

# Errata for: How Well Do Line Drawings Depict Shape?

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## 1 Bas-relief fitting to median response

The calculation for the average error from the median response with bas-relief fitting shown in Table 2 of Cole, et al. [2009] is incorrect. The calculation was erroneously made by first finding the median orientation without bas-relief fitting, then applying bas-relief fitting between each participant's responses (including the median) and *ground truth*, then computing the error between participants' responses and the median. The correct approach is to find the median orientation without bas-relief fitting, then apply bas-relief fitting between each participant's responses and *the median orientation*, then compute the error between the participants' responses and the median.

The corrected numbers are shown in Table 1 and the original erroneous numbers are shown in Table 2. Overall the average error to the median is reduced by 22% when using the corrected calculation. While this is a significant improvement, however, it does not materially change the conclusions of Cole, et al. [2009].

Model	S	H	AR	RV	SC	C
cubehole	9	12	-	11	-	14
rockerarm	9	12	11	11	13	13
lumpcloth	12	14	11	13	13	12
femur	13	13	13	12	12	12
pulley	13	18	16	17	18	15
flange	13	15	14	13	15	15
screwdriver	14	14	13	13	13	10
bumps	14	12	13	13	11	8
twoboxcloth	13	12	13	13	12	12
tooth	14	14	12	14	14	13
cervical	16	15	14	14	12	10
vertebra	14	13	11	13	13	12
average	13	14	13	13	13	12

**Table 1:** Average error to median computed by bas-relief fitting to the median orientation. These numbers are **correct**.

Model	S	H	AR	RV	SC	C
cubehole	11	15	-	12	-	17
rockerarm	11	13	13	14	13	8
lumpcloth	14	16	16	13	15	14
femur	15	17	16	17	16	15
pulley	15	16	15	16	15	15
flange	16	18	19	16	21	20
screwdriver	16	17	16	15	17	13
bumps	17	18	16	18	14	13
twoboxcloth	17	16	18	18	18	20
tooth	18	22	21	21	21	21
cervical	19	17	18	18	13	12
vertebra	19	20	18	22	20	18
average	16	17	17	17	17	16

**Table 2:** Original average error to median as reported in [Cole et al. 2009]. These numbers were computed by erroneously bas-relief fitting against ground truth and are **incorrect**.

## References

COLE, F., SANIK, K., DECARLO, D., FINKELSTEIN, A.,

FUNKHOUSER, T., RUSINKIEWICZ, S., AND SINGH, M. 2009. How well do line drawings depict shape? *SIGGRAPH '09: SIGGRAPH 2009 papers* (Jul).