## CQU: MMST11010 Illustration \& Visualisation Week 9 Tutorial:

Intro

This week we practice giving characters facial expression. Then we show how cartoon bodies can exaggerate motion and help to explain action that a character is engaged in, by foreshadowing what may be about to happen. We then progress to using three-dimensional primitives to construct more rounded characters and spatially dynamic views.

## Exercise 9.1: More expression please

## Objectives:

- Develop fluency and loosen up by producing multiples quickly and repetitively.
- Experiment more with expression of emotional states using two-dimensional characters.
- Try to establish some consistency of personal style when drawing different characters.


## What you'll need:

- Dozens of sheets of scrap (recycled or butcher's quality) paper
- Soft grade pencil


## Exercise 9.1.1

In this exercise you are going to conjure up out of your imagination lots of cartoon heads. Each one will express a different emotional state. If you like you can produce multiple solutions for each emotion. Use masculine and feminine, older and younger character types. Draw just the head, in front-on, three quarter or profile view-whichever you like-and try to vary these views throughout the multiples you produce. Remember the loosening up aim of the exercise. Try to keep your wrist off the paper and use your whole arm and wrist to produce sweeping movements. Work quickly and boldly. Remember to exaggerate the features for heightened effect and to keep things simple. Use only the lines that you need.
The list of emotions below is just a start to get you going. Think of others and see if someone else can guess correctly the emotional state of the characters you have drawn. See how many variations you can produce in 10 minutes. Working quickly, you should aim for at least 20.

- Fright • Happiness • Anger
- Bewilderment • Love • Broken-heartedness
- Sneakiness or mischief • Frustration • Determination



## Exercise 9.2: Body language in action

## Objectives:

- Continue to develop quick and loose cartooning technique.
- Produce a series of draft sketches and work them up to developed two-dimensional (flat) cartoons, using simple line work (no tones).
- Depict whole body (full-length) poses. Draw characters in action working from a combination of real-life reference and imaginative conceptualisation and visualisation.
- Use the construction of the pose and the composition of the image to emphasise the nature of the action and to suggest movement that may have preceded and which may follow the specific moment in time.
- Characterise so that the type of person, the action, the body language and the facial expression are all supportive of each other.
- Begin to consider minimal background elements that may help to situate a character.


## What you'll need:

- Plenty of sheets of scrap (recycled or butcher's quality) paper
- Soft grade pencil
- An eraser
- A felt tip drawing pen


## Exercise 9.2.1

Following the examples provided, produce five cartoons, each one of a different character in a different sporting action pose. As in the examples you will need to produce a skeleton sketch or two as part of the process to work out the body proportions and to analyse the movements in the action involved. You may find it useful to have someone quickly pose for you at this time (if you are in class you could work in pairs for this purpose).

The key to this exercise is to analyse the action to be being depicted. Try to incorporate an 'echo' of the prior action and a foretelling hint of what is to happen next in the lines of action described by the character's body.

## Present line of action <br> (incorporates 'echo' from previous instant)



Produce your preliminary sketches in pencil and a final version of each pose in pen. The drawings need not be anatomically correct. You may find exaggeration to be a useful device. In this exercise try to express movement without the use of additional action lines like ' whooshes' and ' whackos' (see Related Links in the left hand panel to find out what these are if you don't already know).

Use background elements only very sparingly to set the scene if necessary.
Use the following situations or invent your own:
$\bullet$ Diving • Golfing • Pole vaulting • Fishing • Speed walking


Approx time: 40 minutes (if you finish early then do some more; if you don't finish complete them later)

## Exercise 9.3: Three-dimensional primitives

## Objectives:

- Practice sketching three-dimensional primitive shapes from memory very quickly without concern for accuracy, rather concentrating on fluidity and style of line.
- Learn and practice techniques for building three-dimensional forms by combining primitives when sketching from the imagination.

What you'll need:

- Plenty of sheets of scrap (recycled or butcher's quality) paper
- Soft grade pencil
- An eraser


## Exercise 9.3.1

This is another one of those repetitive loosening-up exercises requiring speed with a sweeping hand and wrist movement and little thought about accuracy as such.

For each of the geometric shapes listed produce sheets of multiples of variations of three-dimensional primitives in outline only (no shading). Vary the axis and viewpoint as much as you can. It may be useful to refer back to the Week 5 lecture for this course, entitled, Selecting a Viewpoint. In particular see figure 1 for quick reference. For this exercise you are not expected to formally construct the views according to any particular system. However, you may base the variations loosely on the different viewpoints you were introduced to, such as the different kinds of oblique, axonometric views and one-point, two-point and threepoint perspective views. Time: approx 10 minutes.

- Ellipses: ball shapes, globes, teardrops






- Triangles: pyramids, cones



-Square: cubes, boxes





- Rectangle: boxes, cylinders







## Exercise 9.3.2

Building on the previous exercise, spend a further ten minutes experimenting with the construction of objects, people, animals, buildings, automobiles, plants etc by putting together three-dimensional shape primitives.


## Exercise 9.4: Rounded characters

Note: For those on-campus students in a real-time tutorial class setting the rest of this lesson will consist of demonstration of techniques that will need plenty of practicing out of class.

## Objectives:

- Learn about a classic technique for constructing three-dimensional looking faces for characters with appropriate foreshortening and perspective, by combining shape primitives.
- Learn about applying proportional guidelines to a standard ball primitive and modifying the basic ball with an additionally attached plain to achieve fundamental human facial structure which can be adapted for various types

What you'll need:

- Plenty of sheets of scrap (recycled or butcher's quality) paper
- Soft grade pencil
- An eraser
- A felt tip drawing pen


## Exercise 9.4.1 Demonstration of a basic spherical construction for a head

Using this technique we establish a structure onto which we will draw facial features so that simple foreshortening and perspective effects are achieved. We start by lightly penciling in a circle. We then change it to a sphere, with a 'north/south' axis. Next two hemispheres, 'northern' and 'southern', are defined. Then longitudinal quadrants are sketched in so that the sphere is divided into eight segments. Next we add other primitives for features aligned to the axes and the quadrant dividing lines.

1. Start with a circle.
2. Convert it to a sphere, establishing at the outset a central axis (just like the north and south poles of the earth). This axis relates to the angle of view and the angle of inclination of the head.
3. Divide the sphere into hemispheres by establishing the equator and sketching it in horizontally around the sphere. We will call this the "eye line".
4. Then divide the sphere vertically into halves with one half of this circumference line establishing where you wish the nose to be aligned and the other half indicating where the back of the head is. This line passes through the 'north' and 'south' poles. We can call it the "middle line" or the "nose line".
5. Next, draw another vertically aligned circumference through the poles around the sphere, set at right angles to the nose line. The ears will be aligned to this and so we call it the "ear line". The top of where the ear fastens is where the eye line intersects the ear line.


Once we have this basic demarcation of the sphere we can pencil in structural features as threedimensional shape primitives and these can be aligned and oriented easily.


Only when we are satisfied with this alignment and shaping-up process is the line work which will define the character and expression be added in pen.


Try this out in class. It does take some practice to achieve consistent results and so take the time to doodle in this way whenever you can. After all, it is fun!

Exercise 9.4.2 Enhancing the basic sphere


Whilst strategic attachment of additional primitive shapes to a sphere as indicated above can be of assistance in composition, more lifelike results can be achieved if one uses a 'sliced' sphere model which may be constructed as follows:


To the sliced sphere we now attach a 'visor'. The line around the sphere we previously established as the eye line becomes the "brow line" and an additional line is sketched in to form a new eye line below it. The result looks like a viewing slot in a protective helmet.


Try this for yourself.
To this visor structure classically derived proportional measurements may be added as a guide to placement of the finer features.


The value of this schema is that it can readily be applied when drawing from the imagination as is often the case when cartooning and creating visual roughs. It is also may be applied flexibly to different poses, viewing angles and character types.


All of the illustrations for these cartooning tutorials have been produced by a student previously untrained in drawing. Using these instructions the student has quickly become adept at drawing from the imagination to a level that is quite suitable for the production of creative roughs and visuals.
For interest sake, below is a selection of drawings by the original proponent of this technique for drawing heads, Andrew Loomis, who was a celebrated commercial artist at teacher working in the USA in the 1930s to 1950 s.


Source: Loomis A., 1939, Fun with a Pencil, the Viking Press, New York

Hands and other parts of the body may be constructed using geometric primitives too


Keep practicing at every opportunity and you are sure to be rewarded with increased fluency and greater confidence. Next week, after some more warming up exercises, we will be applying some of these techniques you have learned to the development of concept and storyboard visuals.
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