morphic functions. In fact, the same picture is in almost all respects valid for general analytic varieties, but to prove this requires some relatively sophisticated techniques from the theory of several complex variables. Since the primary focus of the material in this book is on the codimension 1 case, we will for the time being simply state here without proof the analogous results for general analytic varieties:

1. If $V \subset U \subset \mathbb{C}^n$ is any analytic variety and $p \in V$, then in some nbd of p, V can be uniquely written as the union of analytic varieties V_i irreducible at p with $V_i \not\subset V_j$.

「 See P96 ~ P99, Whitney, Theorem 8Q 」

2. Any analytic variety can be expressed locally by a projection as a finite-sheeted cover of a polydisc Δ branched over an analytic hypersurface of Δ.

3. If $V \subset \mathbb{C}^n$ does not contain the line $z_1 = \cdots = z_{n-1} = c$, then the image of a nbd of 0 in V under the projection map $\pi: (z_1, \cdots z_n) \longrightarrow (z_1, \cdots z_{n-1})$ is an analytic subvariety in a nbd of $0 \in \mathbb{C}^{n-1}$.