

Playing the Game - Cold Opening and the Strategic Disclosure of Quality

Felix Munoz-Garcia

February 17, 2015

Cold Opening and the Strategic Disclosure of Quality

- Prior to their release in theaters, most films are seen by critics at private screenings. In this way, reviews are available to moviegoers on the first day that the film opens
- In some cases, however, a movie studio chooses not to have critics pre-screen a film which means viewers go in “blind” the first weekend of film’s release. This is referred to as “cold opening”, and it does not bode well for the quality of the film
- The reasoning is simple:
 - If the studio believes the film is a winner then it would be in its interest to allow critics to pre-screen it so that they can provide positive reviews to attract people to the theater
 - If instead the studio knows it has a stinker then it’ll expect negative reviews which will only deter people from seeing it
 - Thus films with cold openings are expected to have *lower* quality

Cold Opening and the Strategic Disclosure of Quality

- But game theory makes an even stronger prediction: films with cold openings should be of the *lowest* quality
- To understand why, let's set up a game theoretical framework and see what happens:
 - Suppose associated with each film is some intrinsic quality which we'll measure on a scale of 0 to 100
 - Assume studios know the quality of their films and that all viewers assign the same score to a film once having seen it
 - Prior to reading a review or watching a film, moviegoers are uncertain about a film's quality and they give equal likelihood to quality being of any value between 0 and 100

Cold Opening and the Strategic Disclosure of Quality

- Now let's make the analysis:
 - Suppose a studio chooses a cold opening for all films of below-average quality, meaning ones with a quality score below 50
 - In that case, moviegoers would infer from a cold opening that the rating is between 0 and 50 and thus has an expected quality of 25
 - However, if that is how moviegoers behave then this is not optimal for a studio, for suppose a studio has a film with quality level of, say, 45, the studio would then do better to have critics pre-screen it and report that its quality is 45, which is better than the expected quality of 25 from not having it reviewed

Cold Opening and the Strategic Disclosure of Quality

- Now let's make the analysis (cont'd)
 - A pre-screening is better than a cold opening for any film with quality exceeding 25, thus it is not optimal for a studio to choose a cold opening for all films with quality below 50
 - What about if it chose a cold opening only for those with quality below 25?
 - In that case, viewers would infer between 0 and 25 and thus have an expected quality of 12.5, but then a film with a quality above 12.5 would do better to have it reviewed

Cold Opening and the Strategic Disclosure of Quality

- Now let's make the analysis (cont'd)
 - More generally, if a studio used a strategy that has it pursue a cold opening for all films of quality q or less then viewers will infer from a cold opening that a film's quality is, on average, $q/2$
 - In that case, all films with quality exceeding $q/2$ are better off being reviewed than being lumped together with much worse films that also have a cold opening
 - This argument works as long as $q > 0$. Where this process ends up at is that only the absolute worst films - those with a quality score of 0 - would choose to have a cold opening
 - The prediction is not that a film that has a cold opening is below average in quality but rather that it is really really bad!