(n-k-2) plane $\mathbb{P}^{n-k-2}$ in $\mathbb{P}^{n-k-1}$, s.t

$$\overline{\mathbb{P}^{n-k-2}, q_i} \cap V = \{q_i\} \quad \text{for all } i=1,2,\dots d.$$

Thus, the sheaf of germs of polynomial functions on V, which associates to every open set U on V the ring of rational functions on V finite in U, is intrinsically associated to V.

Γ $\mathcal{I}$ = The sheaf of germs of polynomial functions on V.

$$\mathcal{I}(U) = \{ f \text{ rational function on } V \text{ which is finite in } U \}$$

This sheaf, the basic structure sheaf in algebraic treatments of the subject, is also denoted by $\mathcal{O}_V$.

It is not hard to see by the same sort of argument that

1. Any meromorphic differential form on a smooth variety is algebraic, that is, expressible in terms of rational functions and their differentials.

2. Any holomorphic map between smooth varieties may be given by rational functions.

3. Any holomorphic vector bundle on a smooth variety is algebraic, that is, may be given by rational transition functions.