Beckmann and Bergmann Reply: We find the Comment of Gruyters and Riegel [1] (GR) very interesting and constructive. They have very good arguments for the alternative explanation of the experimental data. The moments they derive agree surprisingly well with our results. (Since we define the moments as gJ, their values are really somewhat lower than the experimental ones.) There are, however, still a number of open questions: (a) For the Fe and Co at the surface of Cs we find almost the same moments as in the bulk. We would expect that for the surface the strong noncubic "crystal field" would alter the atomic orbits and partially quench the orbital angular momenta. A calculation of the moments at the surface would be very desirable. (b) First measurements of Fe and Co impurities in other alkali hosts yield considerably larger moments than the atomic ones. (c) It should be noted that when we started with the search for giant moments we were guided by earlier experimental results on FeCs sandwiches. In these experiments we measured the induced anomalous Hall effect in FeCs sandwiches as a function of the Cs thickness [2]. These experimental results defied any explanation as long as one assumes that the Cs is unaffected by the contact with the Fe. The experimental data strongly support the conclusion that the Cs film is polarized by the contact with the Fe. At the present time similar investigations on Ni Cs sandwiches appear to confirm this interpretation.

Scientifically the Comment by Mohn *et al.* [3] is practically identical to the one by GR. We repeated our evaluation with the Landé factor $\frac{3}{2}$ for Fe and $\frac{4}{3}$ for Co in Cs. Then we obtain a spin of 4.5 for Fe and 5.5 for Co, which correspond to 7.3 and 6.7 Bohr magnetons. This is very close to our previous evaluation results. Mohn *et al.* emphasize in addition that there is no mystery in the alkali metals. We have to disagree with this repeated remark. Overhauser, for example, points out in a large body of work that there are more than two dozen effects in the alkali metals which cannot be explained in the free electron model (see, for example, [4]). Our group [5] recently discovered a number of surprising properties of thin Cs films. As an example, if a Cs film, 8.2 nm thick, is covered with 0.1 atomic layers of In, then the resistance increases by 58%, the Hall constant by 15%, the temperature dependence of the resistance by 12%, and the electron dephasing rate by 15%. The origin of this behavior is unknown. Furthermore, we observe giant spin-orbit scattering for Pb in Cs (40 times larger than for Pb in Mg) [6]. If one assumes that the Cs electrons cannot be polarized, then the propagation of conduction electrons injected from an Fe film into a Cs film is incomprehensible [2]. We have a much larger list of phenomena which defy our understanding but which cannot be discussed in a short reply to a Comment.

Recently we received a reprint of a paper by Okazaki and Teraoka [7]. These authors arrive at the conclusion that thin films of Cs become ferromagnetic. This paper is in strong contradiction to the statement by Mohn *et al.* that a "polarization of the Cs neighbors can be ruled out" and "The density at the Fermi surface ... does not allow for a substantial exchange enhancement." Future research is needed to clarify these issues.

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