

Where the operation of heating is associated to $M_1 = 2$ instructions such as p_{11} as the final temperature and p_{12} as the velocity of heating. At the same for the operation o2 of cooling we may have:

$$M_2 = \{p_{21}\}$$

Corresponding to a free cooling to a final temperature indicated by instruction p_{21} . Now considering there are two possible heating temperatures and only one value of velocity of heating we have:

$$S_{11} = \{s_{111}, s_{112}\}; S_{11} = 2$$

$$S_{12} = \{s_{121}\}; S_{12} = 1$$

At the same time should be two the final cooling temperatures we have

:

$$S_{21} = \{s_{211}, s_{212}\}; S_{21} = 2$$

The number of configurations ω present in the set Ω will be four:

$$|\Omega| = S_{11} \cdot S_{12} \cdot S_{21} = 2 \cdot 1 \cdot 2 = 4$$

These configurations or technological recipes may be represented as:

$$\omega_1 = (s_{111} s_{121} s_{211})$$

$$\omega_2 = (s_{111} s_{121} s_{212})$$

$$\omega_3 = (s_{112} s_{121} s_{211})$$

$$\omega_4 = (s_{112} s_{121} s_{212})$$

We may also define a Hamming distance d among the recipes as the minimum number of substitutions to be made to transform a recipe ω into ω' . This operation is symmetric and we have:

$$d(\omega, \omega') = d(\omega', \omega) \quad (8)$$

In the same manner we may define the set N_δ of neighbours of a recipes $\omega \in \Omega$ defined as the number of configurations ω' existing at distance δ from ω as follows:

$$N_\delta(\omega) = \{\omega' \in \Omega \mid d(\omega, \omega') = \delta\} \quad (9)$$