Kanjera South Figures

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Core Prep

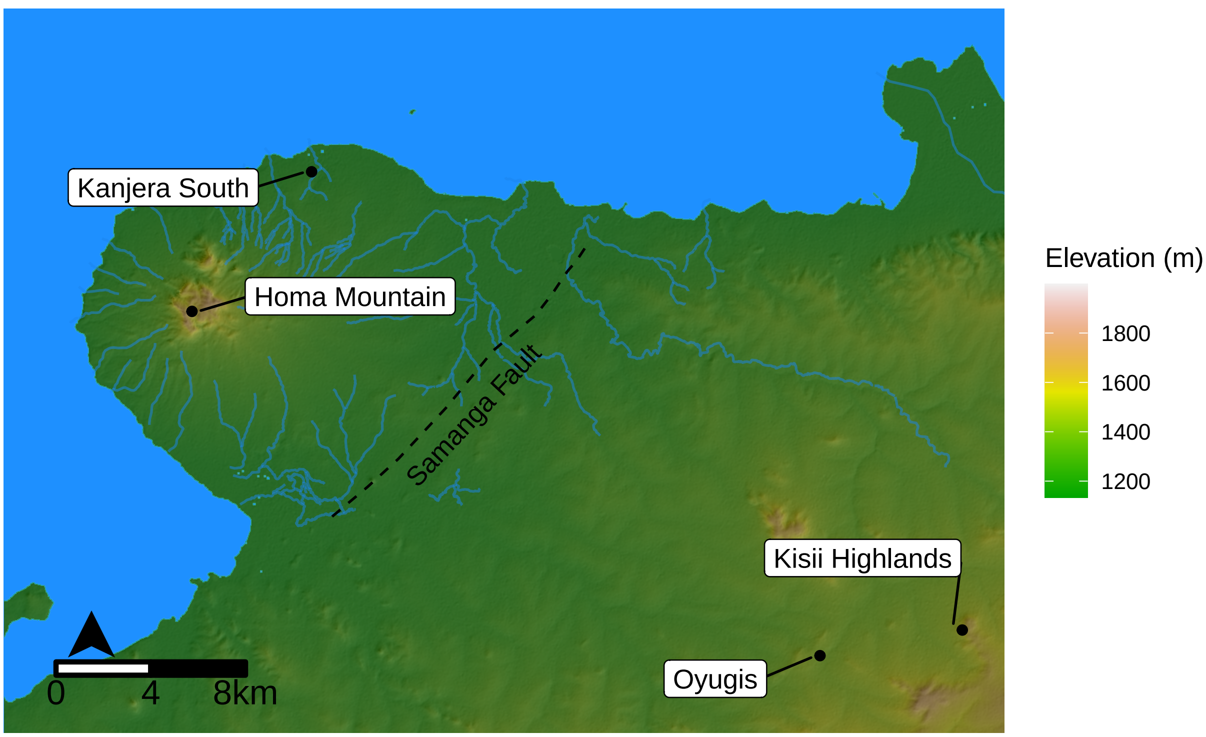

Figure 1: A map of the Homa Peninsula. Kanjera South is situated to the East of Homa Mountain. The Homa Mountain carbonatite center is the primary source of the local raw materials including Homa limestone (HLi), Homa Phonolite (HPh), and Fenetized nyanzian rocks (FNy). Drainages coming off the flanks of Homa Mountain carry these local rock types to within the immediate vicinity of Kanjera South. Distant or exotic raw materials originate in river conglomerates much farther to the east of the Samanga Fault. These include Bukoban andesite (BBa), Bukoban felsite (BFe), Bukoban quartzite (BQu), Nyanzian rhyolite (NyR), and Oyugis granite (OGr)

##

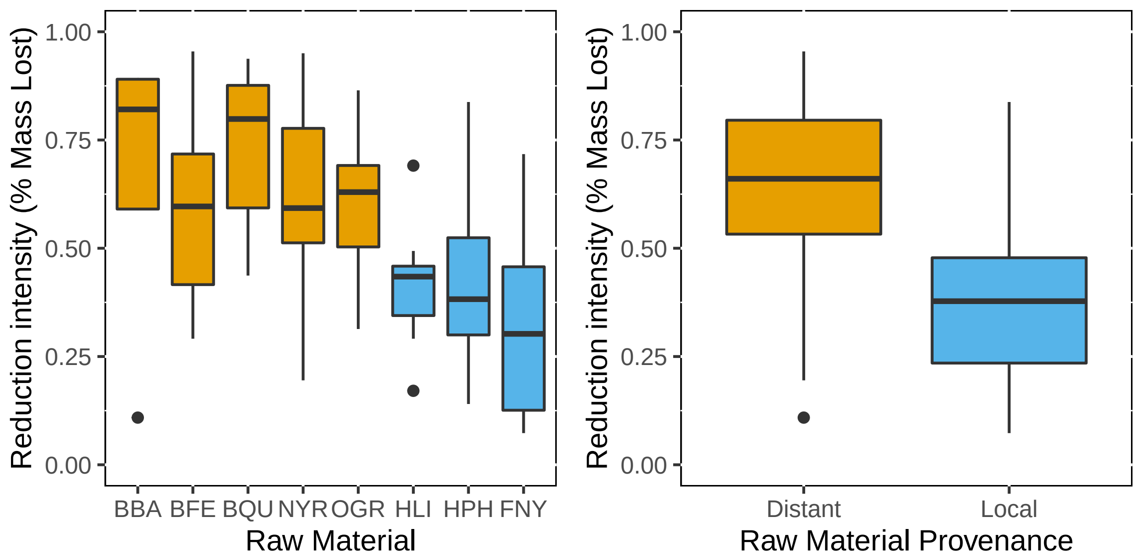

Figure 2: The distribution of core reduction intensity values as predicted by the GLMM (Douglass et al 2018). The results show stark differences in the degree of reduction in materials originating from more distant sources than those that originate from local sources of stone.

```
##  Wilcoxon rank sum test with continuity correction
##
## data:  cores$fixedpredict by cores$rm.provenance
## W = 5639.5, p-value = 2.83e-13
## alternative hypothesis: true location shift is not equal to 0
```

```
##
##  Kruskal-Wallis rank sum test
##
## data:  cores$fixedpredict and cores$DeLaTorre.Typology
## Kruskal-Wallis chi-squared = 57.075, df = 8, p-value = 1.741e-09
```

```
##
##  Fisher's Exact Test for Count Data with simulated p-value (based on
##  2000 replicates)
##
## data:  cores.table
## p-value = 0.0004998
## alternative hypothesis: two.sided
```

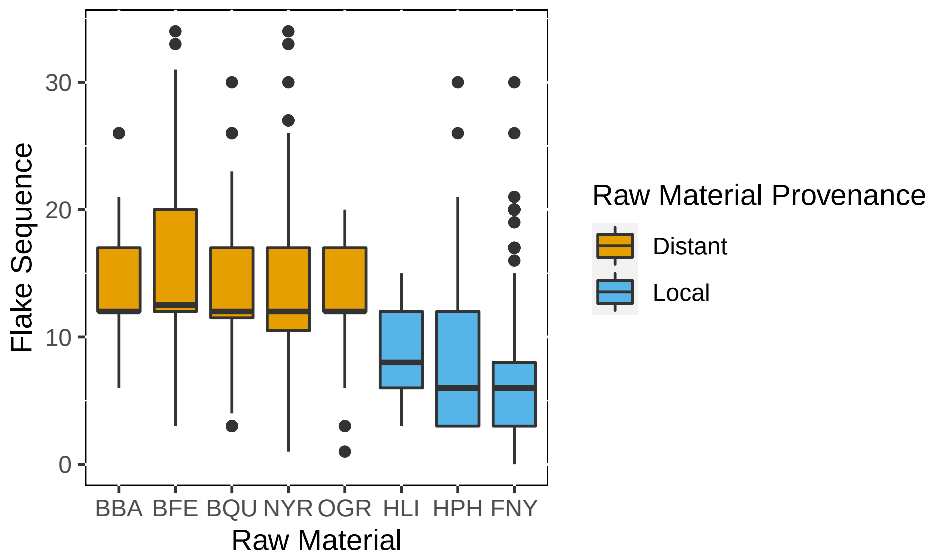

Figure 3: The distribution of flake sequence values present within the Kanjera South flake assemblage. As is the case with the core assemblage, the primary differences in flake sequence values are between materials originating from more distant sources and those that originate from local sources of stone.

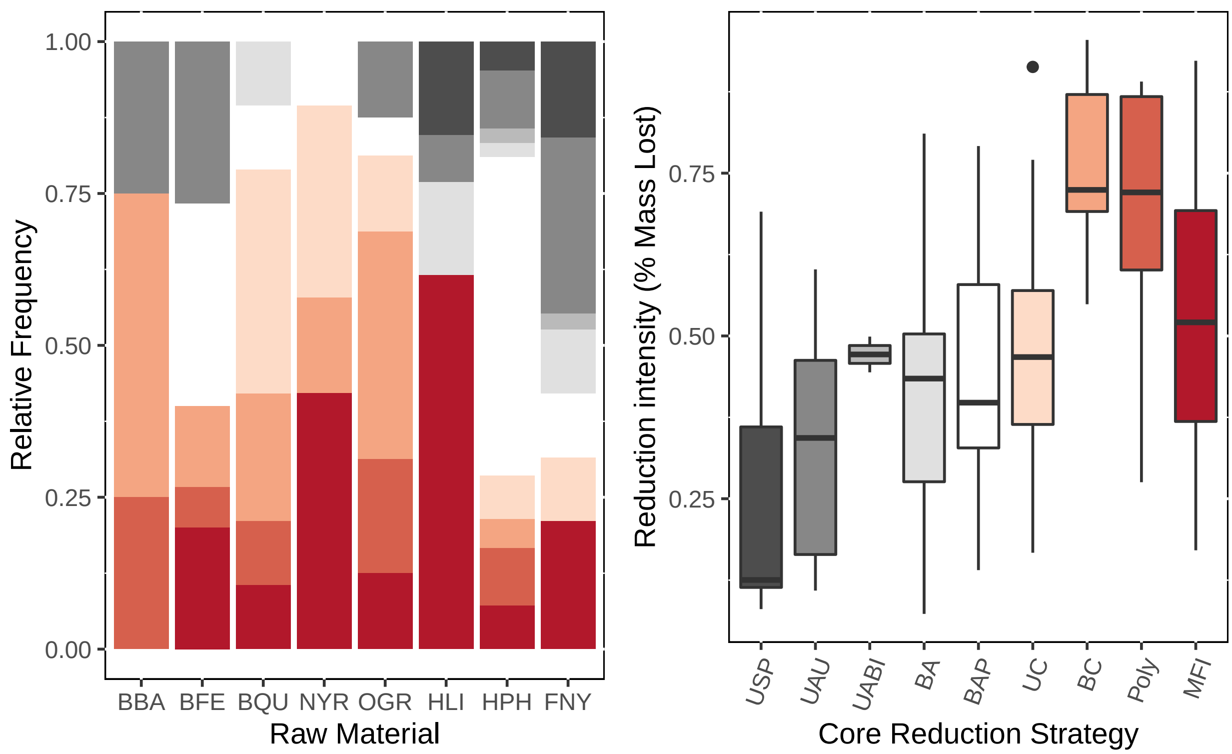

Figure 4: Left: The distribution of core reduction strategies by raw material type. With the exception of Homa Limestone, raw materials that derive from the Kisi highlands are more greatly represented by complex core reduction strategies than those that can be found in the immediate vicinity of Kanjera South. Right: The distribution of reduction intensity values according to reduction strategy. **USP**: Unifacial Simple Partial. **UAU**: Unidirectional abrupt unifacial. **UABI**: Unifacial abrupt bidirectional. **BA**: Bidirectional Abrupt. **BAP** Bifacial Partial. **UC**: Unifacial centripetal. **BC**: Bifacial Centripetal. **Poly**: Polyhedral. **MFI**: Mutifacial Irregular. The colors of the boxplots correspond with the representation of different reduction strategies in the left figure.

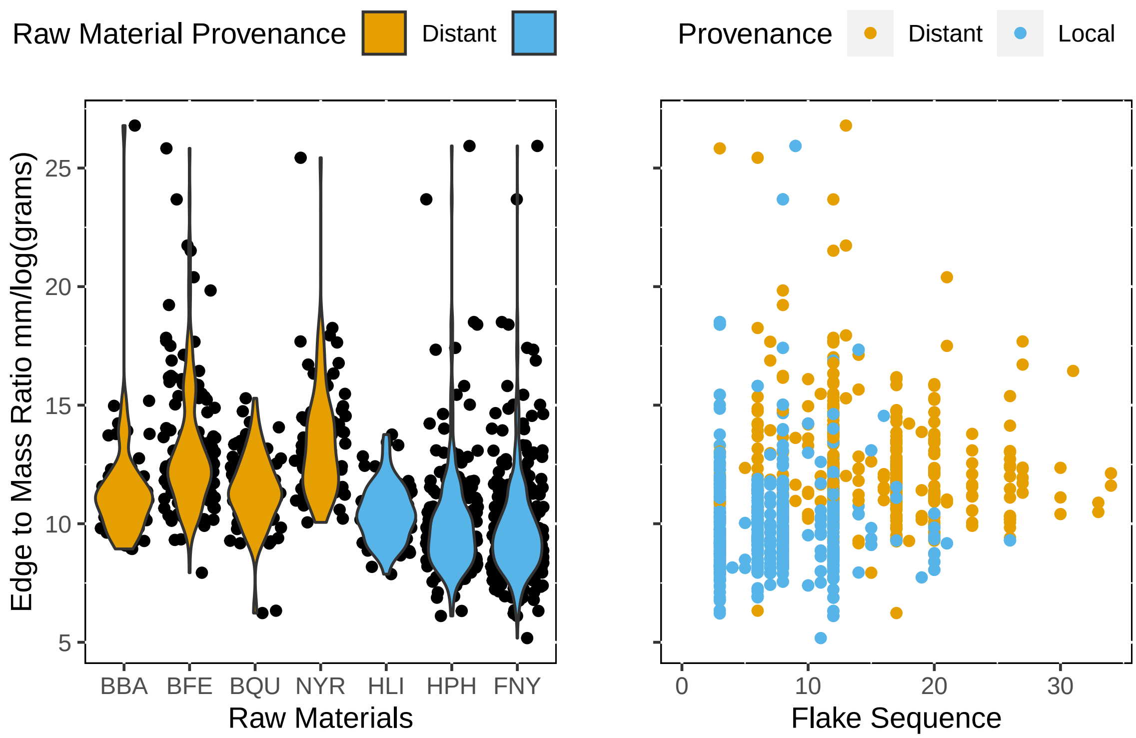

Figure 5: Left: Boxplots of the measures of flake efficiency. Y-axis represents perimeter of flakes divided by a logarithmically transformed mass value. Right: A scatter plot examining the relationship between flake efficiency and flake sequence.