

## References

This chapter gives a potpourri of general analytic, topological, and homological methods applied to complex manifolds and algebraic varieties. Some specific references were given in the text, and here we mention one or two sources for each topic that may assist the reader in amplifying the discussions in the book and serve as a guide to the literature.

"Comment on <sup>that</sup>  $\pi^* \nabla : E \rightarrow B$  is a fiber bundle"

Give a connection  $\nabla$  on  $B$  locally, then  $\pi^* \nabla$  is a connection on  $E$  locally. This is a nonsense, because we have to have a bundle on  $B$ . see page 1. Milnor

Consider a connection  $\nabla$  on  $TB \rightarrow B$ . subbundle of  $TE = \pi^* TB$   
Take the pull-back  $\pi^* \nabla : TE \rightarrow E$ .  $\Rightarrow$  It makes sense. By using parallel transport, we may have a trivialization of  $E$  over  $U$  open in  $B$ .  $\Rightarrow$

## 4. Surfaces.

Perhaps the most striking aspect of the theory of algebraic surfaces, when first encountered, is how different it is in character from the theory