In April 2016, Los Angeles Lakers superstar Kobe Bryant, one of the NBA's most famous and divisive players, retired. He'll be remembered for many things: the championship rings, his feud with Shaquille O'Neal, his ruthless dedication to putting himself in the conversation of all-time greats alongside his idol Michael Jordan. But part of that legacy will also be his penchant for throwing up endless amounts of shots. (He had the third-most field-goal attempts in league history and holds the record for most shots missed in a career.) To celebrate Kobe's trigger-happy ways, his hometown paper made a gorgeous purple-and-gold interactive chart that maps out exactly where he took every single shot on the court.

When consuming a visualization, the viewer will go through a process of understanding involving three stages: **perceiving, interpreting and comprehending**…Each stage is dependent on the previous one.[[1]](#footnote-1)

**Perceiving** means what does it show. This diagram demonstrates Every shot Kobe Bryant ever took, all 30,699 of them during his 20 years with the Lakers, including the regular season and playoffs. Kobe Bryant's 30,699th and final field goal came from 19 feet with 31 seconds left against the Utah Jazz. Purple dots are for makes. Gold dots are for misses.

**Interpreting** means what does it mean. Is it good or bad? Is it meaningful or insignificant? Are the results usual or unexpected?

It is quite useful when we want to evaluate his basketball career, e.g. his shooting ability and dunk ability.

When we click the dot in this interactive graphic, we will see the information on the distance between the shot point and the rim, the opponent of Los Angeles Lakers and the date of the game. We can even know how Kobe scores, by a jump shoot, layer shoot or slam dunk. If you are interested in his one specific game, for instance, the game he scored 81 points against Toronto Raptors, you can see every shot he attempted and made. Kobe attempted 46 shots and made 20 during his career-high 81-point game.

**Comprehending** means what it means to me. What are the main messages? What I have learnt from it? This diagram aims to those who are professional at basketball (spatio-temporal) data analysis or those who are interested in Kobe Bryant. Comparing with traditional data visualization on basketball player, the introduction of temporal data is of great significance. According to Kirk, temporal-based data is worth mentioning separately because it can be a frustrating type of data to deal with, especially in attempting to define its place within the TNOIR classification[[2]](#footnote-2). The reason for this is that different components of time can be positioned against almost all data types, depending simply on what form your time data takes. If you want to study on the process of his dunking abilities after entering the league, you can check the shots made under the rim year by year and according to my analysis, his highest dunking ability is in season 2006-2007.

As is known to us all, Kobe won his own championship in season 2008-2009 (v. Orlando Magic) and 2009-2010 (v. Boston Celtics). The reason why I stressed ‘his own’ here is that he won two medals of Final Most Valuable Player (FMVP) at last. He made 1042 shots in 2008-2009 and 950 shots in 2009-2010 while he made 1050 shots in 2005-2006. He didn’t even enter the playoffs in season 2005-2006. The phenomenon shows that Kobe is the only reliable player in Los Angeles Lakes in 2005-2006 while he had much better partner between season 2008-2009 and season 2009-2010. Actually, Los Angeles Lakers traded its 2nd pick with Memphis Grizzlies to get Pau Gasol, another NBA all-star at that time in 2008. Also, the returning of Derek Fisher, who later became the chairman of National Basketball Players Association (NBAP), was also of great significance.

We have talked much about the functions of the diagram, so is it a good design?

According to Kirk, there are three principles of good visualization design:

Principle 1: Good data visualization is trustworthy. The notion of trust is uppermost in your thought in this first of the three principles of good design. I think this interactive diagram is trustful because of its authentic data source (http://stats.nba.com/).

Principle 2: Good data visualization is long lasting. 'Long lasting' can relate to avoiding the temptation of fashion or current gimmickry and having a timeless approach to design. In my opinion, this interactive diagram is very fashionable and it will never be outdated. The first reason is that the graph maker uses the dot and basketball court as the base layer instead of traditional bar chart. This innovative demonstration can make us see what Kobe did spatially, which means we can know the style of Kobe. Let us imagine that if there was a Shaq’s every single shot, most of the made shots must be very close to the rim and there are almost no shots outside the three-point line. This kind of expression, which can easily show the players’ traits, will be more and more popular.

Principle 3: Good data visualization is environmentally friendly.

The limit is that the penalty shots are not included in the diagram, which means you cannot evaluate the player’s penalty shot ability.

1. Kirk. Chapter1. Defining Data Visualization. P22. [↑](#footnote-ref-1)
2. Kirk. Chapter4. Working with Data. P104. [↑](#footnote-ref-2)