# Survivor, Island of the Invisible Asians: A Quantitative Analysis of Asian Representation vs. Visibility in CBS's Hit Reality Television Program 

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#### Abstract

This study intended to explore Asian visibility, measured in contestant-to-camera speaking time, in comparison to representation in the three most recent seasons of CBS's reality television program Survivor. Previous literature indicated a disparity in appearance time between Asian and White television characters on primetime programs, although no studies delved into reality television nor measured contestant-to-camera speaking time. This study utilized a quantitative content analysis method to collect speaking time values for each of the 58 contestants across seasons 37 through 39, as well as a correlational method to compile and average these values based on each contestant's racial identity. The results indicated an apparent difference in average speaking time between Asian and White contestants. Although Survivor represents only one program, and the results are only applicable to the three seasons analyzed, the disparity speaks to the larger issue of Asian invisibility in other forms of media and the real world. It is apparent that television producers have a more substantial impact on television narratives and contestants' visibility than directly observable. An equally allotted amount of content in future seasons of Survivor would allow viewers to better understand the struggles and experiences of Asian contestants. In order to expand on the complexity and ubiquity of the issue, it would be ideal for future research to explore whether or not the same Asian-White visibility disparity exists within earlier Survivor seasons as well as other reality television programs.


## Introduction

Throughout the course of American history, Asian visibility has consistently been comparatively low (Ocampo 2018). Within modern sociology, Asian Americans are often considered the most "different" out of the three major racial minority groups and the most left out by both the White majority and other minority groups (Zhang 2010). Reality television, in particular, provides an adequate basis for examining relations between racial groups, seeing as, according to Audrey Kwak, its "influence, based in its authenticity and 'reality,' surpasses that of news and conventional entertainment television because of its tremendous popularity" (Kwak 2004). In reality television, dating back to the firstever reality television show, The Real World, racial minority groups have been consistently less represented in reality television than their White counterparts (Bell-Jordan 2008).

In a narrower context, the racial diversity in CBS's reality television program, Survivor, is higher than ever before. In the first three seasons of the program, racial minorities only made up 14.6 percent of the cast, whereas, in the three most recent seasons, this has increased to 39.7 percent (see Figure 1).

Figure 1: Racial breakdown of Survivor cast (seasons 1-3 vs. seasons 37-39)


Although it is impossible to pinpoint the cause of this diversity increase, public dissatisfaction that resulted from the show's earlier casting choices may have led producers to increase casting diversity in later seasons. This can be inferred from Survivor's production team making a statement that the show "had often been criticized for a lack of ethnic diversity," which led to the cast of the thirteenth season (Carter 2006). Survivor's thirteenth season consisted of five contestants from each of the four major racial groups in America-Asian, Black, Latino, and White. Emily Drew expanded upon this, stating the producers intended "to increase the racial diversity of applicants for reality television programming, and to boost and diversify the consumer audience for their show" (Drew 2011). This supports the notion that producers increased the number of racial minority contestants to attract a more diverse viewing audience. While it seems that this diversity escalation would create a proportional increase in television airtime, or visibility, it must be called into question whether representation and visibility are truly correlated. If a visibility disparity does exist, it would indicate that the editing decisions of reality television producers have a more substantial impact on television narratives than readily observable.

Survivor is an American reality competition show, produced by CBS, which began airing in 2000 and continues to air into 2020. On Survivor, sixteen to twenty castaways are stranded on an island with nothing but their clothes and their castmates for thirty-nine days, with the location of the season varying based upon production selection (CBS 2019).

When a season begins, contestants are divided into teams, dubbed "tribes," which reside at different campsites. For the first two to three weeks of the game, contestants compete in this "tribe" phase of the game. Every one to three days, tribes compete against each other in physical competitions: reward and immunity challenges. Reward challenges offer food, drink, or camping equipment to the tribe(s) that win(s) the competition. On the other hand, immunity challenges make the winning tribe(s) immune from "Tribal Council," the location where the losing tribe goes to eliminate one of their members. The elimination process is performed via majority-rules voting, meaning that the contestant who receives the most votes from their tribemates is eliminated. The Tribal Council process continues through the remainder of the game-except for when a contestant is removed for sustaining an injury or quittingand continues until three contestants remain. At this point, the three attend a final Tribal Council, where a jury composed of eliminated contestants cast votes for which of the finalists, they want to win the game. The player who receives the most jury votes becomes the winner and receives one million dollars.

Previous literature has covered issues that plague Asian individuals within the realm of television. One prominent issue in this discipline is the "model minority" stereotype, which is present in both real life and television (Zhang 2010). The model minority stereotype pertains to the idea that Asian Americans are regularly associated with positive stereotypes, such as being the smartest, most "put-together," and least confrontational race (K.-Y. Lee \& Joo 2005; Park et al. 2006). This stereotype is especially perpetuated by television, as it is the most accessible form of media; one study found that Asian Americans were the least represented, yet the most positively portrayed, in television advertising (Stern \& Taylor 1997). Although this would seem beneficial to the Asian American community, it consequently has an adverse effect. Asian Americans are subsequently expected to be the smartest, most put-together, and
least confrontational people in any given group, and Asian Americans who do not act as such are viewed more negatively than individuals of other races who act in the same manner (Bang, Landreth, \& Taylor 2005).

Furthermore, the model minority stereotype is substantially present in reality television, a conflict-based television genre. In a 2012 study, Christopher Wilson and associates, of the University of Florida, found that antisocial behavior is commonplace in reality television due to the frequency of conflict that occurs in such tense environments (Callister, Robinson, \& Wilson 2012). Antisocial acts occur when an individual identifies that conflict is occurring and chooses to avoid it to prevent further conflict. Antisocial behavior relates to the model minority stereotype; due to the expectation to be non-confrontational, Asian Americans are assumed to act the most antisocially during times of conflict. Considering both this idea and the fact that reality television is conflict-ridden, Asian Americans are expected to be the most "left out" in the realm of reality television, also known as the left out phenomenon (Chin et al. 2018).

The study that came closest to exploring Asian visibility via quantitative content analysis was performed by Darnell Hunt, who explored and compared representation and screen time of Asian, Black, Latino, and White characters in primetime television. His study spanned over one television season, fall 2002, and measured the racial makeup of 85 different primetime programs' casts and screen time. Hunt measured a significant difference in screen time: for every episode of a program, on average, White characters received 6.9 minutes of screen time, Black characters received 5.8, and Latino characters received 5.6; meanwhile, Asian characters received only 3.8 minutes. Furthermore, White characters made up 81.4 percent of total screen time, while Asians made up 1.3 percent (Hunt 2002). This difference illustrates that the anticipated phenomenon of Asian invisibility on television is valid, and it would be logical to explore whether or not it is present in the genre of reality television.

Although Survivor cannot encompass the entire realm of reality television, it is one of the most popular programs in its genre. Furthermore, it serves as an adequate basis for the exploration of Asian invisibility, with a newly diverse cast for analysis. Although many studies have explored the racial dynamics of Survivor, the lack of representation of Asian Americans, and the nature of conflict in reality television programs, none have specifically explored the lack of airtime for Asian contestants. For starters, it is essential to address that the representation of racial minority groups in Survivor has increased since its beginning. The first four seasons of Survivor did not feature a single Asian American contestant, while the most recent season (39) alone features five. Thus, representation is not a present issue for Survivor; however, visibility still is. Representation pertains to the racial makeup of the cast, and how each racial group is represented. Visibility refers to the frequency by which producers give airtime to each contestant. In this study, "visibility" is defined as when the program shows a contestant speaking to the audience by expressing their thoughts on the game or their castmates; this is known as contestant-to-camera speaking time. The following question centers around these ideas:

## Research Question

In the three most recent seasons of the American reality television show Survivor, how does each contestant's average amount of contestant-to-camera speaking time per episode, as classified by race, illustrate the visibility disparity between Asian and White contestants?
This study intends to approach this research question through nearly the same method as Hunt in his study by using a quantitative content analysis followed by correlational method. This entails timing contestant-to-camera speaking time for each contestant and averaging the time values based on the race of the contestant. Following such research, the hypothesis follows.

## Hypothesis

In the three most recent seasons of Survivor, the average amount of contestant-to-camera speaking time per episode is lower for Asian contestants than White contestants, thus contributing to the notion that Asians are still less visible on the program despite increased representation.
The hypothesis is rooted in the findings of Hunt in his research on minority visibility on primetime television. Due to the findings that Asians are significantly less visible than their non-Asian counterparts in primetime television, it would be logical to infer that they are similarly less visible in reality television. Furthermore, both the model minority stereotype and left out phenomenon contribute to the idea that producers exclude Asian Americans from the program's narrative due to their assumed lower frequency of confrontation, as well as their tendency to not fit in with the White majority of the racially imbalanced cast.

Knowing if this visibility disparity exists within reality television is useful to both television producers and editors, as it would allow them to consider the implications of the way they shape narratives for television programs. With the knowledge that televisual erasure of Asians perpetuates harmful pre-existing stereotypes and phenomenon, television producers would be able to work to make their contestants equally as visible as they are represented. Furthermore, television viewers would be able to more accurately understand the stories and struggles of Asian contestants on reality television, rather than forming judgments of them based on a minimal amount of content.

## Methodology

This research examined the three most recent seasons—37 (Fall 2018), 38 (Spring 2019), and 39 (Fall 2019)—of CBS's reality television program, Survivor. Each season consisted of fourteen episodes, each of which ranged between 41 and 45 minutes without commercials; some were "double" episodes, which ranged 82 to 90 minutes without commercials (CBS 2019); the three seasons contained a total of 34.3 hours of content. These seasons were selected due to their high level of racial diversity, compared to their predecessors. Out of the 58 contestants across these seasons, 23 were people of color; ten were Black, five were Latino, and eight were Asian. This was the highest proportion of racial minorities across all consecutive three-season strings throughout Survivor history. High racial diversity was desirable for this research, as it allowed for the analysis of more contestants from each racial group. Larger sample sizes for each group were ideal because it enabled the research to collect "more accurate mean values, identify outliers that could skew the data in a smaller sample and provide a smaller margin of error" (Zamboni 2018).

The racial identity of each contestant was determined via autobiographies, which were provided in the "Cast" tab of the CBS website's page for Survivor. Any races not specified in these autobiographies were identified using Survivor Wiki, a public website that keeps a record of past Survivor contestants, including a description of their trajectory on the show as well as their demographic identities. Its racial identifications for each contestant were reliable because the races listed for each of the contestants matched those in the CBS autobiographies or directly mentioned in the program (CBS 2019; Survivor Wiki 2019).

In this research, the race of each contestant was the independent variable, while each contestant's average amount of speaking time per episode was the dependent variable. Thus, each contestant's average speaking time was assumed to be affected by their racial identity. One confounding variable was a game twist in the thirty-eighth season called the "Edge of Extinction." The Edge of Extinction was a second island where contestants went and remained after their elimination, until a predetermined point in the game. At this point, all inhabitants competed in a challenge to re-enter the game. In each episode of the season, producers gave the Edge of Extinction a relatively short segment where each inhabitant briefly shared their thoughts. Since the content of this contestant-to-camera speaking time was not a part of the main game, it had no value to this study. Therefore, contestants who went to the Edge of Extinction were regarded as eliminated, and any speaking time they received on the Edge of Extinction was not recorded. If a
contestant returned to the game from the Edge of Extinction, only their speaking time in the main game was counted until they were re-eliminated, or the season ended.

Season 39 included a similar game twist, under the name "Island of the Idols." The Island of the Idols was also a secondary island; however, rather than going to an island post-elimination, one contestant was randomly selected once each episode to go to said island for a short period of time while still in the game. During this period, the selected contestant was the only contestant who received speaking time; as a result, each selected contestant received an abnormally high amount of speaking time for their respective episode, which was inconsistent with the other episodes they appeared in. Furthermore, each contestant who was exiled to this island was selected randomly, and thus this supplementary speaking time was not influenced by producers and editors. Therefore, to avoid skewed averages and to make the sample more representative of producers' and editors' decisions, any speaking time given to a contestant on the Island of the Idols was not recorded.

Two methods were utilized to collect and analyze the speaking times for each racial group: a quantitative content analysis and a correlational method. These were selected due to their use in Hunt's study. Hunt used a quantitative content analysis to collect and average speaking time values for each character in their respective shows, and a correlational method to subsequently compile and average such values according to character race (Hunt 2002). Accordingly, in this research, a quantitative content analysis method was used to time how long each Survivor contestant spoke to the camera for each episode they appeared in. Pictured in Figure 2 is what a television viewer sees on-screen while a contestant is speaking.


Figure 2: Pictured above is what the television viewer sees on-screen while a contestant is speaking to the camera (the contestant, contestant name, game status, and the tribe they belong to). Here, Kellee Kim, a contestant on season 39, is shown speaking to the camera.

This visual, consisting of contestant name, tribe status, and game position, was used to determine whether or not a contestant was speaking to the camera. One value was collected, in a unit of seconds, for every episode that each contestant appeared in. An average value was calculated for each contestant by totaling all their speaking time across the season and dividing it by the number of episodes they appeared in. Contestants who spent time on the Edge of Extinction, but later returned to the game, had their total amount of speaking time divided by the number of episodes that they were a member of the main game, excluding the Edge of Extinction. A correlational method was next used to compile the 58 averages into four groups (based on the races of the contestants), sum the individual averages for each group, and divide this sum by the number of contestants in each group. The four resulting values represented the average amount of speaking time allotted, per episode, to each racial group.

## Results

A total of 58 contestants were assessed for race, and speaking time was recorded accordingly. Within the contestant sample, $60.34 \%$ were White $(n=35), 17.24 \%$ were Black ( $n=10$ ), $13.79 \%$ were Asian $(n=8)$, and $8.62 \%$ were Latino $(n=5)$. According to Statistic Solutions, "[t]he symbol ' $n$,' represents the total number of individuals or observations in the sample" (Statistics Solutions 2020). In this study, $n$ represents the total number of Survivor contestants in the group being discussed. The data revealed that, as predicted, White contestants received the highest value for average speaking time per episode. As illustrated in Figure 3, White contestants averaged 38.89 seconds per episode, 18.1\% higher than Asian contestants, who averaged 32.94 seconds per episode. Standard deviation ( $\sigma$ ) was calculated for both groups using a coded spreadsheet, resulting in values of 12.92 and 14.18 seconds for Asian and White contestant groups, respectively. Standard error $(S E)$ was then calculated using the equation $S E=\frac{\sigma}{\sqrt{n}}$, generating standard error values of 4.57 and 2.40 seconds for Asian and White groups, respectively. In Figure 3, average speaking time values were displayed on vertical bars, while standard error values were visualized using error bars.


Figure 3: Average Speaking Time: Asians vs. White Contestants.
Across all three seasons, a total of 21,918 seconds of contestant-to-camera speaking time were allotted. Out of this value, 14,567 seconds were given to White contestants and 2,291 seconds to Asian contestants. Thus, out of the total speaking time allotted, White contestants received $66.46 \%$ of it, while Asian contestants received $10.45 \%$. Compared to the percent of the cast that each race made up, in terms of cast composition versus total speaking time composition, there was a $-3.34 \%$ deficit for Asian contestants and a $+6.12 \%$ surplus for White contestants. This is displayed in a two-column bar graph in Figure 4.


Figure 4: Cast Composition vs. Total Speaking Time Composition: Asian vs. White Contestants.

In terms of individual contestants' averages, most fell within the 20 to 29.99 and 30 to 39.99 second ranges. However, outliers were present in both racial groups, as displayed in Figure 5. No contestants of either race fell in the 0 to 9.99 or 10 to 19.99 second ranges. $50.0 \%$ of Asian contestants ( $n=4$ ) and $31.4 \%$ of White contestants $(n=11)$ fell in the 20 to 29.99 range; $25.0 \%$ of Asians $(n=2)$ and $31.4 \%$ of Whites $(n=11)$ fell in between 30 and 39.99 seconds; the 40 to 49.99 and 50 to 59.99 second ranges each consisted of $12.5 \%$ Asian contestants ( $n=1$ ) and $14.3 \%$ White contestants $(n=5)$; no Asian contestants were present in the 60 to 69.99 or 70 to 79.99 second ranges, while $5.7 \%(n=2)$ and $2.9 \%$ ( $n=1$ ) of White contestants were present in such ranges, respectively. Asian contestants' averages were most frequent in the lowest range in which both races were present, being 20 to 29.99. Meanwhile, White contestants were more frequent in every single range above. Furthermore, in the highest two ranges, Asian contestants were not present whatsoever, while White contestants were (although in a low frequency).


Figure 5: Percentage Composition of 10 -second time ranges: Asian vs. White contestants.

Although not included in the above graphs, speaking time values were collected and averaged for Black and Latino groups, as well. The individual averages for these contestants, as well as the ones previously discussed for Asian and White contestants, can be viewed in the complete data table located in Appendix A. The values displayed in Figure 3, Figure 4, and Figure 5 were also calculated for Black and Latino groups; these data, as well as the aforementioned values presented for Asian and White groups, can be viewed in Appendix B (Figure 3), Appendix C (Figure 4), and Appendix $D$ (Figure 5).

## Discussion

The results of this study indicate an accurately hypothesized disparity in average speaking time per episode between Asian and White contestants ( $38.89-32.94=5.95$ seconds, or $18.1 \%$ ) on CBS's reality television program, Survivor, although not as drastic as the difference apparent in Hunt's 2002 study ( $6.9-3.6=3.3$ minutes, or $91.7 \%$ ). However, it is significant to consider that this study explored the reality genre through the lens of one program, while Hunt's study explored the comedy and drama genres via 85 different programs (all of which aired during the primetime television slot). The numerical disparity between Asian and White contestants on Survivor is not nearly as evident as the one between Asian and White characters within Hunt's study; regardless, a sizable disparity still exists. Such results
make sense in the context of previous literature, especially considering the knowledge that the model minority stereotype expects Asian Americans to behave antisocially in conflict-based environments as well as the fact that the reality genre is conflict-centered (Wilson 2012).

It could not be determined whether or not the Asian-White visibility disparity has changed from earlier seasons of the program, due to the extreme lack of Asian contestants in such seasons. Seeing as this study only explored the most recent (and diverse) seasons, the results above are only applicable to said seasons. Although the recent increase in diversity is a step in the right direction for on-screen representation of Asian Americans and other minorities, as illustrated in Figure 4, cast composition and speaking time allotment are inconsistent; this indicates that representation in the cast does not equal visibility on the program. Asian contestants receiving lower speaking time than representation shows that they are, as discussed in previous studies, less visible than their White counterparts.

As predicted, in terms of average speaking time ranges (Figure 5), Asian contestants' averages were of higher frequency in the lowest range in which Asian and White contestants appeared, 20 to 29.99, while White contestants' averages were of higher frequency in every higher range ( 30 to $39.99,40$ to $49.99,50$ to $59.99,60$ to 69.99 , and 70 to 79.99). This is consistent with the data present in Figure 3 and Figure 4, as well as the hypothesis, in that Asian contestants were more likely to receive lower speaking time averages and less likely to receive higher speaking time averages than White contestants. It is also significant to note that there were no Asian contestants whatsoever in the two highest ranges, 60 to 69.99 and 70 to 79.99 . This visibility distribution is clearly disproportionate, and while percentages were nearly the same in the 40 to 49.99 and 50 to 59.99 ranges ( $12.5 \%$ and $14.3 \%$ for Asian and White contestants, respectively), the other ranges indicate that the visibility disparity does exist. Taken together with Figure 3 and Figure 4, the results of this study reveal a speaking time disproportion between Asian and White contestants in the three most recent seasons of Survivor.

With the common knowledge that reality television producers are those responsible for airtime distribution, it can be inferred that such producers are responsible for this disparity. In 2019, Whitney Davis, a Black executive at CBS, shared her story of her time working for the television company, stating that "the overwhelming majority of creators, producers and hired writers on CBS series were white and male" (Davis 2019). Perhaps it is this minority underrepresentation in higher positions that manifests in Survivor's visibility disparity. The lack of Asian representation in those in charge of accurately portraying Asian contestants' experiences on the program eliminates the consideration that Asian producers would place into creating a consistent narrative for Asian contestants. Thus, an increase in diversity in CBS's production team would likely account for at least a small portion of the visibility disparity. A prompt visibility increase for Asian contestants on Survivor is necessary, especially considering that "the visual absence of Asian Americans on television establishes subconscious conclusions of what one can and cannot be" (Kwak 2004). The societal norms that exist around the Asian American community created by a lack of visibility, such as the left out phenomenon, are bolstered when they are reinforced in media like television. Thus, Asian invisibility on Survivor, although only present in a 5.95-second gap, perpetuates pre-existing stereotypes and social phenomenons that harm the Asian American community. Furthermore, the Asian visibility issue is not only present on television, but in the real world, as well. According to Wei Sun and William Starosta, Asian Americans interviewed about invisibility perceptions "observed that members from their own ethnic groups have been ignored/neglected/invisible in dominant European American workplaces and daily life" (Sun and Starosta 2006). It is this very ignorance, neglect, and invisibility that continues to impact the Asian American community, both inside and outside of television.

Despite its ongoing presence in television, media, and the real world, Asian invisibility is not an insolvable issue. With the knowledge that the visibility disparity remains present in Survivor's most recent seasons, despite efforts to increase cast representation, CBS producers and editors can make a conscious effort to correct their subconscious editing disproportions. In the context of Survivor, the reassessment and redistribution of speaking time may allow for an equal amount of content for all contestants on the program, especially the less visible Asian Americans. Regarding the model minority stereotype and left out phenomenon, "the sheer lack of Asian Americans in television increases the emblematic, and therefore problematic, nature of these stereotypes;" when Asian contestants are less visible than their White counterparts, "few exceptions exist to counter stereotypes presented on television" (Kwak 2004). Thus, to
counter such pre-existing negative stereotypes of Asian Americans, a visibility increase on Survivor would be ideal. If given a proportional amount of content, Survivor viewers would be more likely to be equally understanding of all contestants, as well as able form judgements of players based on actions within the game rather than individual racial identity.

Although a visibility disparity was consistently apparent across three mediums of analysis (group averages, cast vs. speaking time composition, and range frequency), there are certain limitations to this study which must be considered. As previously discussed, the speaking time disparity between Asian and White contestants (18.1\%) was significantly lower than the airtime disparity in Hunt's 2002 study ( $91.7 \%$ ). Furthermore, as visible in Figure 3, the standard error values for the Asian and White groups had a large margin of difference- 4.57 and 2.40 seconds, respectively. These likely resulted from the small sample size of the study, as there were just 8 Asian contestants and 35 White contestants present out of only 58 contestants in the sample. These 58 contestants, out of the total 590 contestants who have competed on the American Survivor franchise (CBS 2019), account for just the three most recent seasons of the program. The small sample size resulted from the time constraints of the project; with a larger time frame for data collection, an analysis of all thirty-nine seasons would be adequate in determining how or if the visibility issue has changed throughout the course of the program. Furthermore, the results are only directly applicable to seasons 37,38 , and 39 , and cannot be compared to earlier seasons due to their absence in both previous literature and this study.

## Conclusion

Should future researchers delve into the Asian invisibility phenomenon in succession to this study, it will be ideal to replicate the methods used here for the previous thirty-six seasons to determine if the airtime disparity has changed over time, or exists whatsoever, in earlier seasons. Exploring whether or not the same visibility issue existed when representation was significantly lower would provide more insight into the editing decisions of CBS's production team, and how they have developed with time. A stagnancy in visibility disparity would indicate that the diversity increase was, as the show has previously been criticized for, to appease viewers. Furthermore, Survivor is just one program in the vast realm of reality television; it would be valuable to determine if other reality television programs, such as Big Brother, The Challenge, and many others, contain a similar or different disparity. Such findings would shed light on the expansive unknown that is racial representation versus visibility in the genre of reality television.

Thus, the Asian-White visibility disparity on Survivor is evident, although further research would confirm how large it truly is. Although this study's findings alone are just one of the many facets of an astronomically large issue, the results open a new realm of inquiry into the visibility distribution across the genre of reality television while simultaneously aligning with what previous literature has confirmed. Survivor's visibility gap, as discussed above, may be reduced with both an increase in Asian producers at CBS and a conscious effort from non-Asian producers to equally and accurately portray Asian contestants to the viewing audience. With this, the viewing audience will possess an expanded ability to evaluate Asian contestants based on a balanced showcase of gameplay and personality, rather than a race-based minimal amount of content. In sum, while Survivor and various other programs, both inside and outside the reality genre, have increased their diversity amid an American cultural revolution, there is still work to be done so that on-screen visibility is directly reflective of on-paper representation.

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