Consider a sequence $\{x_n\}$ convgs to a point x_0 in V.

$$\begin{tikzcd} {[f^*H]} \arrow[r] \arrow[d] & {[H]} \arrow[d, shift right] \\ M-V \arrow[r] & \mathbb{P}^n \arrow[u, shift right, "\sigma"'] \end{tikzcd}$$

$\Rightarrow$ $f^*\sigma$ is locally a holomph function. $M-V \to \mathbb{C}$ since σ is locally a holph fnt $\mathbb{P}^n \to \mathbb{C}$. on P396

$\Rightarrow$ Find limit points of $\{f(x_n)\}$ in $\mathbb{P}^n$. $\Rightarrow$ Take a nbd of each limit pt $\Rightarrow f^{-1}(U)$. U a nbd of lmt pt

$\Rightarrow$ By Levi extension theorems (I) & (II), f^*H_i's and σ_i's are extended to M. Let $[f^*H_i] = L$ and η_i be the section of L s.t $(\eta_i = 0) = f^*H_i$ for all i.

Let $D_\lambda = (a_0\eta_0 + \cdots + a_n\eta_n = 0)$, $\lambda = [a_0, \cdots a_n] \in \mathbb{P}^n$.

$\Rightarrow$ Let E be the fixed component of $\{D_\lambda\}$. $\Rightarrow$ The divrs $\{D_\lambda' = D_\lambda - E\}$ gives a rational map

$$\begin{aligned} f:\ & M \longrightarrow \mathbb{P}^{n*} \\ & p \longmapsto \{\lambda : D_\lambda' \ni p\}. \end{aligned}$$

If $p \in \{\eta_i = 0\} - E$ & $p \notin \bigcap D_\lambda'$, $f(p) = \{\lambda : D_\lambda' \ni p\} \ni [(0, \cdots, \overset{i}{1}, 0 \cdots)]$

$$\begin{tikzcd} f: M \arrow[r] \arrow[dr] & \mathbb{P}^{n*} \ni f(p) \arrow[d] \arrow[dd, bend left] \\ p \arrow[dr, mapsto] & \mathbb{P}^n \\ & {[(\eta_0(p), \cdots \eta_n(p))]} \end{tikzcd}$$

If we take another basis $\{\eta_i'\}$ s.t

$\eta_i' = \sum a_{ij}\eta_j$, then

$A = (a_{ij})$ plays a role as an automorphism of $\mathbb{P}^n$.

$$\begin{tikzcd} M \arrow[r, "f"] & \mathbb{P}^n \\ p \arrow[r, mapsto] \arrow[dr, bend right, "f'"] \arrow[ddr, bend right] & {[(\eta_0(p), \cdots \eta_n(p))]} \arrow[d] \arrow[dd, bend left, "A"] \\ & \mathbb{P}^n \\ & {[(\eta_0'(p), \cdots \eta_n'(p))]} \end{tikzcd}$$