Dimitriou, H.T. and Gakenheimer, R. (ed) (2011), Urban Transport in the Developing World. A Handbook of Policy and Practice. Edward Elgar Publishing Limited, UK.

Chapter 9, Xavier Godard, *Poverty and urban mobility: diagnosis toward a new understanding.*

9 Poverty and urban mobility: diagnosis toward a new understanding *Xavier Godard*

INTRODUCTION

The objective of fighting poverty, which has become the priority of development aid is contributed to by work on urban transport in developing countries. The implicit hypothesis, for those concerned with promoting development, was that development was a means to reduce poverty and to satisfy better the basic needs of urban populations, on the condition that benefits would trickle down to all people. As stated by Bourguignon: 'a recurring issue in discussions on development is whether the main focus of development strategies should be placed on growth, on poverty and/or on inequality' (Bourguignon, 2004: 23).

During the 1990s a noticeable evolution in international interests was registered about the so-called developing world. In short, actions against poverty were put centre stage on the agenda of development aid actions. This new approach, promoted in particular by the World Bank which made it its prime objective, led in the 2000s to new funding programmes based on the principle that the fight against poverty should be given priority in return for cancelling or converting some part of the debt of the poorest or most heavily indebted countries.

We could think that the two approaches – poverty alleviation and development – are both the same thing, but they can differ in their logic. Development and economic growth do not mean the same thing, and do not filter through automatically to the whole of the society, as was stated by many experts who placed their trust in the so-called 'trickle-down effects' of economic growth. Sharing the benefits is never an automatic process. According to Bourguignon (2004), many have attempted to analyse the relationships between these three dimensions (poverty, distribution and growth). His own conclusion is that one would need to combine redistribution and growth policies, but focus more on wealth redistribution than on monetary income redistribution. Yet the diversity of contexts and of initial conditions prevents experts from coming up with simple and universal recommendations (ibid.).

In the urban transport sector we need to examine the potential contribution of urban travel facilitation to the above-mentioned goal of poverty

reduction, and to the larger dynamics of development and economic growth. This chapter first discusses whether this focus on 'poverty and urban mobility' comes a little bit too late, and why this may be the case. It then examines the notion of poverty, distinguishing between 'poverty' and 'destitution';¹ and the notion of mobility, distinguishing between 'mobility' and 'accessibility'. Following these conceptual considerations, the discussion looks at the travel conditions of the urban poor and the cost of transport in the household budget, raising the question of public transport affordability. Finally, a number of principles for action in the field of urban transport to contribute to poverty or destitution alleviation will be considered.

This chapter is based mainly on various analyses of African cities conducted by the author (Godard, 2004) or studies in which he has participated in the past. The most recent, conducted for the World Bank in 2003–04 deal with the cases of Conakry (Guinea) (SITRASS, 2004a), and Douala (Cameroon) (SITRASS, 2004b).

LATE INTRODUCTION OF TRANSPORT INTO STRATEGIES AGAINST URBAN POVERTY

The question examined here is whether the objective of poverty reduction is a new priority in urban transport policy-making, and if so, why? Whilst poverty reduction has been an early concern for the World Bank, the link between poverty and transport was only introduced in 1997 (Gannon and Liu, 1997).² Urban poverty has been neglected, as the priority of development aid was for a long time in favour of rural areas and agriculture. This position was influenced by the 'urban bias' thesis which viewed urban dwellers as living from the capture of the rural surplus. The first actions taken in the field of transport were, as a result, as a means to fight poverty in rural areas (for example, through rural road building and access to lowcost transport means), before the importance of urban areas and urbanization processes in development strategies was recognized.

The evolution in the urban transport sector in development is outlined by the document published by the World Bank in 2002 on urban transport strategies, entitled *Cities On the Move*. This was prepared after many years of dialogue with the international community on the subject. This report especially 'links the urban development and transport sector strategies with a strong poverty focus' (World Bank, 2002: xi). As such, its orientation is very different from the equivalent strategy paper published in 1986 (Armstrong-Wright, 1986) which emphasized efficient management, private sector involvement, and reductions in subsidies, competition and reduced regulation.

The action programmes promoted by international funders in general, and the World Bank in particular, have promoted national strategies for reducing poverty introduced at the beginning of the twenty-first century in African countries. Urban transport, however, has only been introduced (rather late in the process) as a potential component in these strategies dealing with poverty reduction. This has been so because within international organizations there seems to have been a difficulty to convince macroeconomists about the potential contribution of transport to poverty reduction; one reason is that mobility is often not considered by such parties as a 'basic need' but as a derived one, as explained below.

「「「「「「」」」」

This is not, however, a new issue. Past research dealt with the subject some time ago, as in the case of the first study on mobility in Quito in the 1980s (see IRT and FLACSO, 1982) or work carried out in India (see Fouracre and Maunder, 1987). But there was no link between these exploratory pieces of research and the much more focused action programmes. Some academics, however, displayed continuous attention to the issue of urban mobility of the poor. Dimitriou, for instance, in a paper presented at the Codatu VI Conference, stressed the importance of urban transport sustainability in the wider problem of poverty. He argued that: 'transportrelated problems among urban low-income groups will be exacerbated by rising transport costs, and the rapid physical growth and spread of cities' (Dimitriou, 1994: 323, 324). In the same conference, Godard concluded that the crux of the problem of development is never-ending poverty, and that the most sustainable factor is also probably poverty, thereby concluding: 'that the mobility of these people is increasingly endangered when policies that entail covering the true cost of public transport by user-paid fares are applied' (Godard, 1994: 15, 16).

On the basis of the above, one can reasonably conclude that the international transport professional community has lagged behind when compared with other sectors (such as housing) in its doctrinarian position towards poverty. The Millennium Development Goals announced by the UN in September 2000 reiterated the claim that the fight against poverty (the first in a list of eight goals) was a major one. The implementation of Millennium Development Goals programmes has subsequently directed attention to many urban services such as education, water supply, sanitation, housing, energy and electricity. Notwithstanding this, transport was not explicitly introduced in the agenda of these programmes.

This difficulty to integrate urban transport into formal strategic actions and efforts for poverty reduction is illustrated by numerous recent Documents of Poverty Reduction Strategy (DPRS): for instance the strategic document of Guinea (République de Guinée, 2002) did not cover urban transport at all.³ In the Senegal DPRS, the theme of urban transport

only represents half a page (République du Senegal DPRS, 2003) of a total of around 60 pages. The urban section of this document only introduced the major actions carried out under the PAMU⁴ – a programme funded mainly by the World Bank, financing the renewal of minibus fleets, urban road construction, and so on. Yet in spite of the findings of studies on the mobility of the urban poor, there was no specific analysis made of the actions needed to fight poverty by improving the travel opportunities of this section of the community. Moreover, the question of affordability of public transport was absent from both the DPRS and PAMU documents. One fears that as a result of such programmes, the access of poor people to public transport will ultimately deteriorate over time, as improvements in transport supply involve an increase in the average fares.

This apparent oversight in thinking with regard to the role of transport in poverty alleviation strategies appears to threaten the ability of the transport sector, notably urban transport, to benefit from development aid funding through debt cancellation and redeployment mechanisms.⁵ Although it must be acknowledged that the path toward poverty reduction through transport is very difficult to achieve.

POVERTY: NUMEROUS DEFINITIONS

Many approaches have been proposed to tackle poverty and help the urban poor, thanks to years of debate amongst development specialists, including economists and sociologists. Yet poverty as a concept is very elusive. According to Winter (2002), Sen (see Sen and Nussbaum, 1993) introduced the notion of 'capabilities' into the concept of poverty,⁶ the expansion of which ultimately provides the basis for the definition of development. The aim here is not to discuss in detail the various conceptualizations of poverty, but instead to consider the main approaches to wealth creation and poverty reduction in a simple manner by drawing from a number of sources (see Bourguignon, 2004; Godard and Diaz Olvera, 2001). These various approaches emphasize different aspects of 'poverty' as follows:

• Absolute poverty – this is a definition of poverty in monetary terms, based on considerations of the available monetary resources/means per person coming from incomes or from transfers. Poverty here is defined in relation to a threshold expressing the resources necessary to meet essential needs (food, housing). This definition can be exemplified by a standard, such as people who do not have more than \$1 per day to live on.

- Relative poverty this definition refers to resource distribution. It applies to the proportion of the population with an income inferior to a particular percentage of the average or median income of the whole population (typically 10 or 20 per cent).
- Human development this indirect measure of poverty is promoted by the United Nations Development Programme (UNDP), which employs the Human Development Index (HDI) as a basis for judging poverty. It is composed of various indicators characterizing living conditions: life expectancy and literacy are introduced here, for example, as well as available monetary resources.
- Access to essential services and opportunities this proxy measure of poverty assesses access to essential services such as water, education, nutrition, health and employment. Such indicators were introduced by the UNDP in 1990 in order to build a Human Poverty Index (HPI). This approach is similar to the HDI but is more focused on access to services as a condition to achieve welfare objectives.
- Social links or social capital these offer additional proxy measure of poverty and welfare. Their use is based on the premise that wealth or poverty is heavily rooted in the social relations that people have (relatives, friends, neighbours), that can lead to different types of solidarity.
- Citizen involvement and empowerment in this context poverty is redefined as being excluded from collective choices, whereas being wealthy is defined as being able to be involved in the choices of a larger community. This approach is included in the set of capabilities which, according to Sen, have to be promoted as an expression of development (Sen and Nussbaum, 1993), and is now supported by the World Bank.

Out of these approaches various methodological debates have arisen, particularly with regard to the measurement of monetary indicators of individual resources.⁷

SOME CRITICAL APPROACHES TO POVERTY

The debate on poverty is by no means confined to the developing world. In fact the increasing poverty which is observed in the richest countries is a paradox that raises many questions about development models. But the notion of poverty itself has to be questioned too. Two sets of critical debates will be discussed here.

The first can be found in sociological analyses which consider that poverty is an inherent dimension in the process of building social

integration: in short, our society needs to identify 'poor groups' as a prerequisite to build its cohesion in the action against poverty. We refer here to the recent analysis proposed by the sociologist Michel Messu (2003), who insists on the 'instrumental distortion' of the discourse about poverty in a game of institutional power, where 'distortion' means categorizing (by income) the identification of the poor before dealing with their socially relevant characteristics. The predominant discourse that considers poverty as an intolerable and exceptional fact to be eradicated from a country, such as France, is actually only stating the inequality in the distribution of wealth which frames our society. Whether we take into account an absolute or a relative threshold, it merely concerns an abstract construct, whereas 'the absolute and vital needs actually are depending on various contexts' (Messu, 2003: 60).

According to Messu, poverty is 'a social and constitutive construct' (Messu, 2003: 44). The poor call for means of solidarity, and it is via the implementation of these means that the sense of community is reinforced and the desire to live together is expressed. This mediation role of poverty alleviation action could be more important than the persona of the poor itself. It can be argued that poverty becomes necessary to society seeking some kind of social cohesion, reflected in the fact that it requires a permanent effort to reduce it. The concept of 'exclusion' is said to suffer from the same criticism in that: 'the notion is vague and confused . . . it becomes a non object for a sociologist whose work begins with the assertion that any society is structured in social groups' (Messu, 2003: 77, 83). This analysis, based on French society, may potentially be transferred fruitfully to developing countries and to the poverty alleviation programmes by international organizations, raising many questions.

The second critical debate comes from analyses dealing with the development-oriented issues forwarded by Majid Rahnema (2003) who introduces an essential distinction between 'poverty' and 'destitution'. He advocates distinguishing between 'poverty', which is considered to have a positive side and is defined as satisfying the basic needs and keeping good social relationships but avoiding superfluous goods; and 'destitution' (French *misère*), which is considered to have a negative side, defined by both the absence of resources to satisfy basic needs and the absence of social relationships and networks which could help provide them.

Poverty may also be seen to represent the state of being free from artificial needs that have been created by society and its economy. This kind of poverty is associated with concerns about social relations, sharing values and the solidarity this offers. It is based upon a vernacular belonging to small communities and partnerships built on exchanges and identical rites. The word 'vernacular', conceptualized by Ivan Illich (1980),⁸ refers

to independent activities, outside of the formal commercial sector, which enable people to satisfy their daily needs. There is a close association between the shift towards a traditional, immobile society and the shift towards a subsistence-based economy (which arises if there is excessive acceptance of the vernacular society).

In Rahnema's view, poverty is valued and should not be resisted. It is deeply rooted in monotheist religions. In Christianity, it is reflected by the expression from the Gospel (Matthew 5:3): 'Blessed are the poor in spirit, for theirs is the kingdom of heaven'. The understanding of poverty, as well as its consequences, has been the subject of arguments throughout Western history. Rahnema gives additional examples and references from Islam. He quotes Iranian Sufism, which gives form to these messages, seeing poverty as a fundamental condition that has been distorted by economics and the economists. It has been transformed into a hegemonic term, void of compassion and completely foreign to the conditions of the millions of individuals it is applied to. The poor, in these terms, are considered merely the beneficiaries of inadequate income, its amount being calculated according to a poverty threshold, with the identity of the poor defined by what they do not possess.

In contrast, the term 'destitution' (misère in French) reflects the destruction of needed social linkages and of the state of material endowment; that means the lack of resources combined with a state of negative dependence. Destitution, according to Rahnema, is then the result of market-led economic development distorting ancient forms of social cohesion without providing an access to resources for everybody. The provocative views of Rahnema raise major criticisms within a wider debate about economic development, considering the seemingly traditional, conservative viewpoint which the author's message carries. However, it introduces an essential distinction – between destitution and poverty – that should help to structure any analysis and help to question the assumptions of any development project. The distinction is thus very relevant to the role played by travel and mobility in reducing poverty, when also referring to destitution. In the following sections, the word 'poverty' will be used when referring to 'destitution' in the sense outlined by Rahnema, in order to make the reader's task easier in spite of the ambiguities referred to above.

MOBILITY AND ACCESSIBILITY

Urban mobility can be defined as the action of moving in order to carry out activities located in urban space. Mobility is the focus of many concepts and approaches that underlie urban transport planning and associated

policy-making which will not be discussed here, as it is assumed that the reader is familiar with them. One does need to appreciate, however, that the classical approach to mobility deals with the simple monitoring of movements. The basic indicator is the number of daily trips per person, whilst other indicators introduce notions of travel time or travel distance. These other approaches integrate the social and economic meaning of mobility: the activities made possible through travelling, the fact of reaching different localities, the activation or maintenance of social linkages, and the experience of the process of movement itself.

Travel is often only considered as the result of the balance between the need to carry out specific activities (that is, related to work, school, visits, food purchases and so on) on the one hand, and on the other hand constraints and costs of access to the places where these activities are carried out. Mobility is not considered as a basic need but as a derived need that depends on the location of dwellers and of their places of activity. Time availability and travel costs are the two main constraints limiting potential urban activities and mobility in the classical perceptions of mobility employed by transport policy-makers, planners and engineers. The presumption here is that a reduction of travel cost generally leads to a growing rate of mobility, but that mobility in itself cannot be a goal. It is also presumed that high levels of mobility can be completely counterproductive if expressed in terms of furthering the places of activity rather than reinforcing the variety of these activities. As stated by Vasconcellos (2001: 221): 'higher mobility does not necessarily represent better living conditions. What matters is the accessibility to desired destinations, which can be obtained with less movement'.

It should consequently be stressed that depending on the perspective taken, travel can be considered either as a value, a development factor, thanks to the activities and exchanges it induces or, on the contrary, an individual and a collective cost, a constraint to be reduced above all if one is concerned with sustainable development and the expansion of motorization on a global scale. The increase in urban motorized mobility rates in developing cities stand in sharp contrast with new environmental protection goals and legislation aimed at the reduction of greenhouse gas emissions.

Notwithstanding the above concerns, the basic premise adopted here is that every person needs to move in space to carry out activities which allow him or her access to at least basic resources and to satisfy basic needs, including social exchanges (Godard, 1998). From this perspective, urban travel is seen as a potential means of freeing people from poverty.⁹ According to Diaz Olvera et al.: 'it is essential to make daily travel easier and cheaper for the poor (to provide access to jobs . . . use of basic facilities

... maintenance of social networks and community based solidarities)' (2008: 2). This message is reinforced by a simple statement made by a woman interviewed in Douala for the SITRASS Study who explained: 'I am now the one in charge of the house so I *need* to move around a lot'.¹⁰

Accessibility is determined by the nature of the relationship between transport supply and the spatial setting of places of activity. If the aim is to make access to urban transport easier and better, as is the case with transport-based anti-poverty strategies, then action has to be based on two levels (Mbara, 2003):

• transport actions to reduce the time and the costs of moving (with location remaining constant); and

• actions to provide infrastructure and basic services close to lowincome residential areas.

These two types of action are confronted with problems of urban planning and governance, given the measures taken by government to try and contain the growth of illegal urban settlements where most of the poor live. Difficult access to housing in urban areas of the developing world leads the poor to unplanned and illegal settlements, usually characterized by poor accessibility. The question which arises is whether one should attempt to legalize these settlements by bringing various services to them, such as water, electricity and roads, at a high collective cost, in contradiction with official urban planning efforts. This suggests that in the short term urban managers and planners (and politicians as well) are faced with very difficult contradictions, which call for compromise solutions in the long term.

However, accessibility is not merely physical, it is multidimensional and every dimension can be an obstacle to the urban poor, as the following dimensions of accessibility suggests:

- Travel time is not a major constraint in itself for the urban poor, but can become one when physical accessibility is problematic or settlements are remote.
- Transport cost represents the classical obstacle for the urban poor in that it can make accessibility unaffordable.
- Cognitive accessibility, for example knowledge of available transport service for illiterate persons faced with written information, is a clear constraint on movement, as are the problems of the ability to negotiate a ticket fare, and other forms of spatial knowledge regarding services.

Finally, the access to urban services additionally depends on the mode of functioning of these services: their queuing and waiting time, the cost of the service, the quality and appropriateness of the service, and so on (see Dimitriou, 1992: 165). This is notably the case for basic services such as health centres and schools, for which some arbitration problems may arise between paying for travel to a rather faraway but free service, and paying for a close but costly service (SITRASS, 2004a, b).

Whilst some basic needs can be catered for or provided at home (for example electricity, water services), other services call for travel whatever the location policy is in terms of services and equipment. These include access to schools, medical and community centres and places of worship in the area. Where urban areas are relatively well equipped with such services, the need for motorized travel is typically low. This has been revealed (see Table 9.1) by the travel survey in Dakar (see Kane and Godard, 2001) which shows that the accessibility of many of the facilities was easy for a significant part of the urban population. This suggests that many deprived people could not be considered 'poor' from the point of view of access to services. This is expressed by both the high level of walking trips and the low level of motorized travel.

THE URBAN TRAVEL CONDITIONS OF THE URBAN POOR

The travel conditions of the urban poor are discussed and illustrated here on the basis of data from Conakry and Douala drawn from the SITRASS Study (2004a, b).¹¹ The mobility indicators of the poor (that is, the average daily trips per person) reveal no specific results for the poor when one includes walking. They differ, however, when considering only mechanized trips (see Tables 9.2 and 9.3), with rates of 0.8 and 1.0 daily for the poor in Conakry and Douala against 1.2 and 1.9 for the non-poor. Gender accentuates these differences, with rates of 0.7 trips for poor women as against 1.4 for non-poor men in Conakry; and 0.8 against 2.1 in Douala.

The average walking trip time in these places is reasonable (around 15 minutes), whilst the motorized trip time is high (40–44 minutes in Conakry and 33–37 minutes in Douala), with these trip times being slightly higher for the poor. These averages can, however, be deceptive as shown by the share of walking trips that take more than 30 minutes. These trips represent more than 10 per cent for the poor in each city. When one considers the bad walking conditions in each settlement (there are very few pedestrian facilities, especially in the peripheral areas), this reveals very difficult

Service		Distance	e of access	to service		Time of access to service			vice	Mode of transport	
	< 100 m	100 to 500 m	500 m to 1 km	1–5 km	> 5 km	< 10 min.	10-30 min.	3060 min.	> 1 hour	Walking	Motorized
Telecom shop	67.4	27.6	1.7	2.7	0.2	94.9	3.6	1.1	0.1	98.1	1.5
Koranic school	48.3	40.5	5.5	2	1.4	87	7.6	0.8	0	93.5	1.8
Children school	23.2	47.8	14.5	10.4	3.3	74	16.8	4.3	0.4	86.4	9.2
Primary school	20.8	56.8	16.2	4.6	1.1	71	25.9	2.1	0.4	93.9	5,4
Market	23.7	38.1	19.3	17.7	1	66	30.4	2.6	0.6	85.4	14.2
Health centre	11.4	40.5	25.2	19.4	3	58.5	37.6	2.9	0.5	75.3	24.2
Secondary school	7.3	33.6	24.6	27.9	5.4	39.3	44.3	10.9	1.4	73.9	21.9
Post office	3.6	13.8	15.7	48.4	16.9	41.3	49.3	6.6	0.6	46	51.8
High school	2.8	5.6	8.2	25.2	56	13.5	32.9	21.5	11.2	22	56.8
Specialized health centre	2.8	6.5	10.3	31.9	44.4	23.2	35.9	22.9	2.9	21.9	63.1

Table 9.1The accessibility of urban services in Dakar (by % of the population)

Source: Kane and Godard (2001) based on Dakar Household Survey, 2000.

City	Group	Sedentarity rate* (%)	Travel rate	Travel time budget (minutes)			
				Walking	Mechanized	Total	
Conakry	Student	8	4.0	48	27	75	
•	Employed woman	10	3.9	50	29	79	
	Unemployed woman	ı 21	3.0	33	25	58	
	Employed man	5	4.3	53	70	124	
	Unemployed man	23	3.4	34	34	68	
Douala	Student	2	5.1	61	20	82	
	Employed woman	10	4.2	42	31	73	
	Unemployed woman	u 22	3.3	31	22	54	
	Employed man	3	4.8	43	109	152	
	Unemployed man	21	3.5	39	_22	60	

Table 9.2Overall travel characteristics of the poor in Conakry and
Douala, 2003

Note: * The 'sedentarity' rate is the proportion of people who did not travel during the surveyed day.

Source: SITRASS (2004a, b).

City	C	onakry	Douala		
	Poor	Non-poor	Poor	Non-poor	
Overall travel rate	3.8	3.9	4.4	4.8	
Men	4.1	4.2	4.7	4.8	
Women	3.5	3.6	4.0	4.3	
Percentage walking	78%	61%	77%	52%	
Percentage walking trips of more than 30 minutes	11%	9%	13%	4%	
Motorized travel rate	0.8	1.2	1.0	1.9	
Men	1	1.4	1.2	2.1	
Women	0.7	1	0.8	1.5	

Table 9.3Daily travel rates for the poor and non-poor in Conakry and
Douala, 2003

Source: SITRASS (2004a, b).

City		-	e trip time inutes)	Daily travel time budget (minutes)		
		Walking	Mechanized	Walking	Mechanized	Total
Conakry	Non-poor	18	40	42	61	103
	Poor	15	44	44	36	80
Douala	Non-poor	11	33	28	77	105
	Poor	14	37	46	37	84

 Table 9.4
 Average travel time budget in Conakry and Douala, 2003

Source: SITRASS (2004a, b).

travel conditions for the urban poor whose trips are made almost 80 per cent on foot.

It is not sufficient to consider only the travel time of each trip, as it can be meaningful to have a view of the daily travel time budget. This budget is high across all groups, but it is higher for the non-poor than for the poor, which results from a higher rate of mobility (Table 9.4). However, this difference does not hold true when one considers only the category of employed men: the travel time budget is very high for poor employed men (124 minutes in Conakry, 154 minutes in Douala). This means that access to employment is paid for by the poor at a high cost in terms of travel time¹² (and often also in fares, see below).

SOCIAL CAPITAL AND TRAVEL

The social capital dimension is essential for the analysis, since the richness of this capital is dependent on physical meetings and the need to travel, in one way or another. This is consistent with the views proposed by Rahnema (2003) in his notion of a vernacular society and the importance of community solidarity.

Networks of social relations may be confined within the living locality and delimited by walking; however, the nature of the city and the urban growth widen the scale of needed social links, implying the necessary use of motorized means on many occasions. This type of travel may be considered as 'non-essential' if we have a restrictive perspective on society that is focused only on economic productivity and work is within walking distance. If we have a perspective, however, that is turned more toward aspirations of social cohesion and social exchanges, the link between travel and social capital becomes critical. This can be illustrated by the example

of the Dakar widow living in poverty with many children, analysed by Werner (cited in Diaz Olvera and Godard, 2002: 253) who identifies four types of social links bearing different kinds of support that are essentially maintained by long walking trips. He compares them to concentric circles with the human individual at their centre, whereby:

- The main network is scattered in the city and in other places, as it is composed of close family relations and friends who support the individual emotionally and materially on a long-term basis and who can be always relied upon.
- The secondary network, however, is spatially very close and includes the neighbours who can bring immediate support.
- The incidental network consists of relationships as a customer within the whole city.
- The latent network consists of relationships that are potential for unanalysed reasons, and set within the whole city.

The crisis that exists between the modes of transport on offer and the high costs of motorized travel may contribute to reduce the reality of these social networks if the networks need to be maintained or extended by visits to the members of these networks, forcing up urban travel. Monetary poverty is therefore more and more an obstacle to keeping this network alive; it can lead to the loss or breakdown of key social networks and the shift to a situation of destitution (as defined above).

IMPORTANCE OF TRANSPORT IN THE HOUSEHOLD'S BUDGET

Consideration of the monetary dimensions of poverty is the classic approach to poverty alleviation (based by now on a great amount of accumulated knowledge). Whether it is appropriate to go beyond this dimension – that is, to take into account the other aspects of poverty and destitution discussed earlier, and to what extent – is a significant issue. Considering that urban populations are integrated within the economic systems of monetary exchange, the availability of financial resources to pay for the cost of urban transport becomes a major issue. Research on the share of transport costs in household expenditure confirms this, and the tension between travel needs and the ability to pay for the costs of this travel. 'Affordability' is defined by Carruthers et al. (2005: 1, 2) as: 'the ability to purchase and make necessary journeys to work, school, health and other social services, and make visits to other family

	Bottom Quintile 1	Quintile 2	Quintile 3	Quintile 4	Top Quintile 5	Total
Dakar	4.2	5.1	5.5	7.8	12.1	8.2
Ouagadougou	5.9	9.7	11.9	13.7	21.8	15.6

Table 9.5Share of household budget consumed by transport expenses in
Dakar and Ouagadougou, 1996

Source: Godard (2002a).

members or urgent other journeys without having to curtail other essential activities'.¹³

The share of transport expenditure in the household budget varies according to cities, and to social groups within the settlements under scrutiny. An important dimension to investigate here is the difference in patterns between the 'poorest' and the 'richest'. An issue is whether the share of the household budget dedicated to transport is lower or higher among each respective group. From the African cities reviewed in this chapter one may note contrasting results showing that there is actually no simple relationship between the share of household budget spent on transport expenses and the income level. The data drawn from consumer surveys conducted in Dakar and Ouagadougou suggest that transport occupies a low share of the household budget among the poorest. This rises from the bottom quintile to the top quintile (see Table 9.5). The share of the biggest single budget line, food, decreases with rising quintiles. This type of data supports the view of many economists who neglect the transport sector in their strategy of poverty reduction: transport does not seem a priority.

Figures drawn from sources other than those already cited convey a very different message. In a study of Buenos Aires, the transport share is decreasing from the bottom quintile to the top (see Table 9.6). A similar but less pronounced trend was registered in Mumbai, where the first quintile has a higher share than the other quintiles (see Table 9.7). In other African cities, one can also find cases where the weight of transport on the household budget is very heavy for the urban poor – on average around 20 to 25 per cent – and more important for people who live in areas with low accessibility (see Table 9.8).

The observed variations depend very much on the role of walking in travel patterns. By definition, walking is free of charge. Various thresholds of the user cost between the three principal modes of transport have been established according to a hierarchy yielding only partly comparable measures. These are as follows:

Income range	Average household income per week in US\$	Average family expenditure on travel to work per week in US\$	Per cent of income spent of travel to work	
Bottom quintile 1	211.2	66.8	31.6	
Quintile 2	449.2	107.8	24.0	
Quintile 3	564.1	86.4	15.3	
Quintile 4	902.4	96.5	10.7	
Top quintile 5	1748.7	149.0	8.5	
Average	833.5	106.5	12.8	

Table 9.6 Expenditure on travel to work, Buenos Aires, 2002

Source: Carruthers et al. (2005).

Table 9.7 Expenditure and income share on transport in Mumbai, 2004

Units in thousands of Indian rupees	Monthly income below Rp5k	Monthly income Rp5–7.5k	Monthly income Rp7.5–10k	Monthly income Rp10-20k	Monthly income >Rp20k	Average monthly income
Expenditure on bus	43	49	53	67	65	52
Expenditure on rail	25	31	40	53	72	38
Expenditure on taxi	27	33	43	78	100	46
Expenditure on fuel	13	33	52	134	378	71
Expenditure on maintenance and other	2	6	13	33	92	17
Total	110	153	201	365	707	224
Share	14.9%	9.6%	9.4%	10.3%	9.2%	10.2%

Source: Carruthers et al. (2005).

- Walking. This presents no cost, but for long-distance trips this means of travel is problematic because of its low speed, insufficient supporting infrastructure, the fatigue generated and numerous other obstacles.
- Public transport. This mode of transport takes place at moderate cost in some cities; it is more costly in others, with various modes

Urban area of dwelling	Annual household income (US\$)*	Annual transport expenditure (US\$)	Share of househol income spend on public transport (%)	
Centre	960	152	15.9	
First periphery	780	151	19.4	
Second periphery	716	144	20.2	
Third periphery	898	184	20.4	
Accessible areas	900	154	17.0	
Isolated areas	768	158	20.5	

Table 9.8Share of transport expenditure in budget of poor households in
Conakry, 2003

Note: * Revenues and expenses are converted from Guinean francs to US dollars on the basis of the official rate of 2000 GF in January 2004 (parallel market change rate was approximately 2400 GF).

Source: SITRASS (2004a).

(bus, minibus, etc.) having different fare structures. Minibuses can be cheaper than the normal bus (see Table 9.9) but their costs can, however, still prove unbearable on a regular basis for the poorest (see the discussion on the affordability index below).

• Individual transport. Higher costs are associated with these means of travel. Such modes are typically not really accessible to the urban poor, except for bicycles and sometimes motorcycles (as observed in Ouagadougou, the capital of Burkina Faso).

Various questions may be raised with regard to the monetary approach. These, in particular, include concerns as to whether:

- The analyses are distorted by the underestimation of household incomes as measured in the surveys.
- The poor are in reality so poor.
- The expenditure on transport is not as highly underestimated as has been observed in other household surveys in some African cities (see Godard, 2001).
- There is a systematic bias in such surveys. The part of the household budget spent on travel expenditure is often neglected by the interviewees as the interviewers tend to focus more on other expenditure such as on food, health and housing.

Mode	Source		Mode	Source	
	Systra Study (1998)	Emtsu Study (2000)		Systra Study (1998)	Emtsu Study (2000)
Bus Sotrac	181	173	Metered taxi	864	663
PTB (urban train)	91	147	Shared taxi	153	157
Car rapide (minibus)	99	100	Clandestine taxi	287	203
Ndiaga Ndiaye (minibus)	120	154	calèche/charrette	114	462

Table 9.9User cost of a trip depending on the means of transport used in
Dakar

Note: All costs are quoted in local currency (Franc CFA).

Source: Godard (2002a).

These questions, combined with the high cost of implementing such household travel surveys, pose many difficulties and, according to Caruthers, call for an easier survey approach. One such approach is the use of an affordability index that can be calculated for a city. This is arrived at on the basis of the number of necessary trips multiplied by the average cost per trip, divided by the average per capita income for the group, expressed as a percentage. The approach is very useful for a diagnosis of the situation in cities where no household survey is available, and was used by the author in 2000 for the study of poverty for the World Bank (Godard and Diaz Olvera, 2000 [2002]).

The affordability index values provided in Table 9.10 reveal huge differences between the cities under scrutiny. At one extreme, São Paulo and Rio are faced with unbearable situations, with indexes of 107 and 63 per cent, respectively. At the other extreme, Bangkok and Cairo have a surprisingly low index, explained by reasons related to their very different contexts. The explanation for this is the very low public transport fare level in Bangkok and Cairo associated with the absence of extreme poverty in the lower quintile. While this approach is very useful, it has its own limitations due to the simplified nature of the indicators employed and to the often questionable quality of available statistics. It therefore cannot really replace the need for a more precise analysis of actual observed transport expenditure of the household budget undertaken by household surveys, in spite of their respective inherent statistical difficulties and biases.

City	Per	Bottom quintile	Fare for	Affordability index		
	capita income US\$ PPP	income as percentage of average	10km travel (US cents PPP)	Average	Bottom quintile as %	
Bangkok	20 386	31	32.2	1	4	
Buenos Aires	15493	15.5	87.6	4	26	
Cairo	7117	43	26.1	3	6	
Cape Town	14452	10	75.8	4	38	
Guangzhou	9165	30	55.1	4	14	
Manila	9757	27	63.0	5	17	
Mexico	9820	15.5	39.3	3	19	
Mumbai	8 5 8 5	41	112.2	9	23	
Rio de Janeiro	14325	10	125.4	6	63	
São Paulo	8732	10	130.1	11	107	

Table 9.10Affordability index values for the bottom quintile in a sample
of cities*

Note: * This index is calculated on the basis of 60 monthly trips and 12 months.

Source: Carruthers et al. (2005).

THE EMPLOYMENT DIMENSION

One of the main features of conventional poverty reduction strategies is to make access to places of employment easier and more affordable. This goal reflects the priority given to helping the urban poor receive the monetary resources they need to fulfil their needs. As summarized by the World Bank (2002: 25): 'the poor people's inability to access jobs and services is an important element of the social exclusion that defines urban poverty'. Another essential aspect of the link between transport and poverty is the employment the transport sector itself may offer to the poor. The opportunity of jobs in the urban transport sector can be a way for many urban poor to generate resources and build a path towards social inclusion.

Urban transport – in particular small-size operators and paratransit owners – is a great purveyor of jobs in developing cities (see Table 9.11). Jobs created of this kind can be numerous as they typically rely on vehicles of low capacity for a constant passenger demand. This especially results in a high potential for jobs in self-employed transport modes, with employment access adequate for people without qualifications. This activity sector further contributes significantly to the fight against poverty by encouraging integration, thanks to the role it plays in offering employment

	Abidjan* 1998	Conakry** 2004	Cotonou*** 2000	Dakar*** 2000	Douala** 2004
Motorcycle taxis fleet			60 000		22 000
Taxis fleet	13 200	5000-6000	na	12000	6000-7000
Minibus fleet	2 700	1 200-1 500	na	4 0 0 0	300-400
Direct employments	37 000	20 000	60 000	28 000	43 000

Table 9.11 Estimates of paratransit employment in some African cities

Sources: * Duprez (2002); ** SITRASS (2004a, b); *** Godard (2002a).

to the young unemployed, often migrants from rural areas. Such jobs include positions as vehicle drivers, conductors, and sometimes on-thebeat *coxers* who help to rustle up potential passengers. Their number is estimated at about 10000 in cities like Dakar or Abidjan, and may rise to more than 50000 or 60000 in Cotonou thanks to motorcycle taxis.

The working conditions in the urban transport sector are frequently criticized for bearing many disadvantages, explained by good but not completely convincing reasons. The sector is associated with poor direct wages; no social protection; hard and tiring activity involving long daily work hours; exposure to extreme levels of pollution; and to traffic accidents as a result of widespread unsafe driving behaviour (specially for motorcycle taxis).

Having acknowledged these poor working conditions, we should not lose sight of the primary goal of poverty reduction initiatives, which is to offer remunerated activities and a form of social integration for the poor. In this regard, addressing these poor working conditions is probably best seen as a second step contributing towards an improvement of the employment conditions in this sector, and should not argue towards the suppression of jobs using the pretext of poor working conditions. This remains a truly complex and ongoing issue in urban public transport systems of the developing world.

To enhance both employment opportunities and public transport operations, industrial training for the newly employed (as well as those already employed) has become critical to the evolution in this sector. Employment policy must, however, be controlled to avoid the increase in employment becoming excessive and non-productive, thereby undermining organization efforts of the transport sector.

An approach to capacity-building based solely on a dialogue with driver or vehicle owner unions risks being distorted by giving too much

weight to the less qualified operators in the name of the principle of equality of access to employment. This issue is one of the most common when attempting to organize the urban transport sector, as existing organization development attempts often lead to the exclusion of some actors that are unable to respect the internally based rules of the organization.

Finally, one should not forget that alongside the small-size bus operators and paratransit owners, public transport companies are also potentially very important sources of employment for low-income earners, in spite of the fact that the jobs they offer tend to be more difficult to get for the poorest because of required literacy and professional skills.

WHAT TYPE OF ACTION?¹⁴

There is a difficulty in designing action programmes for urban transport devoted only to poverty alleviation as many separate skill requirements characterize the urban transport system and every urban situation has its own specificities. For each possible action targeting the poor (areas to serve, modes to promote, persons and systems to subsidize, and so on), the outcomes need to be judged by considering a mix of the following criteria:

- The poor who benefit from the action. The identification of the poor on a purely monetary basis is not an easy task.
- The poor who do not benefit from the action. If their share of the outcomes of the action is high, the target is not achieved. For instance, the poor are mostly excluded from public transport which is supported by the public authorities.
- The non-poor who benefit from the action. If their share of the outcomes of the action is also high, there is a reverse redistributive effect. This is often the case when subsidies are given to a bus company.

Another difficulty is the need to clarify the nature of public transport policy for a city as many objectives are often assigned to it. One needs to know, in particular, how to combine the objective of facilitating the urban travel of the poor and the objective of attracting potential users of the private car to public transport, simultaneously. These two objectives are often both on the government's agenda; however they do not involve the same kind of solutions in terms of quality of service and of cost (Mitric, 2008).

In spite of these difficulties, actions toward alleviating poverty through urban transport initiatives still have to be formulated, designed and

implemented. In so doing, it may be more helpful to think about inflexions¹⁵ in comprehensive programmes of urban transport improvement rather than to design specific programmes dealing only with the travel needs of the urban poor. A whole set of possible actions can be considered in order to address poverty – actions that are aimed at the poor but which can benefit other social groups as well. These are discussed below.

Promoting a Multimodal Approach

Public service urban transport providers have long been considered accessible to the whole population – as much to the poor as to the better-off. This consideration is possibly less true in African cities, as the poorest there have often had difficulties in accessing public bus company services on affordability grounds, as well as in physical terms, or sometimes even for cultural reasons. The recent shift towards a new generation of urban public transport and public infrastructure investors worldwide – in an effort by governments and international development agencies to become less dependent on public (state or municipal) funding – will accentuate this problem since the level of fares that is typically necessary to achieve full cost recovery will be so high as to exclude urban poor users, who as a result will merely be occasional travellers at best.

Lessons from the observation of transport systems in many African cities point to the existence of a multiplicity of types of operators involved in meeting the majority of travel needs. While this is not a handicap in itself, the balance between these varieties of operators is not stable and can generate additional costs if not well regulated and collectively managed. A multimodal system¹⁶ involving small companies thus seems necessary to satisfy at least partially the travel needs of the urban poor, since the supply offered by large companies often cannot or does not satisfy such needs. This is because, for example, they (bus companies in particular) cannot serve peripheral areas without paved roads, while minibuses or shared taxis can. The diversity and the adaptability of small-size operators thus helps improve the travel lot of the urban poor, despite the many drawbacks such as fare segments of routes that can multiply the cost of travel by two or three times.

An interesting example of the situation described above can be found in Abidjan (Duprez, 2002), where several modes coexist. The Sotra bus company – which is still in operation despite the financial crisis it has long been facing – suffered its share of the public transit market decrease for many years during the 1990s, and has probably suffered even further decline since 2002. Minibuses (called *gbakas*) which are very present on the ground play a critical role, especially in the large peripheral areas of

Abobo and Yopougon where about 1 million inhabitants live. Shared taxis (*woro-woros*) also operate both inside each municipality and outside the authorized limits. It is ironic that the main mode used by the urban poor – because the supply of formal bus public transport is more adapted to travel needs inside municipalities – has fares that are much higher than those of the formal bus companies.

Case for Walking and Non-motorized Transport

Walking is the principal means of movement in African cities. It can reach very high levels, as in the case of Dakar, where walking represented 72 per cent of all trips in 2000. The proportion of persons who walk is understandably higher amongst the poor, who only very occasionally use motorized means of transport. Walking conditions are, furthermore, deteriorating in most African cities. This calls for urgent essential action to be taken by the public authorities to ease pedestrian movement via a broad set of low-cost measures, which in reality only require a minimum of specialized knowledge and dialogue (Diaz Olvera et al., 2002; de Langen and Tembele, 2001).

Cycling is not very common in African cities, with some exceptions. Cycling should be made easier, especially where it is already practised such as in Ouagadougou (Burkina Faso), so as to promote sustainable development, among other things. While cycling should be encouraged in Africa, its image is not yet very good as is noticeable in places such as Dakar. First steps to encourage cycling, however, need not involve the creation of cycle paths, but merely the establishment of a hierarchy of roads in order to make the use of cycles safer. Many low-cost actions can be implemented which focus on both walking and cycling facilities, especially in poorly equipped areas.¹⁷ Some actions that can explicitly support the introduction of bicycles include government measures to lower or suppress import taxes on bicycles, a matter that has been debated in many countries.¹⁸

In Africa, the image of poverty associated with the bicycle seems to be at the heart of the matter. An interview conducted in Ouagadougou some years ago (see Cusset, 1995: 66) provides an invaluable illustration of this. Here an interviewee claimed: 'if a man leaves his motorbike for a bike . . . people will try to find out if he is indebted . . . If you are an employee, people will try to find out if you have had a professional misconduct' (and are banned from driving a motor vehicle). In the event neither of these explanations are accepted, the interviewee went on to claim that people would then wish to explore the person's mental state, and: 'If it is confirmed that you are *not* mentally sick, people will finally say: he is trying to show-off or somehow has a desire to become poor.'

This statement was surprisingly made in Ouagadougou – a city which has experienced a very high rate of cycle use in recent years. The implication of the above statement is that those of the urban poor who would want to use a bicycle as an efficient and cheap mode of travel will hesitate to do so, because they do not wish to be categorized as poor. This cultural dimension perhaps explains a little bit better why bicycle use is so limited in African cities.

Servicing the Peripheral and Poor Areas, and the Future of Road Transport

Even if one can identify numerous 'mixed' urban areas (in terms of household wealth) in many cities, some peripheral areas are characterized by a high concentration of very poor families. Because of rapid urbanization, the location of the poor in peripheral areas is common, highly problematic and a product of a complex dynamic process over time which should not be interpreted in too simplistic a way. Yet when urban renewal policies are carried out, with a focus on central and well-served areas for the benefit of middle or upper classes, they clearly bear with them the risk of accentuating the problems of accessibility of the urban poor (Barter and Williams, 2002).

The first action to be undertaken is thus to improve the accessibility of low-income housing areas through adequate-quality roads and space for non-motorized movement. The design of such infrastructure should be creatively thought through; for example, decisions need to be made on whether to prioritize the traffic of shared motorized taxis over bus traffic. Short-term actions must be set within longer-term strategic actions. Pedestrian facilities also need to be provided to connect peripheral areas better. The implementation of such infrastructure programmes to assist the urban poor is not easy, as was observed in Conakry where road programmes were based on labour-intensive methods of construction (see SITRASS, 2004a). In many cities, local decision-makers instead tend to make the case for large and costly road investments, even though some lower-cost improvements to roads would also make a lot of sense.

Basic Action is Always Good

The cost and productivity of urban transport systems, urban mobility and urban access to basic needs are the crux of the urban transport problem. How to increase productivity without reducing the supply of public transport services, and how to decrease the cost of fares, thereby making public transport more affordable, are also critical. Actions designed to enhance urban transport productivity as a whole, rather than for privileged groups,

- * などのであるまであるまであるよう。 第二世界のディー・小学校のなどのないない。 いちょうちんのいい、 したののである。 いちょう

are also critical. However, one is faced again with the possibility of implementing measures which will benefit the transport system as a whole but are not necessarily relevant to the fight against poverty. As illustrated by Mitric (2008), the public transport policy may focus either or private car users (quality of service oriented) or on poor users (accessibility and fares oriented): the necessary actions which are involved by these goals are very different. We need to ensure that gains in productivity feed back into a lowering of the cost paid by the poorest users. Such productivity gains are more often than not captured by the owners of vehicles rather than by travellers by non-motorized modes.

It is clear from the preceding discussion that not all modes of public transport are equally accessible to the poor for many reasons. Actions to improve productivity must rely on a multimodal system which includes many components and modes (such as shared taxis, minibuses operating on a self-employed basis) which can be integrated within a wider scheme composed of company-operated buses, and higher-capacity means such as bus rapid transit (BRT) services and even more high-capacity rail services. Gauging the weakness of the public transport supply in the poorest areas, it appears necessary to establish minimum efforts (and standards) for low-cost transport provision (Koster and de Langen, 2001) at affordable levels.

Organization of the Transport Sector and the Need for an Overarching Organizing Management Authority

The case has already been made that actions to meet the travel needs of the urban poor have to be part of a wider set of interventions dealing with, among other things, roads, transport supply in isolated areas, a variety of public transport operators, levels of fares, operator productivity levels and so on. In that regard it is necessary to set up a structure coordinating these multiple actions which are usually under the responsibility of many different public agencies. This is why the poverty reduction strategy is one supplementary reason to call for the creation of an overarching transport management authority. Organizing a multimodal transport system requires setting up a hierarchy of routes with transfer points that shape the public transport network, and issuing permits to operate in different zones or routes. To be efficient, such an authority must cover the whole transport system, including paratransit. Such authorities have already been set up in some African cities (Godard, 2002a), as the following discussion suggests:

• Cetud, in Dakar, was created in 1997. This was done on the basis of the reform supported by the World Bank. It works with many

components of the transport system but has not yet been successful in implementing a real reform of the sector. It has no real decisionmaking powers, and the issuing of permits for minibuses or taxis remains the responsibility of the Minister of Transport.

• Agetu in Abidjan was created in 2000. It has faced difficulties in launching its activities, due to a conflict between the state and the communes over control of the revenues generated from the yearly taxes paid by the operators managed by Agetu.

These experiences demonstrate the great difficulties that such authorities confront when seeking to take proactive action. They should not, however, invalidate attempts towards organizational and institutional reforms of the urban transport sector. An ongoing issue in seeking this outcome is the need to clarify what the goals and competences of the organizing authority are, for often the fight against poverty does not seem to be a part of this mandate.

Direct Measures on Fares

There is a degree of scepticism with regard to the efficiency of direct measures supposedly benefiting the poor. This is because, among other things, reduced public transport fares often benefit the middle classes rather than the poor, because the poor still cannot afford the fares even when they are reduced. The usual approach in developed countries consists of proposing some reduced or free rates to poor or disadvantaged groups, which are the beneficiaries of various subsidies (for example in France the 'minimum integration income' or unemployment benefits or elderly allowance). This approach is rooted in the pursuit of social cohesion and the fight against exclusion rather than the fight against poverty.

Such an approach seems barely practical in African cities, as it is based on a public transport supply well controlled by the authorities, and relies on a complex administrative system of monitoring individual incomes and resources for targeted people. By contrast, with the formal economy of developed countries, African societies rely mainly on informal activities. Salaried employees are a minority within the active workforce. This means that only the formally identified low-income groups, such as students, state employees and pupils can claim such reduced fares, which is insufficient. These groups are actually not the poorest – which of course is not a reason for not helping them, but they should not misrepresent the urban poor. A more enlightened and global way of thinking should be applied to this matter. A crucial issue is to define the share of the non-poor who will benefit from this type of measure even though they are not targeted, and

to define the share of the poor who will not benefit because they have no easy access to formal public transport.

Other forms of indirect action may have a more noticeable effect; mainly those that rely on a rating (tariff) structure. If the poor are more and more pushed out or displaced towards peripheral areas (as is the case), it means that a flat rate on the overall urban transport network would evidently be beneficial to them. One should, however, be careful in applying such generic principles without detailed analysis, since the context varies from one city to another. The real terms of cross-subsidy which operates within any rating policy have to be analysed.

CONCLUSIONS

Whatever definition of poverty we choose to employ, urban travel transport is a major potential component of a strategy to eradicate poverty. This has long been neglected by economists and other development experts, including transportation specialists, who have given priority to literacy, water supply and health measures but have not addressed the mobility and accessibility needs of the urban poor.

Mobility is a prerequisite of physical access to schools, health and community centres and places of employment. The design of specific transport actions to promote the lot of the urban poor is not easy and cannot be expressed only by a reduced set of indicators, as such actions require an intimate appreciation of the many interlinkages. Because mobility is not an end in itself, it is necessary to integrate the location of activities into the analysis of the transport needs of the urban poor, and thus take into account the interplay between transport and urbanization patterns. This statement is not very original, but it needs to be stressed again and again.

If we refer again to the distinction between poverty and destitution, a possible recommendation would be that transport policies intended to address the movement needs of the urban poor should ensure a minimum standard of mobility, allowing the fulfilment of basic needs and supporting the fight against destitution, whilst simultaneously maintaining existing social networks. The reality of the urbanization process, however, means that travel conditions should be improved at a larger scale than the immediate environment reachable on foot. This suggests that motorized mobility remains an imperative to foster better access to jobs or to maintain a social network, whatever the quality of infrastructure in residential areas.

Strategies for the enhancement of public transport and non-motorized movement facilities have to take into account the issue of affordability at both the individual and the collective levels. They also need to encourage multimodal transport management systems in which paratransit coexists with transport supplied by large enterprises. Whether this leads to the spiral of 'more mobility, more monetary resources for more consumption of non-basic goods', rather than sustainable outcomes, is ultimately a choice of governance.

In conclusion, it is important to stress that the difficulties and possible misunderstandings raised by the tensions between mobility and accessibility, and between poverty and destitution, have not been completely overcome. They are instead inherent to the controversial perspectives on the concept of 'development'. The importance of the poverty theme in formal urban transport policy objectives includes, especially, the risk that formal processes of negotiation between development agencies and transport policy-makers in developing countries can be counterproductive to serving the needs of the poor, and establishing where and when these needs are to be met in priority.

NOTES

- 1. 'Destitution' here is a translation from the French word *misère*. It is a term used to describe a condition worse than 'poverty' where even the basics for daily life are deficient.
- 2. In the same year (1997), UN-Habitat organized in Florence (Italy) a conference on urban poverty, including a focus on access to transport among various themes.
- 3. A revised version prepared in 2004 introduced this concern following the results of the SITRASS Study a study produced by the French International Society for Transport in Sub-Saharan Africa.
- 4. Programme d'Amélioration de la Mobilité Urbaine (Programme for Improvement of Urban Mobility).
- 5. This point was made by Elong Mbassi from the Municipal Development Programme for African cities, in a round table meeting at the Codatu X conference in Lomé (Godard, 2002b).
- 6. Capability is viewed as the positive freedom 'to be' and 'to do something'.
- 7. See Diaz Olvera et al. (2008) on the methodological questions of the estimation of transport expenditures and household revenues.
- 8. Illich (1980) also introduced the neologism of 'conviviality' to designate the quality of social interaction.
- 9. This is well expressed by the title of a recent book by Le Breton (2005): Bouger pour s'en sortir. Mobilité quotidienne et intégration sociale, which can be translated as: 'Being mobile in order to get out of difficulties. Daily mobility and social integration'.
- 10. Unpublished interview.
- 11. Similar analyses on Eastern Africa cases can be found in J. Howe (2000).
- 12. Amongst the variety of data dealing with this topic in cities worldwide, the example of Karachi gives the same kind of figure with 65 per cent of the home-work travel budgets of two hours and more, and 15 per cent of four hours and more (Sohail, 2001).
- 13. One can also find some elements of discussion in Mitric and Carruthers (2005).
- 14. This section is partly based on the conclusions of the SITRASS Study report of Conakry and Douala to which the author contributed (see SITRASS, 2004a, b).
- 15. 'Inflexion' here means giving a stronger weight to the consideration of the travel needs of the poor without exclusivity.

- 16. This is a system that actively seeks complementarities between individual modes and public modes, paratransit and formal enterprises, and buses and mass transport by rail or bus rapid transit (BRT).
- 17. See the manual prepared by M. de Langen and R. Tembele (2001), or the guide prepared by Setty Pendakur (2005) for the World Bank based on this previous document.
- 18. The Institute for Transport and Development Policy (ITDP) a US non-governmental organization (NGO) has pledged to support this initiative in many African countries such as Ghana, Senegal and South Africa.

REFERENCES

- Armstrong-Wright, A. (1986) 'Urban Transport Sector Policy Paper', World Bank, Washington, DC.
- Barter, P. and B. Williams (2002) 'Making the Connections between Transport and Housing Security', in *Urban Mobility For All*, edited by Xavier Godard and I. Fatonzoum, Balkema, Rotterdam.
- Bourguignon, F. (2004) 'The Poverty-Growth-Inequality Triangle' paper in Actes du Sitrass 7, Saly, Senegal, Mobilité et systèmes de transport en Afrique sub-saharienne: les défis de la pauvreté, SITRASS, INRETS-LET, Lyon.
- Carruthers, R., M. Dick and A. Saurkar (2005) 'Affordability of Public Transport in Developing Countries', Transport Paper No. 3, World Bank, Washington, DC.
- Cusset, J.M. (1995) 'Les transports urbains non motorisés en Afrique sub-saharienne, le cas du Burkina Faso', Report, SITRASS, INRETS-LET, Lyon.
- Diaz Olvera, L., D. Plat and P. Pochet (2001) 'Dépenses de transport des ménages en Afrique sub-saharienne', Méthodes et mesures appliquées au cas de Niamey, article in RTS No. 72, Arcueil.
- Diaz Olvera, L. and X. Godard (2002) 'C comme Pauvreté, ou le rôle du transport pour la combattre', in Les transports et la ville en Afrique au sud du Sahara, Le temps de la débrouille et du désordre inventif, edited by X. Godard, Karthala-Inrets, Paris.
- Diaz Olvera, L., D. Plat and P. Pochet (2002) 'Marche à pied et pauvreté en Afrique Subsaharienne', in *Urban Mobility For All*, edited by X. Godard and I. Fatonzoum, Balkema, Rotterdam.
- Diaz Olvera, L., D. Plat and P. Pochet (2008) 'Household Transport Expenditure in Sub-Saharan African Cities: Measurement and Analysis', *Journal of Transport Geography*, 16 (1), pp. 1–13.
- Dimitriou, H.T. (1994) 'Responding to the Transport Needs of the Urban Poor: Some Conceptual Considerations', in Les transports dans les villes du sud, la recherche de solutions durables, edited by X. Godard, Karthala-Codatu, Paris.
- Duprez, F. (2002) 'Les coûts sociaux du système de transports urbains d'Abidjan', in Urban Mobility For All, edited by X. Godard and I. Fatonzoum, Balkema, Rotterdam.
- Fouracre, P.R. and D. Maunder (1987) 'Travel Demand Characteristics in Three Medium Sized Cities of India', TRRL Report No. 82, TRRL, Crowthorne.
- Gannon, C.A. and Z. Liu (1997) 'Poverty and Transport', TWU Paper No. 30, World Bank, Washington, DC.
- Godard, X. (1994) 'Les transports dans les villes du sud, la recherché de solutions durables', Karthala-Codatu, Paris.
- Godard, X. (1998) 'Mobilité urbaine et pauvreté, l'expérience ouest-africaine', in *Proceedings* of *Codatu VIII Conference*, edited by C. Jamet and P. Freeman, Balkema, Rotterdam.
- Godard, X. (2001) 'Poverty and Urban Transport: Lessons from African Cities', CODATU Seminar, Pretoria.
- Godard, X. (2002a) 'T comme Tarif ou le poids des dépenses de transport dans le budget des ménages', in Les transports et la ville en Afrique au sud du Sahara, Le temps de la débrouille et du désordre inventif, edited by X. Godard, Karthala-Inrets, Paris.

Godard, X. (2002b) 'Preface', in Urban Mobility For All, edited by X. Godard and I. Fatonzoum, Balkema, Rotterdam.

Godard, X. (2004) 'Pauvreté et mobilité urbaine en Afrique sub-saharienne: Concepts, analyses et lignes d'action, trop de malentendus', paper in *Actes du séminaire*, SITRASS, Dakar, 22–24 March, SITRASS, Lyon.

Godard, X. and L. Diaz Olvera (2000) 'Pauvreté et transport urbain, enseignements de l'expérience française pour les villes en développement', SITRASS report for the World Bank; Annexed in World Bank (2002) to *Cities on the Move*, An Urban Transport Strategic Review, World Bank, Washington, DC.

Howe, J. (2000) 'Poverty and Urban Transport in East Africa: A Review of Research and Dutch Donor Experience', IHE report for World Bank, Washington, DC, December.

Illich, I. (1980) 'Valeurs vernaculaires', http://lanredec.free.fr/polis/Vernacular.

-

and the second second

1.00

1.11

「ふうちまっているのう」

小道をみ

「「「「「「「」」

- IRT, FLACSO (Institut de Recherche des Transports) (1982) 'Transports collectifs, mobilité et quartiers marginaux à Quito', Dossier d'approche préliminaire, Arcueil.
- Kane, C. and X. Godard (2001) 'Performances des modes de transport et satisfaction des besoins des pauvres: cas de Dakar', Communication Séminaire Sitrass 6, Bamako, SITRASS, Lvon.

Koster, J. and M. de Langen (2001) 'Low Cost Mobility in African Cities', Proceedings of the Expert Group Meeting, Delft, 21-23 June 2000, IHE/World Bank, Delft.

de Langen, M. and R. Tembele (2001) Productive and Liveable Cities: Guidelines for Pedestrian and Bicycle Traffic in African Cities, Balkema, Lisse.

- Le Breton, E. (2005) Bouger pour s'en sortir. Mobilité quotidienne et intégration sociale, Armand Collin, Paris.
- Mbara, T. (2003) 'Enhancing Urban Mobility and Accessibility in Sub-Saharan Africa', Codatu SITRASS Workshop on Urban Mobility and Transport, Africities Summit, Yaoundé.
- Messu, M. (2003) 'La pauvreté cachée: une analyse bachelardienne du concept de pauvreté', edition de L'aube, La Tour d'Aigues.
- Mitric, S. (2008) 'La politique de transport urbain de la Banque mondiale face au transport artisanal', paper in Compte Rendu Séminaire Transport artisanal dans les villes méditerranéennes, INRETS, Lavoisier, Paris
- Mitric, S. and R. Carruthers (2005) 'The Concept of Affordability of Urban Public Transport Services for Low-Income Passengers', World Bank Forum, Washington, DC.

Pendakur, S. (2005) 'Non-motorized transport in African cities: Lessons from experience in Kenya and Tanzania', SSATP Working Paper No. 80, World Bank, Washington, DC.

Rahnema, M. (2003) 'Quand la misère chasse la pauvreté', Fayard/Actes Sud, Paris.

République de Guinée (2002) 'Document de Stratégie de Réduction de la Pauvreté', June, povlibrary.worldbank.org/library/country.

République du Sénégal (2003) 'Document de Stratégie de Réduction de la Pauvreté', May, povlibrary.worldbank.org/library/country.

Sen, A. and M. Nussbaum (1993) The Quality of Life, Clarendon Press, Oxford.

SITRASS (2004a) 'Poverty and Urban Mobility in Conakry', report for World Bank, SITRASS, Lyon, September.

SITRASS (2004b) 'Poverty and Urban Mobility in Douala', report for World Bank, SITRASS, Lyon, September.

Sohail, M. (2001) 'Urban Public Transport and Sustainable Livelihoods for the Poor: A Case Study of Karachi and Pakistan', WEDC, Loughborough University, Loughborough.

UN-HABITAT (1997) 'Access to Transport', Proceedings of the International Conference on Urban Poverty, Florence, 9-13 November.

Vasconcellos, E. (2001) Urban Transport Environment and Equity: The Case for Developing Countries, Earthscan, London.

Winter, G. (2002) 'L'impatience des pauvres', PUF, Paris.

World Bank (2002) Cities On the Move: A World Bank Urban Transport Strategic Review, World Bank, Washington, DC.