Dear Akinbo

I have been thinking about your questions.

In the literature the sorites (the paradox is usually written with a small "s") comes in three forms.

1. Conditional (C) sorites -- how are the predicates (heap & non-heap) related to each other and to the duration of the journey of the grains?

2. Mathematical Induction (MI) sorites -- how is the first step of MI related to the last step (for the grains) of the journey which doesn't end in a grain but a heap?

3. Line-drawing (LD) sorites -- at which number of steps (i.e. which number i of grains) does the change happen or when does MI fail? Or by the least number principle (equivalent to the principle of mathematical induction) there must a point (a line in the sand) when we go from heap to non-heap.

The C sorites equation is $[\bullet, \circ] = \text{duration of the journey of the grains in } H = i \bigcirc$

The LD sorites is $\bullet \leftrightarrow \circ \leftrightarrow \circ$ the top half of $H$ with "phase" of $e^{-i\omega}$

The MI sorites is $\circ \leftrightarrow \bullet \leftrightarrow \circ$ the bottom half of $H$ with "phase" of $e^{+i\omega}$

Such that $<\bullet|e^{-i\omega}H e^{+i\omega}|\circ> = \text{the interference patterns of "time": its "flow", the past, the present, the future, and the "now". Where } <\bullet| \text{ is the state vector for LD and } |\circ> \text{ is the state vector for MI.}$