CONTENTS

§1. Finite analytic mappings

(a) These notes are intended as a sequel to the lecture notes CAV I*, so it will be assumed from the outset that the reader is somewhat familiar with the contents of the earlier notes and the notation and terminology introduced in those notes will generally be used here without further reference. It will also be assumed that the reader has some background knowledge of the theory of functions of several complex variables and of the theory of sheaves, at least to the extent outlined at the beginning of the earlier notes. For clarity and emphasis however a brief introductory review of the definitions of germs of complex analytic subvarieties and varieties will be included here.

A <u>complex analytic subvariety</u> of an open subset $U \subseteq \mathbb{C}^n$ is a subset of U which in some open neighborhood of each point of U is the set of common zeros of a finite number of functions defined and holomorphic in that neighborhood. A <u>germ of a complex analytic subvariety</u> at a point $a \in \mathbb{C}^n$ is an equivalence class of pairs (V_α, U_α), where U_α is an open neighborhood of the point a in $\mathbb{C}^n$, V_α is a complex analytic subvariety of U_α, and two pairs (V_α, U_α) and (V_β, U_β) are equivalent if there is an open neighborhood U of the point a in $\mathbb{C}^n$ such that $U \subseteq U_\alpha \cap U_\beta$ and

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* Lectures on Complex Analytic Varieties: the Local Parametrization Theorem. (Mathematical Notes, Princeton University Press, Princeton, N. J., 1970.)