Rotpunktverlag.

AL IMFELD

AGROCITY
DIE STADT FÜR AFRIKA
SKIZZEN ZU EINER NEUEN URBANITÄT

THE CITY FOR AFRICA
OUTLINES FOR A NEW URBANITY

AGROCITY

envisioned by Al Imfeld
expanded by local African & international experts
edited by Ueli Dubs

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General Introduction from the editor

Shortly prior to his death on February 14, 2017, Al Imfeld (born January 14, 1935) published blueprints on the future AgroCity in German. Next to his two books *Elefanten in der Sahara (Elephants in the Sahara)*, a history of 30,000 years of African agriculture, and *Afrika im Gedicht (Africa in Poetry)*, an anthology of contemporary African poetry, *AgroCity* is the third of his most significant works out of the over 80 books he published. For many years, it had been his intention to publish AgroCity in English with African as well as international experts joining him with their visions and experiences. It was to include perspectives from housewives in slums to planners and architects, city-sociologists and artists, specialists in urban farming and government officials.

We all are fully aware that this book once again tries to empower local efforts from a white man's view. Let us keep in mind that Al Imfeld travelled extensively through most of all African countries, lectured in various universities and colleges, edited tropical-agrarian newspapers and coached numerous projects. He always tried to convince black people that even a white man can have a black heart, a mind-set of deep respect for local environments and conditions. That is why Al decided to give hints in his exhibits provoking African experts to add their views and visions. And fulfilling the vision of AgroCities is a local affair from planning till constructing. It is an African dream being realised, leaving urban citizens in traditional cities jealous, but ready for inspirations and steering their frustration-cities in the direction of AgroCities for the next generation.

This book is structured in six parts, covering the following subjects:
Part one: Frustration AfroCity
Part two: Vision AgroCity
Part three: AgroCity's needs
Part four: AgroCity's infrastructure and services
Part five: AgroCity implemented
Part six: Editor's overall summary
It finishes with acknowledgments.

In each of the six parts, visions, maxims, blueprints, and points to be considered are presented as Al's 61 "exhibits", translated from his German edition of AgroCity. They may serve as cornerstones or hints for future urban projects. They are far from being perfect planning bases, but offer a rich quarry, coming from of Al's extensive trips through most of the 56 African nations, and decades of philosophical, political, religious, historical studies and experiences, discussions, lectures and frustrations.

The editor's contribution is limited to short surveys at the beginning and summaries at the end of each chapter. The main task was to sort out AI's contributions, to find experts from very different corners of urban living-competence and keep editing all of the contributions on an electronic platform. The aim is not only to publish this English version, but also to make it available in French, Arabic and Swahili as e-books. The aim is to inspire as many students and practitioners as possible to enable a peaceful human cohabitation in "green" cities, in Africa and around the globe where new urban settlements are emerging or transforming traditional cities into AgroCities.

Ueli Dubs, editor

Part one: Frustration AfroCity

1.1 Editor's introduction to AfroCity

There is a long line of sad traditions in Africa. Slave hunting and exporting was not an invention of the white man, but also a fate within Africa for many centuries. In the common memory, cities and ports remember Africans of slave hunting and exporting. The following chapters cover these experiences. Since African memories base on ancestor's tradition, local Africans are having a hard time forgetting all these negative vibes. Postcolonial leaders have not been able to achieve positive associations with the word "city". Mass migration to the outskirts of cities has resulted in slums with hardly any positive results on employment, schooling or health services. It all leads to Al Imfeld's modern answer to a new vision of cities, built for the inhabitant's needs, not for traditional administration of power and post-colonial show off factors.

1.2 Africa's experiences with cities

This first part explains a specific pattern of African cities, showing their roots and purposes, illustrating the lack of a Bantu city and contrasting the function of a Bantu village. Actual African cities are not real African cities. They base on foreign patterns and goals, demonstrating central power. The AfroCity leads to discrimination, frustration and a lack of visions and model cities in Africa. It points to the urgent need for an African city, catering to its present and future inhabitants' needs, providing a new urban identity and higher standard of living.

Around 1900 Africa had several cultures: the Arabic population in the North, desert tribes and nomads in the Sahara and about a thousand different Bantu-peoples south of the Sahara as well as early invaders like the Burs in the South. Whereas Muslims and Christians for centuries built centres of power and imperialism such as Ur, Alexandria, Jerusalem, Mecca, Athens, Constantinople, Marrakech, Cordoba, Granada, Rome and so many others, Bantu culture never knew cities. Antique cultures, Muslims and Christians had social and religious centres for emperors, parliaments and churches, which developed their impressive architecture in the centre of cites for the imperial palace. They were surrounded by civic buildings for administration, churches and their ruler's palaces, markets, commercial seats and storage space, military and police infrastructure, educational- and health- as well as sports centres, craftsmen's workshops and citizens' homes. They all were oriented towards a centre, a seat of power.

During colonialization, European monarchs and governments set up administrative centres in Africa as a copy of their capitals. Black people were not allowed to live in these centres and servants had their own homes in backyards or the suburbs. The foreign rulers set up proper infrastructure according to their goals, totally neglecting the local inhabitants' needs.

One reason for the lack of a Bantu city was their agricultural background. Another was the huge blood-drain caused by dozens of millions of people being removed through slavery exports towards the East and the West.

1.3 What is an African city?

Al's Exhibit No 1: Does a specific type of city exist south of the Sahara?

The megacities and the cities south of the Sahara in particular all have ancient Muslim or colonial backgrounds, and for African people they hardly contain any positive memories or associations. Along the coast in the West and the East, there were forts and harbors for shipping merchandise and slaves either to the West (for example Gore in Senegal) or the East (Bagamoyo in Tanzania).

All those cities are too European to have a positive history for Africans; they still seem to serve as a traumatic reminder. Those cities do not create pride. They are associated with power and suppression. Those cities were the center of ruling from top down and pushing the local population to the periphery. Migrants formed other outer belts. Their hatred center belongs to the unconscious side of decolonization.

The situation is different in the old Malian Empire, for instance in Islamic cities in the Sahelian zone. Elsewhere, usually in minor and major Asian towns and cities, there was a strong power center in the minds of the local farmers. Nevertheless, there, history has healed the wounds. Rulers and priests or holy men seemed to form an alliance and people showed respect towards them. This was never so in colonial times, because all eco-social levels were separated (*divide et impera)* (split and rule). The colonial city was almost the opposite, especially since no sacred aspect was left.

Another aspect was missing in the newly and rapidly constructed African cities; they were designed for entertainment and sports. Citizens' needs were not asked about, no infrastructure for locals was organized; no cinema, no theater for the underprivileged etc... All this made the colonial city an apartheid city. African cities south of the Sahara are basically still apartheid cities. For many decades, blacks or natives were not allowed to live in the inner city; this rule may be one of the strong psychological origins of townships or suburban dwellings or slums.

A shocking example is Chitungwiza, the counter-city to Harare, around 20 miles out of the center with very poor infrastructural services: bumpy roads ... never cared for, a minimal bus service ... never on time. Another illustration of the problem was Katutura (= "a place we don't want to live"), the settlement town for all black people, 10 km off the center of Windhoek. It was an adapted apartheid policy that all black people were relocated, starting in 1953, to Katutura. The horrible process only ended in 1968. After independence, new life emerged in Katutura, making it Matutura, a place "where we would like to live".

In their inner hearts most Bantu have an ambiguous relationship to the city; it may even be characterized as love-hate. The roughly 1000 different Bantu peoples south of the Sahara have a 2000-year-old tradition of micro farming. City to them means: the center of gravity from where they were looked down on and ridiculed. City means: a super-chief, a chief above his or her own chief. However, common people did feel represented and protected by their own chiefs because they passed down the ancestral line, guaranteed their land and protected the ancestors' tree of life.

Planners and architects, designers, constructors and artists through their entire activities will have to consider this and will have to promote a new spirit of a city, which leads to a positive image, spirit and climate.

All efforts will have to create a climate that gives back pride and animates initiative.

Therefore, a kind of Africaness as a base is urgently needed. Here, AgroCity contributes something new and may result in excitement, vision, something unique that is rooted "out of Africa". Together we must create something that will make African city dwellers proud and motivate them to new activities, to see the City as a push, a delight, and an involvement versus a former place of resignation. Our planners and building enterprises of an AgroCity may become an act of an African psychoanalysis with a positive future, full of energy, happiness and pride.

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1.4 Bantu Villages

Al's Exhibit No 2: What is a Bantu Village?

History and sociology know that there are not only different cities, but also manifold settlements and villages. They always precede any town or city. Thus, we cannot start to define and proclaim an AgroCity without basic knowledge of the background of the people's settlements that nowadays storm the edges of MegaCities. An analysis shows at the same time - either open or hidden - that there are hints or even re-orientations towards a concept of AgroCity. It also shows that our endeavour is rather a continuation of mixtures already present.

The African countryside is full of small landowners to whom the chief had given a piece of land for a certain time with the function of survival, the chance of the family's survival and a place for burials in order to continue the rituals. The clan lived on such a small piece of land. All land- cultivation and -exploitation stood under the protection of the Chief who would give pieces to the families under his chieftaincy, to a clan or family. They respected the same totem and taboos. When the family expanded, the chief provided some more land, which never was converted into private possession.

However, when the Christian missionaries arrived did they copy the pattern of a Christian (say European) village. The priest or preacher hired land at that time from the colonial administration, which had expropriated land from the former chiefs. In an administrative centre, they started to build offices, a church, and a school, different to African settlements. That was the origin of colonial AfroCities**.**

Julius Nyerere, the former president of Tanzania and founder of the political concept of *ujamaa,* had the idea of bringing all small farmers and pastoralists together in villages in order to have a better administration. At that time, he did not realise that the Africans were scattered all over the land due to ecological conditions. African soil did not allow concentration. Geologically speaking, nature commanded that the settlements be scattered. The overconcentration with *ujamaa*-villages brought the whole project to a downfall because the centre was overpopulated with people as well as with cattle. The centre around a 100 square meters became a desert, dusty in dry times and muddy during rainy seasons. People started to move away from this privileged inner circle and ruined ring towards the adjunctive land.

The Sahelian zone is not prepared for the traditional European village. Thus the capital cities of Bamako, Niamey and N'Djamena have an administrative centre and a service concentration (banks and hotels), surrounded with former villages like settlements, like fingers of a hand grasping deep into the countryside. The given conditions allow a mix of rural and urban, although urban may for the moment only be called a certain colonial remainder.

We all will learn from this experiment of Tanzania and of the Sahel for our future African AgroCity. In case we want to settle outside and build up an AgroCity together, we have to know the underlying soil and/or geological formation. Another basic factor will be water: where to get it and how much is needed and can be recycled.

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Al's Exhibit No 3: History & Myths, Present & Future

Living, lecturing and travelling in Africa over decades showed me that African inhabitants sometimes act in a confused way due to several informal factors. Informal automatically means that no clear-cuts are possible. Things overlap, create new priorities or suddenly disappear for a certain time. Some scientists, especially in religious sciences, call such a parallelism synchronicity. Myths, historical truth and spontaneous moods influence decisions and will shape the future.

Interceptions of ancestors, ghosts, magic phenomena, shamanic wisdom and momentous moods might dominate scientific facts and rational processes. History is neither a stream nor a line; it is rather a permanent option at a crossroad where you may stop, go straight, turn left or right. Africans may wait for a companion to escort them, proceed jointly or get separated again.

History is actually not the accumulation of past events, but rather a melting pot of different mental and emotional layers. History therefore cannot serve as a solid base for future decisions. The very same layers and emotional influences will steer future decisions with changing intensity. This always has to be kept in mind when planning and implementing logically. It will turn Western experts crazy, but is African reality.

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Al's Exhibit No 4: Approach to AgroCity by commenting a Book

In 2016, Peter Hammer Verlag published a study of 170 pages under the title *Planet City: Urbanization in the Global South* by Reinhard Schmidt-Kallert, an urban sociologist. The book shows plenty of interesting facts from Asia, Latin-America and Africa. The author jumps from East to West without observing great differences because he only considers migration and ignores the roots of such developments.

Africa's megacities are hardly 100 years old. Some started as mining townships in South Africa (coal, gold and diamonds) or Zambia (copper) and Katanga, Congo. Further, there are typical colonial cities, which have grown out of administration centres (Nairobi, Dar Es Salam, Kampala, Accra, Abidjan, Lagos a.o.). Their recent colonial past makes African cities specific. And why does the majority of the land

population on the African continent run (without being forced) towards the fringe of the once hated colonial power centres?

Schmidt-Kallert neglects the difference in the making of African cities other than in Asia and Latin America. Schmidt-Kallert, by taking around the "global south", is too superficial and does not take the time to ask such questions. For such a universal topic, more differentiation is needed.

Most of the newly created nations (54) do not know a land law. Corruption reigns. In such a confusion of law, there are no illegal settlers. The new politicians act as though they are in former South Africa under apartheid law. And: People are not given Papers.

Schmidt-Kallert neither respects history nor people's rights and needs. People storm the cities in order to get some rights and a future. Basically, they want papers and only afterwards some land that belongs to them. That is the reason dwellers at the fringe stick together. They still believe that by sticking together, they stand under the old chiefdom law, sharing the same ancestors.

All this shows that the nucleus of a new African city is not yet born and is not in anybody's mind. All those people on the fringe are tribal and thus, they do not mix. Above all, they follow the mind settings and thinking patterns of a farmer. An urban spirit and mentality has yet to be created. The former spirituality of "WE first" (ubuntu) is increasingly disappearing; individualism enters; violence increases. Values keep falling apart (Chinua Achebe).

Schmidt-Kallert more or less ignores the urban spirit or the urban mentality which stands between agricultural mentality and urban multitude and tolerance. The farmer may have knowledge of bio diversity, yet in a city, people have to develop a social diversity. In over 100 years, colonialists, as a united group, have never tried to bring industry to Africa. Thus, Africans remain small farmers, miners, servants and - highly esteemed by the natives - night guards. The colonialists did not develop value-added jobs for Africans. It is shocking that most urban analysts have hardly paid any attention to this fact. Colonialists did not teach Africans how to bake bread, how to roast coffee, how to can pineapple or how to develop a small cotton industry etc... The consequence is that Africa only has a small range of jobs for skilled craftsmen and only bureaucrats who administer instead of adding value.

So far, almost all publications on AfroCities are missing complexity. Examples are Dong Sanders' *Arrival City* and Mike Davies' *Planet of Slums*.
Is it not surprising that three exhibition catalogues tell more about African design and modern architecture than these books? Two are the result of fabulous exhibitions in 2015 in Weil am Rhein, in the Vitra Museum: "African Modernism" and "Making Africa". The third unique work is the catalogue *Africa Junction. Capturing The City* by photographer Lard Buurman with fascinating poetic as well as philosophical texts by Chris Abani, N'Gonné Fall, Chris Keulemans and Alexander Opper, published by the Hatje Cantz Verlag, Ostfildern 2014.

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1.5 Editor's Summary on AfroCity

Please note the slight difference between part one, called A*f*roCity, to the next one, named A*g*roCity. In the Islamic tradition, north of the Sahara, over centuries, many cities grew to decent sizes with flourishing economies and centres of academic education and high standards of culture. However, the African city south of the Sahara and the Islamic influence has no tradition for two reasons: first, Bantu peoples, roughly a thousand different tribes, were living in villages due to their agricultural habits. Growth was limited through the need for grass in order to feed the cattle. Higher concentrations led to erosion of grassland. Intensive growing of vegetables was limited due to lacking rainfalls and thin layers of soil. Villages found their ideal or maximum sizes. However, AgroVillages had a rich tradition.

In colonial times, white people arrived with their own concept of a centre of power. Copying the pattern of European cities with profane and sacred buildings led to a city design far away from AgroVillages. Black people were not even allowed to enter those noble centres of the white domination, administration, self-confidence. In different quarters and buildings of administration, exploitation and discrimination, they lived their life as colonialists in closed clubs and circles. And when they ran out of ice supply, there was a problem.

No wonder the local black people, being constantly expropriated, humiliated, dominated, exploited and raped, were never able to develop pride, sympathy or affection for AfroCities. In their memories, they were marked as centres of horror, military and political domination of their freedom and culture, robbing the fruits of their fields, grasslands and woods of their treasures of underground natural resources. For centuries, colonial administrations were lacking any respect for the black people's culture and spirituality, of any progress.

Postcolonial governments copied the habits of former colonialists, marking their new national confidence and pride in the same patterns, far away from any AfroCitizen's needs and cultural values. AfroCities grew without structures, attracting more frustrated villagers, adding belt after belt to the outskirts of AfroCities. Slums kept growing, lacking the basic infrastructure required for a cultivated, safe and healthy life and education.

Part two: Vision AgroCity

2.1 Editor's Introduction: Al's vision for AgroCity

Having travelled through all African states, Al Imfeld envisioned a model African City, taking into account local habits and customs, culture and spirituality, aims and dreams of the population, geographic conditions, future models of urban coexistence, ecology, cybernetics and limits to growth. This resulted in AgroCity as a vision, a local adaptation and an implementation. Converting a vision into planning, adapting, constructing physically and mentally, formally and informally, is going to involve more than one generation, more than a thousand frustrations and mishappenings. Establishing an honest feed-back culture will create a learning curve for other sites, countries and continents and the next generation of city-planners and -builders.

The mental step from AfroCity to AgroCity is huge, however thrilling. Actually, what might sound like a dream comes close to any idealistic imagination of today's urban visitor or inhabitant. Hardly any noise, no rush, no traffic jams, no frustrated contemporaries ... green cities, a rich flavour of mixed cultures, food stands with mostly local produce, galleries, events and infrastructure! What a delight to any AgroCity tourist, visitor and migrant!!

2.2 Why this book

Al's Exhibit No 0: Whom will this Book AgroCity serve?

With following 61 exhibits
I sketched and tried to encircle
the essence of AgroCity

They all serve the purpose
of providing some aspects of
Africanness around AgroCity

These mini-chapters show you,
viewed from the outside, different aspects
of the wholeness behind AgroCity

For Africans, it should also evoke
what once was the deeper meaning
behind many of their traditions and ways of thinking

This publication is intended
as an introduction to constructing in Africa,
a short orientation for African architects or planners

Let's not copy the emptiness of modernism
and not be tempted by neo-liberalism,
but stay human in an African way

Be proud to take elements of
black people and Africans of the Diaspora
and thus get resonance from the world and let it echo

Building an African AgroCity
is more than constructions and greens;
it brings human and social contrasts together

A building is rooted in history and
surrounded by the complex smell of the environment -
all has to be integrated in an AgroCity

Each pillar must teach a lesson;
a pole which in a shamanistic way
brings heaven and earth together

Each pillar should either be a poem
or become a manifold story
where art and architecture are one

Perhaps a tower is needed
which on its top hosts a dream
of where we are coming from

a monument of a warning finger
like a jazz variation of
NEVER FORGET and NEVER GIVE UP

All following exhibits
are lessons
dancing around AgroCity

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2.3 A City

AI's Exhibit No 5: What makes a city?

A city is far more than an assemblage of buildings. A city does not need a certain number of inhabitants, say 10 or 20 thousand. It is not even defined by the square meters it covers; this does not say much about the essence, flair and spirit of a city.

In medieval times, a king or nobleman granted the status of a city, including market rights, citizenship, tax-, minting- and court-authority. This privilege included circumvallation (a ring of walls). The church authority dedicated churches to a saint as a patron and its yearly festivities.

However, feudal times have long vanished. From its origin, a city was far more than a grouping of houses; it was a power place that offered infrastructure and shelter in public buildings, private homes, in public parks and hidden gardens. It was not only meant for the public and servants, but also for guests and travellers. Trees offered

shadow, gardens leisure and food. A real city was a respiring organism and thus, it needed breathing space.

It looks as though this tradition has died and that urban deserts have started developing. Even benches are removed to avoid the homeless from sleeping there at night. Many people think of a city as a glittering row of luxury shops and, in some distance, a huge shopping mall with an endless parking lot for cars. Sports stadiums attract crowds creating fun, fighting and traffic collapses.

A real and living city is an unfolding place; it creates many other cities within it. For a great part of Africa, life revolves around activities on the *piazza*. Several open spaces as well as covered markets will be important and essential for any African city in the future. Any planner or architect should keep the importance of public spaces in mind. These places will be attractive and fascinating as they create an atmosphere, which automatically give them a magical or sacred touch. A city in itself has neither a soul nor a philosophical essence. Yet the way a city is built and allows a specific spirit to grow will become something like a lighthouse.

The character or micro-cosmos of a city can hardly be measured, but it can be felt. The city of the future does not exclude the rich or the poor; it mingles them both. This factor differentiates the city of the future from the city of the past, which was and remained in itself feudal and always had mono-cultural or nonreligious tendencies. The new city has to overcome the old village or town.

The new and especially the AgroCity must become a cosmos - slowly, slowly. The city of today starts evolving. The real city is socially open and not discriminatory; foreigners and unbelievers are welcome in such a city, peacefully and colourfully united. When we think of a future city, we see a movement. Our future city is no longer a fort, but a centre of joy and pulsating energy.

After independence, Africa started a new era. It may further develop courage to create something new or specific, in other words: a city after independence. Breaking up is not modernity. It implies a changed way of thinking that is on the move, especially towards an AgroCity. A place of pride and comfort.

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2.4 Urban architecture

Al's Exhibit No 6: Urban architecture is more than constructing houses
The notion *urban* implies a climate, a mood, that transcends any building. The planning and construction of each and every urban house shall fit into the cosmos of other buildings, it has to include streets as a part, has to adjust the front to light and climate for a positive reflection. In the future, it has to consider agricultural aspects of sunlight, water, seasons and cultivating plants and small animals.

The new building is like a new scene or act in a play, thus part of a story. One may even consider the entity as a cosmos that animates old and young, men and women for interaction and exchange, a human climate that associates with neighborhood and stimulates innovation. Each building is part of an urban environment, thus it

becomes eco-architecture. Urban architecture has nothing to do with isolation, but with constant link-ups; architecture becomes an art of connecting.

Consequently, culture in all variations must be part and present from the beginning; it is created from the beginning. It shall initiate a continuous process of mixing old and new. We have to abandon a heritage drive; we may be rooted in a tradition and act out of it, but have to find new ways and patterns, set by the future inhabitants.

Thus AgroCity becomes a way of thinking and acting; a constant endeavor of connecting urban and rural. AgroCity does not stand as a fixed concept at the beginning; it must be implemented in a learning process. Africans have the gift of taking over and integrating - improvising often in a surprising way. African culture is of Creole origin. As a consequence of this cultural background, a newly formed mental *mélange* forms the basis of AgroCity and must be developed by Africans. With the development of other AgroCities in Australia, Asia, Europe and the Americas, Africans will constantly observe them and integrate new elements.

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2.5 African Urbanization

Al's Exhibit No 7: The special character of African Urbanisation

Some sociologists of the city are strongly convinced that any city is a city. They are not able to recognize a certain continental difference. They just follow the colonial way of thinking. However, as there is a great difference in types of historical colonialism, there is also a different historical background of great importance for the making of cities.

Africa had different phases of urbanization, e.g. an Egyptian-Sudanese-Ethiopian phase, a Phoenician activity of constructing cities, later a Roman one in Northern Africa, followed by an Islamic phase. All these urbanizations differ substantially from one another. Above all the historical differences, there is a variation according to their purpose. Here the basic question of what makes a city, is already touched on. Is a trade post a city? Or does a certain combination of housing make a city? Must a city have a centre - be it political or religious? What makes a city in a hierarchically oriented society? Must there be a palace for the ruler or a church? Many places we know from archaeological research are places of a certain handicraft (the smith, the artist for religious objects). Or does water make a place during the pastoralist period a city? Is a centre of pilgrimage a city? What makes the essence of a city?

We are still lacking a definition that fits the historical development. As soon as we enter into archaeological and historical analysis, we are confronted with tremendous variation. Exactly such differences warn us of the issues with shortcut definitions or generalisations. Being warned and more cautious, I approach African history from a broad perspective, even including palaeontology and archaeology.

The African population has a long migratory tradition. People were always and constantly forced to migrate; great shocks such as earthquakes, volcanic eruptions or typhoons followed by floods were drivers. People had to flee; they moved to Saudi Arabia and from there into the entire Asian continent.

Recent research based on analyses of genetic material found proof of African migration all over Asia. Three independent research teams from the USA first published results from Indonesia, Malaysia and Southern China that genetic material found was definitely related to Africa. A research team proved a relationship between the Australian Aborigines with the South African San (bushmen). We have definite genetic African spurs for the last 1.5 million years.

In the last 2000 years, Africa was only populated by the white along the coast of the Atlantic and Indian Sea. Europeans wanted to find a closer way into India and Asia. Along the navigation route, they built their supply camps. They never thought of constructing cities. For such camps, they needed some local people for food provision, but not more.

We know of one very mysterious exception: the Monomopata Empire (other names: Munhumutapa, Mutapa, Karanga State). Many regard the ruins of Great Zimbabwe as the heart of a once splendid city in the centre of an empire between Eastern Moçambique and Eastern Zimbabwe. It is believed that the Empire existed between the 13th and 15th century. For the Zimbabwean people, the place is a myth and a historical taboo. Archaeological research assumes today that it was related to Gokomere, an important trade station on the west-east trading route, including visits of Europeans. It was not yet a city, but on the way of becoming one.

Around the 9th century the slave trade evolved from the Swahili Coast in East Africa. The people in focus were castrated and called *Pagen* who were servants and protectors of the women of the Islamic nobility. U.S. studies estimate there were up to 30 million victims; other researchers even go much higher. It shows how many people were concerned about this forced migration between the years 750 and 1900. It is a human tragedy yet to be studied seriously. Because the Pagens died without children, their black colour and their genes hardly left traces on the Asian continent.

About the Atlantic or western slave trade, 70 to 80 million victims are estimated from the hunt to the many deaths along the route. It is a well-researched tragedy and therefore I do not have to go deeper into this dark chapter of forced migration. Keeping this horrific background and the huge figures in mind, it is obvious that African urbanisation could hardly evolve.

We later enter the period of colonialism when the colonialist administration built centres. They were only meant for the Europeans involved in expanding this exploitation and trade zones. The indigenous population never had a right to live together with the white people. All kinds and variations of *apartheid* were in operation from 1900. The servants and labourers had to live apart from the administrative city. The local people were forced into squats or townships. Even the house servants lived in miserable huts some distance away from the master's home.

All these geological, climatic, historical and social conditions give proof of a lack of an African city catering to local needs. This is a key difference to Latin American and Asian cities. Three basic factors differ, namely:
1. constant migration
2. permanent depopulation by a continental slavery hunt from 750 until 1900plus, and
3. another concept, mostly secularized, of 19th and 20th century African colonialism.

Basically said: Africa first has to invent and initiate the design of its cities. And keeping all this in mind, it provides an incentive, a stimulus and even a spur to dare something different. It will be AgroCity.

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Al's Exhibit No 8: Synchronicity and multi-cosmologies

Whoever is planning and building in Africa south of the Sahara is dealing with a challenging project. They have to develop a feeling for the different understanding of time and space. Many planning and architectural people will become frustrated if they do not give proper attention - even unconsciously - to Bantu mentality.

Many periods are interconnected, different time frames are active at the same time; all this makes synchronicity. Since in Africa, after slavery and colonialism, everything seems to begin anew, different pasts are present even in a stone or plant, because - especially for most Africans - all existing things are the result of a continuous mixing. Actually, they all happen synchronically. The essence of African synchronicity implies another past and future and thus, their present is not exactly our European present. Here again, African's present lives from synchronicity.

A day is longer and more expanded in Africa; a day may include several nights that made this actual day. This entire in mind, we might wish to approach the African concept of time and why their day is not our day, and even more so concerning the future. It is a reflexion of Bantu thinking that the Bantu language does not know the Indo-Germanic concept of the future. Or it is the reverse: because the future has much to do with synchronicity, our understanding of future is useless.

However, note: I explain all this complexity with almost linear word passages. Yet in order to give an impression, I first have to follow the European way. However, following, I will need the help of African Mandala and symbols. For such a purpose, we will use the analogy of some African trees – such as the Acacia (with the deep and far reaching roots that give strong resistance when typhoons are raging in the savannah), the Baobab (which grows to be very old and remains multipurpose), the Marengo (the leaves of which prolong life) and the Elemi (popular because it is very protective).

Hand in hand with a different concept of time goes the belief that human beings live at the same time in more than one otherworld or different cosmology. Africa lives in different spaces at the same time, or it lets them overlap. The world where you now are standing and acting is manifold.

A different and additional world is the world of the ancestors which influences you permanently; two other worlds are those of the good and the bad spirits or ghosts. Nevertheless, they do not just exist; they interact - as good or bad forces. This may be the reason he makes sacrifices. Nowadays, with all traditions falling apart, people find themselves victims of such spirits. Consequently, witchcraft has grown immensely. People suspect one another and assume that other people will manipulate them through spirits. Thus, when you build a house or even a city, you cannot disregard those forces (and fears).

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Since Bantu philosophy will easily take up ideas from outside, especially from religions such as Islam and Christianity, the concept of space and room is mixed with salvation and eschatological elements. Or a new dimension of distance appears on the plan: after the end of colonialism Mecca, Rome and Geneva modify London, Paris and Brussels. I do not think that in 2018, Africans want to construct a new Paris. Politically, we have some other important points: New York/Washington, Moscow and Beijing emerge.

Daring to and building up an African AgroCity will come with enormous difficulties and even resistance from other times and rooms than ours. We will even have to fight with spirits. For sure, some witchcraft will accompany us. It will only be possible when we enter into African mentality and spirituality a little bit. Like a psychotherapist, we have to work it out and even make Africans aware of this complexity. Once again, it must be said without any racism: We both, people from the South and North have to listen to one another and learn from one another.

What comes first? Should all this take place before planning? Or must it be in the flow of the happening? One can hardly separate them. We have to learn about synchronicity. Engaging local African specialists, it becomes fully part of the architect or planner or land artist.

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2.6 Rural versus Urban

Al's Exhibit No 9: Rural versus Urban: two contrasting worlds, but nevertheless always interactive

With a glimpse of the cities of Dakar and Maputo you get an impressive illustration of a hectic interactivity between city and land. In both cities, you will find exit-streets, flanked over 20 km with dust or mud. They all seem to have been tarred a long time ago. They have developed into an extremely vivid market for handicrafts, tailors' and carpenters' goods, hair dressers, food stands and many kiosks. And everything is blessed by dust.

How could it develop into such an unhuman direction? As an overflow of a jammed city or mostly through poor farmers and new arrivals from the countryside? Is this market driven by the demand of customers? Or is it all just a revealing of an in-between? A manifestation of informality? Does this street market phenomenon just happen? Yet from the dust clouds, you may draw the conclusion of *still-stand* and a moribund development. Nevertheless, think of Africa with a constant movement of dust!

In these examples, you can observe an overlapping and at the same time a cohabitation of land and city. This will lead to connect to AgroCity. However, how can we grasp, enter and explain the phenomenon of an AgroCity? The essence of the future AgroCity starts with urban vegetation. It is not just the beginning of the *greening of the city*. For me, it is a fusion of an original contradiction of landscape and urban zone. They now begin to oscillate, find harmony and such a process is not rational according to Western understandings, but rather informal. How to mingle a

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rural, annually rotating exploitation of the different seasons with the urban expectation of a constant flow and unrest? A village goes to sleep, an urban entity never sleeps. Such an adapted rhythm is part of a longtime process and a slow fusion towards the AgroCity.

African farms were and still are small - even tiny. Smallness forms their horizon; farmers see only just, what lies before their eyes. This is the only territory they see and where they feel secure. The rest means hostility to them. They all have to protect smallness. Each farmer knows all his cattle from a certain characteristic behaviour and he appreciates them all. This overprotective attitude is unconsciously present; from this background, a subtle mistrust follows all foreigners and all modernism or progress. Thus, a newcomer has to halt at the edge of the house or court and has to start clapping hands and to recite greetings.

In rural areas, everybody takes note of everybody; you are never alone. This system works on a small scale. Here, Christian missionaries rendered a release; Sunday suddenly got exiting. Back home, people were under the rule of the "tradition" in the hands of small family emperors. The younger generation wanted to escape from all open or subtle suppression; they migrated to the outskirts of a city where the same mechanism was established. Eventually, this is the misery, not the slum as such. AgroCity will create relief according to its own rules.

People migrate to the edge of the megacity and get stuck there since they can enter the city neither physically nor mentally. Thus, the African slum becomes a waiting room for urban baptism. What essentially forms the urban culture and/or civilization?

For the moment, just some hints. They all will be explained further later.
1. A city, and even more AgroCity, has to be open and allow mixes. There cannot be any ghettos or gated communities.
2. A real city, and even more so AgroCity, must be similar and reflect the model of bio-diversity in nature. Here, cohabitation of all different people from all cultures and religions, flora and fauna must occur.
3. A future city, and even more so a coming AgroCity, is profane and not sacred, it primarily respects human rights. In reverse, the human inhabitants have to respect one another first, whether they are members of a holy book religion or are Pentecostals, animistic or similar. This is called ecumenical or tolerant.
4. We realistically have to keep in mind that practically everybody at the city's edge or in the slums thinks and acts in an agrarian way. How can we use modern media for the planning, architecture and design of AgroCity? After a long endeavor, the blatant contrast between land/agriculture and megacities/urban must come to a creative interaction: no longer rural vs. urban, but AgroCity.

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Al's Exhibit No 10: Future African house and habitat

People south of the Sahara desert, mostly Bantu, have another relationship to a dwelling place than Northern Europeans. In the north, a cooler climate dominates and thus, "my home is my castle" or my protection. Such a feeling does not exist in Bantu Africa. There, the piazza or market place is dominant; these people are

outdoor oriented, more social and have less individualistic feelings than Europeans. Africans circle around the WE and not the I.

This basic orientation has to be followed when building AgroCity. The African living room is not primarily conceived for privacy or permanent stay or habitation, but far more for showing others what was achieved. Thus, at the same time, it becomes a showroom and a reception place. It may even become something of an ancestral meeting chamber. That may be one of the reasons why in such a chamber, before receiving guests, all the furniture, especially the sofas and chairs, is covered either by plastic or a blanket.

There is this further important consideration to be kept in mind; Bantu believe in their ancestors, and according to the tradition, they are convinced that the ancestors walk with them in reverse, i.e. their feet touch the heads of the ancestors. The ingenious Nigerian writer Ben Okri (*1959) has written an impressive novel about such a rooting and the togetherness with the past in *The Famished Road* (1991). Based on this belief, many Africans want a one-story house. In case another family dwells above them, they believe that the relation and contact with their ancestors will be messed up. Since Bantu society is combined with the living relatives and the ancestral community, a modern house may become a mantle or even a velum of keeping the whole of the two existing worlds together, and even of protecting them. The owner of a house can always say: "I do this not for myself but for the enlarged huge family here and there."

However, even Africans have to learn to break out of such clannishness thinking. Otherwise, they cannot be democratic citizens. AgroCity propagates a certain mixing at least. It is our duty to find and work toward a modern solution. For instance to build a 3- or 4-story house by proclaiming that we contribute to a broader We. Like a TV cable or just a wire, we channel though the different storeys down into the ground. This is just a tip; here Africans have to be consulted. But also being taught - more indirectly by our construction - that peace comes a little bit closer when people break through a certain tradition; it is the monopolization of the ancestors, which at the end leads to isolation.

Now, to a basic question. What are Africans' needs and desires for having a house since many live a life that is basically outdoor oriented? Is it a middle class desire? A status symbol? That is nothing negative, but needs another architectural understanding than in the West.

The next question is: What is needed inside? How important is the kitchen? I dare to say that the cooking-eating room is becoming more and more important - even in Africa. Thus, the kitchen simultaneously becomes a talking and sitting room for women and men. The living room is more the playground for children when it darkens outsides. The TV, set up like an altar, dominates this room. The children have no access; nevertheless the TV runs continuously. For an interior designer, such a room will become a most creative challenge.
Planners and architects have to ask the inhabitants about their wishes, but at the same time, to interfere because very often people ask for the wrong things. A vivid interaction will follow, a fight between needs, wishes and their future outlook. A house is not just a house, it is not just individualistic, but has a window to the world. I

do not plead for skyscrapers but for houses where something communal may happen. Bringing people together is the purpose of the AgroCity.

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2.7 AgroCity

Al's Exhibit No 11: What is AgroCity?

The envisionment of AgroCity is not just of a green city. It is holistic. AgroCity is the base to different thinking and behavior. AgroCity can be compared with biodiversity on all levels, be it soil or society. Logically, it has much to do with social urban life. The envisioned AgroCity is different from biological agriculture and cultivation. It includes cultural and ecological aspects. It is a forerunner of a city or settlement where each and everything is interrelated. Therefore, every entity (not only human, but animals and flowers, trees and stones, insects and bacteria) have rights and have to be respected. But back to the African AgroCity where informality dominates. This informality cannot be learned or understood by a Westerner and therefore it is absolutely necessary that the locally rooted people concerned are those who formulate what to do and what will happen. Their needs shall always enjoy priority and dominate planning, actions and reactions.

The future African AgroCity does not know peripheries or urban epicenters or slums or townships. These quarters will all be part of the city. AgroCity consists of some or many satellites. Once a city outgrows the limit of say 10,000 inhabitants, sister-cities 20-30 kilometers away shall grow, allowing a green belt in-between them for agriculture.

In AgroCity everyone will have (official) papers. It is a basic right to have an official and legal paper. Only this way a feeling of community can grow. All - even hidden - apartheid and racism must be driven out through constant positive action and permanent communication and common actions such as festivities, recycling activities or neighborhood-care. This togetherness also concerns the basic elements such as landscape, all forms of water (rain and sewage) and air (minimal CO_2 values). Clean water must be the aim; all sewage must be recycled on the spot.

This leads us to a basic issue of AgroCity, recycling. It needs a lot of awareness and invention on all levels, small and big. Recycling goes together with sustainability. In an AgroCity, far more use has to be made of sun, wind, radiation, waste separation and – not to forget - biomass. This all requires the involvement of all inhabitants. Everyone has to contribute his or her talents, efforts, awareness and expertise. In addition, this engagement creates pride and dignity.

AgroCity only can exist, if it is basically democratic. If all citizens are respected and taken seriously, different forms of federations and cooperation will arise. In this respect, we trust the gigantic power of African informality. Never think of going there to help them. AgroCity must find and experiment with a sharing economy. It includes many aspects from recycling to crowd sourcing, from sharing machinery to sharing jobs, use of resources without owning them. It covers a broad field and can be a spectacular area of informality.

AgroCity will not grow by itself; it must be present in education as well as in politics, in culture and spirituality. AgroCity must be learned and tried from the basics and in daily steps. Everybody has to learn to handle the principle that everything (even reality and spirit) is interrelated or connected with everything. Many may think that the maxims are about the same in all paragraphs. However, when you go around a mountain or an object, you always face a different view or aspect of the very same object. Through a certain repetition, the solution is empowered.

Looking into history, one cannot name a founder of such a city or village concept in Africa. I would attribute some ideas to the early representatives of the eco-farming movement, in particular Bernhard Glaeser, who together with Kurt Egger performed long-term research in the Usambara Mountains (Tanzania), as well as Sigmar Groeneveld together with Iwan Illich (Witzenhausen) and Jacques Bunincourt (Dakar). After the year 2010, "city gardening" exploded worldwide. Some kind of an outsider is P.M., for years a hidden cult author, the guru of a renewed commune. Since then, Hans E. Widmer (P.M.'s real name) developed his model further, which is based mainly on neighbourhood and "commons", a creation, in his words, of "cooperative and confraternity". It is more urban than agricultural; the members live with an urban spirituality. Particularly important for Africa are the architectural and engineering departments in Addis Ababa and some West African architects (Mandu Pinto dos Santos & Diébédo Francis Kéré) working from Berlin. The new architectural department in Abidjan is also promising.

Finally, I come back to a basic Bantu spirituality: "we" comes first, and without a "we", there is no "I". That is the basic thinking, called "ubuntu". If "we" has got priority, we may also say: in Afro AgroCity, the holistic dominates a single building or an individualistic concept.

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Al's Exhibit No 12: Local, an ambivalent Term

It is dangerous to see certain terms in a fixed and absolute way. For AgroCity, nothing can stand absolutely like a law. Take "local" as an example.
It is fashionable and modern to underline a local touch. However, for AgroCity, it can only mean that local material must be considered first. Why? Africa wants to be part of the world; it breaks out of isolation and chauvinism. Thus, on the way to global acceptance, there must be some consideration of - at least one - foreign element. Regarding construction materials, corrugated metal or corrugated iron sheets are of colonial origin and not essentially African although it may look like something local. I think it is time to introduce bamboo and soon some transformed plastic. Local material alone and exclusively will throw people back into a stubborn narrowness. Just the opposite of what is expected from AgroCity.

In general - as far as it interests anybody - globalization for Africa is a desirable concept. In most cases, globalization is deeply connected with participation. The cultural trend of the continent south of the Sahara is strongly contrary to the cultural mentality of populism. They have a high desire to become part of mankind. For them, the concept of globalization has no negative undertones. Africans have not got the respect they need. Now, we enter the phase of international exchange and sharing. Since Africa is already spread over the world, people dream of communication. Such

communication may even be excitingly present in the fetish of the cell or mobile phone.

There is another side to the ambiguity. Africa must take local more seriously by building up and developing local products. There is no other way for jobs & wealth unless you create them yourself. Moreover, this all starts small, which seems to be rather difficult for most Africans. Due to a long period of suppression, many underestimate themselves and most of them suffer from inferiority complexes.

To become locally oriented is particularly important in the field of foreign development. In general, modern development has destroyed all self-initiative. Therefore, I urge Africans on all levels in the highest tones to become active on local levels and to develop locally what is badly needed.

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Al's Exhibit No 13: Approaching AgroCity

AgroCity is a silent revolution with a time lag of maybe half a generation. From planning to its end, a decade will pass with progress and errors. Many visionaries have outlined ideal green cities, but these ideals have never really grown as big as an entire city with a high degree of eco-farming and self-supply. However, this means that we can learn from the outcome over a century, then scan the latest achievements in technology and reduce "to the max". This will allow the implementation of ultimate cybernetics into social cosiness and the improvement of the quality of urban life.

Model cities with successful patterns will allow clusters, modules and their multiplication. Permanent feed-backs into planning, implementing and further research will focus on urban structures and urban sociology with an optimal socio-economic mix. Obviously, local adaptations will always be necessary due to financial constraints and cultural heritage.

The visions of "ideal" societies and their cities will have to grow. In an ideal case, planning from scratch will allow the establishment of basic infrastructure in small circles prior to any construction of civic and private buildings. However, it can be possible to convert a traditional urban environment into AgroCity step by step. Major adaptations and a dramatic change in attitude and values will be necessary and can make the process much more painful than starting over. In this case, private property is converted into cooperative neighbourhoods, private fossil energy driven traffic is abolished and "noble" quarters are changed into a wide cultural mix of new inhabitants, this is, however, rarely politically achievable in due course. Maybe it is possible in a few quarters of a traditional city, but still will need legal, social and agricultural changes and adaptations, leading to urban eco-farming.

The training of new arrivals is hard enough and will need time and a clever psychological approach. "Converting" traditional citizens will take more than a generation. The needs of traditional citizens with their old habits will contrast with the pioneer's dreams. We have seen experiments in post WWII-communist societies where "bourgeois" patterns were abolished in order to create idealistic and equal

societies. The slow revolution began in 1989 with a lot of rumour. Even Cuba has opened its borders, slowly arriving in modern times after decades of low supply of many vital goods including medication, modern living space and a variety of food. So, why not focus on AgroCity on naked soil? The efficiency will be higher.

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2.8 Editor's Summary to Vision AgroCity

Al's visions are convincing. Leaving old patterns of historic cities can lead to a new dimension of urban living. A city we all want to live in. However, the planners and architects need to follow a totally new approach. Jana Revedin declared the end of "Diva-architects". She brilliantly keeps promoting sustainable urbanism under the term "EcoPolis" with "coaching architects" under the term "radicant". Africa definitely is a place with a very specific flavour. However, the entire world is ready for a new version of urbanism. Al's vision is focussing on an urbanism that achieves a high self-sufficiency of nutrition in the city and it's green belt.

Many smaller or larger attempts, some in urban or village quarters a hundred years ago, have brought his vision into our mind. We are now ready for a slow and holistic implementation of entire cities, in Africa and around the globe.

Part three: AgroCity's needs

3.1 Editor's Introduction: Needs dominate Structure and Services

It is imperative finally catering to urban population's needs surrounding infrastructure, including aspects such as safety, easy pace and respect for ancestors. So far, many cities have outgrown their historic pattern and have kept growing like cancer, consuming land, resources, visions and legends to a degree that has resulted in malfunction, stress, collapse, crime, despair and disillusion.

The concept of AgroCity is focussed on a wide and changing portfolio of needs. Holistic patterns, feed-back-cultures and realistic ways of expanding infrastructure, services, but also culture and habits will allow a new African way of living and empowerment, a life in flexible harmony and respect of humanity. AgroCity is made for humans of today, rather than the ancient urban chaos and patterns of the past.

3.2 Inhabitants' needs first

Al's Exhibit No 14: PEOPLE as the base

In their mind, like an ingrained prejudice, planners and architects, developers and land artists are still deeply convinced that Africans have to be developed; they believe that African people are lacking knowhow and are primitive. Therefore, up until now, only a few builders and constructors have moved into an African country to search for the local social, economic, ecological and geographical basics.

All these developers neglect people as users of the future infrastructure of a city. In the best case, they have got some "knowledge" of an ethnological book (originating from colonial times) and based on such a preparation, planners think what Africans should think and feel. They forget that almost all of these studies took place under colonial and/or missionary rule and were interest based. Colonialism was the *mood and mind setting* and this implied disrespect or superior thinking. The planners and builders should keep in mind (worldwide, but even more on the African continent) that urbanism is a process, not a product. Moreover, they should all become conscious that architecture must become a tool to improve living. It implies designing a new atmosphere.

Whether we believe it or not: people actually know what they need. Our ways of reaching people is more direct; the African way is more indirect, like a snake that winds itself through the bush. Africans in the countryside and in the slums know that change is badly needed and most of them even know how to change although this is conducted in another rhythm than ours. They follow a serpentine path.

Only after listening to them will planners present alternatives. Planners and coaches will not convince everyone right away or all of a sudden because all this has something to do with democratic learning. And this is a slow and painful process. And always, it is not only about housing and infrastructure; it is basically about improving the quality of life. We all have to move away from the mentality that anything has to be completely finished. Why can architecture not be an ongoing process and grow like a tree in spring and after the rainy season.

I strongly remember two specific situations:

1. My longtime friend, Jacques Bunincourt, who founded ENDA, an agricultural NGO, lived in Dakar, Senegal. He was a great eco-farming genius. At the end of his life, just at the beginning of the 1990s, he took me to a slum on the edge of Dakar. Totally surprised, I realized he had changed to slum work. People under his inspiration began to bring another order into an apparent chaos. What surprised me was the newly constructed narrow streets between the huts, all covered with rusted iron sheets. My questions: "Why do people do this? Can't you tell them to plan them to be wider in advance? Very soon, roads will need more space. Now, not even a car can pass." Jacques just smiled and said: "They want it that way for the moment."

2. In Katutura, I was guided by the well-known Namibian artist Joe Madisia who lived in the area. All newly arrived people were given a small piece of land for free where they could immediately start to construct. Joe explained to me: "People were asked and all were satisfied. Important was just that they had something to start with." A bit later, he added: "Don't forget that first of all, Africans need to have a place to rest after death."

Three years later, Joe wrote to me: "I have moved. I regret it deeply. But I didn't have enough space for family and painting." Then he added: "Since the new government has been in power, the enthusiasm for Katutura has vanished; at least, I see it that way." You may compare it with an African mask that changes its face because even a mask grows up with you.

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3.3 Basic immaterial needs

Al's Exhibit No 15: A praise of Informality
In Western societies, everything must be regulated and this goes as far as the EU believing that a banana or cucumber must have a specific bend. Yes, in the end, even vegetables must be standardised. It is comparable to norms for engineers and architects where you will find windows and doors defined exactly. However, people living in informality do not know about or need our norms.

The construction of new African cities must not only be based on knowledge transfer, but must also become a process of fostering common wellbeing. That even includes declaring the contradiction of the normal, or the non-formal as the new formal. Non-conformism and the marginal must become, step-by-step, mainstream. Human measures are the norm, not technology.

For Africa in particular, it shall become a guideline that boundaries become fluid - nor black - or white. The whole African design is typical for a world without limits. It is a mélange, or is it hybrid? This hybrid culture originates from and through informality. African objects neither are a *copy* nor plagiarised, but a mixture of impressions, feelings and colours like in a painting. You may insist on Western design and functionality, but in the end, the painting is fully and essentially African, to a high degree a product of informality.

The consequence is that non-Africans have to listen to the local people. What do they want? What does have priority? We even have to listen to their dreams. A good architect in Africa will also build on the sensorium and experience of a psychoanalyst!

I would even go as far as making a comparison to the new African church congregations. It seems that they show a mixture of business and informality. This is hard for outsiders to grasp, but it resembles the heart of AgroCity. Small-scale agriculture in particular leaves a lot of space for intuition, feeling or the informal. Thus, informality becomes a maxim of the AgroCity. In this informality, like in a contradiction, the formal is included too. The African essence, the hybrid factor, will need its space.

For outsiders this all seems to be chaotic, but on the African continent, even chaos shows a holistic order. Africanness is related to Dada. Moreover, Dada is deeply related to the Yoruba and West African Ogun. They all have many faces and masks. They all include the destructive as well as the constructive, the cruel and the poetry, the cruel leader and the lyric artist. Logic cannot explain such contradictions. Yet they mean informality.

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Al's Exhibit No 16: Spiritual Needs

Africa has always been a continent of strong traditions. Religion and spirituality have gone hand in hand with traditional rituals, shaman culture, music, dancing, praying and suffering. The role of ancestors is as strong as it was a century ago, despite modern communication technology. While superstition, closed circles of clans and communities might slowly fade, they will remain more strongly in place than western urban specialists may wish to accept. Thus, spirituality is a strong factor and may form new centres for urban life – opposite to colonial administrative and religious centres.

Each borough with its specific cultural mix will design its rites and spiritual infrastructure. Being cemeteries, public and private memorial-shrines, churches and religious centres, they all will be part of social life. Even the heights of buildings will be limited due to the ties to ancestors. These social restrictions might vanish in coming generations, but actually, they have to be kept in mind as strong needs of AgroCitizens.

According to my observations, ancestors, good and evil spirits and ghosts are omnipresent. Not only their adoration, but also their protection from negative influences is necessary. Therefore, there always has to be infrastructure for consulting shamans and making sacrifices or prayers in the neighbourhoods.

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Al's Exhibit No 17: Entertainment and Fun

African life without ceremonies, rituals, festivities, singing, dancing and music as well as food and drinks is not imaginable. The mix of events throughout the calendar, different cultures as well as "rites de passage" such as births, coming of age, weddings and funerals will constantly create gatherings and need for infrastructure. So in addition to spiritual ceremonies, festivals and entertaining from small private circles to mass reunions are also part of the agenda. There will be a huge choice in AgroCity, adding colour to daily life. No judgement on a cultural level is necessary. Almost everything respectful and safe goes. It is a chance for integration, an increased life quality and the possibility of multi-cultural encounters.

From formal ceremonies to mass celebrations, from solemn rituals to freaky noise and dancing, all kinds of entertainment is welcome. Fairs and conventions combine with public entertainment and fun for all. Tourism will profit as well from a large variety of attractions and cultural insights. Sport events will be part of it – on a smaller scale in neighbourhoods, to a bigger scale in the form of tournaments in large stadiums.

Entertainment is linked to health and rejuvenation closely in a positive and negative way. Extensive consumption of music, food & drinks as well as intensive sports or festivities might need some limitations. Like with any human activity, limits to gambling for example, being in casinos or at home, abusive electronic entertainment by maniacs and nerds needs attention and social control. In addition, health education for consuming alcoholic beverages and other drugs or sexual encounters

is a must for young citizens and new arrivals. Health checks, age limits and emergency services are part of AgroCity life when it comes to entertainment and fun. However, with a few exceptions, having fun will bring contrasts to daily burdens, outbalance the AgroCitizen's work-life-balance. Next to formal legal limits, informal social control is much more effective.

Another aspect of fun and satisfaction in AgroCity are pets. Raising animals might even combine fun and social contact with pets for some citizens, as a source of protein for the same or for others. Some raise rabbits and lambs in order to eat them at Easter. Others eat up their cats and dogs. Tolerance and respect towards animals are part of life for omnivores in mixed cultures.

Cultural heritage, celebrations, festivals and museums are part of entertainment as well. The time for colonial style museums is definitely gone and we are now in an era where restitution of cultural heritage is in focus, when cyber-visits around the globe are possible for most large museum collections. Still then, small-scale museums and cultural insights should be kept in mind and preserved.

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Al's Exhibit No 18: Eroticism and Sexuality in AgroCity

AgroCity will accept and integrate public eroticism and sexual activities with openness and tolerance. It provides fun with safety, jobs, joy of life and therefore harmony and creativity. AgroCity will be a place of multidimensional teasing; part of it is sexuality. For newcomers to the city, this habitat at the beginning might shock and look over the top. Nevertheless, quickly, it will all cool down and become part of life. Sexual contacts need checks and balances, but not through religion or politics. Among poor citizens, prostitution is always an option to get money. However, safe sex, minimal age limits, crime prevention and hygiene are a must for all involved.

AgroCity must be a mixture of all diversities within society. Monoculture and hidden activities are moved to a new blend and minimal public control. Homosexuals and lesbians are part of the AgroCity's society, accepted the way they are and act. Maniacs and abusers are part of sexual life, but have to bend to respect and limits. Clear offers of services with transparent pricings will assist discipline. Massages for example do not have to end with sex, but can get close to it with a final delight. AgroCity is a pluralistic and tolerant city, allowing space for prostitution. Society may move towards less prude behaviour. Because of the "human condition", sex shall be practised by self-regulation, not by religion, law and in dark corners of society. Love may get worn out; very often there is room for violence. All such results may only be controlled by humanity. AgroCity urgently needs self-control with creativity, empathy and dignity. I have seen prostitutes being violent or throw non paying men's clothing out of the window of a brothel. This indeed is self-regulation and a good lesson to behave!

Red-light districts provide a special touch and attraction. It brings some bohemian character and allows a chance for a human breakout. You must compare it to Mardi-Gras and Carnival as an absolute necessity to have fun from time to time with teasing and temptation. Overdoing it is a question of overall balance, not primarily a

sin! Indeed, such places in a city have to be properly controlled by police in case of emergencies; the police should be respected as non touchable in their service. Thus, a red-light district becomes a special training place for people, men and women, who like to take some risks and have a thrill from time to time. Well-organised freedom fosters joy and spurns creativity. That is the vision of red-light districts in AgroCity.

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3.4 Basic material needs

Al's Exhibit No 19: Material Needs & Frameworks

For the first arrivals, including planning groups and pioneers for constructing AgroCity, basic supply of shelters, food and water as well as water- and waste-recycling have to be supplied. Then land for farming and building is needed, requiring a solid but flexible legal framework. With increasing urban life, administrative infrastructure has to be established. From self- government to public administration, there are many steps. Since public services require budgets, proper registration and taxes are also an issue to consider. Public space, markets, places for gatherings, rituals and festivities, for sports, fun and celebrations are needed.

In addition to the country's constitution and legal system, AgroCity will need special rules and legal frameworks. A main factor is co-ops and communities, the ownership of land and buildings, lend-lease agreements, questions of duties and management as well as durations. The relation between private and public ownership has to be defined in detail for AgroCity to provide a solid base for peaceful growth. Taxes and other sources of finance shall come into place. Retirement funds, unemployment-insurance, minimal income, health insurances will provide security in bad times and for disabled or senior AgroCitizens.

Legal norms for buildings are a main focus. Minimal standards for bio cybernetics, waste management and turnover efficiency will require attention and have to be revised with technical progress. They shall however become a factor of motivation and friendly competition for reaching higher levels of efficiency and loop-management. Farming conditions will require basic infrastructure that goes hand in hand with living. Watering the plants will be like an art and personal care. All genders and ages will participate in urban farming.

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Al's Exhibit No 20: Dispersed Habitat vs. Centralisation

Centralisation does not necessarily mean building up urban centres. Moreover, the gigantic stream towards the megacities is hardly caused by the magic of a centre. It comes rather as a wish for progress; it is a longing for a reorientation through the setting of new priorities. Why? There are small differences in the verbal meaning, but

it is the spirit behind them counting. In order to touch this spirit we have to plunge into African history. Some basic knowledge for a better understanding shall be cited.

The latest migration towards the cities in Africa is deeply rooted in a colonial cause. With the Berlin Conference in 1885-86, the African continent was torn into pieces and became a poker game of which European powers got which slice of the pie. In the past peoples of Africa were torn into pieces, the land was expropriated, the chiefs became desacralized and colonial administrators set the rules. Africa became part of Great Britain, France, Portugal, Belgium, Germany and Italy. In addition to this process, the Boers and the British governed South Africa. Then, Africa was forced to accept and follow the commands of the administrations of London, Paris, Lisbon, Berlin and Brussels. In the South, Cape Town and Johannesburg were the centres of gravity.

After so-called decolonisation, a small local circle took over, trained by the colonialists according to their suppressive attitude. The system hardly changed because this small, corrupted elite got into the driver's seat and continued as before, the only difference was that white became black. UN law forbids any correction of the territories. Thus, the Nigerian colony with 612 different "nationalities" had to stay together and all of a sudden, they were ordered to form a nation. However, there is an enormous difference between a colony and a nation; a colony is held together either by London or Paris or Lisbon or Brussels or Berlin. The conquered peoples were united under an umbrella. With independence in around 1960, people were told that they were now free. However, how do you unite 612 different cultural entities into one nation? Nobody was prepared for it; no government or administration was trained in nation building. That was Africa's basic problem after independence.

During colonial times, Africa was forced to become part of Europe. Colonialists even fostered the nonsense of now being part of Europe. Even today, there is still a francophone African schoolbook that states: "Our forefathers were Gauls".

Africa had no time to formulate its identity for the coming future. There was a lot of confusion everywhere. In such a dark time, visions are imperative. Experiments have to be even more supported than punctual development projects. AgroCity has to be understood as part of a vision. To build a new kind of city enthusiasm will be part of the healing process. Basic healing structures are however not yet apparent. During the last 150 years, Africans had no chance other than to react. Now, the time of formation and creation has arrived.

Be aware: most planners and architects that have dealt with the African continent lack this background. In many ways, I have tried to add to a new spirit. The process of AgroCity has nothing to do with decentralisation, in a way the concept is conceived traditionally. The word is often used in architectural science in relation to squatted agglomerations and the urban centre. Many planners believe in a strong centre. Therefore, the creation of new centres, related to one another, supporting one another, is in focus.

My visions go in a different direction. Instead of centres, it is better to call them orientation points. It is not a new centralization. Under the notion centre, I understand a heart and a brain, ratio and intuition. The words satellites or satellite cities are risky and may be not appropriate, but we have to start with some words

that may lead to a more adequate expression. AgroCity is not a fixed concept. It is fluid. AgroCity (also) happens in the side streets and on the sidewalks. This city may be compared with a stage that turns around for different scenes, some overlapping, some being disturbed. Especially by strongly enforcing the informal behaviour, as a consequence, there cannot be a centre. It may all be better characterized as a termite hill. Some urban planners call the existing African slums "a tendency for a new-centralization" (C. Doxtiadis). In my opinion, they are actually a sign of a wish for a new orientation towards the future. The Informality of slums somehow serves as a blueprint for future informality.

Behind the word "centre" or ""centralisation" is the colonial experience that still asks for this structure. In colonial times, the centre was rather in Paris or London. This outside orientation is still hanging around in many African minds. Even today, some African cities are proud to see themselves as, or aspire to be, 'little Paris' or 'small London'. We around AgroCity create something that originates from the people and not from centres. The people themselves must become the centre.

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Al's Exhibit No 21: Priorities: a warning

All over the world, it is possible to find a tendency to put one thing first and above all others. We in the West say: only one thing is important and this is to be healthy. People forget that health is comprised of many factors. Moreover, what is about, if someone is not healthy according to the proposed normality? Others are totally convinced that the family comes first and above all other social groups. Others strongly propose the (western) school, but is school the only form of education?

This monopolistic tendency leads to false activities. They are all based on mono-causal thinking, but mono-causality does not exist. When we accept interaction then it follows that many causes interact and influence each other. We have to live with poly-causality. Even because there are different levels of perception: ratio vs. heart, the level of moods, feelings and daydreaming. It is risky to demand priorities in our society. Most of the time this postulated priority includes the exclusion of the many and different elements that are deeply related or connected with the demanded priority. We all have to be aware that most of the time priority means the first step. However, along with this step other steps are in process. One may compare it with the foot that has five different toes. Without those toes, the leg would be crippled.

The advantage of a broad planning team is that architects have to share their views with gardeners and the landscapers, eco-farmers and ecologists and artists; they have to be assisted by anthropologists and speakers from the population are involved - a woman and a man - both representing the people. Priorities take on another meaning in a democracy where many people will participate in defining them. In the future, African AgroCity priority means a mixture of different opinions. Thus, we are really back in the midst of Africa, where everything is a mixture, partly a compromise. The essence of the whole of Africa is *mélange.*

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AI's Exhibit No 22: Efficiency versus muddling through

Western thinking will stick to a pattern of a vision, leading to a planning phase with the following implementation. Building a city is a highly complex task; and it will involve specialists from many different sciences, limited by financial and legal constraints. Local and international expertise as well as artistic concepts and the personal styles of architects will shape a growing city. Brasilia of Oscar Niemeier is a brilliant example of a new capital out of the blue. When European cities were designed in the middle ages there was a blueprint of the new city within its walls, mostly founded by nobilities.

Africa thinks differently with a practical approach to solving tasks. Their complexity, described in Exhibit No 8, will lead to a totally different way of envisioning, interacting and implementing, avoiding a logical path of planning and consequent realisation. The positive aspect is that the construction process is dominated by reality, by what is available on the spot, what can be improvised today or tomorrow or in the near future. Timeframes are flexible. Combinations of materials and methods may seem to be chaotic. Nevertheless, the flexibility, the relaxed chain of interactions and coincidences will allow solutions under difficult constraints. This is the big advantage of African solutions.

Improvisation has become an art, a philosophy, a way of life, providing surprising results even with limited options. It is a human approach, a philosophical path, a tribute to ancient spirituality, a rhythm of its own kind.

No wonder African solutions show a sharp contrast to the western way of tackling complex tasks. Therefore, a practical solution has to be found when international expertise meets local constraints and mentalities, when high tech touches sacred grounds, when a western hour meets stretching and shrinking time frames, when brains tick differently than clocks.

One solution is perfect planning according to modern standards, which would serve as a guideline, but is implemented by local people. Another way of adapting to African reality is to form teams with locally adapted and experienced foreigners and traditional Africans. A third path involves talents from many different backgrounds that assist the implementation, providing tools and methods and ways of interacting and involving local formal and informal authorities in order to find practical solutions.

Let us keep in mind that inhabitants of slums are in a way pioneers, explorers, and researchers. They all have the hope of getting rich one day, of creating a better future for the next generation, of making the best out of a given situation. This ingredient may assist building a positive future in AgroCity. Bringing their traditional knowledge of farming into an urban environment, aiming for progress and better living conditions are vital spurs for building AgroCity.

Another aspect is to involve and empower females of all ages. They have always found themselves in situations with little hope, help and money, but have raised their children, managed their households and farms or little businesses. Their experiences with micro-credits have built on this system. While men were gambling, chasing girls and kept drinking, women were muddling through daily tasks and challenges. Thus,

building on female ingenuity and improvisation of talents may be a key factor for constructing AgroCity.

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Al's Exhibit No 23: IBA[1] Africa

I would like to propose a continental African urban construction fair. Instead of constructing a new capital, I suggest planning and starting to build three models in the spirit of AgroCity. Spontaneously I can imagine the following sites: South Africa, Cameroon or Ghana and Uganda or Tanzania. Nevertheless, it could also happen in Mozambique and Mali (or Burkina Faso). African people - and most of the slum inhabitants - are hungry for a brand new city. People from the three best-known slums in Nairobi, namely Mathare Valley, Kibera and Soweto (and even confirmed by some people from Uthiru and Riruta) are proudly convinced they are the trend setters for music, fashion, education and inventive technologies. For an outsider it is unbelievable that those people are full of an innovative spirit. This is contrary to the general sociological assumptions.

Basic interest does exist. What is needed? People with a vision and money. If one thinks of the enormous amount being spent by foundations and billionaires or millionaires in the fight against AIDS in Africa, a similar spirit and effort should arise preparing the foundation of a better livelihood. The slogan could be: Before AIDS, an AgroCity! Or: A new city is needed in the war against the many illnesses, and especially against hunger.

In Lagos, a new slogan grew: "We need a new urbanism!" This shows that there is already a climate sourcing such an experiment, revealing a mood to do something towards AgroCity.

Whoever googles will be astonished at how many urban gardening projects there already are throughout the continent - from Namibia to Mozambique, from Kenya to Senegal. It clearly shows that people have already started the experiment. Now, leaders are needed to further develop the vision. Groups full of experimental spirit for a follow-up are vital. On the ground, I see architects, land artists, a combination of agricultural and urban spirit. A new generation of skillful leaders will take all this into a new spirituality.

To convert this soft wind into a storm, an African IBA can contribute. Where are the African architects? There are many of them around the world, but so far, they have had no chance on the African continent. An IBA could bring them together with the many other architects around the world who are interested in such an experiment. I plead strongly for togetherness of all continents. The exchange of ideas, not only over satellite or internet, but on the spot is needed. Just imagine a physical meeting of geologists, geographers, hydrologists, land artists, n'angas, priests, architects, eco-farmers and AgroCitizens!

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[1] IBA stands for Internationale Baumesse - Ausstellung, an international construction fair. Such IBAs have a 100 year old tradition in Germany.

In other words: A new AgroCity starts with dialogues, exchanging ideas. That is the base. And only afterwards designing and planning will follow. For possible contributions, I think of the foundations of the great agro-seed and agro-chemical firms of Bayer-Monsanto, the Chinese firm Chem China together with Syngenta, DuPont, Dow Chemical and agro-business firms in other branches such as ADM or Cargill.

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Al's Exhibit No 24: How to proceed for IBA?

1. In 2001, UN (United Nations) HABITAT was founded with its head office in Nairobi. It has the goal of an urban rejuvenation on the African continent. A team interested in AgroCity, headed by a professor in architecture, will get in contact with this UN institution.
2. UN HABITAT, together with a university faculty of architecture and urban planning plus government officials, will have to organise a piece of land for testing materials and construction methods. The testing ground of about 10 football fields will be the playground for around 20 specialists. Their hypotheses and findings must be combined with the assumptions of the other scientists present.
3. It will be desirable to have a second testing ground under the heading of a different faculty with a different orientation. One of these testing grounds should be more for the urban, the other more for the agricultural (animals, flora or communal life).
4. One testing field would be located in Ghana (Kumasi) or Ibadan, Nigeria (IDA) at the Institute of Tropical Agriculture, one of the world's leading research stations, ideal for agricultural experiments. Another test centre can be attached to the planned Silicon Savannah near Nairobi.
5. In the test centres, access to data on a water or a soil atlas and literature is available from ICRAF, Nairobi (World Agroforestry Research Centre). Research journals will allow feedback and data exchange.
6. This proposed institution should apply for governmental approval.
7. A budget over several years as well as clear objectives per year shall allow financing through governmental sources, multi-national funds and/or international foundations.
8. If the testing shows encouraging results, the test site shall become the property of a cooperative of a future AgroCity.
This proposal can serve as a model for duplication in Africa and around the world.

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Al's Exhibit No 25: Basic Economics in AgroCity

An AgroCity should be communal without being a commune. Further, AgroCity is not capitalist, but rather a fusion of capitalism and socialism. AgroCity is pragmatic rather than ideological. It is a product of informality. AgroCitizens will struggle towards a never perfect, and even contradictory, democracy.

AgroCity has to take the needs of its youth very seriously. We cannot send them to school without providing jobs for them following school. Informality is able to create new jobs. We all have to think about jobs and to start jobs. Elderly people have to step back a little. They have to be taught to eradiate more satisfaction. Keep smiling is an important wisdom. For educating girls, better school models have to be urgently developed in order to prepare girls for real life - as a wife, a mother and as a worker in a small enterprise or business so that they can see their duties not only in a family, but also in society. Mature women are ideal dealers on the local market. Men should provide them with a market stand and let them deal on their own.

One central orientation in AgroCity is sharing. Husbands and wives work and earn some money, but this money is not private. In AgroCity, many will have to work in gardens and fields. Advisors will coach people to run their business and distribute work within families and neighbourhoods. Sharing machines and capacities is important for many activities such as seeding, harvesting, processing and storing.

Certain pieces of land will be given to tenants in a land-lease agreement. The amount of the harvest that must be given to the community of AgroCity must be clearly defined from the beginning.

Communal work has a high priority. Each citizen is obliged to keep the city clean. Micro-credit-systems are established. In AgroCity, most people start out in small steps. To reach a certain point people need small credits. On the continent, especially in West Africa, the "Tontine" is established. Mostly, a group (up to 12 people) gathers. Each woman puts a certain amount of money in a pot, and it mostly clearly stated how much is desired. At the end of the round, one woman gets all the money. Next time another woman is the lucky one. Thus, it goes from one person to the next. Similar systems exist in Egypt (Gameya) and Susu in African Islamic areas. Tontine is a small, collective African saving ceremony.

As an alternative to Western Union, some Kenyans, KCA University and Safaricom, have developed a transfer- and banking system based on mobile phones. In a very short time, the system conquered Kenya and has now spread to other African countries. These are just two impressive examples. Many other electronic inventions will follow in the years to come. We have to be open in order to integrate such inventions into urban architecture.

Africans still lack the tradition of handling money. The existing money systems on the continent go back to colonial times and tax collecting methods. Northern Africa had a relationship to money over the Islamic religion. In South Africa, the British introduced a money system; the Boers were mostly traders and businessmen but practised a rural exchange economy. In African minds barter or countertrading is still active. Wounded by colonialism, old and new, the African continent was very poor and has remained poor for over a century of modernity. Why? The colonialists exported the natural or mineral resources and did not develop industry in all of the colonies. Thus, Africans never got any added value from their own prime resources or produce. One example: from Africa, coffee is exported and Nescafé imported. The same applies to tea, bananas, pineapples etc..

Even today, Africa hardly gets any money from value added goods. Indeed, the Chinese, operating throughout Africa, are serving as a new form of colonialists. Yet,

the Chinese are clever. They refer to the Western colonialism and say: "Europeans were just robbing you, but we give you something useful such as roads and railways." As a conclusion, the concept of AgroCity is a mixture of agriculture and urbanism, which will create a new economic form that may be a way out of the African development catastrophe.

During the description of the many aspects, I have constantly tried to include as many alternatives as possible. Indeed, not all ideas presented may immediately be practiced or included in a project, but they provide a large range of possibilities. In summary, many fields of services for health, spare time, art and hobbies, sports and free-time activities open huge markets and micro-centres for a combination of small-scale business and rejuvenation. Holistic infrastructure, micro centres, informal meetings and spontaneous actions are preferable to monumental fairs, shows and events. Public and private workshops, ateliers, galleries, and local art festivities are more AgroCity-like than large, dusty museums. Activities in boroughs and neighbourhoods embody the type of AgroCity-life. Education and electronic access to the web are of vital importance. All people responsible for education, family life and public health shall oversee abuse of social and electronic media.

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3.5 Editor's Summary to AgroCity's Needs

After interesting and exotic insights into Bantu feelings and thinking from a Swiss angle, AgroCity will need local guidance, an African rhythm, a culturally well-based team of coaches and experts ...or much more time than one generation for harmonising AfroCitizen's needs, as well as the respective planning and implantation phases. With the progress of building AgroCity, however, needs will be formulated much more easily and more to the point than without a living model. Western or Asian thinking will never combine with the local vibes. However, mixed teams with only limited feedback from foreigners will have a chance to guide the process...or just let it evolve according to AgroCitizens. It is a local project and local pace shall be respected as a general rule.

As a consequence, local funding will be the best solution for harmonising progress with financial needs. As AI points out, small steps to start with, growth according to progress, creative boosts as well as setbacks, leading to new dimensions.

Despite all doubts, urban farming can be initiated even during the pioneer phase. The pioneers' self-sufficiency will create data and experiences for the expansion period. AgroCity is even fit for welcoming migrants the world over. New arrivals may be integrated into urban farming from day one, receiving them in welcome centres and coaching them in the neighbourhood from the beginning. All they want after arrival is a shelter, food and jobs, education and medical supply. This will allow them to assimilate quickly while working with the locals, earlier pioneers.

According to Maslow's pyramid, needs will change over time and depending on success. With new arrivals versus seasoned AgroCitizens, the mix will allow a good transfer of knowledge and spur efforts according to local needs.

Part four: AgroCity's Infrastructure and Services

4.1 Editor's Introduction to AgroCity's Infrastructure and Services

Infrastructure and services have to be implanted according to the people's needs. This is easy for a new site. With services, it will be possible to start in any city. However, with infrastructure, dramatic changes and adaptions will be necessary. At the end of this chapter, we will have a chance to judge whether traditional cities have a chance of becoming AgroCities, maybe by transforming quarter by quarter.

Focussing on the material and immaterial needs of present and future generations, it is vital to orient the necessary infrastructure and services towards the culture, focussing on the needs expressed or envisioned. Many parameters have to be respected. Planning, implementing and further developing the construction of AgroCity will involve all inhabitants, especially the females, who will add a rich treasure of practical experience that comes from carrying many of the daily burdens of labour, household work and care for their families, clan members, neighbours and immigrants. All age groups shall express their specific needs from pre-school-children, pupils, apprentices, students, professionals, housewives to senior citizens. Even ancestors will contribute to structures and rituals.

AgroCities might differ due to historical, geographical, economic or cultural reasons. However, the maxims will remain the same, needing local adaptations. Certain rules are imperative, others flexible. Future experiences will reveal the results.

4.2 Infrastructures and Services according to Inhabitant's Needs

AI's Exhibit No 26: Construction Materials

Not all materials are fit for all climates. The rules in semiarid areas differ to those in the humid tropics. Heavy rains influence equipment differently than constant wind, mixed with dust, does.

Here follow some observations. Avoid sandstone or gritstone and use clay or mud or sandy loam instead. These materials provide more resistance and seem to fit better to Africa south of the Sahara. Sandstone is recommendable in a moderate climate.

Plaster has to be handled with special care, because to most mixtures, cheap sand or even dust is added. A reduced plaster may become rather dangerous in countries constantly exposed to earthquakes and typhoons. We have seen tragic results from Haiti to Japan, from Italy to Chile.

Special caution should be given to painting outside or inside walls with paint mixed with chemicals. Most mixtures of paints are unsuitable for an extreme climate; they

begin to penetrate the walls and destroy them from the inside, which is not often immediately apparent. The process is similar to termites, which eat everything behind the small cover until the whole structure collapses. Construction chemistry can be a black box for Africa because products are seldom tested on the continent and in different climates. Even a certificate of guarantee (mostly for 2 years) is of no help because when the first repair is needed the guaranteed time is over.

I regard the many potholes in most African roads as being not only a result of carelessness but also a result of using materials such as concrete, tarmac or asphalt that are not suitable for African roads. Perhaps the roadside should be given more attention by planting trees and bushes. All these overland highways lay unprotected from dust and water. Not even the colonialists paid enough attention to wind and dust. Most people underestimate the long-term effects of wind and dust in collaboration with the heat. In the tropics, people have to live with extreme temperature variations, leading to constant explosions on the ground floor of the earth. Similar remarks can be made about the effect on the house walls. In case we go into vertical farming more, we have to be aware of certain effects of sun, wind, dust and variations of temperature and humidity.

Such complicated constellations need even more attention and care.
Europeans hardly ever taught African people about such interactions. We Europeans handled many such things spontaneously and forgot to leave such know-how behind. But now it is urgent to make different jobs out of such interactions and that means we create jobs. Important is that the job of caring is highly ranked and not only attributed to women.

From horizontal farming, expanding to a vertical orientation lies a Galilean turning point. This has to be instructed and learnt, especially for Africa. We hardly know of any tradition - except from some myths (hanging gardens) or in Islamic culture. Even vines and ivy, any climbing plants, need extensive care because they get dirt from birds, bats, spiders and insects. For Africa, we are lacking knowledge of such ecotones. Step by step experiments from botanists are needed, as we learn that European knowledge cannot be automatically transferred to Africa. Going to develop AgroCity, all of us involved have to learn a lot. One single person is unable to unite all the knowledge needed. Teamwork is required - not only between North and South, but above all, among the African universities. At no place, architecture should be regarded as an isolated subject.

For Africa, many new materials have to be developed and tested. Africans should stop blindly copying the West. Singapore is also not their vision, but the continent Africa. AgroCity is primarily a challenge for Africa and a therapy for coming away from their latent inferiority complexes.

Special attention should be given to the problems of ventilation (artificial or natural). The current usual air conditioner has to disappear as quickly as possible. It needs too much water and energy, which we do not have. The air conditioner creates a social problem and a painful tension between poor and rich. The young Ivorian architect Isa Diabati is working hard on the problem of ventilation by experimenting with different layers on the roof.

Since everything is related to everything, Isa Diabati is simultaneously considering the all present iron sheets. Iron sheet roofs are particularly unsuitable for the African climate. Nevertheless, as he must realise, Africans regard iron sheets as a symbol of progress. In an interview with Radio DFR 2 (4. Oct. 2016) Diabati said: "Horrible, terrible, Africans are not yet ready to turn away from the roof iron sheet. To abandon, it will mean going backwards."

In conclusion, we as outsiders may not realise that every material also has a symbolic value attached. Africa is not only full of trauma and complexes, but also multidimensional and thus, all things also have a symbolic and even a sacred meaning. It follows that for each material used, stories shall be told. It will be helpful if such stories combine myths with some historical facts.

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Al's Exhibit No 27: Roads, places and house walls

For an African city - especially AgroCity - roads and streets within and leading out of the city connect it to the world, leading it out of isolation. Many people will give priority to good connecting roads even prior to building a school. What is the purpose of schooling when it does not lead into the world? Becoming part of the world is a basic African desire and need.

Roads must start smiling. The colonialists were never interested in connecting people. They had in mind that all roads "lead to Rome" with the variations of leading to Paris, London or even Cairo. They all built streets oriented towards power centres like Cecil Rhodes' dream-road from Capetown to Cairo. This pattern can be found in the capital Lusaka, Zambia, where the main or business road is called "Cairo Road". Thus, for Africans, each constructed road carries the meaning of expulsion, exile or being left alone. A road still has something traumatic for Africans. It may be one reason why people do not properly maintain roads.

African people seem to have an inborn drive to go out, to travel and visit relatives, to perform rituals and gather in cemeteries. They want to be interconnected and escape loneliness. More deeply interpreted: roads have much to do with the exodus. Even today, Africans partly dream of the Old Testament exodus; many still have the century long slavery in their mind, of being hunted and sent abroad. The road prepares for the homecoming - even today. Deep in their hearts, they still remember slavery routes as one-way streets. Therefore, roads have to make people cosy, free and proud.

However, why are African roads in such a miserable condition today? Bumpy and full of potholes? Sometimes, you get the impression that Africans want to purposely castigate the roads, which are not their roads, but roads of exploitation. Many African roads today look like photos of despair, similar to what can be seen in the work of great US photographer Dorothea Lange (1895 - 1965). Roads are also the origin of dust - and dust for many Africans can be a cloud, which covers your head. Today, Africa is continent of too many dust bowls.

Roads have to inspire urban planners and architects, especially in the experiment of AgroCities. Africa is full of symbolism or, behind any subject, there are many meanings and different messages. Africans mainly live outsides on places and in the streets. For any African city, different places provide space for different activities. A place is like an arena of exchange. Yet, an African plaza has another character than in Athens or Rome, even more different from an Islamic place in front of the mosque.

I am unable to define an African piazza because so far Africans have hardly had any chance to construct one. Do they prefer a round one as reflexion of the moon; or would they rather go for a square one? Some have an image from the past in their minds, but then it was rather the place for the cattle or it may have been somewhat of a market place. However, what should be the future shape of a plaza in AgroCity?

For the moment, private house walls are rare. Sooner or later the African population will have to adjust to houses with two or three floors. This will allow fruit and vegetables to be planted vertically and on balconies or terraces and windowsills. Private and public buildings will form new farm ground. Again and again future AgroCities are constructed with a mix of ideas from Africans and many open people around the world. Thus, even the house wall may become a microcosm with roads leading to the world - and plazas becoming part of the new world.

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Al's Exhibit No 28: Water Management

After air and sun, water is the most essential good. However, unless we develop technologies and find new sources of drinking water such as recycled wastewater or desalinated water from the sea, mankind will increasingly die of thirst and, even worse, millions of small children will die from contaminated drinking water. AgroCity must use water technologies to provide clean water to all. Many technologies are available worldwide and there are many new inventions around. Basic facilities such as latrines and septic tanks only solve part of the problem. Leaks occur almost daily in a megacity, polluting the environment and contaminating drinking water. Far too often, wastewater and faecal sludge are not treated the way they should be. Omni-processor-treatment systems can do a lot more, turning waste into energy, biogas, fertilizers, biochar (a soil conditioner) and even drinking water. These valuable resources can significantly help to improve people's lives and create a self-sustaining recycling model.

To achieve this significant goal, the necessary support by specialists is constantly needed. African universities should adapt technology from the Western world to meet the different conditions in African compared to other parts of the world. Universities have to train local craftsmen, passing on ideas and adaptation possibilities. Such a procedure can be called the "trickling-down-process" in a positive way. All this is not possible by merely supplying money; it has to go along with a permanent learning process. Therefore, all AgroCity planners and architects have to be in contact with the latest research and developing institutions around water such as EAWAG, Dübendorf (Switzerland) or German development institutions.

There are great drinking water resources in the Maghreb and Northern Africa. Hydrologists estimate that there is 20 times as much drinking water underground as the water stored in all African lakes together. In the entire northern girdle, there are of 9.66 million cubic-kilometres of water, especially in Libya, followed by Algeria, Egypt and Sudan.

Southern Africa is the region of great streams, and transnational water management is needed. It is sheer nonsense just to build dams for electrical power generation. There must be something like a coordinated water strategy. It is of highest importance to care for streams and rivers by planting trees and bushes along the riverbanks. Shade and roots reduce evaporation. In Southern Africa, the rivers can supply enough drinking water in the long run. The different use of water has to be observed. Drinking water reserves can go along in harmony with electricity needed. AgroCity must develop a smart handling of water; that will be the A and O.

Water supply shall be under the control of public or cooperative management, at least in AgroCity. Any large private distribution is unfair, exploiting poor people. Water must be in communal hands and be at least partly managed by the people concerned. Privatisation can lead to power struggles where the poor lose. Thus, privatisation is not an option for AgroCity.

The first planning priority for AgroCity is the search for water, followed by the development of an intelligent infrastructure for transporting and storing it in a protected flux. A radical re-forestation is urgently needed all over Africa. Forests have many purposes, the most important being keeping back rainwater and the ability to create small water lakes under the roots. This water is absolutely pure and drinkable. We can find a wonderful example in Ethiopia. There, the NGO "Green Ethiopia" has developed a manifold project, with over 1000 women fostering tree siblings, followed by tree planting actions after having prepared the landscape and the soil. Mostly, women plant the trees on the hillside or slopes, but also along rivers, keeping them flowing all year long. Bees enter the reforested territories. Besides stopping erosion, people will soon be able to get clean water and honey. Gradually, a greening of Ethiopia is occurring. A similar program, operated by the Nobel prize winner Wangari Maathai, was successful. The movement was called "Green Belt Movement" and had the aim of reforesting 100 Mio square kilometres in Kenya.

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4.3 Peace & Safety

Al's Exhibit No 29: What is a slum?

Each region of the world knows the phenomenon of people who escaped from the countryside and have set up homes in poor housing or shacks around megacities. It has become a worldwide pattern. The UN estimates that more than half a billion people currently live in such poor urban areas without water and official electricity supply and without waste management. Slums are often associated with dirt and poverty, with exploitation and despair. Mike Davis, in his analytical book *Planet of Slums* (2006), estimates that there are over 200,000 slums on Earth. He

characterises the African continent as being in the most miserable situation as "more than half of the whole population is living in slums or under slum-like conditions."

There are many different words around the world to characterise such a miserable situation of habitat. In Latin America they are called favelas, in Southern Africa, townships, or bidonvilles in the Maghreb. In France, one speaks of banlieues, in Germany they are often called Elendsquartiere. More neutrally, they are just described as informal settlements. On the African continent, the word slum is generally used, although slum is a rather biased concept. Immediately most of us think of dirt and misery, of unbearable and sickening smells, followed by roofs covered with rusted iron sheets as well as narrow and dirty roads.

Social and urban scientists are increasingly abandoning the concept or the word slum. Social scientists have recovered informality, including and allowing a lot of creativity with exchange of goods and services. They are poor from an economic point of view. In such quarters, on the brink of the city, most of the people are not registered, have no papers and rarely have money. People exchange what they have and keep themselves alive. In various papers, I have given some insights into African slums. If everything was negative, why do slum dwellers even go there? Have slum people lost all initiative? Has the bad smell lead to a loss of all feelings and judgements? Is it even a narcotic problem?

On the African continent - as Dong Saunders characterises well in his book *Arrival City* (2011) - you come closer to the city - physically and mentally. Migrants were all farmers in their behaviour and in thinking. Thus, they even expect "a new form of farming". All those settlements on the brinks or borders of the megacities are neither village nor city; they are in a position of transforming into something new. For the moment, all those people are marginal, surviving informally.

The postcolonial modern state is in a similar transition - neither this nor that, also in between, not able to integrate people on the edge. In such a locked-in society. The concept of AgroCity can build a bridge into new mobility and creativity. The slums or informal settlements will become essential for the face of the future African city. There is one essential point, which shall be a base for AgroCity: the different ethnic and religious groupings have to become mixed. AgroCity must adopt a democratic process.

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Al's Exhibit No 30: Violence and Crime in the City

Throughout history, mankind was always divided in the judgment of the city due to a dualistic worldview: expected was a holy city (like the heavenly Jerusalem), but often the city was closer to the City of Babylon or Sodom. Pious people thought that the city was possessed by the devil or by bad people, by people who were full of sins and evils, egoistic and greedy. As a contrast, the church father Augustine (384 - 430) wrote the classic "De Civitate Dei", a kind of projection of an ideal city, a paradise on earth for the future.

The negative prejudice of the city's character is still very much present in today's society. Religious people mistrust city life. On first glance Africans have a different view because of the mass of rural population streaming towards megacities.

Earlier, citizens of a feudal city were blind and only had a view between good and bad. They made no distinction between rich and poor, because all was given and caused by God. Thus, it was logical that the devil dwelled and acted in the city. The poor were just victims of this malefactor. The devil, the fallen angel, was responsible. The opposite were the political and religious leaders, chosen by God, fulfilling his will on Earth. Industrialisation overthrew old orders, establishing capitalists as bosses, ruling over their workforce like a small copy of God. The employees were poorly paid, hardly able to feed their families, living in the grace of the industrialists, who caused much evil. Wealth only meant glory.

Urbanisation increasingly challenges social responsibility. It would be more than naive to believe that all human beings are good. In all of us, there is a kernel of maliciousness, exploitation and brutality. The socialisation process of a human being is very important. The social environment is another formative factor. People are not just born as saints, but rather are moulded by their families and how much they are accepted or humiliated. Later, all our experiences melt down into our character, our school- and professional formation. Puberty marks another challenge. Influences have a decisive formative effect on the individual character as well as on society. The greatest challenge is entering professional life in order to become economically independent. Many unemployed people migrate to cities. There, only small-scale industries and services can absorb them and integrate them into economic life.

Together we have to challenge the impossible in order to give the poor food, shelter, wages and social integration. This prevents crime, violence and sexual abuse. Today, sociological studies show that criminality is as present in villages as it is in towns; only the performance is different. In today's Africa, neighbours are poisoned in villages and shot in town. A woman is not safer in a village than in a town. The rest is projection or prejudice. Subtle bullying is still common practice in rural areas.

What do planners have to achieve and observe?
1. The peaceful city must be conceived radically on the basis of mixing people and their religion and their policy. Ethnic sectors give way to good branding
2. Melting rich and poor, open up communities.
3. Informality and formality shall meld and as much as possible should be left open. There should be as few rules as possible and less laws. People have to find their ways and forms of organisation.
4. "bien vivre" or "buon vivir" (slogan of Latino architects): the aim of our activities shall be marketed on all buildings, gates and road signs, market places included.
5. Even sex clubs and dancing must be given an important ranking. Brothels are accepted and respected.
6. Delight and thrill inhabitants with architecture in buildings and urban landscapes.
7. Promote a feeling of living in a cosmos, at the same time take them into the great worlds, and thus make them a part of the globe.
8. Sharing is better than private property. Public kitchen, laundry facilities, day care for children can bring different generations together. This is a paradise on Earth with harmony, respect and mutual care.
9. An orderly city radiates and inspires with a specific odour or fragrance.

10. Achieve a clean and friendly city; this cultivates good spirits.

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Al's Exhibit No 31: Authority in AgroCity

Where citizens are living, working and relaxing in larger numbers, there are conflicts of needs and interest as omnipresent as in villages. There might be, however, a concentration of criminal energy with certain activities or mass events. Self-control and intrinsic regulation mechanisms are fine and informal. Nevertheless, they will lack efficiency when it comes to large numbers. Therefore, a sensorium for violence and crime has to be put in place. Scanning as well as a zero-tolerance-policy have converted many problem quarters in cities. Self-government of AgroCities is fine but must be enforced by police, army, civil guards, rescue squads and fire brigades after catastrophes and chaotic mass migration.

The entire court and prison system will be needed. However, new ways of a prisoner serving in public shall be in focus. Reintegration has to start in prison. There is no need to torture and isolate, but to challenge. Safe sex in prisons shall be allowed in order to bring people back onto human paths. Work and social contributions in hospitals and senior homes is one way of re-socialising and re-integrating. For detoxifications of drug abusers, modern technology is now available even for heavy cases. Moreover, the death penalty is no option - never. Expulsion with electronic control gadgets might be a heavier penalty. It is obvious that prisons grow their own food in AgroCity.

The constant ability to take photos and call emergencies today adds to transparency and discipline. It can however violate privacy and authorities should carefully evaluate control and private spheres.

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4.4 Health: Education, Emergencies and Health Infrastructure

Al's Exhibit No 32: Health & Healing; Bantu sight of Illness

Among the 1000 Bantu peoples south of the Sahara, health does not have the same level of importance as in Western cultures. Health has to serve fertility and health is much related to the enlarged family; a single person stands in the service of the clan and the community.

The "n'anga" is the traditional doctor. Missionaries and Western researchers called him, rather rudely, a "witchdoctor". In German, he is even termed a magician, wizard or illusionist (Quacksalber). It is the sacred duty of the n'anga to find out the connection of the present illness to the patient's ancestors. It is the belief of the Bantu that ancestors cause a sickness. A talented n'anga is always attached to a certain extended family and has to know the genealogical history going back approximately 400 years. More than that, he has to be a master of constellations and

analyst of all complicated interrelationships. A dead person is not really dead until nobody remembers him or her any longer. Thus, the ancestor had to give a sign that life could continue through certain sicknesses. At the same time, it was a warning to the living to honour the ancestors.

This shows that the African medical system has a strong tradition within a community of faith, throughout all social levels. The great writer Wole Soyinka highlighted this in one of his most famous plays *A Dance in the Forest* (1960), with the warning: "The ancestors don't follow you because they may not understand what is going on in this new world". Furthermore, Sony Labou Tansi finally did not consult a specialist at a hospital in Paris, but went back in the forest of Congo.

Since ancestral belief is very strong and omnipresent, African urban planners and architects have to consider this. Most of the constructors of African houses have neglected such old beliefs due to missionary work and schooling, which has eradicated knowledge of such traditions. This has been a mistake.

Parallel to this basic African medical system, two other medical systems exist. One may even be older than the belief in ancestors; it is the broad field of the good and evil spirits. The same custom applied to people around the Napf Mountain in Switzerland, the place of my youth on a remote farm. We cultivated and nourished the spirits of the dead (they are called "poor soles"). Next to this rather magic catholic belief, many mountain spirits were active. They derived from a Celtic shamanistic tradition.

As mentioned again and again: Africans adapt new methods and behaviour. Therefore, modern medicine is accepted, introduced by the missionaries who constructed clinics and hospitals. Most Africans know that some modern sicknesses and certain surgery must be carried out in the modern European way. Realizing that this medical behaviour was new to Africans, the layout of hospitals and clinics was copied from Europe. Until very recently, nobody thought about an adaptation and even a form of integration of old and new. Modern compositions of hospital complexes shall integrate different locations and ideas on the same spot.

When independence was achieved, most missionaries left and the existing missionary hospitals were handed over to the new state without any concept. Albert Schweitzer's hospital in Lambarene was an example of this catastrophe. The government kept back some of the money spent by foreign supporters of the hospital. Machines and instruments were not taken care of and became unusable. The complexities of hospital management had not been taught to the Africans who took it over.

African health has never been understood by Europeans und has just been judged as superstition. I think one consequence is that out of the about 50,000 new African churches, more than half deal with healing. The new priest, pastor or preacher became a healer meaning that we even have an additional "religious" medical system.

How should an African hospital be built in AgroCity? Nowadays, an urban African hospital shall be planned like a university campus or compound. It will be an integral

area like a district of healing. Health is something comprehensive, holistic and integral. According to African tradition, health and fertility go hand in hand.
A few points:

1. The roads to the hospital have to be tarred and protected either by trees or bushes. Health must be supported by ecological factors.
2. Since family members of the sick person feed and take care of the patient, there must be dormitories for them.
3. The n'anga must have his own "sacred space" in the modern hospital compound.
4. On the campus, there shall be herbal gardens and a special place for sacred trees, important for healing certain sicknesses. People who still know the effects must regularly give courses.
5. There must be vegetable gardens for cooking and an improved diet.
6. In the corners of the compound, there must be barbeques and ovens.
7. Around the compound, solar collectors must feed the system.
8. Staff dormitories, relaxing zones and lecturing facilities have to be included in the hospital complex.
9. Artwork and music will support wellbeing and healing.
10. In addition to doctors and nurses, there must also be gardeners and teachers specialized in herbs, vegetables, trees and bushes.
11. There will always be some technicians for maintaining and taking care of the buildings, machines and instruments.

I expect that more and more, overall continent, everything will not just be looked at in a technical medical way, but also from cultural and ecological perspectives. Health has to do with mentality as well as with practical handling, with tradition as well as with science, with the psyche as well as with knowledge. This holistic approach I expect to shape the health system of the future AgroCity.

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Als' Exhibit No 33: Health Infrastructure

Naturally, emergency services try to save lives and cure sickness and suffering. Thus, health education for all, preventive instructions and coaching must follow In addition to medical services, midwives, baby care and birth control. Informal health care as well as established care have to go hand in hand. Emergencies, hospitals, universities and their clinics, pharmacies, laboratories and traditional medicine are integral parts of medical infrastructure.

A wide range of secondary health care like physiotherapy, medical massages, osteopathy, Rolfing or structural integration, home assistance to palliative care can help to heal or care and create jobs in all neighbourhoods, some not needing intensive education and training. As mentioned above, traditional medical attention and spiritual or complementary health care are part of taking care of AgroCitizens' physical and mental health and healing. Many of these services do not need any infrastructure or can be based in decentralised storage spaces for medical equipment like wheelchairs or special beds.

Since the link between drinks and food with health is obvious, food sanitation, nutrition education and coaching respecting fitness and health must be part of health

services, requiring little infrastructure, adding to mental and physical fitness and therefore increasing life quality while considerably reducing other medical costs.

Growing your own food as well as short and fast ways of moving from harvesting to processing, storing and consuming will lead to higher consumption efficiency as well as to improved taste and enjoyment. This adds to AgroCitizens' health and wellbeing. Banning smog, noise, fast private traffic and letting individuals cycle will add to fitness and health and prevent accidents. Less stress, more physical activity like eco-farming, higher satisfaction, fun and a happy sex-life will assist the health balance of all.

In general, I guess that health infrastructure in AgroCity will be smaller and significantly cheaper than in traditional cities.

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4.5 Education from birth to age

Al's Exhibit No 34: Training for AgroCity?

Let us start with some basic wisdom touching on the field of learning:
1. Different views of an object are possible, depending on the angle, light and perspective. An open mind and a multi-disciplinary approach eases learning with only one sentence: you never exclusively catch the issue.
2. You need at least four statements about or around the object under study
3. Just learning by heart may be accepted within the field of religious belief, but religious learning will never help you to adapt to a general understanding. Good public schools are needed.
4. More important than learning by heart is the practical know-how of how to handle specific situations.
Why do I write these rather philosophical phrases in a book for architects and planners on the African continent? African basic learning does not reach depths. It is mostly memorizing or learning by heart without any practical use in daily life. In AgroCity, practical knowledge will be in focus. Learning for life, not for diplomas and papers.

My proposal: in the future, the environment and local habits must be in focus for planning and constructing a city. Building a city is an important field of practical learning as it stimulates learning. Many places and situations are relevant for learning and education. The school buildings have been too isolated from society and the environment. In Africa, missionaries founded the existing schools. When the missionaries arrived, the first two main buildings were a poor church and a temporary school for educating more and more converts.

Today, schools necessarily have another function than in colonial times. Now, a bunch of buildings is not enough; there must be a whole campus and environment. AgroCity reflects an ecotope. One has to learn how to manage interactive systems, to handle machines and to treat insects at the same time. As a consequence, schools need differently trained teachers, another environment with trees and

bushes, with vegetables and animals, respecting hand, heart and brain. In such a situation, even the concept of cleanliness takes on a different meaning. Schoolchildren learn to seed and grow, to harvest, to process and store, to enjoy and then to recycle fluids and solid materials and food remains.

Three things are of the highest importance in such an educational system:
1. Holistic and eco-topical thinking, harmoniously enlarging the traditional environment, leaving the clan and neighborhood step by step, becoming part of a wider society.
2. Starting self-administration from childhood; socializing, sharing, becoming a responsible member of a micro cosmos.
3. Evaluating and judging situations, tools and objects and taking decisions, weighting and calculating risks.

Although this small chapter takes a rather philosophical perspective, it means nothing else than to take the work of planners and architects seriously. It begins with the thesis that urban architecture is more than building houses. Now, I go further: Urban architecture is part of education. All this is part of a solid education, making planers and architects part of education and schooling. A school complex becomes an art installation - together with teachers and pupils, "social sculptures" in the sense of Joseph Beuys.

Now, just a few words about interior design. You do not have to be a Platonist to state that each object forms a human - and even more so, children. What enters their minds early will stay there until the end of their lives. Thus, banal objects may even become symbols. Once again, the outdoor orientation of Africans must be thought of. Teaching in a small forest or grove or even teaching in a street may become an adventurous day-program. For the interior designer (and every school needs one!), it is important to realize that all objects and even walls and floors should be vivid and artistic; children and artists must be involved prior to constructing the house. The school building must be challenging and stimulating, but practical for students and teachers. Even chairs and desks have to be better adjusted to the African learners. They have to train the homo erectus, the erectness and (unconsciously) standing up. Early on - as said above - children have to be taught that absolute obedience does not exist in schools. Stimulation and motivation are the goals.

Nowadays, every school needs electronic learning support tools in different variations. Outside, an antenna might be needed- like a piece of art, a sculpture as a signal that the wide world is coming to the school. Yet, the book still remains a strong symbol and reality of accumulated knowledge. Any school needs a small library with a permanent exchangeable book assortment, including e-books.

Colleges and universities
In Africa and even more in AgroCity, the planning team faces an almost universal challenge in developing an entire campus. In this respect, the British colonialists have brought something to the continent that should be continued. The British built up three universities, namely in Nigeria, Ghana and Uganda. Kumasi in Ghana is an academic cosmos with different faculties and workshops, teachers and student dormitories, in the midst of a green landscape. The Ugandan university Makerere was built on one of the hills around Kampala. Ibadan in Nigeria encloses a territory almost as big as a small Swiss canton.

After independence, many universities were built, including about 30 alone in Nigeria. All are lacking professors and money. Due to traditional schooling methods (mentioned above), the standards are low.

At the moment, Africa's level of teaching knowledge is at the lowest level and in a difficult situation. All craftsmen and intellectuals, especially planners and architects, are urgently needed to renew education at all levels - didactically, intellectually and materially. The challenge for an interactive, open-minded education is gigantic. In any successful educational system, more attention and prestige has to be paid to the teachers. There is huge room for improvement in new African states for training the trainers and paying them properly. AgroCity has to place top priority on improving teacher education. Good education has to start on all levels with more respect, motivation and dignity.

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Al's Exhibit No 35: Education System AgroCity

Leading young and elder pupils from illiteracy to becoming self-confident readers and writers should be basic, but also the base. It not only allows higher education, but also enables people to better budget and balance their households' or small business' money flows.

Parts of Africa still have a long way to go to improve education at the base. Many good examples in Africa and throughout the world can be copied. One example is the Gentiana Private School in the slums of Nairobi. Their achievements are absolutely remarkable. School systems have to allow normal careers as well as education for people with learning disabilities, providing "bridges" into higher education. Apart from schooling, apprenticeships lift young professionals as well as new arrivals to higher levels of income, satisfaction and pride. The master education can start on a very basic level and lead to high degrees of specialisation.

Professional competitions and awards spur efforts and motivation. Sponsorships from local companies, guilds and foundations as well as from other parts of the country or abroad assist financially and with coaching. Student exchanges and practices for professionals widen pupils' horizons and skills.

The main focus is on getting a job, pride and income for everyone, whatever their actual skills are. With a comb, a mirror and scissors you can become a proud and successful hairdresser in the streets, feeding yourself. Economic empowerment is the key.

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4.6 Employment in AgroCity

AI's Exhibit No 36: Jobs in AgroCity

In AgroCity, with its urban eco-farming efforts, there is a wide range of jobs and duties. Even if there is no payment for many activities, it adds to the households' sustainability and independence, maybe even allowing some trade against cash. It also brings together all generations of the clan and neighbourhood. It also allows job-rotation during seasons or over people's entire lives. It gives room for specialisation and higher professionalism. Again, fairs and competitions with awards help boost efforts. For self-supply as well as commercial activities and trading, seed-money and start-up financing and coaching are not only businesses, but also provide a vital injection of money into the local economy. Professional financing of entrepreneurship and innovation, micro credits and crowd funding as well as sponsoring will have to go hand in hand.

As outlined in other exhibits, there is a wide and informal range of jobs for seasoned AgroCitizens as well as for new arrivals. Since rural experience in farming can harmoniously mingle with urban farming, there are many opportunities even for AgroCity pioneers. Bringing along seeds and experience will always add to the mix of produce.

From tourism to urban eco-farming, from assistance to babies, disabled AgroCitizens, sick people or senior citizens and helping in private or public kitchen, there is a broad range of jobs with small, but acceptable incomes. Manual skills, professional specialisation, industrial production or small workshops, civic services, education and health care all need new workforces in AgroCity, because, as growth is on the agenda, success is near or continuous.

For pioneers, I suggest a Welcome-Team to serve as a shoehorn, provide first shelter, job hints and a survival-kit for AgroCity. Let pioneers start working on their first day in AgroCity! An ethnic godfather-principle where locals introduce newcomers for a limited period of time can operate as well. Unemployment is disgraceful and quick social, educational and economical involvement is vital and spurs assimilation. Employment will boost the AgroCity's overall spirit and drive! Thus, pioneers and new arrivals have the same chance as seasoned AgroCitizens.

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AI's Exhibit No 37: A Right to the City

The city has increasingly become not only something magic, but a symbol of a fascinating and attractive future. While the city is a centre of gravity in Australia, Asia, Europe or America, it is even more so in Latin-America and above all, on the African continent, where the city has become something of a dream. The city stands for a job and thus basic income. The city is the enlargement of informality, belonging to an African understanding of growth. French sociologists call such a phenomenon "Rurbain" (= urbanisation of rural area). In francophone West Africa, the new middle class celebrates Rurbain. All these facts may easily be transposed to AgroCity.

African people by all means have no negative feelings towards a modern and humane city. For most of them, the city is seen as a place that makes one richer, smarter, healthier, and happier. Consequently, most Africans want to have access, a right to the city. The urban sociologist Edward Glaser can deeply understand such a demand. He warns Western people to forget the negative image of suburbs and villages; there is a strong move towards the city and the rest is just a foreword to happiness.

The city stands as an inner kernel or a root for a better life. Therefore, all have the right to the city. The philosopher and specialist of urbanism, Henri Lefèbre (1901 - 1991), published a visionary book in 1968 containing the postulate of a human right to the city. Instead of criticizing the city of his time, he looked forward towards a city with multiculturalism, a rainbow city, a democratic and mixed city, away from ghettoes and clans. Lefebvre clearly stated as a manifest: this is the way toward the city for which all humans have a right to live in and participate.

Our book is a further step toward the African AgroCity, which will follow such a vision, a Rurbain on a progressive level. AgroCity brings land with agriculture together with urban virtues. At the moment, such an interaction is happening in the African middle class living room: a little chaos or a kitschy mixture of past and present. Order governs the mostly locked-up living room, which is restricted to receiving guests. Visitors enter a showroom of cleanliness. Because so many people and children are living in houses that are too narrow, their remaining room is pure disorder or even chaos. Today in the African middle class, we have a kind of nucleus of the envisioned and expected AgroCity.

AgroCity allows more space; it is not a kind of a prison in a house in the constellation of Rurbain. We plan some kind of "heaven on earth", a parallel of the "heavenly Jerusalem" for which African people are longing for when they stream towards the city. In a way, they all assist to create what was impossible even to think of in the past - a right to the city. This includes not only local migrants, but also international migrants and refugees. Providing initial assistance will spur adaptation and enthusiasm.

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4.7 Transportation

Al's Exhibit No 38: Mobility in AgroCity

The existing African capitals had not been planned in accordance with human needs. The planning of Abuja is the most evident example of this absurdity. First of all, priority was given to the scheme of future highways. In the Middle Ages the urban roadmap was conceived as crosswise laid out or in the shape of an omega. The frenzy of the 20th century was illustrated in Lagos after the independence of Nigeria. The objective was that in the future "no one would be walking anymore". Thus, building highways was in fashion. A further example of absurdity was the setting up

of a technical university for food processing in N'Gaundare, in the middle of the glowing savannah in Cameroon. The two Australian architects engaged in the project were working via satellite only. To start with, they gave orders to clear the construction site by cutting down all trees. Moreover, they forgot the system of sewerage in their planning. After students and teachers complained about the burning heat, the architects ordered trees be planted; the air condition only worked sporadically.

In most recently built cities, all trees and shrubs were eliminated to make way for parking sites. The frenzied greed for grandeur will be the greatest hindrance to the planning of AgroCity. How will planners and architects handle such a situation? African people excel in moving about. First of all, they have to attend numerous funeral ceremonies, travelling in crowded and dirty or dusty busses, moving to and from all directions. In addition, many big families often have numerous wedding ceremonies, requiring luxurious gifts that fully exhaust guests' budgets. Nevertheless, rollicking feasts with sumptuous meals and heavy drinking, with dances and comments of praise and congratulations are important as well. All this should be respected when planning AgroCity.

Mobility is of upmost importance for human beings. For example, in Switzerland, at the end of the 19th century, the government of the Canton Ticino gave priorities to building roads and a railway tunnel instead of schools. The authorities could not expect children to walk on rugged or muddy paths to school. However, mobility in AgroCity is controversial. Not only in Africa, but also on a worldwide scale, the dogma of unlimited mobility is favoured. Everybody and everything shall be mobile, the faster, the better. The result today is congestion, queues, pollution, noise, waste of productive time, frustration, fatalities.

How can AgroCity make a positive contribution to Africa? Is it an advantage when towns and countrysides are linked together? How should traffic flows be managed to moderate the frenzy of modernity? In order to achieve a reversal:
1. AgroCity will envisage a city widely free of cars. Priority will be given to public means of transportation, granting relaxation, space for humans rather than for cars. What will be the effect of banning individual vehicles? Less stress, pollution, waste of energy, an optimal traffic flow including automated vehicles. More space for life than for parked cars.
2. From the very beginning, AgroCity will favour public transportation. Emergency vehicles are the exception. To give AgroCity a chance in Africa, advanced devices must be implemented e.g., whatever has to do with electronics and GPS.

Proposals to be taken into consideration are:
1. Only bicycles and electro-rollers will be allowed in the inner AgroCity
2. Cars will be managed by cooperatives
3. As taxis, only rickshaws and smart electric cars are used
4. When planning megacities, underground or surface trams will be available. According to sociological polls, Africans consider ordinary busses to be dirty, catering to poor people
5. Suspension or skytrains can be of service in Africa
6. Developed drones will serve to deliver freight and passengers. While designing the scheme for traffic, attention has to be paid to:
    a) human physiology, respect for seniors and handicapped citizens

b) eco compatible mobiles
   c) harmful radiations require special attention.

As a conclusion, technological progress (3-d printers, GPS, smart vehicles) may provide new facilities in the near future. Of course, not all of my proposals can be realized from the beginning, but shall be taken into consideration from the very beginning of planning: what is already around and what is in the research pipeline.

Priorities will have to be set, but an attitude such as "we will consider it later" shall not become a habit. Teleplanning will become essential for building AgroCity; a bunch of architectural offices is needed and intensive coordination - even internationally. Let us keep in mind that mobility always consumes enormous natural resources as "grey energy" for infrastructure and mobiles. In many cases, electronic conversation is an alternative to travelling.

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4.8 Administration

Al's Exhibit No 39: AgroCity's administrative Grip

From the pioneer stage to growth to a matured AgroCity, administration is part of the key to success. Not only does it add to fairness; it also provides security and integration. Contrary to traditional cities, holistic patterns shall guide the administrative system in AgroCity. Certain organisations have to be centralised such as a district and city executive government, a parliament or cooperative centre, a District or City Court. However, whenever possible, diffuse structures shall be found in all boroughs, close to community and citizens.

The separation of powers and transparent democratic elections are key.
Even public services will be evaluated and awarded. Public insurance shall protect people from setbacks such as sickness, fire and natural catastrophes. Retirement funds, health insurance, fire insurance, unemployment-insurance and minimal income are issues for AgroCity's administration. Many governmental services can be delegated to local cooperatives with sworn agents for issuing papers, documents, IDs and the like. Cooperatives look back on a rich tradition over centuries to govern themselves in a very fair and democratic way. Many co-ops have dominated agricultural and urban land or retail organisations very successfully over decades, with some dating back more than 500 years.

Once again: the aim should be as little concentration as possible for efficiency and fairness and as many decentralised services as possible. Time- and job-sharing will make civic services more popular and provide base-incomes for more, preventing corruption and improving transparency.

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4.9 Government of Public Transportation, Emergencies, Private Traffic

Al's Exhibit No 40: who rushes in AgroCity

In addition to exhibit No 38 on mobility, some transportation deserves exceptions. Emergency transport for police, ambulance, fire brigade and army are clear. In addition, repairing and supporting services for public means of transportation or public infrastructure are included. They can all rely on non-fossil fuel due to the limited range needed.

However, I suggest making no exceptions for politicians and officials! They shall move the way AgroCitizens commute. Let them feel the pulse of common people.

Road pricing for private vehicles using non-fossil energy can create public income and even directly be used to subsidise fares on public means of transportation or allowing them to be used for free. Here we are thinking about specific businesses, private supply and recycling. Seniors, disabled people and foreign VIPs may deserve special treatment.

As an exotic proposal, private traffic with fossil fuel might be allowed one specific day per year, showing what effect it will create with congestion and smog, accidents and full/missing parking lots. Or parades with historic vehicles (20th century) may tour a city on a rare basis. It can be fun and educational at the same time.

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4.10 Eight boroughs per city with colour identity (circle segments)

Al's Exhibit No 41: Friendly Competition

Medieval Italian towns have known the principle of friendly competition for centuries. It is fun. A sportive competition in produce, products, infrastructure efficiency and service quality spurs correctness, rendering services according to AgroCitizen's needs, innovation and fair play. Communities, local administration vs. city-administration and public and private services will improve quality and focus. Contests may promote a local speciality, exotic ethnology, language skills and explain customs and rituals.

Permanent peaceful contests and awards need little budgets, but create a great public effect. For example, a contest for the highest recycling rate or energy efficiency can spur everybody's efforts. Then cultural events and food- and culture festivals can be promoted. Diversity is one of AgroCity's goals. Peace awards and health-awards can increase awareness and care.

Pride for your borough due to sportsmanship, mutual respect and a common achievement will create a colourful character in AgroCity. As a pioneer, you can taste and choose, and as a seasoned inhabitant, you can move according to your taste and preference.

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4.11 Commercial Structures and their Technology

Al's Exhibit No 42: Commerce in AgroCity

In a growing as well as established AgroCity there will be so many fields of commerce invented in an informal way. Cooking in the streets, markets and squares will be common and no standards needed. Demand and supply keep balancing. There is hardly any limit to inventions, variations and habits. Hairdressing, nail care, massages, tattoos and piercings form another segment of commerce, where creativity reigns. AgroCitizens' needs will open business opportunities for pioneers and seasoned inhabitants.

With infrastructure, fantasy will help as well. Food stands, workshops, shops and storage places will grow and vanish, according to actual needs. In order to allow minimal standards of sanity, covered markets and walkways with electricity and water as well as the collection of waste-water are a good idea. Recycling of any waste like packing materials and biomass of all kinds shall be respected in small local circles. Unused food might still nourish animals.

In many traditional European cities, guilds concentrated commerce in the same streets. It made sense for logistics, transparent prices and quality standards and a wide choice of products and produce. AgroCitizens will decide themselves and try out this pattern or a mix.

Thus, let us keep in mind that AgroCity basically achieves a high degree of self-supply of a household or neighbourhood. Markets are for exchanging or selling surplus, buying external supply and getting cash or traded-in goods. It adds to varieties and is a tourist attraction as well as a mirror for local creativity, contests and awards. Markets inspire creativity, timing of growing produce and cater to all, a specific ethnic community, to festivities or arriving AgroCity-pioneers.

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4.12 Nutrition; goals and habits

Al's Exhibit No 43: Feeding AgroCity

Traditional cities and their markets supply shops and restaurants as well as households with a dramatic overload, leading to waste of precious goods and produce. AgroCity's vision is to consume or recycle all overcapacities or to steer them in a balanced way. Next to seeding, hatching and harvesting, processing and storing is a vital element in the supply-chain. Timing is everything and will be more precise with growing experience.

Another aspect of nutrition is the choice of food. For omnivores and vegetarians, there is a wide choice. It might seem ridiculous, but food choices have an enormous impact on the environment. The water needed by animals, their hooves' erosion

effect, the gas produced in their stomachs and bowels, it all counts. An additional aspect is the health of human beings according to their nutritional habits.

Animals as well as plants deserve our respect during growing, harvesting, processing and consumption. Pets and animals for consumption should be treated fairly. Depending on local habits, all animals might serve as nutrition. Larger animals however shall not live in AgroCities. Moderate consumption of meat and temporary or permanent vegetarianism are a healthy option for nutrition and the environment.

The selection of food processed by terrestrial vs. naval farming, organic farming, antibiotics, fertilisers, toxic spraying and genetically modified plants and animals are subject to choices as well. It all counts in the final environmental balance.

When it comes to growing your own, minimal skills have to be instructed. Coaching start-ups, financing seeds and awards for greening are all part of AgroCity-culture. Market rules and variations, food sanity, self-control, feedback and planning of self-sufficiency have to be learnt. Compatibility of animals and plants is all part of eco-farming. Water-supply, energy efficiency and waste aspects are all part of an urban farmer's experience. Vertical gardening, exterior and interior farming, micro agricultures like seaweed, sprouts, mushroom, caterpillars, ants and their eggs, worms and other creatures of high protein content should be a focus of AgroCitizens. Old nutrition habits and traditions shall be critically challenged. Taste, fun and innovation are as important as old habits.

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AI's Exhibit No 44: Eating Habits

Paying respect to food prior to consumption is a question of philosophy. Since AgroCitizens seed, hatch, harvest, process and store the majority of food themselves or with their relatives and neighbours, there is a close tie to food, the care, experience and energy as well as water applied and the respect and grace for feeding in order to survive in urban farming cooperatives. Rituals such as harvest festivities, thanksgiving ceremonies, prayers, singing and blessing fields, livestock and crops have to do with this dignity and gratitude.

Harvesting and slaughtering can be done mechanically, causing stress and adrenaline to be added to animals' muscles. Allowing field slaughtering, the harmonious and ritual killing of animals with surprise, flesh will be tastier and healthier. This all combines to create graceful food chains, eco-farming and awareness for all creations. I must add that eating your own food is noticeably different to eating industrially processed food, especially allowing control of all ingredients, especially avoiding hidden refined sugar.

The consumption pattern of the same food can be varied dramatically. To offer food nicely arranged creates a different atmosphere prior to eating; eating "with the eyes too". To start eating with any starters such as salad and adding sprouts and nuts will change the feeling for hunger essentially. The speed of eating, chewing and enjoying with dignity and at a slow pace will make a big difference too.

Certain cultures, for instance in India, avoid drinking half an hour prior to eating until one hour after meals. This allows the digestion acids to work properly, without being diluted by water. Drinking salty vegetable bouillon is much more physiological than water, adding precious electrolytes and minerals instead of flushing them out of our bodies. Drinks with sugar added are good for the balance sheet of international food companies, but not for our bodies, leaving a sour climate in our blood and an overdose of calories. Cow-milk is healthy for calves, independent of the number of legs...

Let us think about vegetarianism again. Offer a human being nuts, fruit or vegetables as a snack along with a living squirrel, chicken, mouse or guinea pig. Check carefully what a human being would choose, chew and digest. Carnivores have claws, sharp teeth, very strong stomach acids and short digesting bowels. Lions for example allow their youngsters just to eat a springbok's bowels, which are basically a vegetarian sausage. Their stomach cannot produce the acid needed yet. An animal digests and expels food within a few hours. Vegetarians digest within 12 to 24 hours, meat eaters for up to 48 hours. Just reflect, try a style of nutrition for some weeks, asses and make your own choice...

The rhythm of feeding in a few larger portions or various smaller ones should be explored personally. Thus, the way we eat will have a big influence on the body's digesting process and energy absorption. Once again, making your choice has a dramatic effect on water needed during the process of growing food, on waste and damage caused to your environment, on the suffering of animals, dying in an early stage of their natural life. If you cannot convert to a vegetarian, reduce your meat consumption and enjoy it ritually. No doubt plants have a life as well and steer their growth with hormones the way animals and humans do. Thus, harvesting is always a dominant decision of human beings. That is why we should harvest and consume all food with dignity and grace and gratitude. It is a gift of nature to us. Receiving gifts commonly creates a sense of thanks in any culture.

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Al's Exhibit No 45: High-tech and urban Vegetables

AgroCity is neither a nostalgic nor a romantic concept of nature; it is a realistic mix in the field of informality. AgroCity will make use of the latest inventions and adapt them to an African local context. Therefore, when it is proven that plastic can be transformed into another material we will use it and adapt it. Informality is powerful and will find its way and create reality. As it is well researched, tested and proved that urine can be transformed into drinking water, we will capture it and confirm the result in local tests.

AgroCitizens have to become inventive, very active and open-minded and look to the entire world and adapt useful technology for local purposes. Most of the time we have to adapt to our climate or soil or social standards. This is no problem if Africans stick to the principle of hybridism. In those two words the holistic principle is confirmed. Thus, high-tech can live hand in hand with urban vegetable growing.

Until now, Africans have had a tendency to get the latest and the best products regardless of whether they fit into the African environment and traditions. This seems to be their way of overcoming a certain inferiority complex; at least, this is what many social scientists believe. The motivation for modesty and "home-spun" lies within the concept of AgroCity. Copying modern gags make them dependent again- be it from China or capitalistic multinationals. Where Africans think to have no choice or right to refuse foreign patterns and domination, a new form of colonialism is established.

Africans have to be trained in schools that the latest is not the best if one dreams of independence. Thus, basic schooling has to develop a spirit of distinction. For instance, over many years, Kenyan female scientists have researched genetic technologies in connection with corn. The U.S. agro-company Monsanto did everything to intercept this expensive project. The scientists refused Monsanto's attempts because they wanted to be independent and remain in command of the project themselves. I was a member of an evaluation team and was able to observe a great pride that they, the women, had in being able to do all that by themselves and with the help of people around the world who had the same drive. Here, the basic insight was: no cooperation with a multinational, but rather with people of the same or similar spirit of independence.

It is important to be aware of two dangers:
1. According to Africans, foreign assistance is often avoided due to fears that dangerous bacteria are involved (like in vaccinations against Polio). A critical attitude is acceptable but reality should be tested with a mind of critical distinction. Even informality has an aspect of distinction

2. Let us be open: informality can easily be corrupted by money. Many Africans believe that even money can be handled informally but do not realize the institutional power of money.

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4.13 Sports

Al's Exhibit No 46: Fitness and Sports in AgroCity

Moving, shaping the body and training sport skills is part of our fun and physical satisfaction. Health through education, moderate training in groups or clubs and their campaigns and promotions all add to a good balance of physical activities and resting. Nutrition is an essential part of it.

Games and sports are a public activity and a tourist attraction. Competitions create motivation and increase fun and general health. Of course, talented sportspersons shall get professional coaching and financial support. However, elite sports and exaggerated training are not part of AgroCity. It is selfish and over the top. Talents shall rather be used to train and coach others than to achieve Olympic medals. Mass events can be evaded by organising competitions in neighbourhoods on smaller scales.

Sports teams, bringing together people with the same interests and skills, are a perfect method for bringing together smaller of larger crowds to enjoy their hobby. Even marathons can be organised without burning fossil fuel. Boccia or pétanque, crossbow shooting and the like are silent, train psychomotor skills and are fun. Billiards and pool, as well as table tennis and throwing darts are eco-sports. These are just a few reasons for choosing the AgroCity spirit, combined with fun and excitement. Injuries can be avoided and small-scale competitions allow thrill as well. I suggest even organising snail- or turtle-, rabbit-, grass hoppers-, mini-pigs- or dog-races, betting on small amounts included! There are even flea circuses, but you need a magnifying glass to the show. Ply paper into aircrafts and find out which one crosses the biggest distance. Get out for wind-surfing and the like. Juggle three or more tennis balls. Ride on a one-wheel cycle. Become a circus artist...

Sport tools, burning fossil fuel, do not combine with the philosophy of AgroCity. Moto cross, sand dune buggies (disturbing fragile root networks, beetles and micro-organisms), formula one races, air shows and the like create exhaustions and do not combine with eco-farming. Kite flying and solar propellers and -motors are a delight as well. We all feel the difference.

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4.14 Tourism

Al's Exhibit No 47: On AgroCity Tourism

Tourism not only creates jobs and wealth in AgroCity, but also assists promotion, recruits volunteers, keeps attracting students, sponsors, governments, professors, conferences, fairs and the like. Thus, promotion and attraction are a vital effect. Homepages, promotion tours for travel agents and scientists for a "soft AgroCity"-tourism will be established. In addition, the infrastructure for tourism has to be planned and implemented from the beginning.

This starts with a welcome-desk at airports and tourist offices. This goes on with aps, electronic and physical guides. It involves tours, fairs, colloquiums, meetings and ends up with accommodations in hotels, bed & breakfast and couch surfing - facilities. The times of frigid big hotels shall be over. Mixing cultures, providing adventures, empathy and insights are on the agenda for AgroCity-tourists. "Tourists" always are strangers, visitors. AgroCity will convert them into "friends, promoters, potentional sponsors or Ambassadors". Let tourists live as closely to local family life and urban farming as possible. Diffuse lodging and cultural exchange make a big difference to anonymous tourism to traditional cities. Let AgroCity promote itself as an urban encounter of a new kind with calm streets, clean air, engaged, but relaxed inhabitants.

Provide "background tours" in places where harvest, processing, storing and consuming as well as recycling happens. Bring tourists to markets, restaurants, food-stalls and recycling places. Give them an insight "behind the screen". AgroCity's cultural events, fun quarters and sex corners provide an attraction not normal to tourists, but everyday events of AgroCitizens. Interactive tours, visits to workshops and prisons, to administration offices and recycling engineers, participation, traineeships, eco-tourism with rich contrasts. Organise events like a circus, a street

show, street dancing, song contests, folkloristic shows, poetry slams and the like will also be part of the yearly calendar. Locals will be proud of their creativity and skills, generating income and attracting tourists.

AgroCity should also indicate seasonal highlights, promote accommodation-capacities and lure AgroCity tourists with low cost programs. It may even provide couch surfing to tourists and new AgroCitizens. Through couch-surfing people gain an insight that no hotel can provide. Hardly any infrastructure is needed for couch surfing. An additional bed on the roof or in a living room with a convertible sofa is enough. Put your offer on a website. Allow guests to be varied, for instance an AgroCity-scientific researcher or an urban farming technician. Involve tourists in urban farming from seeding, hatching, harvesting and processing. They can all enjoy insight-tours and locals can earn some extra money. Make acquaintances, knit new social webs with an exclusive character. Make your relatives a tour guide at almost any age. Tourists even may become your long-term sponsors, corresponding and supporting you on special projects.

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4.15. Industry

AI's Exhibit No 48: Industrial Goods

AgroCitizens' focus is on self-supply, on subsistence, urban eco-farming. However, local skills, produce, artistic talents and their products may allow surplus and trade. They can be made diffusely as well as through industrial production. Appropriate infrastructure, locations, outlets, markets and exports can create various channels of distribution. This all has an employment effect, creating jobs according to processing and skills. Producing, wrapping, shipping, bringing to markets, engagements in marketing and promoting locally, nationally or abroad opens new fields of business. Larger hotels in post-colonial cities are in need of food for their kitchens, but also for wrapped snacks such as nuts, chips, tea bags and the like in the rooms' minibars. This is a good field of business in most African countries.

Building materials and tools can be produced industrially in and around AgroCity. Recycling and "build with waste" have already been mentioned. One industrial business will be able to produce seeds for AgroCity. There will be a huge market in town and neighbour satellites. The same applies to wrapping food for storage and trading. Then there will be a need for feeding smaller animals in AgroCity. Agricultural tools will be constantly in demand.

Industrial production of food and other products may lead to boredom and repetitive activities. Internal and external job rotation will help to bring back imagination and innovation, challenges and new horizons. Nevertheless, even a longer engagement in an industrial production can lead to satisfaction, security and pride. The extent to which insurance is important for food production (hail, draughts, fungus, essential temperature changes etc.), as well as for protecting infrastructure from fire, earthquakes and other problems must be evaluated.

Social security and pension plans, nurseries and food on the spot, massages and mental coaching will be part of taking care of industrial workers because they dedicate their energies to specific processes.

Eco-efficiency shall guide the selection of the marketing mix of products, pricing, positioning and promotion. Waste recycling must be an intrinsic factor for all processes. Copying success stories as well as innovative models may go hand in hand. Let us keep in mind that AgroCities keep growing until they are of acceptable size and will see neighbour satellites in planning and starting construction. Construction material and appliances create an opportunity for advanced AgroCities industrially producing this wide range of goods needed. Processing local raw materials such as wood, concrete or clay makes sense if available. Furniture, curtains, bed-ware, kitchen equipment and clothing will be in constant need. Such products and advice will create business and jobs for assisting pioneers when building infrastructure and private homes. Local raw materials will enjoy priority and create value for the entire supply-chain, including support and future replacements.

Industrial production does not necessarily mean large halls with rows of workbenches. For me, "industrial" just expresses a repetitive act for processing the same product over time but it can even be the breeding of crickets, the training of dogs and mini-pigs for the blind, or the training of dogs and pigs for finding truffles, sniffing drugs and detecting money. There is no limit to fantasy and creativity.

Financing individual workshops or cooperatives will be arranged on a private basis, on cooperative levels, with crowd funding, government subsidies and international development support or sponsorships. Tourism again ads to support and financing. Contests and awards spur creativity, productivity and artistic design. Fun and work come together. Pride and financial security are intrinsic results.

Let us keep in mind that marketing AgroCity is part of a very specific industry. Copying models, adding feedback and providing coaching is an industry as well. Research and development are part of any AgroCity. International scientific exchange of data and research results may even be marketed under a brand name or patent, protecting intellectual property and help to finance AgroCities.

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4.16 New Arrivals & Migration

Al's Exhibit No 49 : Migrating into AgroCity

Arriving in a pioneer-stage is always an adventure, involving delicate mental changes and physical and financial ventures. A "Godfather-Principle" can build a bridge in terms of language and culture. A seasoned AgroCitizen welcoming, hosting and coaching a pioneer due to common shared background and origin can assist a fast and easy adaptation to AgroCity. It also allows new standards to be set and local AgroCity rules to be accepted. The Godfather-Principle is an excellent tool, especially

for preventing future crimes. Providing practical hints for infrastructure and culture allows for fast learning and integration.

Minimal standards and initial support will include acceptance of everyone: relatives to AgroCitizens, "sans-papiers", criminals, migrants, adventurers and the like. There is a place for everyone as long as he / she shows abilities to adapt to urban life.

Initial forms of shelter, schooling and cultural integration, immediate employment and tours will assist adaptation to AgroCity's standards an ease independence. "Pillow Teaching" is an innovative language course, based on everyday conversations, role-plays, and games such as naming all the objects you touch. No grammar, no frontal teaching, just learning by repeating. The way we all learnt our mother tongue. Sharing common time, a table, and maybe bed will be the best boost effect for cultural adaptation and integration. Electronic platforms provide cyber-markets for pillow teaching.

After people get their first shelter, it is important that they be provided assistance to construct their own homes. Schooling, health education, legal support and practical hints must be part of the coaching of the pioneers. Financing migrants' settlements will become a vital role early on as well.

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4.17 Exit-strategies, Limitations, Respect for Cultural Habits

Al's Exhibit No 50: Stop AgroCity

Building is always an adventure and realistically has to provide contingency plans. The most extreme one is aborting AgroCity, evacuating and recycling to zero. This could be required due to natural catastrophes, technical meltdowns, social unrest, corruption, war and changes in the local climate or other effects that bring AgroCity models out of control.

Protection, coaching, evacuation plans and other management skills, as well as mass migration, are part of these exit plans. It all has to do with reality, peacekeeping and humanitarian respect.

Limiting growth due to local constraints is an intrinsic measure to AgroCity's growth. Setting up further satellites may be a wise way to avoid having to abort the city. Hopefully, this will never become top priority but it is an essential addition to governmental contingency planning. To govern means to prevent and foresee!

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4.18 Editor's Summary on Infrastructure and Services

Diffuse, holistic and cooperative planning, financing and construction of infrastructure and administration has a long tradition of success. Everything works at arm's length,

democratically controlled and regulated. The more locally rooted the better. Flexibility and direct impacts are promoted. A true sense of responsibility and down-to-earth growth is implemented.

Contests and awards spur efforts and efficiency, reward outstanding results and create inventions, adaptations and higher standards. Fairplay, sportsmanship and a true sense of solidarity in neighbourhoods are promoted. Constant feedback between infrastructure and services rendered to actual and potential needs are an absolute necessity. AgroCities will show different faces over time and according to local conditions.

A specific rhythm, a human climate shall be created: let us call them AgroCity-vibes!

Part five: AgroCity implemented

5.1 Editor's Introduction on Implementation

Basic needs lead to infrastructure, services and culture. All these planning cornerstones now have to be implemented. Many local factors have to be taken into account such as geography, economics, actual and future cultural mixes and resources.

Mistakes, corruption, lack of expertise or resources will lead to collapses, frustrations and setbacks. It is imperative to share these negative experiences as well as successes with others. "Shit happens". An honest feed-back-culture will help to heal wounds, find new strategies and means aiming at success. In addition, it will help others to avoid negative constellations, to find positive ways to master a crisis, to muddle through, to grant a successful completion of implementation.

5.2 Preconditions of the Spot

Al's Exhibit No 51: local conditions for AgroCity

Geography dominates all local conditions. It includes geology, water and vegetation. Climate, seasons, natural threats, catastrophes. Insects and fungus will influence urban eco-farming. Natural resources underground and on the surface will allow an eco-exploitation. Technologies for harvesting, storing, transforming, preserving and recycling will include traditional harvest/exploitation as well as the most recent technology. Ecological solutions of the "sins of the fathers", detoxification, destruction, greening and reforesting are part of AgroCity strategies.

Apart from AgroCitizens' needs, geographical conditions also shape the framework for planning and implementing the city. Local conditions may spur efforts as well as limiting them slightly or dramatically. It is a constant dialogue of ambitions and conditions, a never-ending cycle of evaluating and adapting.

On the social side, races, tribes, clans, religion and their mix will set certain expectations or limitations. As outlined, tolerance and mixtures or at least cultural exchange will allow a peaceful coexistence. This includes awareness of the environment, respect for vegetation and animal food.

The goal of AgroCity is to achieve a self-sufficiency of roughly two thirds of all regularly consumed goods. This leaves a large field for exchanging goods and services. Trading them links AgroCities to the rest of the country and to the world and adds to variety of goods and services offered on the market. It also helps to flatten seasonal or climatic effects.

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5.3 Waste Management, Recycling

Al's Exhibit No 52: Promoting Recycling

AgroCity has to give permanent incentives for changing earlier behaviour. The fundamental challenge is turning wastewater into drinking water, because water will be one of the biggest future challenges. Thus, water recycling is the most urgent and basic need of AgroCity. Planning and constructing AgroCity is far more than drawing and constructing buildings. It includes an all-embracing idea that wants to become reality. It is a philosophical concept for improving quality of life as never seen in our time on the scale of an entire city.

Development will start, as already strongly recommended, with cleaning which includes recycling. Many are poor or miserable because they are not able to recycle waste material. There is much waste around but people are not educated in recycling technologies. In the Nairobi slum Mathare Valley, a small Tanzanian research team showed options for getting out of poverty through recycling. The researchers first observed grey plastic shopping bags that hung all over the place and were used at night to collect piss and shit and afterwards were thrown down on the next roof, followed by other plastic waste and batteries which were thrown into the dirty river. Then came e-waste from electronic and electric gadgets (a mobile phone produces a lot of e-waste). Toxic smoke from burning wood and coal and plastic added to the disaster.

The large majority of inhabitants claimed, they had neither time nor money for recycling waste. However, recycling can be a lucrative business and source of sustainable income. Thus, recycling is the heartbeat of AgroCity and especially a chance for the poor.

All waste is complex. Thus, it needs an integrated waste management system that starts with prevention, and is followed by efficient waste removal, high rates of recycling and proper disposal of rubbish and faecal sludge in a sanitary and environmentally friendly way. All such attention will create jobs and a formal market. It involves collectors, traders, and recyclers of reusable material.

All that starts with raising people's awareness. Motivation follows for local waste collectors by providing training on all levels including how to sort it. Local pickers must be offered fair prices and accurate weighing. Indeed, such formalities are needed, but more importantly, people experience pride in doing such a job. Residential waste may be better handled informally. Informality may have a lot of potential for producing humus out of faecal sludge and dung.

Another category is industrial waste: it needs strict standards and controls.
This small chapter about recycling was urgently needed, because it shows even deeper what I understand to become AgroCity.

Minergy? There is a big difference between Zero-Energy and Minergy. Zero means full independence, no supply via wires and tubes. Minergy however tries to achieve high turnover efficiency but might need an outside supply to cover peak consumption periods, feeding into the very same supplier's net overcapacity of energy production

from transforming and recycling. Moreover, it will renounce total independence, accepting limited inefficiencies, but avoiding too much grey energy (energy to produce machines and materials involved).

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Al's Exhibit No 53: Garbage vs. Corruption

As a child, I always wondered why on Saturday afternoon we should clean our farm and farmhouse. Was it in preparation for Sunday? My father just said: "Once a week, mankind has to put the creation in order." One of our neighbours never cleaned his house nor the surroundings; he was a drunkard. Even children realised that his farm slowly kept falling apart.

Cleanliness is the initiative of improvement and progress. At the same time, cleaning assist the maintenance of infrastructure. Every machine needs care and must be constantly oiled and lubricated. Everywhere, especially in Africa, objects have to be dusted regularly. Dust penetrates everywhere and contributes to destruction, like ants eating up plants and constructions from the inside until only the outer shell remains. One more bite - and it will collapse. Society needs this kind of care too. With mountains of garbage, all activity and motivation will be destroyed. Even human bodies down to their cells are intoxicated and need cleaning.

Benedict of Nursia (480-547), the reformer of the monks' life, had such insights. Monks had to live together in monasteries, had to pray and work, to clean and wash; discipline and cleanliness supported an orderly life in the Benedictine cloisters. Pastors and preachers, by parents and even the chiefs of communities, later taught such wisdom.

In late medieval times, farms north of the Alps were in a miserable condition due to permanent wars. Agriculture in particular was under stress and in disarray because no care was possible. Farmers had lost every motivation to produce and harvest for the nobility and soldiers. War systematically destroyed all their efforts and agricultural grounds. Reality nowadays is not much different in places where criminal gangs or small marauding armies terrify the population. Only with peace, a cleaning process of the land and homes may be started. Responsible people told farmers that cleanliness is the key to a better life.

I think, in improving conditions in so called slums and building up AgroCity, we should all respect historic facts. History always knew slum-like habitats and it was always in connection with powerless people. Lack of influence led to misery and suppressed and condemned people to inactivity. Systematically, a consciousness of keeping all things clean and running was fostered. Even in certain circles of developers, the idea of the importance of clearing up was present although often their cleanliness and discipline was felt as being heartless und cruel.

In a negative constellation, it is no wonder that criminal gangs control waste and garbage. Practically all megacities on the African continent, from Casablanca to Capetown, are suffering from slum illness, which is dominated by corruption combined with chaotic garbage disposal. A phenomenon can be noted in all informal

settlements around the globe. Many actions and utilities in slums are controlled by mafia-like organizations. One may say that such results correlate with informality, but there is a difference between informality and criminal exploitation.

To preach against garbage and corruption and to reinstall law and order will bring back freedom, initiative and creativity. Waste and corruption tend toward dictatorship or prepare it. A dictator often starts with the slogan: "We will clean up!" However, since garbage as well as corruption block democratisation, criminal gangs and dictators have no interest in cleaning up. The best way would be for all neighbourhoods to take cleaning into their own hands. Two basic rules to be considered:
1. All begins with proper cleaning and recycling. All is repeated in growing up from childhood, and the same applies to social growing up or development.
2. In the transition from pissing and shitting into the fields to going to the toilet in AgroCity, a mental mile can be measured.

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Al's Exhibit No 54: Building Standards

The local geology, especially soil and climate will dominate decisions, limits and challenges surrounding urban farming. Housing, agriculture, street life and culture in AgroCity will be spurred or limited due to local conditions. In exchanging research data and previous experiences, it is up to the planners to accept or adapt to the state of the art standards and technology-transfers. In one AgroCity, container-villages might be preferred to clay huts. Certain building materials might fit; others may be unavailable or unaffordable. Modules and samples will make the choice easier.

Local material resources shall go hand in hand with imported more adequate and efficient fabrics. Recyclable building materials are preferable. Many building materials can be processed from waste. After sorting, waste management will allow buildings to be constructed from cheap and solid materials such as plastic, sand, textiles, bottles and paper or wood and natural fibres. An entire industry can be built on waste management.

Moving into different homes and leaving the older constructions to arriving pioneers will assist a natural and economic rotation, according to their growth of wealth and status. This will be the most economical way of recycling or reusing a house or commercial facility. So AgroCity will create a market for hopefully any budget or free use. Slums are, however, not acceptable. Minimal infrastructure such as water, electricity, health services and safety are part of AgroCity's maxims.

Earthquake and tropical storm zones will definitely set different standards and limits. It is dominant and restrictions are nothing but a respect towards mankind and animals. Modules such as containers or tents might be better than shaky buildings. Wood or bamboo may fit better than thin brick walls. A lot of experience and technology is available about specific geographic conditions.
Evolution is the word: future development and post-pioneer settlements might change their face like in all cities. The life cycle of the different public and private

buildings will be quite different. This will have an effect on the rhythm of change. Economic conditions as well as fashions can change neighbourhoods too. Fairs, markets and exhibitions will assist to improve building materials and processes as well as the cost efficiency. Temporary living for citizens and newcomers will establish settlements. Hosting pioneers for their construction phase can create jobs, money or exchange of services in a positive way.

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5.4 Ethnology

Al's Exhibit No 55: Strange or just Different?

Life in the city is an adventure. Everything you meet is different to the countryside. Strangeness is omnipresent. However, is it really strangeness? In a city, innovation is visible everywhere whereas in rural habitats, things might not have changed for generations. This is a fact and not frightening per se. Nevertheless, we forget that there are always two levels at least - objectivity and subjectivity. Development constantly changes a city, and new means something different from the state before. You never meet the same constellation twice; all things are constantly changing and becoming strange or different.

Because all people and things interact, they create innovations - even small ones - with the consequence that all become constantly different and we think this is strange. That is reality. However, there is another strangeness and this is the intrinsic one. It means that your brain sees changes as frightening threats. This is the reason we say the word "strange" or "stranger" is ambivalent. It is a mental projection of the outside, but actually strange means different. Once again: the city is the culture of differences - and not of strangeness; strange belongs to the realm of psychology and is wide open for manipulation.

Psychologically analysed, the city is constantly rated negatively and associated with evil. Seen from a rural attitude, the city is characterized as confusing and *strange*. So far, the manipulation of strangeness dominates and makes the city a place of fear. This is why many still say that strangeness belongs to the essence of city life. Objectively noted, it is the difference, the newness, innovation and rapid change and not strangeness.

People migrating from the countryside enter the city with a rural mentality. Anthropologists say that the concept of strangeness goes back to Stone Age periods and is typical for pastoralist societies, even for smaller agricultural societies where all people have their specific space, an ascribed function or role. Whenever new people enter, unemployed and no place to stay, they face new roles and hostile conditions. In a city, everything is different: here, many things co-exist. It becomes dramatic only when the old mentality prevails and people act in agrarian patterns. In AgroCity, social acceptance and tolerance will guide the inhabitants, welcoming and assimilating new arrivals. A change of mentality rarely happens automatically in the brain of seasoned and established citizens or migrants. Adaptation and education is

important. Such an attitude demands a certain mental mobility. We see again that there are different ways of mobility: people move, but their mind settings do not.

Nobody can just come, claim rights, and ask for a job at the new place. Mobility has to be cultivated within a climate of informality and tolerance, but with basic rules and mutual respect. The base indeed is always the victimized person; she or he has to become innovative and creative. Within informality, many possibilities are open.
To provide more security in AgroCity there must be a basic income for all. The fear of losing or not finding a job must be taken very seriously. We have seen how insecurity can cause witchcraft, especially on the African continent. It makes people greedy and superstitious. To be realistic, every city culture has to accept conflicts and learn from them. That is why I demand there be AgroCity-caretakers with psychological, economic, social and cultural competences and skills from the beginning of planning and construction.

AgroCity constantly has to stimulate innovations as well as formal and informal opportunities. A person under stress can never be innovative. Our society now lives in permanent fear; AgroCity must be planned and constructed with a climate of hope and optimism. Instead of permanent lamentation, inhabitants and arrivals have to create positive waves, a thrilling sound from all corners and angles, from above and below: "yes, we can". With a spirit of fraternity and sisterhood, all together - and remember: everyone is a foreigner outside of his doorstep. We want to create a better world.

Assimilation as well as sticking to the clan's identity might combine, but they are often fields of conflict. From language to religious rites, food preferences and limitations to customs, habits, clothing and behaviour, there are wide ranges. It is important to set up common practices, especially in terms of communicating. Education, health services and economic activities ask for a common way of communication. This has to be trained from arrival to perfect integration. Common cooking, washing and public communication will help people to quickly adapt, especially the younger generation. Day-care for children, care for seniors, schools and sport activities are places and events for forming a first grade of integration. Thus, an appropriate mix of past identities, of a clan's or people's clan behaviour will add to a colourful mix of cultures, respecting their background, but asking for minimal integration. Families with the same cultural background might concentrate, but shall not become dominant.

In order to provide the necessary infrastructure, AgroCity constantly has to assess stress levels in its boroughs. Coaching, educating and public security have to strengthen all positive movements, preach tolerance and adaptation, but also define and enforce no-goes. Consequently, the neighbourhoods have to put an eye on the cultural mix. If self-control does not help, the civil authorities have to "gently" limit ethnic concentration. It is better that people come together from different boroughs to take part in common activities than build closed ethnic quarters and communities.

With progress and growth, schooling and permanent education have to grow. Only well tuned conflict management can grant peaceful coexistence. Moreover, if there are riots, corruption, crime and exploitation, the authorities have to act. Even expelling AgroCitizens is an option.

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5.5 Feedback-culture

Al's Exhibit No 56: Feedback Culture in AgroCity

Modern ways of communication have made international, national and local exchange of knowledge and experiences, of scientific research and practical tests, of blueprints, statistics and artistic plans, easy. This is a huge boost to our vision of AgroCity. The focus in this book is on Africa. It goes without saying that any new city in planning and implementing can profit from experiences collected from professionally managed projects. It is not a virtue of mankind to communicate honestly and confess openly when there are negative outcomes, but this is essential for our common learning-curb. "Shit happens"! So let us talk about it, list achievements as well as exits and abortions. The cyber-visit to a project as well as physical presence and work on the job will teach young specialists in a real-time insight, coaching, lecturing and contributing process.

If a new generation of AgroCity-inhabitants and experts invite and attract attention even for "good old City citizens", still commuting in congested streets, sniffing smog, looking for parking space, facing crime and waste, financing lousy energy efficiencies, the urge to turn traditional metropoles into AgroCity boroughs will grow. This trend cannot be stopped any more. New chances of self-steered public transportation for groups and individuals will soon allow this change. Urban eco-farming will follow and change mentalities, habits and goals. AgroCity will start a silent, peaceful revolution of citizens living together.

As a creative suggestion, one city on earth should never change; it should continue life in the old way, produce daily traffic jams, bad smell, stress, crime, inefficiencies, and high living costs. It will serve as a museum for mankind. High-ranking politicians and candidates for state presidencies will then be "condemned" to live there for three months for their education. They may relax later in a AgroCity for a week... and then go to work.

One suggestion is Paris:
Get your asthma in front of Sacré Coeur, get raped around Moulin Rouge, suffocate on Champs Elisées", train your French car's brakes on Place Etoile", get mugged in the elevator of the Eiffel-Tower, arrive on top without a view except for smog, get lost in the Louvre, enjoy plastic flowers in the park of Versailles, eat *****junk food from meat factories from a remote country, including your included artificial hormone and antibiotic dose, pop-up croissants, formerly frozen ... and step on slippery dog shit and enjoy your day's commute for the two hours needed.
Paris has always been a dream destination! So let us conserve this wonderful model city of Louis XIV the way it is in 2017 for the next centuries. A perfect model for ShittyCity.

In short, modern research and development will assist world-wide projects, enable us to learn from previous achievements and disasters and allow a multiplication in Africa and other continents. Specialists will keep monitoring, set standards, allow an international survey, a permanent exchange of research and social changes, crime

rates, life expectancy, level of education, creativity, productivity, recycling rates, jobs for all, safe cities, decent lives for seniors. A special focus must be set on urban farming and its development. Fairs, models, exhibitions, competitions with awards will increase life's quality according to local needs and dreams. "If you can dream it, you can live it". AgroCity will provide the social climate and physical infrastructure in the best way for those wishing to live in a city.

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5.6 Profiles for a planning crew

Al's Exhibit No 57: Who is planning AgroCity

Like inhabitants and plants, animals and nutrition habits, the team responsible for planning, implementing, administering and reporting the growth and progress of AgroCity has to have a decent mix of genders, specialist, professional qualifications and fields of expertise. The most important qualification however is the talent of listening to future AgroCity-citizens, to new arrivals and seasoned inhabitants, especially to women since they carry most of the burden of daily life.

The size and structure of teams will depend on the geographical spot, pre-existing experiences, financial resources and actual states and time frames and it should be flexible over time. Team members' ability to conduct information exchange, foster feedback cultures and adhere to reporting standards as well as their practical experience, local language and cultural skills are as important as their scientific background.

Realistically, all-African-teams will have the best chance to plan and implement AgroCity. A minimal mix of international cultures might best work with Latin American experts, where there is a similar pattern of time and space like in Africa. Maybe migrated blacks from all over the world can add experience and insights. Some talents from the rest of the world might work on the sites for a limited period of time, bringing in new ideas and research, however, allowing them to carry full responsibility for an AgroCity-project might cause friction and drive the teams crazy.

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5.7 Planning and Implementation

Al's Exhibit No 58: How to plan and build AgroCity

In exploring an optimal location, planning AgroCity and assisting in its implementation, scientific and professional expertise is of main interest. Yet let us keep in mind that chaos, success by chance, improvisation, "reduce to the max" and informality will have to spur the construction and growth process. Checklists might help, but improvisation does it. Most new AgroCity citizens will arrive with little money

and big expectations. Standards will have to bow, time will be stretched, and hopes give way to "shit happens".

Once a city is planned properly, its principles and maxims are simply communicated to new arrivals, which in most cases will occur through informal implementation. Public infrastructure will grow in line with the AgroCity's growth. Budgeting for public services and financing them will always create headaches. However, listening and catering to the AgroCitizens' needs will allow progress. Part-time jobs, job rotation and common efforts can reduce budgets. Voluntary public greening and eco-farming, crowd funding, benevolent work instead of fines and prisons are new ways to socialise, learn and contribute to public welfare, especially for the weakest members of society.

The process of growth will mean that thousands will arrive with poor education, little or no financial reserves, no shelter and no social connections. This will be the ultimate challenge phase. Most basic infrastructure like drinking water, local water recycling circles, latrines, tents and electricity had to be installed previously by civic servants, soldiers, prisoners, volunteers, professional construction firms and pioneers. Food supply as well as construction materials and tools will be rare in the pioneer phase. Price exploitation, along with corruption, might occur.

The police has to be present as well as coach teams for cohabitation and construction. Fire brigades as well as medical services have to be established from the beginning and grow with the city. Constructing in quarter by quarter might give space for arriving citizens to establish short term tent camps.

Thus, the pioneer phase will create jobs, models of exchange trade, markets, workshops, trade and coaching possibilities, even on a non-monetary base. Traders and service providers from religious coaches to prostitutes, from cooks and food growers to part-time public servants, will offer life-quality from the beginning. Construction loans and seed money for small enterprises are a challenge to the government, NGO's and banks. Civic administration has to grow slowly in numbers and intensity. Tax brakes might boost efforts.

Money will always be a limitation to expectations and realisation. Early death, divorce, sickness and anger are part of human life. They will melt in AgroCities as much as in slums or luxury homes. The aim is to provide a solid ground for acceptable minimal standards of life-qualities.

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5.8 Timing and Coordination

Al's Exhibit No 59:Timing AgroCity

Rome was not built in one day, and neither was London after 1666. Chaos will prevail in the pioneer phase. Informality will allow improvisation, creativity, soft starts, room for growth and improvement. Public efforts and small cooperatives will provide first grids and structures. Africa has always been a source of genius quick solutions and

improvisation. Letting things happen within wide limits will lead to an acceptable result, far away from perfection, but catering to basic and later growing needs.

Feedback, impact statements, and soft coaching are vital and can accelerate the construction of AgroCity. A small team however has to monitor growth and negative feedback and permanently tune contingency plans such as a construction pause and exit-strategies. Natural catastrophes, major planning errors, epidemics, riots and other social disturbances might occur without warning. Informality and improvisation is part of AgroCity even for public services and security forces. They all are Africans and have a rich culture of experimentation. Since cultures, languages, customs and habits are melting in AgroCity, it will remain an experiment anyhow. Let us keep in mind that everybody will arrive with visions, dreams and expectations for the better. If there is room to construct and realise it, it will be done to the best of their hopes and abilities, whatever the limitations might be.

There is no rush in completing AgroCity. If it takes a year or eleven or thirty-one, it does not really matter. More than one generation will be needed to achieve this big goal.

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5.9 Financing

Al's Exhibit No 60: Financing AgroCity

After decolonialisation, Africa saw the impressive growth of AfroCities. Prestige, slightly overdosed self-confidence, corruption, monopolies and frustration led to cities that disrespect AgroCity-maxims. It was all financed by the local economy or credits from outsides, with legal and black money.

Financing AgroCity means to think "out of the box". There will be new or renewed models established. Sharing larger private and public credits, micro-credits, crowd funding, donations from foundations, the World Bank and other financial institutions will help AgroCity to grow and reduce unemployment and poverty. "Godfather-systems" with more developed AgroCities or traditional cities nationally and internationally can establish a long-term growth, even with paybacks and redemption.

Source funding, expansion funding and private or public sponsoring can create a steady flow of funds. Olympic games, international fairs, congresses and tourism are other driving forces for AgroCity's development. UNESCO & company might provide funds and attractions as well. Competitions and awards can assist.

Co-ownership models for some families, larger cooperatives and time-based property have been well-established models for centuries. The administration and government is close to the users; micro-democracy can steer all processes and adapt over time. Worst-case scenarios always have to be kept in mind. Hopefully, AgroCity will never face a "too big to fail" problem. Criminal organisations, international and national economic trends and war irritations or traditional religious conflicts can always occur and disturb the maxims of AgroCities. They too have to face reality and adapt constantly. Shit happens daily!

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5.10 Limits to Growth

Al's Exhibit No 61: Vision of Satellite Sizes

We do not know what the ideal size of AgroCity will be. Only reality will prove if 10,000 inhabitants are a magic number. However, if we imagine a satellite of maybe round shape around no centre, eight boroughs of 1,250 souls might be an ideal size. Maybe we have to rely on the number of households instead of head counts.

It all depends on local customs and geographic conditions. Nevertheless, another question is if there is a minimal size for AgroCity to be viable. The answer might be astonishing: no! Whether it should be called an AgroVillage or an AgroCity is up to the AgroCitizens. The minimal standard of structures and services counts. The grade of eco-agro-subsistence is important. In addition, growth may vary anyhow due to fertility, economic, political and environmental influences. It is even imaginable that people migrate over the course of seasons.

When the size is reached and variations in terms of density and topography are accepted, the time for an additional satellite will be ripe. Some 25 kilometres apart will allow every additional satellite to profit from a green belt for more intensive agriculture than in urban circumstances. Large cattle however shall not be the prime goal. Mankind can survive without cow milk. It is only healthy for calves (independent of the number of legs). Hoof-erosion, air pollution and intensive water consumption does not make cow farming an ideal model for any city, but especially not for Africa.

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5.11 Editor's Summary to Implementation

Planning as a first step is vital, especially for the pioneers. They should arrive and already enjoy minimal services when taking their first steps to becoming AgroCitizens. But next to the planners' camp, AgroCity life will start in an informal way according to the arrival of the pioneers. In the worst case, a building site is overrun by a wave of mass immigration from the rural parts or from a large stream of migrants or refugees. For a harmonious growth, a slow and steady flow will be ideal, but cannot be controlled. Therefore, informality and crowd-management in a sometimes-chaotic way are to be anticipated. Here it is best to let things happen with intrinsic self-regulating mechanics. AgroCities will have different attractions and reputations. This is all part of the experiment. Just minimal standards are important. A central role focuses on reception centres. The rest is delight and luxury.

5.12 Editor's Overall Summary

With the grid of Al's visions, blueprints and practical hints, experts in planning and constructing AgroCity have to keep contributing to this book. It was Al's intention to

trigger those articles to arrange a colourful mix of ideas in order to boost efforts for model-AgroCities and a vast number of clones in Africa and the rest of the world. It will be up to future generations to evaluate our actual contribution to AgroCity. For all of us, it was worth not only dreaming the AgroCity-dream, but worth also making the first steps for planning and implementing AI's concept of AgroCity. Thanks to constant efforts, easier ways of communication and cultural exchange, the idea will spread and grow and provide a more human and joyful agro-urban environment for future generations of AgroCitizens.

6. Acknowledgements

6.1 Al's will
It was Al Imfeld's vision to provide mental, cultural and practical structures for AgroCity, catering to their inhabitants' needs, allowing temporary or long-term structures to support living and life's quality. He not only edited the German version of his ideas, but also delegated the English version prior to his death on February 14, 2017.

He wanted to receive and include contributions from local and international experts: agro-specialists for urban farming, philosophers, sociologist, architects, administrators, public service-persons, NGO's, artists ... with a focus on females as major carriers of life's burden in Africa.

6.2 Contributions
This book shall constantly grow through contributions from experts, visionaries, artists and pioneers. It shall allow transfers of experiences, insights and new visions. The electronic version will facilitate this constant process. We plan to edit this English version in French, Arabic and Swahili in the near future to allow all Africans to share our ideas. We want to remain open to further translations for the rest of the world's population and find the respective electronic platforms.

6.3 Input & Feedback
Please direct all inputs and feedbacks to www.agrocity.org

6.4 Acknowledgements
It was an honour to edit this English version of AgroCity in memory of Al Imfeld, a great visionary for a new African urbanity, for peaceful future cities the world over. My thanks go to so many friends who directly or with hints contributed to this book. May it find numerous contributors with their views and experiences in the near and far future!
My special thanks go to "KADE Kilimanjaro Association for Development and Environment" for pooling the future contributions as well as for setting up a pilot AgroCities. Aidan Msafiri and Jörg Bürgi have taken up the spirit of Al Imfeld to let AgroCity become a fulfilled dream.
Rosa Brown in Zurich has taken the heavy burden of lecturing our bumpy English translation. Close friends of mine are planning the financing of this marvellous project. Many thanks to all.

Ueli Dubs, editor

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