

Towards an anthropology of action: From pastoral techniques to modes of action

Carole Ferret

► **To cite this version:**

Carole Ferret. Towards an anthropology of action: From pastoral techniques to modes of action. Journal of Material Culture, SAGE Publications (UK and US), 2014, 19 (3), pp.279 - 302. 10.1177/1359183514540065 . halshs-01611342

HAL Id: halshs-01611342

<https://halshs.archives-ouvertes.fr/halshs-01611342>

Submitted on 5 Oct 2017

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Ferret, Carole 2014 « Towards an anthropology of action: From pastoral techniques to modes of action », *Journal of Material Culture* vol. 19 n° 3, p. 279-302 (traduit par Matthew Carey)
ISSN: 1359-1835 doi: 10.1177/1359183514540065

<http://journals.sagepub.com/doi/abs/10.1177/1359183514540065>

Author's own file, publisher's pagination is in the margin.

Carole FERRET

Laboratoire d'anthropologie sociale, Paris

(translated from the French by Matthew Carey)

Towards an anthropology of action: From pastoral techniques to modes of action

In defence of *how*

Imagine you are in a room full of flies; the question is 'how to get rid of them?' One strenuous solution would be to use a steam-hammer:¹ an action that I would describe as direct, positive, internal and equipped. This action is strenuous because of the effort it implies, equipped in that it makes use of a tool, internal because it strikes at the bodies of the flies, and direct and positive because it uses no intermediaries to achieve the intended goal: killing the flies. Such an action would without doubt be deemed a little too interventionist (*interventionniste*), because it's disproportionate. You could instead use a fly-swat (a less strenuous option, but also a 'continuous', i.e. repetitive, one). Hanging fly-paper would make the task much less burdensome by removing the repetitive element: you simply have to hang the paper and let it do the work. The action of fly-paper is also participative in that the flies must actively collaborate in their own death by alighting on the paper. You could also leave a bowl of vinegar in the room to drive the flies away, via an external, participative and negative act; or alternatively, you could draw them out of the room by leaving a pot of honey outside the door (an act that would also be external and participative, but positive in this case, because it draws them to one precise spot, rather than scattering them indeterminately). You could kill them all using fly-spray: an action that would be unburdensome and easy, as well as especially direct, positive and deleterious. You could train the flies to leave the room when you entered or genetically modify them to achieve the same end: two forms of interventionist transformations that are extremely difficult to accomplish. There are also preventative actions, such as hanging mosquito nets at the

windows: an external, direct and positive action. Or you might systematically hide any potential food source by closing bins and jam-jars, brushing up crumbs, and putting your cheese in sealed plastic boxes: another external action, but this time an indirect, negative and also an *a priori* one, so long as you are fastidious and somewhat maniacal in carrying out these tasks. You can also wait for winter and the flies' inevitable death: a passive and exogenous act. Or finally, you can try to convince yourself that the flies do not really bother you or, better yet, that they are familiar spirits come to inspire you ...

There is, as the saying goes, 'more than one way to skin a cat', and even more technical choices involved in making a pot (Sillar and Tite, 2000). As people endeavour to achieve particular goals in particular circumstances, they make use of a wide range of possible actions, which differ not only in terms of content (which raw materials, tools, energy sources, etc. to use) but also of form (actions may be internal or external, direct or indirect, positive or negative, strenuous or passive, continuous or discontinuous, preventative or curative, etc.). Efficacy works in manifold ways. My question is whether these different forms of action are evenly distributed across cultures. Is there a cultural preference for particular forms of action? The analysis of a Siberian system of horse husbandry so extensive in nature that Yakut domestic horses are sometimes said to be 'wild' (Ferret, 2006) led me to construct a grid of human actions – a framework that could be applied to many other cases. This framework could help to analyze technical actions, since technique can be defined as efficacious action on matter.

Whether anthropology focuses on universals or underlining differences, it cannot but interrogate the different forms of human action. How do people act? The social sciences have, for the most part, looked at *why* people act. Sociologists have particularly focused on the 'why' that precedes action – i.e. on determining social factors, as opposed to actors' post hoc rationalisations; whereas others, notably philosophers, have turned their attention to the teleological and after-the-fact of 'for what reason?' that appears in people's reasons, and especially to the potential lack of fit between intention and action. Here, I contend that the question 'how', which looks at actions themselves, at their precise detail and modus operandi (rather than restricting itself to recognising agency) is just as crucial.

p.281 The necessary imbrication of technique and representation need not lead to the latter's entire colonisation of the discipline of anthropology. Studies of material culture certainly aim to analyse the materiality of objects, but before they are used, these objects must be produced.² And unlike archaeologists, anthropologists have the great advantage of being able to observe such processes 'live'. They have access not only to things, but also to gestures and to discourses. This article, then, will focus on efficacy rather than on materiality, though it addresses quite physical, concrete and tangible matters.³ We do not need to rush beyond the material dimensions of technology to catch its social and cultural meanings. Techniques are not only meaningful because they refer back to symbolic operations, but also per se, in each individual link within an operational sequence (*chaîne opératoire*).⁴ The careful analysis of practice can be used to explore not only the depths of

people's thought, but also the form of their actions. The subtleties of their workings can, I suggest, tell us a great deal about the societies in which they occur.

Two sources of inspiration for the classification of actions

My initial aim was to compare people's interactions both with nature and with each other among the Yakuts (or Sakha) of eastern Siberia – a pastoral society rearing horses, cattle and reindeer.⁵ This requires a theoretical framework capable of analysing diverse types of action – one that is sufficiently precise to render the complexity of real-world actions, sufficiently objective to avoid value judgements and sufficiently abstract (and thus formal) to be applicable to the gamut of human activities. Over the course of my research on the technical actions that Yakuts perform on their horses (Ferret, 2006) I have endeavoured to construct just such a framework, altering and adapting this methodological tool as I used it to describe their actions as I observed them. This has been a long-term process and one whose outcome is doubtless imperfect; nonetheless, I believe it to be useful, as it allows the anthropologist to transform a wealth of technical detail into a relatively coherent and meaningful ensemble. In so doing, it also endeavours to build a bridge between 'the mental and the material' (Godelier, 2011[1984]) and could potentially be applied to other terrains. Readers can judge this for themselves.

My framework emerges out of Haudricourt's⁶ (1962, 1964) distinction between 'direct positive' actions and 'indirect negative' actions. Haudricourt suggests that there might be a relationship between 'the domestication of animals, the cultivation of plants and human relations' and that it could be understood in terms of the relative predominance of different types of action (ranging from the sphere of agriculture to that of government) in different types of society. Thus, he proposes Mediterranean sheep husbandry and New Caledonian yam cultivation as archetypes of two forms of action. For Haudricourt, action is direct when there exists an intimate and continuous relationship between people and the animals they husband or the crops they tend; in contrast, action is indirect when people act not upon the domesticated entity, but on its environment. Action is positive when it obliges the domesticated entity to follow a particular pre-ordained path, and negative when it simply blocks certain routes, appraising the outcome. Although this approach is not without its critics, Haudricourt's relentless focus on material activities is vital in that it encourages us to attend to the different forms that action can take (Ferret, 2012).

As Haudricourt's original binary typology failed to render the complexity of 'oriental' Yakut pastoralism, I chose to enlarge the framework. Actions directed towards other living things are not only about 'doing', but very commonly about 'making the other do', as both parties are agents (whether or not they are human). To adopt the language of semiotics,

such actions are not *operations*, but *manipulations* (Greimas and Courtès, 1982[1979]: 184–185, 219). The distinction between these two descriptors is not simply a question of the object’s nature (living or otherwise), but rather about a transfer of agency from subject to object. Although it might seem impossible to manipulate inert objects to ‘make them do’ anything at all, robots for instance can be manipulated. Similarly, other living beings (especially people) can have ‘operations’ performed upon them insofar as they are treated as pure patients (in the technical sense) and not as biddable agents. From this perspective, branding an animal and signing a log-book are equivalent actions.

Hegel describes this delegatory aspect of manipulation as the ‘cunning of reason’ and sees it as a means of multiplying the agent’s efficacy:

Reason is just as cunning as she is powerful. Her cunning consists principally in her mediating activity, which, by causing objects to act and re-act on each other in accordance with their own nature, in this way, without any direct interference in the process, carries out reason’s intentions. (Hegel, *Enzyklopädie, Erster Theil, Die Logik*, Berlin, 1840, p. 382, cited in Marx 1976[1867] I, ch. 7: 135)

In this article, we are less concerned with whether people endow non-humans with agentive capacities than with the manner in which they instrumentalise such possibilities. Greimas and Courtès (1979: 220) distinguish between several different forms of manipulation (see Table 1):

p.282

Making the other do (intervention)	Preventing the other from doing (prevention)
Not preventing the other from doing (laissez-faire)	Not making the other do (non-intervention)

Table 1. Forms of manipulation (Greimas and Courtès, 1982[1979]: 220).

This idea of manipulation isolates and identifies the objective of action even more precisely than the concept of intentionality, which encourages a distinction between the desired objective and the objective attained. Indeed, in the construction ‘making the other do’, the first verb describes the subject’s action towards the object, whilst the second accomplishes the intended objective.⁷ Thus even the most direct objective is separated both from the primary subject’s action and from the primary object of this action. Consequently, the standard subject–object dyad (also called ‘patient–agent’, as the *object* should here be understood in its grammatical sense rather than its ontological one),⁸ can be replaced with a triadic construct: ‘subject–object–objective’. Horse-breaking is a clear example of this, as in most cases the broken horse is not an end itself, but a means to some other end.

We can think of the relationship between operations and manipulations in the following terms (see Figure 1):

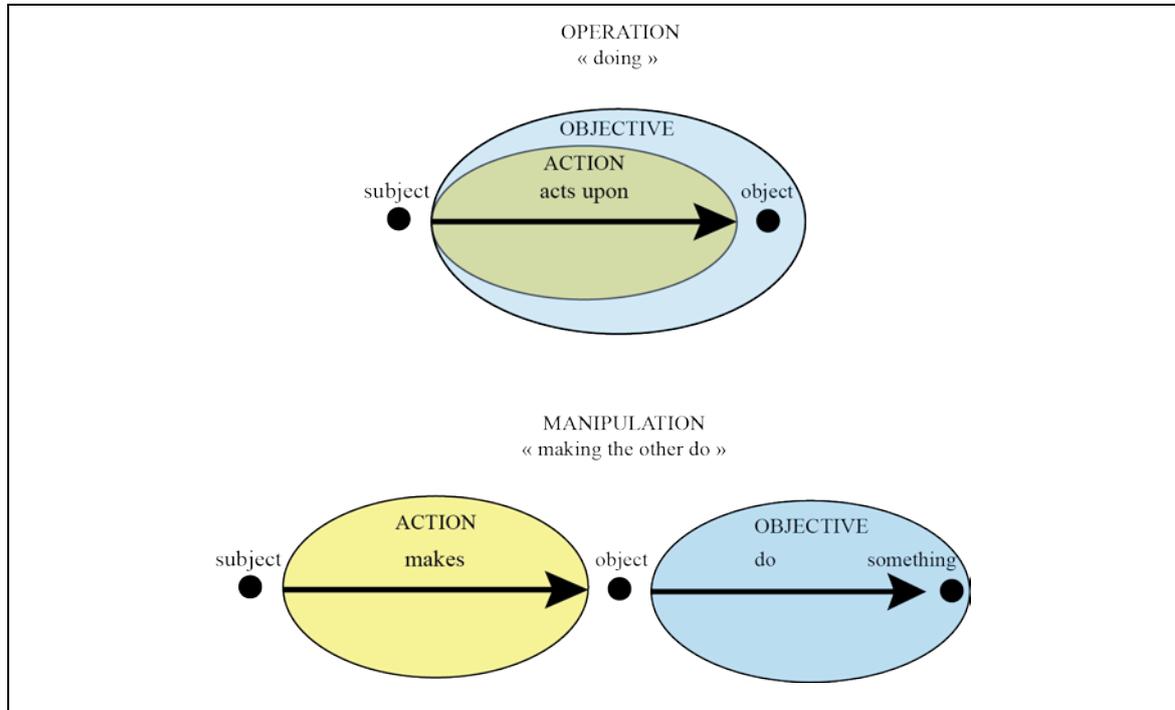


Figure 1. Diagram of operation and diagram of manipulation.

The objective of an action may be a thing (represented by ●) or an event (represented by →). I shall not insist on a strict semantic distinction between goal, end, aim, intention and objective, all of which are indiscriminately defined as that which the subject proposes to achieve via a particular action or set of actions.⁹ I understand the term *thing* in its widest possible sense, encompassing all animate and inanimate beings/entities, and contrast it with *events*, which are what happens to, or are caused by, things. Events include actions, but they are not necessarily intentional. When I aim to make somebody cry, my goal is that he or she cries (an event) and not his or her tears (things). In contrast, when I force-feed a goose, my intended goal is the goose's swollen liver (a thing) and not its ingestion of prodigious quantities of grain (an event). When I order a cake from the confectioner's, my goal is the cake (a thing); but when I encourage my daughter to bake a cake, my goal is to entertain her or perhaps teach her how to bake (events). In other words, a subject's action tends towards a process or a result. And all actions are intended to be efficacious, though not necessarily useful (Sigaut, 2002: 158–159).

In acts of manipulation (making the other do), only the first verb always describes an intentional action; the second is simply an event, which may or may not be intentional. Although he, she or it may accomplish the desired action, the manipulated object does not necessarily co-operate willingly. For instance, making somebody yawn can be an action, even though yawning itself is an involuntary act.¹⁰ Similarly, *foie-gras* geese cannot be said to participate in their force-feeding. And yet, force-feeding a goose is a manipulation and

not an operation. One does not enlarge the liver as one would inflate a balloon; rather, it is the living organism that effects the transformation of grain into diseased liver.

By drawing on the work of Haudricourt and Greimas, I was able to analyse horse-rearing techniques and construct a theoretical framework whose analytical scope stretches well beyond the initial object of study. I began by examining the gamut of actions performed by a particular subject (Yakut horse breeders) on a particular object (horses), and then drew up a list of all the different horse-rearing and horse-training techniques deployed by Yakuts and classified them in terms of their intended goal (reproduction, feeding, care, control, training, the extraction of meat, milk, etc.). Then, within each of these classifications, I examined the different possible means of attaining a particular goal. For instance, several different types of action can be deployed to control the movement of a freely roaming herd of horses: one can watch over them, provide them with fodder in specific locales to encourage them not to stray, accustom them to particular grazing trajectories, make use of their herd instinct, etc. These different techniques, used either together or separately, correspond to different types of action, much as we saw in the example with the flies. They can only be described in terms of their contrasts.

The following framework is the product of a long and ongoing process of creative revision, developed as the actions I observed compelled me to integrate previously unforeseen dimensions.

Types of action

- An action is described as **active**, **passive** or **interventionist**, according to the activity (or even activism) displayed by its subject. The central distinction is between active actions ('doing' or 'making') and passive ones (not doing or making); interventionist action is little more than a sub-set of the former. Interventionist action is characterised by the subject's deploying a great deal of activity with the aim of radically transforming the object. Promethean action, as exemplified by Soviet projects to radically transform nature (e.g. diverting vast Siberian rivers), is the archetype of interventionist action.

At the other extreme, we find *laissez-faire*. This is an action in the full sense of the term, even if strictly speaking the subject does nothing whatsoever; I describe it as a passive form of action. An action may be passive, just as an absence may be performative (Meyer, 2012). Here, the term passive should be understood in its everyday, and not in its grammatical sense. In a passive construction, the grammatical subject does not act: it is a patient and not an agent. When a mouse is eaten by a cat, the grammatical subject (the rodent) is a semantic object and the grammatical agent (the cat) is a semantic subject.

The type of action I describe as passive is equivalent to actions such as 'letting the dough rise' (Descombes, 1995: 166), which is an action insofar as it is an integral part of the recipe, separating the forming of the dough from its baking. What is more, if the subject remains passive at this juncture, something else is nonetheless acting: passive action is not simply a form of stagnation. While it proves, the dough is transformed by the fermenting yeast. This actant can be the object itself (in which case, I call the action participative) or a third party such as time or erosion (in which case, I call the action exogenous). The actant's action is not necessarily intentional, but it intervenes nonetheless. Inanimate objects, such as acids for example, are not 'actors' in the strict sense as they do not intend to corrode, but we can still describe the production of carpaccio as the action of lemon on thin slices of beef. Passive actions are typically either exogenous or participative. p.285

There exists a third type: endogenous passive action, or special abstentions. In certain cases, the subject voluntarily abstains from performing a usual or expected action. For instance, at particular junctures during a mare's gestation, the Yakut avoid moving animals to minimise the possibility of miscarriage. Here, there is not even an actant, but the abstention can be considered a form of action by virtue of its exceptional, or even pathological nature, which distinguishes it from the general scheme of things and evinces the actor's intentionality. Blanking somebody we know in the street can be thought of as an action intended to demonstrate displeasure. If, however, it is the result of having donned the wrong glasses, then it is no longer properly considered an action. Passive actions encompass several forms of inaction: *laissez-faire* (which includes both participative and exogenous actions) and special abstentions. There are indeed forms of action that require one to do precisely nothing.

- As we have just seen, an action is described as **endogenous**, **exogenous** or **participative** according to whether the subject acts alone (endogenous), if his action is abetted or replaced by that of a third party (exogenous), or if the object itself actively participates in the action (participative). In other words, this descriptor describes *who* acts.

When the Yakut describe mosquitoes as 'little shepherds', this is not simply a metaphor. They in fact rely on the mosquitoes' active participation to draw the horses towards smoke-points where they can escape from their bites. Once the mosquito season is over, they are forced to round up the herd themselves without help from their 'little shepherds'.

The external factor that plays the role of vicarious subject retains a certain independence vis-à-vis the primary subject. A tool cannot fulfil this role. The use of a tool is covered by the category 'equipped' (see *infra*). Yakuts claim, for instance, that they could not break their horses in without the snow, which hinders their attempts to rear or leap. The snow is an exogenous natural factor they take advantage of, but were they to spread artificial snow to simplify horse-breaking then the snow would tend to become a tool, rather than an exogenous factor.

p.286 The snow both hampers horses' defensive or evasive actions and softens any falls, but the ruggedness of the terrain can also be taken advantage of via a participative action. Mongols break their horses on stony or pebbled ground, saying 'people who don't know this trick fear stony ground, but horses are easier when they're on pebbles – they won't rear'. Similarly, the Tuva prefer to break in horses in the mountains, despite the danger – or perhaps precisely because of the danger. The slope both troubles and frightens the horse, preventing it from leaping. This participative manipulation has a paradoxical ('contrary') aspect, as one heightens the animal's awareness by increasing the risks associated with a potential fall.

Participative action is the acme of manipulation, as the object plays the role of actor, cooperating in the action in a quasi-intentional and non-compelled manner. To avoid the pitfalls of attributing intentions to animals, I shall restrict my analysis to the criterion of non-compulsion. An action is, then, participative when the object actively participates in the action when it could have acted otherwise. Force-feeding geese is a manipulation, but it is not participative as the geese can neither avoid being fed nor prevent their liver from expanding.

The more discreet the manipulation, the more efficient it can be said to be, and participation is most perfect when the object's action appears, to all intents and purposes, to be purely voluntary. A century separates J-J Rousseau, the philosopher, and F Baucher, the riding master, but their words resonate with each another (see Ferret, 2010).

Let him always think he is master while you are really master. There is no subjection as complete as that which preserves the forms of freedom; it is thus that the will itself is taken captive ... No doubt he ought only to do what he wants, but he ought to want to do nothing but what you want him to do. (Rousseau, 1921[1792]: 84–85)

This semblance of liberty gives such confidence to the horse that he gives up without knowing it. He becomes our submissive slave, while supposing that he is preserving an entire independence. (Baucher, 1851: 168)

In *Emile*, the teacher's action is presented as a form of manipulation at once difficult ('the wisest of all arts of diplomacy'), passive ('by doing nothing'), *a posteriori* ('without predetermination') and participative to such a degree that the subject's and the object's wills precisely coincide. Baucher's *Méthode d'équitation* (Method of Horsemanship) displays the same association of passivity and participation.

- An action is **direct** or **indirect** according to whether it leads directly to its objective or merely to an intermediary step likely to help achieve it. Direct action tends entirely towards its objective: it cleaves to it to such an extent that in some cases action and objective become indistinguishable. In contrast, indirect action can be described as oblique, tending not directly towards its objective and only reaching it by tortuous routes.

This does not imply that direct action is more likely to be successful than indirect action. Or, to appeal to F Jullien's (1995: 7) rhetorical question regarding the meaning of Chinese texts: 'Rather than being gratuitous, does not the refinement of circumlocution have its own power – one that is all the more efficacious for being discreet?'

The oneness of the object is indicative of the directness of action. Indirect actions pursue several objectives simultaneously. These objectives may be ranked or not, causally linked or independent; they may be intermediary objectives presaging some further goal or simply multiple competing objectives. For instance, the large-scale slaughter of Yakut foals when they reach their first autumn not only aims to build up meat-stocks for the harsh Siberian winter (meat-production could be increased by slaughtering them two or three years later and not at the age of six months), but also, indirectly, to avoid having to feed them over the winter. Weaned foals, unlike adults, require additional food if they are to overwinter. p.287

Similarly, when breaking a feisty horse, it is sometimes more efficient to drive it towards heavy, snow-covered ground, where it is forced to reduce speed as it plunges into the snow, rather than tightening the reins, which can cause the horse to accelerate, 'taking the bit between its teeth'.

In Leroi-Gourhan's (1972[1943]: 47–52) famous typology of the elementary forms of action – where the key distinction is between 'resting percussion' (more precise, but less forceful) and 'thrusting percussion' (more powerful, but less precise) – the category of indirect resting percussion seems to combine the advantages of the other two categories. The form and function of a piece of wood will differ according to whether it has been shaped with a penknife (resting percussion), an axe (thrusting percussion), or a chisel (indirect resting percussion). There is little difference here between the successive objectives (striking the chisel with a hammer and the chisel striking the wood), especially as they occur almost simultaneously and the one necessarily follows the other. What is worth highlighting, though, is the fact that some forms of percussion are more direct than others. Thus, a screw and a wheel are both means of transforming circular movement into linear movement (Haudricourt, 2010: 117 ff) in a much more efficient fashion than their direct equivalents (the nail and the *travois* [a transport device, used to drag loads and consisting of two poles drawn by an animal]). Numerous other mechanical devices (e.g. pulleys and gears) rely on indirect action to multiply their efficacy.

Energy recovery systems also often rely on indirect action, as when the movement of dancers is used to power lighting (sustainable dance floors). Kazakhs place lambskins at the entrance to their yurts so that people soften them as they walk on them – as opposed to using a toothed wooden instrument (Dobrosmyslov, 1895: 142–143) – another fine example of passive, indirect action. The diversion or subversion of artefacts (as when the bricoleur redeploys tools in contexts or ways for which they were not intended – e.g. Kalashnikovs in guerrilla warfare,¹¹ or the internet), may sometimes be classified as indirect action, when both uses are carried out simultaneously. If I grab my shoe to hammer a nail into the wall, then it will not be indirect, as at that moment, I am using it only as a hammer and not as a

shoe. But the following actions *are* indirect: if I put on my high-heels to get a book on a shelf, or to arch my back and so charm my second-floor neighbour, or on the contrary to get on his nerves as I totter about upstairs.

- An action is **positive** or **negative** according to whether it leads to the intended objective or limits itself to preventing the accomplishment of one or more alternative objectives. An action that runs counter to the intended objective is called **contrary**.

For instance, if I were to visit Rome, I could:

- take the shortest possible route (direct, positive action);
- go via Florence (indirect action);
- p.288 – rule out going to Florence (negative action – not because it involves rejecting one possibility, but because all other possibilities remain open);
- set off in the opposite direction and so only reach Rome after having circumnavigated the globe (contrary action).

Directness and polarity often go together, as direct actions are typically positive and indirect ones, negative. This, however, is not invariably the case. Directness is a measure of the causal proximity between action and objective, whereas polarity expresses the unequivocalness of the relationship between them. It is perhaps useful to think of directness as being situated at the level of intentionality and polarity at the level of effects. Indirect action pursues multiple objectives, whereas negative action has multiple possible outcomes. Where the oneness of the objective is a sign of an action's directness, the precision of its result indexes its positivity.

In American pool, for instance, there are, strictly speaking, no direct actions: the cue ball itself should never be potted, but must strike (and thus pot) an object ball. The object ball can only be struck by another ball and never by the cue-tip itself. That said, one could argue that potting a ball 'dead straight' is a direct action as cue and object ball are perfectly aligned. Doubles or shots off the cushion, on the other hand, are indirect forms of action. A positive action aims to pot a ball, whereas a negative action might endeavour to cover a pocket or snooker the opponent. The example of pool shows that the most direct and positive forms of action are not always the most effective. To 'make an angle' (when cue ball and object ball are not aligned with the pocket), the player must aim slightly to one side of the direct point of impact in order to make the shot.

Negative action leaves open a wide range of possibilities, whereas positive action leaves no alternative. It follows that if an action excludes all possibilities other than the intended one, then it is therefore positive.

Imagine a couple planning their honeymoon. They are torn between Rome and Venice and each of them has independently purchased two tickets to one of these destinations. If

the woman tears up the tickets to Venice, thereby ruling it out as a destination, then the action could be described as positive as it effectively forces them to go to Rome. If, however, prior to the purchase of the tickets, the woman intimates to her husband-to-be that the miasmas of Venice indispose her, then the action is negative, because it leaves open other possibilities.

This restriction of positive action to a single outcome is not, however, absolute. If it were, then all positive action would necessarily lead to its desired objective. Direct, positive action, in common with all other forms, frequently falls short of its goal, and when it does so it is all the more striking as this goal is so clearly determined. Tethering a horse to a post to restrict its freedom of movement is direct and positive: it cleaves close to its objective, fixing the animal in place and limiting the chances of escape. But the ropes can always fray and give way, and some horses, accustomed to waiting for their master, will better stay put than a tightly tethered animal.

The reader should not draw the wrong impression from the terms ‘positive’ and ‘negative’. They imply no value judgement of the outcome of an action, either from the point of view of the subject or of the object. To avoid confusion, we describe an action as *constructive* when the subject has a positive opinion of its likely outcome, *preventive* when it hinders or excludes a bad thing, and *reparatory* when it fixes some ill. This distinction is significant in certain fields, such as medicine, where there is a distinction between preventive and therapeutic medicine. In the formal analysis of actions, however, its very subjectivity marginalises the opposition, reducing it to a simple heuristic.

p.289

Similarly, an action’s positive or negative polarity tells us nothing about its consequences for the object. Instead, I use the following terms: *neutral*, for actions that have no effect on the object; *care-taking*, for those that aim at preserving the object’s current state; *deleterious*, for actions that temporarily damage the object; and *transformative* for those that permanently and significantly alter the object. Animal husbandry involves feeding, protecting and taking care of livestock, but some animal products imply the slaughter of animals. Unlike with milk and wool, meat and leather can only be harvested from dead animals – i.e. ones that have been radically transformed. One of the key variables distinguishing between different systems of animal husbandry is their relative reliance on either living or dead animals (Digard, 1990: 195). The consequences of an action for its object are obviously a significant variable in decision-making: a horse-rearer may stop milking a mare if he fears it will endanger her foal. Moreover, in the long term, the cumulative effect of numerous acts of care-taking may end up radically transforming an animal – either individually (training) or collectively (domestication). This produces a specific dependency on humans. This distinction, though, is not essential to the classification of different forms of action.

The concept of contrary action also requires a little explaining. First, it is worth stressing that it is not a failed action that just happens to lead in the opposite direction to that expected. Chess-players who sacrifice their queen know full well what they are doing.

Contrary action (which is more common than one might imagine) ought to lead to an outcome quite opposite to the intended objective. It is not, however, irrational.¹²

The contrariness of an action may simply be attributable to competition between two possible goals. Thus, Yakuts slaughter the fattest horses because they like their meat fatty, but in so doing, they remove these fat horses from the active gene pool and so encourage the reproduction of leaner horses – which runs counter to their breeding objectives. This is one example of contrary but rational actions, which are quite comprehensible and easily observed. People constantly act at the crossroads of contradictory and competing objectives.

There also exist contrary and rational actions whose objectives are not in contradiction with one another. The principal of military dissuasion (Beaufre, 1965[1963]) relies on just such a contrary act – one that obeys the Roman adage *si vis pacem, para bellum*: one obtains peace by preparing for war and making the cost of conflict too high for one's opponent. Contrary action can also take the form of psychological manipulation aimed at exploiting the object-actor's spirit of contradiction, or in the language of psychologists, taking advantage of his or her 'reactance' – i.e. the tendency to resist attempts at persuasion (Brehm, 1989; see also Elster, 2007: 45). Parents often make use of this tendency: to get a child (or indeed anybody) to do something, it is sometimes useful to ask them to do the opposite. Thus the subject may establish a restriction with the sole purpose of seeing the object defy it. In this case, though, the contrary objective is never achieved, as the object-agent works against it.

p.290 Finally, there are contrary, rational and accomplished actions, whose goals are not in contradiction with one another, that obtain these goals via reiteration or continuity. A rider who constantly forces his horse to change direction so as to teach it to walk straight, or who excites an animal as part of its training to make it calmer in the long run. We also find techniques with paradoxical effects (e.g. the boomerang – see Sigaut, 2002: 160),¹³ or the man who sets off in the opposite direction and reaches Rome by circumnavigating the globe. Just as it took us a long time to accept that the earth was round, so we must recognise that many contrary actions attain their objectives by ostensibly turning their back on them, as if their field of action was also spherical.

- An action is **internal** or **external** according to whether it acts upon the object itself: on its body if it has one, or even on the body's interior. An action that affects not the object proper but instead its environment, is said to be external. It is this distinction between internal and external that is the closest to the direct/indirect opposition established by Haudricourt. A clear example is the distinction between 'French gardens', where plants 'are constantly and geometrically pruned' and 'Chinese gardens', 'where one ceaselessly works the soil'. Melanesian yam cultivation mainly involves 'indirect' actions, avoiding all contact with the tuber. (Haudricourt, 1962: 41)

Just as in the relationship between direct and indirect action, internal action is not necessarily more efficacious than external action. Tugging at stalks 'to help the harvest along' leads to catastrophic outcomes (p. 44). In *War and Peace*, Tolstoy (1957[1865–1869]: 589) compares the manipulation of the enemy army to herding livestock and stresses the efficacy of external action.

The aim of cutting off Napoleon and his army never existed except in the imaginations of a dozen people. It could not exist because it was senseless and unattainable ... The Russian army had to act like a whip to a running animal. And the experienced driver knew it was better to hold the whip raised as a menace than to strike the running animal on the head.

Some actions can be both indirect and internal. For instance, the indirect counterstrike percussion used by Indian artisans to produce agate and carnelian beads (Bril et al., 2012: 64; Roux and Bril, 2002: 32) differs from the types of percussion described above in that the jewellery hammer strikes the stone (internal action), but the shards are knocked off the stone thanks to the counterstrike force produced by the stone's impact against a third point: a forked iron bar (indirect action).

One final example from the vast range of possibilities: the different types of sporting competition identified by Christian Bromberger (1995: 17 – 'direct' competition, as in boxing; the 'parallel' competition of swimmers in their lanes; and the 'indirect' competition of individual athletes aspiring to a record) can, if one considers one's adversary as the object of one's action, be understood in terms of the distinction between internal and external actions.

This preliminary identification of a few large classes of action is useful for understanding the relationship between an action and its subject (endogeneity, exogeneity and participation), its object (internality vs externality) and its objective (directness vs indirectness; positivity, negativity or contrariness). There are, however, other characteristics which might, at first sight, seem secondary, but which are essential to the identity of particular (and sometimes surprising) forms of action. p.291

A few other distinctive characteristics of action

A distinction is sometimes made between *intentional* and *involuntary* actions.¹⁴ People can, indeed, act more or less consciously and/or deliberately. But these differences of degree do not pose a fundamental challenge to the idea that all action is necessarily intentional. Driving a car is an intentional action, even though it largely comprises reflex actions. More generally, the acquisition and perfection of a particular *savoir-faire* depends on diminishing one's awareness of the precise actions involved, so that it becomes unthinking. My fingers, as I type this sentence, move across the keyboard without my being fully aware of where the

different letters lie. This reduced awareness corresponds to the subject's temporary embodiment of the artefact (Warnier, 2009a: 159, 2009b: 465) or may be linked to the 'tectoneotic awareness' of a self extended by its material engagement (Malafouris, 2008: 1998).

As the idea of intentionality is built into the definition of action, I ultimately abandoned the distinction between intentional and involuntary actions. The ability to represent an objective to oneself may or not be particular to humanity, but it is a necessary element of action – as in Marx's (1976[1867] I-7: 284) famous distinction between the bee and the architect. What criterion other than intentionality can be used to distinguish between the two following actions:

A dog's curled tail might have something stuck in it, but that of itself would not make us speak of the dog as holding the object with its tail; but if he has taken between his teeth and kept there some moderate-sized object, he is holding it. (Anscombe, 1963[1957] § 47: 86)

Indeed, when action is defined as an intentional gesture (e.g. S Ferret, 2006: 124), it is ultimately only the intention that is necessary; the gesture can be dispensed with. One can paradoxically conceive of inactive actions (which I call *passive*), but not unintentional actions. Weber (1978[1956], 1: 4) makes much the same point in his definition of action: 'We shall speak of "action" [*Handeln*] insofar as the acting individual attaches a *subjective meaning* to his behaviour – be it overt or covert, *omission* or *acquiescence*' (emphases added).

Laissez-faire can be a form of action, but one cannot act without meaning to. Passive actions are nonetheless intentional insofar as the agent relies on the intervention of some other factor. Indeed, the intention, performance and consequences of an action obviously do not always coincide. A failed, or inefficacious, action is still an action; as is an action with collateral effects. But there is no such thing as an unintentional action. Errors, of course, are also actions. Davidson (1980: 46) gives the following definition: 'a man is the agent of an act if what he does can be described under an aspect that makes it intentional.' Having settled the question of intentionality, it is that of practices that concerns us here.

p.292 Numerous forms of human action are the result of cooperation between individuals who may not always have a common goal. Accordingly, many authors distinguish between *individual* and *collective* actions. Game theory explores different types of conflict and cooperation, looking at the product of numerous individual choices. Even in the most apparently straightforward case of harmonious cooperation towards a shared objective, there is the problem of whom to identify as the subject of the collective action: the group? The sum of individuals? The leader? 'If a surgeon is assisted by a variety of different actors, occupying roles that he himself has determined (anaesthetist, etc.), does that make him less active qua surgeon?' (Descombes, 1995: 164). For reasons of simplicity, I have for the time being sidestepped the analytical problems associated with collective actors by partially integrating the collective dimension of action into the idea of *onerous* action.

- Thus, I distinguish between **onerous** and **undemanding** actions, according to the amount of work or effort they imply. An action may be onerous because it requires a good deal of effort from the subject (individual action) or because he or she is assisted by others who work alongside him or her (collective action). In the latter case, it is the sum of multiple efforts that indicates the onerousness of the action. From this perspective, the quantity of effort required is only measured at the moment of action. An action that depends upon the use of a tool which itself requires considerable preliminary effort is referred to as **equipped** – in which case the tool may be either a necessity or a luxury (Sigaut, 2007: 18–19). In contrast, the distinction between *natural* and *artificial* action is less practically useful than it might at first glance appear (Ingold, 2007: 4; Sigaut, 2007: 25–26). Numerous elements or factors initially present themselves as natural, before revealing their artifice in the course of investigation. Hunting with a rifle, for instance, is clearly artificial, but then so is falconry, as the raptor must be trained to its task. Actions are mediated by tools whose artificiality is relative.
- I also distinguish between **easy** and **difficult** tasks according to the degree of skill required for their proper execution. Difficult actions are typically entrusted to specialists. Onerousness and difficulty frequently balance one another out as an actor-subject's skill makes a task easier (Roux and Bril, 2002: 42). Such expertise may be more or less codified.
- This brings us to the further distinction between *a priori* and *a posteriori* action, which depends on whether the action was carried out according to a pre-determined system. This opposition separates immutable actions (accomplished in accordance with relatively rigid principles, systematically applied to all objects of a certain category and conducted in a series of fixed stages) from opportunistic, variable or situationally defined action.

Chinese analytical thought seems particularly inclined to such sets of antitheses, as it was the inspiration behind the idea of both Haudricourt (1962) and Needham (1969), as well as François Jullien (1995), who opposes Western efficacy to Oriental strategy. In my typology, the former corresponds to *a priori* and the latter to *a posteriori* actions.

Rather than set up a model to serve as a norm for his actions, a Chinese sage is inclined to concentrate his attention on the course of things in which he finds himself involved in order to detect their coherence and profit from the way that they evolve. From this difference that we have discovered, we could deduce an alternative way of behaving. Instead of constructing an ideal form that we then project on to things, we could try to detect the factors whose configuration is favourable to the task at hand; instead of setting up a goal for our actions, we could allow ourselves to be carried along by the propensity of things. In short, instead of imposing our plan upon the world, we could rely on the potential inherent in the situation. (Jullien, 2004[1996]: 16) p.293

I will not, however, follow François Jullien in his systematic assignment of one type of action to each opposing cultural bloc (East and West), nor in his antagonistic opposition of technique and action, inspired by the Aristotelian distinction between *poiesis* (technical action aimed at producing an object) and *praxis* (moral action, aimed at perfecting the subject). Though largely untheorised, the Greek concept of *metis* (cunning intelligence) clearly speaks to the existence of an idea of the efficacy of indirect, opportunistic and sometimes contrary action. This is the cunning of Antilochus, who contrives to overtake Menelaus in a chariot-race despite his inferior horses.

When he sees the chariot of Antilochus veer towards his own, the King of Sparta imagines that the young man has, through lack of experience, lost control of his team ... The prudent trick of Antilochus adopts the guise of its opposite in order to fool Menelaus, and simulates madness. (Detienne and Vernant, 1978[1974]: 22)

Though I may be accused of failing to think my way outside a Western model of action based on means and ends, I persist in thinking that employing indirect means does not imply that one's action is aimless. As far as I am concerned, the difference is located in the nature of the means, rather than in the presence or absence of a goal. Seen from this perspective, Chinese action is simply less likely to be interventionist (not 'imposing its plan upon the world'), and more inclined to be passive ('carried by the current'), exogenous ('the flow of things'), indirect and *a posteriori* (less normative and without 'ideal forms'). When the Duke Wu decides to attack Hu, he begins by offering him his daughter's hand in marriage 'to turn his thoughts towards pleasure' and even executes his own minister who counselled him to attack Hu (Jullien 2004[1996]: 168) – all this so as to dampen his enemy's suspicion. Such behaviour is hardly a matter of allowing oneself to be 'carried by the current': rather it is two instances of indirect, contrary action.

The distinction between *a priori* and *a posteriori* action can be fruitfully compared to the opposition between procedural knowledge (born of routine and useful so long as external constraints remain unchanged) and conceptual knowledge, which when allied with a understanding of procedures allows for flexibility and adaptability when faced with new situations (Hatano, 1982). Indeed, flexibility and opportunism are two capacities frequently attributed to pastoral nomads (Bourgeot, 1986; Gossiaux, 2009), whose mobility forces them to adapt to shifting environments. But precisely how does this aptitude manifest itself?

p.294 As regards matters equestrian, 'mounted societies' (*peuples cavaliers*), where everybody rides horses (Digard, 2004), display a good-deal of opportunism and, unlike 'master-and-groom societies' (*sociétés à écuyers*), where horse-riding is restricted to an elite, establish very few rules and have hardly any normative discourses surrounding either the rider's saddle position or the behaviour of the horse. Both learning how to ride and riding are informal activities. In central Asia, the horse is so commonplace as to be almost a seat like any other – one on which one can sit as one pleases (Ferret, 2009: 172–173).

As regards horse-training, the opposition between continuous and discontinuous action is more useful than the opposition between brutal and gentle techniques, which carry stark value judgements. In central Asia, foals are used to being tethered and manipulated from shortly after birth (so the mares can be milked) and from the age of six months are directly mounted by children. The continuity of interaction means that there is no critical moment when the horse must be 'broken'. In Siberia, in contrast, among the Yakut, future saddle-horses are captured at three or four years of age, after having grazed freely and far from people. They find themselves suddenly deprived of their freedom, tethered, restricted by fences, ropes and harnesses, before being let loose on open, snowy ground and broken to saddle and sleigh in a matter of days (Ferret, 2006: 407–589).

- **Continuous** action is distinguished from **discontinuous** action in that it is constant, repetitive and/or regular, whilst the latter is one-off, episodic, irregular and definitive. The perfect example of discontinuity is the act of slaughter, which can only be carried out one time on a particular object, as its consequences are irreversible. In other instances, however, notably in the process of training, it is the continuity (i.e. the repetitiveness) of the apprentice's action that underpins its efficacy (Bril, 2002: 140). This quality is not, then, a secondary characteristic of the action, but an essential component of it.

As regards the herding process, the continuity or discontinuity of watching over the livestock is in itself sufficient to change the nature of the action. Thus, in Yakutia, the herding of horses varies with the seasons, but is invariably episodic. The horse-herds spend more of their time searching for horses than watching over them (Ferret, 2007). In central Asia, on the other hand, the flocks (and especially collective flocks of sheep that graze near the village) are continuously shepherded. The lack of fencing means that their owners must keep them away from crops. This permanent presence necessarily affects the animals' behaviour. The Yakuts' periodic visits to check up on the herd are indirect and negative, whereas the constant Kazakh shepherd's action is direct and positive, entirely controlling the animals' movement.

What can we do?

The identification of different forms of action is not, in itself, a panacea. The description and analysis of real-world actions is never simple. How, for instance, are we to identify and build a hierarchy of objectives (which are always subjectively defined, and often multiple and ambivalent)? One may slaughter an animal because one needs food (a direct, positive action), but if one had noticed the animal limping, then its slaughter might be a medical intervention (in which case, it would be an indirect, positive and reparatory action). Or if

the animal in question were a mediocre and not particularly fertile mare, then the action could be seen as an attempt to select for certain traits. Thus, the same action can cut across categories and, above all, can be classified in a variety of different ways. The surest way to avoid misinterpreting objectives is to appeal to actors' own interpretations and to rely on extensive observation.

Nor is it an easy task trying to decide where to draw the line between different actions. An inventory of actions singles out discrete entities from the continuous flux of actions.¹⁵ Just where does any given action begin and end? The appeal to language (an action ends when the verb used to describe it changes) is unsatisfactory, as the same action can be described using different verbs (Davidson, 1980: 4).

The verb 'to plough' has no precise agricultural meaning. The cultivation of wheat, barley and oats in conventional rotation requires no fewer than six to eight different ploughing operations, each with its own specific name: *lever les jachères*, *rebiner*, *labourer à demeure*, *entr'hiverner*, and *faire les avoines* ... (Sigaut, 2010[1987]: 89)

What is more, any action can be broken down into subsidiary actions. Which level of analysis should we focus on? Following on from Adam Smith's description of the 18 steps involved in producing a needle, and Taylor's advocacy of a vertical and horizontal division of labour, several authors have endeavoured to identify elementary labour operations or motions, e.g. Gilbreth's concept of *therblig*, which Haudricourt (1987: 46) described as a unit of intentionality rather than of motion (see also Bril, 1984; Kœchlin, 1972). Beyond a certain point, however, any level of analysis except the truly microscopic condemns the analyst to failure because of the colossal amount of description required. Though sometimes irreplaceable, 'fine-grained' analysis is not always possible or indeed desirable. We have to accept that there is a certain degree of arbitrariness in our decisions to focus on particular actions or 'strategic tasks' (Lemonnier, 1980: 9) and to vary the level of analysis on a case by case basis (Lemonnier, 1976: 113–117).

These questions are essential, as the level of analysis (e.g. whether one looks at a task as a whole or at each of its components) has a significant impact on the interpretative outcome (Roux and Bril, 2002: 45). Real choice is often to be found in apparently insignificant actions. Thus, all horse-riding peoples break their horses in – an action that is typically direct, positive, internal, strenuous and difficult. This level of analysis might be useful for establishing an opposition between pastoral and agricultural peoples, à la Haudricourt, or for comparing processes of domestication as opposed to taming (Descola, 1994), but it is of no use if we wish to compare different pastoral peoples. To do so, we must bring our analysis down a level to focus on the precise detail of the circumstances and gentling. The downside of this is that at such microscopic levels, the analysis may lose all coherence. We must, then, find a path that marries the partiality of the macro with the discordancy of the micro.

This awareness of our limitations should not, however, be allowed to paralyse our interpretative efforts. Armed with this theoretical framework, we can now return to our

initial hypothesis and consider whether, in their behaviour towards nature and towards one another, members of particular societies are inclined or disinclined towards particular types of action. In any event, the classification of an action is always relative to other possible actions, other 'technical variations' (Lemonnier, 1980). The analytically important thing is which action people choose from the range of available actions. p.296

The confronting of opposing styles of action can produce a real clash of cultures. In the classical world, Scythian hit-and-run archery tactics proved unsettling for Persian and Macedonian troops. Such tactics were passive, indirect, negative (perpetual retreat and avoidance of combat), sometimes deleterious (scorched earth), contrary (fooling the enemy into thinking he has won an easy victory), frequently *a posteriori* (strategy developed on the hoof) and participative (making the enemy participate in his own downfall), and always discontinuous. These skirmishing techniques literally disarmed Darius' cavalry and infantry (Herodotus, *The History*, Vol. III, Book IV §120–131: 84–89). At the beginning of the Battle of the Somme, in July 1916, rigid adherence to predefined orders and objectives (*a priori* actions) handicapped British forces lined up against the more flexible and decentralized German army (Graves-Brown, 2007: 293).

This is not, however, to appeal to a reductive, binary model. People's inclinations or disinclination towards particular forms of action are precisely that: a question of *inclination*. Obviously, no human group exclusively practises one particular form of action. And it may well be that we cannot even identify a general propensity. Even very closely related social groups sometimes display astonishing levels of technical variability – not just in what Leroi-Gourhan (1971[1943]: 29–35) calls the '*derniers degrés du fait*' or the 'final degrees of technical fact',¹⁶ but also in the ordering of actions (Lemonnier, 1986: 168–170). And one cannot, of course, rule out the possibility that these 'technical systems' are internally incoherent. Whatever the case may be, the framework outlined here is first and foremost a descriptive tool, designed to dissect the subtleties of action and help understand how they work. It is not a ready-made, one-size-fits-all typology of societies.

If we apply it to Yakutian horse-rearing techniques, we see that they are strongly non-interventionist, frequently external, generally passive and rarely strenuous. Above all, however, they are discontinuous. In the breaking in, training, feeding and watering of horses, balance is not the product of continuous action, but of occasional interventions and alternating contrasts. This same discontinuity is evident in the contrasted series that begin with a few direct, positive, occasionally interventionist and invariably one-off actions (such as the slaughter of foals, gelding of saddle horses and the creation of herds), before switching to a *laissez-faire* mode. This, for instance, is how one watches over the herd: once a herd has been formed and hefted, i.e. trained to graze within certain unmarked limits, the herders are practically certain that the horses can take care of themselves and will optimise their own grazing patterns. Although the Turco-Mongol approach to horse-riding appears fairly robust, it is also rather hands-off as its goal is less obedience than efficacy of movement (Ferret, 2006).

This model has proved its analytical productivity in that case. But these observations must, of course, be put to the test of further research in different sites. The advantage of such a framework is that it compels the analyst to enter into the detail of technical action, rather than limiting himself or herself to a superficial perspective. How useful it is will only be clear once it has been tested more widely. The objective of this endeavour is not, in sum, merely to classify different types of action, but rather to understand better both how they function from the actor's point of view and the sometimes simple, sometimes winding ways in which they work.

p.297 **Funding**

This research indirectly benefits from several grants received for my fieldwork in Siberia and Central Asia from the French Ministry of Foreign Affairs, the French National Center for Scientific Research (CNRS) and the French Polar Institute Paul-Emile Victor (IPEV).

Notes

1. Translator's note: the French equivalent of the English expression, 'using a sledgehammer to crack a nut', is 'using a steam-hammer to kill a fly'.
2. Francophone and Anglophone anthropological approaches to techniques frequently differ in that the former tend to focus on production whereas the latter emphasise consumption or use (Coupaye and Douny, 2009; Ingold, 2007: 9; Naji and Douny, 2009).
3. In the debate that ranges 'materials against materiality' (Ingold, 2007), my position is closest to the former, even though frequent uses of the concept of materiality also tend to embrace 'mutuality', i.e. social relations (Knappett, 2012) and therefore may serve to unite archaeological scientists and archaeological theorists (Jones, 2004). Here, I propose widening our focus from material objects to embrace gestures whilst simultaneously narrowing our focus to the concrete course of technical actions.
4. The French prehistorian and ethnologist André Leroi-Gourhan (1911–1989) introduced the concept of *chaîne opératoire*, which can be defined as follows:

An operational sequence is a series of operations that transform a raw material into a product (be it a consumer good or a tool). Such series are composed of a certain number of stages, each of which is characterised by: a folk term, a 'scientific' term (as a single folk term often covers two technically distinct operations), a site, a tool, a gesture, a type of percussion, a force, a raw material, a product, an agent and a material state (chemical or physical ...). Any given fabrication process may involve one or more operational sequences, and these chains can be incorporated into the process in a variety of ways. (Cresswell, 2010[1976]: 26; see also Lemonnier, 1986; 1992: 25ff; Sillar and Tite, 2000: 4)
5. Since 1994, I have conducted several long-term periods of fieldwork among various Siberian and central Asian peoples, particularly among Yakuts (Sakha) and Kazakhs.
6. André-Georges Haudricourt (1911–1996) was a French linguist and ethnologist whose most famous works deal with historical phonology, cultural technology and ethnobotany.

7. Expressed in the language of structural syntax, the notion of ‘making the other do’ corresponds to a causative or factitive diathesis, which increases the number of actants by one. Tesnière (1959: 102) divides sentences into:

- the verb, which describes a process;
- actants, ‘beings or things which in some or any way (even as mere extras or almost completely passively) participate in the process’; these include the prime actant (who performs the action), the second actant ‘who supports the action’ and/or the third actant ‘who profits from or is injured by the action’;
- and circumstantial phenomena (*circonstants*).

Verbs can be aivalent, with no actant (e.g. ‘it seems’), monovalent, with a single actant (‘Alfred is sleeping’), transitive and bivalent, with two actants (‘Alfred hits Bernard’), and transitive and trivalent with three actants (‘Charles shows Alfred the picture’). The shift from ‘Alfred sees the picture’ (two actants) to ‘Charles shows Alfred the picture’ = ‘Charles makes Alfred see the picture’ (three actants) is a causative diathesis. The additional actant (Charles) instigates the process: ‘Charles is responsible for the action carried out by Alfred’ (p. 260). Seen from this perspective, what I call ‘subject’ is the prime actant and what I call ‘object’ can be either the second actant, in operations, or, in the case of manipulations, the third actant, ‘a simple executive agent’ (p. 261).

p.298

The concept of actant was taken up by AJ Greimas in structural semiotics (Greimas and Courtès, 1982[1979]: 5) and later in actor-network theory (Callon, 1986: note 21; Latour, 1988[1984]: 252: note 11 and *passim*), although in the process, the hierarchy of prime, second and third actants was erased, allowing these authors to posit the idea of a symmetrical relationship between actants. When a hotel manager attaches a large cumbersome weight to room keys in order to induce customers to leave their key at the front desk every time they leave the hotel (Latour, 1991: 104–110), there is nothing symmetrical in the position of the three actants (the manager, the customer and the key). Certainly, the order that is obeyed is no longer the same, because ‘it has been translated, not transmitted’, but I would interpret it as an external and discontinuous manipulation (external because the manager doesn’t act on the customer and discontinuous because he or she no longer has to repeat himself or herself every time a customer leaves the hotel).

8. Every being is more or less certain to be sometimes a subject and sometimes an object (e.g. ‘Alfred hits Bernard’ and ‘Bernard hits Alfred’).
9. Clausewitz uses the German terms *Zweck* and *Ziel* (which respectively describe the centre of a target and the limits of a given space) to distinguish between the aims of war (or political goals [*der politische Zweck*]) and the aims in war (or military objectives [*das Ziel*]) (Aron, 1983[1976]: 50).
10. Yawning may or may not be an intentional action, as with the famous example of twitching vs winking analysed by Gilbert Ryle and later taken up by Clifford Geertz (1973: 6) in his defence of ‘thick description’:

Two boys fairly swiftly contract the eyelids of their right eyes. In the first boy this is only an involuntary twitch; but the other is winking conspiratorially to an accomplice. At the lowest or the thinnest level of description the two contractions of the eyelids may be exactly alike ... Yet there remains the immense but unphotographable difference between a twitch and a wink. (Ryle, 2009[1971], Vol. 2: 494)

11. Paul Graves-Brown (2007) explains that the success of the Kalashnikov is by no means due to its advanced technology but rather to its simplicity, ruggedness, and ‘lack of novelty’ (p. 303). In this case, ‘subversion of function lies not in mechanical misuse of the device, but rather in the social and political context of that use’ (p. 301).

12. Without venturing too far into debates about the rationality of different actions, I will simply say that I use an extremely broad definition of rationality (stretching beyond economic and scientific forms of rationality) – one that appeals to Pareto’s (1935[1916]) ideas of the subjective logic of action (‘In the eyes of the Greek mariners sacrifices to Poseidon and rowing with oars were equally logical means of navigation’, I §150: 77), just as did Weber (2012: 274): ‘By “purposively rational behaviour” we shall understand behaviour that is exclusively oriented towards means which are (subjectively) considered to be adequate for the attainment of purposive goals which are (subjectively) unambiguously comprehended.’ This is why the Achuar hunter’s sung *anent* (brief chanted invocation), which aims at seducing and lulling the game (Descola, 2005: 125), can be seen as part of a goal-oriented operational sequence.
- p.299 13. Not to be confused with the ‘paradoxical techniques’ described by C Tourre-Malen (2011), which are deliberately awkward and not very efficacious (e.g. horse-riding side-saddle or high-heels for women).
14. By using these adjectives, I avoid the question of the distinction between will and intentionality, which has no place in this article (see Anscombe, 1963[1957]: §49: 89; Davidson, 1980: 96 ff).
15. That’s one of the reasons why determining the meaning of actions is more complex than seeking the meaning of objects, which ‘possess obvious discreteness’ (Campbell, 1996: 95).
- Leroi-Gourhan (1971[1943]: 27–29) opposed the (‘unforeseeable and particular’) ‘fact’ to the (‘inevitable, predictable and rectilinear’) ‘tendency’, that characteristic of technological evolution by which, independent of any direct connection, processes and tools appear that make use of the same forces and exhibit the same mechanical, chemical and other properties, in response to technological problems posed in identical terms. (Lemonnier, 1992: 83)
- If we take, for instance, a shoe, then the shape, the material, the height of the heels, the style of lacing, etc. will all be considered ‘technical traits’. What Leroi-Gourhan called ‘*degrés du fait*’ are ‘the steps by which a classification of a given technology becomes more and more detailed’ (Lemonnier, 1992: 84). At the final degree, these traits lose any functional character and assume an essentially symbolic role (Lemonnier, 1986: 160).

References

- Anscombe GEM (1963[1957]) *Intention*. Cambridge, MA: Harvard University Press.
- Aron R (1983[1976]) *Clausewitz: Philosopher of War*. London: Routledge.
- Baucher F (1851) *A Method of Horsemanship Founded upon New Principles, including the Breaking and Training of Horses with Instructions for Obtaining a Good Seat*. Philadelphia: A. Hart.
- Beaufre A (1965[1963]) *An Introduction to Strategy*. New York: Praeger.
- Bourgeot A (1986) Nomadisme: mobilité et flexibilité. L’herbe et le glaive: de l’itinérance à l’errance (la notion de territoire chez les Touaregs). *Bulletin de liaison de l’ORSTOM département H* 8: 145–162.
- Brehm JW (1989) Psychological reactance: Theory and applications. *Advances in Consumer Research* 16: 72–75.
- Bril B (1984) Description du geste technique: quelles méthodes? *Techniques et cultures* 3: 81–96.
- Bril B (2002) L’apprentissage de gestes techniques: ordre de contraintes et variations culturelles. In: Bril B, Roux V (eds) *Le geste technique. Réflexions méthodologiques et anthropologiques*. Ramonville Saint-Agne: Erès, 113–149.

- Bril B et al. (2012) Functional mastery of percussive technology in nut-cracking and stone-flaking actions: Experimental comparison and implications for the evolution of the human brain. *Philosophical Transactions of the Royal Society* 367: 59–74.
- Bromberger C (1995) De quoi parlent les sports? *Terrain* 25: 5–12.
- Callon M (1986) Some elements of a sociology of translation: Domestication of the scallops and the fishermen of St Briec Bay. In: Law J (ed.) *Power, Action and Belief: A New Sociology of Knowledge?* London: Routledge, 196–223.
- Campbell C (1996) The meaning of objects and the meaning of actions: A critical note on the sociology of consumption and theories of clothing. *Journal of Material Culture* 1(1): 93–105.
- Coupaye L and Douny L (2009) Dans la trajectoire des choses. Comparaison des approches francophones et anglophones contemporaines en anthropologie des techniques. *Techniques & Culture* 52–53: 12–39. p.300
- Cresswell R (2010[1976]) Techniques & culture: les bases d'un programme de travail. *Techniques & Culture* 54–55: 23–45.
- Davidson D (1980) *Essays on Actions and Events*. Oxford: Oxford University Press.
- Descola P (1994) Pourquoi les Indiens d'Amazonie n'ont-ils pas domestiqué le pécaré? Généalogie des objets et anthropologie de l'objectivation. In: Latour B, Lemonnier P (eds) *De la préhistoire aux missiles balistiques. L'intelligence sociale des techniques*. Paris: La Découverte, 329–344.
- Descola P (2005) *Par-delà nature et culture*. Paris: Gallimard.
- Descombes V (1995) L'action. In: Kambouchner D (ed.) *Notions de philosophie II*. Paris: Gallimard, 103–174.
- Detienne M and Vernant J-P (1978[1974]) *Cunning Intelligence in Greek Culture and Society*. Chicago: University of Chicago Press.
- Digard J-P (1990) L'homme et les animaux domestiques. Anthropologie d'une passion. Paris: Fayard.
- Digard J-P (2004) Une histoire du cheval. Art, techniques, société. Arles: Actes Sud.
- Dobrosmyslov AI (1895) *Skotovodstvo v Turgajskoj oblasti*. Orenburg: Izdanie Turgajskogo oblastnogo statističeskogo komiteta.
- Elster J (2007) Agir contre soi. La faiblesse de volonté. Paris: Odile Jacob.
- Ferret C (2006) Techniques iakoutes aux confins de la civilisation altaïque du cheval. Contribution à une anthropologie de l'action. Unpublished PhD thesis, Paris, EHESS.
- Ferret C (2007) Les Iakoutes, des chercheurs de chevaux. *Ethnozootechnie* 80: 51–62.
- Ferret C (2009) Une civilisation du cheval. Les usages de l'équidé de la steppe à la taïga. Paris: Belin.
- Ferret C (2010) Education des enfants et dressage des chevaux. Des analogies aux modes d'action. In: Aigle D et al. (eds) *Miscellanea Asiatica. Mélanges en l'honneur de Françoise Aubin. Festschrift in Honour of Françoise Aubin*. Sankt Augustin: Monumenta Serica, 141–172.
- Ferret C (2012) Vers une anthropologie de l'action. André-Georges Haudricourt et l'efficacité technique. *L'Homme* 202: 113–140.
- Ferret S (2006) La leçon de choses. Une initiation à la philosophie. Paris: Le Seuil.

- Geertz C (1973) *The Interpretation of Cultures: Selected Essays*. New York: Basic Books.
- Godelier M (2011[1984]) *The Mental and the Material: Thought, Economy and Society*. London: Verso.
- Gossiaux J-F (2009) 'Il n'existe pas de pauvres chez nous'. De la supériorité des nomades sur les sédentaires. *L'Homme* 189: 115–138.
- Graves-Brown P (2007) Avtomat Kalashnikova. *Journal of Material Culture* 12(3): 285–307.
- Greimas AJ and Courtès J (1982[1979]) *Semiotics and Language: An Analytical Dictionary*. Bloomington: Indiana University Press.
- Hatano G (1982) Cognitive consequences of practice in culture specific procedural skills. *Quarterly Newsletter of the Laboratory of Comparative Human Cognition* 4(1): 15–18.
- Haudricourt A-G (1962) Domestication des animaux, culture des plantes et traitement d'autrui. *L'Homme* II(1): 40–50.
- Haudricourt A-G (1964) Nature et culture dans la civilisation de l'igname : l'origine des clones et des clans. *L'Homme* IV(1): 93–104.
- Haudricourt A-G (1987) *La technologie science humaine. Recherches d'histoire et d'ethnologie des techniques*. Paris: MSH.
- p.301 Haudricourt A-G (2010) *Des gestes aux techniques. Essai sur les techniques dans les sociétés pré-machinistes*. Versailles: Editions Quae – MSH.
- Herodotus (1882) *The History*, Vol. III, trans. G Rawlinson. New York: Appleton.
- Ingold T (2007) Materials against materiality. *Archaeological Dialogues* 14(1): 1–16.
- Jones A (2004) Archaeometry and materiality: Materials-based analysis in theory and practice. *Archaeometry* 46(3): 327–338.
- Jullien F (1995) *Le détour et l'accès. Stratégies du sens en Chine, en Grèce*. Paris: Grasset et Fasquelle.
- Jullien F (2004[1996]) *A Treatise on Efficacy: Between Western and Chinese Thinking*. Honolulu: University of Hawaii Press.
- Knappett C (2012) Materiality. In: Hodder I (ed.) *Archaeological Theory Today*. Cambridge: Polity Press, 188–207.
- Kœchlin B (1972) Trois systèmes de notation des positions et mouvements du corps humain. In: Thomas JMC, Bernot L (eds), *Langues et techniques. Nature et société. II. Approche ethnologique et naturaliste*. Paris: Klincksieck, 157–184.
- Latour B (1988[1984]) *The Pasteurization of France*. Cambridge, MA: Harvard University Press.
- Latour B (1991) Technology is society made durable. In: Law J (ed.) *A Sociology of Monsters. Essays on Power, Technology and Domination*. London: Routledge, 103–132.
- Lemonnier P (1976) La description des chaînes opératoires. Contribution à l'analyse des systèmes techniques. *Techniques et culture* 1: 100–151.
- Lemonnier P (1980) *Les salines de l'Ouest. Logique technique, logique sociale*. Paris: Ed. MSH – Presses Universitaires de Lille.

- Lemonnier P (1986) The study of material culture today: Toward an anthropology of technical systems. *Journal of Anthropological Archaeology* 5: 147–186.
- Lemonnier P (1992) *Elements for an Anthropology of Technology*. Ann Arbor, MI: The Museum of Anthropology.
- Leroi-Gourhan A (1972[1943]) *Evolution et techniques. I: L'homme et la matière*. Paris: Albin Michel.
- Malafouris L (2008) Between brains, bodies and things: Tectonoetic awareness and the extended self. *Philosophical Transactions of the Royal Society B: Biological Sciences* 363(1499): 1993–2002.
- Marx K (1976[1867]) *Capital: Volume 1: A Critique of Political Economy*. London: Penguin.
- Meyer M (2012) Placing and tracing absence: A material culture of the immaterial. *Journal of Material Culture* 17(1): 103–110.
- Naji M and Douny L (2009) Editorial. *Journal of Material Culture* 14(4): 411–432.
- Needham J (1969) *The Grand Titration: Science and Society in East and West*. London: G. Allen & Unwin.
- Pareto V (1935[1916]) *The Mind and Society* (Trattato di sociologia generale). New York: Harcourt, Brace and Company.
- Rousseau J-J (1921[1792]) *Emile or, Education*, trans. B Foxley. London: J.M. Dent & Sons.
- Roux V and Bril B (2002) Observation et expérimentation de terrain: des collaborations fructueuses pour l'analyse de l'expertise technique. Le cas de la taille de pierre en Inde. In: Bril B, Roux V (eds) *Le geste technique*. Ramonville Saint-Agne: Erès, 29–47.
- Ryle G (2009[1971]) *Collected Papers, Vol. 2: Collected Essays 1929–1968*. London: Routledge.
- Sigaut F (2002) La formule de Mauss. *Techniques et culture* 40: 153–168.
- Sigaut F (2007) Les outils et le corps. *Communications* 81: 9–30.
- Sigaut F (2010[1987]) Des idées pour observer. *Techniques & Culture* 54–55: 87–97.
- Sillar B and Tite MS (2000) The challenge of 'technological choices' for materials science approaches in archaeology. *Archaeometry* 42(1): 2–20.
- Tesnière L (1959) *Eléments de syntaxe structurale*. Paris: Klincksieck.
- Tolstoy L (1957[1865–1869]) *War and Peace*. Charleston, SC: Forgotten Books.
- Tourre-Malen C (2011) Les techniques paradoxales ou l'inefficacité technique voulue. *L'Homme* 200: 203–226.
- Warnier J-P (2009a) Les technologies du sujet: Une approche ethno-philosophique. *Techniques & Culture* 52: 148–167.
- Warnier J-P (2009b) Technology as efficacious action on objects ... and subjects. *Journal of Material Culture* 14(4): 459–470.
- Weber M (2012) *Collected Methodological Writings*. Oxford: Routledge.
- Weber M (1978[1956]) *Economy and Society*. Berkeley, CA: University of California Press.

Abstract

This article starts from the hypothesis that societies are characterized by their propensity towards certain forms of action – forms that differ in their means, rather than their ends. It then proceeds to develop a theoretical framework for understanding the different dimensions or aspects of human action: manipulation/operation; passive/active/interventionist; endogenous/exogenous/participative; direct/indirect; positive/negative/contrary; internal/external; continuous/discontinuous. This framework is the product of extensive research on pastoral techniques among Siberian Yakuts, but can also be applied to actions carried out in other spheres that concern behaviour towards nature and towards other people. In so doing, the article strives to resolve certain key problems within the anthropology of action.

Keywords

anthropology of action, efficacy, manipulation, pastoralism, Siberia, technology/techniques

Author biography

Carole Ferret is CNRS researcher, deputy director of the Laboratoire d'anthropologie sociale (CNRS – EHESS – Collège de France). Her research project, 'Treatment of nature and treatment of others: An anthropology of action among two pastoral peoples of Central Asia and Eastern Siberia', explores to what extent groups can be distinguished by a propensity for certain ways of doing.

Plan

In defence of <i>how</i>	1
Two sources of inspiration for the classification of actions.....	3
Types of action.....	6
A few other distinctive characteristics of action.....	13
What can we do?.....	17
Funding.....	20
Notes.....	20
References	22