A critical requirement in lower-limb prostheses is maintaining low system weight, as users strongly prefer light prostheses over heavy ones. This requirement of light weight is at odds with most robotic prostheses, whose primary goal is to actively power ankle push-off - an approach that requires heavy motors and batteries. However, artificial limbs offer an opportunity to improve function in other ways as well. One alternative approach is to modulate the passive mechanical properties of the prosthesis using lightweight, low-power actuators, without actively powering the body’s motion. This approach aims to improve gait by exploiting biomechanical workarounds for lost function, rather than direct replacement of the ankle joint. These workarounds may mimic alternative aspects of foot and ankle function, or may not be biomimetic at all. This presentation discusses such “semi-active” devices and the concepts underlying their biomechanical function.