The Timing of Presidential Cinema*

Joseph E. Uscinski, University of Miami

Objective. Researchers have examined the social meaning of political cinema; however, little research places film into its contemporary political and economic context. Therefore, I examine the timing of the production and release of presidential cinema. Methods. The data are comprised of major motion picture releases from the years 1953-2004 that include a U.S. president as a character. Regression analysis is used to determine how the temporal release of movies featuring a president corresponds to social realities. *Results.* I find that the release of presidential cinema is correlated with the party that controls the actual White House and with the number of consecutive terms that the same party has been in the White House. More films with presidents are released during Democratic administrations than during Republican administrations and more films with presidents are released during first rather than second terms. This appears more acute during presidential election years. The state of the national economy affects the release of presidential cinema as well. Strong economies lead to the release of more films with presidents. Conclusions. This suggests that popular film content is affected not only by filmmaker whim and creativity, but also by measurable contemporary political and economic conditions. Future studies investigating film content should account for how national trends affect popular entertainment.

Films have, since their inception, contained overt political themes and messages (Davies and Wells, 2002; Rollins and O'Connor, 2003; Franklin, 2006). From the government propaganda films of the 1930s and 1940s to more recent films such as *Wag the Dog* (1997), films have provided a pathway to understanding overt and underlying political currents (Sachleben and Yenerall, 2003). Perhaps the most frequent political institution addressed in films is the U.S. presidency. Because film portrayals of the president speak of the very embodiment of U.S. government (Bolam and Bolam, 2007), films help construct popular images of the executive office (Muscio, 1996; Monsell, 1998). In fact, movies that prominently feature a presidential character such as *The American President* (1995), *Independence Day* (1996), and *Air Force One* (1997) earned staggering U.S. box office returns of \$65, \$306,

*Direct correspondence to Joseph Uscinski, 5250 University Dr., 314 Jenkins Bldg., Political Science Department, University of Miami, Coral Gables, FL 33146 (Uscinski@ miami.edu). The author will kindly share all data and coding information with those interested in replication. The author thanks Ryan Fitzharris for his assistance in data collection, and the editor and anonymous reviewers for their helpful comments. All errors remain the fault of the author.

SOCIAL SCIENCE QUARTERLY, Volume 90, Number 3, September 2009 © 2009 by the Southwestern Social Science Association

and \$172 million, respectively.¹ Thus, these films represent big business as well, appealing to and reaching large numbers of U.S. moviegoers. Examining these films not only adds to our understanding of images of the presidency, but also to our understanding of how films affect and reflect political realities (Sachleben and Yenerall, 2003).

Previous research examines presidential cinema in a very qualitative way, examining one or a few films at a time. For instance, researchers examine apocalyptic cinema (movies such as Dr. Strangelove (1964), Meteor (1979), Mars Attacks! (1996), and Deep Impact (1998)) and how presidents are portrayed in times of disaster (Mitchell, 2001). Other works study how Hollywood portrays presidential strength and heroism in movies such as Air Force One (1996) and Independence Day (1996) (Lawrence, 2003), while other studies comment on the Hollywood portrayal of campaigns, candidates, democracy, and corruption in movies such as *Primary Colors* (Levine, 2003). In general, Hollywood tends to overwhelmingly support the institution of the presidency, even though it may occasionally criticize certain aspects of the office or particular presidents (Scott, 2000). But, while these studies provide much needed insight into the social meanings of individual films, current research is contextual in nature and looks at only one or a few films at a time. This has left researchers with an incomplete view of the link between actual politics and popular film.

This article moves the study of presidential cinema forward by examining all major movies featuring a president. This provides a broad and muchneeded view of how film releases reflect politics. In particular, I compare the 176 films featuring a fictional or nonfictional U.S. president released over a period of 52 years to the actual presidency, economic conditions, and public opinion each year. Analysis indicates that political and economic conditions predict the amount of presidential cinema released each year. These findings are in opposition to the two popular conceptions of filmmaking: that films are produced as money-making ventures and that films derive sporadically from the creative whim of Hollywood (Gomery, 2004; Prindle, 1993). This analysis instead demonstrates that social and political realities affect the content of Hollywood films in predictable ways. For instance, the actual president's party affiliation and length in office are significant predictors of Hollywood's choice to produce and release presidential cinema.

Dependent Variable

The dependent variable is a time series that includes a count of all major motion picture releases that feature an actual president, an actor portraying an actual president, or an actor playing a fictional president of the United States. Vice presidents, presidents of other countries, U.S. presidents before they enter the office, and presidents of fictional countries are not

¹See (IMDB.com) for box office returns on these and other movies mentioned in the data set.

included.² The time series encompasses the years 1953-2004.³ This time period provides ample variation; it contains 13 presidential terms, 10 presidencies, and varying levels of economic prosperity.⁴ From 1953 to 2004, there were 176 films released that meet the above criteria. These films are arranged by year into 52 cases. The films and their years of release are included in Table 1. The number of films per year varies between 0 and 13, with a mean of 3.4, and a standard deviation of 2.6. The variance in the number of presidential films is of importance. Given that movies are a major source of information for the mass public, variations in the number of presidential portrayals in film presents a change in the audience's informational environment. For instance, the informational environment in a year when there are 13 portrayals of the president in film is vastly different from a year when there are none. This may be especially true given that these portrayals are overwhelmingly positive. Given that hundreds of millions of people attend these films each year and that films have been shown to affect political and social opinions (Feldman and Sigelman, 1985; Lenart and McGraw, 1989; Adams et al., 1985), understanding the frequency of these portrayals is of prime importance. Although Figure 1 shows that there is not a readily discernable pattern to the data, I seek to explain the variance in the number of films with a president released each year. To do this, I employ variables measuring the actual presidency, public opinion toward the president, the economy, and the nation's war activities. This will demonstrate that the amount of presidential cinema released each year is correlated with these political and economic factors.

Explanatory Variables

I first ask whether the number of films with a president varies over time with the party in the actual White House, with the number of terms the president is in the White House, and with the electoral cycle. I create timeseries variables to measure these: a dummy coded 1 if the actual president is a Democrat; a dummy coded 1 if the actual president is in his first term and 2 if in the second; and a dummy coded 1 for election years when there is a Democratic incumbent. Given that filmmakers are consistently found more liberal in surveys and interviews (Bozzell and Baker, 1990; Lichter, Lichter,

³I begin with 1953 because about half the films released before this time (and information pertaining to them) no longer exist in any form (Shales, 1972).

⁴The data for this study were collected using the Internet Movie Database (imdb.com).

²I included films that were released into at least 20 theaters. This analysis therefore excludes the straight-to-video releases that became common after the mid-1980s, minor releases such as film festival releases, releases limited to only a few markets, shorts, and made-for-television movies and mini-series. For movies released in the 1980s, 1990s, and 2000s, I exclude movies that did not gross at least \$1 million at the box office. I do this because many poorly budgeted and executed films during this time period, especially during the late 1980s and early 1990s, were released to theaters only as a precursor to video release. This rule only removed two releases during this time period.

TABLE 1

Movies with Presidents, 1953-2004

Title	Year	Genre	Characters
The President's Lady	1953	History	Andrew Jackson
Project Moon Base	1953	SF	Fictional
Sitting Bull	1954	History	U. S. Grant
Davy Crockett: King of Wild Frontier	1954	Family	Andrew Jackson
Prince of Players	1955	History	Abraham Lincoln
Court Marshall of Billy Mitchell	1955	History	Calvin Coolidge
The Long Gray Line	1955	Drama	Fictional
Far Horizons	1955	History	Thomas Jefferson
From Earth to the Moon	1958	SF	U. S. Grant
War of the Satellites	1958	SF	Fictional
The Oregon Trail	1959	Western	James Polk
Crack in the Mirror	1960	Drama	Fictional
The Absent Minded Professor	1961	Family	Fictional
Advise and Consent	1962	Political	Fictional
Son of Flubber	1963	Family	Fictional
How the West Was Won	1963	History	Abraham Lincoln
Cattle King	1963	Western	Chester Arthur
Seven Days in May	1964	Political	Fictional
Dr. Strangelove	1964	Political	Fictional
Fail-Safe	1964	Political	Fictional
Kisses for My President	1964	Comedy	Fictional
Sergeant Deadhead	1965	Comedy	Fictional
Country Boy	1966	Musical	Fictional
In Like Flint	1967	Comedy	Fictional
How to Succeed in Business	1967	Comedy	Fictional
Without Trying	1307	Comedy	T IGTIONIAI
You Only Live Twice	1967	Action	Fictional
First to Fight	1967	History	Franklin Roosevelt
Wild in the Streets	1968	Political	Fictional
The Virgin President	1968	Comedy	Fictional
The Monitors	1969	Comedy	Fictional
Putney Swope	1969	Comedy	Fictional
The Forbin Project	1970	SF	Fictional
Brand-X	1970	Comedy	Fictional
Beneath the Planet of the Apes	1970	SF	Fictional
Tricia's Wedding	1971	Comedy	Richard Nixon
Cold Turkey	1971	Comedy	Richard Nixon
Escape from Planet of the Apes	1971	SF	Fictional
Hail to the Chief	1972	Political	Fictional
Richard	1972	Comedy	Richard Nixon
Wild in the Sky	1972	Comedy	Fictional
Werewolf of Washington	1973	Horror	Fictional
The Groove Tube	1973	Comedy	Fictional
The Pink Panther Strikes Again	1976	Comedy	Fictional
Buffalo Bill and the Indians, or Sitting Bu		Western	Grover Cleveland
All the President's Men	1976	Political	Richard Nixon
American Raspberry	1970	Comedy	Fictional
American haspoeny	1311	Comedy	riolional

The Right Stuff

Dead Zone

Dreamscape

Secret Honor

Assassination

Superman IV

The Package

Brenda Starr

Hard to Kill

A Cry in the Dark

My Science Project

Blood Suckers from Outer Space

The Adventures of Buckaroo Bonsai

Slapstick of Another Kind

Amazing Grace and Chuck

Amazon Women on the Moon

Bill and Ted's Excellent Adventure

Splash

Title	Year	Genre	Characters
MacArthur	1977	History	Roosevelt, Truman
Wizards	1977	SF	Fictional
Twilight's Last Gleaming	1977	Political	Fictional
Rabbit Test	1978	Comedy	Fictional
Revenge of the Pink Panther	1978	Comedy	Fictional
Born Again	1978	Drama	Richard Nixon
Capricorn One	1978	SF	Fictional
Sextette	1978	Comedy	Jimmy Carter
Attack of the Killer Tomatoes	1979	Comedy	Fictional
Meteor	1979	SF	Fictional
A Touch of the Sun	1979	Comedy	Fictional
Being There	1979	Comedy	Fictional
Americathon	1979	Comedy	Fictional
Kidnapping of the President	1980	Drama	Fictional
The Nude Bomb	1980	Comedy	Fictional
Used Cars	1980	Comedy	Jimmy Carter
Superman II	1980	Action	Fictional
First Family	1980	Comedy	Fictional
Escape from New York	1981	Action	Fictional
Kill and Kill Again	1981	Action	Fictional
Legend of the Lone Ranger	1981	Western	U. S. Grant
The Final Conflict	1981	Horror	Fictional
Ragtime	1981	Drama	Theodore
			Roosevelt
C.O.D.	1981	Comedy	Fictional
The Man Who Saw Tomorrow	1981	Fiction/	Fictional, JFK
		Biographic	al
Inchon	1981	History	Harry Truman
Wrong if Right	1982	Comedy	Fictional
Airplane II	1982	Comedy	Ronald Reagan
The Soldier	1982	Action	Fictional
Pandemonium	1982	Comedy	Ronald Reagan

1983

1983

1984

1984

1984

1984

1984

1984

1985

1987

1987

1987

1987

1988

1989

1989

1989

1990

History

Family

Horror

Drama

Comedy

Comedy

Comedy

Action

Action

Drama

Thriller

Action

Action

Comedy

SF

SF

SF

SF

Eisenhower

Fictional

Richard Nixon

Dwight Eisenhower

Abraham Lincoln

George H. W. Bush

Harry Truman

TABLE 1—continued

TABLE 1—continued

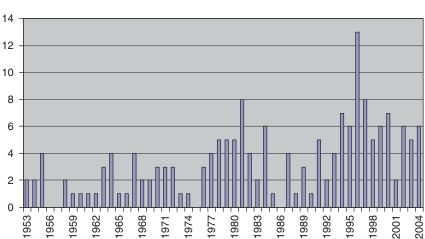
Title	Year	Genre	Characters
Naked Gun 2 1/2	1991	Comedy	George Bush Sr.
JFK	1991	Historical	JFK, Johnson
McBain	1991	Action	Fictional
Suburban Commando	1991	Family	Fictional
The Last Boy Scout	1991	Action	Fictional
Bebe's Kids	1992	Family	Lincoln, Nixon
Love Field	1992	Drama	JFK
Hot Shots! Part Deux	1993	Comedy	Fictional
In the Line of Fire	1993	Action	Fictional
Dave	1993	Political	Fictional
The Pelican Brief	1993	Action	Fictional
Richie Rich	1994	Family	Fictional
Guarding Tess	1994	Comedy	Fictional
Naked Gun 33 1/3	1994	Comedy	Bill Clinton
The Puppet Masters	1994	SF	Fictional
Forrest Gump	1994	Drama	JFK, Johnson,
·			Nixon
I.Q.	1994	Romance	Eisenhower
Clear and Present Danger	1994	Action	Fictional
Gordy	1995	Family	Bill Clinton
Senior Trip	1995	Comedy	Fictional
The American President	1995	Political	Fictional
Captain Nuke and the Bomber Boys	1995	Comedy	Fictional
Canadian Bacon	1995	Political	Fictional
Nixon	1995	Historical	Richard Nixon
Brilliant Lies	1996	Drama	Fictional
First Kid	1996	Comedy	Fictional
Mars Attacks!	1996	Comedy	Fictional
Jingle All the Way	1996	Comedy	Fictional
Angel of Pennsylvania Avenue	1996	Family	Herbert Hoover
Beavis and Butthead Do America	1996	Comedy	Bill Clinton
The Rock	1996	Action	Fictional
Independence Day	1996	SF	Fictional
Spy Hard	1996	Comedy	Fictional
My Fellow Americans	1996	Political	Fictional
Escape from L.A.	1996	SF	Fictional
Courage Under Fire	1996	Drama	Fictional
Long Kiss Goodnight	1996	Action	Fictional
Amistad	1997	Historical	Martin Van Buren,
			John Adams
Wag the Dog	1997	Political	Fictional
Murder at 1600	1997	Political	Fictional
Contact	1997	SF	Bill Clinton
Air Force One	1997	Political	Fictional
Rocket Man	1997	Comedy	Fictional
Absolute Power	1997	Political	Fictional
Shadow Conspiracy	1997	Political	Fictional
Species II	1998	SF	Fictional
Deep Impact	1998	SF	Fictional
Primary Colors	1998	History	Bill Clinton

Title	Year	Genre	Characters
Armageddon	1998	Action	Fictional
The Godson	1998	Comedy	Bill Clinton
Dick	1999	Comedy	Richard Nixon
The Moment After	1999	SF	Fictional
Wild West	1999	SF	U. S. Grant
Austin Powers: Spy Who Shagged Me	1999	Comedy	Fictional
Trippin	1999	Comedy	Fictional
Deterrence	1999	Political	Fictional
The Contender	2000	Political	Fictional
Thirteen Days	2000	History	JFK
The Alternate	2000	Political	Fictional
X Men	2000	SF	Fictional
Company Man	2000	Comedy	JFK
The Adventures of Rocky and Bullwinkle	2000	Family	Fictional
Deterrence	2000	Political	Fictional
Megiddo: The Omega Code 2	2001	Fantasy	Fictional
Pearl Harbor	2001	Historical	FDR
The Sum of All Fears	2002	SF	Fictional
The Crocodile Hunter: Collision Course	2002	Family	George W. Bush
Life or Something Like It	2002	Romance	Bill Clinton,
<u> </u>			George W. Bush
Spy Kids 2: Lost Island of Dreams	2002	Family	Fictional
Bowling for Columbine	2002	Documen-	George W. Bush,
5		tary	Bill Clinton
The Adventures of Ociee Nash	2002	Family	William McKinley
X2	2003	SF	Fictional
The Corporation	2003	Documen-	George W. Bush
•		tary	0
Hulk	2003	SF	Fictional
Scary Movie 3	2003	Comedy	Fictional
Love Actually	2003	Comedy	Fictional
The Day After Tomorrow	2004	SF	Fictional
Welcome to Mooseport	2004	Comedy	Fictional
Chasing Liberty	2004	Romance	Fictional
Agent Cody Banks 2:	2004	Family	Fictional
Destination London			
First Daughter	2004	Family	Fictional
Fahrenheit 9/11	2004	Documen-	G. H. W. Bush,
		tary	Clinton,
			G. W. Bush

TABLE 1—continued

and Rothman, 1983; Prindle, 1993; Powers, Rothman, and Rothman, 1996) and that the vast majority of presidential cinema portrays the president positively, I expect that filmmakers will produce more films with presidents during Democratic administrations and also during election years when the Democratic Party is incumbent in the White House. Hollywood may choose to make movies with presidents to influence public support for the president during Democratic administrations. Hollywood may also make





Movies with Presidents by Year, 1953-2004

more presidential films during Democratic administrations because it shares party affiliation and ideology with the president. This may indicate a form of media bias. On the financial side, filmmakers may also cater to audiences during Democratic administrations: movie audiences tend to be Democratic (Franklin, 2006); therefore, filmmakers may want to appeal to audiences when the president represents a leader with whom the audience shares partisan values. Releasing films during years when there is a Democratic president may aid in marketing these films to Democratically-inclined audiences.

I also ask if the length of time a party holds the White House affects the amount of presidential cinema. Generally, second-term presidents have lower approval ratings than first-term presidents. As such, I expect that as a party holds the executive office longer, fewer films will be made featuring a president.

To examine if public opinion, or attitudes toward the presidency, drives the amount of presidential cinema, I include averaged annual presidential approval from Gallup polls. When presidential approval is high, I expect filmmakers to release more films with presidents to capitalize on the public's positive feelings toward the office. Because filmmakers have economic incentives to produce films that coincide with the audience's predispositions (Franklin, 2006), it is likely that filmmakers may want to feature presidents in their product when presidential approval is high.

I also include and test measures of the national economy. I include a time series measuring GDP normalized in year 2000 dollars and a measure of yearly unemployment. I expect that because the president is often blamed, or rewarded, for the nation's economic performance, a bad economy could lead filmmakers to pass on films that contain presidential figures. A good economy could lead filmmakers to produce more films with presidents. Because the president is charged with the task of commander-in-chief, the presidency is inextricably linked with the nation's war activities. As such, I also ask if the nation's war activities affect the appearance of a president in film. Hollywood may display a "rally around the flag" effect by producing more films with a president during wartime (e.g., Norrander and Wilcox, 1993). Filmmakers may also refuse to address the presidency during trying times in history. I develop two variables to measure war. The first, labeled ARMED CONFLICT, is a dummy coded 1 if the United States is involved in a major armed conflict in that year. I include the Korean War, Vietnam War, both Iraq Wars, and the Bosnian conflict. The second measure, COLD WAR, is coded 1 during the Cold War years.

Results

Table 2 presents results of regression analysis. The dependent variable is the number of films released containing a president in each of the 52 years; this provides an N of 52. I employ Prais-Winsten regression to alleviate the problems caused by autocorrelation; this also provides straightforward interpretation of the results. I will note that because the dependent variable is an "event count," I tested models using event-count estimators as well; the results are substantively similar and robust across specification. Because movies take several years to make, I tested each of the explanatory variables at varying lags. This was to test the effect of each variable on the *production* and *release* time of presidential cinema. Although I cannot show all specifications of the model due to space considerations, the model reported in Table 2 represents the general findings of the research. I will, however, discuss some of the additional findings below.

The first covariate, DEMOCRAT IN WHITE HOUSE, is coded 1 if the actual president is a Democrat. It provides a significant parameter indicating that when the president of the United States is a Democrat, 1.25 more films with presidents are released per year. Of course, some films could have been produced during Republican administrations and released during Democratic ones. If this were the case, it would make the results convoluted. To address this, I performed similar models but lagged the DEMOCRAT IN WHITE HOUSE variable to account for this. I do not include these lagged measures in the reported model due to collinearity; however, the DEMOCRAT IN WHITE HOUSE parameters are 1.55 at a one-year lag and 1.2 at a two-year lag.⁵ This demonstrates that movies are more likely to be *produced* as well as released during Democratic administrations.

⁵Movies may take several years to produce before they are released. Although I was not able to retrieve reliable release dates for all the movies in the data set, most began production one to three years before release. I did run regressions using the production dates I was able to gather; however, production dates may leave out information, including the time it took to write, edit, and sometimes cast the movie. Hence, using lagged release dates contains some error, but is the best available indicator of production times.

TABLE 2

Variable	Coefficient
Democrat in White House	1.25***
	(0.519)
Democratic incumbent in election year	2.65***
	(0.950)
Presidential term in White House	-0.905**
	(0.497)
Presidential approval	-0.020
Dresidential enpreval 2 year lag	(0.023
Presidential approval 3-year lag	-0.058***
GDP	(0.019) 0.0002**
	(0.0001)
Unemployment	0.134
	(0.203)
Armed conflict	0.268
	(0.550)
Cold War	_1.81* [*] *
	(0.906)
Constant	7.41***
	(2.99)
N ₂	52
r ²	0.72
Rho Durch in Michael	-0.290
Durbin-Watson	2.09

*p<0.10; **p<0.05; ***p<0.01. Results are one-tailed test.

This finding is evident from the raw data as well. At first glance, the 176 films in the data set appear evenly divided between Republican and Democratic years of White House control, with 84 films released during Republican administrations and 92 released during Democratic administrations. However, during the time period under study, the White House was controlled for 20 years (five terms) by Democrats and for 32 years (eight terms) by Republicans. Therefore, an average of 2.6 films containing a president was released each year of Republican administrations (standard deviation of 2.0 and range of 0–8) while nearly twice that, an average of 4.6 films per year, was released during Democratic administrations (standard deviation of 2.9 and a range of 1–13.) Over the course of a *term*, 10.5 films were released during Republican administrations as compared to a significantly different 18.4 films during Democratic ones.

The second covariate, DEMOCRATIC INCUMBENT IN ELECTION YEAR, is a dummy variable coded 1 in election years when the Democratic Party is in the White House. The coefficient is significant and demonstrates that during presidential election years when the Democrats control the Oval Office, 2.65 more films are released with presidents. This is a telling finding given that filmmakers know ahead of time what party the president belongs to and when the coming election will be held. Hence, this finding suggests that filmmakers time the production and release of these movies in accordance with the administration's party and the coming election. The raw data support this finding as well: in election years when a Republican controls the White House, an average of 2.75 films with presidents come out compared to a significantly different 6.2 films per year when a Democrat controls the White House. In examining the two years prior to elections, I find that almost twice as many presidential films are released per year when Democrats hold office as compared to when Republicans hold office; 2.9 for Republicans and 5.5 for Democrats. Going into an election, the number of movies released with presidents remains nearly identical to the yearly average for Republican administrations, while the average during Democratic administrations increases from 4.6 to 6.2 movies per year. This demonstrates that Hollywood releases more films with presidents near election time when the Democratic Party is the incumbent party. A recent example of this was in 1996 when incumbent Democrat Bill Clinton ran for his second term. Nineteen films in this data set were released in 1995 and 1996, including Michael Douglas as The American President (1995), Bill Pullman's portrayal of a fighter pilot/hero president in Independence Day (1996), and James Garner and Jack Lemmon as hero presidents in My Fellow Americans (1996). Taken together, the first two variables demonstrate that Hollywood releases films with presidents that coincide with Democratic control of the White House.

PRESIDENTIAL TERM IN WHITE HOUSE asks if longitivity in the White House affects the number of movies released featuring presidents. During the period under study, there were nine first-term presidencies and four secondterm presidencies. The significant parameter indicates that in second terms, about one less movie with a president is released per year. This is shown by the raw data as well: of the 176 films, 135 (or 77 percent), were released during a president's first term. Only 23 percent were released during second terms. For example, 20 films with presidents were released during Ronald Reagan's first term; six were released during his second term. As such, longevity in the actual White House leads to fewer movies with presidents.

The effect of presidential longevity is more striking when differentiating by party. Of the nine first-term presidencies, five were Republican and four Democrat. Of the four second terms served by presidents, three were Republican and one was Democratic. The average number of movies released during presidential first terms is 4.1 films per year for Democrats and 3.4 for Republicans. However, during Democratic second terms, Hollywood releases an average of 6.5 movies with a president per year while only a fifth of that, 1.25 movies per year, are released during Republican second terms. Presidential cinema is correlated not only with the party holding the White House, but also correlated with the number of terms the president has been in office.

The PRESIDENTIAL APPROVAL variable tests if the release of films with presidents is related to presidential approval. A significant finding would suggest that filmmakers are capitalizing on the public's positive feelings toward the president. The parameter, -0.020, is insignificant and indicates that public approval of the actual president does not affect the *release* of movies with presidents. I also include the measure of presidential job approval with a threeyear lag. The coefficient, -0.058, is statistically significant. This indicates, counterintuitively, that high presidential approval dampens the production of presidential cinema. However, this has a relatively small effect at the margins, as it would take a sustained 20 percentage point sway in presidential approval to affect the number of films produced in a year by one.

Economics appears to affect presidential cinema as well. The GDP coefficient is significant and indicates that a \$5 trillion increase in GDP leads to an increase of one film per year. This is a minor effect; however, this could be because growing economies reflect well on presidents causing filmmakers to make more films about them. UNEMPLOYMENT is insignificant and indicates that the amount of presidential cinema released each year is not affected by the audience's economic prosperity.

The variables ARMED CONFLICT and COLD WAR test if war shapes film content. The ARMED CONFLICT parameter is insignificant, indicating that U.S. involvement in international conflict does not appear to affect the amount of presidential cinema. This is not unsurprising given that films take a few years to produce and wars occur somewhat unpredictably. The COLD WAR variable, however, is significant, indicating that 1.8 less films with presidents were made per year during the Cold War. Rather than showing a "rally around the flag" effect, filmmakers appear less likely to address the institution of the presidency during Cold War years.

Scholars of film would not predict that film content would be subject to the political and social variables tested in this model. In fact, these scholars, along with most people, would argue that film content is driven by either profit motives or by creative whim. However, given the results here, political realities, including the party of the president, the term of the president, and election years, drive production and releases of these movies. One would suppose that if movies were driven only by profit motives or by creative whim of Hollywood writers, then the movies in this data set would be randomly distributed across time. However, they are not: the release of these movies is significantly tied to the actual presidency. In fact, the r^2 of the model that I report in the article is a rather large 0.72. Hence, the political variables in the model explain the majority of the variance in these movie releases. This runs contrary to what most people would expect. This does not, however, indicate that money and Hollywood creativity play no role in the production and release of these movies. In fact, these findings could either indicate that movie-going audiences have a greater demand for these movies when there is a Democratic president, which moviemakers are responding to (out of profit motive), or that moviemakers have more of an inclination to produce and release presidential films because of an ideological orientation that responds to the party in the actual White House. Although it is beyond the scope of this article to parcel out which of these two explanations is most accurate, it is likely that both play a role. I will leave it to further research, perhaps including case studies on single movies or indepth interviews with Hollywood decisionmakers, to parcel this out.

It would be ideal at this point to have a time series of the *total* number of films released each year to be sure that the results presented here are not merely a function of the total number of films released in a given year. Although such a measure would be ideal to include in the model, the accounting methods tracking total releases varied year to year. Despite this, I was, however, able to attain reliable numbers for portions of the time period under study. Using those, I find no correlation between the total number of movies released in a year and the number of films released with a president in a year. For instance, in 1988, a year that represented a high, with 491 total film releases, there is only one film with a president. In 1995, a year with a low of 370 total releases, six films with presidents were released. This year is tied for having the third-most films with presidents. Therefore, the number of films with presidents in a year is not a function of the total number of films released in a year. I also tested to be sure that the total number of films was not a function of any of the independent variables in the data set, such as the economy. This does not appear to be the case either.

Due to the exploratory and suggestive nature of this research, as well as space constraints, the model reported above includes only major findings of the research. I also tested, but do not report, more precise measures of time in office, dummies for each president, and other measures of economic conditions, as well as measures of mass partisanship and ideology. To examine how each of these covariates affected the release and production dates of these movies, I tested the covariates at varying lags and I gathered and employed the production dates for the movies. The model presented, however, is indicative of the overall findings. Using plot summaries, scripts, and the films themselves, I coded movies based on the tone of the portrayal of the president. I tested the data by excluding the few movies that contained negative portrayals of the president or of the office: this did not change the results. I also looked at the movies based on the size of the role the president plays. The results of that analysis strongly buttress the analysis reported here.⁶

⁶For instance, *Air Force One* is clearly a film that features the president prominently while other movies, such as *Airplane 2*, feature the president less prominently. To address this, I examined only movies in which the president was a protagonist or major character. This yielded 45 movies. For these movies, even with a smaller *N*, I find the same result: these movies are more likely to be produced and released during Democratic administrations. During Democratic administrations, an average of 1.6 of these movies was released per year; however, an average of only 0.4 of these movies was released during Republican administrations. This is even starker during election years: an average of 2.8 of these movies was released when a Republican was an incumbent, while an average 0.5 was released when a Republican was an incumbent.

Discussion

Presidential cinema plays an important role in perpetuating myth and garnering support for the presidency; the inclusion of a president in film indicates not only that the film is at least remotely political, but that it speaks to what the public perceives as the embodiment of U.S. government (see Easton and Dennis, 1969; Niemi, 1973). In addition to this, films have been found to affect political attitudes (Feldman and Sigelman, 1985) and perceptions of candidates (Adams et al., 1985). Given this, variation in the amount of film that pertains to the presidency, especially given its frequent release during election years, should be studied very carefully. This article attempts to better understand when presidential cinema is released and links its production and release times to political realities. Although much previous research has been qualitative and looks at only one or a few films, this article examines all presidential cinema for a period of 52 years. Films featuring a president are much more likely to be released during Democratic administrations and during election years when Democrats are incumbent. However, fewer films featuring presidents are released during second terms than first terms. This article demonstrates that the content of film is dynamic: film content is not merely the result of Hollywood's creative whim and/or happenstance. Film reflects, to some degree, measurable political climates and realities.

I hope that this article will spark future research in a few areas. First, work should be done investigating the causal mechanisms behind film content. Although this article suggests that actual politics predict the release of presidential cinema, little is known about why this occurs. For instance, researchers should work to better understand who in Hollywood makes relevant decisions and why. In-depth interviews with filmmakers could shed light on how political bias or profit motives affect the choice to produce and release certain films or include certain characters at certain times. Second, while some work addresses the effect of movies on audiences (Feldman and Sigelman, 1985; Lenart and McGraw, 1989), the breadth of this work is limited and should be significantly expanded and updated. There is currently little work examining how film content over a series of years affects audiences. Given that the number of films in this data set varies greatly from year to year, we should study if and how such films affect public opinion and political behaviors.⁷ This is especially important given that films are seen by

⁷For instance, the release of movies with presidents is correlated with electoral success for the actual office. The incumbent party in power goes on to maintain the White House when more films with presidents are released. An average of 14.9 films with presidents is released per term when parties go on to retain office, while 12.1 films are released per term when a party loses control of the White House. In terms where Republicans go on to maintain the office, an average of 12.8 films are released; however, when they lose the Oval Office to the Democrats, only 6.7 movies are released per term. This holds for the Democrats as well. I would not go so far as to say that movies *cause* presidents or parties to win or lose office; certainly, a multitude of factors lead to election outcomes. However, presidential cinema appears to be a significant indicator of electoral success.

hundreds of millions each year and constitute an important part of culture and provide information for the populace. Third, future works addressing film and politics should examine the appearance of Congress, law enforcement and legal officials, and foreign countries. Future works should also examine other facets of entertainment, including television series and madefor-television movies.

REFERENCES

Adams, William C., Allison Salzman, William Vantine, Leslie Suelter, Anne Baker, Lucille Bonvouloir, Barbara Brenner, Margaret Ely, Jean Feldman, and Ron Ziegel. 1985. "The Power of the Right Stuff: A Quasi-Experimental Field Test of the Docudrama Hypothesis." *Public Opinion Quarterly* 49(3):330–39.

Bolam, Sarah Miles, and Thomas J. Bolam. 2007. *The Presidents on Film: A Comprehensive Filmography of Portrayals from George Washington to George W. Bush.* Jefferson, NC: McFarland & Company, Inc. Publishers.

Bozzell, Brent, and Brent Baker. 1990. And That's the Way it Wasn't. Alexandria, VA: Media Research Center.

Davies, Philip John, and Paul Wells. 2002. *American Film and Politics from Reagan to Bush Jr.* Manchester: Manchester University Press.

Easton, David, and Jack Dennis. 1969. Children in the Political System. New York: McGraw Hill.

Feldman, Stanley, and Lee Sigelman. 1985. "The Political Impact of Prime-Time Television: 'The Day After'." *Journal of Politics* 47(2):556–78.

Franklin, Daniel. 2006. *Politics and Film: The Political Culture of Film in the United States.* Lantham, MD: Rowman and Littlefield Publishers, Inc.

Gomery, Douglas. 2004. "The Economics of Hollywood: Money and Media." In *Media Economics: Theory and Practice*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Lawrence, John Shelton. 2003. "The Hundred Million \$ Men: Presidential Action/Adventure Heroes of *Independence Day* and *Air Force One*." In P. C. Rollins and J. E. O'Connor, eds., *Hollywood's White House: The American Presidency in Film and History*. Lexington, KY: University Press of Kentucky.

Lenart, Silvo, and Kathleen M. McGraw. 1989. "America Watches 'Amerika': Television Docudrama and Political Attitudes." *Journal of Politics* 51(3):697–712.

Levine, Myron. 2003. "Myth and Reality in the Hollywood Campaign Film: Primary Colors and The War Room." In P. C. Rollins and J. E. O'Connor, eds., Hollywood's White House: The American Presidency in Film and History. Lexington, KY: University of Kentucky Press.

Lichter, Linda, S. Robert Lichter, and Stanley Rothman. 1983. "Hollywood and America: The Odd Couple." *Public Opinion* 5(Dec./Jan.):54–58.

Mitchell, Charles P. 2001. A Guide to Apocalyptic Cinema. Westport, CT: Greenwood Press.

Monsell, Thomas. 1998. Nixon on Stage and Screen: The Thirty-Seventh President as Depicted in Films, Television, Plays and Opera. Jefferson, NC: McFarland & Company, Inc., Publishers.

Muscio, Giuliana. 1996. Hollywood's New Deal. Philadelphia, PA: Temple University Press.

Niemi, Richard G. 1973. "Political Socialization." In J. N. Knutson, ed., *Handbook of Political Psychology*. San Francisco, CA: Jossey-Bass.

Norrander, Barbara, and Clyde Wilcox. 1993. "Rallying Around the Flag and Partisan Change: The Case of the Persian Gulf War." *Political Research Quarterly* 46(4):759–70.

Powers, Stephen, Stanley Rothman, and David J. Rothman. 1996. *Hollywood's America*. New York: Westview Press.

Prindle, David F. 1993. Risky Business: The Political Economy of Hollywood. Boulder, CO: Westview.

Rollins, Peter C., and John E. O'Connor. 2003. *Hollywood's White House*. Lexington, KY: University Press of Kentucky.

Sachleben, Mark, and Kevan M. Yenerall. 2003. Seeing the Bigger Picture: Understanding Politics Through Film & Television. New York: Peter Lang Publishing.

Scott, Ian. 2000. American Politics in Hollywood Film. Chicago, IL: Fitzroy Dearborn Publishers.

Shales, Tom. 1972. The American Film Heritage: Impressions from the American Film Institute Archives. Washington DC: Acropolic Ltd.

702