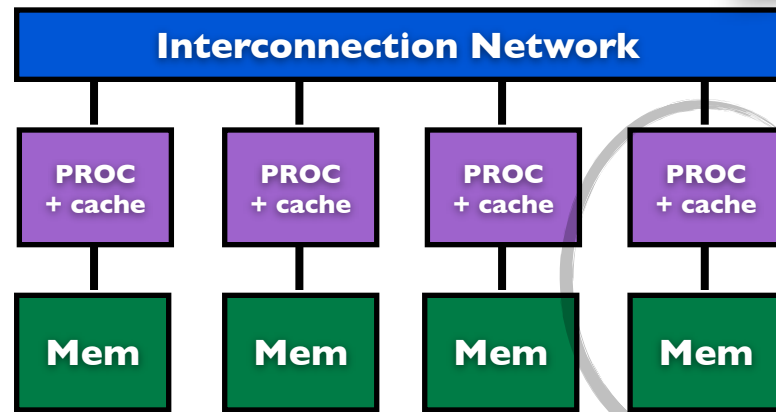


## Distributed Memory

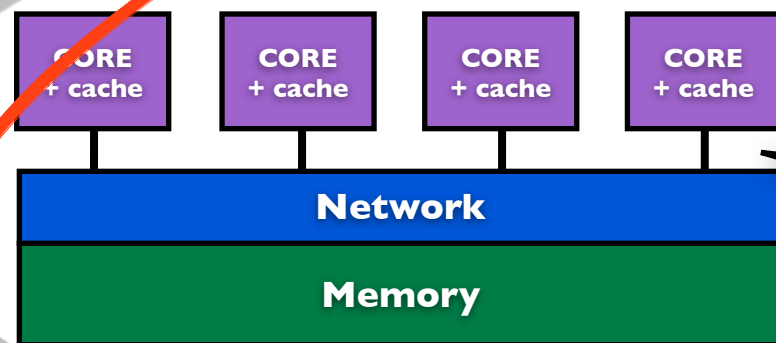


**Data Parallelism:**  
Focus on who owns what data and what communication is needed

MPI,  
Sockets

Rmpi,  
pbdMPI,   
socketConnection

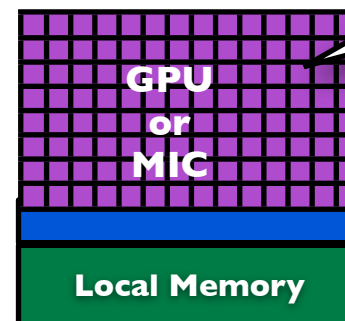
## Shared Memory



**Task Parallelism:**  
Focus on who does what task

**Simple Task Parallelism:**  
Same Task on Block of data

## Co-Processor



GPU: Graphical Processing Unit

MIC: Many Integrated Core

CUDA,  
OpenCL

OpenCL  


OpenMP

OpenMP,  
Threads,  
fork

multicore  
(fork) 