```mathematica
tσ[x_List, y_List][γ_] := (rr = Replace[Thread[x → y]];
   CF[γ /. b_i_ :> b_rr@i /. a[f_, i_, j_] :> a[f, rr@i, j]]);
tσ[x_, y_][γ_] := tσ[{x}, {y}][γ];
hσ[x_List, y_List][γ_] :=
  CF[
   γ /. a[f_, i_, j_] :> a[f, i, Replace[Thread[x → y]] @ j]];
hσ[x_, y_][γ_] := hσ[{x}, {y}][γ];
dσ[x_, y_][γ_] := γ // tσ[x, y] // hσ[x, y];
```