From bad: non-local degenerate,..... to good: local invrtible, good

Last days I, Sasha and Ted we disussion a question: If the structre is 'bad' (non-degenerate), we add ghosts, and in elarged space it becomes good Examples:

Lagrangian surface in T^*M is graph of function in $T^*\left(M \times \mathbf{R}^d\right)$ plus the condition $\zeta_a = 0$ (η are momenta of additional variables)

Yesterday with Sasha we came to the example:

Let A be an arbitrary matrix, then the matrix

$$\begin{pmatrix} A & 1 \\ 1 & 0 \end{pmatrix}$$

in extended space is non-degenerate!