cible at 0. $n = k$. $V_i' = V_j$ for some j. i.e $V = V_1 \cup \cdots \cup V_k$ is unique.

pf). By the proper mapping theorem, $\pi(V_1)$ is a subvariety of $\mathbb{C}^{n-1}$. $\Rightarrow$ $\pi(V_1)$ is irreducible, otherwise V_1 is irreducible. $\Rightarrow$ $\pi(V_1) = W_i$ for some i. Similarly, we have $\pi(V_j) = W_m$ for some m.

Suppose $V = V_1' \cup \cdots \cup V_n'$.

$\Rightarrow$ $\pi(V_1')$ is irreducible $\Rightarrow$ If $\pi(V_1') = W_1$,

$\pi^{-1}(W_1) = V_1' \cup \cdots = V_1 \cup \cdots$.

see P98. Whitney.

포기 함 받아들이자. the assertion 1 을.

Finally, several more fundamental results in several complex variables will be proved by the methods of residues in Chapter 5.

P20

Definition: An analytic subvariety V of a complex manifold M is a subset given locally as the zeros of a finite collection of holomorphic functions. A point $p \in V$ is called a smooth point of V if V is a submanifold of M near p, that is, if V is given in some nbd of p by holomorphic functions $f_1, f_2, \cdots f_k$ with rank $\mathcal{J}(f) = k$; the locus of smooth points