2004 Canton, 19-21 April, Desjeux V1

THOUGHTS ABOUT THE SOCIAL LOGIC OF INNOVATION IN THE HOUSEHOLD SPACE

AN ANTHROPOLOGICAL VIEW TO UNDERSTAND CONSUMPTION AS A SOCIAL PROCESS

Dominique Desjeux
Professor of Social and Cultural Anthropology, Sorbonne (University of Paris 5)

Introduction

The relation between innovation and consumption is not necessarily obvious in the field of consumption, even though current research on practices in the area of information and communication techniques has shown certain links.

Innovation is more closely associated with the business world and its performances, and consumption is generally viewed in terms of individuals and their purchasing behavior for the household. Moreover, everyone does not understand the term *innovation* in the same way. As Norbert Alter (2000, 2002) shows, common sense often confuses *invention* — a creation, a new product, a new technology or a new service that may never actually take off — and *innovation*, which is the social process through which a creation spreads. This diffusion is difficult to predict because of the great number of actors involved throughout the process, from producer to consumer, not to mention the institutional and legal factors that come into play. Historically these two phenomena have always been separated into two distinct, autonomous universes: organizations and work on one hand and family and their habitat on the other.

However, I observed in Madagascar between 1971 and 1979 a connection between consumption and the different processes of diffusion of new technologies or new agricultural practices, such as the introduction of planting rice in rows in connection with a new rotary hoe (Desjeux 1979), or changes in vegetable farming in the Congo (Desjeux 1987). In the Congo, there was a link between the different stages of raising new vegetable crops, processing them, distributing them, and consuming them in villages and in cities. This link constituted what could be called in economy an informal network. It was possible to observe in particular how, through linear networks closely related to extended families, supply and demand, production and market, innovation (the social adoption of new cultural techniques by the Congolese peasants) and consumption, all came together as these new vegetable crops were proposed for self-consumption or for sale.

Maurice Godelier (1973) showed, continuing the work of Marshall Salhins and Karl Polany, that economy is embedded in the social domain. This observation led me to view markets as a system of action that varies over societies and products.

One of the first sociological and empirical demonstrations in French was made by François Dupuy and Jean-Claude Thoenig (1986) in *La Loi du marché (The Law of the Market)* concerning the sector of electrical appliances. Ben Fine and Ellen Leopolds showed a bit later in their work *The World of Consumption* that there were supply systems and thus a system of action in consumption. Today, Franck Cochoy with his book *Une sociologie du packaging* (2001) observes how packaging plays a mediating role between product offer and the consumer, how it crystallizes all of the work that precedes marketing in this linear process in order to influence consumer choices.

My first analytical conclusion is that innovation and consumption are two sequences in the same process and the same social functioning; thus, they can be analyzed in the same way, at least on the micro- and meso-social scales of observation that I use. Innovation and consumption are in perpetual interaction — although non-linear, without beginning or end — dependent on the collective involvement of all those who are part of the system of action. In this hypothesis of collective activity, both dynamic and structured, innovation, decision-making, uses, and consumption can be dealt with in more or less equivalent ways. However, this equivalence does not mean that they are similar, even though these four phenomena are very close in interactionist and strategic terms.

This equivalence stems from the fact of observing an action, an initiative, a practice, or a use. Taking action is one sequence among others within the process of innovation or consumption; it is a departure from a routine that is a sort of crystallized action until another decision or another crisis comes along to disrupt it. Routine is the state in which we find ourselves most often: it is an undemanding state for individuals, since any change, decision, or innovation requires energy. Routine and innovation are two parts of the consumption process.

In every sequence, actors are involved in the material, social, and symbolic spheres. In practice, however, it is not possible to work simultaneously on every scale, sequence, or chain of causality, or in three dimensions. Therefore studies focus most often on a relatively long sequence that is nevertheless always limited. Semiological approaches do not deal with social relations; instead, they examine the meaning of products or brands. Anthropology deals very little with brands and packaging; rather, it studies the social interactions and material culture associated with the use of the object. Economists focus on the rational dimension, limited by constraints, unequal access to information, and so on.

My second methodological conclusion is that by limiting a study to one sequence, the household, it is possible to apply the same methods for analyzing innovation as those used in business. The household space is viewed as a space of production, use, consumption, and

communication. Focusing on innovation makes it possible to analyze how a new product is chosen or acquired, not merely looking at the moment of purchase or taking action but analyzing the intercourse of actors involved in the introduction of a new product, including the ways in which the dynamics of couples and different generations determines adoption. Understanding how something new is adopted means understanding the decision behind acquisition and comprehending consumption as interactive social dynamics.

Between 1990 and 2002 (in Argonautes, the Magistère at the Sorbonne, and in the consumption sector of CERLIS; with Sophie Taponier, Sophie Alami, and Isabelle Garabuau-Moussaoui), we tried to observe, through empiric research, the longest possible sequences, without making a separation between organizations and the household space. We studied the diffusion process of different types of innovation in different environments: SIG (geographical information system) and decision-assisting software in an agricultural environment, looking at researchers as well as agricultural users and professional chambers (Taponier and Desjeux 1994); Word 6 in the Infrastructure Ministry, examining outside contractors and users within the ministry as well as central management and decision-makers in *départements* (Taponier, Alami, and Desjeux 1995); Ministry of Agriculture funding assistance to businesses, studying central management, recipient firms, and the Region bureaucracy (Garabuau-Moussaoui and Desjeux 2001); and smart-home equipment in Angers, interviewing and observing operators, users, and local institutions (Médina, Alami, Taponier, and Desjeux 1994). We studied the itineraries of consumption in daily life by looking at what happened in the home and en route to and from the point of purchase in the areas of food, medicine, new communication technologies (ADSL, web phone, *Call Porteur*, Minitel, etc.), energies, and so on (cf. documentary sources).

Each time, we discovered that it is always possible to retrace the process *before* the organization studied, working backwards from the ministry to Microsoft and even beyond to its competitors, in order to explain the diffusion process for Word 6 and the fact that Windows operating systems and applications are constantly revised, to fight against competition. There is always a new, earlier "first cause," as Aristotle would have said. Innovation and consumption are embedded in perpetual movement, which I call a "parrot's ladder," that symbolizes this process of continual change (Taponier, Alami, and Desjeux 1995). But because I must stop somewhere, *ananke stenai*, as Aristotle would have said, I will focus on one sequence in this immense action system involving business, distribution, consumption, environment, namely the introduction of innovation in the household. Bruno Latour (1989) has a similar objective in *La Science en action (Science in Action)* when he tries to empirically reconstitute all the stages of the production of scientific knowledge, following an original approach that is, of course, his own.

The practical hypothesis is that if I understand the process of innovation and what determines whether a new product is adopted in this space, I can understand in part what

influences a consumer at the moment of purchase, beyond the obvious effects of brands and packaging. The purchase decision can thus be viewed as a process in time, which does not exclude other approaches. The decision is not automatically determined at the moment of selection by one type of packaging over another in a linear process. From an anthropological and sociological viewpoint, the decision appears to be organized by everything that happens before and after the moment in which the choice is made. Incentive, individual experience, the territory of the brand, the semiology and the multisensoriality of the packaging are considered here not as independent or central variables, but as dependent variables in the social process, in an itinerary that goes from household space to place of purchase and back. The basic assumption is that there is no center or single independent variable, be it economic, psychological, or anthropological, that fully explains the behavior of consumers.

This itinerary approach can also provide ideas for research and development departments in companies as to how to conceive a new technical object, product, or service, to correspond to different uses and problems to be solved in the household space. I called these household innovations "*pierres d'attente*" (cornerstones), the term used by Catholic missionaries in Africa who used elements of religious culture in the local society to convert members to Christianity (Desjeux, Alami, and Taponier 1999). Beyond what oversupplied consumers might voice about their motivations — which teaches us very little about creation and the elements of innovation that interest them — it may be more appropriate to look for implicit cornerstones and counter-factors in the household when a company wants to launch a new product.

In other words, if a new product does not correspond to any use; if it does not solve any problem in the bathroom (Chenine 2001, Gamba 1999, Leveque 1998), kitchen (Garabuau-Moussaoui 2002), living room, or within the home in general (Médina, Alami, Taponier, and Desjeux 1994); if it cannot be incorporated in the system of signs and symbols that everyone in a household constructs to act socially in order to constitute a family memory and to construct their own identity; or if it increases tensions and mental loads within the household; then it has little chance of succeeding.

The following are principles of observation that shape one way of trying to comprehend how innovation takes root, particularly technical objects in the household space.

1. Starting with the system of material objects

To understand how a technical object may succeed, there is no absolute starting point; it is possible to start in the symbolic, social, or material sphere. I choose to start here with material culture, because it is the most common way to approach the diffusion of technologies in anthropology. Moreover, it is a very efficient starting point in terms of hypothesizing how constraints influence the process of innovation. With this material starting point, it nevertheless makes little sense to consider only the technical possibilities of the

object in order to predict how it can be used, even though they do structure options to a certain extent. Without the technical object, the social actor cannot do anything, but without an actor and without a social context, the technical object is nothing.

Thus, to understand how an object catches on, researchers should not observe merely the object itself; they should broaden their scope and study the material system of objects in which it is to take part, forming a logistical chain that determines acquisition and use. The cell phone, for example, requires several other objects — not all indispensable — to be used, such as the table it rests on, the battery and recharger, paper and pens to write down messages, a bank account or prepaid card to pay for it to work, drawers to keep the bills, clothes or accessories to hold it safely when the user is mobile and prevent theft, and so on.

Any object is thus connected to myriad others: frozen food products are connected to refrigeration, temperature-controlled transportation, coolers, microwave ovens, etc. Similarly, broadband services are related to the development of the home computers, such as new light chips (cf. *Herald Tribune*, 12 February 2003) that may improve the colors and the intensity of computer light, even though today their cost is prohibitive for home use.

The potential of computers in the household space — they already control much of professional space — explain why some operators try to impose their new technologies in the home, as does EDF with current carriers that replace cables, as does Microsoft with its built-in offer of home networks, as do Cisco with wireless networks and France Télécom with its home services. Others, such as EPSON, try to sidestep computer use by offering devices that print photos directly from digital cameras, reaching those who cannot afford computers. Ultimately, an innovation may make smart refrigerators commonplace or reorganize distribution circuits… or it may fizzle out.

It is this chain of objects that enables a system of uses that social actors may recombine to produce a new functions that are often completely unforeseeable.

A simple but suggestive example is given by Peter Drucker in the October 1999 *Atlantic Monthly* showing the unpredictable link between the invention of printing and the birth of capitalism. Printing allowed greater production of books, therefore reducing their price. This decrease made books more widely accessible, and among them, the Bible became more affordable. Thanks to this, Protestantism was able to develop, and thanks to that, if Max Weber is correct, capitalism was born. Just looking at Gutenberg's printing press, one could have no way of predicting capitalism; the combinative of uses of these various technologies and the interplay of actors brought about this result.

2. Understanding that a new technology is appropriated because of the user's active mobilization through selection and reinterpretation of the technical uses proposed

All the technical potential of an object can rarely be exploited by an individual user, who chooses among several possibilities or reinterprets them according to other possible uses.

With the multifunction telephones in the 1990s, very few functions were actually used or adopted; vinyl records are reused by disc jockeys and reinterpreted. The reinterpretation of Minitel is also a good example: France Télécom had not foreseen that one of the most popular uses of Minitel would be the "*Minitel rose,"* devoted to sex, in the same way that dating sites on the Internet (cf. Pascal Lardellier, "*Internet, la grande foire des cœurs* (The great fair of hearts)," *Libération*, 11-02-2003) have become popular. Internet provides competition for matrimonial agencies, which was not at all foreseen.

Similarly, it was not imagined in the beginning how important the cell phone would become among the young for maintaining social bonds. Teenagers surprise adults, who feel that the young communicate "without saying anything." The phatic function of the telephone ("Where are you?" "I'm on my way. I just left…") had been underestimated.

Another somewhat simplified example of reinterpretation comes from a development project in the Congo in the 1970s, when I was working on project in Sakamesso in the Pool region. In the village of Mutampa, donkeys from Chad were introduced to free women from the chore of carrying — traditionally on their heads; men rarely have this task. However, these donkeys frightened the women, and in desperation, the donkeys were placed in the schoolyard. One died a short time afterwards and was eaten, which is one reinterpretation, but the women reinterpreted donkeys in another way: to keep their authority over misbehaving children, they said: "If you do not behave, the donkeys will eat you."

These examples are extensions of Drucker's principle concerning aggregation of uses, which, we have seen, are not very often predictable. Reinterpretation is one sign that the diffusion process is occurring, and even succeeding. It means on one hand that new markets develop out of these reinterpretations and aggregated uses, provided that they can be standardized at some point and that the product can be made affordable for consumers. Afterwards, during another sequence of the diffusion process of an innovation, the question of enchantment or re-enchantment in connection with the distribution or the product — its meaning — becomes relevant. The question of meanings and social norms is already present in pre-coded uses of objects within the home.

3. Identifying the boundaries between public, private, and intimate areas within the household

From an anthropological viewpoint, there are structures within the home that preexist and that contribute toward structuring the interplay of actors and their choices. Technical objects are integrated in this space that is already structured, with public, private, and intimate spaces, whose boundaries vary from culture to culture.

The criteria that determine whether an area is public, private or intimate are related to the practices, in particular the use of objects, that take place there: the more limited the access, the more intimate the space, that is, it is kept for persons who are affectively close. If it is

open to others who are socially or emotionally distant, it can be classed as public. These categorizations vary according to history and cultures, as do the existence and importance of the boundaries between them. These boundaries can and do change.

In a given culture, the importance and the place of these boundaries also depend on the social world of individuals, on their stage in their life course, and on gender or generation norms that govern tasks and space. In France, the entrance, hall, dining room, and living room are rather public spaces; the kitchen and study are rather private spaces; the bedroom, toilet, and bathroom are intimate spaces; and the garage, attic, and balcony — places used for relegating surplus objects — can be public or private.

However, this categorization also depends on the size of the home: when it is small, this distinction is reduced and nearly everything is public. When people move to a bigger space — often associated with opportunities of social advancement — their home may have all the rooms mentioned above and the three codes are valid (Desjeux, Monjaret, and Taponier 1998). There are also temporary fluctuations: a toilet or bathroom can be intimate or public. Persons who do not belong to the intimate social sphere of the hosts must ask permission to use certain areas, which also vary from one culture to another. The use of the refrigerator is quite private in France, whereas it is somewhere between private and public in the United States; opening someone else's refrigerator is possible in the United States but forbidden in France — or China — for people who are socially distant.

With these limits, we are at the edges of three dimensions, the material (the amount of space available), the social (social distance or proximity), and the symbolic (the meaning of the space).

4 Identifying the prescribed, allowed, and forbidden uses of the object

When an object is used and where it is stored are part of a system of social norms based on what is socially prescribed, allowed or forbidden to do. These norms are preexisting, but they can also be modified by an object and its changing uses.

In France, in 1995-96, our first qualitative research on e-mail showed that professional use was prescribed and private use was possible; intimate use, such as love letters, was practically forbidden, for our older interviewees and many of the younger ones. Today there are no longer any socially forbidden uses of e-mail (Garabuau-Moussaoui and Desjeux 2000). At home or in the professional space, e-mail seems to be an intermediary form between impersonal formal writing, which expresses a great social distance, and verbal communication, face to face or by telephone, that is less formal. The use of e-mail is quite similar to that of Post-its (Desjeux, Ras, and Taponier, 1998)!

In another domain, in China, in Guangzhou for example, toilet paper may be openly visible in the living room. In France, showing toilet paper in a living room is forbidden, with exceptions when used with a young child. Sanitary paper is allowed in China because it has

been reinterpreted in multiple usages, such as handkerchiefs and paper towels for cleaning (Zheng and Desjeux, 2002). These different uses stem from and also determine whether objects are destined to be displayed, left visible, or hidden, particularly in more public spaces. This may impact packaging, which also both stems from and influences use and display in the household space.

5 The importance of the rational and the imaginary

A technical innovation develops according to a relatively complex process that involves both the rational and the imaginary. This means that the classical oppositions of rational vs. emotional, meaning vs. interest, or even gift vs. purchase are not very meaningful here, because of the dynamic, micro-social perspective that we are using; they may be more relevant elsewhere, such as in microeconomics.

These dimensions coexist, but they come into play, one by one or simultaneously, during the diffusion process (Desjeux, Berthier, Jarraffoux, Orhant, and Taponier 1996). As for the imaginary, it is possible to observe "anthropological structures of the imaginary" (to cite the fundamental book of Gilbert Durand) on a macro-social scale of observation, but on a more micro-social scale, the dynamics of the imaginary can be observed, with both dimensions also coexisting in social reality. The practical problem is that structure and dynamics cannot be observed at the same time. However, it is possible to do so in succession.

It is indeed possible to reconstitute trajectories of the imaginary by means of the position occupied by the product during the curves of its diffusion and its life. Thus, a new technical object starting the trajectory of its diffusion can provoke an intense mobilization of the social imaginary. When this new object takes on significance and the exact limits of its uses are uncertain, a positive or negative imaginary can occur. This was the case for the stagecoach in 17th- and 18th-century Germany. It was imagined to have a debilitating effect on Germans, whereas walking and horseback riding were supposed to form real men, as Sombart reports, cited by Shivelbusch in *The Railway Journey* (1977, 1986). According to Shivelbusch, the "good old stagecoach" was, in the 19th century, deemed better than the train, which, because of its noise, would kill off all communication. The same concern arose for the computer in the 1970s and Internet in the 1990s; it was imagined that they would either encourage or completely destroy communication. Similarly, the first dissections in the Renaissance and the problem of cloning today also present parallels. The issue is actually that of the place of new boundaries. New reference points — norms, codes, knowledge — create uncertainty and insecurity, and therefore they produce a marked imaginary at the very beginning of the diffusion process.

This can take the form of an optimistic enchantment: everything will be possible with this new technology. It is the dominant imaginary of computing in the 1970s, for example. These are the "techno-optimists," in what Georges Balandier (2001) calls "techno-messianism" in

Le grand système (The Big System). But the imaginary can also take the shape of a pessimistic fascination: practically everything is likely to go wrong, as exemplified by Dominique Wolton in *Internet et après? (Internet and beyond?)* and Philippe Breton in *Le culte d'Internet (The Cult of Internet)*, who can be classified as "techno-pessimists" since, when they wrote their books, very little was actually known about users' real practices with Internet.

These authors are part of a "techno-apocalyptic" movement, to plagiarize Marco Orru (1998) who showed how Durkheim's concept of anomie could be connected to a Jewish pessimistic "apocalyptic" trend in the 19th century. This pessimism is nevertheless a form of enchantment, because of the pleasure obtained in noting that "everything is going to pot." Pessimism also comes from another fantasy, that of lucidity and self-restraint: not being taken in or duped by something new — even though the only real lucidity may be knowing that it is impossible to think clearly about what cannot be foretold!

The imaginary, with its positive/negative ambivalence, plays an important function in the diffusion of innovation; its activation is an indispensable phase of this process. The imaginary allows us to move from "invention" to "innovation." Whereas rationality alone would not be enough to trigger adoption in a highly unknown situation, the imaginary enables us to garner the energy necessary to take action. This same idea can be found in an old book by Gérard Althabe (1969), *Oppression et libération dans l'imaginaire (Oppression and Liberation in the Imaginary*, about the Tromba, a cult of possession among the Bestimisarakas on the eastern coast of Madagascar. The imaginary makes it possible to transcend reality and its constraints.

However, the new object gradually enters social intercourse, like a space shuttle reentering the atmosphere, with the same risks of disintegrating. It starts off with the producer, as a research and development prototype, and then it is given form with a brand and packaging, to follow a linear trajectory into the household space.

Diffusion thus takes place within the limits of the material space of the home, of social norms, of power relationships, and of the symbolic. The two great messianic and apocalyptic types of imaginary are replaced by a less dramatic imaginary that acknowledges many dynamics — prescribed, allowed, and forbidden; public, private and intimate; displayed, visible, and hidden — and many other factors — social distance, autonomy, control, and transgression (Desjeux, 1971). This interaction makes it very difficult to predict the trajectory of the diffusion/consumption process. It explains the importance of various means of constructing consumer choice, such as packaging (Cochoy 2001).

The important point is that in the diffusion of an innovation, it is possible to observe at any given moment structure (household space) and dynamics (the diffusion process and the imaginary of a product). This household imaginary may in turn be mobilized by advertising communication and semiological studies. These comings and goings between the imaginary,

the rational, and the constraints of situations, within the realms of creation, business, and household space, show that the innovation process is a sort of perpetual motion without beginning or end. And yet there is no real center, because at any moment the object may disappear from the diffusion/consumption trajectory, which finally is not linear. This partly explains what I might call the paradox of innovation.

6 Contingency and structure of the innovation process: the paradox of innovation

Paradoxically, an innovation develops in a socially structured environment, which might lead us to believe that it is predictable; but at the same time, the concrete result of its development is largely uncertain — that is, unpredictable beforehand. Indeed, when an innovation is observed on a micro-social scale, it follows most often what I call "the great curves of social life": social stratification (social classes, pressure groups, professions); sexual cleavages (hetero or homo); age or generational cleavages; cultural cleavages (ethnic, religious, political). Quite often, a technical innovation does not develop in a socially haphazard way. It usually starts, though unpredictably, on the basis of one of these cleavages.

The cell phone, for example, has "exploded" thanks, among other factors, to what I called the "market of poverty" (Desjeux 1997), structuring less well-off social groups or temporary groups such as the young with the development of calling cards — *intellos précaires* (financially unstable intellectuals) are often future *bobos* (bourgeois bohemians). These limited calling plans are a technique for managing poverty. The amount that can be spent in a given period is more important than the unit price. They make it possible to avoid the uncertainty of the phone bill, which was a great concern for parents, solving a problem and lightening a mental load. It developed largely due to a young market that was not foreseeable at the outset, as I learned thanks to Motorola in Chicago, during a consultancy job.

Another good example is e-business, which is just beginning its development curve — with a small surge at Christmas 2002 in the United States and in France — and its mirror image, distance sales (VAD) (Desjeux and Garabuau-Moussaoui 2001; Garabuau, Grand, and Mourad 1994).

E-business attracted 3% of French customers in 1999. However, only 35% of all households own computers, and only 14% have Internet connections (CREDOC and Bigot 2001), those who are predominantly well to do. The development of e-business follows another curve of social life, that of well-off consumers.

I supposed that distance purchasers might have been interested in e-business. A qualitative study (Clochard and Desjeux 2001) plus some statistical information showed that a large percentage of the underprivileged, aged, and poor — though not only them — took part in correspondence or distance sales. However, the underprivileged do not own computers and are not connected to Internet; they are thus not avid e-business customers. Social groups, limited income, the high cost of computers and ISPs, not to mention the logistical limitations

of letterboxes and secure payments, largely explain the limited use of e-business. At present the meaning and the form of the social trajectory of the development of e-business remains highly uncertain.

7 Conclusion: smooth vs. rough process, the two faces of innovation and consumption

The way to estimate the odds an innovation succeeding or failing depends on the scale of observation chosen (Desjeux, 1996).

The macro-social observation scale values smoothness. This is best expressed in the "epidemiological curve" of innovations developed by Henri Mendras and Michel Forsé, in 1983 in *Le Changement social (Social Chan*ge), following Everett M. Roger in *Diffusion of Innovation* (1953) and especially of Ryan and Gross (1943, cited by Roger) on the diffusion of the hybrid corn in the United States, with early adopters, innovators, an early majority, a late majority, and laggards. This principle, intended to explain diffusion, is essentially psychological. It relies in part on the principle of imitation, similar to Gabriel Tarde's work at the end of the 19th century. It is a useful curve for following the progression of diffusion. The micro-social scale, on the contrary, values roughness, power relationship, material constraints, margins of maneuver, and so forth.

Both observations are true, each on its own scale. Here lies the paradox of innovation. It shows that whenever a new product is launched, there is an element of risk. This may explain the strength of quantitative studies as a means to gaining information on freedom in the imaginary from the real uncertainties of the innovation process.

The paradoxical conclusion that I draw from all these observations is that it is misleading and not very relevant to grasp the complexity of reality and to have an overall qualitative or quantitative approach. It is more important to understand how the different phases of the diffusion process occur and to determine what dimensions should be taken into account in this process. A view that is limited to strategic points is often more applicable than a view that tries to integrate all data at the same time, in order to understand how innovation occurs in the household space.

BIBLIOGRAPHY

Alter Norbert, (éd.), 2002, *Les logiques de l'innovation. Approches pluridisciplinaires*, Paris, La Découverte

Alter Norbert, 2000, *L'innovation ordinaire*, Paris, PUF

Althabe Gérard, 1969, *Oppression et libération dans l'imaginaire*, Paris, Maspéro

Balandier Georges, 2001, *Le grand système*, Paris, Fayard

Breton Philippe, 2000, *Le culte de l'Internet. Une menace pour le lien social ?* Paris, La Découverte

Cochoy Franck, 2001, *Sociologie du packaging*, Paris, PUF

Desjeux Dominique, 1997, "L'ethnomarketing, une approche anthropologique de la consommation: entre fertilisation croisée et purification ethnique", *UTINAM n°21-22*, juin, Paris, L'Harmattan, pp.111-147

Desjeux Dominique, 1996, "Tiens bon le concept, j'enlève l'échelle... d'observation", *UTINAM n° 20*, Paris, L'Harmattan, pp 15-44

Dupuy François, Thoenig Jean Claude, 1986, *La loi du marché* pour le secteur de l'électroménager, Paris, l'Harmattan

Fine Ben, Leopold Ellen, 1993, *The World of Consumption*, Londres, Routledge

Godelier Maurice, 1973, *Horizons, trajets marxistes en anthropologie,* Paris, Maspéro

Latour Bruno, 1989, *La science en action,* Paris, La Découverte

Orru Marco, 1998, *L'anomie. Histoire et sens d'un concept*, Paris, l'Harmattan

Schiffer Mickael Brian, 2002, "Studying Technological Differenciation: The case of 18th-Century Electrical Technology", *American Anthropologist volume 104 n°4*, December, pp. 1148-1161

Shivelbusch Wolfang, 1977, *The Railway Journey*, Berkeley, The University of California Press (traduction anglaise, 1986).

Wolton Dominique, 2000, *Internet et après ?* Paris, coll. Champs Flammarion

Sources documentaires des enquêtes

Alami Sophie, Desjeux Dominique, Taponier Sophie, Pavageau Jean, Schauffhauser Philippe, 1992, *Etude des effets de l'intervention de l'Orstom dans quatre pays tests: Cameroun, Congo, Mexique, Niger, Paris*, Argonautes, Contrat Comité National d'Evaluation de la Recherche (Confidentiel), 5 vol., 435 p., multig.

Chenine Ghania, 2001, *Les soins du corps*, mémoire de maîtrise de sociologie, Paris 5, Sorbonne, 121 p. multig

Clochard Fabrice, Desjeux Dominique, 2001, *La Vente à distance. Enquête qualitative*, Paris, Argonautes, Trois Suisses, www.argonautes.fr

Desjeux Dominique, Garabuau-Moussaoui Isabelle, 2001, “The Social Logic of the Spread of E-Business to the Home: in the Light of Scales of Observation”, Paris, Sorbonne, *8th Interdisciplinary Conference on Research in Consumption*, pp. 17-24

Desjeux Dominique, Jarvin Magdalena, Taponier Sophie, 2001, "La nuit, la consommation d’énergie et le contrôle social" *in Consommations et sociétés, Cahiers Pluridisciplinaires sur la consommation et l’interculturel n°1*, Paris, L’Harmattan

Desjeux Dominique, 2000, "La méthode des itinéraires, un moyen de comparaison interculturelle de la vie quotidienne: l’exemple de Guangzhou en Chine", *in Chine-France. Approches interculturelles*, Zheng Lihua, Desjeux Dominique (éds.), Paris , l’Harmattan.

Desjeux Dominique, Draebel Tania, Testut Nina, Horn Ray, Pires Joao, 1999, *Ethnographic Qualitative Field Study of a Hewlett-Packard Calculator in Four Countries (United-States – New-York; Brazil – Sao Paulo; Norway – Oslo; France – Paris)* [Etude des pratiques et perceptions d’une calculatrice auprès d’utilisateurs de quatre pays: Etats-Unis, Brésil, Norvège, France], Paris, Argonautes, Contrat Hewlett Packard (Confidentiel), 4 vol., 332 p., multig.

Desjeux Dominique, Sophie Alami, Sophie Taponier, 1999, "Les pratiques d'organisation du travail domestique: "une structure d'attente spécifique", *in Services de proximité et vie quotidienne*, Michel Bonnet, Yvonne Bernard (éds.), PUF, pp. 75-88

Desjeux Dominique, Ras Isabelle, Taponier Sophie, 1998, *Enquête anthropologique: diversité des usages et des fonctions du Post-it dans le milieu domestique et dans le milieu professionnel*, Paris, Argonautes, Contrat France Télécom/CNET (Confidentiel), 5 vol., 280 p., multig.

Gamba Tiphaine, 1999, *Soins du corps au masculin*, Paris, mémoire de maîtrise de sociologie de Paris 5, Sorbonne, 103 p. multig.

Desjeux Dominique, Ras Isabelle, Taponier Sophie, 1998, *Enquête anthropologique: diversité des usages et des fonctions du Post-it dans le milieu domestique et dans le milieu professionnel*, Paris, Argonautes, Contrat France Télécom/CNET (Confidentiel), 5 vol., 280 p., multig.

Desjeux Dominique, Monjaret Anne, Taponier Sophie, 1998, *Quand les Français déménagent. Circulation des objets domestiques et rituels de mobilité dans la vie quotidienne en France*, Paris, PUF

Desjeux Dominique, Taponier Sophie, Alami Sophie, Garabuau Isabelle, 1997, "L'ethno-marketing: une méthode pour comprendre la construction de la rencontre entre l'offre et la demande. Le cas de la domotique dans un quartier urbain en France", *Penser les usages,* Arcachon, France Télécom, pp. 250-258

Desjeux Dominique, Berthier Cécile, Jarraffoux Sophie, Orhant Isabelle, Taponier Sophie, 1996, *Anthropologie de l'électricité. Les objets électriques dans la vie quotidienne en France*, Paris, L'Harmattan

Desjeux Dominique, Alami Sophie, Garabuau Isabelle, Sicot Laurence, Taponier Sophie, 1995, *Permanences et évolutions du média papier comme support de communication (une anthropologie du papier dans l'univers domestique)*, Paris, Argonautes, Contrat La Poste – Mission Recherche, 3 vol., 250 p., multig.

Desjeux Dominique, Favre Isabelle, Simongiovani Joëlle, Sophie Taponier, 1993, *Anthropologie d'une maladie ordinaire. Etude de la diarrhée de l'enfant en Algérie, Thaïlande, Chine et Egypte*, Paris, L'Harmattan, 256 p.

Desjeux Dominique, Taponier Sophie, Favre Isabelle (dir), 1991, *Recherche en ethno-marketing sur l'évolution des comportements alimentaires en Europe (Grande-Bretagne, Espagne, France) et leur prospective en matière d'aliments nutritionnels*, Paris, Argonautes, Contrat GIRA, 1 vol., 108 p., multig.

Desjeux Dominique, Taponier Sophie (dir), 1990, *Etude des pratiques et des représentations des consommateurs face aux friteuses électriques*, Paris, Argonautes, Contrat SEB, 1 vol., 137 p., multig.

Desjeux Dominique, 1987, *Stratégies paysannes en Afrique Noire*, Paris, l'Harmattan

Desjeux Dominique, 1979, *La question agraire à Madagascar*, Paris, l'Harmattan

Desjeux Dominique, 1971, "Equipe milieu, cadre d'action", *Educateurs spécialisés, Cahiers de l'UNAEDE*, pp.12-19

Garabuau-Moussaoui Isabelle, 2002, *Cuisine et indépendances, jeunesse et alimentation*, Paris, l'Harmattan

Garabuau Moussaoui Isabelle, Palomares Elise, Desjeux Dominique (éds.), 2002, *Alimentations contemporaines*, Paris, l'Harmattan

Garabau-Moussaoui Isabelle, Desjeux Dominique, 2001, *Etude qualitative méthodologique préalable à l'évaluation FRAI*, Paris, Argonautes, ministère de l'Agriculture, 250 p., multig.

Garabuau Moussaoui Isabelle, Desjeux Dominique (éds.), 2000, *Objet banal, objet social. Les objets quotidiens comme révélateurs des relations sociales*, Paris, L'Harmattan

Garabuau-Moussaoui Isabelle, Nicolas Blandine, Sokolowski Esther, Taponier Sophie, Desjeux Dominique, 1999, *Enquête ethnologique: l'évaluation qualitative des usages dans le cadre de l'expérimentation COM1*, Paris, Argonautes, Contrat France Télécom (Confidentiel), rapport final, 218 p.

Garabuau-Moussaoui Isabelle, Ras Isabelle, Taponier Sophie, Desjeux Dominique, 1999, *Suivi de l'expérimentation d'un accès Internet sur réseau ADSL ("Turbo Wanadoo") chez des résidentiels: phase qualitative (enquête ethnologique)*, Paris, Argonautes, Contrat France Télécom – DINU/CNET (Confidentiel), 2 vol., 275 p., multig.

Garabuau-Moussaoui Isabelle, Ras Isabelle, Taponier Sophie, Desjeux Dominique, 1999, *Suivi de l'expérimentation d'un accès Internet sur réseau ADSL ("Turbo Wanadoo") chez des*

professionnels: phase qualitative (enquête ethnologique), Paris, Argonautes, Contrat France Télécom – DINU/CNET (Confidentiel), 4 vol., 400 p., multig.

Garabuau-Moussaoui Isabelle, Taponier Sophie, Le Touzé Olivier, Desjeux Dominique, 1998, *Expérimentation "Call Porteur". Suivi des usages et de leur évolution*, Paris, Argonautes, Contrat France Télécom – DINU, 4 vol., 390 p., multig.

Garabuau Isabelle, Grand Cécile, Mourad Nadine, 1994, *Anthropologie de la consommation: le cas de la vente par correspondance*, Paris, Paris-V-Sorbonne, Argonautes, 337 p. (multig.)

Leveque Claire Marie, 1998, *Reflets aquatiques et expressions corporelles. Etude des pratiques et représentations de l'espace et du corps dans la salle de bains*, Paris, mémoire de maîtrise de sociologie de Paris 5, Sorbonne, Magistère de Sciences sociales, 118 p., multig

Médina Patricia, Alami Sophie, Taponier Sophie, Desjeux Dominique, 1994, *Anthropologie de la domotique au quotidien*, Paris, Argonautes, Contrat de recherche EDF-GRETS et Ministère de l'Equipement (Plan Construction et Architecture), 3 vol., 390 p., multig.

Taponier Sophie, Draebel Tania, Sokolowski Esther, Desjeux Dominique, 1999, *Etude ethno-marketing sur les pratiques de télécommunications internationales de trois communautés (personnes originaires de Chine, d'Algérie et des Etats-Unis),* Paris, Argonautes, Contrat France Télécom (Confidentiel), 5 vol., 492 p., multig.

Taponier Sophie, Le Gac Sylvie, Desjeux Dominique, Orhant Isabelle, 1996, *Le développement de l'offre de téléservices dans le secteur résidentiel,* Paris, Argonautes, Contrat EDF-GRETS (Confidentiel), 2 vol., 280 p., multig.

Taponier Sophie, Desjeux Dominique, 1995, Evaluation du processus de changement de logiciels généraux du Ministère de l'Equipement, l'exemple du passage de Word 2 à Word 6, Paris, Argonautes, Contrat Ministère de l'Equipement (DPS/IS), 3 vol., 260 p., multig.

Taponier Sophie, Alami Sophie, Desjeux Dominique, 1995, *Evaluation de la politique de câblage informatique au sein des DDE*, Paris, Argonautes, Contrat Ministère de l'Equipement (DPS/IS), 2 vol., 240 p., multig.

Taponier Sophie, Desjeux Dominique, 1994, *Informatique, décision et marché de l'informatique en agriculture*, Paris, l'Harmattan

Taponier Sophie, Berthier Cécile, Desjeux Dominique, 1993, *Etude des systèmes de chauffage "base + appoint" et "bi-jonction" dans les immeubles collectifs aidés. Enquête auprès des bureaux d'études, des gestionnaires et des locataires*, Paris, Argonautes, Contrat EDF-GRETS, 1 vol., 215 p., multig.

Zheng Lihua, Desjeux Dominique (éds.), 2002, *Entreprises et vie quotidienne en Chine. Approche interculturelle*, Paris, l'Harmattan