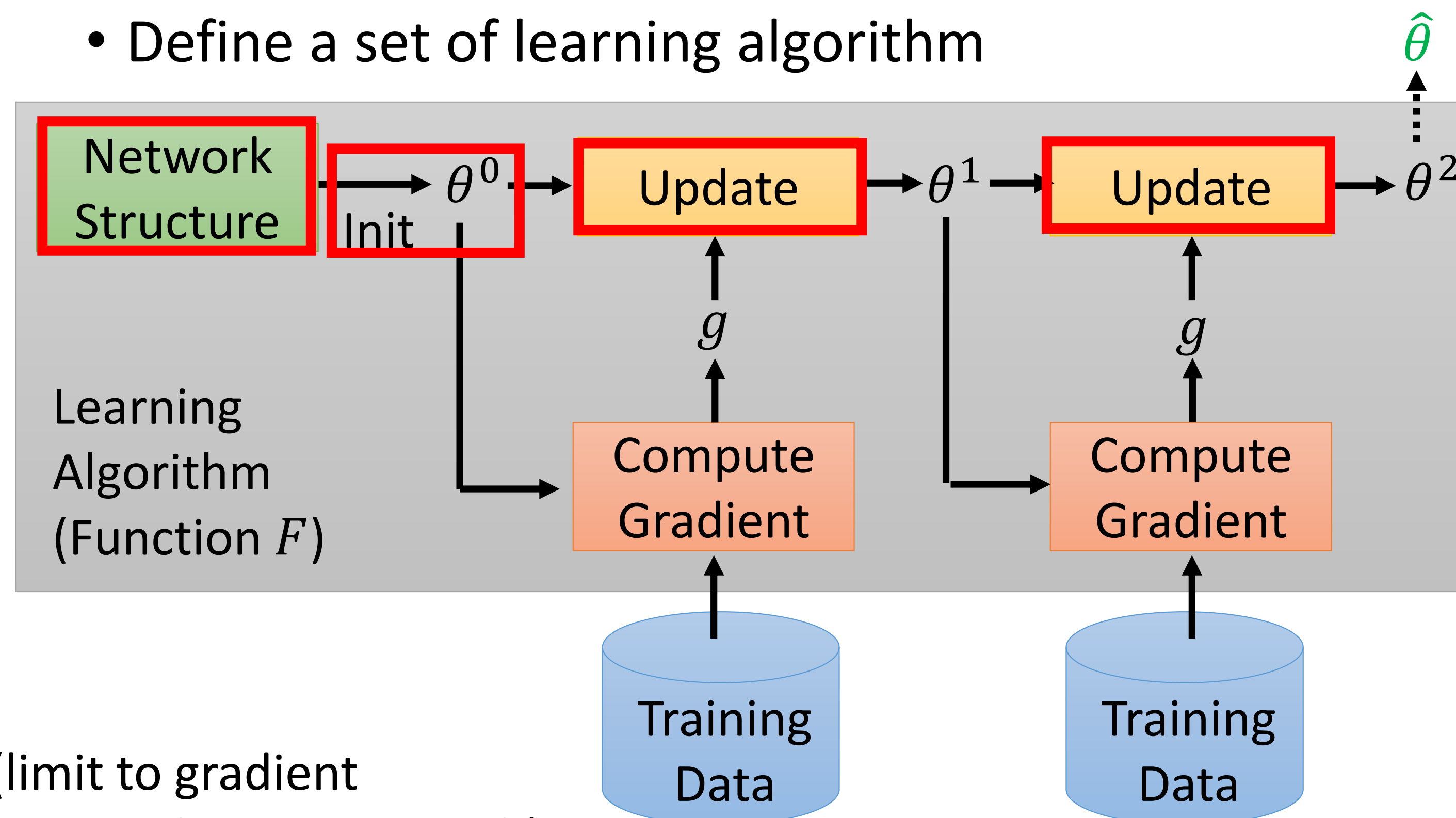# Preliminary Work

Meta-Learning

Meta Learning

Different decisions in the red boxes lead to different algorithms. What happens in the red boxes is decided by humans until now.

- Define a set of learning algorithm

(limit to gradient descent based approach)

Preliminary Work

Meta-Learning

Meta Learning

$$L(F) = \sum_{n=1}^{N} l^n$$

N tasks

Testing loss for task n after training

- Defining the goodness of a function F

Task 1

Train

cat   dog

Test

cat   dog

Learning Algorithm F

f^1

l^1

Task 2

Train

apple   orange

Test

apple   orange

Learning Algorithm F

f^2

l^2