Questions on Chapter 1: Skill classification.

Question 1.

Name three actions, and for each of the actions give one way in which the movements used to accomplish the actions might vary either across situations or persons. *Be careful to stress how the movement actually changes in your examples.*

**Action 1:** Throwing a ball. Might alter via type of throw. The angle at which the arm comes through relative to the shoulder changes as you go from a side-arm to over-arm technique.

**Action 2:** Swimming. Alters via use of a variety of techniques (back stroke, butterfly). Patterns of inter-limb interaction differ. For example, in the back stroke, the arms are offset by 180 degrees, though rotating in the same direction, while for the butterfly, the arms share similar shoulder joint angles throughout the motion.

**Action 3:** Picking up a coin. Can be picked up with a two-footed stance, or a one-footed stance akin to a flamingo. Something like that.

Question 2.

Reproduce the three diagrams represented below, giving yourself plenty of room to write on them. Place each of the 4 skills (B to F) on each of the three diagrams. For each continuum, I want you to compare the placement of skills B and C, and skills D and E (hence compare the tennis serve with the return, and expert with novice juggling) by *giving reasons* why one skill of the pair might be more gross, more discrete or more open. Making this comparison will help you understand how the continua function.

For an example of the placements, I have gone ahead and given my placement of flying a kite, together with some reasons.

For each skill pairing, the most important part of the answer is to identify which continua most effectively distinguishes between the two skills, and why.

A. Flying a kite
B. Tennis serve
C. Return of tennis serve
D. Juggling for a beginner
E. Juggling for an expert

*(see next page for my answers)*
**Reason:** Not much difference to speak of, but I would say that tennis uses more large muscle groups than juggling, hence the difference.

**Reason:** The tennis skills are discrete. Little doubt there - the only issue is whether you have them defined appropriately (i.e. as individual shots rather than a rally). For juggling, even a beginner might manage a few catches every now and then...giving it a slight push towards continuity. But full continuity is only reached by the expert.

**Reason:** Full range here. Remember it's about predictability of events. The less predictable it is, the more you have to rely on the environmental information. Hence, maximum unpredictability is when you are totally at the mercy of another's decision (tennis return). Maximum predictability is when there is nothing unpredictable going on...and this never happens (In the tennis serve, there is still the toss, but mostly it's predictable). Note no skill is totally over to “closed” though, for this reason.