As time passed, people expected more and more difficult tasks to be completed by machines. Machines became more complex. Several simple machines all working together in a system are called complex machines. A **system** is a group of parts that work together to perform a function. Groups of parts that perform specific functions, in a complex machine, are called **subsystems**. Each subsystem in a complex machine contains a simple machine and usually has just one function.

**Subsystems**
The different subsystems in a mechanical device can produce a force advantage, such as the **disc brakes** in a car.

![Typical modern brake system](image)

The brake fluid transfers the pressure from the brake pedal to the brake pads and the disc, which produces enough force to stop the car.

Another example of a highly efficient combination of levers and hydraulics is the **backhoe**.

The backhoe is a combination of 3 levers, called the **boom (class 3 lever)**, the **dipper (class 1 lever)** and the **bucket (class 1 lever)**.

The assembly of the 3 levers swings around on a gear-like part called the **slew ring**.