$\bar{p}: N/i_*(A) \to \pi_1(B_G)$ <u>is induced by</u> $p_*: \pi_1(X_G) \to \pi_1(B_G)$:

a) $\omega_*(\pi_1(G)) \subset A$

b) $\bar{p}: N/i_*(A) \to \pi_1(B_G)$ <u>has a cross-section</u>.

We will display two immediate corollaries, the first one appears in [4], the second may be new. Of course both have direct proofs.

Corollary 10: <u>If</u> G <u>acts on</u> X <u>with a fixed point, then</u> G <u>lifts to the universal covering</u>.

Proof: This follows from theorem 5'. The existance of the fixed point makes ω homotopic to a constant and gives rise to a cross-section in the bundle $X \to X_G \to B_G$. These two facts insure that conditions a and b are met.

Corollary 11: <u>Suppose</u> G <u>is connected and the covering</u> $\tilde{X} \to X$ <u>corresponds to the subgroup</u> $A \subset \pi_1(X)$. <u>Then</u> G <u>lifts if an only if</u> $\omega_*(\pi_1(G)) \subset A$.

Proof: Since G is connected, $\pi_1(B_G) = 0$ and condition b of theorem 5" is always satisfied.

Now Corollary 11 shows that if $\omega_*: \pi_1(G) \to \pi_1(X)$ is trivial, a connected G action will lift to any covering. Thus we always get a lifting if $\pi_1(X)$ has a trivial center,