

Mon 2013.07.15 LL

Spent the day at Olin Library and finished *Rowing A Scientific Approach*. See [book notes](#).

The book gives a lot of good pointers on how best to row and the postures involved, but did not provide enough detail on the accelerations.

Things to consider / learn:

- Angle of foot rest should be made so that at starting position, knee / thigh to calf are 90 degrees from each other. The book claims that angles less than this will cause a moment that will tend to lift the rower out of the seat.
- For drive, the lower back / hip is what should begin the drive, not the legs
 - > This is to prevent "jack-knifing" the back and snapping the spine. When the lumbar (lower back) spine is in lordosis, the extensor Erector muscles can act as a tie beam to support the load.
 - > Keeping the head up helps do this.
- At the end of the drive (propulsive) phase, the rower's back should be mostly vertical (100-120 degrees tilted)... angles greater than this will result in poor form that compensates physical safety of the rower's spine and muscles.
 - > I noticed this difference between Ellen's rowing and that of other rowers. Ellen always kept her back straight (which is good) and moved with her seat first, whereas other rowers tend to lean too far back and swung their bodies back first. I guess this is the difference between an Olympic rower and an amateur one.
- At the end of the propulsive phase, the hand pulls bowwards and downwards, to lift the paddle out of the water in preparation for recovery and the next stroke.
 - > I always thought that the handle was supposed to be kept level or even pulled up slightly...

Contacted Gregg to see when he could come in this week.

Dragon boating update: we won 3rd place in our division (B Major)... beat Upenn but not Harvard. [More info](#)

Dinner at Petr's update: [see folder](#) for photos and videos of us playing Settlers of Catan