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# CS 111: Program Design I

## Lecture 19: Copyright, Terms of Use, Privacy

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# **COPYRIGHT, TERMS OF USE**

# Projects

- Data analytics/data mining

- Supreme Court database

- Web Crawler

- Network analysis



Copyright  
Contracts  
Privacy  
Government surveillance

- First, a quick network analysis preview

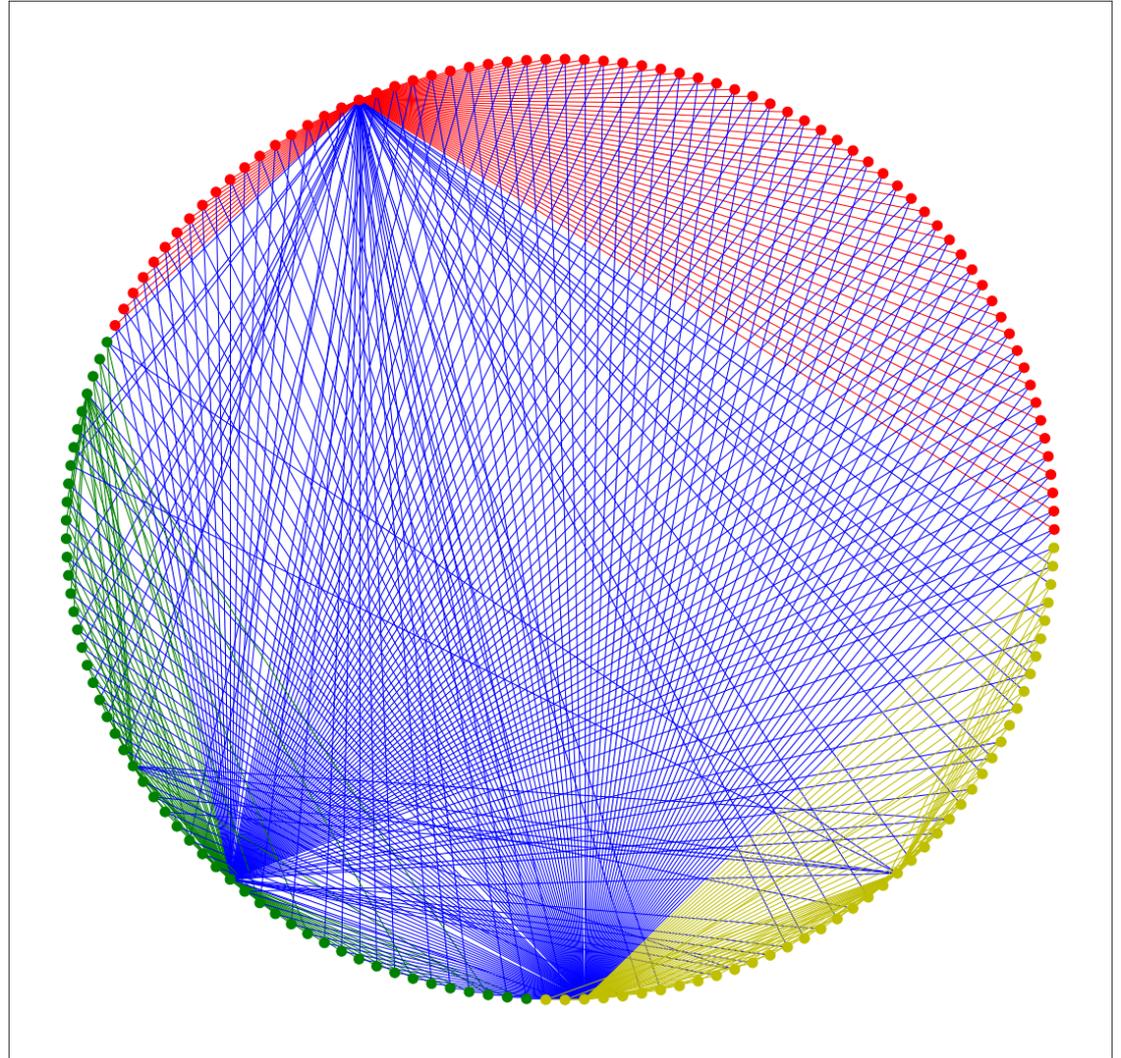
# .csv Database of Twitter Connections

	A	B	C	D
1	a	b		
2	Chelsea Rider	Joe Rogan		
3	Katy DeLeon	Predictive Analytics		
4	Computational Legal	Andrew Bridges		
5	Leigh Cressman	Predictive Analytics		
6	Jacques de Vrij	James D. Williams		
7	James Williams	Computational Legal		
8	Groovy Lens   DTisseu	Predictive Analytics		
9	Alan Mills	Computational Legal		
10	Computational Legal	IIT Student Gov		
11	Lisa Chesterfield	Computational Legal		
12	HeroX	James D. Williams		
13	Sarah Esther Lageson	Computational Legal		
14	Stuart Anderson	Computational Legal		
15	Lauran	Predictive Analytics		
16	Computational Legal	Jason Hiner		
17	James D. Williams	Frank D. DiMatteo		
18	Legal Tracker	Westlaw		
19	Predictive Analytics	Medical News		
20	Logikcull	Computational Legal		
21	Risto HÅ½bner	Legal Tracker		
22	Ashish Koul	Predictive Analytics		

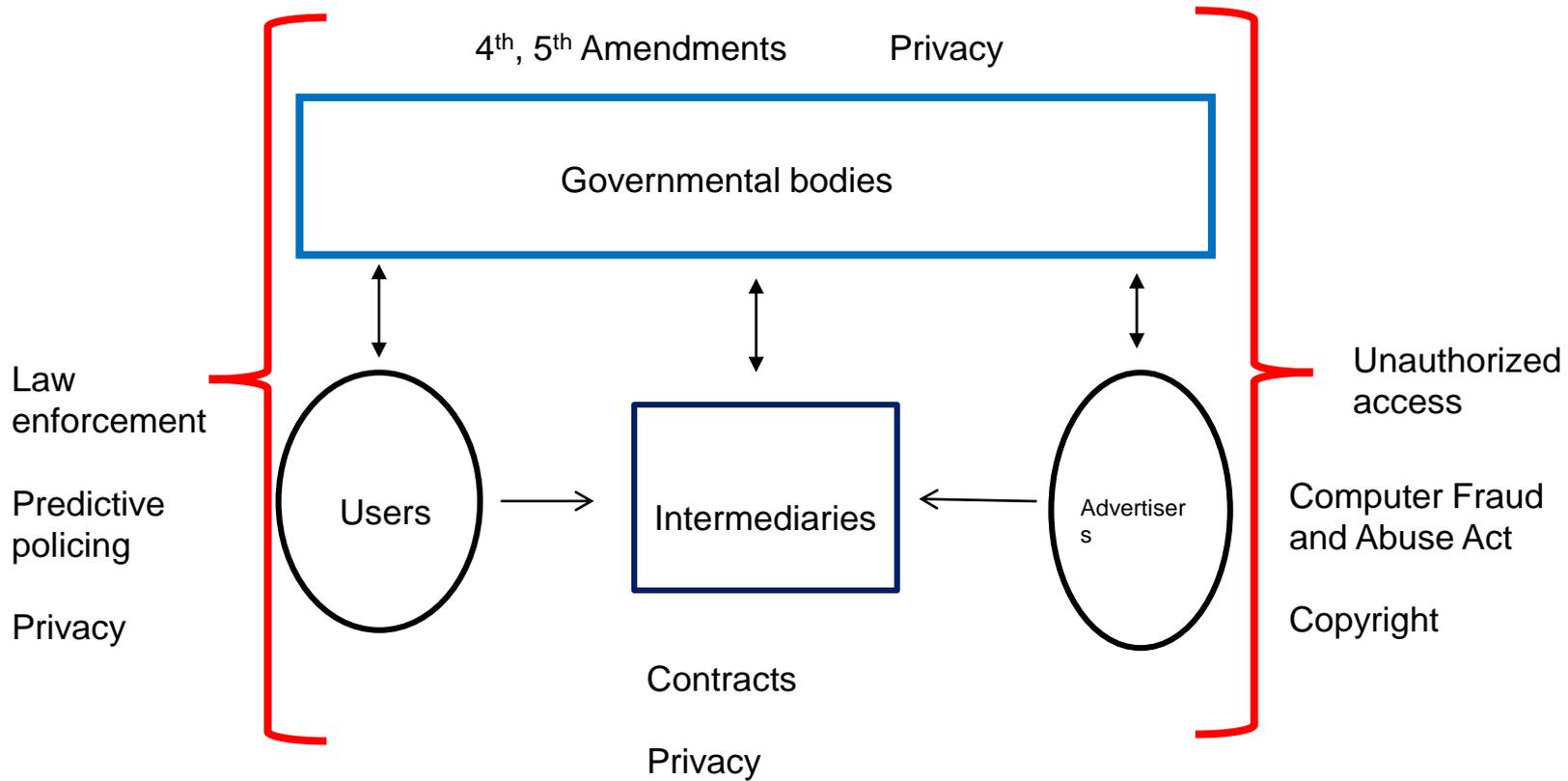
There are  
nearly  
40,000  
rows

# Four Communities

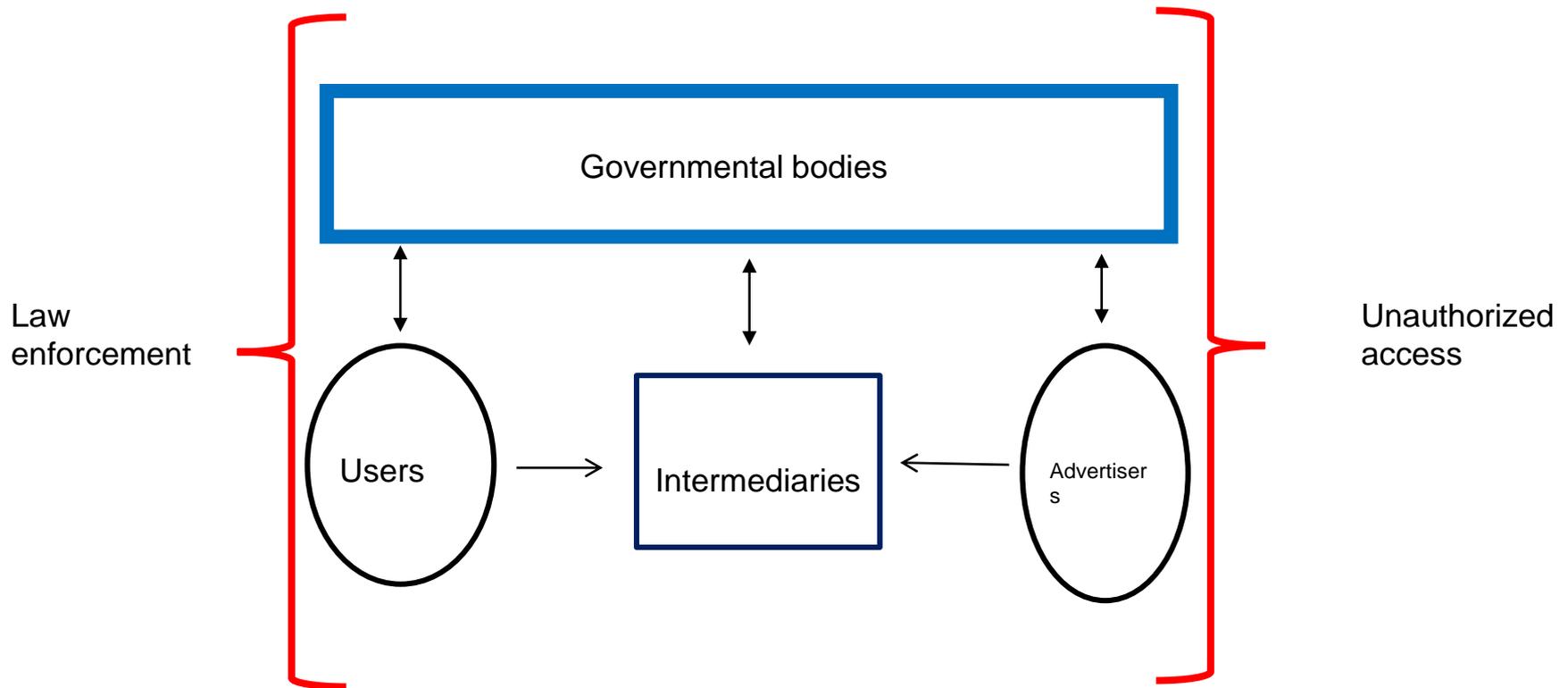
Members of each community are more connected to each other than they are to members of the other communities.



# A Structure of the 21<sup>st</sup> Century



# Encryption, 4<sup>th</sup> and 5<sup>th</sup> Amendments



# Crawler, Copyright, and Contracts

```
import urllib.request as ur
```

```
def get_page(url):
```

```
    """Returns text of url as string"""
```

```
    page = ur.urlopen(url)
```

```
    start = page.read ()
```

```
import pandas
```

```
f = open('permission_denied.csv', 'r')
```

```
to_use = pandas.read_csv(f)
```

Contracts  
(and CFAA)

The diagram consists of two rectangular boxes on the right side of the slide. The top box has a red border and contains the text 'Contracts (and CFAA)'. The bottom box has a blue border and contains the text 'Copyright and contracts'. Four arrows originate from these boxes: a red arrow points from the top box to the line 'page = ur.urlopen(url)'; a red arrow points from the top box to the line 'start = page.read ()'; a blue arrow points from the bottom box to the line 'start = page.read ()'; and a blue arrow points from the bottom box to the line 'to\_use = pandas.read\_csv(f)'.

Copyright  
and  
contracts

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# Copyright: A Bundle of Rights

- The right to
  - make copies and distribute copies of the work.
  - make a derivative work.
  - publicly display the work
  - publicly perform the work
- 17 U. S. C. §106.

# Why Have Copyright?

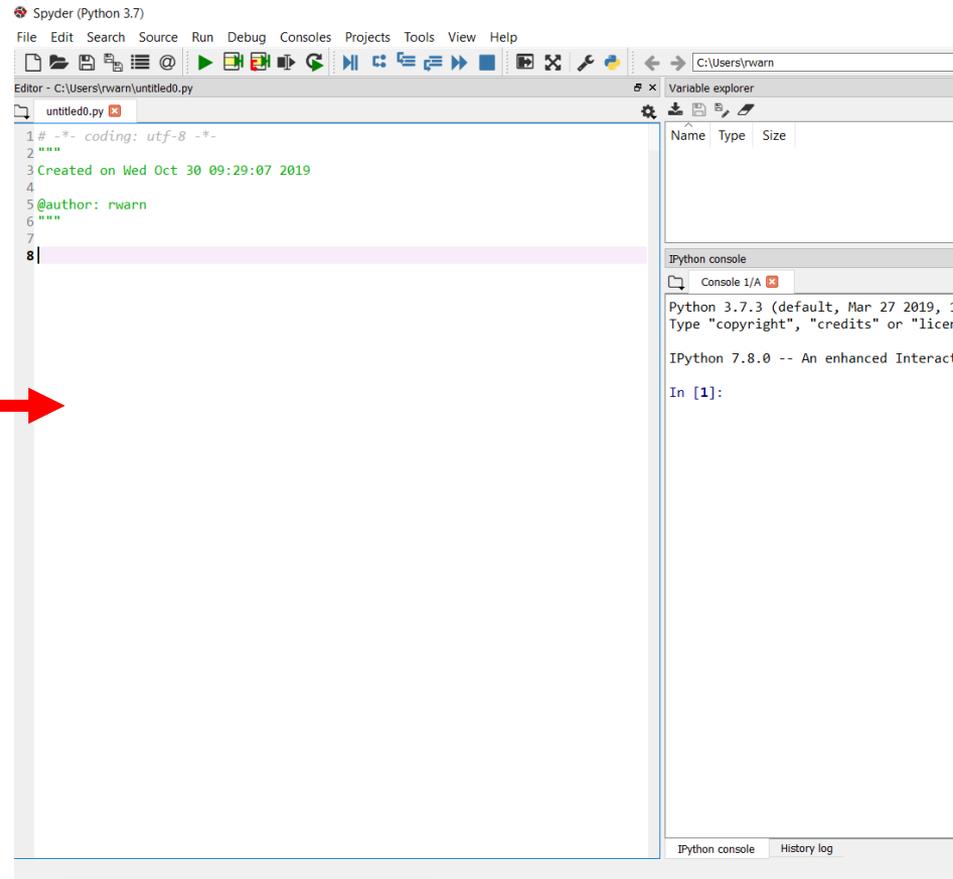
- To promote progress in the arts and sciences.
- Assumptions:
  - We want enough progress in the arts and sciences.
  - We won't have *enough* unless authors can get paid for their works.
  - They won't make enough money if people can copy their works for free.

# Can You Do This?

the neighbors of all currently infected nodes are marked as infected:

```
def propagate_simple(G):
    to_infect = set([])
    # Find infected nodes
    for v in G.nodes():
        if G.nodes[v]['infected'] == False:
            # Mark all neighbors for infection
            for w in nx.neighbors(G, v):
                if G.nodes[w]['infected']:
                    to_infect.add(v)
                    break
    # Infect marked nodes
    for v in to_infect:
        G.nodes[v]['infected'] = True
```

Copy?



# Fair Use

- The doctrine of fair use allows someone to use a copyrighted work *without violating the copyright even though the person did not get permission for the use from the copyright holder.*
  - 17 U. S. C. §107.
- The rationale is the same as the rationale for not allowing copyright in ideas: allowing “fair use” promotes “the Progress of Science and useful Arts.”

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# The Fair Use Factors

- 1) The purpose and character of the use,
- 2) The nature of the copyrighted work.
- 3) The amount and substantiality of the use.
- 4) The effect of the use upon the potential market for or value of the copyrighted work.

# Princeton University Press v. Michigan Document Services

- Michigan Document Services copied parts of books to make coursepacks for students.
- The coursepacks
  - Allowed professors to select just the materials they wanted to use, and
  - Saved students money.
  - But the materials were copyrighted.
- Fair use?

# Factor Four

- The effect of the use upon the potential market for or the value of the copyrighted work.
  - *The problem:* A “copyright holder can *always* assert some degree of adverse effect on its potential licensing revenues . . . simply because the copyright holder has not been paid a fee to permit that particular use.”
  - *The court’s solution:* “*When there is already a licensing market (or evidence one is likely to develop), the fourth factor comes into play.*”
- How much power does that give the copyright holder to limit fair use?
- My answer: a lot, probably too much.

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# Fourth Factor

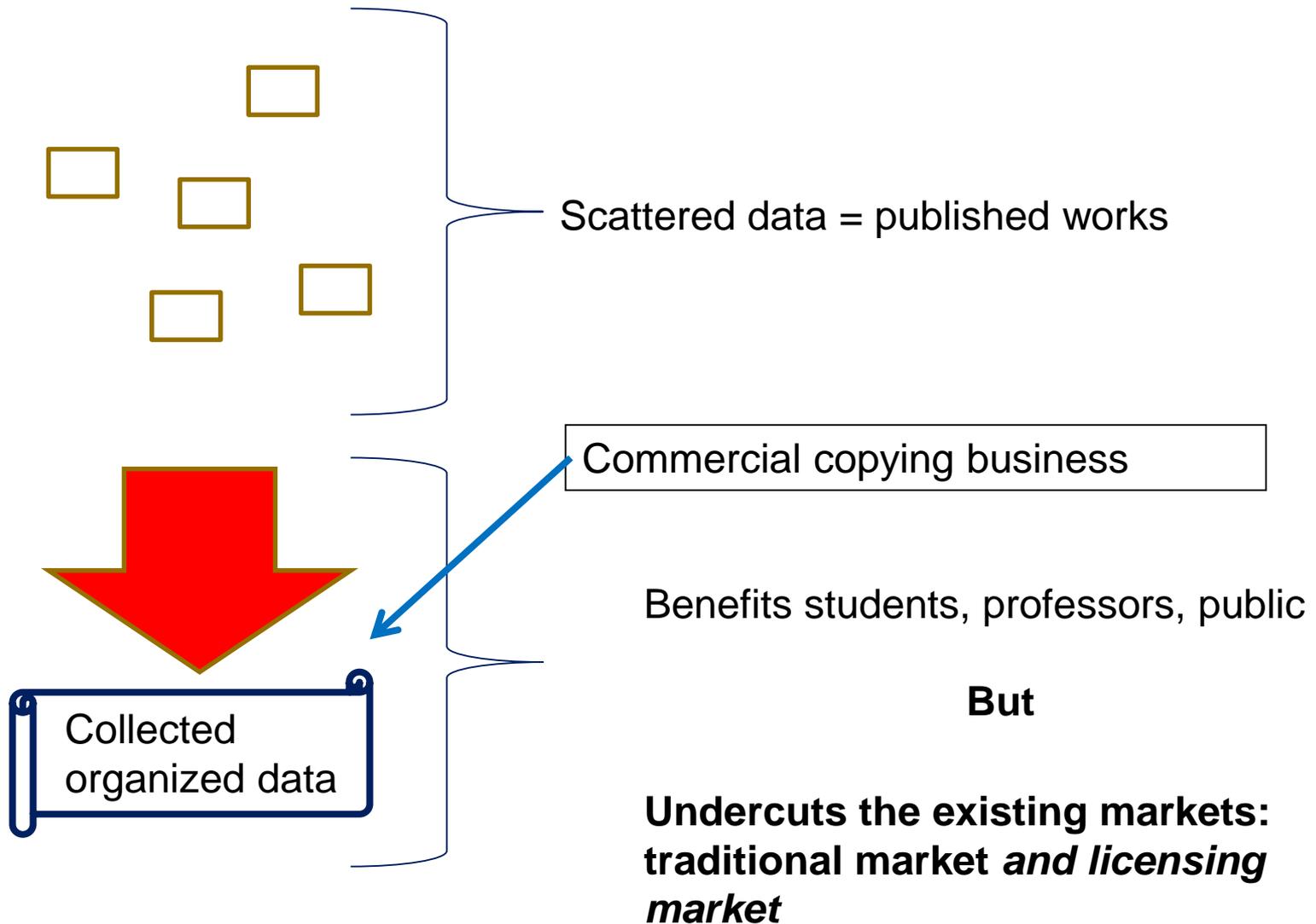
- The effect of the use upon the potential market for or value of the copyrighted work.
- The 1<sup>st</sup> and 4<sup>th</sup> factors can support conflicting conclusions.

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# Princeton University Press v. Michigan Document Services

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- The coursepacks
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  - But the materials were copyrighted.
- Fair use?

# Mich. Document Services



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# Problem and Solution

- *The problem:* The copyright holder can *always* say it lost money because it was not paid a licensing fee.
- *Solution:* When there is already a licensing market (or evidence one is likely to develop), the fourth factor comes into play.

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# An Alternative Approach: Factor One

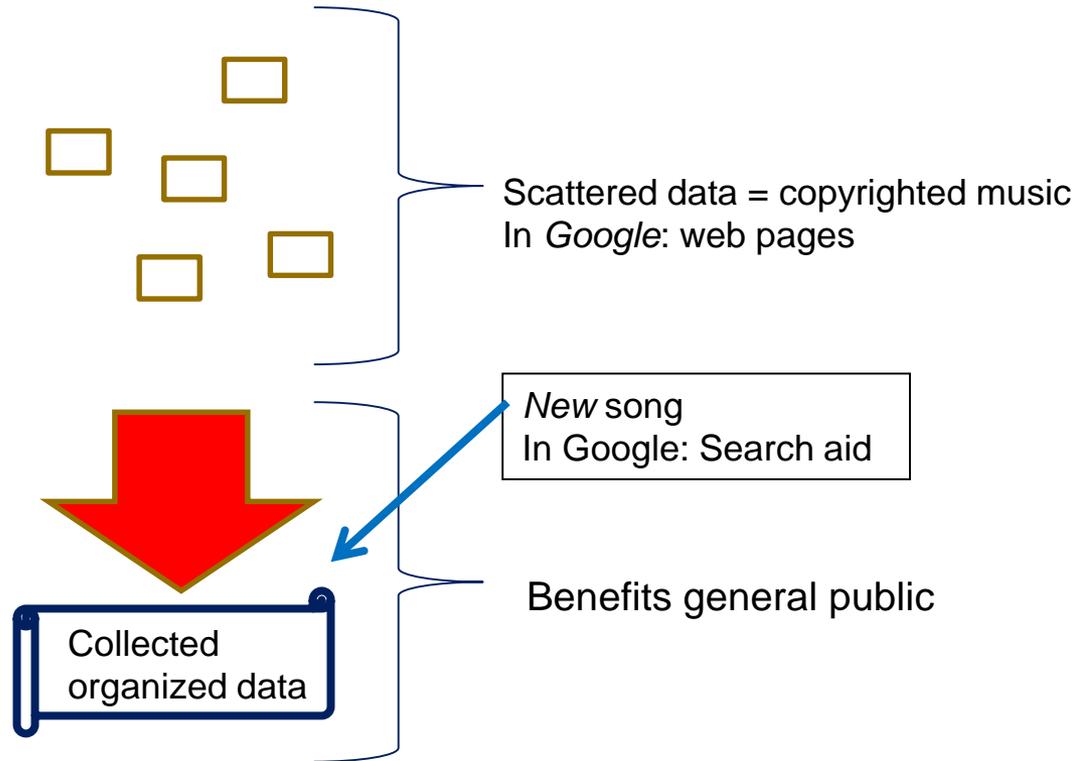
- The purpose and character of the use.
  - Commercial or nonprofit/educational?
  - Is the use transformative?

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# DJ Earworm

- “The United State of Pop” by DJ Earworm, <http://dyearworm.com/united-state-of-pop.htm>, is composed of small parts of the 25 top pop hits of 2007.
- So he transforms what he takes into a new creation.
  - Promotes progress in the arts and sciences.

# DJ Earworm



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# *How* Transformative?

- How transformative does a use have to be?
- There is as yet no clear answer to that question.

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# What About Google?

- How does it search millions of sites without a problem?

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# The robot.txt File

User-agent: \* [Or bot names]

Disallow: /

--Allows nothing

User-agent: \*

Disallow: [blank]

--Allows all

User-agent: \*

Disallow: [one or more, each followed by a url]

# Another Way To Control “The Door”

```
<html>  
<head>  
<title> . . . </title>  
<META NAME="ROBOTS"  
CONTENT="NOINDEX, NOFOLLOW">  
</head>
```

---

```
<META NAME='ROBOTS'  
CONTENT= '...'>
```

- **NOINDEX** - prevents indexing.
- **NOFOLLOW** - prevents following links.
- **NOARCHIVE** - cached copy not available in search results.
- **NOSNIPPET** - prevents caching and description in search results.
- **NONE** - equivalent to "NOINDEX, NOFOLLOW".



# **TERMS OF USE**

# The Contracts Behind the Links

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# Code, CFAA, Copyright, and Contracts

```
import urllib.request as ur # Module for opening URLs
```

```
def get_page(url):
```

```
    """Returns text of url as string"""
```

```
    page = ur.urlopen(url)
```

```
    start = page.read ()
```

```
import pandas
```

```
f = open('permission_denied.csv', 'r')
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to_use = pandas.read_csv(f)
```

CFAA and  
contracts

Copyright  
and  
contracts

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# Terms of Use Agreements

## **3. Safety**

We do our best to keep Facebook safe, but we cannot guarantee it. We need your help to keep Facebook safe, which includes the following commitments by you:

...

2. You will not collect users' content or information, or otherwise access Facebook, using automated means (such as harvesting bots, robots, spiders, or scrapers) without our prior permission.

...

from: <https://www.facebook.com/legal/terms>

# What Can You Put in the Contract?

- *The question: what terms can a business put in a contract it knows consumers will not read and would not understand if they did read?*
- In other words: how much power does the business have to impose terms?
- Is this permissible?
  - “You will not collect users' content or information, or otherwise access Facebook, using automated means (such as harvesting bots, robots, spiders, or scrapers) without our prior permission.”

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# Traditional Standard Form Contracting

- Appears about 100 year ago with the rise in the manufacture of standardized goods.
- Most consumers experience it as “the paper in the box.”
  - The warranty between the buyer and the manufacturer.

# *Steven v. Fidelity and Casualty Co.*

- Mr. Steven bought a life insurance policy before his air trip.
- He had to substitute a different air carrier during the trip. That carrier crashed and Steven died.
- The insurance company denied coverage claiming that the policy did not cover substitute carriers.



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# Amazon As An Example

- Amazon collects massive amounts of information
- In a long-term, high interaction relationship,
- In which it needs flexibility
  - because of rapid technological and economic change.
- So it needs to update its terms of use and privacy policies.

# Clauses in Standard Form Contracts

## ■ Three types of clauses

### □ *Interactional:*

- Parties, type of good or service, price, delivery, etc.

### □ *Risk allocation:*

- Who bears what risk

### □ *Normal course:*

- Privileges and obligations during the proper functioning of the product or provision of the service.

# LinkedIn Updating Example

- LinkedIn: 16 privacy policy changes, 10/23/15.
  - <https://www.linkedin.com/legal/pop/pop-privacy-policy-summary>.
  - “information we receive through address book imports may include *phone numbers*.”
  - “advertising partners may associate *personal information* collected by the advertiser directly from you with our cookies and similar technologies.”
  - “we use member information for *research and development*.”

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# The Standard Practice

- “1.1 If you choose to use NYTimes.com . . . you will be agreeing to abide by all of the terms and conditions of these Terms of Service between you and The New York Times Company.
- 1.2 We may change, add or remove portions of these Terms of Service at any time, which shall become effective immediately upon posting . . . by continuing to use this Site, you agree to any changes.”

# Limits

- There must be some limits on the terms a business can introduce in a retroactively updatable agreement.
  - Otherwise there is *no agreement*.
- When one party has the discretionary power to change terms, there is “duty imposed on one having the discretionary power to affect the rights of the other party to exercise that power *in a manner consistent with the covenant of good faith and fair dealing.*”
  - *Perdue v. Crocker National Bank* (1985).

# The Obligation of Good Faith

- In a business/consumer contract, complying with the obligation of good faith means not violating the reasonable expectations of consumers.
- When do you violate them?
- Restatement 211(3): “Where the other party [= **the business**] has reason to believe that the party manifesting such assent [= **the consumer**] would not do so if he knew that the writing contained a particular term, the term is not part of the agreement.”