

Summary:

In anatomy we learn muscle function joint-by-joint, plane-by-plane and direction-by-direction, yet we know the human movement is not like this. How we have adapted this cadaver and dissection approach on movement has some major shortcomings and at time led us astray. Human movement is an integration of joints and regions that is based upon collaboration and integration, not isolation and fragmentation. Thus, human movement is like an orchestra, where each instrument/muscle, play a part. Each instrument/muscle needs to be maintained and practiced, however it is with the other instruments, muscles, the magic happens. Van Ingen Schenau describes and presents this in an eloquent and rather advanced manner. The description of jumping in this article is great where the authors shows how mono articular muscles serve as engines and bi-articular muscles as force transformers of the mechanical output into a desired outcome. Enjoy.