

The Fundamental Group

— Munkres Section 52

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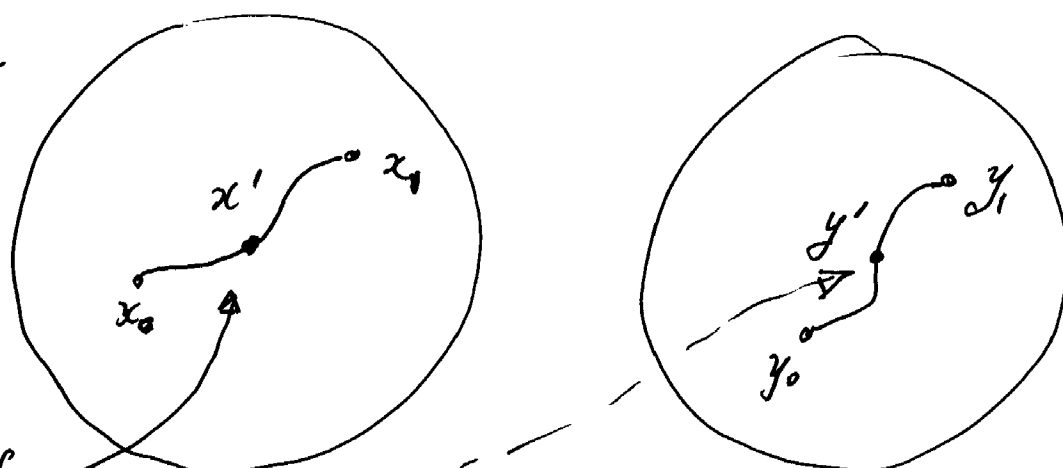
$h: X \rightarrow Y$ is a continuous map that carries the point x_0 of X to the point y_0 of Y .

$$h: (X, x_0) \longrightarrow (Y, y_0)$$

If f is a loop in X based at x_0 then the composite $h \circ f: I \rightarrow Y$ is a loop in Y based at y_0 .

BUT? if h only carries ~~the~~ one point (x_0) to Y (ie y_0) how does this work?

Figure 1



$$h \circ f(i') = y' ???$$

$$h \circ f(i') = h(f(i')) = h(x') ???$$

not defined!

