is fundamental.
In Section 4, we state and prove Kodiara's characterization of those compact complex manifolds which are derived from algebraic varieties, thus providing the essential link between the intrinsic and extrinsic properties of a variety.
This embedding theorem and Chow's theorem are existence theorems – they do not by themselves provide a constructive method for finding the equations defining the image of a variety under a projective embedding – but together they form the philosophical cornerstone for our analytic treatment of algebraic geometry.

In the final section of this chapter we explain in some detail the Grassmannian, a variety whose points parametrize the linear subspaces of some fixed dimension in projective space and whose internal structure reflects the nongeneric intersections of a variable linear space with a fixed one. One reason for placing this discussion here is that the Grassmannian illustrates quite nicely the general structure theorems of this chapter. Another is that extensive use will be made in the following chapters of the Schubert calculus, a quantitative expression of the nongeneric incidence relations among linear spaces that is inherent in the Grassmannian.

## 1. Divisor and Line Bundles.

### Divisors

Let $M$ be a complex manifold of dimension $n$, not necessarily compact. We recall from Section 1 of Chapter 0 some facts about hypersurfaces in $M$:

Any analytic subvariety $V$ of $M$ of dimension $n-1$ is an analytic