

The following are some notes made by Rachel Jackson after coaching sessions, either with her on the water, or of other rowers while she was in the launch with me. Because images and words are so important in how we view things and learn, I am including her thoughts and notes. Though I would not necessarily use all her images, I feel that they are all worthy of consideration and have helped me tremendously

NOTES & THOUGHTS, Rachel Jackson  
on 26 July 05 lesson with Gordon Hamilton

Work at the catch:

like swimming, hand entering the water  
slices gently/quietly into the water, slicing forward first  
then oar swings outward and backward

(Gordon's words: „pressure against the pressure“, „dead time“)

coming into the stroke be patient  
slice in forward and wait to feel the pressure of the water on the outside of the  
blade  
then, heels down, push feet smoothly into the stroke

don't think of the hands (GH: „too clever“, „too busy“)  
one hand often dominating, ahead of the other

come into the stroke with your arms/chest leaning lifting back on the oars  
(like a pushup/back on the pins/parallel bars)  
sternum leads coming up to the catch, shoulders down  
spreading your arms into the stroke

instead of „the catch“ think „coming into the stroke“  
instead of „the drive“ think „working through the water“  
instead of image of boat and rower separate from water  
join/enter the water with each stroke, much more like swimming  
release the water when work is done

be patient  
get a little more recovery, unhurried time coming to full reach into the stroke  
then a big stable bite  
reaching forward, entering the current of water flowing past the boat,  
a clean slice forward into the current allows smooth laminar flow to set up on  
both faces of the blade  
this creates lift and begins pulling the boat forward even before leg drive begins  
(think of fish swimming upstream, undulating side to side,

pushing with sweep of tail but also being lifted forward by smooth curve of body)  
NOTES & THOUGHTS, Rachel Jackson on July 2005 lesson with Gordon Hamilton,  
page 2

Work through the drive:

each stroke unhurried, strong and powerful, no wasted effort  
heels down, foot flat on foot stretchers throughout,  
full foot contact gives strong stable platform all through the drive

pressure back onto the pin coming into the catch sets arms/shoulders/back  
in strong stable position to hold against leg drive  
drive begins as a simple strong push against the foot stretchers,  
happens without effort, feels effortless  
the oar blades have been accepted into the current, are now „held% by the water,  
legs and hips join the speed/momentum of the water

again, reaching forward, a clean, quiet slice forward into the current  
allows smooth laminar flow to set up on both faces of the blade,  
creates lift and begins pulling the boat forward even before leg drive begins,  
making the beginning of the drive seem effortless

as oar swings out and back through the stroke  
laminar flow of water on both faces of the blade holds the oar steady  
lift continues to be created as oar blade swings away from the boat  
out to midpoint of stroke

trying too hard, tearing the oar through the water, breaks the „hold% of the water  
breaks the laminar flow and creates turbulent flow  
you literally lose hold of the water and can do far less work  
smooth laminar flow both sides of oar blade creates strong stable hold on the water  
makes lift possible - the water itself pulling the oar blade upstream  
makes work by rower possible - the oar stable as if set in a much denser medium

NOTES & THOUGHTS, Rachel Jackson on July 2005 lesson with Gordon Hamilton,  
page 3

Work during the recovery (or „the glide%):

the recovery is not a passive part of the stroke  
all the speed of the boat is yours to keep or to squander (don't just ride the glide!)  
and yet the recovery is a time of rest for the drive muscles

some muscle physiology:  
muscle groups come in opposing pairs, agonist vs. antagonist  
(such as quads and gluts vs. hamstrings)

contracting one group encourages relaxation and lengthening in the opposing group  
muscles that are allowed to relax and lengthen are able to do more work on the next contraction

at the end of the drive elbows out, level with the oar handles,  
allows firm even pressure out onto the pins  
release as much as possible of the energy of the drive into the water  
use the momentum of the drive/release to come out of bow  
but from then on in the recovery do not use momentum to carry you up the slide

instead lengthen spine, rotating hips and sitting tall, feeling strength and stability in torso  
shoulders and arms are free to relax and to do simple work,  
such as pressure out onto pins for stability  
let the weight of your legs rest on your heels,  
low in the boat, relaxing your legs and stabilizing the boat

bring yourself up the slide by drawing your heels towards your hips  
this is easy work and uses muscle groups opposing those of the muscle groups used for the drive

in particular, slow, easy contraction the hamstrings allows relaxation and lengthening of the quads and gluts  
this makes coming into full compression much easier  
the quads and gluts have been allowed to more fully „recover%  
and are now ready and able to do more work on the next drive

(pulling yourself forward with your toes has a very different effect, destabilizing the boat and creating tension in all the muscles of your legs by engaging opposing muscle groups at the same time, making full compression more difficult and not allowing full recovery)

NOTES & THOUGHTS, Rachel Jackson on July 2005 lesson with Gordon Hamilton,  
page 4

at 3/4 to 7/8 slide hips and legs are compressed enough that it is now difficult to continue to use hamstrings and hip muscles to continue up the slide,

but by then the hands are well to stern of the pins („ahead of the pins%  
now „pressure onto the pins% has become a pushing back and down  
sitting tall, hands are low in relation to shoulders and new big muscles (lats) are engaged

this feels good!, it is a „productive% effort, producing motion  
(as opposed to the „isometric% exercise of pressure outward  
onto stationary pins during mid-recovery)

the last 1/4 to 1/8 of the slide arms and lats are fully engaged  
pushing out and back towards the catch

when the oar blades find the water, torso and arms are perfectly set to hold against and to join

the lift from the current and the powerful work of the legs and hips during the drive

regarding boat speed during the recovery

- drawing your heels towards your hips pulls the boat forward
- pushing out and back on the pins into the catch pushes the boat forward
- lift created by a clean catch slicing forward into the current pulls the boat forward

so boat speed stays very fast and steady throughout the recovery/glide  
with no check at the catch and no drop in speed at the start of the drive

full foot contact, heels down, foot flat on foot stretchers

- throughout the drive and the recovery/glide
- keeps boat stable
- keeps all the motion forward

boat planes steadily high in the water

- no bounce upward during drive
- no drop into the water at the release