Are illegal squatters ruralising the urban edge?

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This article was motivated by a claim in literature that migrants are ruralising Third World cities. It investigates the impacts of migration - the fact that all residents are from somewhere else - on the form and function of an informal settlement, using an illegal shantytown in Mamelodi, Tshwane, as a case study, by exploring the relationships between (1) the demographic profiles of migrant households, including their origins and expectations, (2) the form of a squatter settlement, and (3) how it actually functions as a setting for social and economic activities. Illegal settlement making is finally tentatively explained with a theory developed from the ruralisation hypothesis.

Key words: Informal, settlements, migrant households, ruralisation

Is ongemagtigde plakkers besig om stedlike buitewyke te verlandelik?

Die motivering vir hierdie artikel is 'n stelling in die literatuur dat immigrante Derde Wêreld stede verplattelands. Dit ondersoek die impak van migrasie - die feit dat alle inwoners van êrens anders af kom - op die vorm en funksie van informele nedersetting, met 'n onwettige plakkerskamp in Mamelodi, Tshwane, as 'n gevallestudie, deur 'n ondersoek van die verwantskappe tussen (1) die demografiese profiel van migrante huishoudings, insluitend hulle herkoms en verwagtinge, (2) die vorm van 'n plakkerskamp, en (3) hoe dit in werklikheid funksioneer as 'n plek vir sosiale en ekonomiese bedrywighede. Onwettige nedersetting word ten slotte tentatief verduidelik deur middle van die verplatteland hipotese. **Sleutelwoorde:** Informele nedersettings, migrante huishoudings, verlandeliking

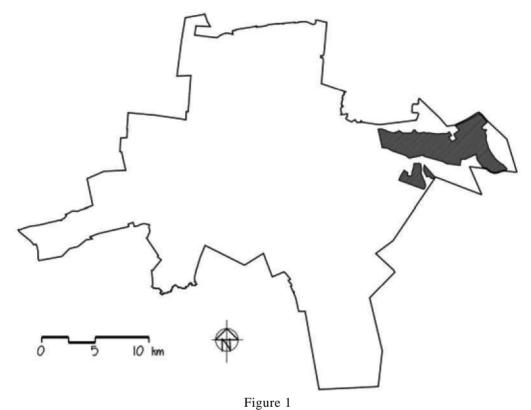
If gly, beautiful, sublime ... there is ample evidence in literature that squatter camps are all of these. As James Michener writes: "When we landed at the capital I saw ... the same corrugated iron shacks that both depressed and exhilarated me when I first saw them". This line from his novel of 1971, *The drifters*, reflects the contrasting views of shanty towns - dense, makeshift, self-built settlements in which 60% of sub-Saharan Africa's rapidly increasing urban population lives (United Nations Human Settlements Programme 2003).

The Gauteng Department of Housing believes informal settlements are "ugly" and intends to eradicate them by 2014 (2005: 6). This region, which includes Johannesburg and Pretoria, is the economic dynamo of sub-Saharan Africa, and it is not surprising that it is an attractive destination for migrants. At least one fifth of Gauteng's population live in informal dwellings (Brown & Fölscher 2004: 80). The Department's current response is to build thousands of small, identical, freestanding, subsidized houses. This is a questionable policy, simply due to the costs and sheer numbers involved, and because such Western-style suburbanism generally perpetuates urban sprawl, as well as social and economic fragmentation (Poulsen & Silverman 2005).

Others consider them "beautiful" and "sublime". John Turner advocated thirty years ago that shantytowns are an asset (Turner 1976). David Dewar of the University of Cape Town is a well-known local academic, architect and planner who also believes "informality should be celebrated" (Dewar 2005). He maintains that informal settlement is the only practical solution to housing the poor. Good public transport, access to economic opportunities, and professional and constitutional support for incrementally improving public spaces could offer enormous advantages, many more than simply providing houses for free.

The author and his students have been intensively studying and surveying informal settlement in Mamelodi, situated east of Pretoria, for the last three years. Exposure and experience arguably allow a more informed reflection on the theme "ugliness, beauty, sublimity" as it relates to shantytowns, than do theoretical reinterpretations of literature. Although Mamelodi West is

a historical township, shaped by apartheid-era spatial planning doctrine, it is spatially part of Pretoria - albeit peripheral - rather than simply a satellite city (Figure 1). Mamelodi East, which evolved in the mid 1990s, consists of speculative bonded housing developments, subsidized RDP housing, informal housing on serviced stands and ... a number of illegal shantytowns, some very large. Here rapid urbanization is mainly due to migration from rural areas, and illegal migration from other African countries. Contrary to popular belief, rural-urban migration is not due only to rural poverty, but often also to the perception that the city offers more social and recreational variety. For many rural adolescents, surviving in the city for some time before returning home is also a form of initiation into adulthood.



The centre of the Tshwane Metropolitan Area with Mamelodi shaded (author's drawing)

Urban growth is also due to natural population increase. Individuals and young families have to move out of formal houses belonging to parents or grandparents when conditions become overcrowded. There is a long waiting list for subsidized houses, with the result that even households with steady incomes sometimes resort to land invasion. Finally, there are also those who have good employment in the city, but travel to their rural homes each weekend. For them a shack is a conveniently cheap temporary shelter.

The research site is an illegal informal settlement whose residents started to invade land allocated for a major arterial road around 1997. It is located near the south-eastern edge of Mamelodi between a formal housing scheme to the east and a school to the west (Figure 2). There are two grocery stores selling basic consumables in the immediate vicinity, but the closest mall, at Denneboom Station, is a 45-minute walk away. It takes about 15 minutes to walk to the nearest train station and the area is well serviced with minibus-taxis. Our research has been focussing on land-use patterns Steyn 2005a), energy consumption (Steyn 2005b) and demographics (unpublished but available on CD-ROM).

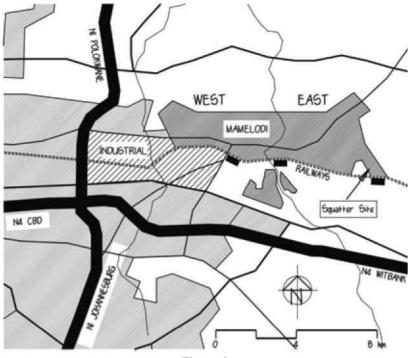


Figure 2 Locality plan (author's drawing)

Two puzzling issues gradually crystallised and they are the framework for this article. First, in spite of the fact that all residents are from somewhere else, and of the wide range of reasons for living there, illegal shantytowns are homogeneous landscapes - conglomerations of similar shacks (Figure 3). There is no diversity at all. In adjacent areas, however, where squatters were granted secure tenure and the sites serviced, shacks have sometimes been replaced by mansions, obviously expressions of wealth. Also noticeable is expression of the occupants' individual aesthetic taste.

Second, as student architects trained to appraise ambience and environment many fieldworkers commented on the rural "feel" and sense of place. We were sensitized to this phenomenon by Matthews and Kazimee, who write that "in Third-World cities, we no longer see urbanization of the rural migrants, but rather a growing ruralization of the cities" (1994: 133). This hypothesis became our conceptual reference.

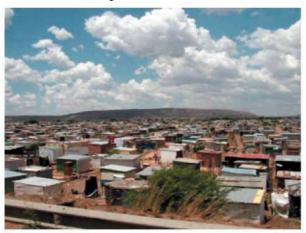


Figure 3
The homogeneous morphology of shantytowns (author's photograph)

From these issues the aim of this article grew - to try and determine why the illegal squatter settlement under study is so homogeneous and why it has a rural atmosphere. It is hoped that an

exploration of the relationships between the settlement's (1) community profile, (2) form and (3) function would inform a credible conclusion. Research involved a triangulation of literature reviews, interviews with residents and other stakeholders, as well as observations and recording of behavioural and physical patterns. Comparative analyses were mostly used for integration and interpretation.

Community profile

Data for this part of the study were grouped under four headings: (1) demographics, (2) housing perceptions, (3) modes of transport and (4) residents' likes and dislikes. Seventy people were interviewed, which we estimate to be about 15% of the adult population. Of these, 30 were male and 40 were women, with slightly more than half of them single mothers. Eighty-two percent of them came from rural and 18% from urban areas (Figure 4). Even so, 96% have family in the community, either living with them or in nearby shacks.



Figure 4
Distribution of residents according to places of origin (author's data)

Sixty-five percent earned less than the official poverty threshold (R1 500 per month in 1996 rands), but interestingly, 84% declared that their situation was better than where they had previously lived, while 87% enjoyed good relationships with their neighbours. Fifty-six percent were unemployed, but many of those received child and/or disability benefits. Nearly eleven percent were self-employed and 10,3% were housewives and students.

Housing perceptions were straight-forward: most residents perceived a definite progression from a rural homestead to a shack to a small, subsidized one or two-roomed house to a bonded house (conventional freestanding houses financed through mortgage bonds). But, while some residents clearly consider the squatter settlement as a transit camp, others regard it as a permanent home (Figure 5). Most are extremely proud of their houses and the yards and public spaces are kept clean, in spite of there being no municipal waste removal.

None of the residents interviewed owned cars. Surprisingly only 0, 5% used bicycles, although a number of informal workshops repair them. Fourteen percent used the train service, 13% used the public bus service and 27% used minibus-taxis (Figure 6). They relied mostly on walking (35%).



Figure 5
A well-kept shack as a permanent home (author's photograph)



Figure 6
Minibus-taxis (author's photograph)

Residents' likes and dislikes were captured as unprompted comments on their quality of life. They appreciated the cheap shelter and the ubiquitous minibus-taxis. Most respondents considered the streets safe for children, many enjoyed the community spirit and associated street life, and some commented on the low levels of crime. Nearly all, however, complained about the lack of economic opportunities, civic amenities and services. Many complained about long walking distances and others commented on the lack of recreational parks. Surprisingly, very few commented on the quality of shelter, in spite of an almost uniform low level of climatic comfort.

This profile shows a community of migrants, mostly poor, but reasonably satisfied with their situation ... and there is absolutely no evidence of the culture of entitlement that seems to prevail in RDP townships. Complaints about the lack of amenities and services are obviously legitimate.

Form

The settlement consists of alleys, lanes and small patches of open ground. The layout is informal and organic, but certainly not amorphous - organized by the distorted grid of lanes and alleys (Figure 7). As the architectural critic, Alan Lipman observes (2003: 156):

Although customarily crowded into small areas, the shacks do not usually block paths or intrude physically on neighbours. Limited as it may be, there is space about them; space for neighbourhood activities such as watching casually over children at play, trading with hawkers at local stalls, maintaining informal surveillance of the area and - commonly - exchanging views with people from diverse backgrounds.



Figure 7
Plan of the squatter site under study (author's drawing)

Plots range from 115 to 536 square metres, with two or more shacks on many of the larger plots. There are a number of pit latrines and standpipes, which are often shared by a number of shacks.

All buildings have timber frames clad with flat or corrugated iron sheeting, and sometimes wooden boarding. Houses range from about 12 square meters, with an average of 33 square metres. The largest is 62. So, plan layouts differ considerably within the framework of a common building technology and common house type (Figure 8).

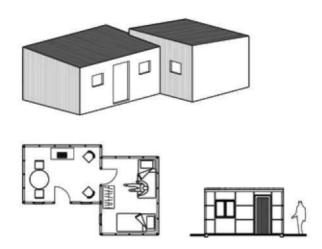


Figure 8
Plan, section and isometric view of a typical two-room squatter shack (author's drawing)

The settlement under study has a low coverage of 17% and a medium density of 50 units per hectare. The population density is estimated at 250 persons per hectare. What is surprising is that space is available for more building, but the rate of occupation seems to have stabilised, in spite of the fact that there is continuous change - when people leave as subsidised houses are allocated to them, their plots are occupied by roughly a similar number of newly-arrived migrants, although one would have expected to see a rapid built-up in line with increased migration as evident in nearby informal settlements.

The area is consequently much less crowded than some other informal settlements. In a nearby shantytown a low coverage of 26% was measured, but at 90 units per hectare and at least 340 people per hectare the densities were considerably higher. This is still much lower than in sprawling informal settlements at Alexandria and Diepsloot where densities are probably close to the 740 people per hectare level that has been described as "a common Third-World density" (Kathpalia 2003).

Function

After commenting on the effectiveness of a squatter settlement's layout, Alan Lipman writes (2003: 156):

These informal and consistently effective physical arrangements are matched by similar, seldom officially recorded, social compacts. There is, we soon realised, a shared understanding of how life on the settlement might be conducted in an orderly; mutually satisfactory manner. We learnt that the physical and social arrangements are not fortuitous: they are communally negotiated, clearly articulated and endorsed by informal peer pressure and a written code of conduct. As key aspects of public life on the site, they are appropriately, if not conventionally, civic.

The right to occupy land, the construction of shacks and general conduct are governed by a strict set of rules enforced by a ward committee established by consensus. This is a different dispensation from the household and clan leadership by elders found in rural areas, or the election of party-political representatives in formal townships.

It seems as if the locality of the settlement directly influences the way it functions. While Mamelodi West relates directly to major industrial districts, Mamelodi East is simply too remote from such employment opportunities and residents have to be much more self-sufficient.

There are very few civic amenities in Mamelodi East as a whole. There are no health care clinics, libraries or police stations in the vicinity. In fact, it is estimated that each medical doctor in Mamelodi East must care for more than 30 000 people! Parks and playgrounds do exist outside the settlement, but they are undeveloped dusty wastelands. As in many other squatter settlements, spaza shops (small kiosks selling basic necessities and providing basic services) and shebeens (unlicensed bars) are major features. For many, life depends on self-sufficiency hawkers, small traders, artisans and technicians in home industries, and even some subsistence farmers. Front gardens, streets, alleys, spaza shops and shebeens are true social spaces and intensely inhabited (Figure 9). It is clear that the community supports its local, internal economy, and members only venture outside when commodities or services are not available on site. The atmosphere is vibrant and convivial, corroborating Geoffrey Broadbent, who writes that informal self-built communities very often "have far greater vitality than anything that has been formally planned" (Broadbent 1990: 349). Zodwa Gxowa-Dlayedwa's research (2006) also seems relevant here. She found that black rural communities were considerably more tolerant towards outsiders than the black inner-city population. While illegal cross-border migrants are protected in the squatter settlement by what residents call a "debt of honour", in urban centres they tend to congregate and live in isolated groups. It seems as if the residents have not become urbanised in the highly individualistic, consumer-driven, Western sense, but largely maintain rural values.



Figure 9
Inhabited social space (author's photograph)

Towards a theory of illegal settlement

People come from the adjacent township five kilometres away, from rural villages a few hundred kilometres distant, or they travel a thousand or more kilometres from Zimbabwe, Zambia and Malawi. Still, when they occupy the land, they adopt a common spatial and technological expression, a morphology that broadly resembles a denser form of rural settlement, but constructed with materials salvaged from urban, industrialized society. They also adopt a common, mutually-supportive culture for survival and to protect themselves from external threats.

Their building technology is not based on traditional rural architecture - pre-colonial building traditions and forms that evolved over time to suit indigenous custom, climate and technologies, usually constructed by the community (Figure 10). They rather adopt a uniform vernacular architecture, the product of a delivery process accepted by the whole community as the proper way to make buildings, using readily available materials and techniques, and constructed by the inhabitants themselves or by local craftspeople.

It could be argued that, although the squatters face an insecure future due to the constant threat of eviction, they still manage to maintain a dignified existence and a reasonable standard of living - albeit rather precarious - because they adopted a settlement paradigm similar to that of the rural African village. That would explain the uniformity. In rural Africa, building forms developed slowly and incrementally over very long periods, and became culturally embedded once an appropriate solution for a certain set of circumstances had been found. As Reader writes, for sub-Saharan communities "... innovation and change were unacceptable risks" (1997: 263). Also unacceptable were, of course, non-conforming behaviour and material expression. This seems to be what we are witnessing here.

In many parts of sub-Saharan Africa the dominant settlement type is unquestionably still that of scattered villages of thatch and mud huts. This form might seem "haphazard" to the uninformed, but it is ecologically responsive and according to strict farming rules and cultural beliefs, which developed over centuries. Two outstanding and admirable achievements of African village society were that everyone had a house and social harmony without centralised authority. These are, as Basil Davidson put it, the essence of Africa's "guardian institutions"

(1967: 169). This pattern is arguably "the standard" for inland Bantu-speaking pastoral sub-equatorial Africa.

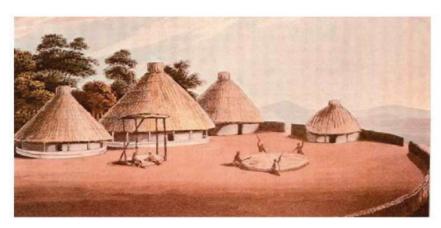


Figure 10 ATswana homestead in Kurreechane by Rev. John Cambell (from Willcox 1988: 101)

A pertinent fact is that great pre-colonial cities, such as Kano, Zaria, Benin City and Old Oyo, are unquestionably collections of villages - each with strong rural characteristics - but were gradually aggregated into mixed-use wards inhabited by households sharing kinship, culture or competencies in specific crafts. Southern Africa's own pre-colonial urban complexes like Mapungubwe and Great Zimbabwe are characterised by a clustered village-based spatial organisation (Figure 12). The population of Great Zimbabwe during the 14th century had been estimated at around 10 000 people (Connah 2001: 236). They occupied about 25 villages, comprising a total of 33 hectare, within a radius of one kilometre of the Great Enclosure. This indicates a population density of 300 people per hectare, exactly halfway between that of the squatter community under study and that of the nearby informal settlement!

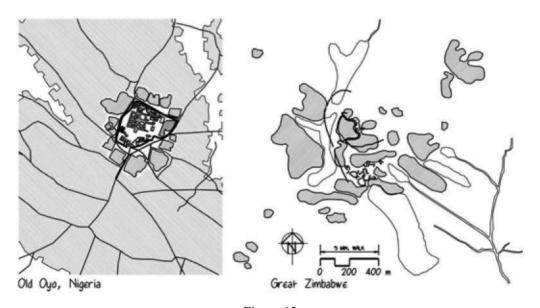


Figure 12
Plans of the core of Old Oyo and Great Zimbabwe
(author's drawings after Fraser 1968: 66 and Connah 2001: 240 respectively)

Simplistic comparisons of street patterns, form and spatial organisation demonstrate clear conceptual similarity to rural settlement. Considering 400 x 400 metre fragments (generally accepted as a five-minute walking distance), the pattern of lanes and alleys, created without any professional intervention, has nothing in common with Tshwane's traditional neighbourhoods,

which are mostly archetypal Garden Suburb mutations. However, it is conceptually very similar to that of a nearby informal settlement and to that of Lamu, off the East Coast of Kenya, an historical but still functioning Afro-Arab town (Figure 13). This seems significant, since Nnamdi Elleh suggests that Lamu's street pattern has a "format like that found in traditional African villages" (1997: 81, 149).

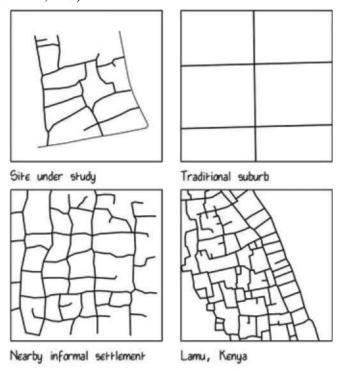


Figure 13 A comparison of street configurations (author's drawing)

The scale of the squatter settlement is similar to that of a rural village (Figure 14). Villages are composed of compounds consisting of a number of huts, each constituting a room, arranged around a number of open-air living spaces. And although the rooms of shacks are sometimes connected, each can be clearly distinguished. In both cases the dimensions of a room rarely exceed four metres. Richard Hull commented that "Africans were adept at maintaining a feeling of smallness and rural intimacy, even in areas of high population density" (1976: 48). This is obviously still true.

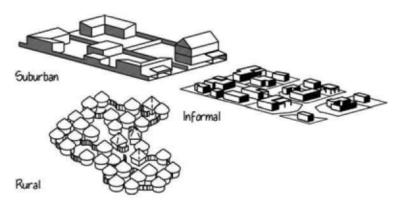


Figure 14 A comparison of form to assess scale (author's drawing)

A comparison of 100 x 100 fragments of settlement footprints is equally informative (Figure 15). It shows that the site under study is more loosely organised and less dense than the nearby informal settlement earlier referred to, with the organic layout of the first conceptually resembling

that of the Nabdam village, and the latter arranged in a rough gridiron pattern resembling the suburbs. There are essentially two types of traditional rural African villages; compact and dispersed. Compact villages are found in regions like West Africa and are associated with crop agriculture and crafts. The Ambo kraal, although not typical, shows the southern African pattern of dispersed settlements with a compound for an extended family often confused with a village. The dispersed pattern was associated with the cattle ideology prevalent in pre-colonial southern Africa. It could be significant, therefore, that the site under study recalls a model from the cradle land of the Bantu-speaking people, an area our indigenous population probably left more than 2 000 years ago (McEvedy 1995: 32). Is it possible that such ancient and collective memories are the major forces shaping informal settlements?

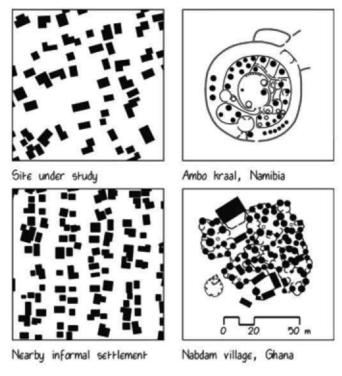


Figure 15 A comparison of spatial organisation (author's drawing)

Conclusions

Many aspects of informal settlements are unquestionably beautiful and sublime. Many authoritative sources admit the value of informal settlements and admire the innovativeness. They are testimony of how people are coping without professional or government intervention, of the strength of *Ubuntu* (a person is a person because of other people), and of the role of women in creating homes under challenging circumstances. But while the hospitality and homely sense of place were much appreciated, the squatter community studied was probably not typical, and a Rousseauian complacency would be totally inappropriate.

There is also an ugly side to squatting. We must recognise the health risks prevalent in squatter camps. And the lack of education, healthcare, basic services and sanitation, clean water and economic opportunities, as well as the lack of truly nutritional food. Informal sprawl and inevitable locality at the edges of cities are not only wasteful in land, but tend to confine the very young, the elderly and those without money to their immediate surroundings.

The appearance of an illegal settlement and the way it works do not seem to have evolved from a simple, purely practical, value-free response. On the contrary, form and function seem

to reflect embedded values and knowledge that have been protecting sedentary sub-Saharan existence and village cultures, possibly for nearly 3 000 years. And just as Great Zimbabwe was transformed into an urban centre through a rural-based knowledge system about 600 years ago, the edges of our cities are once again being urbanised in a similar manner. From a Eurocentric position the result might seem rural, but it is in fact the manifestation of how African urbanism had been achieved in pre-colonial times. The ultimate conclusion is, therefore, that squatters are not ruralising the edges of our cities ... they are rather creating African urban places and conventions of urban conduct, guided by a rural-based knowledge system that spans time, space and settlement size.

From this paradigm we can learn important lessons: the beauty of an unpretentious, harmonious morphology; the convenience of a mixed-use, walkable environment; the practicality of a hierarchy of pedestrian-dominated lanes and alleys; the comfort of smallness and intimate spaces; the security of an identifiable neighbourhood and a sense of belonging; the enjoyment of friendship, community support and participation; the satisfaction of sharing and helping. Some illegal settlements provide a satisfactory home for many people, in spite of poverty, marginalisation and a lack of resources, and it is doubtful if squatting would ever be eradicated. A more meaningful course of action seems to ... celebrate and facilitate informality! We must accept that a true African city will always be pluralistic due to our socio-economic and cultural diversity. What is extremely important is that low-income people may not be banned to the peripheries of our cities, but should rather be accommodated in serviced settings closer to places of skills training and economic opportunities, but in numbers that would ensure political and social critical mass, as well as a viable local economy (Figure 16).

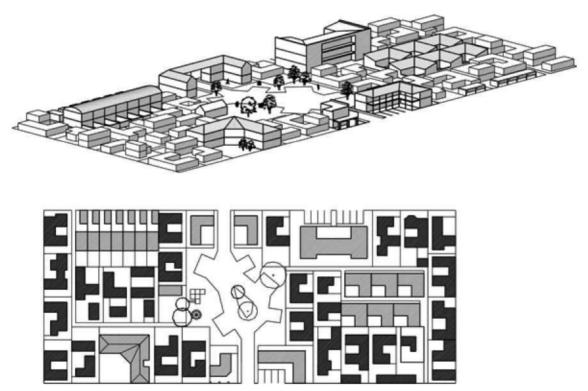


Figure 16
An vision of a mixed-use, mixed-income neighbourhood, with self-built houses hatched dark (author's diagramme and drawing)

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