

# narratives, networks, and art

K. Hunter Wapman, Brian Lubars, Carl Mueller, Dan Larremore

# what we're gonna talk about

1. how is a book a network?
  - construction
  - rationale
2. ok sure, but why? so what?
  - case study: David Foster Wallace's *Infinite Jest*

# *cargo* and/or takeaways:

(hopefully)

- art has structure
- art exhibits complexity
- how can we measure it?
- can literary analysis *be science*?

(yes, there's a field: Digital Humanities)

# how is a book a network?

start by asking: what do we want to know?

- we have to *choose*
- choice impacts *what we will see*

we wanted to model *reader experience*

# how does a reader experience a book?

- statically?
  - ... no, reading is *something you do*
  - doings take time
- dynamically?
  - 👉

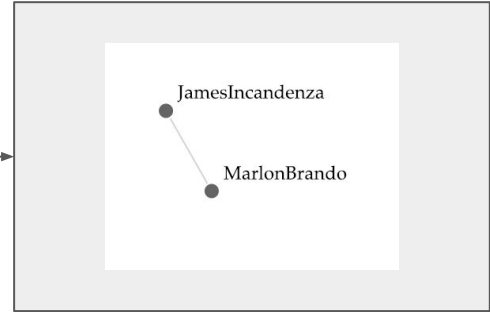
# how did we represent a book as a network?

- an accumulating temporal network
  - sections → layers
- nodes:
  - character mentions
- edges:
  - co-occurrences: characters occurring within  $k$  tokens (words) of each other
    - question: how to choose  $k$ ?

# accumulating the network

Layer  
1

"It's **Marlon Brando**'s fault, **Jim**. Your mother back in California before you were born, before she became a devoted mother and long-suffering wife and breadwinner, son, your mother had a bit part in a Marlon Brando movie. Her big moment. Had to stand there in saddle shoes and bobby sox and ponytail and put her hands over her ears as really loud motorbikes roared by. A major thespian moment, believe you me."  
- James Orin Incandenza (section 52)



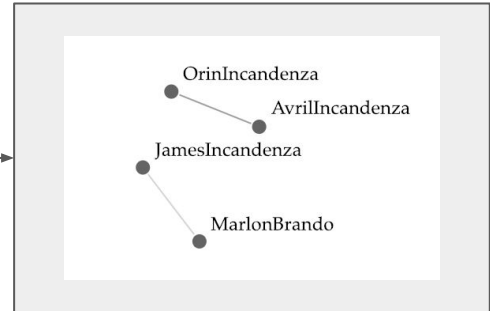
+

+

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Layer  
2

"my eldest brother **Orin** says he can remember being in the home's backyard with our mother in the early spring, helping **the Moms** till some sort of garden out of the cold yard."  
- Hal Incandenza (section 3)

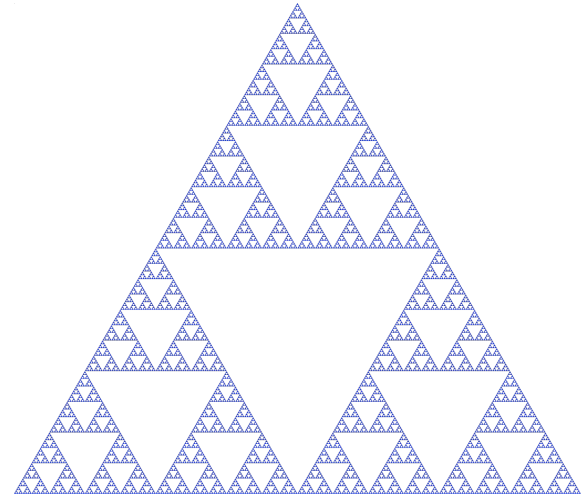


ok sure, but why? so what?

case study: David Foster Wallace's  
*Infinite Jest*



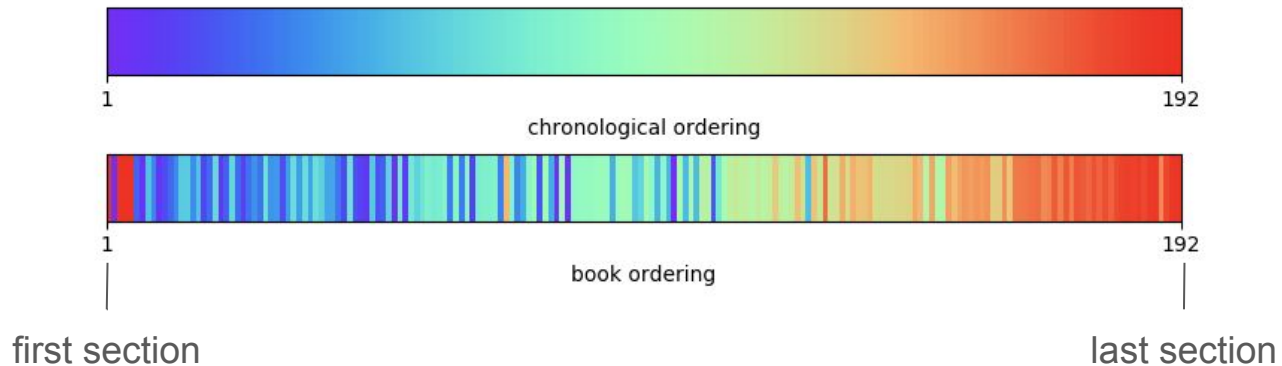
but and so and but so\* what about  
structurally



\* actually appears in the book

# why *Infinite Jest*?

- events are not in chronological order
- we can *make a comparison* between:
  - book ordering
  - chronological ordering

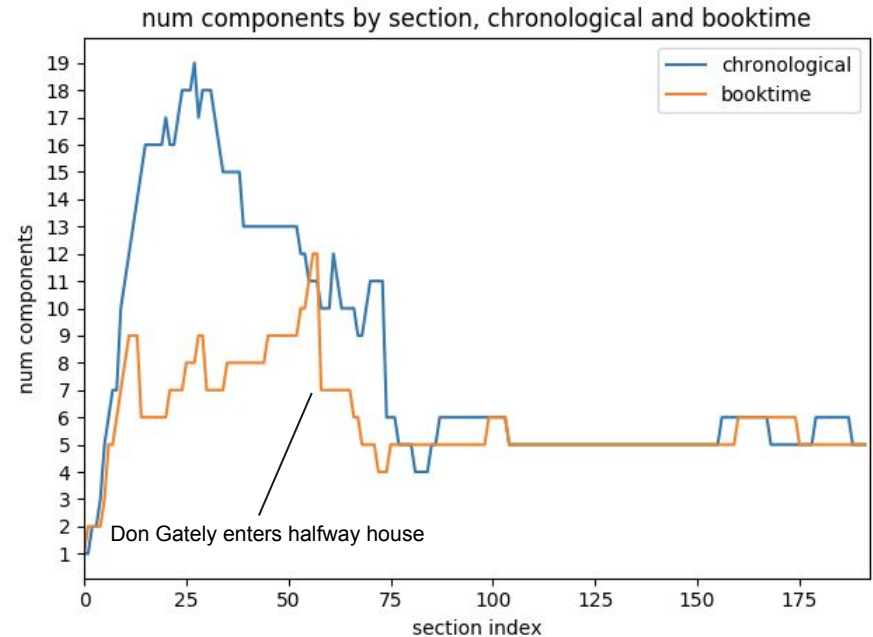


# questions:

1. how does the book's structure impact its narrative?
2. why is it structured this way?

# Q1: how does the book's structure impact its narrative?

- components → separate plotlines

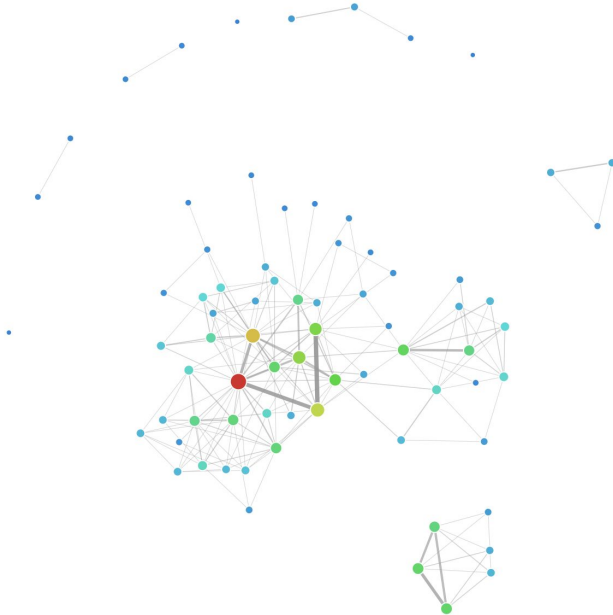


## Q2: why is it structured this way?

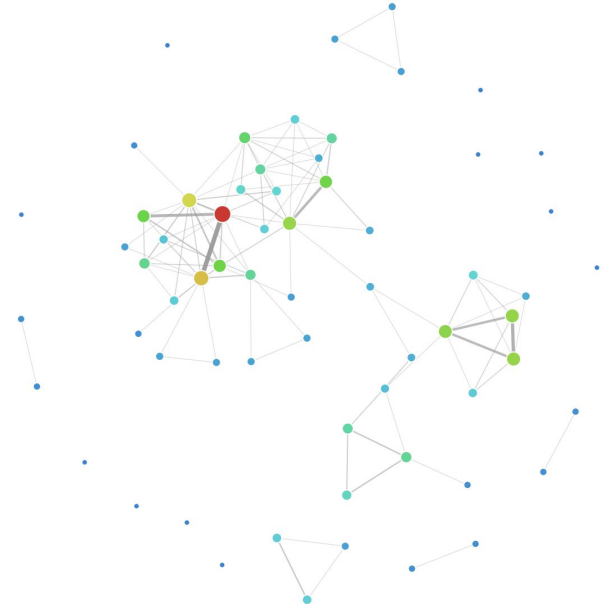
- 12 vs 19 plot lines!!!
- out-of-order sections → context/exposition
- in-order sections → define the narrative
- book reflects a balance between min/max plot lines
  - reflecting the balance between a challenging reading experience and an incomprehensible one?

# how do these two orderings look?

book ordering



chronological ordering



vebveb

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## *cargo* and/or takeaways: (overoptimistically)

- components are a proxy for plotlines
- the number of plotlines is a good proxy for narrative complexity
- what other network measures would tell us interesting things about books?

(unshameless) webweb plug

[webwebpage.github.io](http://webwebpage.github.io)