1036-57-111 Shmuel Weinberger* (shmuel@math.uchicago.edu), Department of Mathematics, University of Chicago, 5734 S. University Ave., Chicago, IL 60637. Aspects of compact topological group actions.
Away from the prime 2, there is a quite good understanding of equivariant surgery for finite group actions, assuming certain gap hypotheses, or of isovariant surgery, without the usual gap hypothesis that is quite parallel to the classical surgery theory of manifolds.

This talk will explain some of the issues involved in going beyond these cases: i.e. understanding the prime 2, equivariant surgery without the gap hypothesis, and infinite compact groups.

I plan to discuss concrete examples where the phenomena can be described without any reference to surgery theory. (Received January 18, 2008)