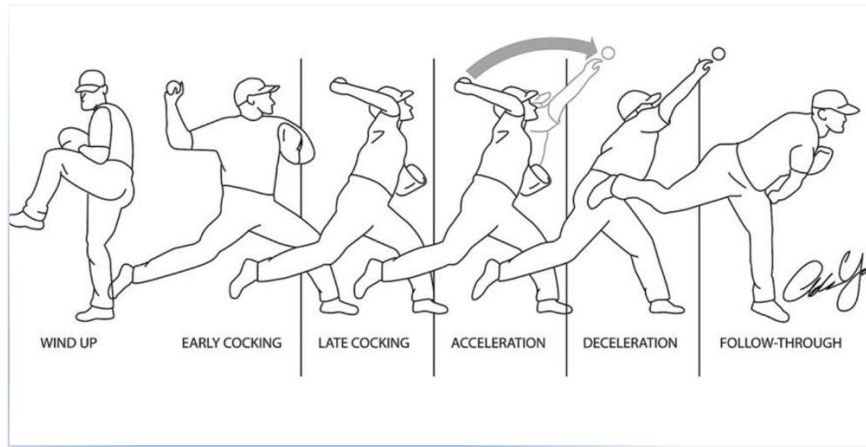


Hi there, this is coach Paulina speaking about movement analysis. Did you know the overhead throwing motion is always depicted as a baseball player? However, tennis players use the very same biomechanical principles to serve! Here's how!



### Early and late stages of wind up in professional tennis:

Sampras here is in the early stages of his *wind up* technique, he likes to keep it very simple, gently lifting the front foot to change this body weight back and prepare to take his racquet back and up to where Federer is in this next photo.



Federer here is in the late stage *wind up*, where his racquet will soon turn up by a combination of rotating his shoulder and also leaning slightly forwards to achieve a nice and balanced toss with the opposite arm.

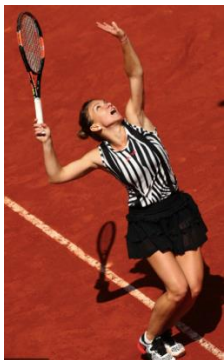


**In tennis early cocking is as important as in baseball, here you see some examples of early cocking:**

Tsitsipas favours a very simple loading of his legs at this stage of the throwing movement, and you can see a nice *shoulder line*, one that goes from his hitting elbow to the tips of his left hand, that looks like a *steep skiing slope*, that will give him a lot of power at later stages of the movement.



Halep has an equally powerful early cocking phase, with a slightly different racquet angle (pointing up to the sky as opposed to Tsitsipas racquet) and also a *shoulder line* that looks different from Tsitsipas, it looks more like a reverse L shaped line (from her right elbow all the way up to her fingertips of her left hand).



**Can you find pictures of famous tennis players that can illustrate the next stages of the overhead throwing motion? Here they are: late cocking, acceleration, deceleration, follow through.**

Enjoy the process of analysing tennis movement!

Big virtual hug from coach Paulina.