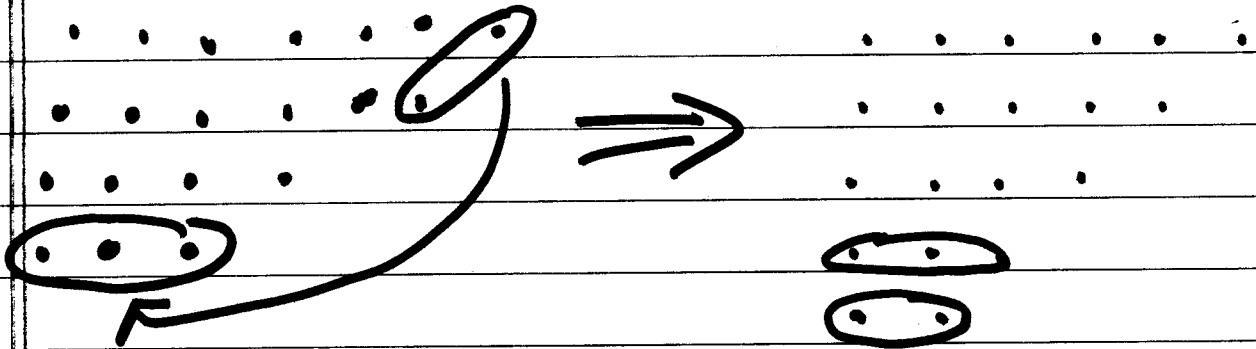


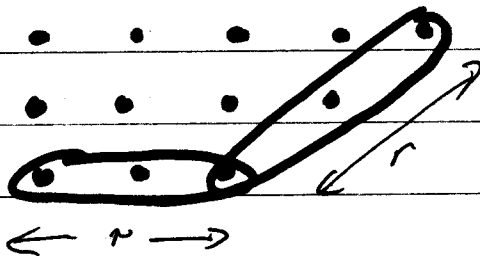
Case 2: $s(\lambda) > p(\lambda)$

Note: $s(\tilde{\lambda}) \leq p(\tilde{\lambda})$



Also changes the number of parts by 1 & hence changes the parity of the # of parts. Clearly this map is an involution, & hence onto one. This map breaks down into cases.

In Case 1 it breaks down when $r = p(\lambda) = s(\lambda)$ and there is a node in common:



This is the partition (with r parts)

$$\begin{aligned} & r + (r+1) + \dots + (r+(r-1)) \\ &= r^2 + 1 + \dots + (r-1) = r^2 + \frac{1}{2}r(r-1) \\ &= \frac{3}{2}r^2 - \frac{1}{2}r = \frac{r}{2}(3r-1). \end{aligned}$$