

eg. Subsystem code (Shor-Bacon code)

$$Q_1 = \begin{matrix} X & X & X \\ X & X & X \\ 1 & 1 & 1 \end{matrix}$$

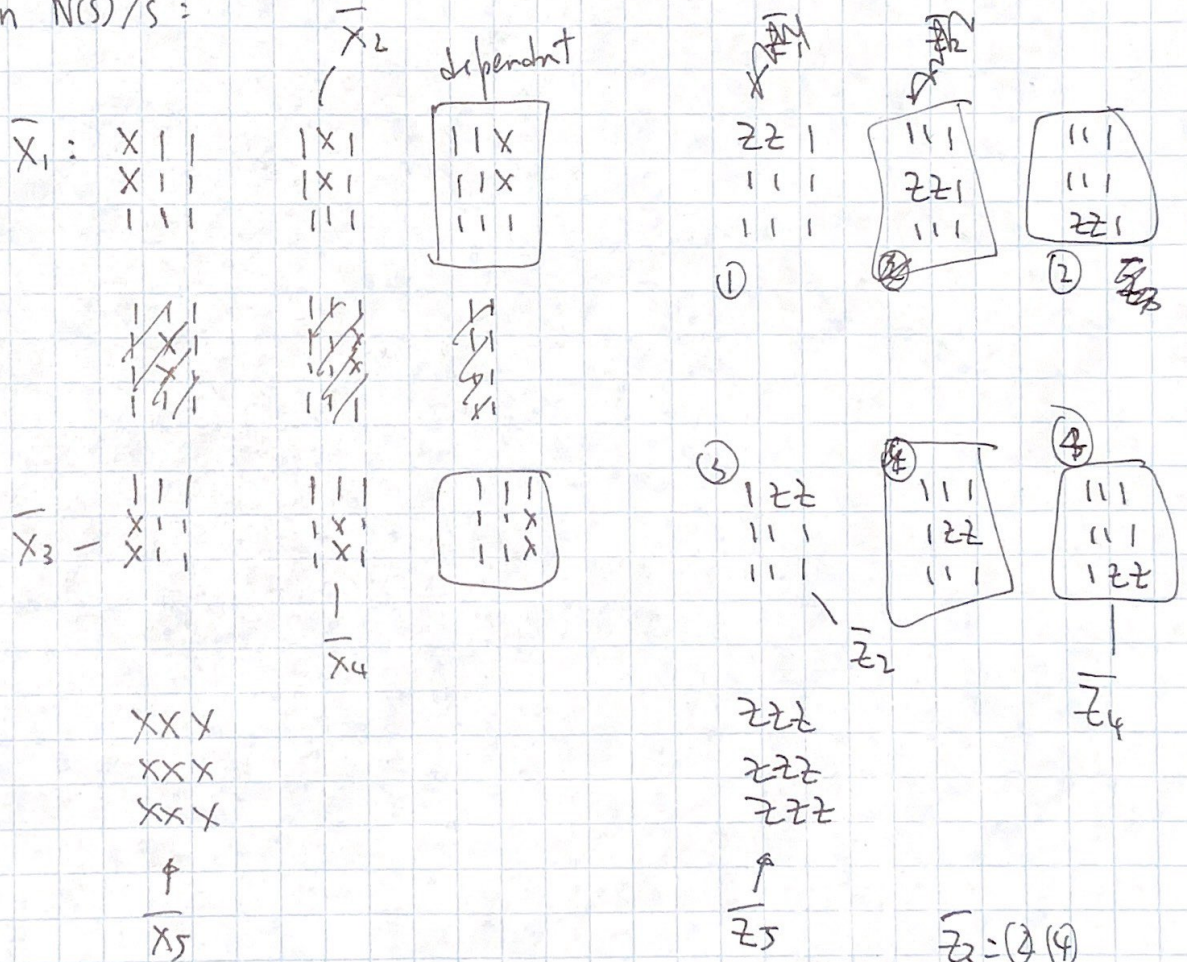
$$Q_2 = \begin{matrix} 1 & 1 & 1 \\ X & X & X \\ X & X & X \end{matrix}$$

$$Q_3 = \begin{matrix} Z & Z & 1 \\ Z & Z & 1 \\ Z & Z & 1 \end{matrix}$$

$$Q_4 = \begin{matrix} 1 & Z & Z \\ 1 & Z & Z \\ 1 & Z & Z \end{matrix}$$

(ie  $Q_3 =$  product of 3 generators from original shor code)  
 $Q_4 = \dots$

In  $N(S)/S$ :



meas generators  $\bar{X}_1 \dots \bar{X}_4$   
 $\bar{Z}_1 \dots \bar{Z}_4$

to infer meas of  $Q_1 \dots Q_4$

(Fluquet code)

$$\bar{Z}_1 = Z_1 Z_2 = (1)(3)$$

$$\bar{Z}_3 = (2)(4)$$

Best