

“.....When we examine the changes in [certain] groups of objects: there are those which affect only some member of the group, and those which make connected alterations in all the members of the group. If you put a candle in front of a mirror, and then hang a black cloth over the mirror, you alter only the reflection of the candle as seen from various places. If you shut your eyes, you alter its appearance to you, but not its appearance elsewhere ... In [these] cases, you do not regard the candle itself as having changed; you find that there are groups of changes connected with a different centre or a number of different centres. When you shut your eyes [...] the centre of changes that occur is in your eyes. But when you blow out the candle, its appearance everywhere is changed; [...] the change has happened to the candle. The changes that happen to an object are those that affect the whole group of events which centre about the object.”

Bertrand Russell: ABC of Relativity

Philosophical reflections motivating some basic ideas:

- indivisible propagation of state change associated with a single centre: the candle moves and the movement of its reflection is synchronised with it

[We shall use simultaneous change at many centre sets of definitions are used to model such transformations of state]

- implicit reference to the role and privileges of agents: the observer shuts her eyes vs she blows out the candle, the reflection of the candle can only be moved through moving the candle

[We shall introduce agents and represent their privileges in order to model concurrent systems]

