

The analogous general result, where  

$$\text{codim } D \leq (\text{codim } V) - 1,$$

has been proved by Remmert and Stein.

We begin by making some reductions. If we prove the result when  $V$  is nonsingular, then this will imply the general case by the following stratification device: Let  $V'$  be the variety of singular points of  $V$ ,  $V''$  the variety of singular points of  $V'$ , etc.

⌈ See p. 21. Remarks. ⌋

Applying the nonsingular case to sufficiently small nbds of points  $p \in V - V'$ , we conclude that  $D$  extends to  $\Delta^n - V'$ . Repeating the argument,  $D$  will extend to  $\Delta^n - V''$ , and so forth.

⌈ Given a point  $p \in V - V'$ , choose an open set  $U$ , s.t.  $U \ni p$ ,  $U \cap V \subset V - V'$ .  
 $\Rightarrow U \cap V$  is nonsingular  $\Rightarrow$  Consider  $D \cap U$ .  
 $\Rightarrow$  By applying the nonsingular case, we have  $\overline{D \cap U}$  in  $U - V'$  analytic. Repeating the argument,  $D$  extends to  $\Delta^n - V'$ .  $\Rightarrow$  Keep doing the procedure, then  $D$  will extend to  $\Delta^n$ , since  $\dim V$  is finite. ⌋

Next, by localizing around a point of  $V$  and choosing