

- Different techniques can rely on the same actors, raw materials, etc.: for instance, the person who welds iron sheets in a car factory during the week is the same one who uses a lawnmower at the weekend or a coffee machine every morning. The raw material that is ordinary salt has innumerable culinary or chemical uses.
- Techniques can result from the embodiment of identical representations in gestures and objects: e.g. knowledge about transformations for clay or iron underlies thousands of technical processes.

In this respect, it is worth noting that Leroi-Gourhan's program on the 'elementary means of action on the matter' (1971[1943]; 1973[1945]) has not yet been seriously documented. Such an elementary means is, for instance 'mixing': whether you are preparing mayonnaise, cement, or orange cordial in a glass of water, you are performing a similar elementary action. How such a universal physical action is actually used by people has never been investigated; nor, as yet, have anthropologists tried to get information on the mental apparatus lying beyond such 'representation' (say, 'adding some kind of liquid to a denser liquid, powder, or solid, gives a paste and homogenizes it, etc.').

At a third level, the ways in which a technique or an object is manufactured, used, or exchanged is linked to practices and thought systems that go well beyond simple material effectiveness. A technical system is therefore always part of the sociocultural whole that includes it. Social representations of techniques include more than the strict domain of action on matter.

As a result, the relationship networks which material actions have with other social acts, or techniques, come from *choices* that are, to a greater extent, at all times, everywhere—even in the case of our most 'modern and rational' techniques—determined by considerations that are in no way technical (Bijker and Law 1992; Latour 1996). For want of a better expression, 'technological choices'—or technological 'options'—emphasize the sorting of possibilities on which the development of a technical system is *de facto* based, although usually in an unconscious and unintentional way, and they refer both to the process of selection and to its results. The whole problem is to identify where these choices [↳] come in; what the logic is behind them; what their consequences are; and so on (Lemonnier 1993a). 'Technical decisions' regarding the building of a metro (Latour 1996), the design of a missile guidance system (McKenzie 1990), or the fencing of gardens rather than pigs in New Guinea (Lemonnier 1993b) do not merely relate to technical actions, but to various ideas, which we label 'political', 'economic', 'gender', 'representations of beauty', etc.

The 'choices' a society adopts, rejects, or modifies in a technical component entail elements that do not serve any material purpose—such as particular ideas about gender relations between the men and women who use the finished object; representations of the relationship between a given material and the cosmos or the gods; political considerations about organizing labour, etc. Such non-technical representations weigh just as heavily as mechanical components in the way an object is thought about and manufactured (or in the way a technique is put to use), its material effectiveness, and even the fate of those who use it (e.g. Schmidt 1996).

Among the Anga people of Papua New Guinea, the use of a given type of tree bark for making capes or loincloths does not result from its affordability in a given ecological zone or specific technical knowledge. Rather, it is correlated to the use women have for this particular raw material: in those groups where women make and wear this type of beaten bark loincloth, it is literally unthinkable that men could use it. Consequently, men ignore the trees in question as a source of raw material for their own capes, using other trees instead (Lemonnier 1984; 1993a: 105–12). What is at stake is gender, and not the botanical adequacy of a raw material.