

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/334272774>

Babar Azam @70

Preprint · July 2019

DOI: 10.13140/RG.2.2.24549.14566

CITATIONS

0

READS

422

1 author:



Gangan Prathap

APJ Abdul Kalam Technological University

477 PUBLICATIONS **4,631** CITATIONS

SEE PROFILE

Babar Azam @70

Gangan Prathap

On 5 July 2019, Babar Azam completed his 70th ODI innings for Pakistan in the last of their encounters at the 2019 ICC Cricket World Cup. His 96 runs off 98 balls against Bangladesh was not good enough to take Pakistan into the knockout stage. But his consistency with the bat in this World Cup was enough to underline the fact that he is probably the most exciting ODI batting talent since Virat Kohli. We can examine this gut feeling analytically using some of the methods reported in these pages earlier in Science Reporter.

Science Reporter, March 2016 had shown for ODI batsmen that performance is a complex construct. There is a size (quantity) component, the number of innings played. And then there is quality (in this case, batting average). A third aspect is that of consistency. Readers of Science Reporter might recall that a definition for consistency was offered in these pages (SR Vol.48(09) - September 2011) using a second-order energy analysis based on what was called the Energy, Exergy and Entropy (EEE) paradigm.

We now use this three-dimensional paradigm to see how Babar Azam compares with two most recent greats of ODI cricket, Virat Kohli and Steve Smith at comparable stages of their careers. The data is readily sourced from the Cricinfo website. We just need an innings-by-innings account of the runs scored. If c_k is the runs scored in the k -th innings, the total runs scored at the end of N innings is $R = \sum c_k$. The batting average is R/N . Note that we use k as the index and so the batting average here is not the same as that used in most cricket statistics where the index runs over the number of innings where the batsmen gets out. The second-order terms are then: Exergy $E = \sum c_k^2$, Energy $X = R^2/N$ and Entropy $S = E - X$. The consistency of the player is then X/E .

Table 1 shows the statistics for the three iconic batsmen in the recent history of men's ODI cricket from the Cricinfo website after 70 innings. Analysis reveals that in terms of all three indicators considered, total runs scored, quality (batting average) and consistency, Babar Azam, is well ahead of his two contemporaries. Figure 1 is a representation of batting progress using entropy as a pseudo-time. Babar Azam seems to be getting better with time and was at his best most recently at the most recent edition of the World Cup in England and Wales.

Dr Gangan Prathap is associated with the A P J Abdul Kalam Technological University, Thiruvananthapuram. He was earlier at the National Institute for Science Communication and Information Resources (NISCAIR), New Delhi and more recently with the National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram. Address: 56 Pebble Gardens, Njandoorkonam, Chempazhanthi PO, Thiruvananthapuram-695587; Email: gangan_prathap@hotmail.com

Table 1. Statistics for three iconic batsmen in the recent history of men's ODI cricket from the Cricinfo website after 70 innings. Analysis reveals that in terms of total runs scored, quality (batting average) and consistency, Babar Azam, is well ahead of his contemporaries.

Indicator	Smith	Kohli	Azam
Innings N	70	70	70
Runs R	2515	2780	3213
Average R/N	35.93	39.71	45.90
Exergy X	90360.36	110405.71	147476.70
Energy E	160539	200474	225417
Consistency	0.56	0.55	0.65

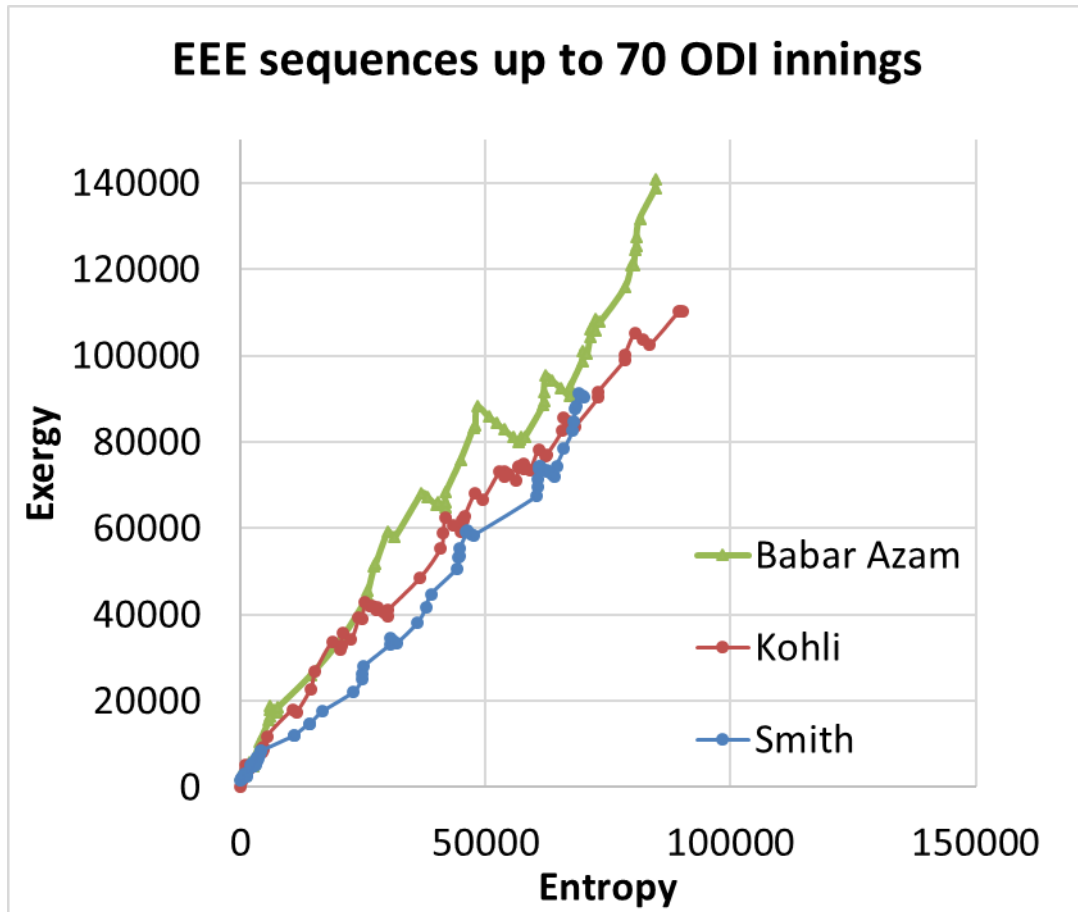


Figure 1. A representation of progress using entropy as a pseudo-time. Babar Azam seems to be getting better with time and was at his best most recently at the most recent edition of the World Cup in England and Wales.