

## The Variables:

$$\begin{pmatrix} b_1 \setminus a_1 & x_{12} & x_{13} \\ y_{12} & b_2 \setminus a_2 & x_{23} \\ y_{13} & y_{23} & b_3 \setminus a_3 \end{pmatrix}, \quad \xi_-, \alpha_-, \beta_-, \eta_-.$$

We short "x<sub>1</sub>" for either of  $x_{12}$ ,  $x_{23}$  and "x<sub>2</sub>" for  $x_{13}$ . Weights are intuitive on  $yb$  and 3-complementary on  $ax$ : wt:  $b \rightarrow 0$ ,  $y_1 \rightarrow 1$ ,  $y_2 \rightarrow 2$ ,  $a \rightarrow 3$ ,  $x_1 \rightarrow 2$ ,  $x_2 \rightarrow 1$ . Weights are 3-complementary on the dual (greek) variables.

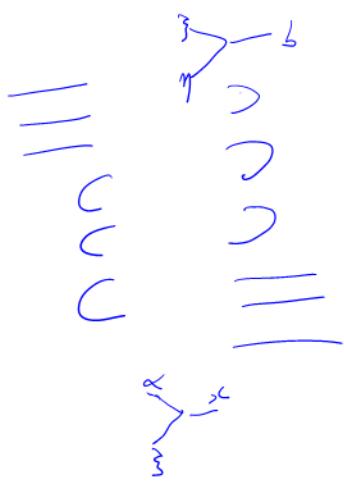
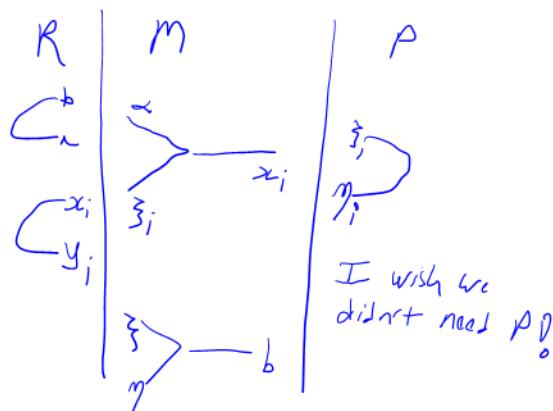
In  $m[ij \rightarrow k]$ :

$$\text{At } \epsilon = 0: \quad \dots, \xi_1 \eta_1 b, \xi_2 \eta_2 b, \xi'_1 \xi''_1 x_2, \eta_2 \xi_1 y_1, \alpha \xi_i x_i \dots$$

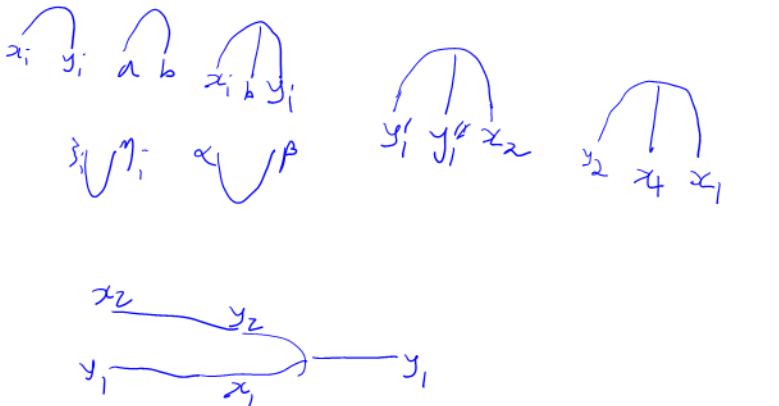
$$\text{At } \epsilon/\epsilon^2: \quad \dots, \xi_1 \eta_1 a, \xi_2 \eta_2 a, \dots$$

In  $\Delta[i \rightarrow jk]$ :

$$\text{At } \epsilon = 0: \quad \dots, \eta_i b y_i, \dots$$



The right wing perspective:



Def For  $f \in Q[z_i]$  let  $\delta(f) = n \cdot \deg_z f - 2 \operatorname{wt} f$

claim,  $\delta$  is non-decreasing under gl. morphisms.

Def For  $\phi \in Q[\xi_i, z_i]$  let  $\delta(\phi) =$

E.g. In  $ybxz$ ,  
 $\delta(a) = -1$     $\delta(ab) = 0$     $\delta(ab^2) = 1$   
 $\delta(x) = 0$     $\delta(e^x) = 0$     $\delta(b^2) = 2$

In  $sl_3$

$$(x_1, x_2) \mapsto [x_1, x_2] = x_3$$

$$\delta = -2$$

$$\delta = 1$$