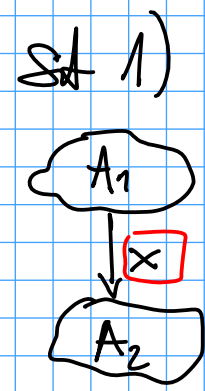
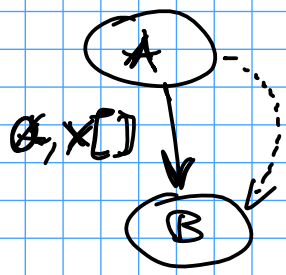


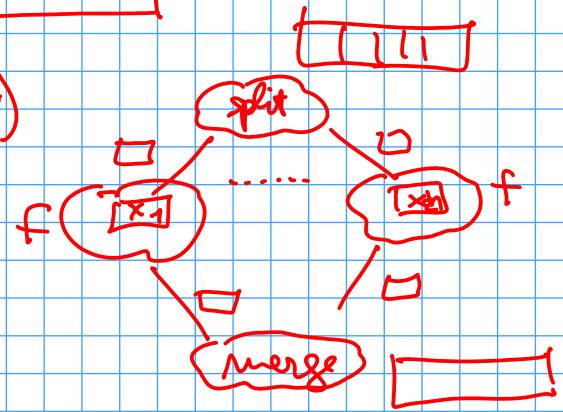
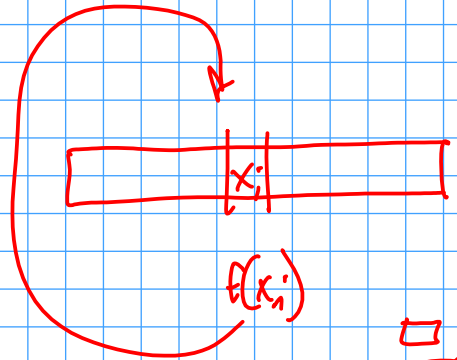
2) COORDINATION

(SYNCH & COMM)



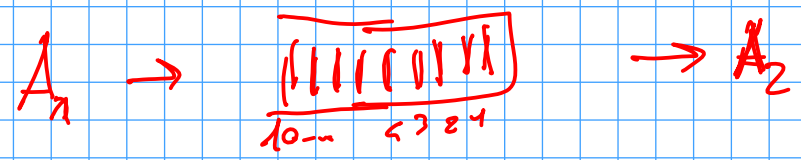
cow/non
 A_1
 ~~~~~  
 send(x)  
  
 $A_2$   
 ~~~~~  
 receive(x)

synch
 A_1
 ~~~~~  
 X =  
 }  
  
 $A_2$   
 ~~~~~  
 ... = X



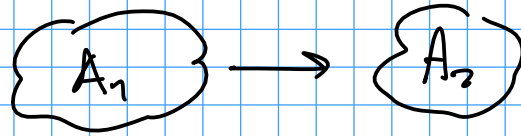
+ Wrappings
 with
 locks
 semaphores
 mutexes

- 1) sysV msg
- 2) pipe
- 3) AF_UNIX sockets



3) IMPLEMENTATION

communication
synchronous

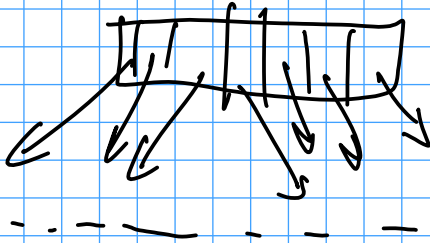


str mem

shared mem
+ locks / semaphores

cow

secrets



Accelerators

GPGUs

FPGAs

Mic
Pti

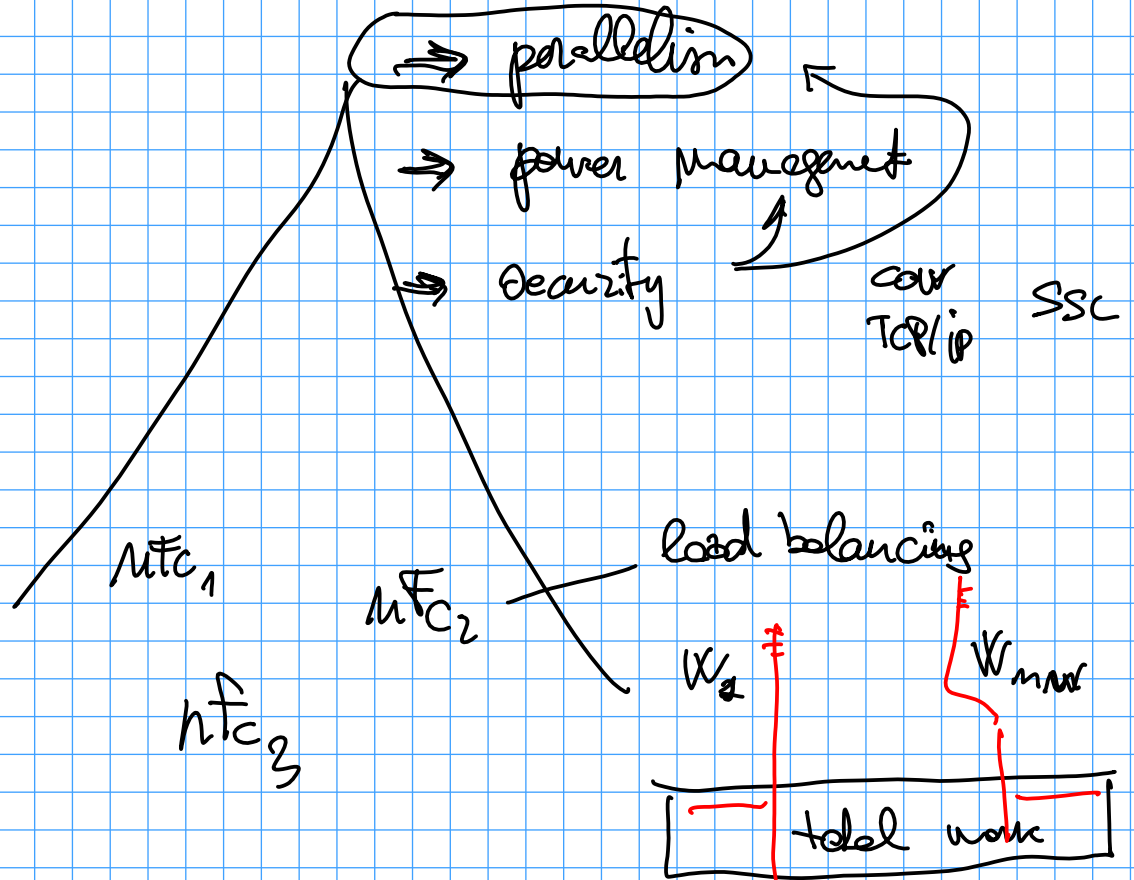
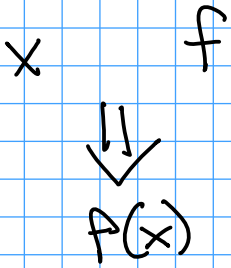
FUNCTIONAL

NON FUNCTIONAL

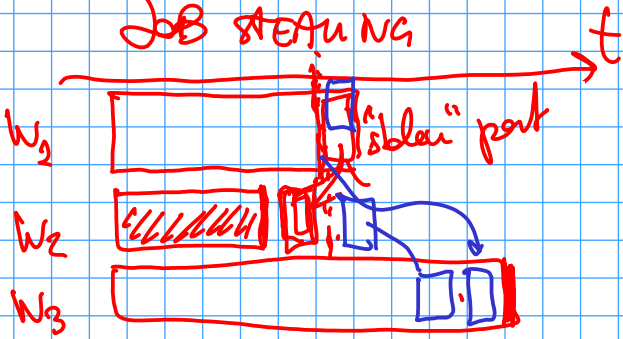
"CONCERNS"

WHAT IS
TO BE
COMPUTED

how a result
is computed

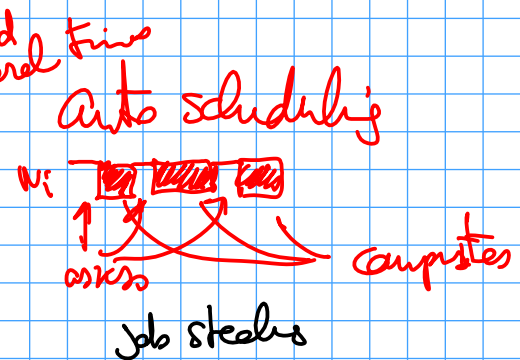
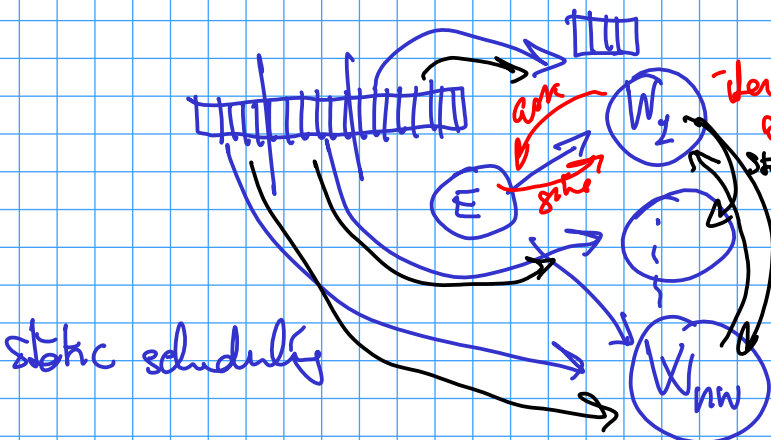


JOB STEALING



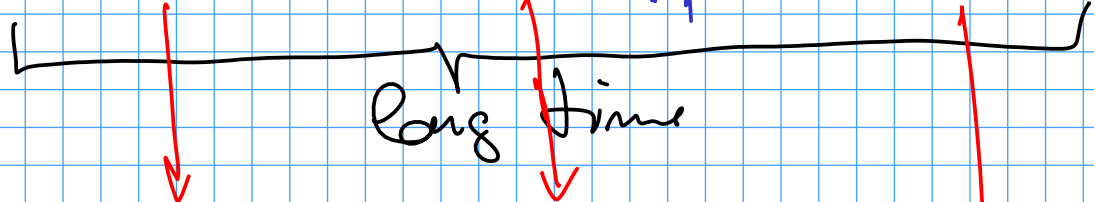
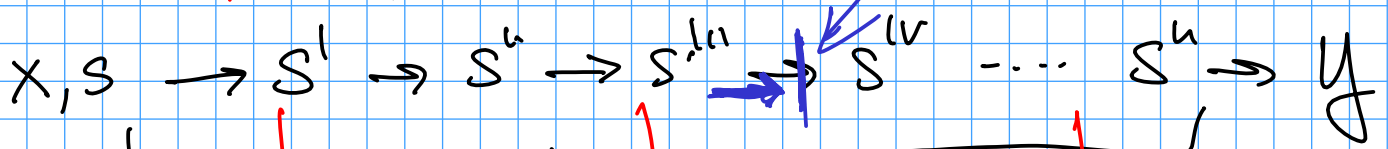
↓ changes to get load balancing

- ① → auto scheduling
- ② → job stealing

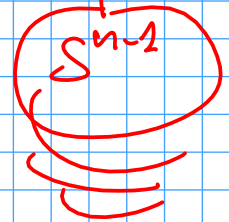
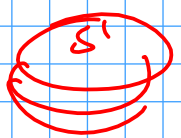


reliability

↳ checkpointing



Checkpoint



backtracking
restart from the last checkpoint
available