

to the AGN standard model (Osterbrock 1993). This would also require that the torus is *not* aligned with the spiral disk of the host galaxy, since the low-redshift BALQSOs, PG 1411+4414 (inclined spiral) and PG 1700+5153 (face-on) are not viewed edge-on (*cf.* Hutchings *et al.* 1992).

2.8 : The Radio Flux Dichotomy

Essentially all BALQSOs are radio-quiet (see table 4-1 and Stocke *et al.* 1992). This dichotomy suggests a strong anti-correlation between the existence of radio jets in QSOs and the creation of an observable BALR. It is consistent to believe that only radio-quiet (or radio-moderate) QSOs have BALRs. In this case, the limits on the fraction of QSOs with BALRs (discussed above), refer to only radio-quiet QSOs.

Recent work (Francis *et al.* 1993) has indicated an excess of BALQSOs in the radio-moderate, $0.2 < \log(R^*) < 1$, category. We note that it is not necessarily inconsistent to have radio-moderate BALQSOs, as would be the case if we presumed that the BAL strength was inversely proportional to the radio flux. The bi-modality of the radio brightness distribution in QSOs and the difference in emission-line widths[†] suggests that there are two very distinct QSO populations. BALQSOs, which are part of the non-radio-loud population, may have characteristics which enhance the radio flux from the QSO central engine or its environment. We note that if this radio-moderate excess is significant enough, it will necessitate larger global covering factors (see §2.1), or non-isotropic radio-emission.

2.9 : Lack of Redshift Evolution

Most identified BALQSOs have moderate to high redshifts ($z_e \sim 1.5-3$), so it is difficult to establish any redshift evolution in the fraction of BALQSOs relative to low redshift objects. Although there have been some claims of an excess at high redshift (see reference within Weymann *et al.* 1985), more recent work by Foltz *et al.* 1990, using results from

[†] Radio-bright QSOs tend to have narrower BELs, *cf.* Francis *et al.* (1993).