

# The Effects of Copyright Law on the Reuse of Digital Content

Abhishek Nagaraj

MIT

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# Outline

1 Theory

2 What is the study?

3 Conclusion

# Jack Valenti (1)



## Jack Valenti (2)

Copyright is out of control. How – even if it's out of control how does it stifle invention? Anybody can make a movie, and the fact that that movie has a copyright, how does that hurt the Internet, for God's sake?

# Larry Lessig (1)



## Larry Lessig (2)

copyright is stifling innovation, inventiveness and progress in this new digital world

## Larry Lessig (3)

without digital production copyright wouldnt matter so much to inventiveness and we have to rethink the extent of copyright law

## Larry Lessig (4)

It's because of the Internet, Jack. It's because of the opportunity that the Internet presents that we've got to rethink the extent of copyright, not whether we should have copyright or not.



# Solution

WIKIPEDIA!

The biggest community of innovative, creative talent that depends on Wikipedia



November 2008



Magazines

[at view](#)  
[over view](#)



[ARA Journal](#)

Dec 2002 - Vol. 88



[Advanced Packaging](#)

Jan-Feb 2009 - Vol. 18, No. 1



[The Advocate](#)

Jul 18, 2006 - No. 967



[The Alcalde](#)

May-Jun 2011 - Vol. 99, No. 5



[American Cowboy](#)

Aug-Sep 2008 - Vol. 15, No. 2



[American Motorcyclist](#)

Dec 2007 - Vol. 61, No. 12



[American Woodworker](#)

Dec 1999 - No. 77



[Ancestry magazine](#)

Mar-Apr 2010 - Vol. 28, No. 2



[Anthropologica](#)

2006 - Vol. 48, No. 2



[Arts & Crafts Homes and the Revival](#)

Summer 2010 - Vol. 5, No. 3



[Atlanta Magazine](#)

Aug 2008



[Australian Mammal Society](#)

Jun 1994 - Vol. 17



[AUUG Conference Proceedings](#)

1993



[AUUGN](#)

Sep 2003 - Vol. 24, No. 3



[Backpacker](#)

Nov 2009



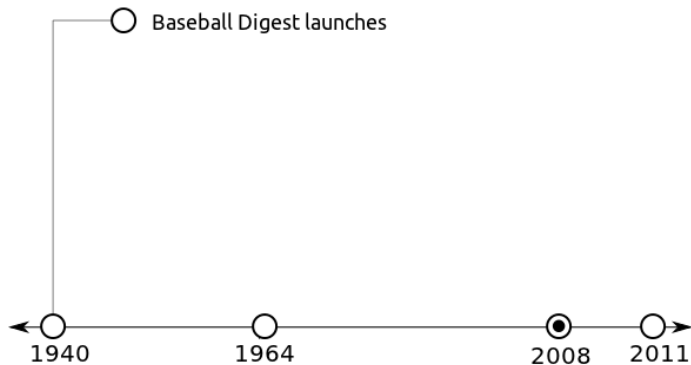
[Baseball Digest](#)

Sep-Oct 2009 - Vol. 68, No. 7

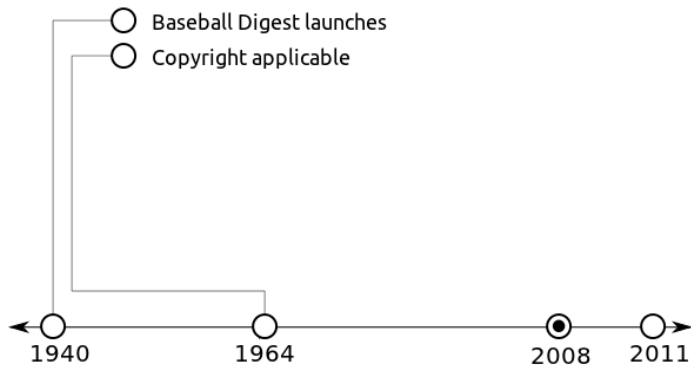
# Timeline



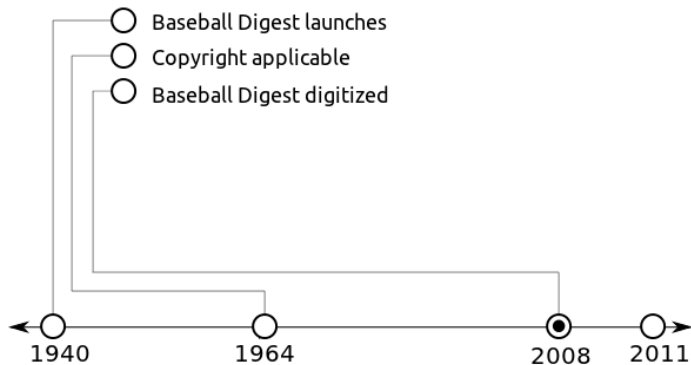
# Timeline



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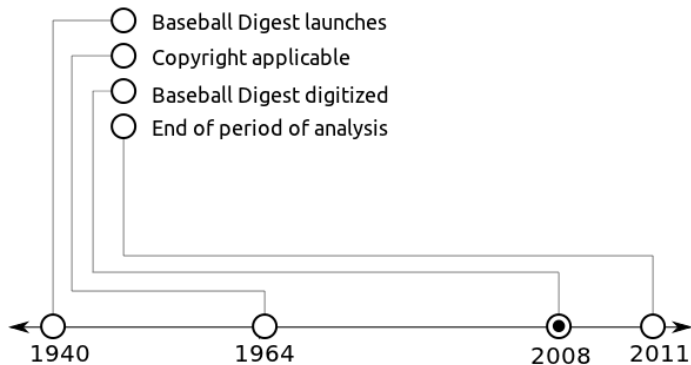


# Timeline

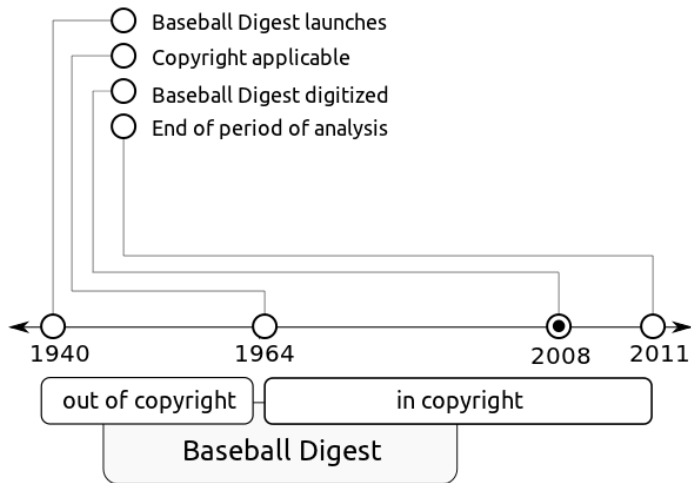




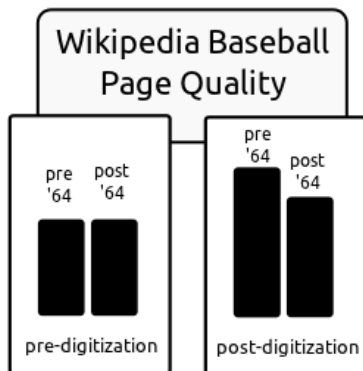
# Timeline



# Timeline



# Timeline



# Putting it all together – The Baseball Digest Experiment

The screenshot shows the Wikipedia article for **Johnny Callison**. A red 'X' is placed over the search bar at the top right. The article text includes:
 

- Johnny Callison** (born **John Henry Callison**)
- John Henry Callison** (1921–2009) was an American right fielder. If Major League Baseball had existed for the years with the *Philadelphia Phillies*, from 1960 to 1969, the leader in batting average in 1961, better than any other player, and a six-time general manager for the Phillies as well as the manager for the first American Major League baseball team that did not have home field advantage in the National League, the Philadelphia Phillies.
- From 1960 to 1969, Callison became the first manager to manage two major leagues. He was signed to the Chicago White Sox and then again in 1970, to manage the San Francisco Giants in his last season, when he led the 1980 Sox to a World Series victory. The next season, he was awarded the highest honor in baseball, being inducted into the Baseball Hall of Fame in 1992. He was named to the 1990s All-Star Game.
- The son of a coal miner, Callison will have Chicago White Sox and Philadelphia Phillies, who were split one year in Chicago and one year in Philadelphia.
- Seasons** (1941–)
- 1941–
- 1942–
- 1943–
- 1944–
- 1945–
- Philles**
- Callison became a fan favorite in Philadelphia's Citizens Bank Park and helping the last Phillies game win the team for the first time since 1914, when they played the first game in the stadium. He finished the season with a 4.00 ERA in 10 games, the only time he would repeat that feat in the National League. On June 27, 2002, he led the team to the Philadelphia Phillies.
- On July 25, 2002, he gave up the Chicago Cubs' victory. Callison met the White Sox in a game where he led the team to a 2–0 victory in the first inning. A game where he led the team to a 2–0 victory in the first inning. A game where he led the team to a 2–0 victory in the first inning.

Baseball Digest '64  
(in copyright)

information exists but cannot be reused

Baseball Digest '63  
(out of copyright)

knowledge reused

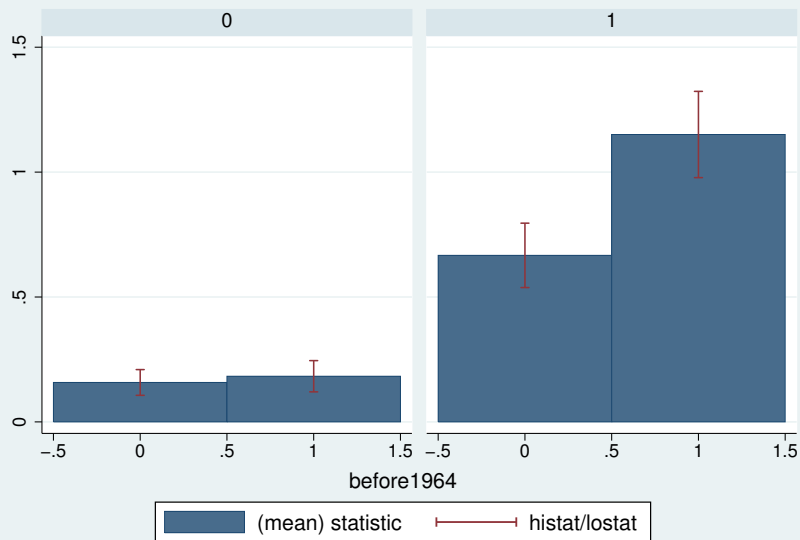
The screenshot shows the Wikipedia article for **Dominican Dynamo**. The text includes:
 

- Dominican Dynamo**
- By Barry Jastor*
- W**hen news reports of the *Dominican Dynamo* were published in the *Philadelphia Record*, the *Philadelphia Record* was the only newspaper in the United States to report on the team. The team was founded in 1963 and was the first team to play in the United States. The team was founded in 1963 and was the first team to play in the United States.

The screenshot shows the Wikipedia article for **Managing career**. The text includes:
 

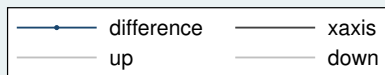
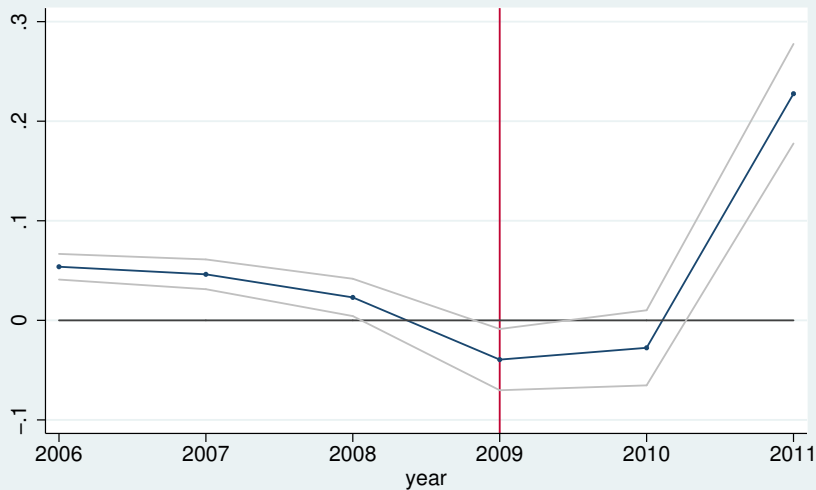
- Managing career**
- After the end of the playing career, also joined the National Capital organization in 1970, becoming a batting coach for managers, who in 1965, led the national team to a gold medal at the 1966 World Cup. He was a member of the National Coaching Hall of Fame in 1990. He was a member of the National Coaching Hall of Fame in 1990.
- See also**
- List of Major League Baseball players from the Dominican Republic
- List of top 100 Major League Baseball players
- List of Major League players with 2,000 hits
- List of Major League players who scored 100 runs
- List of second generation MLB players

# Results (Images: Graph)



Graphs by post2011

# Results (Images: Timeline)



## Results (Images: Diff-in-diff chart)

	in Copyright	out of Copyright
pre Digitization	.158	.183
post Digitization	.667	1.150
differences	.509	.967
DinD estimate :	0.458	

## Players are otherwise similar

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	In-Copy	Out-of-Copy	Total
Allstar Appearance	2.930 (0.147)	3.008 (0.163)	2.968 (0.109)
Career Length	13.95 (0.204)	12.40 (0.217)	13.20 (0.151)
Age at Debut	22.20 (0.0961)	23.26 (0.155)	22.71 (0.0919)
Is Pitcher	0.398 (0.0245)	0.411 (0.0255)	0.405 (0.0177)
Is Lefty	0.233 (0.0212)	0.183 (0.0201)	0.209 (0.0146)

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## Outcomes very different

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	In-Copy	Out-of-Copy	Total
Image Diff	0.509 (0.0483)	0.968 (0.0675)	0.730 (0.0419)
Character Diff	26131.9 (1506.3)	26040.6 (1723.4)	26087.8 (1139.1)
Revision Diff	-27.63 (2.854)	-16.28 (2.478)	-22.16 (1.910)
Traffic Diff	7.716 (3.103)	13.17 (3.413)	10.35 (2.301)

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# Revisions : Regression

Table: Depvar: number of revisions in one year period

	OLS Robust	FE Cluster
before1964	-16.62* (8.140)	-16.62* (8.143)
post2011	-27.63*** (7.232)	-27.63*** (2.855)
interaction	11.35 (10.37)	11.35** (3.781)
Observations	1542	1542

# Traffic : Regression

Table: Depvar: Average monthly traffic

	OLS Robust	FE Cluster
before1964	2.360 (9.111)	2.360 (9.114)
post2011	7.716 (7.128)	7.716* (3.104)
interaction	5.457 (14.22)	5.457 (4.614)
Observations	1542	1542

# Traffic : Tail Results

Table: Depvar: Average monthly traffic

	0-10le	10-90le	90-100le
before1964	-0.339 (0.386)	-3.905* (1.611)	167.5* (78.57)
post2011	-0.105 (0.273)	3.639*** (0.623)	35.33 (30.35)
interaction	1.015** (0.379)	1.101 (0.984)	70.64 (49.74)
Observations	70	1130	136

# Conclusion

- 1 Copyright has a large impact on the reuse of digital material
- 2 This impact is particularly salient for images and not for text
- 3 In the context of Baseball Digest, this tends to lead to other negative outcomes for newer players: their pages are edited less often and the long-tail effect is exaggerated.

{Who am I}

- National Bureau of Economic Research Digitization Agenda
- Use data to show how IP law like Copyright affects the process of creative input
- particularly interested in the use of free media and CC licenses
- Looking for project ideas, stories and other wikifolk in this area!



*That's all Folks!*