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The Fact: Acuteness of the Urban Problems, Lack of Adaptation of the Tools for Spatial Development

The countries of West Africa have experienced an acceleration in urban development in independence. If the problems involved in this wave of urbanization have not yet become as acute as the situations one finds in North Africa or elsewhere, particularly in the great Latin-American and Asian metropolises, the latter may be a harbinger of the problems that will confront the African cities as they move into the year 2000 if we do not make a large effort to solve them now.

In French-speaking West Africa, Abidjan, Bamako, Lomé, Nouakchott, Ouagadougou and Niamey, which are symbols of growth in their respective countries, find themselves with highly unbalanced urban hierarchies and networks. These great cities drain human resources, public finance and private capital from economies that remain primarily rural, without managing to generate the dynamic endogenous mechanisms needed for any true development. For this reason, the medium sized cities (of about 20,000 to 100,000 inhabitants) are not in a position to play a supporting role in the development of their respective regions. They act as simple wayhouses in the exodus of the rural population toward the cities, and as control centers for export production facilitating the drainage of raw materials or mining products without any local processing, and hence without creation of regional benefits. The countryside is being emptied of people, the farmers are becoming impoverished, and governments are running into debt — and these phenomena, combined with the worldwide economic crisis that is making a frontal attack on the Third World countries which lack energy resources, have led several of these countries to the verge of monetary bankruptcy, ecological catastrophe, and a social explosion.

But certain countries have made an attempt to overcome these evils to some



General view of the market in Mopti, with the mosque in the background

Photo J J Guibbert

extent. One of the instruments in this process has been the definition of a policy of national development aimed at re-balancing the urban systems and at helping in the creation of regional metropolises that would no longer act as simple pumps for emptying the surrounding rural areas, but rather as complementary agents in regional development. Thus more than ten years ago, Senegal decided, after a series of preparatory phases, to endow itself with a National Plan for Regional Development. This plan called for the creation of various integrated urban levels, from the local town to the capital, covering the whole of the Senegalese territory. Within this framework, the majority of the medium-sized Senegalese cities now have master plans. How do things stand now, ten years after these plans were worked out?

The overwhelming majority of these plans have only to be implemented. There are even some departmental capitals in which

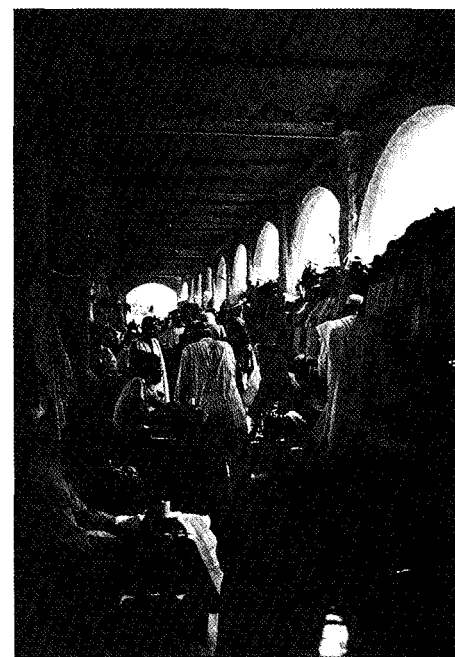
the local officials (mayors, for instance) are ignorant of the very existence of these plans. In general, they have been worked out by foreign consulting firms with only slight participation by local governments, and excluding consultation with the population. They propose solutions that are too sophisticated and hence too expensive, exclusively spatial and ignoring the economic basis of these cities and the way they fit into their region; these plans necessarily end up as a waste of resources and a failure.

Certain national officials in West Africa have tried to learn from this failure. City planning officials in Mali decided a few years ago to set up a pluri-disciplinary national team able to work out the tools needed for the development and control of urban space in their cities. In 1981, the Bamako Master Plan was revised from beginning to end by a national team. It then became necessary to step down by one level in the urban framework and to



Harbour area of Mopti

Photo J J Guibbert



Covered clothing market, and tailors at work.

Photo J.J. Guibbert

approach the planning, the development and the management of regional capitals. The Malian situation made this undertaking — already difficult in other, more prosperous countries — extremely perilous. The weakness of government finances, the disorganization of the administrative system, and the extent of the problems were immense. However, a team of young city planners, architects, sociologists, geographers, economists and so on from the National Agency for City Planning and Construction decided to tackle this task. To this end, it was necessary to innovate, to find new working methods to produce new tools for spatial development adapted to medium-sized cities which had been left to the devices of a few local figures for many years.

For this purpose, the Agency of City Planning and Construction decided to call on the ENDA¹, which, for some years now and in collaboration with UNESCO, has

been running a program for the training of planners and managers of human settlements in Africa². In addition, UNICEF, which began in 1979 to become aware of the seriousness and importance of the urban problems in West Africa, offered essential support.

A Session of Reflection on Tools and Methods for the Environmental Planning of Medium-Sized Cities in Africa

This session, which was held in Mali in the fall of 1981, corresponded:

1) To a request, coming at a crucial moment in its work, from a national pluri-disciplinary team in charge of implementing Mali's policy of urban development.

The session benefited from the experience

acquired by a national pluri-disciplinary team already experienced in working out master plans for Bamako and Sikasso. It was also based on a political desire to equip the regional city planning agencies in Mali with development tools adapted to the specific Malian context, to the timeliness of the problems, to the shortage of material means, to the limited numbers of city planning officials, etc. A maximum impact was ensured by the presence all during the session of all of the regional city planning directors who were subsequently be made responsible for working out the tools for spatial development in the regional capitals and for their application.

2) To the conclusion of a procedure launched by the ENDA and by UNESCO on behalf of implementation of methods and tools for a trans-disciplinary operational approach to the development of human settlements in Africa. The session in Mali benefited from what had already



Open market in the city

Photo J J Guibbert



A street in a working-class neighborhood of Mopti

Photo J J Guibbert

been done in Morocco (Ben Slimane and Sefrou), in Ghana (Tema and Koumassi in Ivory Coast (Adjame, Abidjan), and in Senegal (Ziguinchor)³. This experience acquired by ENDA and UNESCO made it possible to constitute and distribute a set of documents of a subject rarely treated in the urban research and development field; that of the development of medium-sized cities.⁴ The session benefited from the experience developed by UNESCO in Latin America within the framework of its program for training managers and planners of urban settlements.

The network of relationships established on the occasion of the previous seminars made it possible to select about ten foreign participants who were to have a particularly profitable impact on the session. They had acquired wide experience in their own countries on all of the subjects treated⁵, and allowed the session to enjoy access to a wealth of expertise that would have been hard to assemble without the help of international financing. The majority of the foreign participants, working in agencies involved in planning, development, research and training in their own countries, were taking part in research and development activities. The great majority among them were natives of West Africa — a fact that made it possible, on one hand, to ensure an impact at the level of their respective countries and, on the other hand, to constitute the nucleus of a pool to regional expertise with respect to the problems of urban agglomerations in French-speaking West Africa.

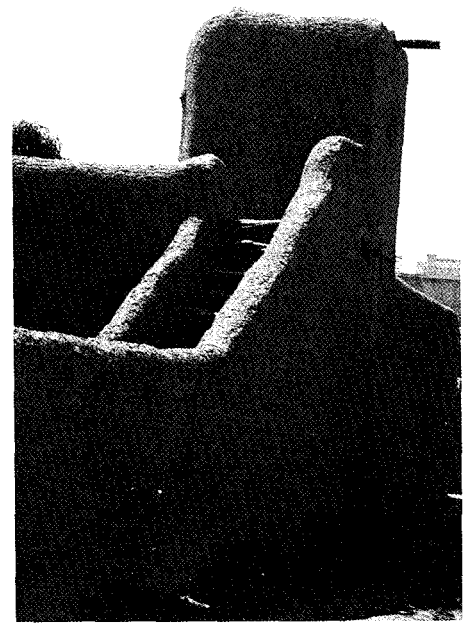
3) The session profited from having an exemplary case study: the city of Mopti.

- It was exemplary because of the urban history of its region. Mopti, a city in the loop of the Niger River, was created recently (1893), but is to heir to the civilization of the Western Sudanese cities that were the splendor of the great empires of the Middle Ages⁶. It inherited an architecture and a form of democratic municipal management that are quite exceptional, and too often unrecognized. It is worth being rescued from oblivion



Traditional house made of banco

Photo J J Guibbert



A detail of building (stairs) and its problems

Photo J J Guibbert

and being saved from the slow disappearance that threatens it nowadays.

- It was exemplary because of its contemporary history. The fact is that Mopti is the only regional capital in Mali endowed with a classic master plan⁷. Although it is quite complete, this plan, which dates back to about 15 years ago all the same, has not yet been implemented. This failure was worth thinking about. On the basis of the quite complete basic data contained in this first plan, it seemed appropriate to propose new methods that would be better adapted, more participative and more operational.
- It was also exemplary because of the profound motivation of the municipal authorities in Mopti. The cooperation of the municipal government, strongly linked with the people and ready to listen to them, guaranteed a real consultation of the people and concrete support for the follow-up operations that might result from the session. This collaboration was

also a barrier against the techno-bureaucratic dangers that are endemic to all planners. Everything was done to keep the meetings from being a mere academic exercise, and to make it a real field project, open to the desiderata of the population groups.

The Steps: an Integrated Pedagogical Sequence, Oriented Toward Action

The exchange of regional experience

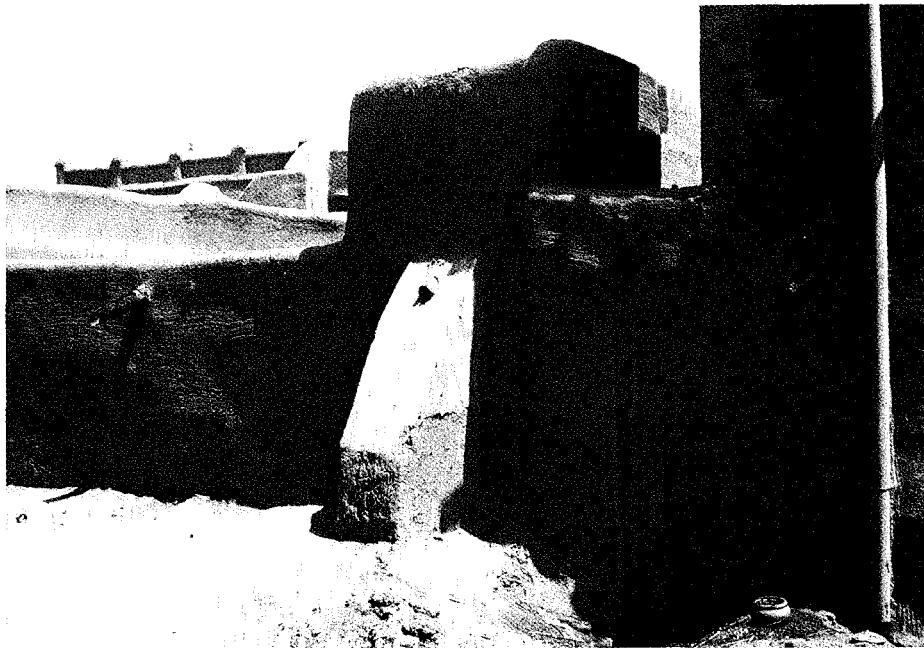
The guests had been chosen on the basis of several criteria: *inter alia*, their ability to integrate themselves into pluri-disciplinary efforts, but also their experience with a certain number of subjects that had seemed particularly important to the organizers:

No cities without the countryside

We should recall, with Hedi Eckert, that "The imbalance between a capital city and a secondary city in Africa would therefore come down to the geographical and demographic expression of a specific but well-known economic reality: that of the dominated economies... An unbalanced urban framework necessarily reveals deeper imbalances, occurring incidentally at interdependent levels, and the visible signs of which are:

- imbalances among regions;
- disparities among income categories;
- disparities among geographical income areas;
- disparities in access to economic and social training;
- the constraints imposed by capital that is necessarily invested on a short-term basis and in microeconomic interest (the company), and not in the macroeconomic interest (the national community)."⁸

And that, because of this, "The planning



Dry latrine system upstairs in a Mopti house

Photo J.J. Guibbert

of the medium-sized city, if it claims to be effective, will necessarily have to be designed within a wider spatial framework of which it will be the point of convergence: the region."

The fact is that, too often, urban planning is merely the juxtaposition of various urban systems: roads, sewers, electricity, water supply; of a land use plan; and of proposals for improvement of living conditions without taking into account the urban economic base, and especially the regional economic base that use and shape these networks and urban spaces.

Whence, in the best case, a non-application of the proposed urban development plans (the case of Mopti), and, in the worst case, the application of aberrant and costly solutions (the case of Yamoussoukro in the Ivory Coast, for example).

Techniques adapted to medium-sized cities in Africa

We had already noted the inappropriate nature of the technologies proposed for the development of medium-sized cities on the occasion of the session held under UNESCO auspices of the ENDA and the MHAT at Sefrou in 1978⁹. In Sefrou, a small Moroccan city of about 40,000 people, the national and regional technicians did not possess the technology for drainage and waste treatment that was economically acceptable to the Sefrou city government.

They were trained in the Western school of sophisticated technology, and the only proposal offered was to use a purification station for the treatment of used water. This solution was too expensive for the city budget and could not be financed by the national budget in a period of budgetary restrictions caused by the existence of a wartime economy. People continued to empty waste, without treatment, into the *wadi* going through the city, to the detriment of the health of the people — part of whom used this water for household needs — and of the beauty of the area, thus compromising the touristic calling of that marvelous little medina.



Drainage of waste water into the river.

Photo J.J. Guibbert



Infill system using garbage

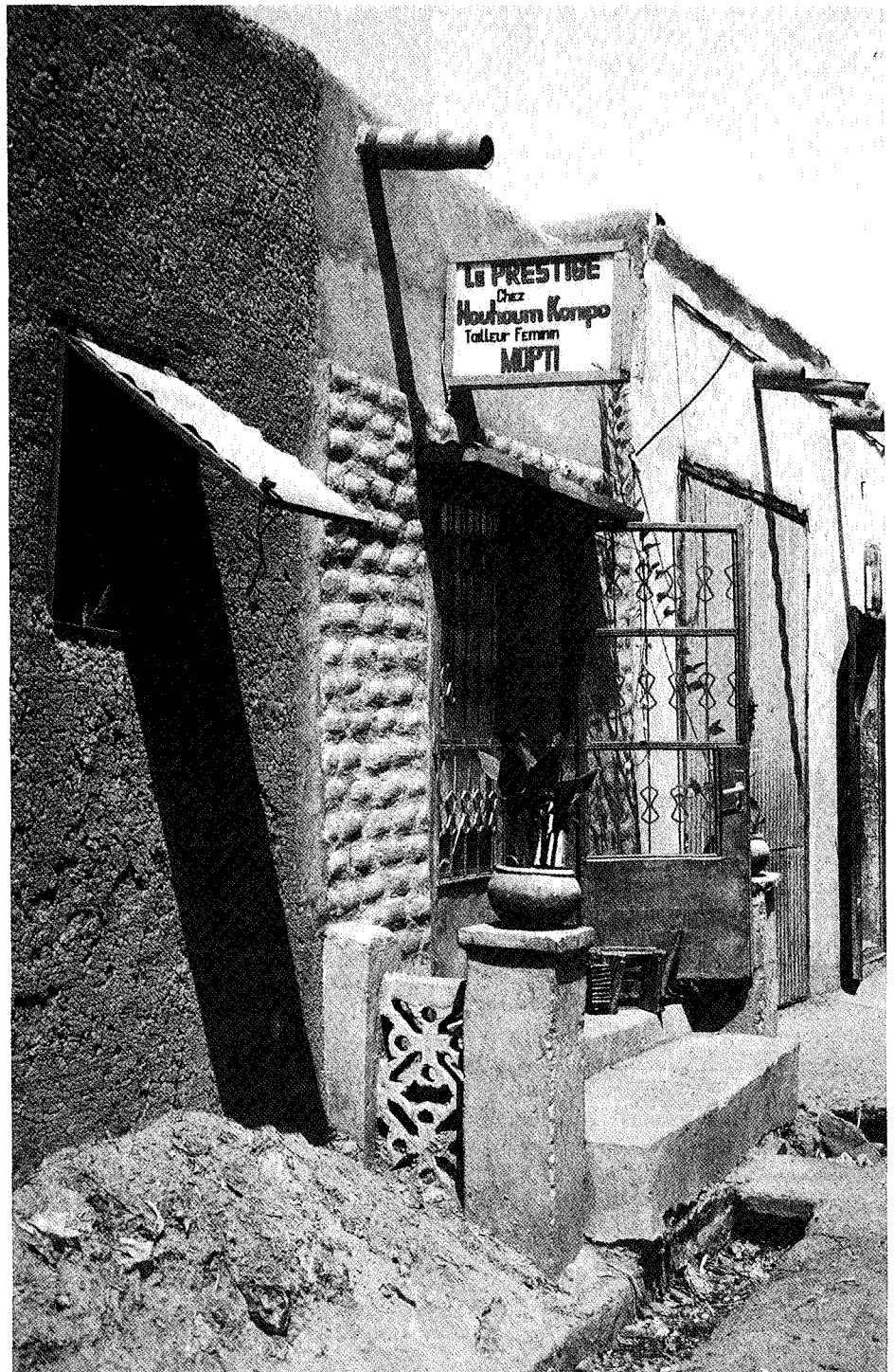
Photo J J. Guibbert.

In Mopti, the technical problems were also numerous and the solutions very poor, despite the apparent sophistication of the proposed solutions. In the face of the problem presented by the deterioration of the traditional system of latrines based on the principle of storage above ground level (in order to avoid polluting nearby underground water) and of separation of organic wastes for use as manure, the Mali urban plan proposed the construction of water-tight pits to receive liquids and solids that would then be evacuated by using cesspool trucks for emptying. After a broad exchange of views on the subject, this solution proved to be too expensive for the people and the city government. It was not adapted to the narrow little streets of the old part of Mopti, costly in energy (gasoline), and fragile in maintenance.

In this built of *banco* city, whose thermal qualities and strength are now familiar, the new government buildings and the shopping centers are built with cement and iron that must be imported from other countries at great expense.

Technologies adopted by the citizens of medium-sized cities of Black Africa — Plea for self-planning

In Ziguinchor (Senegal), as in many other cases, the Master Plan was not applied. According to Mamadou Sylla, an architect in the City Planning department, "It is a



"Prestigious" new materials (cement, painting.)

Photo J J Guibbert

problem of creating awareness among all of the people concerned — voters, officials, technicians and developers.”¹⁰ Above and beyond this, it was also a problem of informing population groups, whom Mamadou Sylla tried particularly to organize in Ziguinchor (drawing up of very detailed district plans on a scale of 1/2000, systematic organization of neighborhood meetings, etc.). In Grand Yoff (Dakar), Mohamed Soumaré tried, together with the team of the Chodak project and the support of the city planning department, to take another step toward the participation of population groups.¹¹

These were some of the many experiments that made it possible to sketch out the road to self-help planning, which remains the essential basis for success of city planning adapted to the medium-sized African cities.



Commercial facilities and modern building in the commercial area of Mopti

Photo J J Guibert

The Malian Case

The general context. anarchic and uncontrolled urbanisation

Despite a low urbanization rate (12 per cent approximately, in 1975), Mali is now confronted by pressing problems of planning and urban management that go beyond the planning and control capacities of its government, and which reveal a very clear deterioration in the living conditions of the poorest urban population groups.

The diagnosis made by the Malian technicians as to the framework of their attempts at urban planning is a severe one:

- anarchic and uncontrolled urbanization, and hence disorderly development of the cities;
- the lack of a clearly defined framework for intervention;
- outmoded legislation;
- restrictive urban planning, limiting itself to subdivisions;
- the absence of participation by the population in the management of their environment.”¹²

The first twenty years of independence did

not allow Malian cities to equip themselves with operational city planning documents. Only two master plans were worked out: that of Bamako (1978) and the one for Mopti (1967). These documents were developed by foreign consulting firms, with reduced consultation of the national and regional authorities and without participation of the people. Moreover, the technical structures installed with a view to the application of these plans were insufficient, and hence these plans remained for the most part a dead letter.

“Thus urban planning in Mali became the product of successive public land development operations carried out, in isolated episodes, in all urbanized regions by multiple authorities (District, Circle, Domains, City Planning Agency), as a function of their own demands, which resulted in the production of ‘bare’ plots, without facilities, invariably laid out in straight-line fashion. This result leads to land speculation and substantial financial waste, as well

as to anarchic urbanization and disorder in spatial development.”¹³

So far, the bulk of the Malian government’s effort at urban planning has concerned the capital. Bamako was given a Master Plan, revised in 1981 by the officials of the National Agency of City Planning and Construction. The Malian government is now paying more attention to the situation of the medium-sized cities that are experiencing significant growth rates

Cities	1965	1976
Kayes	23 600	44 736
Sikasso	21 800	64 030
Segou	27 200	64 890
Mopti	32 400	53 885
Gao	15 400	30 715

The case of Mopti

Before 1900, Mopti was just a stop along



"Spontaneous" modernization the street loses its charm

Photo: J J Guibert.

the river route linking the region's two large cities, Jenné and Timbuktu which were the end points for the trans-Sahara trade. Mopti was then a simple village of Bozo fishermen, which attracted a few groups of nomadic Peuhl shepherds in the 16th and the 18th centuries.

The history of modern Mopti begins in 1893, the date of establishment of a small French military post that marked the French colonial appropriation of what was then called the Sudan. An initial group of French traders settled in the area of Charlotville toward 1900. Then the construction of the Dakar-Niger railroad integrated Mopti into the larger area of French West Africa. It then became the capital of the central delta of the Niger, a region destined to become an exporter of rice to the other colonies of French West Africa, and especially to Senegal. The Great Mosque of Mopti, a jewel of Sudanese architecture, was built in 1908. The year 1910 saw the beginning of construction of

the first dikes that were to allow the successive extensions of the city until 1954, as well as the construction of the working-class districts as we know them today. At present, the bulk of road transportation linking the rest of the country passes through the road junction of Sèvre, located about 15 kilometres inland, where the new government offices, the development operations, and the beginning of processing industries are situated. Hence one cannot analyze Mopti without considering its relationship with Sèvre.

Its geographical location at 14°30' North Latitude and 4°12' West Longitude places it in area of transition between the dry Sahelian ecosystem to the north and the more humid West African ecosystem to the south. Mopti receives about 600 millimetres of rain a year during the warm humid months from May to October. During the dry season, from November to April, the city is swept at times by the warm winds coming from the Sahara. The

temperatures there at the end of the dry season are very high, a fact that affects the predominant type of housing (*banco* houses with terraces). The city, located on the banks of the Niger, is strongly affected by the river's high waters. During each rainy season, a vast expanse of about 4 million hectares is flooded in the central delta. Crops, fishing and trade are all conditioned by the river. The city itself gradually conquered its usable lands from the flooded areas by means of a system of dikes and earth infill that affect the architectural and city planning options (drainage, roads, latrines, foundations, etc.)

Mopti now consists of a mosaic of peoples from the central delta, or more distant areas: Bozas, Bambaras, Somono, Marka, Peulh, Sonrai, Sarakole, Dioula, Arabs, Lebanese, etc.). The city is remarkably dynamic

It is dynamic demographically: a preliminary draft of proposals for the general development of Mopti forecast a doubling of the population during the period 1967-1980.

1966	1975	1980	1985
33,052	± 50,000	± 60,000	± 80,000

But it is also dynamic economically, a fact that appears paradoxical when one is familiar with the serious problems now affecting the Malian economy.

This dynamism is based on the richness of the outlying rural areas, which are periodically fertilized by the river's overflow. This provides for:

- flood crops, and mainly rice, since the region contains a third of the country's total land area planted with rice;
- stock raising: with 1 million head of cattle and 1.5 million sheep and goats (1964 figures), the Mopti region has the greatest animal husbandry resources in Mali;
- fishing: 20,000 tons of dried fish and 8,000 to 10,000 of smoked fish are commercialized — in addition to the output

for domestic consumption in Mali and in the neighboring countries (Ivory Coast, Ghana and Upper Volta)

Trade remains Mopti's main activity, primarily traditional trade controlled by African traders: the Dioulas. It is perhaps in the maintenance of traditional commercial links, little affected by the inefficiency of the nationalized commercialization services that we should see the surprising dynamism of Mopti's economy, despite the general crisis the country is experiencing. We should also mention the survival of some remarkable traditional craftsmen (weaving, basket making, pottery, etc.) This branch retains all of its vitality despite growing competition from manufactured products, which are often imported because above all it helps to provide for working-class homes.

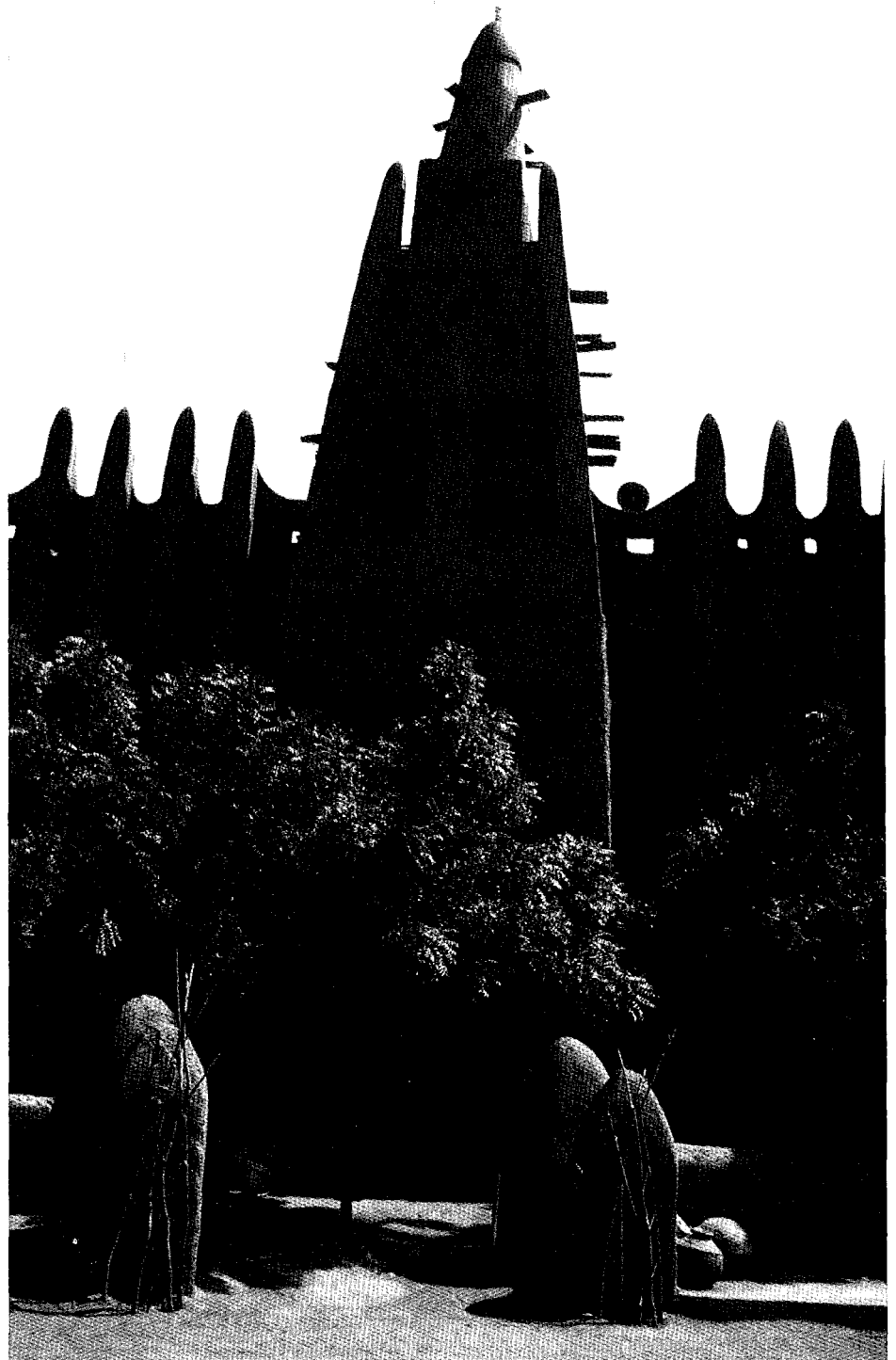
Finally, we must not ignore the regional role of the large-scale development operations (rice, stock raising, etc.), which are in fact feudal enterprises often involving the use of considerable means, sometimes of questionable efficiency, and which escape (despite nominal control) the control of the local authorities. We can discern triple polarity that permeates the economic and social life of Mopti and its region: city government, traditional types of agencies, and development operations, for which it is sometimes difficult to reconcile the interests and the methods of operation.

*The 1967 preliminary proposal for the general development of Mopti*¹⁴

The main problems identified by the preliminary project were as follows:

- the difficulty of finding the land needed for expansion, due to the fact that the city is completely surrounded by water during the greater part of the year;
- overpopulation and the necessity for reducing the population density, which is about 340 people to the hectare on the average;
- upgrading of the old neighborhoods,
- serious shortage of neighborhood services and facilities¹⁵

The proposed measures were classified according to the various urban ensembles:



Entrance to the mosque in Mopti

Photo J J Guibbert



A new hotel in Mopti, made of banco

Photo J J Guibbert

- for the old town, it was a question of restructuring and upgrading while preserving a remarkable architectural context and limiting its extension. This was to be done by the adoption of city planning standards adapted to the very specific case of the city of Mopti, by the creation of a network of indispensable services, and by the improvement of flood protection;
- partial restructuring and upgrading of the business district, which is now saturated;
- development and enlargement of the port area, and extension of the fishing port;
- containing the expansion of the village of Taikiri, located on land that is particularly difficult and expensive to develop;
- the development, in stages, of an extension zone between Charlottville and the dike linking Mopti with Sevare, which would entail the use of heavy equipment for building dikes.

How was all this implemented? According to the Regional Director of City Planning, there has been in the last fifteen years only a very timid beginning to implementation of this preliminary plan. The few operations of urban development carried out were executed without coordination, at the whim of the government companies in the area and without consultation of the local authorities:

- development of the cold storage area near the port by the fishing cooperative, which caused a long conflict with the city government about the fees to be paid for use of public spaces;
- construction of dikes for the development of new rice-growing areas, without paying attention to the urban requirements for ending the isolation of the village of Medina Coura. This gave rise to another conflict concerning the use of a dam-with-bridge for the rice operation (use reserved for the operation itself, or open to the public), which isolates the most distant village from the city center of Mopti, illegal settlements made by a floating population establishing itself in huts made of precarious materials in the main area earmarked for urban expansion;

- a disfigured city center due to private constructions not respecting the remarkable urban landscape of the center of the city and of old Mopti...

Nevertheless, this failure cannot be attributed to substantial diagnostic mistakes that might be contained in the preliminary development plan. Apart from a few differences, the proposed solutions were to be offered again at the end of the session. So what is the origin of this hiatus between the proposals and their application? If certain technical solutions were too expensive for the city of Mopti, it does not seem that the shortcomings of the 1967 preliminary plan should be sought along those lines. The failures come more from a technocratic working method in the design of the document (little concertation among the administrative, economic and social actors) and from a bureaucratic system governing attempts at application (inconsistency between local and regional departments, no stimulation of awareness and involvement of the population groups). Hence the work of the seminar was oriented toward a strategy for the design and application of tools for spatial development. It is now time to sketch out the general lines of our work at Mopti.

A Primary Concern: Participative Urban Development

Systematic Participation of the Economic and Social Actors

The economic and social actors, above all, create the city. Ignoring this fact can lead to great problems. Hence, in accordance with the orientations of the Malian government, the population groups or their representatives were associated with the different stages in the process of analysis, of reflection, and of decision.

At the time of gathering data, special attention was paid to the economic and social dimensions, and quite naturally to the most disadvantaged, to those who very

rarely have the opportunity to express their problems and their suggestions. Thus, in all groups of 2 or 3 people, the participants called on banks, tradesmen and craftsmen of the city — but also visited the compounds in poor districts of Medina Coura or the huts in the swampy areas bordering the Sevre road. The latter, above all others, should benefit from the attention of the government authorities. Their suggestions are important, and ignoring them condemns land development plans to failure, since reality is stronger than administrative decisions. It is these poorer groups that, in being thrown back to the edges of the city, block the application of city planning documents while creating insoluble problems for the future.

During the analysis and decision phases, these economic and social actors were also represented, and then became the spokesmen for the decisions made during the session vis-a-vis their fellow citizens. That is why special attention was paid to the groups: cooperatives, labor unions, women's associations, young people; but also representatives of the traditional organizations *Ton* and *Kari*, which constitute the social network of the working-class districts and of their solidarity. These organizations will later be able to take part in the implementation of the follow-up proposals of the session in the field of group and individual improvement. The traditional organization of the construction workers, famous throughout the region of the bend in the Niger and the holders of the canons of that magnificent Western Sudanese architecture, will make it possible to remove community buildings from the standardizing greyness of concrete, and will lead to creation of a new architecture adapted to the essential needs of the Mopti population groups.

Operational Training: Excess Data, Absence of Strategy

The first step accomplished was to assem-

ble of all the data accumulated in the desks of government officials. This data was disparate in method of collection, in time, and in reliability, but made it possible to economize on large-scale inquiries that precede the majority of city planning operations. We must note that in the case of Mopti, we benefited from the exhaustive inventory of the 1967 preliminary plan, numerous indications of which remained valid. Then there was a systematic discussion with the whole group of government officials, regional and local, which enabled us, going beyond statistics, to get a more exact qualitative idea about the situation. But above all the problem remained: what to do with the data? The 1967 preliminary plan was exemplary in this respect. A mountain of data that brought forth a mouse at the level of execution. A diagnosis, however complete it may be, rarely supplies the keys to a strategy for action.

Thus in the case of the session, some simplified questionnaires were used, oriented toward the identification of the problems and of proposed solutions as a priority matter. The whole set of these naive questions put to the administrative, economic and social actors enabled us to draw up a general recapitulative table of the problems encountered and the solutions put forth by this multitude of urban participants involved.

The general table served as the basis for the drawing up the general lines of a summary master plan for Mopti by a small team composed of national, regional and local technicians, as well as of some foreign participants.

A Creative Step, an Innovative Orientation

A series of tools were used for this purpose. First of all, it was decided to break the routine of a presentation and the awkwardness of working in plenary session. The session broke up at times into small groups:

- groups of 2 or 3 people for discussion

- with the government agencies;
- contact groups of 2 people in the field;
- working groups of 5 to 10 persons for a given subject.

A coordination team ensured circulation of the information, and was also in charge of guaranteeing the unity of the procedure. The latter resulted from the conclusions of the first sessions for exchange of experiences, which were held at Bamako and are presented in the first part of this discussion:

- interdependence of the development of the city and of its region;
- participation of popular organizations in all phases of the summary development plan;
- counting on its own strengths, and promoting the local resources;
- favoring appropriate technologies, economical in use of foreign currency and energy, generating local jobs and incomes, acceptable to the population groups economically and socially, and given to preserving the environment. In a nutshell, placing this plan within the framework of an endogenous and participative eco-development

Finally, a simulation game made it possible to integrate the whole range of data gathered, to find a common denominator among the individual interests; sometimes to make unpopular decisions in the name of group interest and the majority.

The Results

Quite obviously, not all of Mopti's problems could be touched on — much less solved. But some trails were blazed, with the local officials being given the task afterwards of developing them. Some structures for permanent consultation and group management, without which urban management is impossible, were sketched out:

- a methodology for working out some summary schemes for development and city planning for Mali's medium-sized

cities, to be spelled out later by the National City Planning Agency and systematically applied to the other regional capitals;

- the general lines of a summary development scheme for the city of Mopti, to be supplemented under the responsibility of the Regional City Planning Director with the collaboration of a local team consisting of representatives of the local technical departments, the city government and the population groups;
- a project for upgrading the sanitation system that is well adapted to the city of Mopti, which could be carried out with the participation of the population groups and the use of appropriate technologies, based on traditional and preservative knowledge of the environment, and in which UNICEF and the FENU have already displayed some interest

The Mopti session was not without problems, to be sure. It was carried out with extremely limited means, a situation now characterizing the whole range of activity of the Malian government. But the motivation of the national participants, the dynamism of the foreign participants, the quality of the debates and the exemplary cooperation of the Mopti city government seemed to create the conditions required for the proposals put forward, with some limited but judicious outside assistance, to move from the stage of projects to reality.

Reference Notes

¹ ENDA, Environment and Development of the Third World (BP 3370, Dakar, Senegal) is an international, non-governmental organization that carries out training, research and support activities on behalf of grassroots groups

² UNESCO, Division of Human Establishments and of the Socio-Cultural Environment (7 place de Fontenoy, 75007 Paris, France)

³ J P Perrier, J J Guibbert, *Jeux pédagogiques et gestion environnementale en Afrique* (Pedagogical games and environmental management in Africa), ENDA, UNESCO, 1980

⁴ Jorge Feldman, Mario Robirosa, *Stratégies pour l'aménagement des établissements humains* (Strategies for the development of human establishments), METURB 12, ENDA, 1981

⁵ *Avant-projet de l'aménagement général de la ville de Mopti* (Preliminary draft for the general development of the city of Mopti), 3 volumes (Sema, Bamako, Rome, de Weger Spa, 1967)

⁶ Algeria, Benin, Upper Volta, Morocco, Senegal, Togo

⁷ In addition, a visit with commentary to the city of Djenné was set up for the free day in order to make the foreign participants — but also the national ones — more familiar with the performances of traditional Sudanese city planning

⁸ Hedi Eckert, *Villes secondaires, villes moyennes et planification régionale* (Secondary cities, medium-sized cities and regional planning), METURB 16, ENDA, 1981

⁹ J J Guibbert, *Technologies douces pour les villes moyennes* (Soft technologies for the medium-sized cities), ENDA, 1979, mimeo

¹⁰ Mamadou Sylla, *Etude du Plan Directeur d'une ville moyenne au Sénégal: Ziguinchor, capitale régionale de la Casamance* (Study of the master plan of a medium-sized city in Senegal: Ziguinchor, regional capital of the Casamance) METURB 19, ENDA, 1981

¹¹ Mohamed Soumaré, *L'urbanisme au quotidien: la participation des populations à l'aménagement de leur quartier* (Grand Yoff, Dakar) (City planning in daily life: the participation of the population groups in the development of their district (Grand Yoff, Dakar)), METURB 17, ENDA, 1981, and cf. Mr Soumaré's article in the present work

¹² Abdoulaye Deyoko, *Les méthodes de planification urbaine au Mali et les structures de participation populaire en milieu urbain* (The methods of urban planning in Mali and the structures of popular participation in the urban environment), METURB 18, ENDA, 1981

¹³ We should, however, mention the interesting attempts at *banco* construction of the Mopti dispensary (Architect: Ravereau), as well as the construction — certain technical elements of which are open to discussion — of the new Mopti hotel

¹⁴ *Avant-projet de l'aménagement général de la ville de Mopti, op cit*

¹⁵ *Idem, op cit*

*This article incorporates the general ideas of the general report on the session "Tools and methods for environmental planning in medium-sized cities in Africa" (METURB), in the context of a training program for responsible authorities in human settlements, launched by UNESCO and ENDA, Bamako-Mopti, Mali, 1981