Diet Variability among *Australopithecus africanus* and *Australopithecus robustus* Through Dental Microwear Analysis

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Analysis of dental microwear allows for dietary reconstruction in fossil taxa and is applied here to two species of *Australopithecus* to make inferences on the variability of foods consumed. These two Hominini species include *A. africanus* (n = 7), found at the Pliocene deposits of Sterkfontein, and *A. robustus* (n = 9) from the Pleistocene cave of Swartkrans. The dental microwear signal of *Parapapio broomi* (n = 10), a small monkey, from Sterkfontein and *Dinopithecus ingens* (n = 9), a larger monkey, from Swartkrans provide evidence for the diets available from these distinct deposits and the possible resources exploited. To investigate potential dietary differences, dental microwear features were examined under low-magnification (35x) stereomicroscopy using a 0.4 by 0.4 ocular reticle and an external light source. Dental microwear features were counted twice on the occlusal surface of the second molar paracone and averaged. Small pits, fine scratches and puncture pits are the features most commonly found in the taxa. Linear regression shows a significant relationship exists only between small pits and fine scratches, while puncture pits are not significantly associated with other microwear scars. Bivariate plots show that *Parapapio broomi* differs from the other taxa on the prevalence of small pits, whereas both *Australopithecus* taxa show large numbers of puncture pits and fine scratches, and fewer small pits. *Dinopithecus ingens* resembles *Australopithecus* more than does *Parapapio broomi*. The tremendous variability in the two species of *Australopithecus* suggest a wide range of foods, including grasses, seeds and terrestrial resources, that were exploited despite the availability of forests in the Pliocene, and more open habitats in the Pleistocene. These results largely agree with isotopic evidence of the diversity of foods consumed and adaptability of *Australopithecus africanus* and *Australopithecus robustus*.