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Sommario/riassunto	In this book, the ``canard phenomenon" occurring in Van der Pol's equation $\epsilon \ddot x+(x^2+x)\dot x+x-a=0$ is studied. For sufficiently small $\epsilon >0$ and for decreasing $a$, the limit cycle created in a Hopf bifurcation at $a = 0$ stays of ``small size" for a while before it very rapidly changes to ``big size", representing the typical relaxation oscillation. The authors give a geometric explanation and proof of this phenomenon using foliations by center manifolds and

blow-up of unfoldings as essential techniques. The method is general enough to be useful in the study of other singular perturbation problems.