Safe area for synthetic points. Let us call it $S(x) = \{ x + \zeta : \|\zeta\| \leq \varepsilon \} / \{y + \zeta : y \in D_{maj} , \|\zeta\| \leq \delta\}$

$D = D_{maj} \,\dot{\cup}\, D_{min}$ with $D_{min} = \{x1, x2, ...\}$

unsafe area for synthetic points

Questions: Can we train a generator so that it produces points respecting $S(x)$ for a given x?
The generator learns the shape of the safe area.

noise →

$\boxed{G}$ →v   with $x + v \in S(x)$

x →