

## Labs 17 and 18 – Action - Reaction

### Aims:

- Experience the process of animating an action and a convincing reaction in 3D Computer animation, using Maya
- Practice the creation of the main poses of a fight, using a rigged character

As discussed in the previous lecture, the character needs to communicate effectively, even without verbal support, which means that it must be done/expressed through the poses, which appear in a sequence through space and time, and at a specific rhythm – timing -- thus, generating a meaningful motion.

First, you need to have the action planned, in **thumbnails**, with sketches of the key pose and other main poses of each action or reaction, to capture the essence of the action, the attitude, the emotional state. You may use video references, too.

You should start by defining the characterization of the character -- i.e. if it is young or old, male or female, traits of personality, confident or not, mood, etc. -- by the way the pose is arranged as the normal posture for that specific character. This helps making the body expression consistent along the different moments.

For this exercise/assignment, this initial pose could also be the base for the idle cycle key pose (depending on the kind of action you plan to create).

Again, for this exercise, use the following key poses (one for each character) created by Preston Blair; and use the Maya file “Animation\_Character\_AFG\_2.ma”, which has the two characters already in the scene.



Then, you need to start defining the timing for the action/motion, that is, at what time the key pose happens (i.e. at what frame), at what time the anticipation happens, etc. so that you can start creating the pose in the adequate frame in the timeline.

Simulate the action yourself (or ask a colleague to do it) and use a stopwatch to find the approximate duration of the action and the approximate time for main poses.

In the process of arranging each pose, try to follow the concepts of Power Centre, Line of Action, Contrapposto and Serpentine line, which were discussed during past weeks.

Animate the action of one character first and then animate the reaction of the other character.

Make sure the two characters don't move at the same time – one acts and the other reacts, and vice-versa.