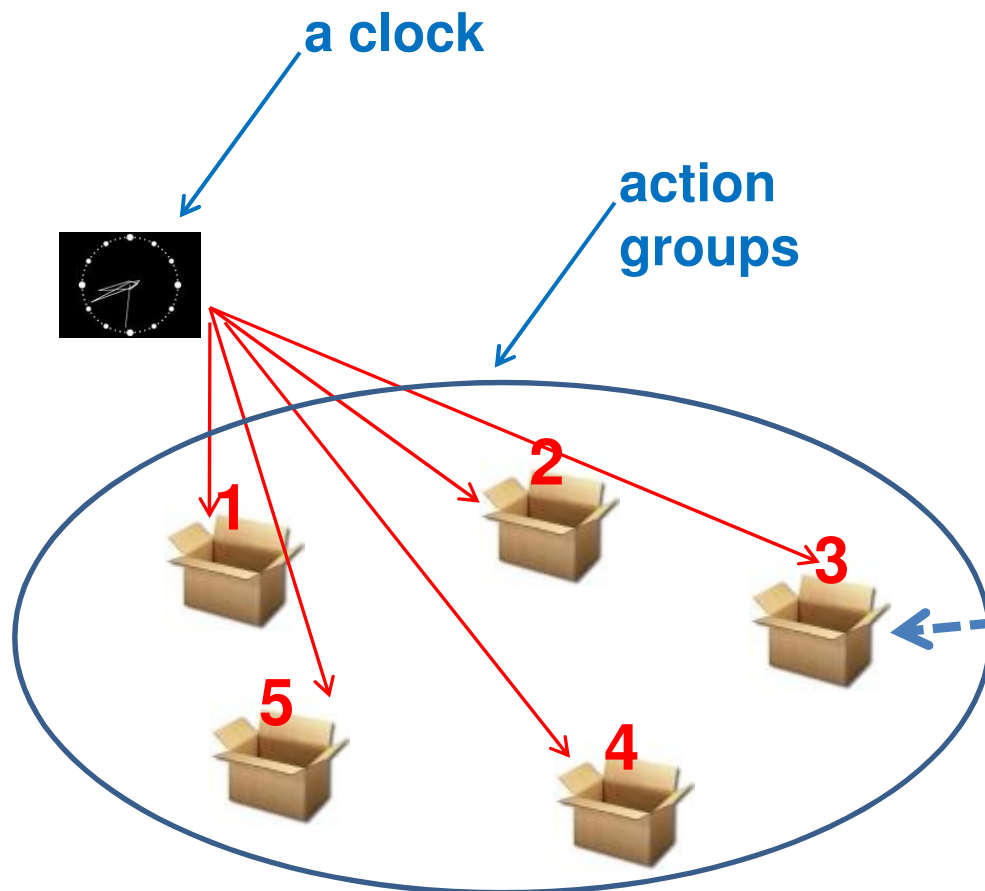


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Pietro Terna - DipEco

## 2. Schedule

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**What in each box?**

**Tasks to be executed (with  $p=1$  or with  $p<1$ )**

**Tasks are included into the code in a static way, or can be added/activated dynamically by other tasks, also via agents' actions**

**Tasks can be read – via a 'read' task schedule element – from an external source (file, web interaction, ...)**

**A special type of task to be read from an external source is that of the **recipes****

## tasks read from an external archive

a\_n – a specific agent (instance of class A)

a\_X – a randomly chosen agent (instance of class A)

a\_%all – a quota of all the agents (instances) of the class A

a\_all – all the agents (instances) of the class A



[agent method]

methods specific of each agent or  
inherited  
from the basic type 'agent'

# recipes read from an external archive


Recipes as a whole  
have an id or name

[ [agent method] [agent method] [agent method] [agent method] [agent method] ...]

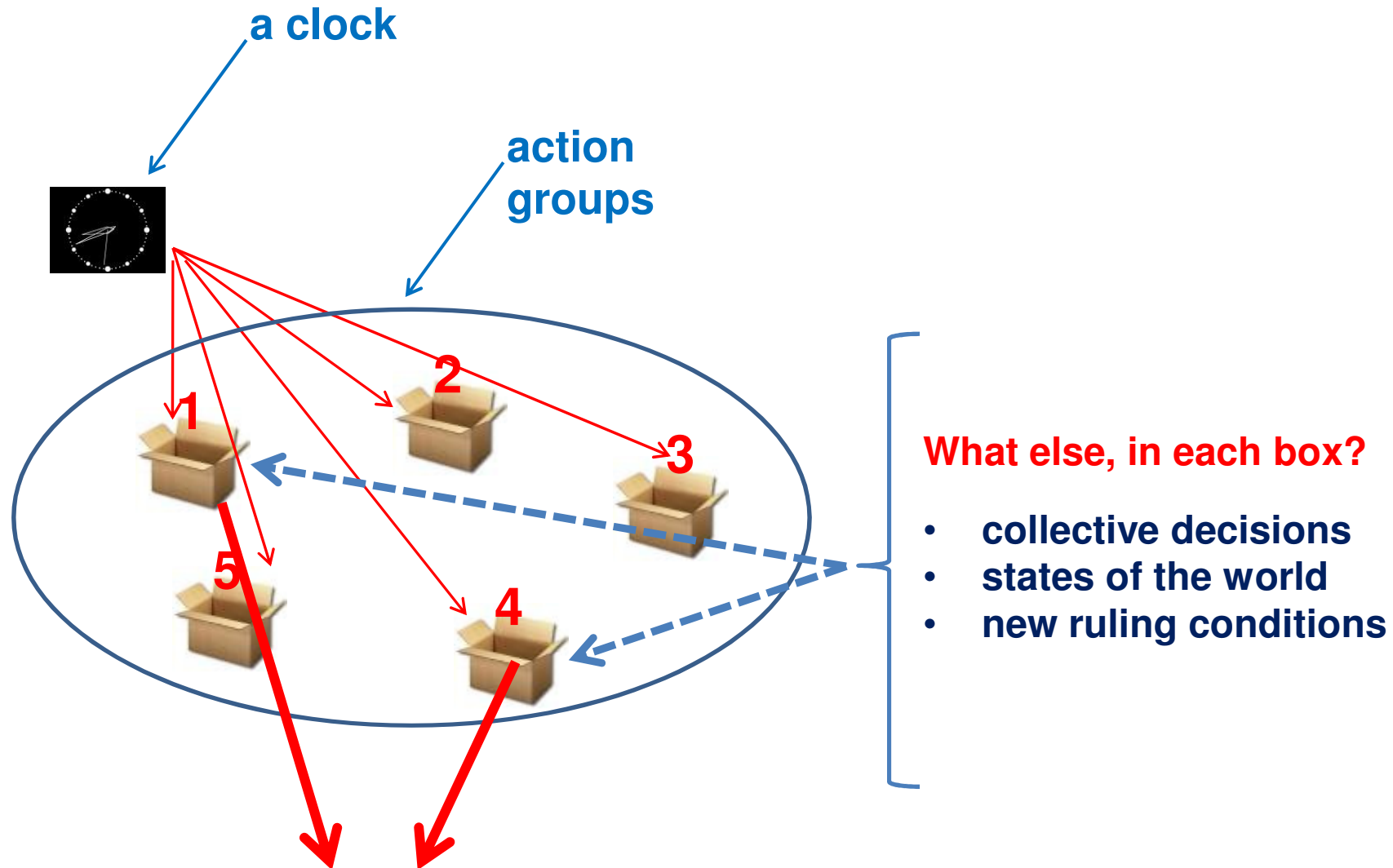
→ to be executed in a sequential way by a given thread of agents  
(static or dynamic)

[ [agent method] **[ [agent method] [agent method] [agent method] ]** [agent method] ...]

with segments to be executed in a parallel way

[ [agent method] [agent method] **N**[agent method] [agent method] [agent method] ...]  
[ .....  ..... :: [agent method] ..... ]  
[ ..... :: ..... ]  
[ ..... [agent method] ..... ]

with components belonging to different recipes to be executed as a whole



**What else, in each box?**

- collective decisions
- states of the world
- new ruling conditions

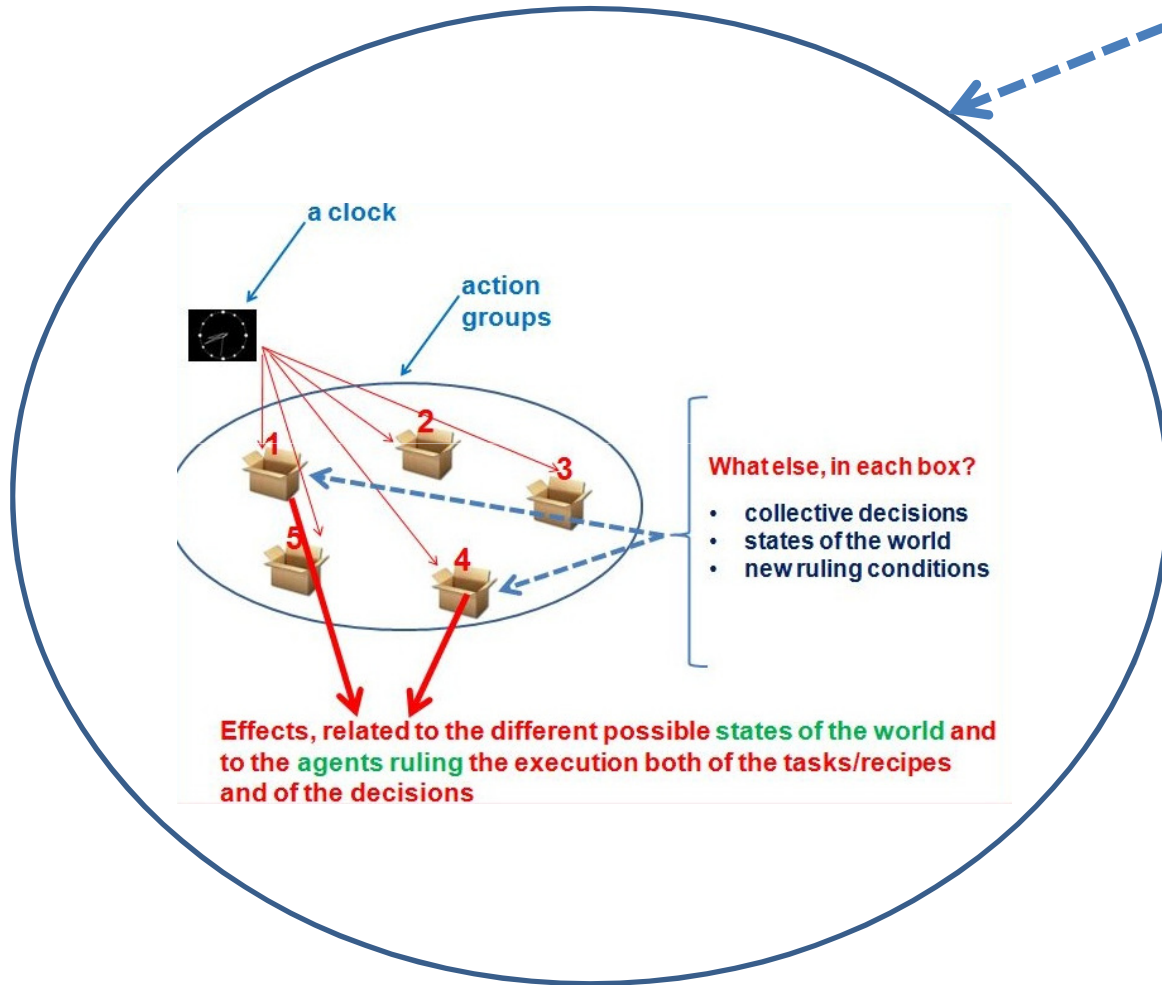
**Effects, related to the different possible states of the world and to the agents ruling the execution both of the tasks/recipes and of the decisions**

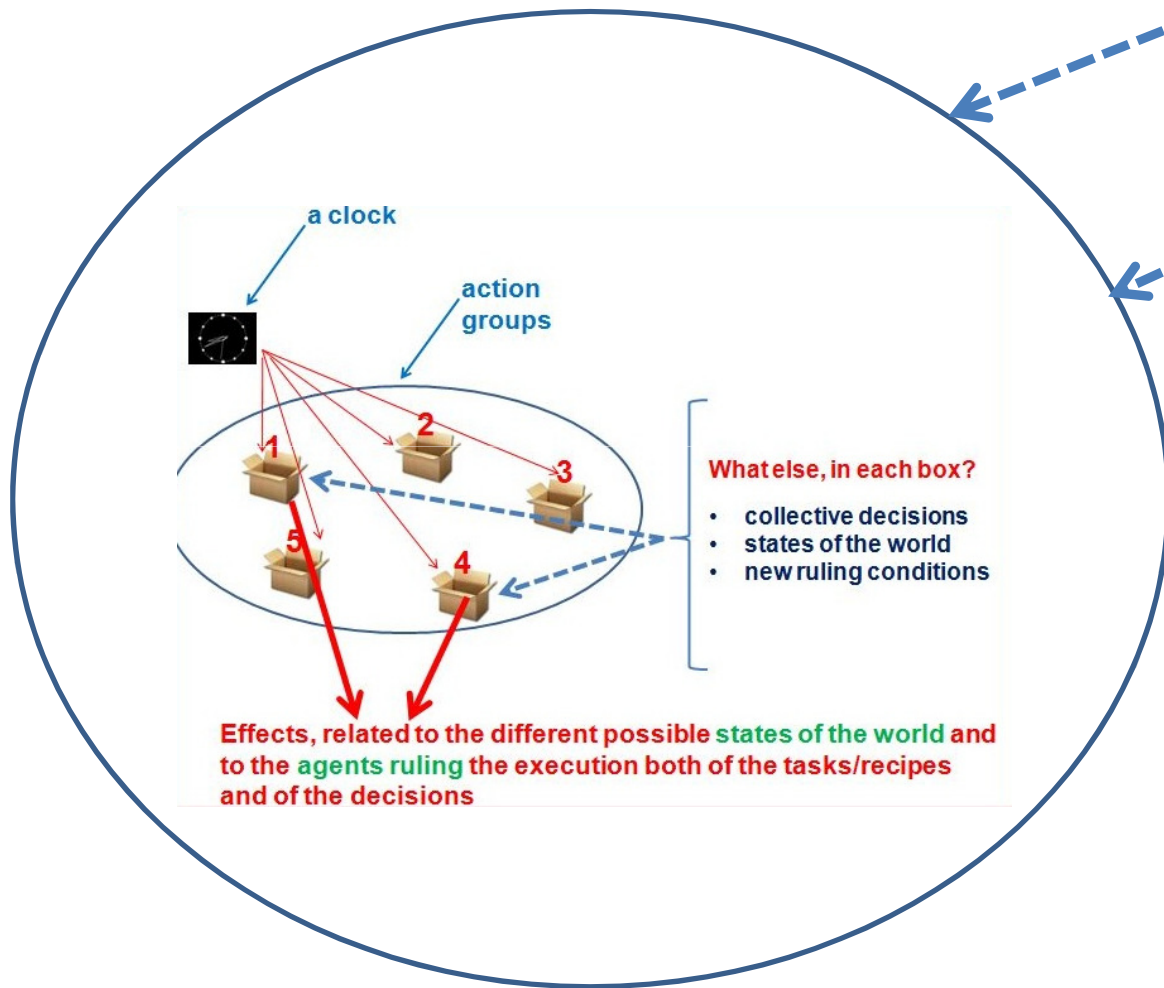
**repeated trial and error processes**

with

reinforcement learning and NN to memorize and apply the outcomes

NN directly trained via a trial and error process (guessing actions and effects)





Will **valid rules** emerge?

Will **anarchists\*** help to improve that kind of emergence?

(\*) randomly acting agents