

have a systematic character which can be characterized with three levels of interaction (Lemonnier 1992: 4–11).

p. 300 On the first level are the components, or elements, that interact with each other in any given technique (understood as a specific action on matter, delineated by the anthropologist, for whatever reason), for example, tying your shoelaces, landing a Boeing 777, or carving chips from a block of wood. These components, or elements, which interact with one another are: the matter being acted on (which can be the body itself when one walks, swims, dances, etc.); tools; gestures; one or several sources of energy; actors; and 'representations'. The components involved in any action aimed at obtaining some material result physically fit together, or are at least more or less mutually compatible in a physical sense. They form a system, in the simplest sense of the term, defined by the fact that a change in one element can lead to the modification of one or more of the others. If heating milk in a saucepan, control of the transformation from cold to boiling is different on an electric plate and on a gas hob. The heat remains when the electric power is cut, whereas it stops almost instantly with a gas cooker.

The term 'representation' deserves special attention, as it is deliberately vague and includes the extremely complicated processes labelled 'skills'—understood as 'care, judgement and dexterity' according to Ingold (1997: 111)—as well as sets of culturally shared ideas about the components comprising a given technique. These skills are part of what anthropologists call 'implicit' or 'tacit knowledge'. This type of knowledge is more of the type 'to know *how*' rather than of the type 'to know *that*' (Varela, Rosh, and Thompson 1993: 208), and it is not restricted to information about how to make the gestures and operations involved in a technical action. It is also made up of particular mental *skills*, for instance, abilities to evaluate a situation in a fraction of a second and to adapt the ongoing technical process to it (Descola 2006: 11).

This 'know how' does not comprise a series of instructions or images listed somewhere in the brain that would constitute a sort of program to be executed. As a result, 'it is not through the transmission of (programmable forms of rules and representations) that skills are learned, but rather through a mixture of improvisation and imitation in the setting of practice' (Ingold 1997: 111). This 'know how' and skills are embodied and drive actions that are made automatically: for instance, you normally have no consciousness of the many and complex tasks you perform while driving (Bloch 1998: 3–21).

'Actors' and 'energy' are also quite ambiguous terms because, from an emic point of view, some participants and powers in a technical action may belong to what we call the supernatural domain, in which the relationship between means and ends violates western scientific knowledge (to whistle in order to chase the rain away is an example of such a violation).

At a second level, in any one given society and at a given period of time, various techniques are linked with each other in various ways and for various reasons. Here are some examples:

- p. 301
- A technical action depends on the preceding actions: you have to go and cut canes and saplings before you can lash together roof beams for your house; if there are no tires produced and transported to a shop, you cannot get a complete wheel installed on your car; you have to remove the egg's shell before you put it in a frying-pan.
  - Different techniques may use the same tool or machine (think about all the situations in which you have to screw or tighten something or pull something out with pliers or pincers); millions of different products can be made by lathes or drilling devices.
  - Different techniques can include identical steps (pieces of an operational sequence): whether you build a New Guinea house or a garden fence, you have to fell trees and make planks or posts out of the trunks. Welding sheet metal together is an operation common to many industries.