

**Senegalese Émigrés and
New Information and Communication Technologies**

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Introduction

International migration has been a vital element in Senegal's evolution over the last two decades. While this is not a new phenomenon, the migration of Senegalese to other countries grew rapidly between 1980 and 1990, and has had significant social and economic implications. Above all, there has been, during this period, an increase in both the number of destinations and the points of origin, thus posing more complex issues with regard to the country of origin. The need to establish "long-distance relations" – i.e., the set of economic, financial and social ties between émigrés and the country of origin – becomes all the more urgent when the receiving countries are farther from Senegal and have fewer links to the mother country. The émigré is an actor whose life evolves across different geographic spaces. The migratory system is structured between different poles: the countries of origin, the host countries and investment zones. In order to organize and enliven this complex network, the émigré must ensure that information is able to move between the different poles of the system, operating, despite the distance, through a process of nearly constant interaction. Émigrés – like anyone working within a network in an environment of expanded distances and a high degree of mobility – have a need to communicate.

New information and communication technologies (NICTs) are the modern tools (cable, satellite, the Internet, telematic applications) that facilitate the circulation of ideas and bring together data and people. This study attempts to shed light on the role of NICTs in the "long-distance relations" between émigrés and their families in their country of origin. The ways in which these technologies are used and appropriated by émigrés are complex. In the specific context of this study, dealing with the places of origin of émigrés who have long lacked connection with the modern communications network, the phrase "new technologies" may be disconcerting to the reader. Indeed, the landline telephone may be old and commonplace in Dakar, while it is just becoming known in M'Benguène, the village in the department of Kébémér that has just emerged from technological isolation, thanks to investments from its national émigrés in Italy. Thus, as Mucchielli (1998: 9) observes, "the analysis of contexts and, consequently, of approaches at work in the communications realm, is therefore fundamental." Our field research was set in the central-west region of Senegal. The onset of chronic drought at the beginning of the 1970s seriously endangered peanut production, which represented the primary agricultural industry, and led to the mass departure of its inhabitants to Italy in the mid-1980s. This study analyzes the appropriation of NICTs by the émigrés and the rationales it engenders, which, according to Mucchielli (1998:10), are "organizational rationales of power and knowledge and of hierarchical power, a cultural rationale of propriety, a cultural rationale of *savoir-faire*, psychosocial rationales of fear of the loss of prestige or control..." As with any innovation, NICTs bring into question age-old beliefs and knowledge, long-established positions and well-established local structures.

Given the climatic difficulties and the socioeconomic context – deflation in the public sector, with "voluntary departures" and the onset of unemployment – migration abroad represents one of the main responses to the ongoing crisis. The development of NICTs coincides with a growing need on the part of Senegalese émigrés for carrying out financial transfers, something revolutionized by the use of information technologies such as the fax and telephone. Our study of financial transfers by Senegalese émigrés in New York¹ has shown the preeminent importance of informal structures, due to the adoption of NICTs. Indeed, bank

¹ Tall, S. M. 1998 : 73-90.

transfers were more dependable, but informal transfers were faster and more accessible. Nevertheless, there is an overlap between international finance and telecommunications. Old technologies have a way of becoming new with the help of modern media: radio, with frequency modulation, television, with MMDS and digital technology, the telephone, with satellite technology.

Rapid social changes occur as a result of the relations between émigrés and their families living in Senegal, who survive thanks to contributions sent from abroad. These émigrés thus gain a decision-making power in the management of domestic affairs, facilitated by NICTs. The use of detailed qualitative surveys sheds light on the social implications. For example, through the use of enterprises specializing in the long-distance sale of foodstuffs, émigrés pay for the expenses of maintaining their families by relying on merchant networks and on the facilities provided by NICTs. Émigrés make it possible for their families to access NICTs by paying the fees for connection of fixed telephone lines or by providing them with cellular telephones. Émigrés often guarantee payment of bills. For the needs associated with long-distance management of the domestic realm and of their personal affairs, émigrés are introducing other means of using NICTs.

How, then, do émigrés appropriate NICTs? What is the role of NICTs in eliminating the physical element in the financial transfers of émigrés and promoting the circulation of private capital? What is the role of migrants in the penetration of these technologies in villages that are, *a priori*, isolated? What are the social and economic implications of accessibility to NICTs? This study attempts to gain an understanding of how Senegalese émigrés and their families who remain behind are served by these new communications tools and how, in turn, these tools influence their lifestyles. Thus, the study is built around a consideration of this dialectic of passive and receptive use of NICTs, and their dynamic and active appropriation. By relying on the opportunities offered by NICTs, émigrés, thanks to their money and *savoir-faire*, are attempting to instill a new dynamic in their relations with families who remain in their country of origin. Thus, this study is focused squarely on the link between technological innovation and social changes, under the influence of one key actor: the émigré.

The methodology combined a macro approach (an inventory of local and national statistics on teledensity) and a micro approach (a qualitative analysis of changes brought about by NICTs at the local level). Collection of statistical data on telecommunications companies made it possible to construct a quantitative foundation on the rapid changes that the telephone has undergone in Senegal. It also made it possible to provide a status report on the telephone: number of subscribers and connections, changes in the nature and number of calls, the origin and destination of calls, etc. Qualitative surveys (focus groups, semi-structured interviews (SSI), interviews, structured surveys and participatory surveys were conducted. The study of long-distance relations between émigrés and their families in the homeland was carried out using a combination of qualitative and statistical data collection on the role of NICTs in the financial transfers of Senegalese émigrés through specialized entities. The analysis of certain reference sites visited frequently by émigrés rounded out this research. These sites represent extensions of Senegalese media in the host country – providing a glimpse into Senegal.

Émigrés adopt NICTs and strengthen “long-distance relations”

As soon as émigrés manage to find work in the host country, they re-establish ties with their families back home. For this, the telephone is the most frequently used tool. Often, émigrés take collective responsibility for the charges of providing electricity and telephone service in

their villages. They ensure access to a telephone line and pay for the bills their families receive. Émigrés also bring back, during their vacations in their home country, various electronic products (cellular telephones, televisions and radios, camcorders), which help equip their homes with improved technology. They appropriate new communications tools by bringing them into their own environment. They use NICTs in a manner at odds with the nature of the technologies, i.e., they adapt them to their personal-use needs, which often are different from the original intended use of the technology. In practice, the ways in which NICTs are used flows from a complex process of appropriation, making an instrument – even one as personal as the cellular telephone – a communal instrument through which their villages gain access to the broader world. The social function still remains the dominant factor in the process by which émigrés appropriate these technologies. The telephone expands the circle of interpersonal relations beyond national borders, eliminates the time delay in communications, and makes communication a dynamic and interactive process.

Fixed telephone and the exponential increase in teledensity

In 1985, SONATEL was created by the separation established between postal and telecommunications services. The inventory of fixed telephone lines on which it had a monopoly was approximately 206,000 lines in 2001, representing a growth of nearly 20% per year. This figure was 23,000 at the time of SONATEL's creation in 1985. On a smaller scale, the pace of development can be measured by the number of telephone connections. The change in the number of landline telephone connections was particularly rapid in the region of Louga, as a result of émigrés who built houses, which they equipped with telephones, also paying the initial installation fees for the family as a whole. Thus, the first investment of migrants is the telephone used to maintain relations with the family in their home country. It is as if the telephone were a means of extending the home space in the new country – this, given the fact that the family structure is based on oral communication. The number of subscribers tripled in less than seven years in Louga, growing from 1,821 to 5,963. This growth is all the more paradoxical for the fact that the regional economy has experienced structural difficulties related to the dependence of the local economy on peanut cultivation, which has been strongly affected by the drought and by the drop in worldwide flows. The financial repercussions of emigration to Italy, which has been particularly strong, are partly responsible for the increase in teledensity in the Louga region. The region, where there had been no telephones outside the cities and in the adjacent villages, began to see growth in telephone service.

Between 1960 and 1990, subscriptions grew to over 100 telephone lines in Kébémér. With the development of emigration from Kébémérois to Italy at the end of the 1980s, the Société nationale des Télécommunications (SONATEL) fielded many requests. The increase in the number of fixed-telephone subscribers is linked primarily to the boom in residential connections. In 1990, in the city of Kébémér, 60% of the lines belonged to decentralized State services, NGOs and commercial enterprises. The number of fixed-telephone subscribers in Kébémér tripled between 1991 and 2001. This trend was reversed in 2000, with domestic subscribers representing 90% of the number of telephone lines. Émigrés held 60% of domestic subscriptions – located, above all, in new areas of the city. The proliferation of lines occurred particularly in the new outlying neighborhoods occupied by émigrés. There, they made real estate investments in well-off areas, systematically equipped with telephones, in order to keep in contact with the family during their time abroad. SONATEL officials estimate that émigrés account for nearly 400 telephone lines (or half of the subscriptions) in Kébémér. It is difficult, without a quantitative survey, to distinguish émigrés from non-

émigrés in the population of subscribers. As a result of the telephone, émigrés can transmit financial resources, stay abreast of developments with their relatives, and identify investment opportunities in their country of origin.

Moreover, it is difficult to limit the number of persons using a telephone line to the subscriber or location where the phone is installed. Telephones can be acquired in the neighborhoods, without any financial compensation. Thus, existing fixed telephone lines are being used communally. Total coverage of the country by portable telephone service ensures that rural areas are able to skip the costly obstacle of having to install landline telephone networks.

The cellular telephone, or the implosion of a new technology

The cellular telephone, which developed rapidly in Senegal, represents a response to the mobility of the Senegalese people and was rapidly integrated in a social milieu characterized by orality and illiteracy. Beyond the functional aspect of this technology and the fact that it became part of the habits and customs of the people, its role in the process of social differentiation was a factor in its appropriation by the well-to-do segments of the society. In addition it has been widely adopted by the general population, in an attempt to emulate the wealthier segments. The cellular telephone was an instrument of social prestige. However, the possession of a cellular telephone is matter of nuance in terms of social prestige – both as regards the type of phone and the type of subscription. Access to this communications tool depends solely on having a cellular phone and paying for connection through one of Senegal's two providers (SONATEL and SENTEL). Competition favors a lowering of connection and communications costs and, as a result, an increase in the number of cellular subscribers. The development of cellular telephony has been particularly rapid, with the number of SONATEL's cellular lines increasing by a factor of more than 150 in less than 5 years: from 1,395 lines in 1996 to 6,942 in 1997, 22,110 in 1998, 73,472 in 1999, and 150,000 lines in 2000. (Data taken from the annual reports of SONATEL, published in December of each year.)

SONATEL had more than 200,000 subscribers in 2001, while SENTEL (the number two provider of mobile telephone service) had nearly 50,000 subscribers. Given that the price of the cellular telephone is still prohibitive for the vast majority of Senegalese – many living in poverty – its rapid development may seem paradoxical. However, according to the results of our survey, with a sample of 100 persons with cellular telephones in rural settings, 97% received them free from a relative and 95% of the donors were émigrés who left the telephones behind during their vacations in Senegal. An analysis of the appropriation of the cellular telephone in two villages studied shows the complexity of its use by the population. These two villages, without fixed-telephone service, suffered from under-supply, despite their proximity to the city of Kébémér. The two individuals with cell phones (Khady Diagne and Sarakh Sène) were young people who, as of March 2000, possessed the only cellular telephones in their villages.

“Alizé Khady Diagne”: The umbilical cord linking Gade Kébé with the rest of the world

Khady Diagne is a married émigré of approximately 30 years of age living in the village of Gade Kébé, in the Louga region. His village of just under 150 inhabitants, 2 kilometers from Kébémér (the administrative center of the department), has no landline telephone. In order to communicate with his wife, the husband, who emigrated to Italy, left her a portable telephone that he used during his last vacation back in Senegal. This represents the sole material link between the village and the outside world. This personal tool – the portable telephone of Kady Diagne – is known in the village by SONATEL’s commercial name, “Alizé Khady Diagne.” All of the inhabitants of this village adopted this single instrument of communication, which linked the village to the world beyond. The “Alizé de Khady Diagne” fulfilled, among others, the following functions:

- as a reception point for domestic calls for all of the villagers. The Khady Diagne number functioned, in reality, as the common number for the community. Often, the wife who possesses the telephone gives the phone to a child, who is then responsible for bringing it to the intended recipient;
- as an instrument for disseminating information on family ceremonies. News of people living in the village (family events, death notices, administrative meetings) are communicated to Khady Diagne, who is responsible for calling the people involved;
- as a point of contact for village girls who work as domestics in the nearby city and need to communicate with their employers;
- as the intermediary for street merchants (known as “banas banas” merchants), who need to contact their clients and correspondents, or who need to know the status of the markets.

This example gives an idea of the transformative capacities of a personal communications tool, such as the cellular telephone, to become a community instrument for relaying messages between the village and the outside world. An entire system of solidarity and a complete social structure are at the heart of this appropriation. Here, the cellular telephone, a personal tool *par excellence*, is shared among several people. Just as telecenters democratized access to the telephone by allowing all those with money to bring together their correspondents, the cellular telephone made it possible to extend the telephone to the most remote villages, which are not likely to benefit from programs to extend service in the foreseeable future. The development of this type of telephone is facilitated by the relative speed of connection (compared to installing fixed telephone lines), the fact that subscribers, by using the prepaid “Diamono” cards, have no need to pay a bill, and the flexibility of use. There are, however, certain obstacles to its adoption: the cost of the phone, the fact that cellular networks are not present in all places, the high rates charged for cellular calls vs. fixed-telephone calls, phone theft, and the need to recharge the batteries in locations where electricity may not be available.

The cell phone of Sarakh Sène in Dawakh: obligatory contact point

In the village of Dawakh Gadiaga, where approximately 100 people live in ten households a short distance east of the city of Kébémér, the only cell phone, as of March 2000, belonged to Sarakh Sène, a 30-year-old man. The phone was offered to him by his brother who emigrated to South Africa and who was having enormous problems contacting his family back in his native village. He provided the telephone for the village, where there was not yet any landline telephone service. Sarakh located, within the village, the area where access to the network would be best (near the standpipe and the mosque). Since the village had no electricity, Sarakh equipped his phone with two batteries. However, because of the frequency and length of calls from abroad, the battery's charge quickly became exhausted. Thus, every Monday, at Kébémér's weekly market, Sarakh would recharge his two phone batteries. He also had an automobile charger for the cell phone batteries and took advantage of the presence of a vehicle in the village (that of an NGO or of an individual) to recharge the batteries. The communal involvement in operating the cell phone allowed Sarakh to play a role in mediating between the village and the outside world. Through his intermediation, the NGO operating in the village would inform the population of upcoming meetings and activities. Thus, he served as the interface between the village and its members located abroad, or with those living in Touba and Dakar. As a result, he was propelled to the head of organizations of young people in the village – youth groups, the literacy committee, etc.

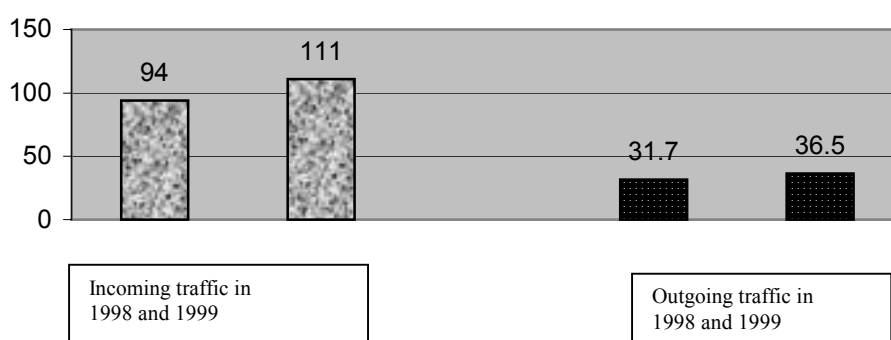
Based on these two examples, typical of other villages in central-west Senegal that have experienced strong emigration, one can see that the cellular telephone is producing new relationships and, at the same time, assuring cell phone owners a new social role. The fixed and cellular telephone contributed to the emergence of new venues for coordinating local development activities in the rural setting. How, then, are families affected by these new networks? New leaders are emerging, in spite of sectarian or traditional affiliations, whose role is linked primarily to mediating between the people and the outside world – a role that has allowed them to externalize capacities for sharing, communicating and negotiating. Places where telephones are located have become unprecedented opportunities for innovation, allowing one woman to become the primary point of attraction within the village of Gade Kébé. This woman demonstrated, in the handling of her portable telephone, the ability to interface between the village and the outside world – showing mediating qualities such as confidentiality, availability, altruism and solidarity. By projecting her capacities in the collective awareness, she systematically positioned herself as a leader, despite her youth and gender, gaining responsibility for directing other activities in the village and thus playing a role in social mediation.

In the rural environment, according to the results of our survey, people invoke the lack of telephone lines (38%), mobility (60%) and the desire to stand out (2%) as reasons for choosing the cellular telephone – a highly dynamic new technology. The telephone companies are offering new options and are lowering connection and communication costs, expanding network service as a result of both competition and technological advances. The cellular telephone is replacing fixed telephony in regions not yet served by the landline telephone and supplements the fixed telephone in well-off households, while increasingly competing with the fixed telephone among some poor families, who either give up their fixed phones or restrict themselves to using phones restricted to outgoing calls. Heads of households use a cell

phone for making calls, while the fixed telephones serve as the reception point for calls from abroad. In combination, these calls are a lucrative source of revenue for SONATEL.

In calling from their adopted countries, émigrés contribute to an increase in the shared international communications charges. Indeed, foreign telephone companies transfer to SONATEL a compensatory tax for calls made from their country to Senegal. This net traffic represents an average of 29.4% of SONATEL's total revenues over the last five years (1995-2000) and 26.7% in 1999. This traffic is the second largest source of revenue after fixed telephone traffic (55%), with mobile telephone traffic ranking third (12.7%). In 1999, the figure for outgoing international traffic was 36.5 million minutes, compared to 31.7 million minutes in 1998 – or an increase of 15% -- attributable to the drop in international communications charges. Incoming traffic increased from 94 million minutes to 111 million minutes in 1999 – or an increase of 18% -- which affects the compensatory tax that companies in the countries from which the calls originate transfer. In order not to rely too heavily on the shared international communications fees from compensatory taxes, SONATEL systematically lowered international rates in 1998. In 2000, the company lowered its international rates by 8% in January, and then, in June, by 25% for peak hours and by 50% for off-peak hours. A call from Senegal to France costs 19% less than a call in the opposite direction. However, because of the respective standards of living, calls from émigrés are more frequent, with those in Senegal initiating the call – for urgent matters – only to request that the person abroad call back. The incoming international traffic in Senegal grew from 94 million minutes in 1998 to 111 million minutes in 1999 and 133 million minutes in 2000, representing a 20% increase, vs. a 19% increase in 1999 and a 6.4% increase in 1996. Outgoing traffic increased slightly, taking into account the reduction in traffic and the increase in teledensity. The balance of international telephone traffic increased by 5.85 billion CFA francs in 2000. The volume of incoming traffic increased by 20%, thus contributing to increasing the proportion that this traffic represented in SONATEL's overall revenues for the fiscal year – accounting for nearly 80% of the company's profits for 2000.

Figure 1: Increase in international telephone traffic from and to Senegal (millions of minutes)



Source: SONATEL annual reports for 1998 and 1999

As shown in Figure 1, incoming international traffic is far greater than outgoing traffic. This increases SONATEL's profits from the accounting rate. By calling the families they helped provide with telephone lines, émigrés at once contribute to increasing SONATEL's share of the rates distributed between calling and called parties in international calls. If published figures are to be trusted, countries transferring the greatest compensatory taxes are those with the greatest number of émigrés. Gambia paid 12.85 million CFA francs per 6-month period in

1995; Argentina, where few Senegalese émigrés live, paid 580,000 CFA francs. According to SONATEL's 1995 annual report, SONATEL's five largest debtors in the payment of net traffic charges are *Telecom/Italia*, *Italcable*, AT&T, *France Telecom*, *Telefonica* and MCI. According to the 1996 annual report, Spain's *Telefonica* paid \$5.635 million to SONATEL for settling arrears in net traffic balances for the period from the third quarter of 1992 to the second quarter of 1994. SONATEL's 1997 report states clearly that the increase of 6.4 billion CFA francs from the net balances in traffic is accounted for by the rise in incoming traffic, particularly from MCI and AT&T (+ 33%), *France Telecom* (+ 44%) and *Telefonica* (+63%). A major increase can be seen in calls from the United States (AT&T) and from Spain (*Telefonica*) since these countries recorded major population figures for Senegalese émigrés. The positive balance in traffic to which émigrés contribute – to the benefit of SONATEL – is certainly a major component in the company's revenues.

Moreover, SONATEL's 2000 annual report attributes the company's growth to the increase in the number of fixed telephones and the increase in incoming international traffic, along with its corollary, the increase in net traffic balances, and to the explosion in the number of mobile telephone subscribers. Certain tools, such as the fax, by contrast, face competition from e-mail and the telephone.

The fax and its use in economic and administrative affairs

Fax is rarely used by international migrants, though their families may fax them administrative documents (birth certificates, *certificat de vie collectif*) from telecenters. The fax is also used by informal transfer agencies to convey payment orders to their correspondents in Senegal. The few émigrés who use the fax are mostly merchants, who use it to authenticate documents or to provide specific information (merchandise lists with the corresponding specifications). Indeed, the fax is primarily a communications tool with professional uses. Migrants with no investments to manage in Senegal rarely use it. The way in which relationships are structured in the informal sector is incompatible with use of the fax as a means of communication. Basic transactions are negotiated in person. Nothing is taken *a priori*. Thus, only administrative documents are sent by fax. For most émigrés, the frequency of receiving or sending documents by fax is not sufficient to justify the purchase of a fax machine, while the rates for sending a fax discourage its use. Illiteracy is also a major obstacle, since documents to be sent must be written by someone else, given that many migrants only know how to write in Arabic. Many migrants can debate in Italian with the locals, but are unable to write the simplest note in the language. Moreover, in terms of exchanges by fax, the migrant who receives more documents than he sends generally prefers to respond to faxes by telephone. All in all, the success of the telephone has somewhat tempered the propensity for faxing. It is also true that the audiovisual and interactive media are more closely compatible with relationships firmly rooted in oral communication and negotiation.

Television and camcorder: In tune with the social life in the country of origin

Television is a new communications tool in rural Senegal. The camcorder makes it possible to live in the adopted country without being completely cut off from social life in the country of origin. Festivals, family ceremonies and major television events are experienced by international migrants thanks to the videocassette. The success of audiovisual media is linked to their easy use in the community and the simplicity of the information (image and sound),

which is easy to decode by all. Everything happens as if the traditional evenings that punctuate the cultural life of the villages were passing before one on the small screen.

The presence of television in the villages, thanks to sets brought back by émigrés

While televisions are common, the development of television in the villages is slowed somewhat by the absence of electricity and by poor reception. Émigrés are increasingly providing their families with television sets that operate on solar energy, as is true in the village of MBenguène. In other villages that lack electricity (direct current or solar), such as Gade Kébé, television sets are powered by automobile batteries. In general, only a few homes are equipped with television sets and television viewing is done collectively. The women are responsible for turning on the television sets. Television is watched selectively—first, to preserve the solar batteries, and second, because a degree of organization is needed to take the television set out to the courtyard, plug it in, and provide mats and chairs for the viewers. With only programs on the national channel available, programs are watched parsimoniously. The programs chosen in Mbenguène, for example, are the Tuesday dramas in Wolof, the Thursday evening Islamic broadcasts, the Friday television series, and Saturday programs of local music or traditional songs.

According to the adults in the village, television is primarily for young people and women. The penetration of a modern communications tool in a traditional arena governed by longstanding control mechanisms has an undeniable cultural impact. Television changes the modalities and timing of the village's night life. No longer a seasonal phenomenon, it is becoming a permanent fixture. The return of émigrés coincides with festive night-time events during which videocassettes and music are enjoyed late into the night. Certain traditional activities (cultural gatherings, songs, funeral gatherings) are increasingly forgotten. And while the content of television programs gives the village exposure to the outside world, it does little to replace the role of traditional games and evening gatherings in the education of the young people. At the same time, the camcorder allows migrants to produce material consistent with their needs and makes it possible for them to participate in the social life of their villages.

The camcorder: Making up for the lack of images

The camcorder is a communications tool *par excellence*, making up for the lack of images shared between émigrés and their families. It provides images that neither the telephone, e-mail nor letter writing offers. Innumerable émigrés have come to know their future spouses through cassettes viewed collectively in Brescia or Brooklyn. Video cassettes of family ceremonies in Senegal function as audio-visual match-makers. A break is occurring in the marriage strategies and traditional procedures for finding partners, with physical aesthetics taking on a more determining role than kinship links. These audiovisual encounters are followed and supplemented by the telephone. This phenomenon is gaining currency with the proliferation of portable telephones, which provide the opportunity for intimate conversation. Video cassettes expand the field for encounters and reinforce exogamous relationships for people who often have a limited circle of acquaintances in the host country – acquaintances made through the daily routine of commuting and work – and whose vacations in their country of origin are often too brief for encounters outside the circle of family and/or neighborhood acquaintances. Émigrés who are unrelated often watch videos in groups in the host country. Sectarian links, professional relationships or mere opportunity may bring

together émigrés in the same apartment. The video promotes an extension of the types of relationships and expands the circle of acquaintance.

Some migrants bring camcorders to their families so that all of the important events can be filmed: religious events, family ceremonies, etc. The video is more a communications tool than an instrument for storing information. In the adopted country, the video is a tool for connecting the émigré with the family milieu. Thus, one can hardly imagine a marriage of an émigré, even in remote villages, that is not filmed. It is reported that an émigré whose marriage cassette was damaged before he had a chance to see it financed a new ceremony so that he could have his own cassette. In the suburbs of Dakar and in the villages in the country's interior, centers specializing in the reporting of family ceremonies – using sophisticated cameras and post-production that adds script – are springing up. Thus, the video serves as a sort of live iconographic memento.

In the host country, video cassettes make it possible to keep abreast of local television programs. Indeed, major broadcasts are transported the next day on the first flight bound for Italy or the United States. Major television events in Senegal (wrestling matches, political debates, broadcasts of traditional events, excerpts and Tuesday dramas in Wolof) are sometimes seen on video cassette by émigrés with only a slight delay. Cassettes are sold on New York City's 116th Street for \$US10, at the Lyon train station for 100 French francs, and in Brescia two days later. Folkloric troupes specializing in the production of made-for-television movies on video sell their products abroad to émigrés, who often see cassettes that are not sold to national television until long after they have been disseminated abroad. For émigrés, videos function much like local television, personalizing and harnessing the television image which, until then, had been a monopoly of the powerful.

Radio: An old technology with new advances

Radio has existed in Senegal since the time of communal receivers. However, with the arrival of FM in the villages at the beginning of the 1990s, radio experienced a renewed life. By the same token, émigrés in Italy listening to radio stations broadcasting from Senegal (thanks to digital receivers) is certainly a new phenomenon. FM radio and interactivity brought about by the telephone provide a new venue for dialogue between listeners. People feel a sense of solidarity from these radio stations and have the sense that they are participating in the broadcasts. All in all, the marriage of the telephone and the radio provides a link between mass information and interpersonal information, constituting a new space for sociability adopted by those excluded from the normal circulation of ideas in order to make themselves heard.

The *WorldSpace* system, founded in 1990, allows for live reception of satellite audio programs from portable radios. Three geostationary satellites, put into orbit at 35,000 km above the equator, provide reception of programs with high-quality sound and ease of use. "Afristar" was launched into orbit in 1998, "Asiastar" in 2000, with "Ameristar" due to become operational in 2001. Digital receivers cost 120,000 CFA francs in 2001. With *WorldSpace*, émigrés are able to listen, live by satellite, to local FM radio stations (*Walf Fadjri*, *Sud FM*, *7FM*, *Radio Sénégal International*) from their adopted country.² Announcements and news releases on deaths, political debates, along with local information, are heard live by émigrés who, using the telephone, participate in an exchange of opinions.

² *Wal Fadjri*, June 27, 2000.

With the development of the *WorldSpace* digital receiver, émigrés are able to systematically participate, by telephone, in FM radio broadcasts. With the telephone, radio is no longer merely an instrument for providing information, but is also a tool for communication, i.e., for establishing an interactive and dynamic process of information exchange and communication. Émigrés have begun to create venues for dialogue in their host countries in order to preserve identity and create Senegalese “islands” within their adopted country. With this real-time interactivity, émigrés are participating directly in broadcasts. Long before the development of *WorldSpace*, émigrés had attempted to secure radio air time in their host countries.

Senegalese émigrés in New York leased a radio frequency to broadcast every Sunday from 11 p.m. to 1 a.m. For two hours, the radio station *African Time* provides a weekly summary of political, social, sports and musical events in Senegal, as well as of the Senegalese community in New York. The radio station of the “Modou Modou” provides information on Senegal, while at the same time offering feedback for national radio stations on the activities of émigrés. With an average of 20 minutes of advertising during the two hours of broadcasts, the station is profitable. It also plays a genuine political role. New York is one of the few cities outside of Senegal in which the PS (the political party formerly in power) lost during the 1998 elections, causing the competing party leaders to take to the campaign trail. The “Modou Modou” radio station is also the main point of contact for banks and real estate companies seeking business among Senegalese émigrés in New York. Apart from the *Homeview Sénégal* and *Seneweb* web sites, the radio station is the main venue for connecting with Senegalese in New York.

Illusions and glimmers of Internet penetration in émigré communities

In Senegal, the appropriation of the Internet in the rural environment is still limited to programs such as the IDRC’s ACACIA initiative. Émigrés who secured telephone service for their families abroad are only vaguely familiar with the instrument and are unable to help their families back in Senegal with Internet access. Most émigrés are from rural regions and are illiterate or have very little education. The Internet is viewed as a tool for intellectuals, an essentially urban Dakar phenomenon, since more than 50% of the population is rural. Connection to the Internet was not yet available in the region studied. However, the ease with which émigrés can access the Internet in their host country suggests that this tool will be used extensively by émigrés. Émigrés in the United States with limited access to the Internet spend long hours online to read the newspapers and listen to radio stations. It seems that émigrés are using the Internet when they lack access to audiovisual media. *WorldSpace* is not yet available in the United States. The Internet is therefore used in place of radio and television. The problem of communicating through the Internet – between émigrés and their families – is related to the lack of connectivity in their country of origin. A certain category of émigrés have taken to using e-mail to exchange personal messages. Rural populations are not yet familiar with the Internet, and there are some initial signs of improved penetration by the world wide web among émigrés and their families. The benchmark site, *Homeview*, as well as that of *Webtv*, are viewed as having real potential.

Many sites are directed, above all, at Senegalese abroad, as is the case with the Mouride brotherhood’s web sites examined by Sheikh Guèye (2002). Indeed, “Touba” or “Mouride” are particularly useful keywords for finding web sites on Senegal. These two sites are portals, points of reference designed primarily to meet the need of émigrés in their adopted countries

to maintain contact. The main objective of *Homeview Senegal*, as its name implies, is to “meet the real needs of Senegalese abroad who are cut off from their country of origin, a task made possible by the partnership with *Homeview Media*.” This is an example of North-South cooperation in NICTs, bringing Senegalese abroad closer to their home country and providing a sort of synthesis, an abstract of sites of interest to Senegalese abroad, who can use them to read newspapers from their home country, view television news and listen to radio live. Homeview Senegal organized discussions between émigrés and the Foreign Affairs and of Senegalese Abroad. *Seneweb* receives an average of 4,000 visitors per day, totaling nearly 100,000 hits. This figure is merely an average, with a maximum of more than 5,000 visitors and more than 140,000 hits in 24 hours. These sites (so-called portals – deriving from the fact that they make it possible to enter the country virtually) ensure the possibility of maintaining contact with the country of origin. They are visited largely by émigrés in countries where connection is easy and inexpensive. Émigrés are able to catalyze the process of accessing the Internet and, at the same time, influence the content and improve the participation of the South in the network of networks.

Webtv is an Internet connection based on television, using a casing equipped with a demodulator and an infrared keyboard. The television screen is used as a monitor. *Webtv*, which offers the possibility of navigating the web without a computer, appears to be the future of Internet in Africa, since it mitigates the problems connected with the lack of computers. Its images are of better quality and is a tool that can be used collectively. Most communications technologies, such as radio and television, have been developed in Africa through collective use. The only obstacle is that competition with television and its popular series could be hard to overcome.

The appropriation of NICTs (telephone, radio, television, video) by émigrés is facilitated by the high degree of compatibility with systems of oral communication. Émigrés make their own use of NICTs. The adoption of similar technological innovations is a function of the skill of the users. While no real skill is required for the telephone, the same is not true of the fax, since the sending of documents involves knowing how to read. Senegal has entered the information society or, more precisely, the network society. This is true, at times, even for remote villages or NGOs, with émigrés providing their families with access to NICTs (fixed telephone, cellular phones, television sets or camcorders) to maintain regular contact despite geographic separation. Old communications tools, such as the radio, rely on new advances that facilitate their accessibility as well as their connection with other information technologies. With the telephone, radio becomes an opportunity for freedom and for citizen participation, while The Internet generates social links and provides an opportunity for those escaping territorial control and strongly threatened by uncertain identity. This tool makes it possible to leap political borders and ensures émigrés contact with their home countries. Émigrés’ familiarity with the Internet can be a determining factor in creating virtual communities—communities that ignore national boundaries. People appropriate NICTs according to their own logic, by integrating them in their experience and internalizing them. This contributes to changing their organizational methods, as well as expanding their relationship with the outside world. For the diaspora of the Mouride brotherhood, the Internet is a means of gaining exposure and of rebuilding solidarity. The Internet in Senegal represents more a potential resource: many villages live essentially from financial resources sent by those who have emigrated, and with the development of NICTs, funds sent from abroad arrive more quickly.

NICTs and financial transfers from émigrés: Toward the globalization of capital

The desire to earn money is at the core of migration. A large portion of the money accumulated is sent to the country of origin. The residence status of the émigré in the adopted country plays a role in the frequency of the transfers. Those living with unofficial status make frequent and major transfers of money in order to prepare for the extreme eventuality of expulsion. Work status in the adopted country determines the transfers, with merchants who have easier access to informal channels sending money back more often than other migrants. Certain family events increase the transfers by émigrés: the birth of a child, the marriage of someone close to them, illness among family members, etc. The start of the school year, religious festivals and holidays (the Touba Magal, Maouloud, the end of Ramadan, Tabaski) are times of increased transfers. This variation in the pace of transfers contributes to the increase in types of transfers. The impact of NICTs in financial transfers translates to an increase in the methods for moving funds, and to an increase in the amount of money moving between host country and homeland. Beyond the readjustment in the balance of payments, financial flows sent by migrants raise the standard of living of households and contribute to the emergence of an entrepreneurial sector and to the development of rapid, transnational circulation of capital.

Since the beginning of the 1980s, the classic transfers (money orders, postal orders) have been used less and less by Senegalese émigrés, given the relatively long delivery times and delays in payment. Since the 1990s, the classic instruments for transferring money have increasingly shifted to extensive use of NICTs. New methods of transferring funds were instituted to mitigate the constraints of the classic methods, such as the postal service and “traditional” bank transfers. These new methods of transferring funds, based on the use of NICTs, help support social networks and inject major amounts of money directly into household budgets and local investments. Telephone, fax and telematic transfers have led to new, non-physical means of financial circulation and a diversification of mechanisms for conveying money. Émigrés are able to make major amounts of money available to recipients through a simple phone call.

Formal instruments for money transfers: Capturing the “manna” of émigrés by simplifying the procedures

At the end of the 1980s, a massive bank restructuring operation eliminated development banks and credit unions³ -- which had sustained huge losses -- from Senegal’s financial landscape. Development banks were all liquidated at that time, and only eight commercial banks are now in existence (Baumann 1995: 70-75). This increased the distrust of Senegalese for national banking institutions. Bank transfers seem complicated and expensive. Moreover, the need to have an account in Senegal in order to make transfers, in addition to the fees charged and the administrative red tape are obstacles to the widespread use of bank transfers among émigrés. Commercial banks that survived bank restructuring, convinced of the lucrative possibilities inherent in these other methods of transferring money, made investments most often in partners involved in handling transfers from émigrés. The

³ This concerns primarily the Banque nationale de Développement du Sénégal (BNDS), the Banque sénégalaise-koweïtienne (BSK), Société Financière Sénégalaise de Distribution et de Tourisme (SOFISEDIT), the Société nationale de Garantie et d’Assistance, Société nationale de Banque (SONAGA-SONABANQUE), the Banque commerciale sénégalaise (BCS)...

International Bank for Commerce and Industry of Senegal (BICIS) collaborated with *Canal Money Transfert*, a money transfer institution established by Pakistanis in New York, as well as with CBAO (Compagnie Bancaire de l'Afrique de l'ouest), which is the local agent for Western Union, and BST (Banque Sénégal-Tunisienne), which is associated with *Money Gram*. The links and agreements between money transfer institutions and these banks make it possible to channel large sums of money.

Moreover, money deposited in the National Bank of Paris (B.N.P.) can be withdrawn at the BICIS in Dakar. Other banks, such as the Société générale de Banques au Sénégal (SGBS) and Crédit lyonnais Sénégal have their headquarters in France. The widespread use of banking instruments, such as credit cards, allows émigrés in the United States to travel without cash. Money can be withdrawn in Dakar according to their needs, using their American Express, Visa or Master Card credit cards. However, this concerns a specific type of émigré – namely, those who are educated and with regular jobs in the host country.

The Banque de l'Habitat du Sénégal (BHS), established in New York in 1993, set up a system of transferring funds by telex in order to compete with the more rapid informal transfers. This is an authorization made in the form of a fax by a BHS account holder to pay a third party residing in Senegal a designated amount of money. BHS establishes the information on the payee through a telephone call. However, the delivery times are excessively long, the authorization has to go through the bank's financial services processing procedures and the money does not reach the payee until a week after the transfer is initiated.

BST(Banque Sénégal-Tunisienne) and Money Gram

Money Gram is a system for transferring money rapidly. It was created in 1988 and is based in the United States, in Denver, Colorado. The system of transfer is structured around a network of 26,000 agents throughout the world. The London office manages the transfer with BST. The transfer is coordinated from a central server based in the United States and provides financial intermediation between two Money Gram agents. Thus, from any of the institution's agencies, individuals can transfer money, which arrives after passing through the central server at another agency responsible for transferring it to a designated payee. The payee is identified by a company name and a code, which he must provide to the paying agency. For security reasons, all transfers pass through Money Gram's central server.

The individual fills out the money transfer form, remits the amount of the transfer in cash and pays a commission. The agent registers and validates the information in the computer and gives the client specific information which he must provide to the payee – thus completing the first agent's role in the transfer.

The information (amount to be transferred, company name, reference information, and a code, in case the reference information is misplaced) passes through the central server, which confirms and validates the entry and sends it to the second agent. The information appears 10 minutes later on the screen of the terminal of the second agent, who is authorized to proceed with making the payment when the payee arrives, providing his identification. The payee must indicate the amount and the reference information for the transfer, in the form of a number or code provided by the sender. The telephone is necessary for transfers of this type, if only to provide the reference number to the payee.

Money Gram's telematic system borrows the highly confidential SEITA network used by the airline companies. It is relatively simple to use. In order to access each transaction, one must give the password, the agent code, the organization's code and the reference number. The system is simple, and neither the sender nor the recipient needs to have an account in the bank. They are identified solely through the reference number. Only the sender pays a commission, which is shared by Money Gram and the two agents involved in the transfer. Under this system of transfer, BST makes the payments prior to receipt of the transfer. Thus, financial status is not an issue in becoming a Money Gram agent.

BST has been Money Gram's agent in Senegal since 1999. In order to increase its accessibility, BST installed a network of sub-agents with the agencies of the National Agricultural Credit Intermediary of Senegal (CNCAS) in Thiès and Kaolack. Direct mail campaigns and efforts in countries with high concentrations of émigrés are aiming to gain market share in money transfers of émigrés.

CBAO and Western Union

Western Union is an American company created in 1871, which developed a telematic money transfer system using a central server. The company is a financial intermediation institution with 80,000 agents spread throughout 170 countries. For Western Union, the agents represent independent businesses authorized to sell their services in return for a commission. Émigrés can send money by Western Union from nearly all European countries and from the United States, without any requirement that they or their correspondents have a bank account.

CBAO is the agent for Western Union in Senegal, with its activities there dating back to 1995. The money transfer system is based on a telematic network. The server, located in the United States, is the transit point for all transfer orders occurring between any pair of agents. The time required for transfers between Italy and Senegal is estimated to be 15 minutes. Due to the fact that the telematic system's parameters are pre-set, data can be captured quickly. The determination of commissions is made in advance, according to rules in force in the country. Transfers are made, therefore, without any bank payment. The only payment is that related to the office where the transfer is initiated. The reliability of the system is guaranteed. During holidays, the Western Union counters may be open on an exceptional basis to allow families of émigrés to receive last-minute transfers.

According to CBAO officials, in 2000 more than 100 million CFA francs were withdrawn daily in Senegal's three Western Union agencies, which increasingly use the postal network as a relay in regions where Western Union has no offices. For every million CFA francs sent by a Senegalese émigré in Tenerife to his family in Dakar, Western Union charges a commission of more than 50,000 CFA francs. In order to ensure its accessibility in Senegal, Western Union collaborates with the postal services and with the SGBS. Transfers may be redeemed at 60 sites in Senegal: CBAO agencies or agencies of the SGBS, as well as post offices. The collaboration between banks and post offices is a means of addressing the deficiencies of both. The flexibility and proximity of the post office are used to advantage for the solvency and profitability of the banks. In this process of extending its network of sub-agents, CBAO targets the basins of emigration, the suburbs, Touba and its outlying areas, certain villages of the Senegal River valley, and the central-western region of the country.

The use of money transfer tools, such as Money Gram and Western Union, brings banks closer to a certain type of client – those who until then had little occasion to use the banks' services, with everything working in favor of increasing the banks' clientele.

The Postal Service falters, its money transfer methods obsolete

The Postal Service, since the end of the 1970s, has shown itself to be limited in terms of both security and the excessively long times required to transact orders⁴ in comparison with the instantaneous transfers based on the telephone and the fax. Its faxed orders are limited to the interior of the country. The postal services of some countries (United States, Italy, Spain) have not signed agreements on financial transfers with the Senegalese Postal Service. Without the ability to make transfers to Senegal from their adopted countries, émigrés are obliged to use other channels to repatriate their money. For example, Senegalese migrants in Italy make transfers using the intermediation of a friend living in France, who takes responsibility for resending the funds received from Italy to the final recipient in Senegal. Thus, the absence of relationships between the Senegalese Postal Service and those of countries in which Senegalese émigrés live diverts the flow of transfers to other neighboring countries.

With the reign of telecommunications and the obsolescence of non-electronic swaps, there has been an increasing alliance between the postal service and NICTs. In 1998, 21,505 orders for a total of 4.5 billion CFA francs, originating primarily from Europe and Central Africa, were distributed in Senegal. The 35 post offices of the Senegal river valley, 16 of which were built by émigré populations, distribute nearly 120 million CFA francs per day in money orders. Prior to the development of NICTs, international migrants had for a long time used the Postal Service and vacations in Senegal to repatriate money they had saved. Institutional difficulties, monetary problems (devaluation, non-convertibility of the CFA franc outside the area in which it is issued, laws restricting movements of cash) reduced the accessibility and utility of these classic methods for transferring money. The Postal Service for a long time benefited from its accessibility, despite its deficiencies, to assert itself as the predominant means of carrying out financial transfers. NICTs facilitate greater accessibility to informal methods of transferring funds.

Problems with classic methods of transferring money and the emergence of new informal instruments as a result of NICTs

With the failure of old methods of repatriating the savings of émigrés, new strategies for transferring funds were devised. These new methods make use, above all, of émigrés and/or merchants, during their respective trips back to Senegal, as well as making major amounts of money available by telephone or through faxed transfers.

Formal transfers encounter problems related to the postal service's restrictions regarding financial products and constraints imposed by the banking environment. Informal transfers cure the inadequacies of official transfers by bringing together, according to the situation, official means and informal methods. Rudimentary at the start, these systems of transfer are being modernized as a result of NICTs and are becoming true financial products which,

⁴ The financial difficulties of the Senegalese Postal Service emerged with the breakup of the former PTT (Post, Telegraph and Telecommunications) into two distinct companies: the Postal Service and SONATEL. For a long time, telecommunications sustained the deficit of the Postal Service in the old PTT.

through an ongoing process of improvement, may give rise to new instruments adapted to the financial habits of émigrés and merchants.

***Making funds available through the intermediation of merchants:
“Virtual” transfers***

Those who act as informal couriers have relationships with émigrés most often based on a common residence or from working together in the same workplace over a long period of time. They take responsibility for transmitting the money received as quickly as possible. Given the speed with which information must be communicated, use of the telephone is indispensable, in order to indicate the time the émigré is to arrive, to inquire as to the safe arrival of the funds, or to indicate how the money is to be spent. A telephone call to give a detailed description of the courier allows the recipient to easily recognize him upon arrival at the Dakar airport.

Commercial networks and migrant networks are juxtaposed. To merchants, the collection of money from émigrés provides very short-term loans, which are invested in the purchase of handbags and shoes in Italy, electronic equipment and cosmetics in New York, and articles of clothing in France. Merchants acting as couriers can earn significant sums by dabbling in variations in exchange rates before delivering the money to the recipients. Independent of these earnings, the merchant increases his capacity for supply and can rapidly repay the amounts collected, particularly since he is acting as both a wholesaler and retailer. Thus, the amounts entrusted to him are a sort of loan that he uses to stock merchandise, and which he repays upon his return after having sold his products. For this type of transfer, the telephone is merely an instrument for control or to inform the recipient. However, with the increasingly widespread links between merchants and émigrés, this technology is key to the transfer process. A telephone call is sufficient to make available to his correspondents the specified amounts of money. With the development of NICTs, the émigré can put himself in the more favorable position of creditor by requesting by phone that the expenses of his family be taken care of, while not repaying the merchant until his next visit to the adopted country. In such a case, it is the merchant who provides a bridge loan for the émigré's expenses.

Funds are made available based on the financial viability of the merchant. At the order of migrants who have already paid them an amount of money in the adopted country, merchants request their correspondents in Dakar, by phone, to pay out to the party specified by the émigré the corresponding amount of money. The withdrawal of the money is carried out in the Dakar shop: souks in Sandaga, stores that sell spare parts, telecenters, etc. Locations for making withdrawals are proliferating in certain villages in the country's interior – primarily in Touba – with accounts settled upon returning to the country. However, adjustments in expenses and money entrusted to the merchant are made periodically on the telephone; thus, the telephone functions as an accounting instrument.

These migrants make transfers without actual movement of financial flows. This system consists of orders for expenses, made by telephone. The émigré, from his adopted country, requests a merchant to provide his family with food products. The accounting is made upon the return of the migrant, who honors all expenses incurred during his absence. This type of transfer, which presupposes frequent and regular returns to Senegal on the part of the émigré, as well as his having established himself in the business community, makes it possible for the émigré to control the family budget. The émigré pays a merchant in New York, who takes responsibility for providing, through an intermediary in Dakar, the products needed to sustain

the family. With such a procedure, no transfer of money is made to Senegal. One example of a migrant with access to this type of transaction is Mr. Ndiaye, who lives in Italy and established himself in the business community, prior to his departure, in his uncle's food-import business. Financed and assisted by his uncle, he left for Italy at the age of 18. He built a house in the Parcelles Assainies section and stays in Senegal from November to March every year. The only breadwinner in his household, which consists of his wife, her mother and three brothers and sisters, he paradoxically makes no financial transfers. It is in one of the wholesale shops of his uncle, managed by one of his cousins, that the migrant's wife obtains everything she needs during the absence of her husband, who brings back, upon his return, automobiles, whose sale makes it possible for him to settle his debts from the expenses incurred by his wife. He benefits doubly from the sales of the automobiles, since it also allows him to defray the costs of their shipment.

The migrant can also leave significant amounts of money with the merchant for the subsistence needs of his family. The merchant becomes the *de facto* manager of the émigré's assets. The money, as hard currency, is enhanced even more by émigrés by making very short-term investments, primarily in vehicles, spare parts, or second-hand electronic equipment, rather than using the funds for a direct transfer. Moreover, a rapid increase in this type of commerce can be seen, financed by the transfers of émigrés who control these sectors and are able to obtain these articles in the adopted country.

The creation, by émigrés and merchants, of original instruments for transferring funds is governed by an organizational approach that entirely avoids the constraints and administrative complications of official transfers. Émigrés, in coordination with merchants, have developed a complex system of advancing and clearing funds and of social control, supported by the telephone.

Kara International exchange: An instrument for informal transfer of funds

The creation of *Kara International Exchange* was initiated by Senegalese merchants of New York's Broadway and Dakar's Sandaga.⁵ This financial instrument was originally conceived for transferring savings of émigrés. The rapid increase in the number of Senegalese in the United States has led to growing demand for the transfer of money to Senegal. It is estimated that in 2000, 11,000 Senegalese were living in New York City. Senegalese émigrés living in Italy number some 45,000.⁶ Nineteen-eighty-seven marked the beginning of major growth in the number of Senegalese in these two countries.

Kara is an institution typical of businesses operating on the margin between formal and informal, combining modern tools (fax, telephone, e-mail) and traditional modalities (trust, sectarian networks), using official and unofficial channels. Its Mouride owner, SBD,⁷ had the idea of opening a currency exchange establishment carrying the name of his *marabout* (mentor) Serigne Modou Kara M'Backé, while working as a sales assistant at a wholesale

⁵ Sandaga, the Dakar market located in the Plateau district, is known for its picturesque souks and specialized shops dealing in electronics and cosmetics. The commercial signs often carry Mouride place names.

⁶ Corrected official migration statistics communicated during the symposium, "La Politique de protection, de gestion, et de promotion des Sénégalais de l'extérieur," held in Dakar November 2 and 3, 1994 at the Ministry of Foreign Affairs and of Senegalese Abroad.

⁷ These are the initials of the actual individual.

merchant on New York's Broadway, most of whose business was with foreign clients. This business received a good deal of foreign currency and would negotiate its currency at banks at preferential rates. In 1991, this émigré had the idea of creating a foreign exchange office for Senegalese merchants shopping in New York. Accustomed to the fixed parity between the CFA franc and the French franc, these merchants were bothered by the fluctuations of the U.S. dollar. He built a vast network of relationships with the wholesale merchants of Sandaga, where he had worked prior to emigrating to the United States. Moreover, the fact that Senegalese wholesalers regularly frequented the Broadway shop, where he worked as a sales assistant, allowed him to nourish the ties with Senegalese merchants coming to New York to buy goods. These relationships were strengthened when his foreign exchange institution was launched.

The initial stages of development of the enterprise used the small circle of family and commercial relationships. Later, the activity was expanded to members of the Mouride *dahira* of New York, in which Kara's owner was a senior member. These groups of people belonging to the same sect were formed as a result of associations arising from living or working in the same place or to their allegiance to the same *marabout*. The duty to provide mutual support was tacitly accepted within this group. The *dahira* functions, for the émigrés, as a mechanism for social protection, serving to reestablish patriotic connections and extend the circle of acquaintances. Aided by this commitment to solidarity, it acted as a catalyst, a launching pad for Kara's activities, by providing its initial channels for disseminating information and thus providing its first clients.

The stages of transfer: Speed and simplicity of transactions

Nothing in the activities of Kara is, *a priori*, contrary to New York's financial laws. As a result of its foreign exchange license, issued by the competent authorities in New York, this institution is able to purchase and sell any currency. Its entire system of transferring funds is based on mutual trust between the various users, as well as on simplified procedures for transfers, the speed of transactions for depositing and withdrawing the transferred funds, and a mixture of traditional models and NICTs.

Collection of money: A commonplace commercial transaction

The migrant who wishes to transfer money using Kara goes to the modest Broadway apartment that serves as its office, warehouse and counter. Its business hours allow the migrant to go there outside of normal office hours. Kara is even open on Saturday. Migrants do not have to fill out forms or sign documents, and they need not identify themselves. It is sufficient for them to indicate the amount to be sent. After receiving the funds, the Kara New York employee enters on the computer – his only work tool – the references provided by the client. On the printout given to the client are the complete names and addresses of the sender, the recipient, the amount sent, in short, the various items of information given by the migrant. The date of the transaction and the amount sent are also given on the receipt, which can serve as verification, in the exceptional event of a claim, for the client in New York. For the Kara Dakar correspondent, it can also be a means of identifying the recipient. This stage of the transfer transaction, the only one at which the migrant is present and which takes no more than five minutes, is a time of conversation between the client, who provides information, and the Kara agent responsible for entering the information on the computer. This draws the two parties closer together. The transaction of money leaves an important role to the spoken word,

and provides the client the ability to not have to interact with a form, as is necessary in modern banks.

The transfer transaction: A payment order by fax

After the turning over of the money to be transferred and payment of the relevant commission, the Kara New York office requests, by fax, that the Dakar agency remit the amount deposited by the migrant to his correspondent. The recipient of the transfer is informed by the migrant at his own expense. This is a strategy for limiting the costs of operation by Kara New York, which recently installed a telecenter in its Broadway offices to reduce the transfer time. The migrant is able to contact his correspondent in Senegal, by paying a fee based on the amount of the time used, immediately after effecting the transfer. In this way, Kara also makes a commission on the commission paid by the telephone company.

The consolidation of several services needed by clients increases the financial accessibility of Kara International Exchange. The commission of \$US20 is relatively high and is charged regardless of the amount sent. In addition, Kara calculates the value of the dollar of the migrants below the prevailing rate.⁸ The speed and simplicity of the transfer transaction are the main reasons migrants give for choosing this institution. They need not be able to read or write in order to make a transfer. Most of the clients are merchants. The security of the transfers by fax is guaranteed by the social relationship between Kara and the merchants. The payment orders requested of the Dakar agency and made by fax carry the number of the sending fax. The authenticity of the fax is recognized by a secret encoding system for the writing of payment orders in numeric form. The payment orders are handled only by Kara. The sender, at most, is given a receipt, while the recipient receives notice to go and withdraw a particular sum of money. The client never comes into contact with any supporting documentation. Any doubt Kara has about the authenticity of the fax is verified by a telephone call to the Kara New York office. The regular exchange of statements allows them to monitor and verify the account balances.

Transfer times are short. Generally, a transfer made by a migrant in New York before 10 a.m. local time can be received by the migrant's correspondent around 3 p.m. local time. Were it not for the time difference (Sandaga is bustling at noon while New York is just beginning to stir), the transfer would be nearly instantaneous. Today, migrants can inform the recipient of the transfer from Kara New York's telecenter. Thus, the only delay in sending is the time needed for the recipient to go to withdraw the money at the Sandaga market. The choice of this shopping area as an outlet for withdrawing transferred funds is based on a strategy of strengthening local links. The recipient must know the name of the sender and the amount sent by the migrant, who has already given him the information by telephone. The recipient must present an identity card and the information contained on it must correspond to that given by the migrant – i.e., name, surname, address. However, for regular customers, merchants and steady clients, the money is handed over without any formalities. The withdrawal transaction is not merely a financial transaction, as in classic banks: conversation is inevitable, while connections are established and old forms of social interaction are rekindled.

⁸ At the time we were in New York, in October 1994, the dollars Kara took from émigrés were calculated at 510 CFA francs, while the current rate was 525 CFA francs. Thus, for every dollar sent, Kara made 15 CFA francs merely by the difference in exchange rates.

The compensation between Kara New York and the Dakar correspondent is made using the money deposited by merchants who are preparing to go to New York. In order to avoid carrying large sums of money and having trouble with Senegalese customs, these merchants deposit their money with the Dakar correspondent at Kara Sandaga, who uses it to pay the recipients amounts “sent” by migrants from New York. Kara acts as a bank with a system of tacit compensation, without physically transferring money. It is only the strong integration in Sandaga’s commercial milieu (thanks to family, sectarian and work-related networks) that allows the mechanism based on trust to function. The financial equilibrium of the transfer system is maintained by various compensation mechanisms: air freight, import-export, transit. This diversification of activities makes it possible for *Kara Dakar* to replenish its coffers and ensures that the compensation does not become unbalanced, despite the disproportion of amounts sent by émigrés from New York and those withdrawn by their recipients in Dakar. Kara shares the financial health of its large clients, with whom it had done business in Sandaga. The estimation of financial risk is not made, as it is made in classic banks, on the basis of duly processed written documentation; rather, it is made through knowledge of the moral integrity of the merchant and on the basis of the economic soundness of his activity.

The multipolar nature of international migration has helped open up the flow of funds and has given rise to these new financial instruments, which are notable for being easy to use and locally managed. The local element – an essential factor in establishing trust – is the foundation of all transactions. Geographic and social at the start (same village of origin, kinship), this locality takes on a professional and nationalistic meaning in New York: former merchants turned financiers, merchants from Sandaga, Senegalese merchants established in other countries (Côte d’Ivoire, Spain, Italy), Senegalese street peddlers in New York. Close sectarian association is a unifying factor, due to strong influence of the Mouride *dahiras* in New York. All of these forms of close relationships are based on NICTs.

***The proliferation of money transfer offices and the Kara crisis:
A setback in gaining expanded access to NICTs***

Many Senegalese merchants have turned toward new destinations, such as Dubai, Jeddah, Istanbul, Hong Kong and Singapore. The final blow for Kara was the proliferation of competing money-transfer companies. Transfer of money by informal couriers and through private individuals accounts for a greater volume of funds transfers, often for purposes of financing the purchase of land or for the construction of a house.

The owner of Kara has the sense of having been robbed. Currently, some ten money transfer offices with or without storefronts are, with varying success, duplicating the identical transfer system. In order to find clients, they distribute calling cards and leaflets during Senegalese special events and holidays. The *al pular* group of Brooklyn has its own courier office, and uses its ethnic ties to market its product to its fellow Senegalese. Withdrawals in Dakar are made at the HLM market, known as a place where there is a high concentration of merchants of *pular* ethnicity. The proliferation of foreign exchange offices which, in Senegal, are nothing more than simple telecenters, has led to an explosion in the sums of money transferred between a number of foreign exchange establishments. This created cash imbalances at Kara, jeopardizing the ability to honor regular cash withdrawals and damaging its credibility after the holidays at the end of 1996. It has also turned increasingly to travel agencies and the sale of airline tickets. Merchants who trusted the company in depositing money in Sandaga tend to be asked by close family to provide their services. In addition to the

competition from money transfer instruments implemented by the *al pular* of Brooklyn, there are those such as Western Union, which though definitely somewhat more expensive, are far faster and more secure than informal forms of money transfer. In this race against the clock, NICTs represent the most effective means of ensuring continuing business viability.

NICTs provide formal transfers with security and speed, the essential factors than make them profitable. By relying on the postal network, formal transfers have increased the accessibility of regions served extensively by the postal service. NICTs improve the productivity, speed, security and flexibility of informal transfers, while making use of oral communication. This is the basis of the trust and the concept on which the system of transfer relies. A simple telephone message can make available to correspondents thousands of miles away, in real time, major sums of money. As Bournoux (1998:110) states, “there is an overlap between financial agents and those handling information.” Castells (1998:8) also observes, quite correctly, that “the possibility of communicating, without time delays, with any point on the globe promotes the rapid movement of capital” (page 8). NICTs are also a means of monitoring transfers and economic investments. Correspondents can keep accounts, émigrés can monitor the fulfillment of obligations and of set time frames. This is what Castells (1999: 430) calls “communities of resistance that defend their space, their places, against an unfamiliar dynamic: the characteristic flows that determine social dominance in the information age.”

Conversely, NICTs also lead to increasingly individualized financial relationships between the international migrant and his village. We are witnessing an end to group transfers carried out by a person delegated by émigrés living in the same area. This is provoking an unraveling of community-based investments in the areas of origin, and the redirecting of expatriate investment toward the cities. The bonds of common identity based on common village origin are being blurred by greater accessibility to NICTs. The impossibility of maintaining frequent relationships with one’s village of origin led migrants to set up, in their adopted countries, “miniature villages” where news from their homeland was collected, along with collective strategies for transferring financial resources and making investments in the village. As a result, NICTs have produced social restructuring in the places of origin.

NICTs, socioeconomic recomposition and the dynamics of Senegalese international migration

With the expanding possibilities for transferring money, NICTs are helping to make these more accessible and more important. Thanks to these technological resources, émigrés are able to exercise almost daily control over the management of their families’ affairs and be a part of the life back home, while maintaining their ties with their new country. In order to accomplish this, they set up, in partnership with businessmen in their new country, small and medium-sized enterprises. However, as with anything new, NICTs are a venue for social innovation, which jostles the continuity and the classic forms of organization, eliciting conflicts and restructuring in the forms of social organization and in economic relationships.

NICTs and the interdependence of the local economy and émigrés’ countries of origin: “When Lombardy⁹ sneezes, Ndiambour¹⁰ catches cold”

⁹ Northern region of Italy.

¹⁰ Region in the central-northern part of Senegal.

With the attempts of migrants, once established in their host countries (such as Italy and the United States) to return, we are witnessing the implementation of a partnership with businesspeople of these countries. They are setting up “bipolar” enterprises with one foot in Italy and the other in Dakar or Touba. Auto parts stores, painting contractors, clothing and shoemaking are some of the sectors exporting raw materials or finished products from their host countries. There is an emergence of hybrid enterprises, established on the basis of family networks, but underpinned by high-quality communications technologies and relationships built on ad hoc, opportunistic arrangements. This reconfiguration of systems of connection between social entities and technological instruments is not in any way contradictory to those elements that serve as protectors of identity – the sect, the family, etc. Thus, a consolidation of partnerships is occurring between émigrés and economic agents in their host countries, through a merging of social networks and commercial networks, all due to NICTs. Émigrés are building a “bipolar” form of commerce using these resources, encompassing a vast network of financial flows.

The émigré entrepreneurial sector is based on partnership and, thus, on negotiation and dialogue. NICTs facilitate oral modes of forming contracts in the informal sector, where writing is more for legal/contractual purposes than as a form of communication.

Transfers have contributed, by relying on NICTs, to a new globalization of finance for commerce. A survey was conducted of some 13 enterprises selling automobile parts and motorcycles, purchased primarily in Italy. The use of the telephone and fax is essential in handling their activities. This has opened up new markets and better control of local markets. Above all, however, these agents have been able to find other sources of financing and other forms of backing outside of banks and the State. In the automobile-parts sector – a preferred area of investment for émigrés – NICTs help establish partnerships with Italian automobile wrecking yards for vehicles no longer in use in Europe. By fax, they compile, from abroad, a list of parts to be loaded in their containers, requesting that they be sent in a timely manner the bill of lading or shipping invoice for the container, so that they can initiate customs clearance and transit, and thus reduce warehousing charges at the Port of Dakar. This form of entrepreneurship straddling two countries requires an intensification of exchanges of information, leading to a strengthening of interpersonal relationships and confirming Castells’ view (1998: 21) that “Economies everywhere are becoming interdependent and thus are introducing a new form of relationship between the economy, the State and society, in a flexible system.”

NICTs and social restructuring within the migratory system

NICTs foster the creation of long-distance interpersonal relationships and are part of a new process of exchange. Opportunities for social management are appearing, even for émigrés staying in their adopted country. They have access to a mechanism for real-time family decision making. NICTs are breaking down barriers and challenging assumptions regarding temporal and spatial frameworks.

Family institutions and social organizations are a couple examples that are useful in examining the impact of NICTs on the life of the people. These technologies are accelerating the process of social change. Their accessibility, even for groups which, until now, have participated little in decision-making mechanisms, provide new power. Relationships of dependence become relationships of exchange. There is a renewal of local awareness and a strengthening of the feeling of belonging. This rebalancing of roles guarantees vulnerable

social segments of the population access to information and to decision making. These groups have a firmer grasp of the use of the telephone than do older folks. This creates a reversal of roles, given the fact that the technology is dependent on resources from migrants. NICTs promote a new form of social mobilization of nationals from a region beyond the national borders. Linking local challenges to the broader world context is another means of joining the global community. Places of communication are becoming new places for social negotiation. With NICTs, a transformation of private spaces to public spaces is occurring. In the public squares of popular neighborhoods and in certain villages, where bedrooms are used as offices or as living rooms, the placement of the telephone can elicit or revive numerous conflicts. In the households in Wolof country, the management of the family's common assets theoretically is under the authority of the "senior" wife. However, some young émigrés have a tendency to install the device in their wives' rooms, bypassing the management role of their mothers or aunts. The émigré, knowing that, during his stay, he is the person most frequently called, is instinctively inclined to install the telephone in his wife's room. This poses problems of accessibility for male adults and for elderly individuals.

Women and young people, groups that have been excluded, are emerging in the context of social hierarchies resistant to change in the rural environment. Now, these groups can speak and even make decisions. However, the unequal access could lead to instability in the social systems. The sharing and collective use of existing lines is also producing dependent relationships. Disadvantaged communities were the first to migrate, hence the first to provide their families with a telephone and to acquire a new status. They can no longer be excluded from the opportunities to access information and to the area of decision making. By entrusting the management of the telephone and of the cellular telephone to their sisters and wives, émigrés contribute to their empowerment, giving them an entrée to the public sphere. Given that they are in the home more than the men, they receive the telephone calls and are, in fact, the repository for information. They serve at the heads of associations and enhance their powers of influence. NICTs help to consolidate their place as agents of social change and give them a sense of political awareness. Their group strategies solidify their links and lead to a reordering of their relations with other groups. However, this poses problems for their power relationships. The concept of the division of female and male roles in the family is weakened, thus leading to interpersonal conflicts and inter-group conflicts.

NICTs make it possible for émigrés to control the domestic space. Managing such a sphere involves the power of financial resources and makes it possible to direct spending, give orders, deal with conflicts – all matters that the migrant can now do by telephone on an almost daily basis. What is presently occurring is a globalization of family management. The social connection is no longer a set of innate or established statutory relationships, but rather the result of social interactions constructed in the complex mesh of a multitude of networks, including those linked to NICTs, driven by interested players bringing to bear an approach involving negotiation and exchange rather than one of exclusion and hoarding. New technologies facilitate the reestablishing of communal links. The use of the telephone in the rural setting shows the true complexity of how the telephone is handled, in relation to previous modes of organizing and managing information.

Relying on NICTs, the dissemination of information is governed by rules rooted in the local structure. Certain sensitive news is transmitted to the village chief, who makes a determination as to the appropriateness of disseminating it and as to those to be informed. Felicitous news, such as family ceremonies, falls under the responsibility of the griot (or village elder) who, depending on the target audience, presents the news in an agreeable and

lively manner. This is also a matter of reestablishing age-old links. Private news is delivered word for word to the recipient by a messenger. Increasingly individualized access to the telephone will make it difficult to perpetuate these strategies for organizing and controlling information locally. Are things moving toward conflict or toward better relationships between actors? Are we not witnessing new forms of inequality between those with access to NICTs and those excluded from such access? In post-colonial black Africa, cities are made up of different diasporas and of different flows of migrants, linked to the globalized flow of capital and information.

NICTs and informal globalization

International migrations are driven by complex spatial/geographic factors. NICTs function as a domestic challenge and an instrument of globalization of family relationships. Inter-personal exchange and communication on the family-unit level are based on the neighborhood or on geographic proximity. In this regard, there are exchanges of money and goods. With NICTs, the exchanges go beyond the material realm, encompassing ideas and involving an increasingly distant outside world. The dialectic of the “here” and the “elsewhere” is called into question by the simultaneity and everyday nature of exchanges between émigrés and their places of origin. What is occurring is a globalization of the domestic realm from the bottom up. Proximity – until now a means of exerting social control – has been superseded by a “virtual” proximity that relies on oral communication and financial relationships. In certain villages in the Louga region, the Italian cities of Florence, Pescara and Rimini are more widely known (even by the elderly) than cities in Senegal.

NICTs shorten the distances and strengthen the significance of urban spaces within the rural environment. Migrants straddle the local and the global, mobility and identity, the altruistic and the profitable. These technologies foster a reinvention of the social bond. The traditional methods of relaying information are being short-circuited by new mechanisms such as the rural telephone and the cell phone. *Griots*, disseminators of domestic information on family ceremonies and village gatherings, are receiving competition from those who possess the local NICT devices. There is a hoarding phenomenon that occurs and that contributes to widening the gap between those who have acquired these technologies and those who have not. With NICTs, the social link no longer depends on spatial proximity – producing in turn a breakdown of identity, a strengthening of bonds and a shrinking of distances. These technologies facilitate the dissemination and segmentation of information and expand the number of depositories. Until recently, ceremonial information was overseen by the *griots*, who took charge of it and disseminated it through their own channels; this type of information is now disseminated via the telephone. In villages where information comes by means of the telephone wires, through an intermediary in possession of a telephone, the *griot* usually takes responsibility for redistributing it in the squares. This role, which has disappeared in the city, is still intact in the village, where teledensity is still low. Thus, social status and age-old roles are changing and being questioned, while new networks are being promoted by NICTs, which have become the key to the emergence of a new model for information sharing. Those with the necessary tools for disseminating information become the depositories of information.

With the advent of the GSM, SONATEL is developing cellular service in rural areas where the landline telephone network does not yet exist. In June 2000, only 646 villages out of a total of 16,000 in Senegal were equipped with telecenters. The cellular telephone can open up to the outside world rural towns not yet served by the landline telephone network. NICTs are being developed in regions where there is strong demand for access to information and in

which there is competition between social and family environments, on the one hand, and modern, outside influences on the other. New technologies are breaking down spatial barriers. However, one can not yet speak of openness to the outside world, given the condition of the roads and the obsolescence of the rural transportation system. The unit cost of linking subscribers to the telephone network is ten times more expensive in rural areas. For commercial reasons, SONATEL is not making investments of this type unless it is certain that they will be profitable. Installation of the telephone in isolated regions is dependent on the existence of a certain number of pending requests. In this respect, the financial well-being of émigrés creates an increasing number of connection requests, thus making investment by the telephone companies feasible.

NICTs promote the resurgence of local powers, due to the consolidation of individual initiatives. The relationships among villagers scattered throughout the world strengthen the role of local powers at play within the village. Thus, the village reaches beyond physical limitations. We are witnessing the establishment of direct links between local and global networks, staking out a new form of globalization. One can see the forming of relationships with increasingly distant environments as a result of NICTs.

In regions with strong emigration, one sees the paradox of a village in which the strongest links are to Italy, where the largest proportion of its departed offspring live. Thus, there is an expansion of the village's opportunities for exchange and a questioning of the classic foundations of relationships. The social and economic life of the village unit has been broken into several interconnected pieces by NICTs. Social networks are energized by technical networks. Distance is no longer a constraint in itself, and access to communications networks makes it possible to integrate social networks. This is all the more relevant when émigrés living in the same village tend to emigrate to the same city abroad. The village of M'Benguène is not a distinct entity, but rather part of a complex system of multiple residences (village, nearby town, places abroad, Touba) interconnected by NICTs. In the village of M'Benguène and the outside world, bonds dominate distance, time dominates space. The world abroad is a limiting concept, because émigrés consider their nationals to be full members of the community, whom they are obligated to keep informed of the life of the village, down to the most trivial details. Since they often can not attend the village ceremonies, émigrés participate in them by underwriting the associated financial costs. Absence, they say, means being present but unable to do anything.

Analyzing the types of telephone relationships between the village of M'Benguène and the outside world is a complex task. The importance of phone connections between the village of M'Benguène and the outside world lies in social, administrative and economic factors. Prior to the existence of the telephone, relationships were limited and depended on people physically moving from one place to another. With NICTs, the roles of mediating with the outside world are reversed. Financial relationships are geared exclusively to Italy or to traditional nearby villages, with the social dynamic based on kinship, while Touba encompasses the range of religious and economic relationships. Only the village of Diawar and the city of Kébémér are geographically close to the village. The perception of relationships for the villagers is based more on the ease of relations than on geographic proximity. We are witnessing an opening up of the village to greater opportunities for accumulation. Émigrés, then, are intermediaries for the collection of resources. Is not this creation of transnational spaces outside the limits of national borders a type of globalization from the bottom up, one that is being advanced more rapidly by communities more than by states? It constitutes globalization that is occurring bit by bit, through a process of hybridization, one step at a time, through open, flexible social

networks. New types of relationships are being established, new exchanges of information with increasingly distant places are taking place, along with financial transactions beyond borders and without the intervention of the State. NICTs allow émigrés to bypass the national level with its bureaucratic constraints or its deficiencies in terms of mobilizing financial resources suited to the needs of the people. Those entities that seek to embody a collective identity (family, sect, merchant) appropriate NICTs to escape the control of the State. The installation of the telephone in the rural environment of Louga is changing the rules for handling information and the local mechanisms for communication. There is a strengthening of the role of young people and women, expansion of the circle of social relationships, implementation of links with distant places, a range of interests arising out of the use of the telephone by different actors.

The impact of NICTs on family relationships and on power structures is all the more complex given the fact that all those involved have an interest in it. Those in possession of information differentiate themselves from and oppose the classical elites, to whom this role traditionally belonged. This fragmentation between the modern and the traditional leads to: the multiplicity of decision-making poles within the rural setting; the diversification and break-down of sources of leadership; and the tentative beginning of a process of democratizing social functions.

Conclusion

Is not the migratory system a set of cities interconnected by networks, of relationships based on NICTs, financial movements and a complex of representations? New technologies allow the migrant to connect “pieces” of family distributed among different political and economic spaces. The categories of time tend, in the context of NICTs, to replace those of space, which have for a long time ordered relationships, forms of bonding and modes of sociability. The development of new technologies involves an extension and diversification of information flows, a process of overcoming the permanence of space, a mechanism for negating political territories – in short, a form of globalization.

NICTs have fostered easy and rapid access to information, partnership and entrepreneurship, mobilizing of funds and socialization. We are seeing the emergence of new and more open leaders, formerly excluded, who are more receptive to change and less inclined to practice exclusion. Leadership linked to the appropriation of NICTs brings things into focus more than it controls, links more than it excludes, exchanges more than it monopolizes, is acquired more than it is inherited or gifted. Thus, NICTs are a factor in achieving progress, a source of power that encourages people to access that power, a powerful element of social innovation. Actors deploy various strategies in the context of current change linked to these technological resources: new positions, attitudes and alliances, new compromises and conflicts. There is occurring a hybridization of different types of human, relational and economic resources providing migrants or their intermediaries a new role, based not on hoarding of information but rather on its dissemination and sharing. Those accessing NICTs include a range of social identities: those who hold power and those who serve as power brokers. Thus, NICTs are factors instrumental in social integration, powerful levers for social rebalancing and for strengthening local spaces within a globalized system. Intense social mobilization is occurring, one that is characterized by the invention of new roles and the effective transfer of roles belonging, until now, to a particular segment of the population. This transfer involves conflicts, an intensification or even a tacit sharing of roles by a segmentation of social channels. The cellular telephone makes it possible to circumvent the initiating role of the

State, to short-circuit the role of local authorities and increase the participation of the people in equipping their localities.

The appropriation of NICTs necessarily engenders micro-relationships of power with a destabilizing effect on the classical order, and with the power to structure a new order. The emergence of new venues for managing information poses the problem of the future role of the *griot* and the impact of the disappearance of this role in the distribution of castes. Who can imagine a *griot* who does not provide information? The collective appropriation of NICTs is winning out over State appropriation of these technologies. Thus, it produces a new approach to community development that implies solidarity and negotiation. This new form of articulation of the local and the global, the individual and the communal, the economic and the social produces endogenous innovations, allowing Africa to secure its place in the globalization process. This form of globalization does not mean the end of territories, let alone the disappearance of regions with their specific characteristics; on the contrary, it is part of a dynamic of revitalizing relationships, bringing them into a broader circle of relationships. This globalization by NICTs is a process of negation of distance and multipolarization of spaces, of stretches of space easily linked in real time. New technologies call into question the dichotomy between center and periphery, formal and informal, modern and traditional, causing a tangle of relationships, economies and spaces, and a reinterpretation of time.

Bibliographic references

- Bougnoux D. 1998, *Introduction aux sciences de la communication*, Paris, La Découverte, 126 pp.
- Castells M. 1998, *La société en réseaux*, Paris, Fayard, 616 pp.
- Castells M. 1999, *Le pouvoir de l'identité. L'ère de l'information*. Paris, Fayard, 538 pp.
- Cheneau-Loquay A. (under the direction of), 2000, *Enjeux des technologies de la communication en Afrique. Du téléphone à l'Internet*, Paris, Karthala, 402 pp.
- Dertouzos M. 2000, *Demain. Comment les Nouvelles technologies vont changer notre vie*, Paris, Nouveaux Horizons, Calmann-Levy, 341 pp.
- Duclos D. 2001, "La globalisation va-t-elle unifier le monde ?" Le Monde Diplomatique, August 2001, p. 14-15.
- Economia, 2000, "Sonatel, en attendant la concurrence," *December*: 50-53.
- Favreau 1998, "Du local au global: enjeux et défis des nouvelles initiatives de développement local et d'économie sociale," in Economies et solidarités, Revue du CIRIEC, Volume 29, 2, 1-13.
- Hamelink C. 1987, "Les technologies de l'information et le tiers monde," Revue Tiers Monde, 111, July/September.
- Humbaire B. 1997, "L'Internet et l'Afrique : ressources documentaires," Afrique Contemporaine, 182, 47-62, [cf. Revue Tiers Monde, 138, 245-260].
- Lemieux V. 2000, *A quoi servent les réseaux sociaux*, Publications of IQRC, 109 pp.
- Mignot-Lefebvre Y. 1994, "Technologies de communication et d'information au sud: la mondialisation forcée," Revue Tiers Monde, Volume XXXV, 138, April-June, 479 pp.
- Mucchielli A. 1998, "Les Sciences de l'information et de la communication," Paris, Hachette, 159 pp.
- Olorunnisola A. A 2000, "African media, Information providers and emigrants as collaborative nodes in virtual social networks," African Sociological Review, 4,2,: 46-71.
- Perouse De Montclos M. 2000, "Réseaux financiers, diaspora et hawilad: le rôle clé de la péninsule Arabique entre l'Occident et la Somalie," Autrepart, 16, : 87-98.
- Sassen S. 2000, "Le travail mondialisé. Mais pourquoi émigrent-ils?" Le Monde Diplomatique, November 2000, p. 4-5.
- Shapiro C. Varian H. R. 1999, *Economie de l'information, Guide stratégique de l'économie des réseaux*, Paris, Nouveaux Horizons, 313 pp.

SONATEL 1997, "Tableau de bord du Directeur Général présenté au Conseil d'administration de la SONATEL," Dakar.

SONATEL 1999, "Rapport annuel," Dakar.

Tall, S. M. 1998, "Un instrument financier pour les commerçants et émigrés mourides de l'axe Dakar-New York: Kara International foreign money exchange," Harding et al. Les opérateurs économiques et l'État au Sénégal, Studien zur Afrikanischen Geschichte, Hambourg, LIT :73-90.

Tall S. M. 2000, "*Les investissements immobiliers à Dakar des émigrés sénégalais*," Université Louis Pasteur de Strasbourg, 553 pp.[Doctoral thesis]

Tall S. M. 2002, "*Mouride migration and financing*", ISIM NEWSLETTER No. 9, Leiden, Pays Bas, p. 36.

Tall S. M. 2002, "*Les migrations internationales d'hier à demain*." [To appear in Karthala, 2002 under the direction of Diop. M. C.]