#### What is Shaping?

- a procedure by which performance improves because higher + higher criteria are needed for reinforcement for that behaviour

### **Successive Approximations:**

- a series of behaviours where the responses become more and more closer to the form + quantity of a well-performed target behaviour
  - each of these approximations = a "step"
- shaping is often used to trained unperformed behaviours, but can also be used to improve existing skills

#### Qualitative "Topographic" Shaping:

- in qualitative shaping, the standards for performance that go successively higher are linked to the degree in which the responses look, sound, or feel like the well-formed behaviour
  - any operant behaviour can be qualitatively shaped

### **Quantitative Shaping:**

- refers the setting criteria for reinforcement to increase or decrease the quantity of the behaviour usually by changing its frequency, duration, or magnitude
  - example of quantitative shaping via biofeedback: to be able to hear the audio portion of television programs at all times, a man has to increase his heart rate from 17 beats to at least 22 beats per minute

#### Shaping in Real Life:

# **Shaping Everyday Behaviours:**

- nearly everything we learn to do are shaped by real-life events
  - i.e.: learning to walk, eating with a spoon, playing the guitar

#### **Shaping Problem Behaviours:**

- shaping can increase the frequency + magnitude of undesirable attitudes in children
  - in some instances, crying are linked to reinforcers, such as getting attention or a toy they want so children might develop tantrums to get their way

## **Aspects of Shaping Methods:**

- three tasks must be completed before conducting a shaping procedure: 1) describing the ultimate behavioural goal, 2) identifying the starting response; the first step that will receive reinforcement in the successive approximations, and 3) developing a flexible plan for the steps we expect to apply

#### Shaping "Steps":

- the behaviour that undergoes shaping is a behavioural deficit + new to the person so its usually really different to the desired action
  - therefore, its relationship to the desired behaviour may be hard to see so creating "steps" to achieve the desired goal is necessary
- the best advice in shaping is to be flexible enough to speed up/slow down the shaping process

#### Shortcuts to Shaping (4):

- 1) physical guidance (manually moving the person's body through the desired movements)
- 2) using pictures (showing examples of what the desired behaviour looks like)
- 3) modeling the behaviour
- 4) using instructions to describe how the perform the responses

# **Computer-Aided Shaping:**

Percentile Schedules: applying a math formula to determine the criteria for reinforcement

- another computer-aided shaping technique is to use software on a computer to process data for the formula continuously + report whether an instance of the behaviour has met the needed criterion