboration
- ▲ A Modernist Commons in Canada / Une commune moderniste au Canada

gender issue

Although feminist scholars have been critical of what Mary Hawkesworth ...

gender issue

Mediated at once by the gendering of immaterial labour and ...

gender issue

the column With Our Women, which suggests not only the ...

gender issue

Insofar as EMiC/EmaC and its digital initiatives stem in part ...
- L'apport du concept d'ontologie informatique à l'étude de l'histoire littéraire

dean irvine: A Modernist Commons in Canada / Une commune moderniste au Canada

XML

By way of examples, I want to take a detour into modernism's archives, which is where I discovered print precursors to EMiC/EmaC's digital co-op and commons. First, I will elaborate with examples from Livesay's leftist archive of writing from the 1930s, her collaborations with editors on the construction of her retrospective collections of the 1970s, and my own editorial collaborations as the director of EMiC/EmaC. Second, I will address the issue that the majority of EMiC/EmaC's digital initiatives involve anglophone modernists and speak to the collaboration between F.R. Scott and Anne Hébert in the 1960s as a precursor to unrealized partnerships with francophone scholars and institutions that hold the potential for EMiC/EmaC to engage more fully with Canada's and Quebec's interlingual modernisms. Mediated at once by the gendering of immaterial labour and by the gendering of the commons, these case studies serve as generalizable instances of ways in which the gender relations in authorial and editorial work in print are remediated in digital media.

Livesay's poetry of the 1930s issues from what Cary Nelson calls the decade's progressive conception of culture as a "collective project" galvanized by a sense of "commonality and shared cultural mission" (6, 8).<sup>3</sup> Her leftist archive manifests this collectivism. For instance, her poetry's adaptation of lyrics from International Workers of the World (IWW) songs is a typical leftist cultural practice, one that Hester Furey reads as a "modernist intervention in the imaginary" (52). IWW songwriters "rewrote popular, religious, and patriotic songs" in a parodic manner that "resembles modernist art functionally, mixing high and low" (52). The IWW songbook combined "the gestures and functions of missal, manifesto, performance art, poetry, and song" in a way that "takes issue with traditional representations of its subject matter, working to disrupt and transform the culture it represents" (52-3). In the context of the IWW songbook, the notion of originality was irrelevant. "The song belonged to the group, not just to the person who wrote it" (55). As an extension of this leftist cultural practice, Livesay's borrowings from the politically conscious modernism of the Auden generation are blatant and extensive, and at times her poetry's indenture to some of their best-known poems

# Visualization as Experience

1. Perceptibility
2. Pre-knowledge
3. Comprehension
4. Utility
5. Interpretation
6. Engagement
7. Outcome
8. Purpose

- Tomoko Ichikawa (2015)





# Scholarly Reading

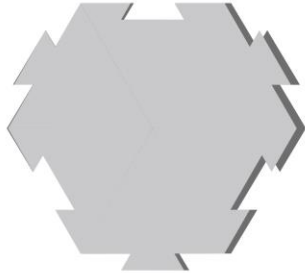
## ~~Visualization~~ as Experience

1. Perceptibility
2. Pre-knowledge
3. Comprehension
4. Utility
5. Interpretation
6. Engagement
7. Outcome
8. Purpose

- Tomoko Ichikawa (2015)



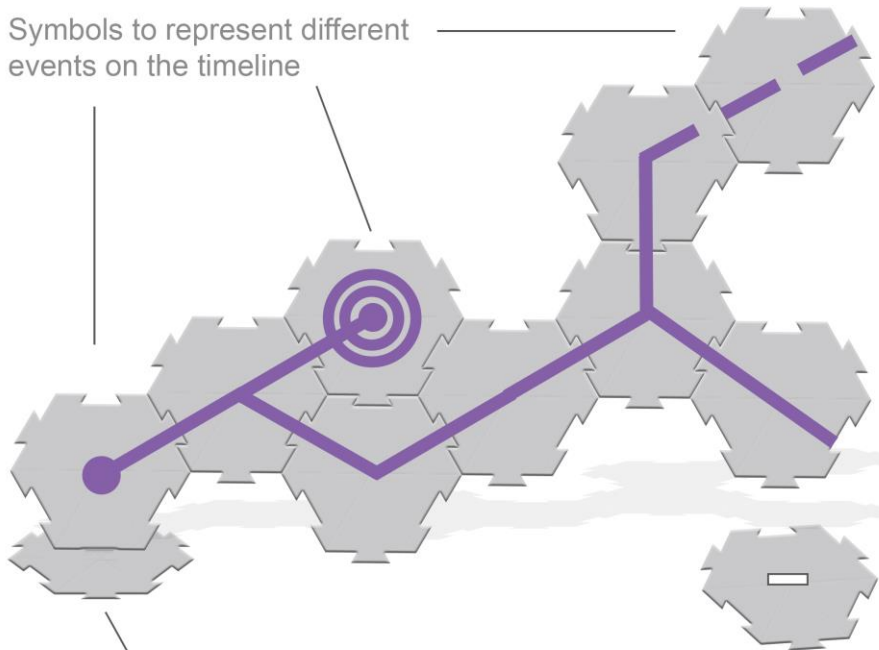
# Hexagons



Hexagonal flat pieces used to build structures easily understandable from both sides (front and back).

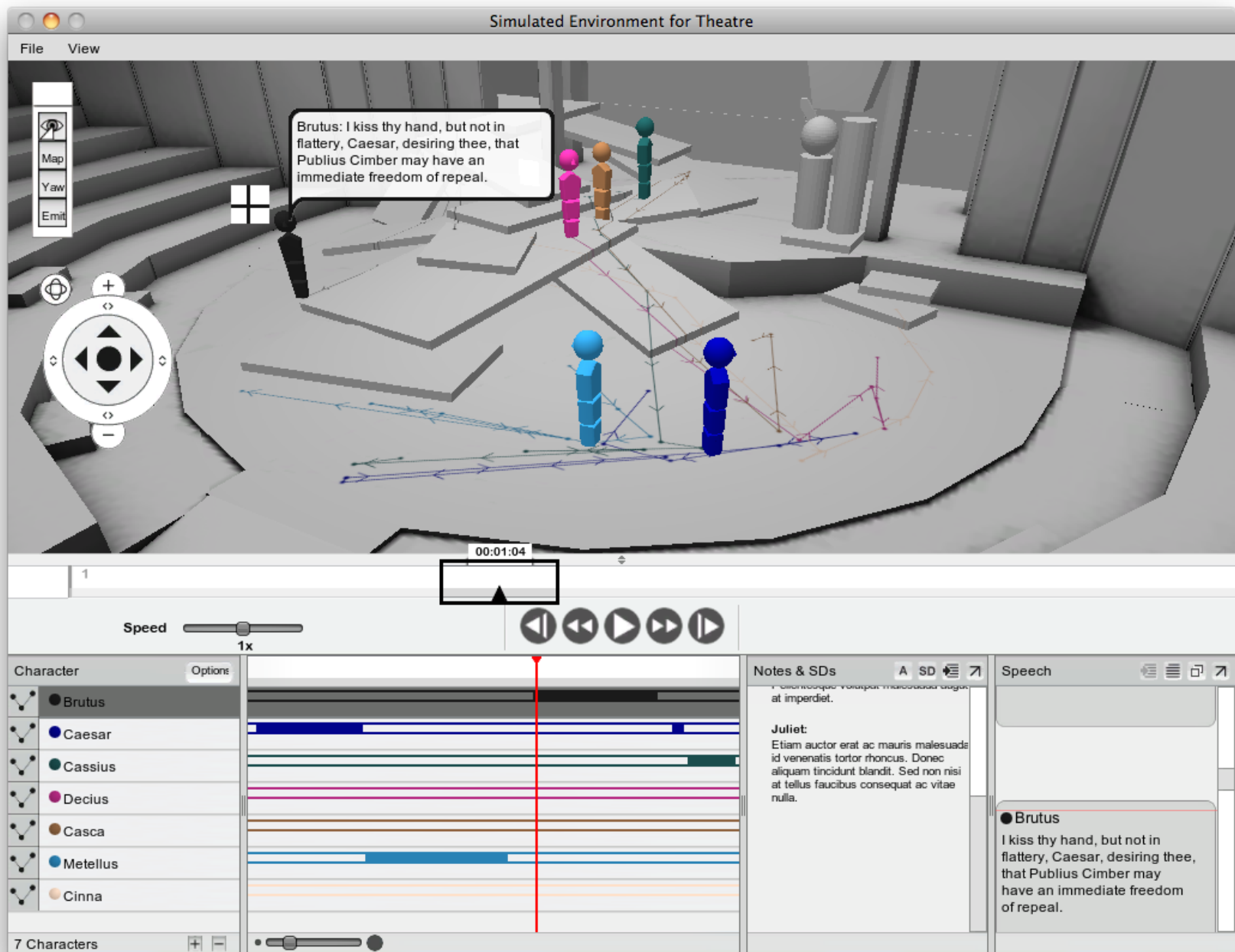
Each piece has different printed symbols so the user can build any structure he has in mind.

Symbols to represent different events on the timeline

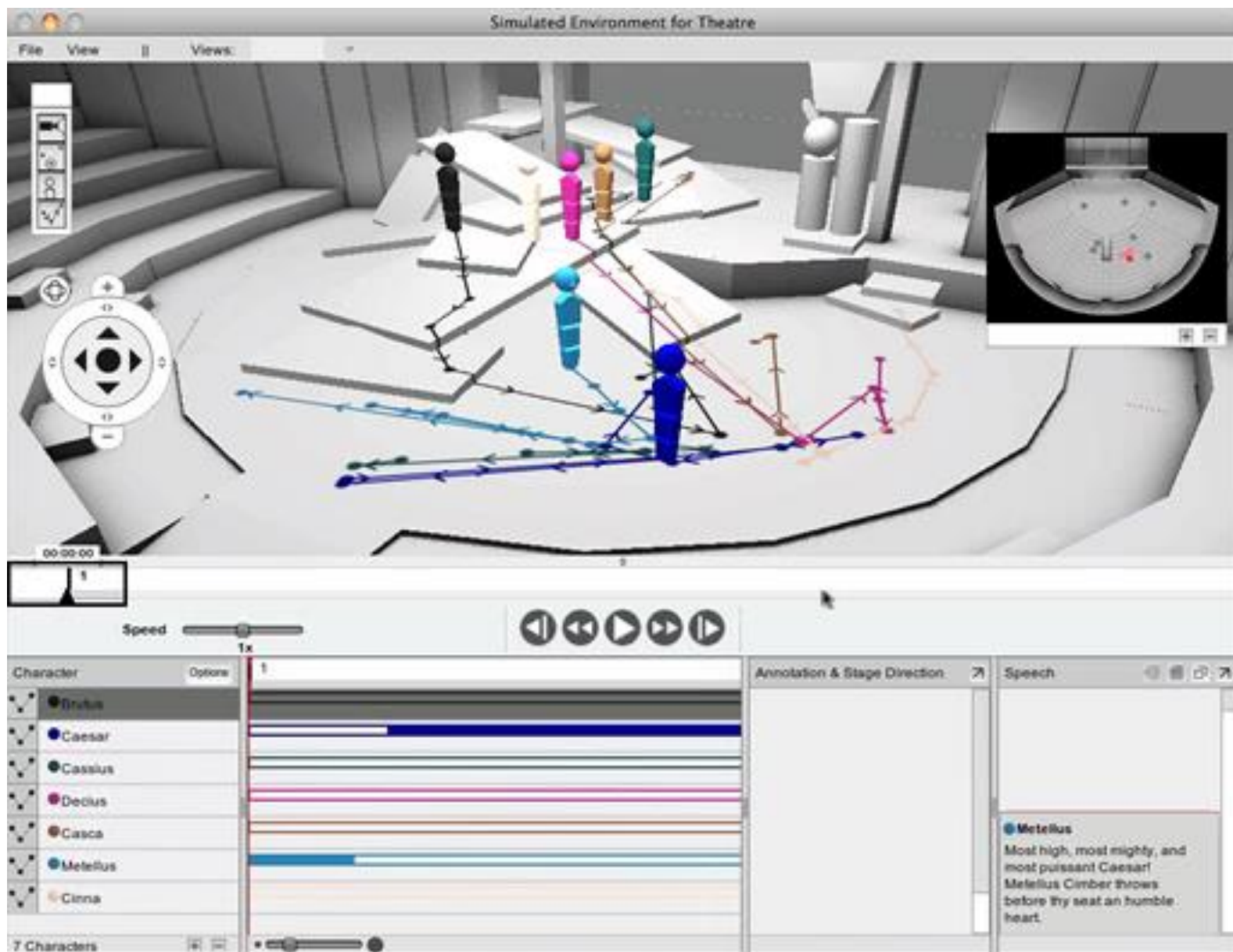


Structural pieces in the same model but with a "housing" on the middle.

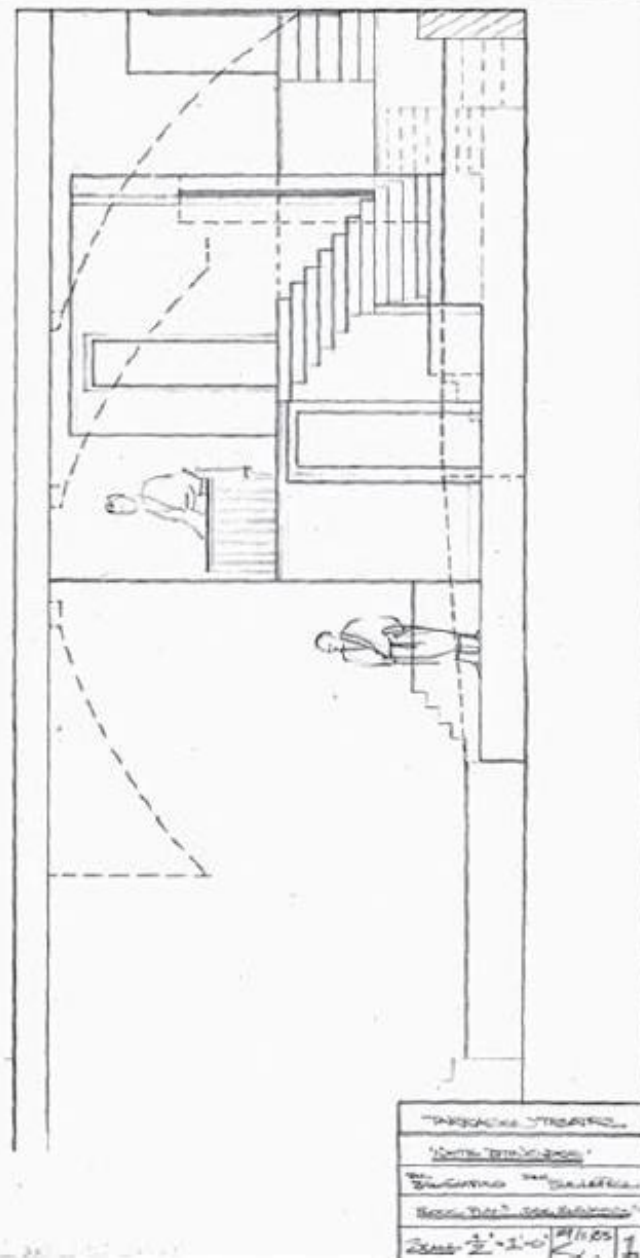
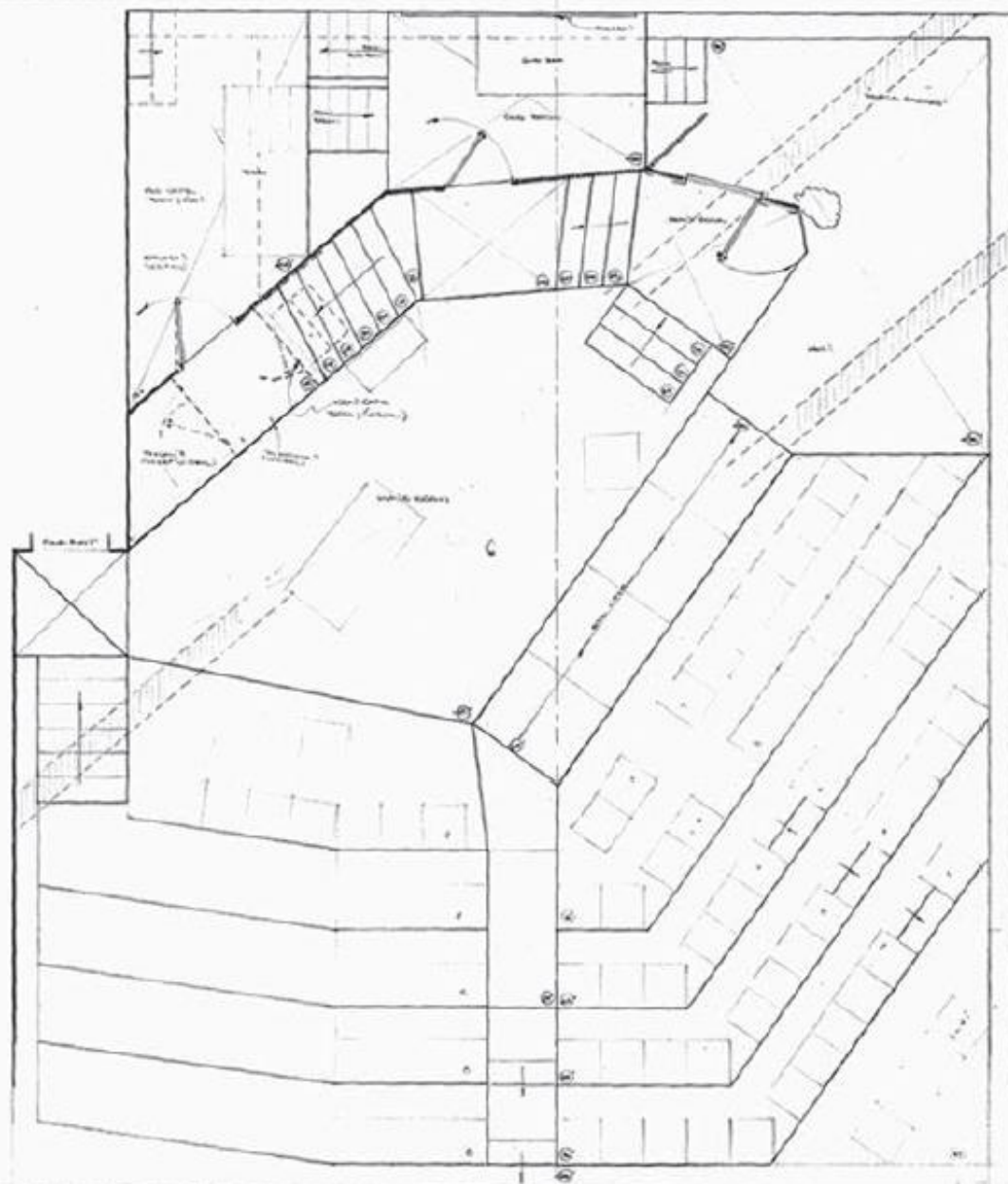




Jennifer Roberts-Smith et al. "SET" (2015)

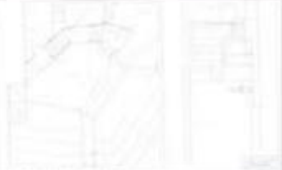






Sue LePage design for Judith Thompson's *White Biting Dog* at Tarragon Theatre (1984)





#### Technical Drawings:

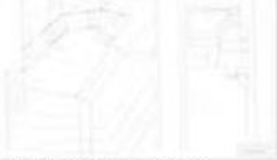
LePage, Sue, designer.  
Technical Drawings for White  
Biting Dog, Tarragon Theatre,  
Toronto, 1984. L.W. Conolly  
Theatre Archives, Guelph,  
Ontario.

00:00:00

1

Speed 1.00x





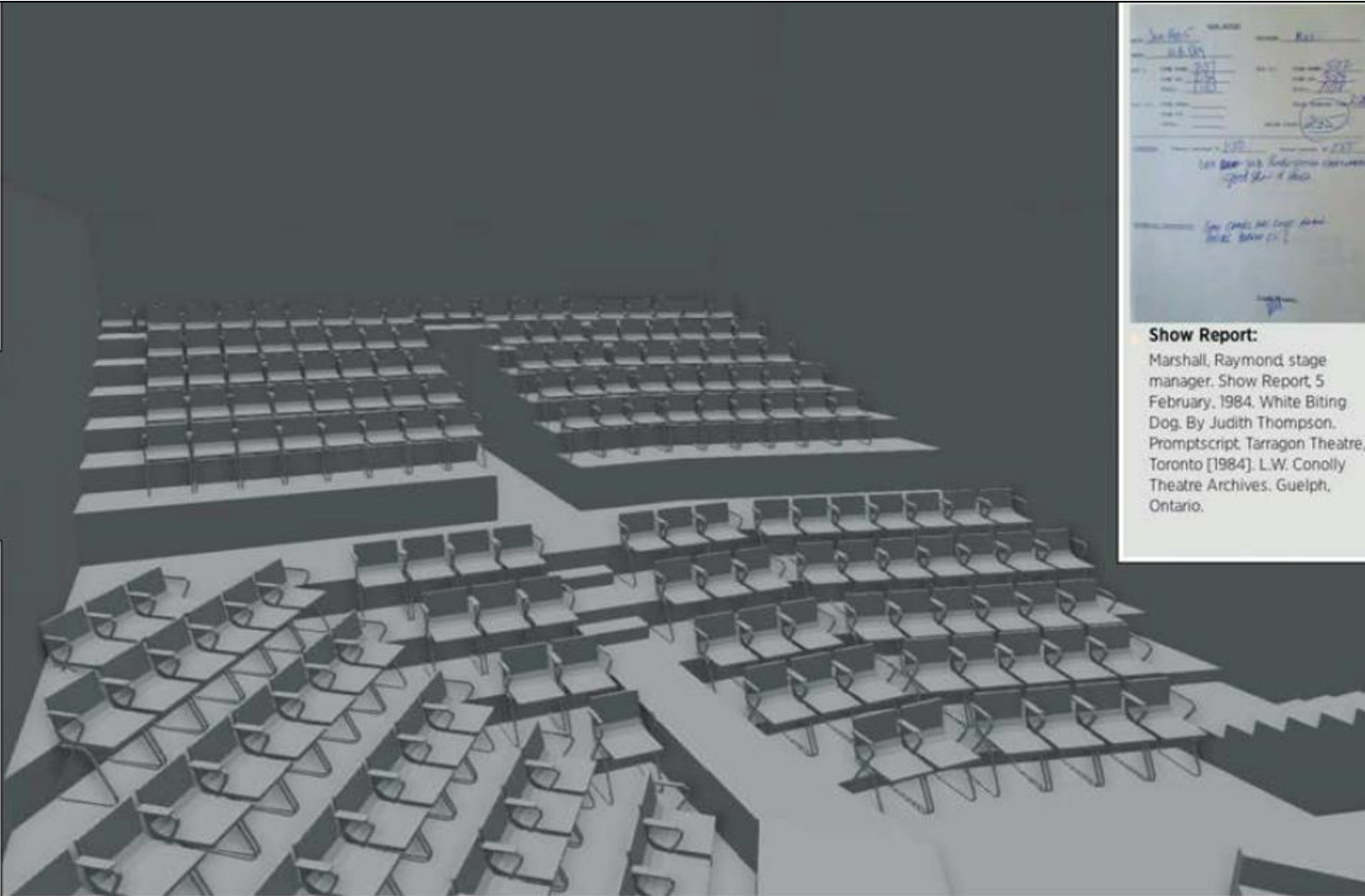
#### Technical Drawings:

LePage, Sue, designer.  
Technical Drawings for White Biting Dog. Tarragon Theatre, Toronto, 1984. L.W. Conolly Theatre Archives, Guelph, Ontario.



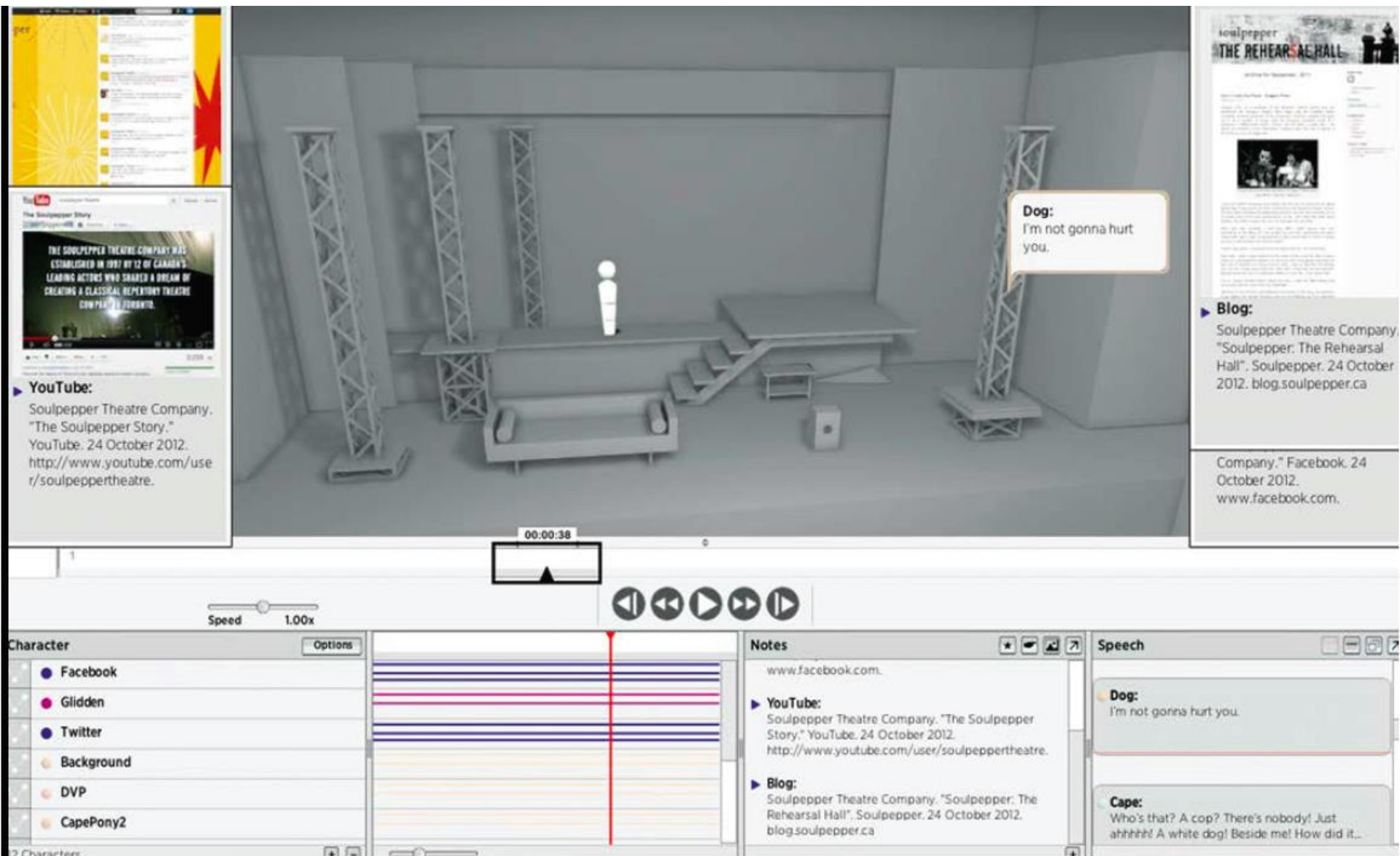
#### Extended Drawings:

LePage, Sue, designer.  
Technical Drawings for White Biting Dog. Tarragon Theatre, Toronto, 1984. L.W. Conolly Theatre Archives, Guelph, Ontario.



#### Show Report:

Marshall, Raymond, stage manager. Show Report, 5 February, 1984. White Biting Dog. By Judith Thompson. Promptsript Tarragon Theatre, Toronto [1984]. L.W. Conolly Theatre Archives, Guelph, Ontario.



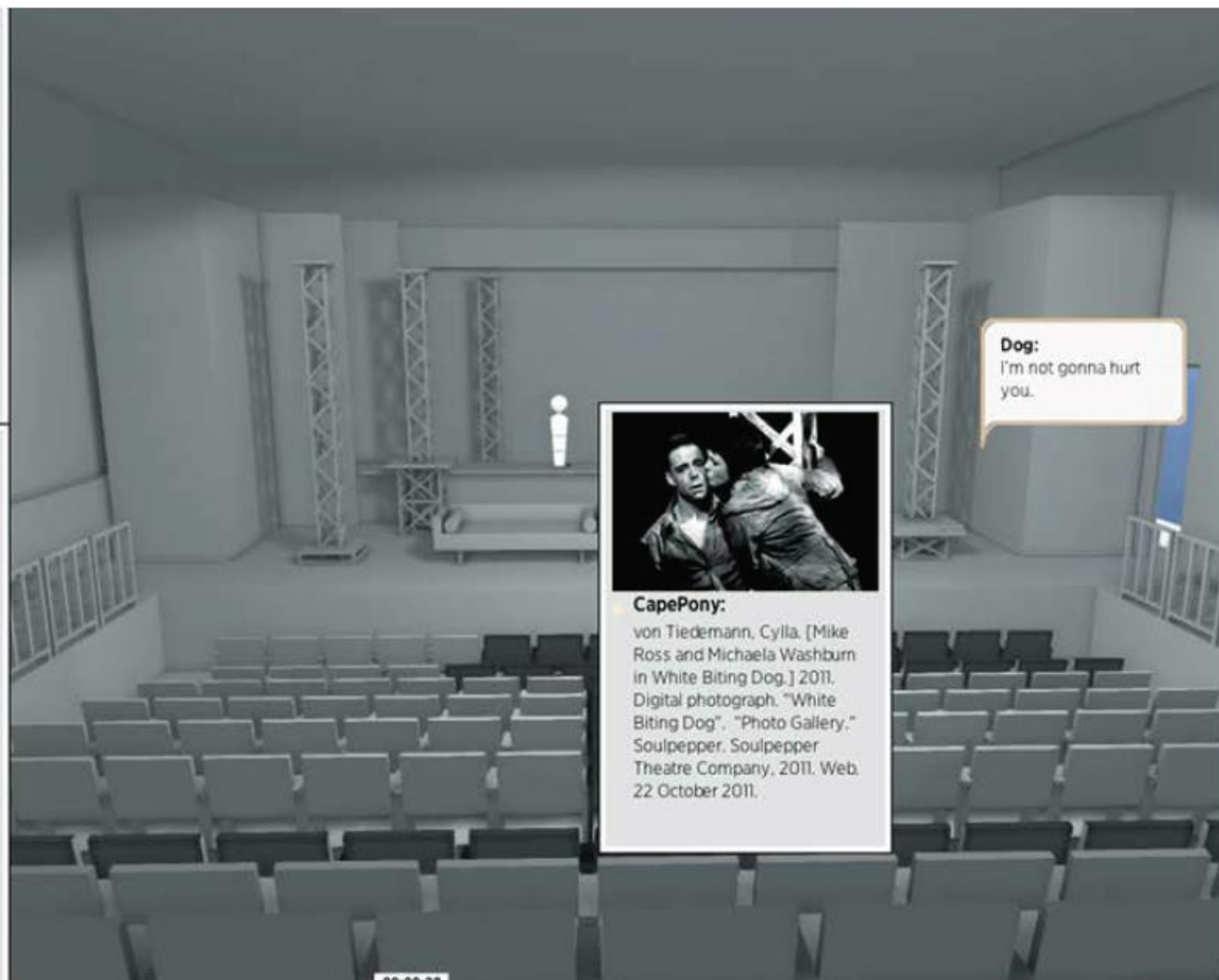
Kelly Read design for Judith Thompson's *White Biting Dog* at Soulpepper Theatre (2011)



**Facebook:**  
Soulpepper Theatre Company.  
"Soulpepper Theatre  
Company," Facebook. 24  
October 2012.  
[www.facebook.com](http://www.facebook.com).



**Blog:**  
Soulpepper Theatre Company.  
"Soulpepper: The Rehearsal  
Hall", Soulpepper. 24 October  
2012. [blog.soulpepper.ca](http://blog.soulpepper.ca)



**CapePony:**

von Tiedemann, Cylla. [Mike  
Ross and Michaela Washburn  
in White Biting Dog.] 2011.  
Digital photograph. "White  
Biting Dog". "Photo Gallery."  
Soulpepper. Soulpepper  
Theatre Company. 2011. Web.  
22 October 2011.

**Dog:**  
I'm not gonna hurt  
you.



**YouTube:**  
Soulpepper Theatre Company.  
"The Soulpepper Story."  
YouTube. 24 October 2012.  
<http://www.youtube.com/user/soulpeppentheatre>.



**Twitter:**  
Soulpepper Theatre Company.  
"Soulpepper Theatre  
@Soulpepper." Twitter. 24  
October 2012.  
<https://twitter.com/Soulpepper>



# Scholarly Reading

## ~~Visualization~~ as Experience

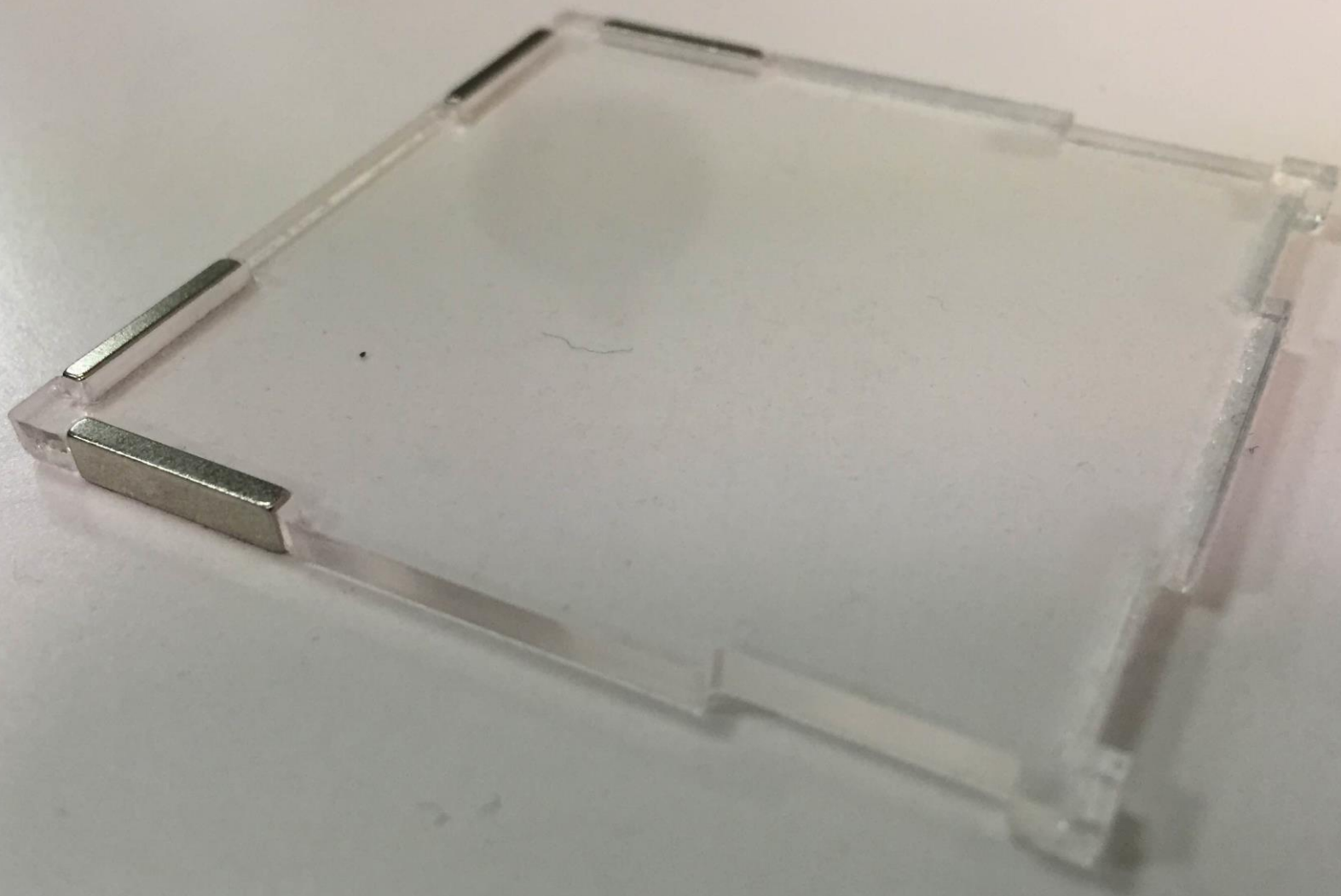
1. Perceptibility
2. Pre-knowledge
3. Comprehension
4. Utility
- 5. Interpretation**
6. Engagement
7. Outcome
8. Purpose

- Tomoko Ichikawa (2015)

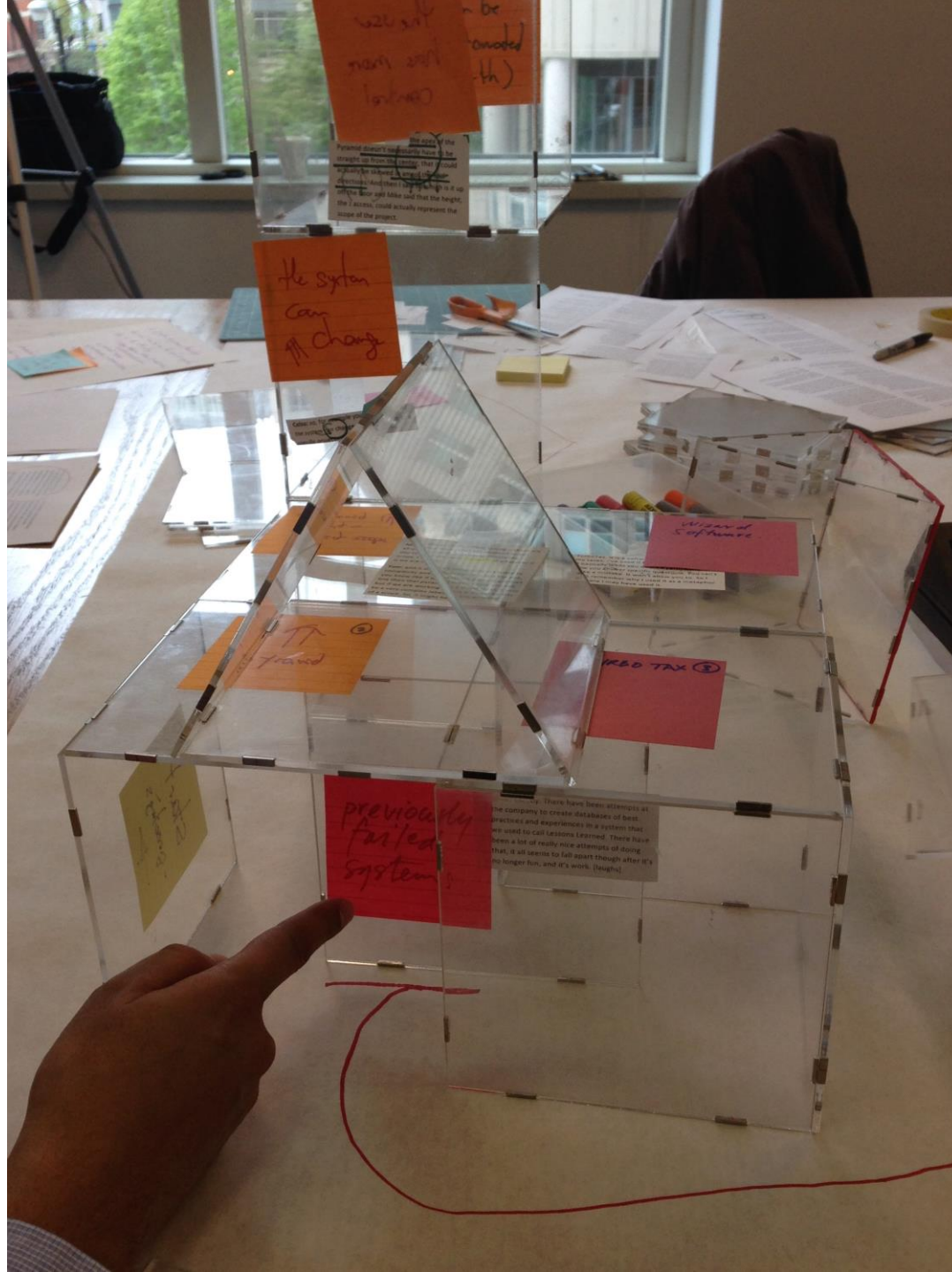




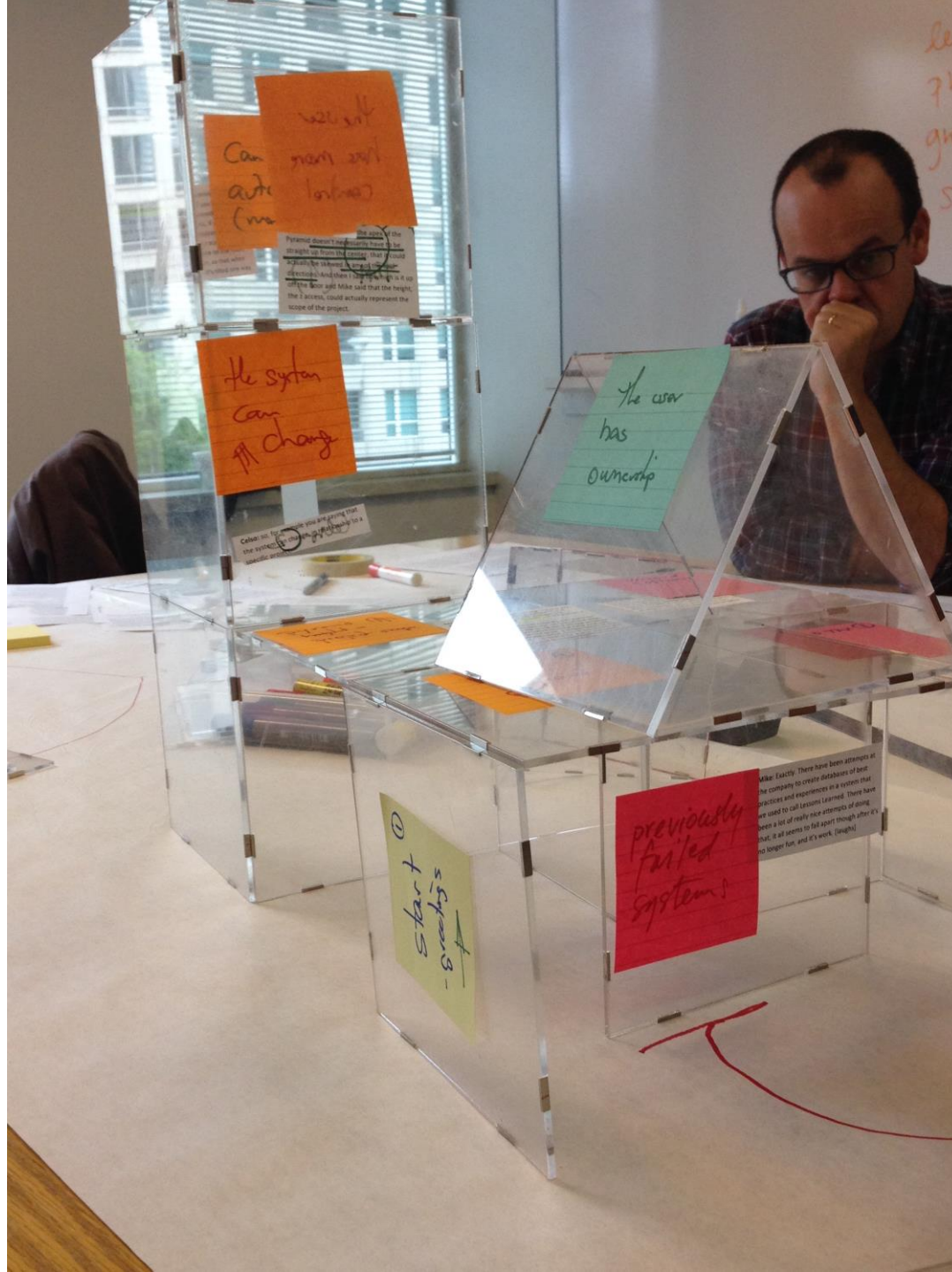


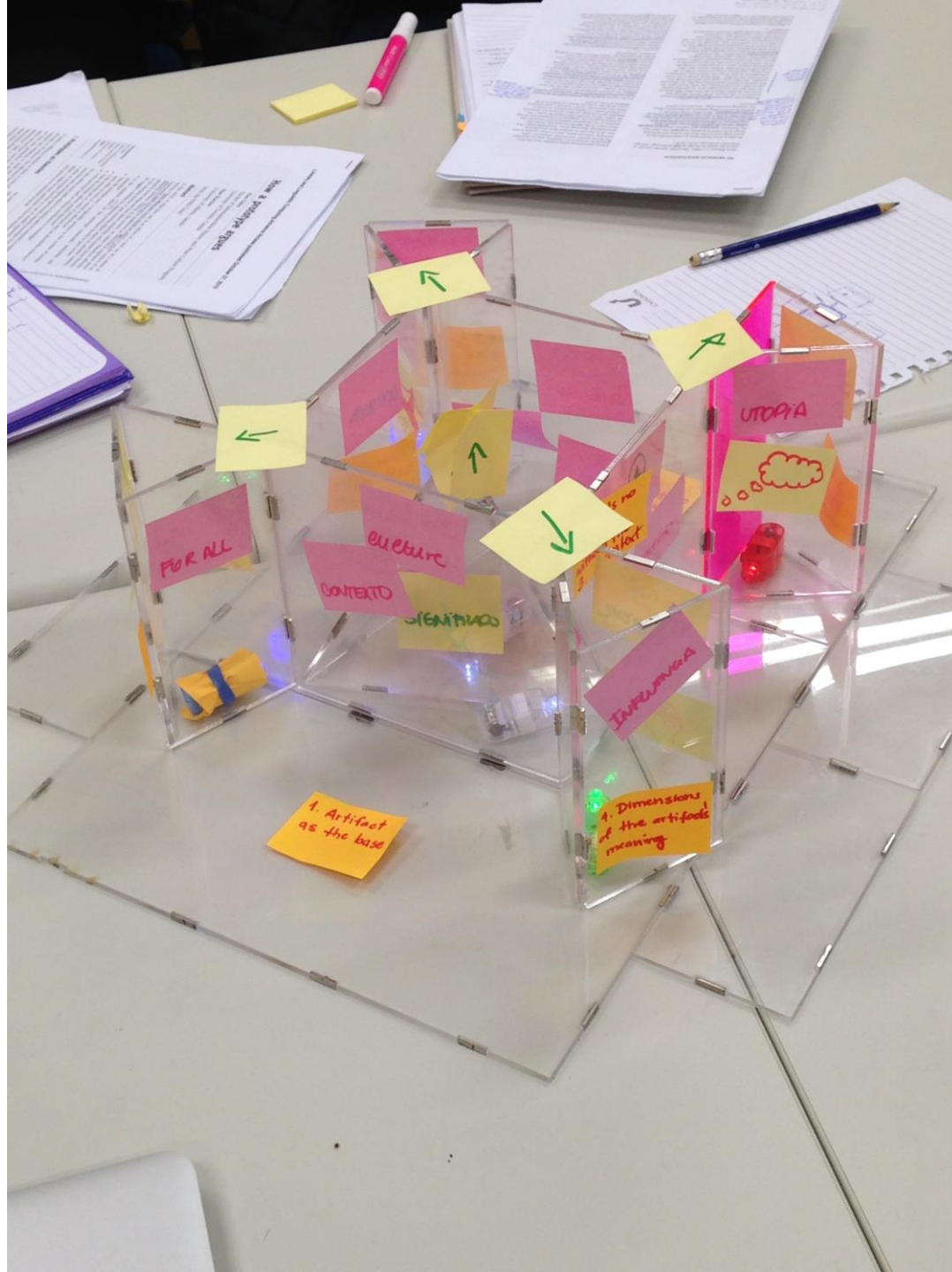




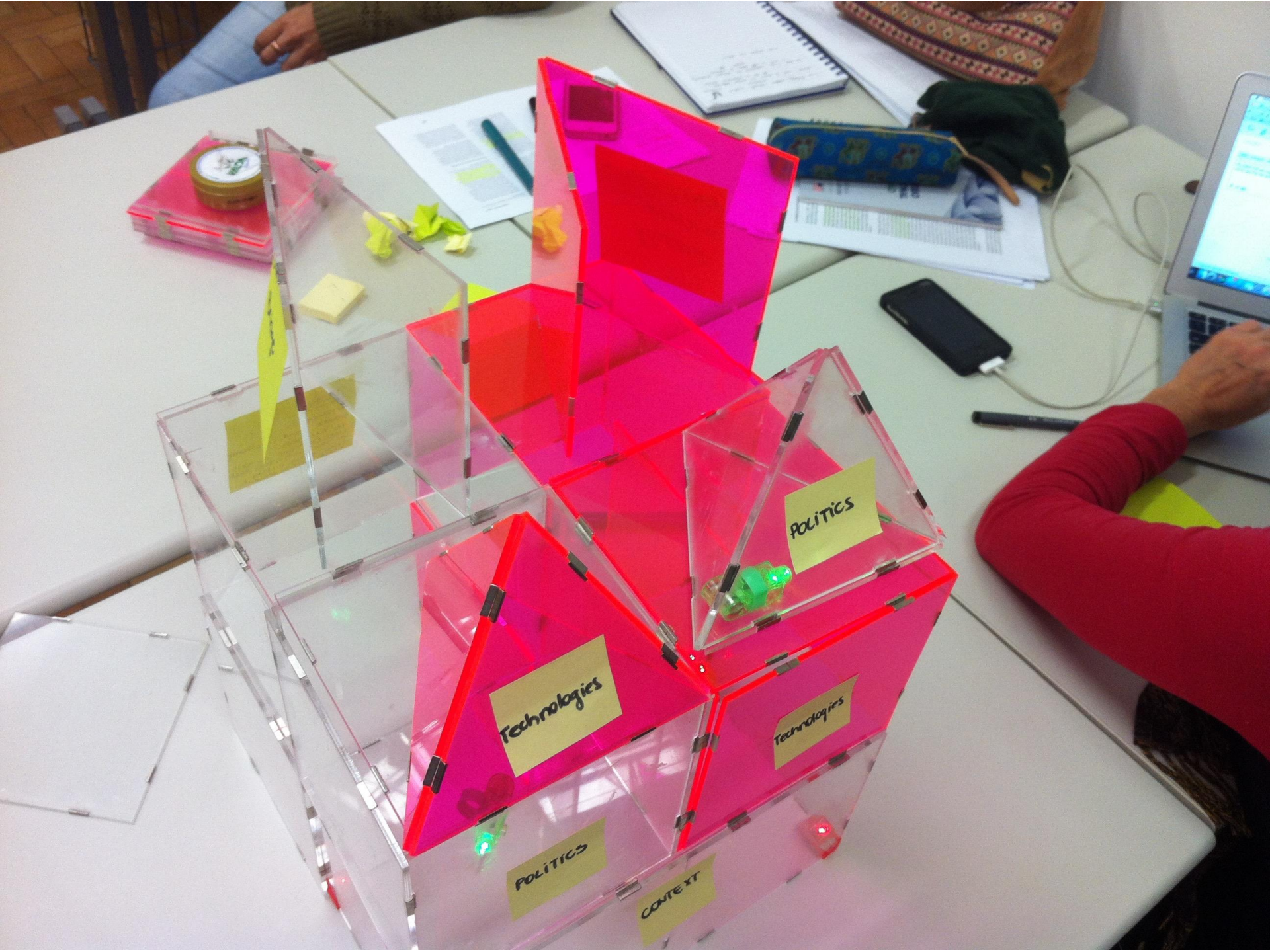




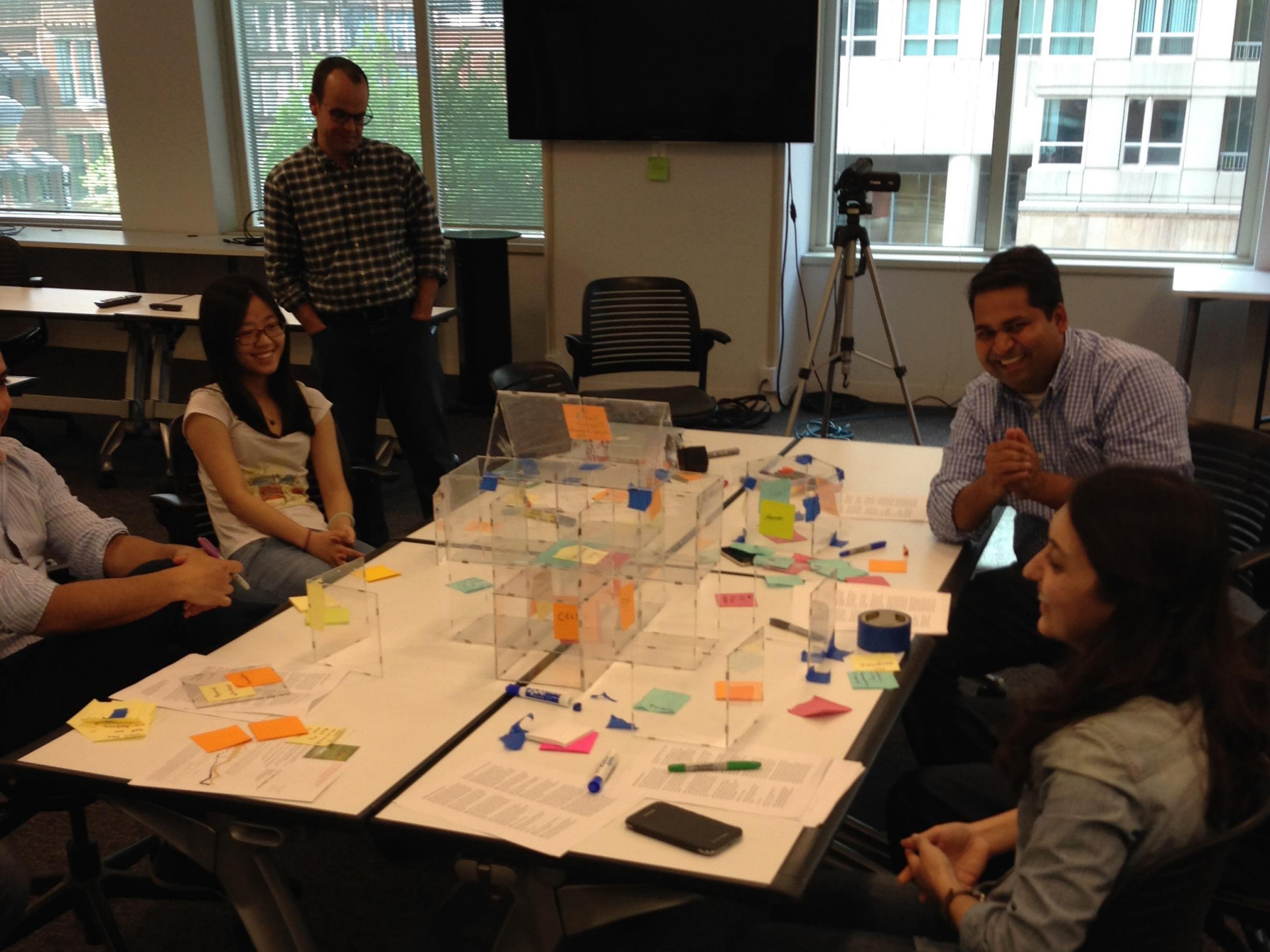






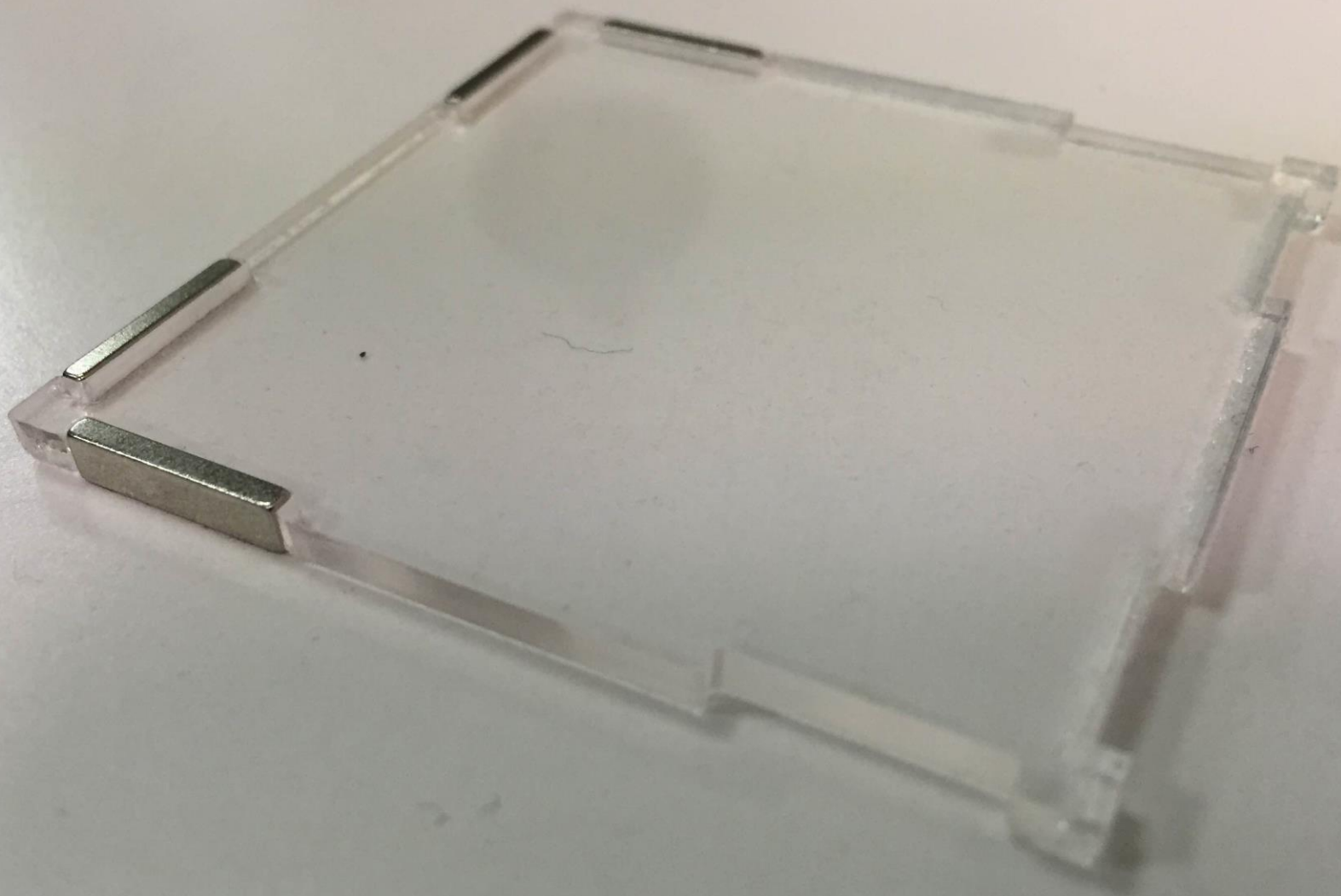












Since it is not always possible to predict all of the reader's tasks in advance, one suggestion is that we attempt to allow dynamic construction of pages,

**Too skeuomorphic?**

while this requires some stable “templates” but also the ability to create custom ones.

Since it is not always possible to predict all of the reader's tasks in advance, one suggestion is that we attempt to allow dynamic construction of pages, where there are some stable "templates" but also the ability to create custom ones.

Maybe not



## **Summary of the presentation:**

- Reviewed digital scholarly editing insights
- Considered experience of scholarly readers
- Provided examples of possible interfaces

Stan Ruecker

Associate Professor

Institute of Design

Illinois Institute of Technology

Chicago IL USA

[sruecker@id.iit.edu](mailto:sruecker@id.iit.edu)

**Thank you!**