~~if b in Imf~~ • b ~~f(a)~~ •

HoTT Feb 23

show these are equal

$\text{decode}(\text{code}(f(a), b)) \longleftrightarrow \text{decode}(\text{code}(g(a), b))$

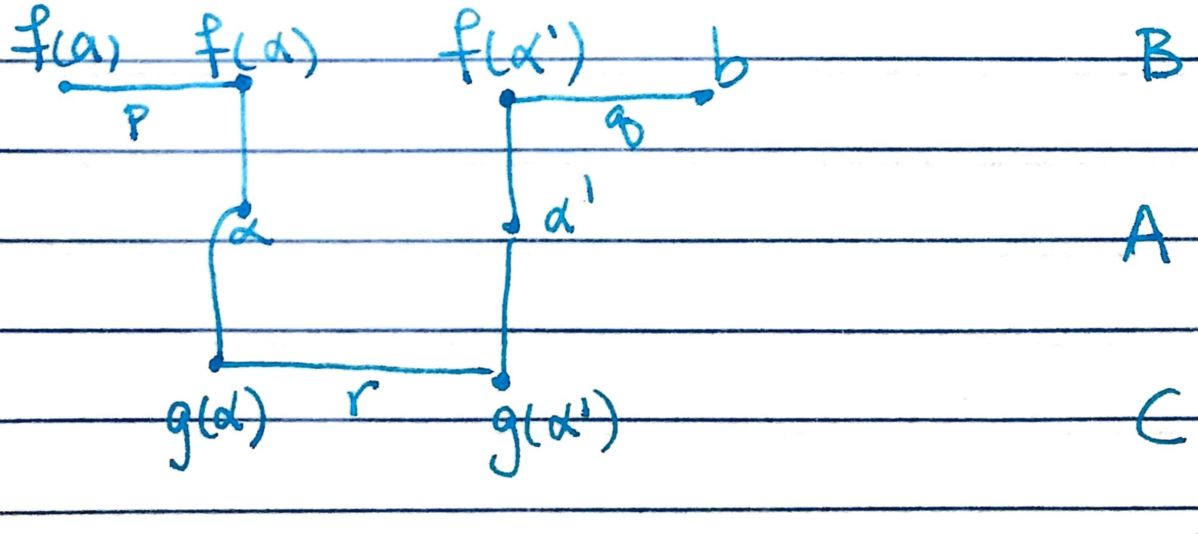
$$\text{decode}\left(\sum_{\alpha':A}(b=f(\alpha'))\times(g(a)=g(\alpha'))\right) \qquad \text{decode}\left(\sum_{\alpha:A}(g(a)=g(\alpha))\times(b=f(\alpha))\right)$$

Ask Michael Schulman: How can we formalize our argument that the definition of code(f(a), b) is the bottom left of code(b, b') definition.

~~send Amelia research statement~~ ✓

$$\text{decode}(p,q,r) = \underbrace{\text{ap}_{\text{inl}}(q)\cdot\text{glue}_{\alpha'}^{-1}\cdot\text{ap}_{\text{inr}}(r)\cdot\text{glue}_{a}\cdot\text{ap}_{\text{inl}}(p)}$$

↑ has to be refl.



Next: show that this path is equiv. to decode(code(g(a), b))