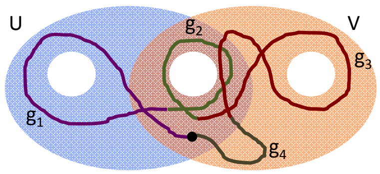
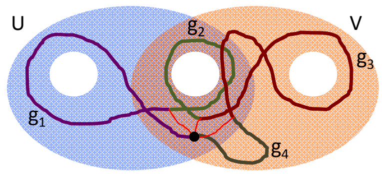
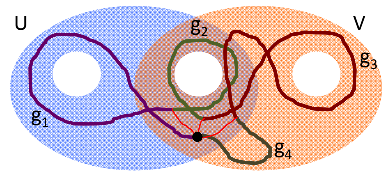


$g = g_1 g_2 g_3 g_4$



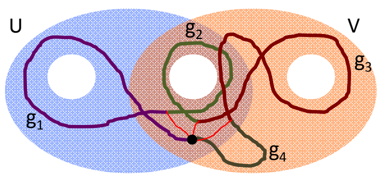
$g = (\alpha_0 g_1 \overline{\alpha}_1)(\alpha_1 g_2 \overline{\alpha}_2)(\alpha_2 g_3 \overline{\alpha}_3)(\alpha_3 g_4 \overline{\alpha}_4)$

where α_0 and α_4 are constant maps.



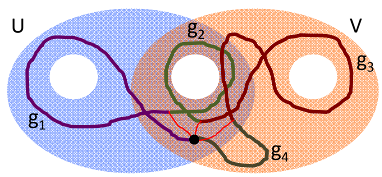
$g = (\alpha_0 g_1 \overline{\alpha}_1)(\alpha_1 g_2 \overline{\alpha}_2)(\alpha_2 g_3 \overline{\alpha}_3)(\alpha_3 g_4 \overline{\alpha}_4)$

where $(\alpha_0 g_1 \overline{\alpha}_1)$, $(\alpha_1 g_2 \overline{\alpha}_2)$ in $\pi_1(U)$ and $(\alpha_2 g_3 \overline{\alpha}_3)$, $(\alpha_3 g_4 \overline{\alpha}_4)$ in $\pi_1(V)$



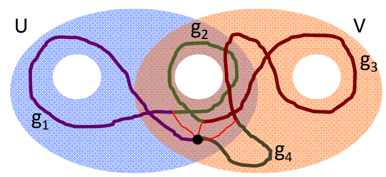
$g = (\alpha_0 g_1 \overline{\alpha}_1)(\alpha_1 g_2 \overline{\alpha}_2)(\alpha_2 g_3 \overline{\alpha}_3)(\alpha_3 g_4 \overline{\alpha}_4)$

where $(\alpha_0 g_1 \overline{\alpha}_1)$ in $\pi_1(U)$ and $(\alpha_1 g_2 \overline{\alpha}_2)$, $(\alpha_2 g_3 \overline{\alpha}_3)$, $(\alpha_3 g_4 \overline{\alpha}_4)$ in $\pi_1(V)$



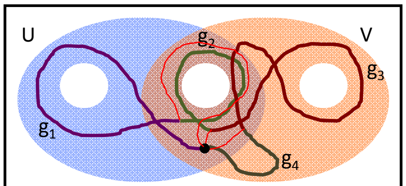
$g = (\alpha_0 g_1 \overline{\alpha}_1)(\alpha_1 g_2 \overline{\alpha}_2)(\alpha_2 g_3 \overline{\alpha}_3)(\alpha_3 g_4 \overline{\alpha}_4)$

where $(\alpha_0 g_1 \overline{\alpha}_1 \alpha_1 g_2 \overline{\alpha}_2) = (\alpha_0 g_1 g_2 \overline{\alpha}_2)$ in π_1(U and $(\alpha_2 g_3 g_4 \overline{\alpha}_4)$ in $\pi_1(V)$



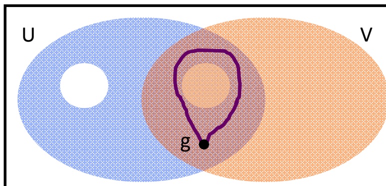
$g = (\alpha_0 g_1 \overline{\alpha}_1)(\alpha_1 g_2 \overline{\alpha}_2)(\alpha_2 g_3 \overline{\alpha}_3)(\alpha_3 g_4 \overline{\alpha}_4)$

where $(\alpha_0 g_1 \overline{\alpha}_1)$ in $\pi_1(U)$ and $(\alpha_1 g_2 g_3 g_4 \overline{\alpha}_4)$ in $\pi_1(V)$



$g = (\alpha_0 g_1 \overline{\beta}_1)(\beta_1 g_2 \overline{\alpha}_2)(\alpha_2 g_3 \overline{\alpha}_3)(\alpha_3 g_4 \overline{\alpha}_4)$

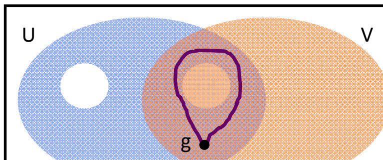
where $(\alpha_0 g_1 \overline{\beta}_1)$ in $\pi_1(U)$ and $(\beta_1 g_2 g_3 g_4 \overline{\alpha}_4)$ in $\pi_1(V)$

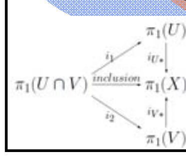


$\pi_1(U) = \langle a, b \rangle$ $[g]_U = b$

$\pi_1(V) = \{e\}$ $[g]_V = e$ $[g]_{U \cup V} = e$

$\pi_1(U \cap V) = \langle b \rangle$ $[g]_{U \cap V} = b$





$[g]_U = b$

$[g]_v = e$ $[g]_{U \cup V} = e$

$[g]_{U \cap V} = b$