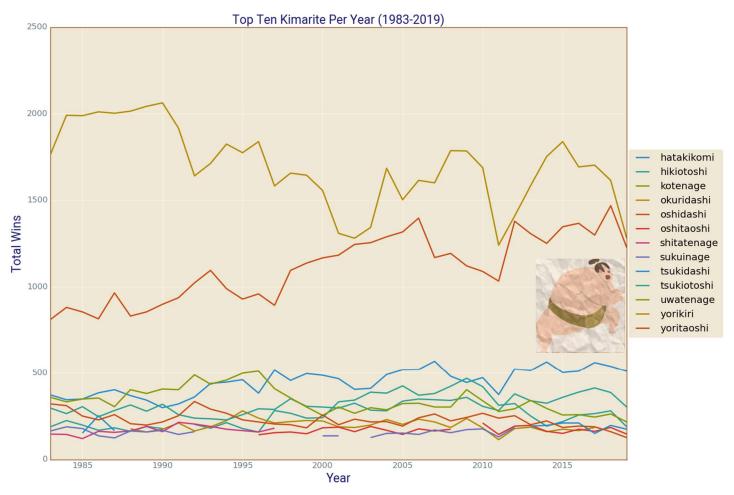
Top Ten Kimarite Per Year (1983-2019)



iii. Design Decisions:

- Sandy color background meant to match the sand covered clay of the dohyo, the ring of a sumo match that is encircled by partially buried straw.
- The color palette was selected through a matplotlib availability, where I used the style "_mpl-gallery" due to its clarity and boldness of color.
- I presented the legend, detailing each kimarite as each color corresponds to the time series
 plot, directly next to the figure in order to detail the sumo performing the highest winning
 kimarite, yorikiri, on the legend.
- I used the font, Roboto, because its clear sans serif style, as well as it being free.

iv. Findings:

 The most frequent winner of sumo bouts is yorikiri, where the sumo grabs their opponents clothing, called mawashi, and firmly pushes them out of the ring.

- The second most frequent kimarite is *oshidashi*, which is quite similar to *yorikiri*, except the sumo does not need to make a grip on the *mawashi* and may use their entire body to make their opponent fail.
- After these two kimarite, there is no clear order as to which kimarite are more successful than others. While some finishing techniques are more popular than others, such as *uwatenage* and *hatakikomi*, they are still entrenched with the other kimarite.
- The two bottom kimarite that were eligible to make the top 10 kimarite are sukuinage and oshitaoshi.

v. Data and Methods:

The data found in <u>Sumo Wrestling Match Results</u> shows a range of data from sumo matches each year from 1983 to 2019. In my figure, I focus on only the number of wins using each kimarite, which are finishing moves used by sumo to throw their opponent out of the ring or cause them to touch the ground with a body part that is not the soles of their feet.

To create the time series above:

- I added the columns, Year, Kimarite, and the total Count of how many times a kimarite won each year into a new csv, that encompassed all 38 years of data.
- I used a loop to get this data from each csv in the folder of all 38 csvs
- I used the year in the name of the csv to extract the Year, which was not present in any column
- I used the groupby function to total the kimarite, and then sorted the top ten per year, dropping the rest.
- I appended all the data to the csv file I used to create the figure
- I used matplotlib to create the figure, first pivoting the data into index=year, column=kimarite, and value=count.
- After pivoting the data I inserted them into the time-series and adjusted the design, as noted above.

vi. Significance:

There's an old saying, if ain't broke- don't fix it. While the time-series <u>Top Ten Kimarite Per Year (1983-2019)</u> upholds this timeless standard, we can see another truth plant its feet firmly in the ring. Taking the easy, default route will allow sumo to succeed in a grapple with their opponent most of the time, however the real edge lies within their specialties. Sumo who have practiced and perfected other kimarite are able to increase their chances of a win by performing kimarite that their opponents are less used to fending off. It's important to know your opponent's strengths and weaknesses, as well as your own. It can take sumo from struggling in *yorikiri* for a win- due to possible lack of strength or an opponent's dazzling techniques- to utilizing the lesser ranked *sukuinage* or *oshitaoshi* to force their opponent out of the ring, as well as riling up the crowd.

Github Repository: Top Ten Kimarite Per Year (1983-2019)