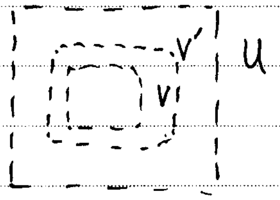

In the statement of Hartogs' theorem, they said a nbd of $U-V$.
Choose a larger V' s.t $V' \supset \overline{V}$.
$\Rightarrow$ $U-V'$ has a nbd "between V and V'",
i.e. $U-\overline{V}$

If f is a birational map, of course, then all the functions f^* are isomorphisms; thus the space of sections of any contravariant holomorphic tensor bundle is a birational invariant; in particular, the Hodge numbers $h^{p,0}(M)$ are.

$$M \xrightarrow{f} N \xrightarrow{g} M \xrightarrow{f} N$$

$\Rightarrow$

$$\begin{tikzcd} H^0(N, \Omega^p_N) \arrow[r, "f^*"] \arrow[rr, bend right, "id"'] & H^0(M, \Omega^p_M) \arrow[r, "g^*"] \arrow[rr, bend right, "id"'] & H^0(N, \Omega^p_N) \arrow[r, "f^*"] & H^0(M, \Omega^p_M) \end{tikzcd}$$

since $(g \circ f)^* = id$ & $(f \circ g)^* = id$.
$\Rightarrow$ f^* & g^* are isomorphisms.

Several of these invariants have been given names:

1. The number $h^{1,0}(S)$ of holomorphic 1-forms on a Riemann surface is its genus $g(S)$.