Presentation Topic:

Schroder Bernstein Theorem

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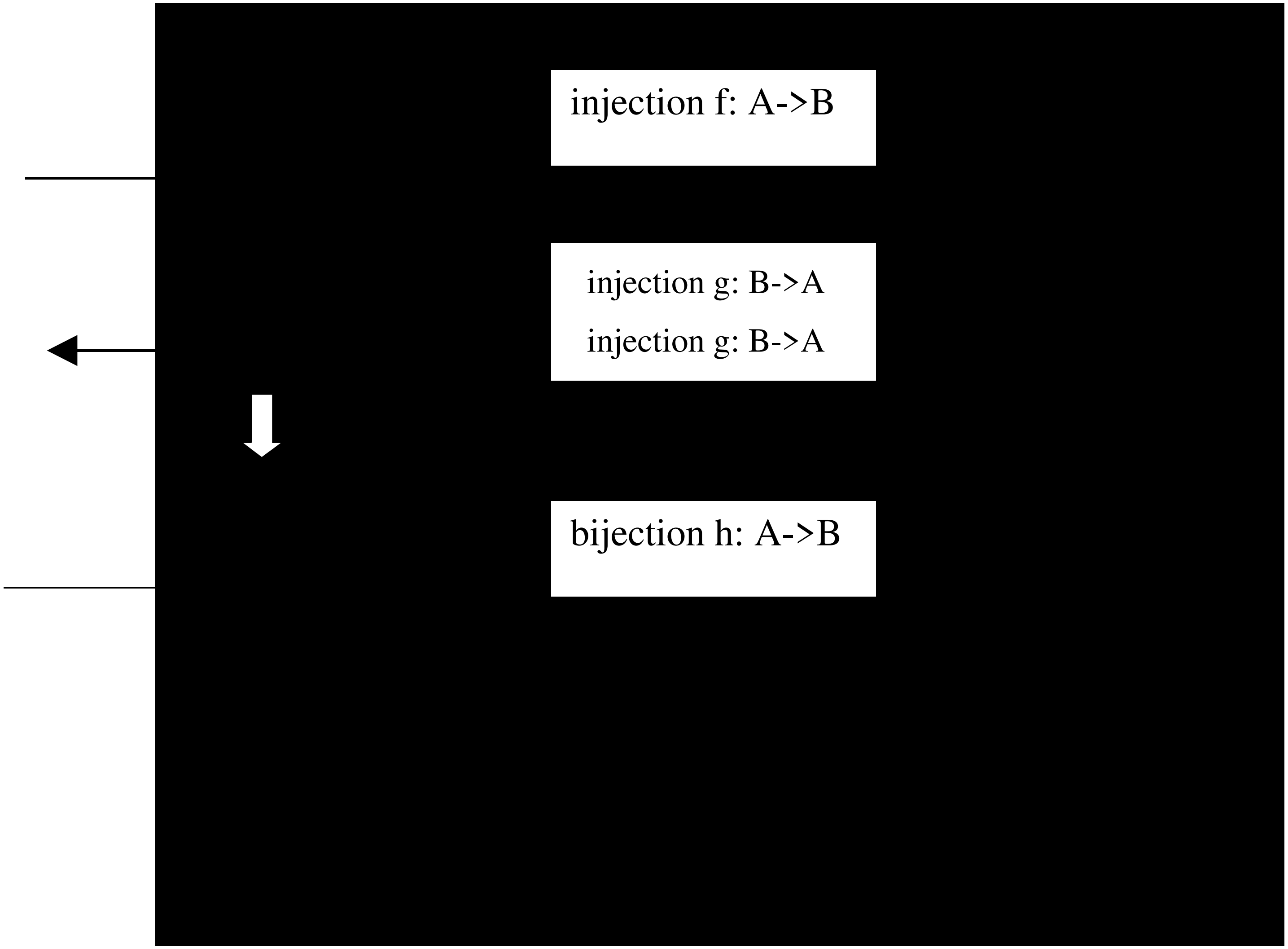
injection f: A->B
injection g: B->A
injection g: B->A
bijection h: A->B

A hidden Assumption:

Both f and g are total.

A counter example:

A: {1},
B: {0,1,2,...}
f = {(1,1)}
g = {(1,1)}

Clearly both f and g are injective.
But there certainly does not exist a bijection h from A to B.