Winter 2016 MAT 259
Visualizing Information

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Media Arts Technology
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First Assignment: Culture Analytics – MySQL

Digging into the database of the Seattle Public Library select a topic that reveals some cultural trends taking place in the past 10 years.

Question

Books and movies remain the most popular cultural represent forms. Will they have mutual impact on each other? For example: When a film adapted from a book released, will the checkout number of this book in library increase?

Assumption

Books and movies offer different experience to the audience. After watching a great film, people may want to get more details about the story. And books also provide more space for people to image. So I expect the release of these films lead to an increase of checkout number of the original book.

Approach

I chose several adapted films respectively released on 2006, 2009, 2012 and 2014. Compare the checkout number of specific book in the normal time and the time after adaptation film released to find the trend over months and years. And one of them is a series film in order to discover if the influence will continue.

Query

Code:

```
SELECT
    YEAR(checkOut) AS CheckoutYear,
    MONTH(checkout) AS CheckoutMonth,
    COUNT(checkOut) AS CheckoutCount
FROM
```

```
        spl3._rawXmlDataCheckIns

    WHERE
        title LIKE '%Hunger Games%'
        AND SUBSTRING(itemType, 3, 4) = 'bk'
    GROUP BY CheckoutYear , CheckoutMonth
```

Query Time: 405.019 sec (the second run time will be shorter)

Explanation:

The substring ensures all the items found in MySQL are books. And I set the COUNT(checkOut) to directly get the checkout number of specific book every month.


Results

The Da Vinci Code Book Checkout in 2006

The Da Vinci Code is a mystery-detective novel by Dan Brown written in 2003. The adaptation film was released on May 19, 2006. (The position of red line on horizontal axis)
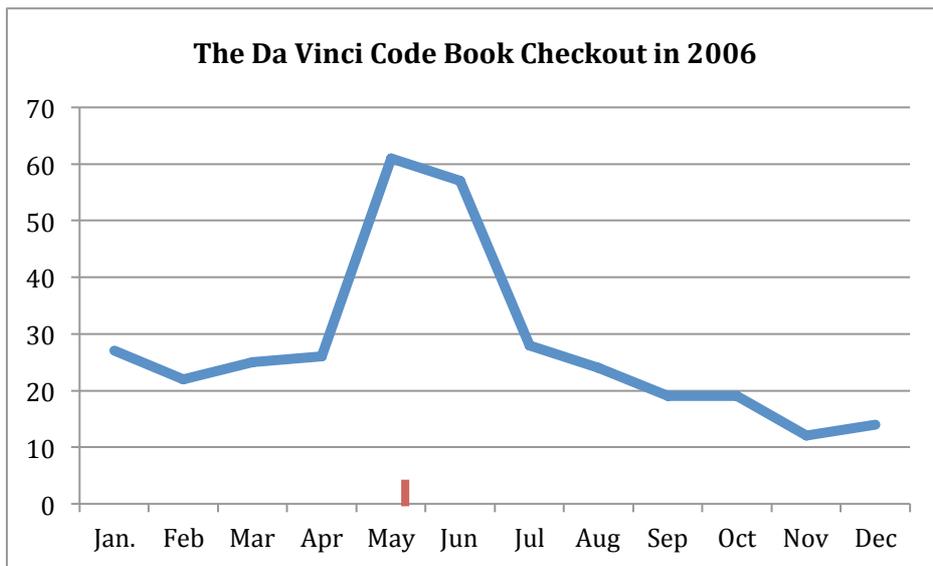

The Time Traveler's Wife Checkout in 2009

The Time Traveler's Wife is a novel by Audrey Niffenegger published in 2003. The adaptation film was released on 14 August 2009.

**The Time Traveler's Wife Book Checkout in 2009**
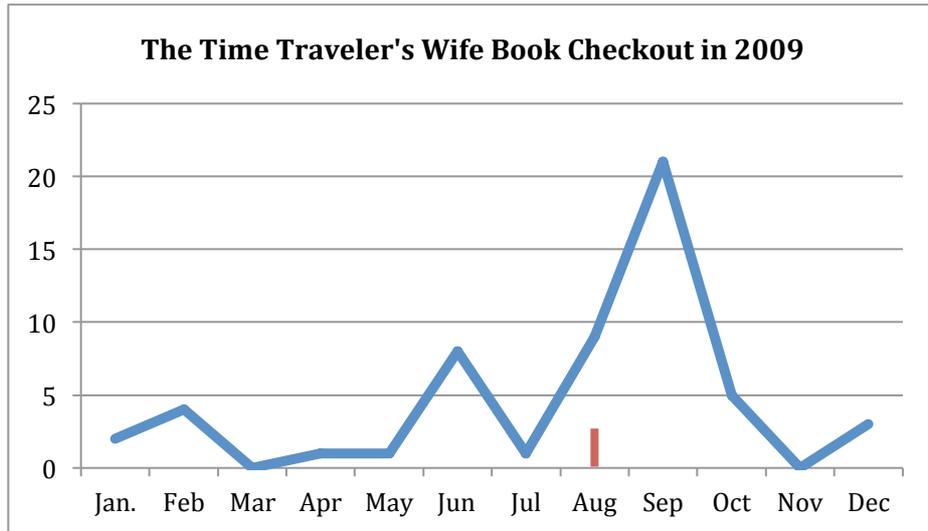
The Hunger Games Checkout in 2012

The Hunger Games is a series of three adventure novels written by Suzanne Collins, which respectively published in 2008, 2009 and 2010. And the corresponding adaptation film was respectively released on March 23, 2012, 2013, 2014 and 2015 (The third one Mockingjay divided into two parts)

The Hunger Games Book Checkout in 2012
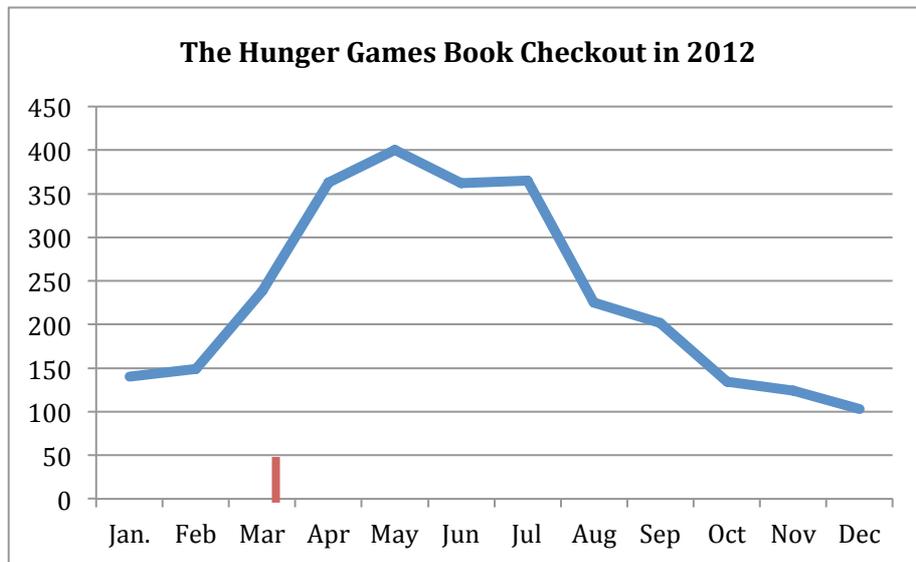
The Fault in Our Stars Checkout in 2014

The Fault in Our Stars is a novel by John Green published in 2012. The adaptation film was released on June 6, 2014.
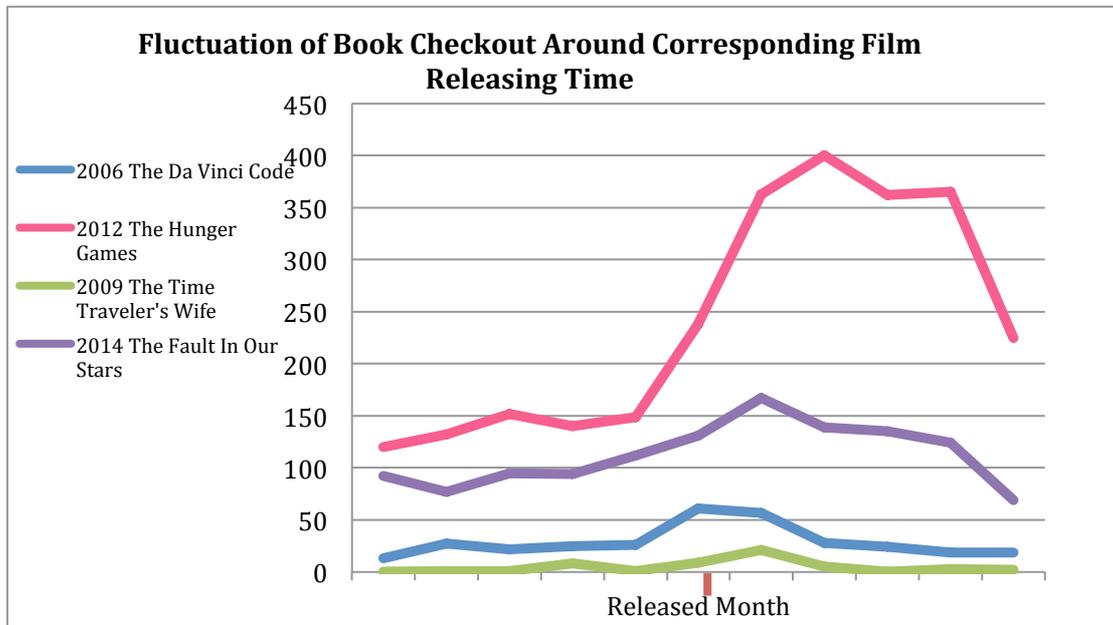
The Fault In Our Stars Book Checkout in 2014
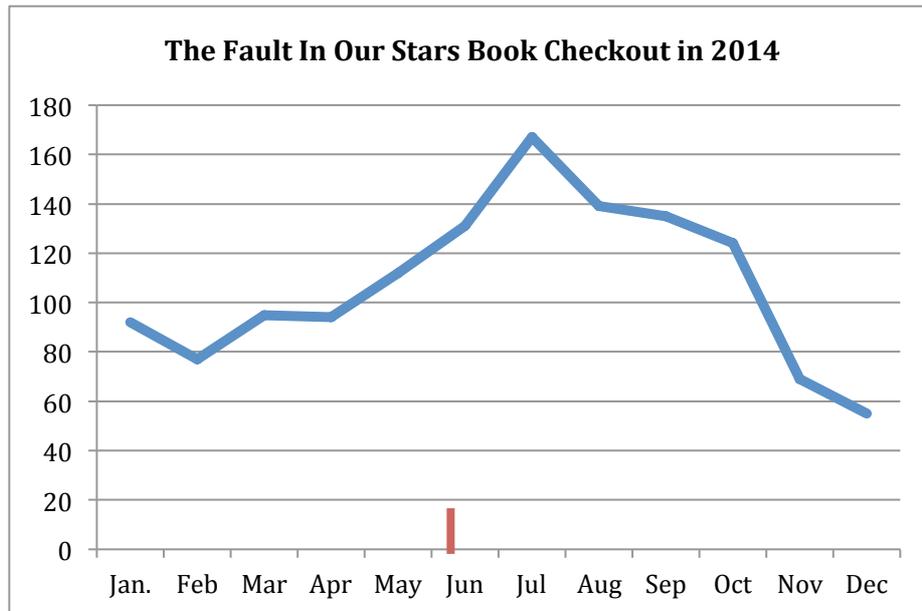
Analysis

1. From the four charts above, we can see that after the release of the film, the checkout number of corresponding book more or less has increased. So the hypothesis is basically confirmed. The adaptation films indeed stimulate the desire of people to read the original book.

2. This impact is time limited. It's obviously that the checkout number of book will decrease after several months of film released. And the chart below is more persuasive on this property. Since the Hunger Games is a series of novel. So I compare the checkout number in different years. Only when the first adaptation film of this trilogy released, the checkout number of the novel has clearly increased. However, Part of the reason is that when the first film released, the book has ended (2010). So even if the second film released on 2013, people already read the whole book after the first film released on 2012.

The Hunger Games Book Checkout in 2008 -- 2014
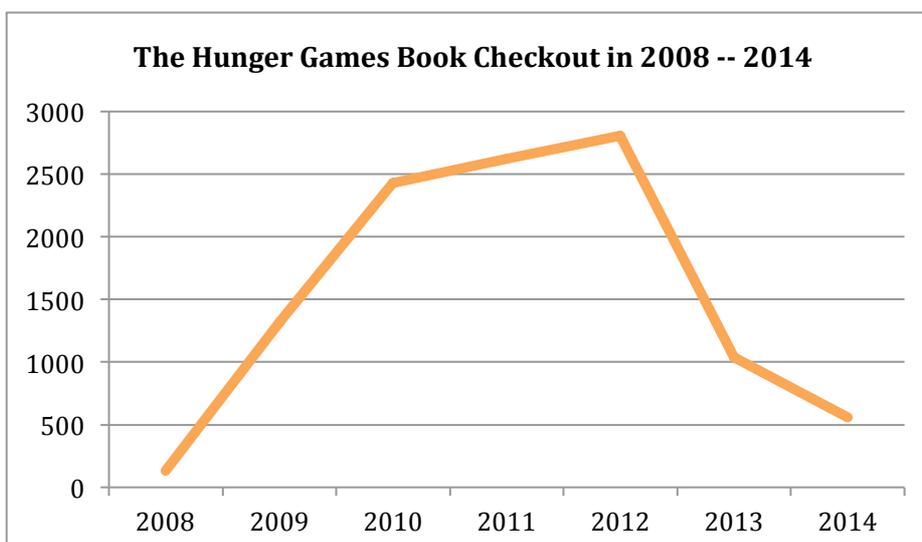
3. The chart below reveals the trend from five months before the release time to five months after the release time. Besides the increase and decrease of checkout number, we can also find that the time of maximum checkout is not the release the duration of film showing. And people need some time to respond and decide whether to see the original book.

Fluctuation of Book Checkout Around Corresponding Film Releasing Time

Legend:
- 2006 The Da Vinci Code
- 2012 The Hunger Games
- 2009 The Time Traveler's Wife
- 2014 The Fault In Our Stars

X-axis: Released Month

Y-axis: 0, 50, 100, 150, 200, 250, 300, 350, 400, 450

4. I tried to search some films adapted from documentary book than novel. But it doesn't have any obvious change. It seems that novels are more attractive to people. And it is also conform the common sense.