

# Steps towards a configurative discipline

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*'Open up that window and let the foul air out.'*

Jelly Roll Morton<sup>1</sup>

Architecture – planning in general – breathes with great difficulty today. Not because of the erroneous obstacles society casts in its way, but because architects and planners refuse to extend the truth that man breathes both in and out into built form. The breathing image epitomizes my conception of twin phenomena – we cannot breath one way, either in or out. As to what Jelly Roll cried: which window and what foul air? The 'window' is relativity and the 'foul air'... well, it is what exudes from the aggressive halves into which twin-phenomena are brutally split by some disease of the mind which, in our particular part of the world, has been devoutly cultivated for 1962 years!

## Right-size

I am again concerned with twin phenomena; with unity and diversity, part and whole, small and large, many and few, simplicity and complexity, change and constancy, order and chaos, individual and collective; with why they are ignobly halved and the halves hollowed out; why too they are withheld from opening the windows of the mind!

As abstract antonyms the halves are rendered meaningless. As soon however as they are permitted to materialize into house or city their emptiness materializes into cruelty, for in such places everything is always too large and too small, too few and too many, too far and too near, too much and too little the same, too much and too little different. There is no question of right-size (by right-size I mean the right effect of size) and hence no question of human scale.

What has right-size is at the same time both large and small, few and many, near and far, simple and complex, open and closed; will furthermore always be both part and whole and embrace both unity and diversity.

No, as conflicting polarities or false alternatives these abstract antonyms all carry the same luggage: loss of identity and its attribute – monotony. Monotony not merely in the sense of uniform because, as I have already said:

If a thing is too much and too little the same, it will also be too much and too little different. Right-size will flower as soon as the mild gears of reciprocity start working – in the climate of relativity; in the landscape of all twin phenomena.

The amorphous and additive character of all new towns – their heterogeneous monotony – is the immediate result of the complete absence of right-size. Those urban functions which were not forgotten were compartmentalized. The actual build-

ing elements were subsequently arranged academically according to a trivial infill habit, and the open space between them is so casually articulated and emptied of every civic meaning that they loom up like oversized objects, pitilessly hard and angular, in a void (what Candilis justly calls 'espace corridor').

Within the tyrannical periphery of such objects there is no room for emotion; nor is there any in the resulting emptiness between these objects. Emptiness has no room for anything but more emptiness. All urban ingredients curdle, all urban colours clash. Just planned wasteland.

### **The devaluation of various abstract antonyms**

Now the object of the reciprocal images contained in the statement: *make a bunch of places of each house and every city; make of each house a small city and of each city a large house*, is to unmask the falsity which adheres to many abstract antonyms: adheres not merely to small versus large, many versus few, near versus far, but also to part versus whole, unity versus diversity, simplicity versus complexity, outside versus inside, individual versus collective etc. etc. It seems to me that these reciprocal images furthermore upset the existing architect-urbanist hierarchy. It is what I wanted them to do – gladly.

To proceed from the idea of dwelling, in the sense of 'living' in a house, in order to arrive at the idea of living, in the sense of 'dwelling' in a city, implies proceeding simultaneously from the idea of living, in the sense of 'dwelling' in a city, in order to arrive at the idea of dwelling, in the sense of 'living' in a house. That is as simple and involved as it actually is!

When I say, therefore, *make a welcome of each door and a countenance of each window: make of each a place, because man's home-realm is the in-between realm - the realm architecture sets out to articulate*, the intention is again to unmask false meaning and to load the meaning of size with what right-size implies! As soon as the equilibrating impact of the in-between realm – extended so that it coincides with the bunch of places both house and city should be – manifests itself in a comprehensibly articulated configuration, the chances that the terrifying polarities that hitherto harass man's right composure may still be reconciled, will certainly be greater.

It is still a question of twin phenomena; a question of making the in-between places where they can be encountered, readily mitigating psychic strain. What is direly needed is a dimensional change both in our way of thinking and working which will allow the quantitative nature of each separate polarity to be encompassed and mitigated by the qualitative nature of all twin phenomena combined: the medicine of reciprocity.

### **First approach to a configurative discipline**

Commenting on some housing projects by Piet Blom published in *Forum*, I stressed the fact that these projects did not depend on current types of housing, since the latter have amply proved their own obsolescence, especially in a larger context<sup>2</sup>. Nor

do these projects depend on the current narrow views of what inside and outside, individual and public space mean; nor for that matter on the frozen quartet of functions and the foolish severing of urbanism from architecture into two conflicting disciplines. They successfully demonstrate the validity of a way of thinking and a corresponding design process which I have advocated for many years.

By liberating oneself of the abject burdens mentioned above, by crossing the frontier of established practice – though not of what is plausible – and making constructive use of the kind of capacity rejection of the obsolete precludes if new valid forms are to replace it, it is now possible to invent dwelling types which do not lose their specific identity when multiplied,<sup>3</sup> but, on the contrary, actually acquire extended identity and varied meaning once they are configured into a significant group.

What is essentially similar becomes essentially different through repetition instead of what is but arbitrarily 'different' becoming arbitrarily 'similar' through addition (a universal city-molesting sickness).

Each individual dwelling possesses the potential to develop, by means of configurative multiplication, into a group (sub-cluster) in which the identity of each dwelling is not only maintained but extended in a qualitative dimension that is specifically relevant to the particular multiplicative stage to which it belongs. Whilst the resulting group is, in turn, fortified in the next multiplicative stage by a new identity which will again enrich that which precedes it.

As it is, all hitherto adopted methods impoverish whatever limited identity a preceding numerical stage may possess as such. In fact the absurd truth of it is that the identity of a dwelling, if it has any at all, is at present almost invariably such that it is incapable of surviving the very first repetitive stage, i.e. that of the single block! This demonstrates that the established design mechanism is unable to cope with plurality; that it deals with the wrong singular in a basically wrong – additive – way.

It is of course true that the plural must first acquire meaning in human terms if it is to be guided by the still unexplored aesthetics of number. But the reverse is equally true. We simply cannot embark on one without the other – they are both part and parcel of the same problem.

The identity of a smaller cluster – its intrinsic 'gestalt' in human terms, i.e. its real 'dwelling' potential – is embraced and intensified in that of the larger one which grows out of it through further repetition, whilst the identity of the larger cluster is latently present in the smaller one. This, of course, points towards the meaning of unity through plurality and diversity; diversity through unity and configurative similarity, but also towards the need to articulate both interior and exterior space clearly and consistently, since only their complete ambivalent accordance can ultimately constitute the sequences of places that must accommodate the occasions which real urban existence calls for.

This is why I propose so emphatically not only a far greater comprehensibility at all stages of multiplication but also a radical enlargement of scale in the sense of far greater configurative compactness. Furthermore, a greater audacity of form and

articulated place-clarity within a closely-knit compound rather than an amorphous texture of inevitably oversized items (oversized however measurably insignificant!) additively arranged in space-emptiness.

But it is also why I propose a greater urbanity, since this implies a far closer meshing of all urban functions, aspects and kinds of human association. A far greater affinity towards their interdependent multi-meaning on the part of the architect is a first condition. Hence the city-like nature of a house and the house-like nature of a city. No configurative stages of multiplication – simultaneously rather than consecutively conceived – can acquire real significance until they coincide to some extent at least with the illusive configuration of the individual and the collective. Fuel for the entire process as well as recipient of the engendered warmth.

To achieve this end, more is required than a figural configuration of dwellings. We must indeed proceed from this but we must also proceed from more than this. Why, is apparent enough, since it is those functions that every plurality of people requires in order to exist within an urban cluster in a fashion and degree of urbanity pertinent to it, which must further identify each configurative stage.

We must do all that can be done in our field to make each citizen know why it is good to live citizen-like in a city built for citizens, for a city is not a city if it is just an agglomeration for a very large 'population' – a meaningless accretion of quantities with no real room for anything beyond mere survival.

### **Coincidence of urban identity and dwelling configuration**

It is a question of multiplying dwellings in such a way that each multiplicative stage acquires identity through the significance of the configuration at that stage. I say, through the 'significance' of the configuration in order to make it clear that it is not merely a matter of visual form, since this alone would be purely academic, but of significant content transposed through structural and configurative invention into architecture. Each multiplicative stage should therefore achieve its appropriate identity by assimilating spontaneously within its structural pattern those public facilities this stage requires and which inseparably belong to it.

The important question here is, therefore, how to identify the part in terms of the whole, i.e. what can identify it beyond the multiplicative stage reached. How is one to comprehend whether the cluster one resides in is self-contained and independent, or a dependent configurative part of a larger cluster?

To put it in general terms: by what means can the degree of 'urbanity' (literally used as derived from 'urban'), that belongs to the particular complexity and scale of a given urban entity, be identified throughout – i.e. become significantly comprehensible in terms of what it actually is?

It seems to me that at each multiplicative stage large elements that have a wide specifically civic meaning or city-forming potential, beyond that of the immediate public requirements the stage calls for locally, should be included within its configuration.

On a city level these elements are so manifold that if meaningfully localized in a framework of urban reference they could help to impart a specific urban identity to each sub-area – a different one, moreover, in each case. Such decentralization of the civic possibilities that belong to a large city would impart city-like identity evenly instead of concentrating it in one or a few centres. It would, at any rate, counteract the kind of urban congestion through overpressure, which of course goes hand in hand with suburban anaemia as its equally nefarious counterpart, and impute fuller urban context to the sub-areas beyond their specifically local context. Each citizen would thus ‘inhabit’ the entire city in time and space. (See John Voelker’s Zone project <sup>4</sup>, in *The Child, the City and the Artist*, pp. 206–207)

It may sound paradoxical but decentralization of important city-scale elements will lead to a greater appreciated overall homogeneity. Each sub-area will acquire urban relevance for citizens that do not reside there. The urban image – awareness of the total urban cluster – is then no longer represented by strictly personal place-reference, different for each citizen, and a centre common to all, but, apart from such personal place-reference, by a gamut of truly civic elements more or less equally distributed and relevant to all citizens. As I have already suggested, such elements will bring varied specific identity to each sub-area. They will, moreover, induce citizens to go to parts of the city otherwise meaningless to them.

How obsolete the accepted ingredients with which most city plans and housing projects are additively concocted really are, especially in this century, is demonstrated by the schemes which have tentatively succeeded in re-estimating the meaning of many if not yet all urban ingredients and inventing new forms and ideas for them by means of one single simultaneous configurative discipline. Those housing projects, which are real sources of inspiration today, have evolved new dwelling types, new methods of access; communication and integrating public facilities through a single complex constructive and sequential discipline. All these matters coincide in that they constitute part of each other’s immediate counterform and are contained in each other’s embracing periphery. The house, for instance, is thus also part of the street, whilst the street, reinterpreted, is included in the house in that it is not necessarily exterior to it in the limited sense – nor for that matter are external living spaces. All ingredients are redefined and closely meshed.

### **The vehemence of vast plurality**

Provided the dimension of a given cluster is fairly small, whether independent or part of a larger urban complex, the suggested configurative process could no doubt bring about the required overall comprehensibility. In city scale clusters or entire cities, however, the forces and the movements which result from these forces – the vehemence of vast plurality – are so great that functional and emotional conflicts ensue with which even the sequential configurative process I have referred to cannot fully cope. This is due to the heaping up of quanta which, even if they may one day be so interadjusted as to become compatible, confront us today in all their ap-

parent discrepancy as irreconcilables which the citizen can no longer respond to positively, but which together, nonetheless, belong to the essence of the citizen's environment.

The accumulative nature of cities today is such that the forces which cause it and the movements which ensue cannot be canalised adequately in time and space by any of the ideas and methods hitherto accepted by urbanists whether in the CIAM tradition or not.

### **Amorphous texture versus comprehensible structure**

Nor will the configurative process manifested in the outstanding schemes already referred to, which deal with the grouping of a large though still limited number of dwellings and the public facilities this number requires, suffice, unless the 'infrastructures' are so conceived that identity is maintained locally as well as throughout the entire city-compound. If this fails, what we shall end up with will, in spite of the desired opposite, again become an amorphous additive texture instead of a comprehensible configurative structure; a mere arrangement, still, of some urban components instead of a meaningful configuration of all urban components in the right association.

Locally, the configured sub-areas will, no doubt, be richer and more habitable by virtue of the same fugal process of thinking that brought about the housing schemes mentioned. A great advance indeed – but the vastness of the urban areas covered and the numerical problems that go with it can well cause the successful establishment of identity during the initial stages of multiplicative configuration to be discontinued during the further ones, so that textural incomprehensibility instead of structural comprehensibility will again result.

It is not my intention to devaluate what has been gained so far by reciprocal thinking and the configurative design process that goes with it. The process is certainly the right one; it must only be extended because, as yet, it has the numerical limits I have just dealt with. But they can be resolved if new structural devices are invented that have urban validity for all citizens and impose a clear, large, and comprehensible overall framework on the whole urban entity within which the smaller numerically limited configurations are integrated and acquire overall specifically urban identity. These large structural devices may be the 'infrastructures' about which the Smithsons have thought a great deal; they may be the 'megastructures' which have also occupied the minds of Tange, Maki, Ohtaka, and Kurokawa.<sup>5</sup> An inspiring scheme for a total and very compact habitat on which Piet Blom is at the moment working – it will be published in a forthcoming number – attempts to integrate the smaller and larger urban components by means of a single configurative discipline, proving tentatively that this is certainly possible.<sup>6</sup>

Without such large identifying structures the vehemence of the forces and movements that belong to a city – and make it a city – cannot but assault the identity meaningful configuration may have acquired within it. Whilst it is certainly possible

to guide repetition through the initial stages of multiplication – the schemes already published demonstrate this effectively – it is not possible to maintain, extend, or augment identity through any number of stages by continuing the fugal process beyond the stages it can cope with. Whether it will be necessary to subordinate it from the start to a large structural service framework (Tokyo Bay plan), or whether the configurative process can become so rich that it incorporates all components, including the most intimate, as Blom's new plan (albeit for a much smaller cluster) attempts, is a question of crucial importance. I, for my part, do not believe that these two concepts are incompatible. On a vast metropolitan scale, at any rate, their integration seems inevitable. The configurative discipline already discussed should at all costs be extended and enriched as far as possible.

The necessity to uncover the still hidden laws of numerical aesthetics – what I call harmony in motion – was already brought forward in our first *Forum* issue. Failure to govern multiplicity creatively, to humanize number by means of articulation and configuration, has already led to the curse of the new towns! They demonstrate how the identity of the initial element – the dwelling – has hardly proved able to survive even the very first multiplicative stage – those in Holland are terrifying examples of organized wasteland. The fact is that in most cases the initial elements had no identity to lose, anyway!

### **The aesthetics of number<sup>7</sup>**

We have forgotten most of what there is to know about the aesthetics of the single thing, whilst we know little yet about the aesthetics of multiple things. The capacity to impart order within a single thing – to make it rest within itself – is unfortunately no longer ours and that is a terrible thing; we cannot do without classical harmony. The capacity, however, to impart order to a multiplicity of things is as unfortunately not yet ours either, and that is a terrible thing too, for we cannot do without harmony in motion.

In order that we may overcome the menace of quantity now that we are faced with *l'habitat pour le plus grand nombre*, the aesthetics of number, the laws of what I should like to call 'harmony in motion' must be discovered. Projects should attempt to solve the aesthetic problems that result through the standardization of constructional elements; through the repetition of similar and dissimilar dwellings within a larger housing unit; through the repetition or grouping of such housing units, similar or dissimilar; through the repetition of such housing groups, similar or dissimilar (theme and its mutation and variation), as I put it in Aix-en-Provence. We must continue the search for the basic principles of a new aesthetic and discover the human meaning of number. We must impart rhythm to repetitive similar and dissimilar form, thereby disclosing the conditions that may lead to the equilibration of the plural, and thus overcome the menace of monotony.

The formal vocabulary with which man has hitherto successfully imparted harmony to the singular and particular cannot help him to equilibrate the plural and

the general. Man shudders because he believes that he must forfeit the one in favour of the other; the particular for the general; the individual for the collective; the singular for the plural; rest for movement. But rest can mean fixation – stagnation – and multiplicity does not necessarily imply monotony. The individual (the singular) less circumscribed within him(it)self will again appear in another dimension as soon as the general – the repetitive – is subordinated to the laws of dynamic equilibrium, i.e. harmony in motion.

Having suggested that it is due both to the great area covered and the quantitative aggression of the forces vast plurality entails which tend to invalidate the configurative articulation of repetitive elements beyond the first stages of multiplication, it is obvious and reasonable to suggest that identity beyond these first stages – real city identity – can only be established by the very quanta which tend to obstruct the sequential process half way. With this in view, it is clear that large city-forming attributes – other than circulation – must be introduced stage by stage in the whole configurative process to impart localized full-city identity, whilst bold infrastructures must generate a framework within which all configurative stages of multiplication – i.e. not merely the initial ones – become meaningfully comprehensible. Failure to govern mobile quanta through infrastructures will make it impossible for cities to become more than vast disorganized accretions that frustrate the very needs they are meant to provide for.

It is all too often claimed that the great metropolis defeats its own ends in principle! This, of course, is the kind of sentimental loose thinking that stands in the way of any solution that proves the opposite.

### **Urban transmutability**

If it were possible to comprehend a city as a complex with a certain finality, or as a determined mechanism geared to a kind of urban existence which is fairly constant in time and space – subject only to either slow gradual change or to sudden mutations at very long intervals – it would perhaps also be possible to rely on the extended configurative discipline. But a city is no such thing – no longer at any rate. Nor am I prone to speak instead of a city as an organism, since this suggests quite predictable ‘natural’ change and growth according to fixed inherent impulses and external forces.

The ‘organic’ image of a city is therefore as false and misleading as the mechanical one. Without wanting to be nasty, both sprout from the same sentimental and rational type of mind; a type, moreover, that is invariably addicted to technological advance for its own sake, and all too common among architects and urbanists. A city, however, is a very complex artefact and, like all artefacts, fits no pseudo-biological analogy. It is a man-made aggregate subject to continual metamorphosis to which it either manages or fails to respond. Accordingly, it is either transfigured or disfigured. Our experience is founded on the latter, our hopes on the former – that is the plight we are in now. But we know this much, that transfigurative potential



implies enduring and dynamic identity; lack of it: disfigurement, loss of identity and paralysis.

A city is only transmutable as a whole if its components are also transmutable. One change can effect, delay, or check another change, but this does not alter the fact that each component is subject to change of some kind. Transmutations seldom coincide in time and degree nor are they affected at the same tempo. Such incongruity is simply the spontaneous outcome of urban life. It is a reality that must be accepted and understood.

A city is chaotic and necessarily so. One can no more rule this truth out than one can rule out the eternally incongruous desires of man. The manifold functions of a city must be adequately organized in the light of all aspects of mobility, not for the sake of subduing the chaotic element they incur, for this is happily as impossible as it is undesirable, but in order to avoid their reciprocal elimination (functional paralysis), mechanical stagnation, and the human distress implied.

Are we such fools as not to realize this? All these nefarious properties do not exclude from either order or chaos as such but from the mismanagement of both. Order and chaos form yet another twin phenomenon which, if split into incompatible polarities, turns both halves into a twin-negative. Now architects and urbanists today are addicted to this splitting mania. Their particular nature seems to make them as wary of chaos as they are willing to bestow order.

One cannot eliminate chaos through order, because they are not alternatives. Sooner or later it will dawn upon the mind that what it mistook for order is not really order, but the very thing that causes the stagnation, paralysis, and distress falsely attributed to chaos. It will also dawn upon the mind that what such 'order' is supposed to dispel – chaos – is quite a different thing from the negative effects brought about in trying to do anything so foolish.

Chaos is as positive as its twin sister order.

It is clear that the time has come to reconsider the entire configurative process in the light of the many aspects mobility embraces in order to discover new spatial, structural and constructive possibilities for our cities.

Kenzo Tange, referring to his Tokyo Bay plan, says: *'The spatial order in cities will doubtless become richer in content as time goes on. It will come to include not only spaces of an orderly but free, non-ordered spaces as well.'* He adds: *'We must seek order in freedom and freedom in order. It is by relating these two extremes that we will create a new spatial organization for contemporary cities.'*<sup>8</sup>

As fully as the order-freedom reciprocity appeals to me, as little can I cope with order and freedom as extremes which they only are as long as they are negatives (insofar as the chaotic element is here rightly implied in the word freedom). Since there must always be some kind of space between the alleged extremes, a distinguishable borderline between ordered and non-ordered space is unthinkable. They are not separate categories that can be locally provided for.

### The fulfilment of a great desire – the metropolis

A lot has been written about circulation – its mechanical and numerical connotations. It is still too often handled in the abstract, as one of many urban functions. But circulation cannot be fully understood in terms of function – that is why we have hitherto failed to come to terms with it. Transportation is a particular aspect of communication, communication a particular aspect of mobility in general. Now mobility is not merely an aspect of city life, it is of the very essence of human association, whilst cities in principle are meant to provide the framework for human association in its most complex and varied form.

Cities tend to become more magnetic, and consequently larger and larger as the web of association is intensified and its range extended. I say it this way and not the other way around because it is important to comprehend the expanding city in the light of man's basic desire to communicate, i.e. from a positive human need, and not from statistical, economical and technological inevitability in an impersonal hence negative sense. I believe it is because this quantitative attitude still prevails that the prospect of urban expansion seems terrifying instead of gratifying, and the solutions ubiquitously proposed so functionally inadequate and contrary to the growing communicative need of the citizen.

There is one more question Tange's excellent exposé of the Tokyo plan poses. I should like to deal with it here briefly because it immediately concerns the argument of the present essay. He says:

*'The speed and scale of contemporary life call for a new spatial order in cities. Nevertheless man himself continues to walk in steps of a meter or so and we are still surrounded by the unchanging human scale. Furthermore, whereas the life-cycle of large-scale constructions is growing longer, the life-cycle of our houses and the articles we use in daily activities is gradually growing shorter. This fact results from our ever-increasing reliance upon manufactured goods and from our tendency to take up new things and discard them more and more rapidly. Individuality, freedom, and spontaneity form an ever-strengthening antithesis to the control of technology. Man desires more and more to exercise his own individual choice in matters that concern houses, gardens, streets and plazas. There are then two conflicting extremes – the major structures which have a long life cycle and which, while restricting individual choice, determine the system of the age, and the minor objects that we use in daily living which have a short life cycle and which permit the expression of free individual choice. The gap between the two is gradually growing deeper. The important task facing us is that of creating an organic link between these two extremes and, by doing so, to create a new spatial order in our cities.'*<sup>9</sup>

Some basic objections to this concept, which I underline fully, have been thus formulated by Fumihiko Maki and Masato Ohtaka in an essay on 'Group Form'<sup>10</sup>:

*'Tange's megaform concept depends largely on the idea that change will occur less rapidly in some realms than it will in others, and that the designer will be able to ascertain which of the functions he is dealing with fall in the long cycle of change, and which in the shorter. The*

question is, can the designer successfully base his concept on the idea that, to give an example, transportation methods will change less rapidly than the idea of a desirable residence or retail outlet? Sometimes the impact and momentum of technology become so great that a change occurs in the basic skeleton of social and physical structure. It is difficult to predict to which part of a pond a stone will be thrown and which way ripples will spread. If the megaform becomes rapidly obsolete, as well it might, especially in those schemes which do not allow for two kinds of change cycle, it will be a great weight about the neck of urban society. The ideal is not a system, on the other hand, in which the physical structure of the city is at the mercy of unpredictable change. The ideal is a kind of master form which can move into ever new states of equilibrium and yet maintain visual consistency and a sense of continuing order in the long run. Inherent in the megastructure concept, along with a certain static nature, is the suggestion that many and diverse functions may beneficially be concentrated in one place. A large frame implies some utility in combination and concentration of function. That utility is sometimes only apparent. We frequently confuse the potential that technology offers with a kind of compulsion to use it fully. Technological possibility can be sanguinely useful only when it is a tool of civilized persons. Inhuman use of technological advance is all too frequently our curse. Optimum productivity does not even depend on mere concentration of activities and workers.'

Paul Goodman says in *Communitas*<sup>11</sup>: 'We could centralize or decentralize, concentrate population or scatter it. If we want to continue the trend away from the country, we can do that; but if we want to combine town and country values in an agrindustrial way of life, we can do that. ... It is just this relaxing of necessity, this extraordinary flexibility and freedom of choice of our techniques, that is baffling and frightening to people. ... Technology is a sacred cow left strictly to (unknown) experts, as if the form of the industrial machine did not profoundly affect every person.'

Technology must not dictate choices to us in our cities. We must learn to select modes of action from among the possibilities technology presents in physical planning. If the megastructure concept presents the problems outlined above, it also has great promise.

### **Motive, means and end in confusion**

I have nothing against the megaform concept; on the contrary, this essay is a plea for a configured megaform, i.e. for the city as a single complex megaform in which the conflicting extremes, about which Tange speaks, are not resolved, however, by 'creating an organic link,' but are simply not accepted as conflicting categories. Were it not for the fact that Tange seeks order in freedom and freedom in order, what are now but doubts as to some albeit vital implications with regard to motive, means, and end would have become real objections.

I would contend that it is primordially man's nature as a social being to seek immediate intercourse with his fellow men and participate as an individual in the doings of society at large. This is in fact as much a consequence of consciousness as

of man's specific ability to evolve the means, technological and economical, with which he manages not merely to survive physically but, beyond that, to frame more effectively all the shades of human intercourse he seeks. As soon as his physical survival is secured – a stage as yet only reached in a small part of the world – what lies beyond survival as such becomes paramount – and, one would imagine, well within reach.

This is my point of view: once this stage has been reached I think one can say, without looking for reservations which can easily be construed, that ultimately man tends to move towards large cities simply because he wants to, and that he does so because it is his nature to gather and communicate in as varied a way as possible. It is not merely because he must, in that impersonal economical factors or systems of production necessitate him to do so, since this is no longer true.

We cannot solve the problem of the expanding metropolis if we continue to approach it negatively. That the metropolis 'explodes' instead of expanding naturally – I am thinking among other things of the suburban disease – is based on an existing negative status quo. Even if the vicious circle qualities are evident, we must start from the simple positive truth that cities expand because man today is drawn towards them for intrinsically human reasons – because the desire to communicate and participate is a primordial attribute of consciousness. In order to accomplish this end he has developed technological and economical means with which – quite apart from whether or not these succeed or fail – to accomplish the terrific human clustering his desire for complex association demands. That there is an emotional chasm between the way the increased speed and scale this desire causes manifests itself, and the desire itself, is evident enough, but this is no reason to disparage either the ultimate human validity of the great metropolis or the increase in speed and scale of contemporary life which has, of course, in many ways unfortunately developed in a way both arbitrary, impersonal and hence inhuman.

I do not like proverbs but one is certainly putting the cart before the horse when one suggests that man must adapt himself mentally and emotionally in order to accommodate himself to his own artefacts because he fails to build them as a means towards an end he fundamentally desires.

Technology and economics are servants of man's desire to achieve kinds of human association beyond those which survival necessitates (in the light of his hobby of making bombs and rockets I cannot help adding: so I would like to think!). If instead they have become the very tyrants that frustrate this great desire, so much for that; this should never be allowed to alter the right relation between motive, means and end.

Herein lies the danger of labelling the two conflicting extremes major structures and minor objects, as Tange does, since the minor objects are always the end, in that they appertain to daily living, whilst the major structures (must they determine the system of the age?) are the means (the servant), in that they are conceived to help

the end accord with the desire. It seems strange, therefore, that Tange calls minor what I would call the major end.

As long as architects desire to create a new spatial order for our cities, because they not only desire to bridge the great 'gap', but because they think it is these 'major structures which, while restricting individual choice, determine the system of the age,' they will not fully succeed, because this concept is founded on false premises – on a technological slant – albeit a different one from that which infected CIAM for so long. This is also why the whole concept of 'open' versus 'closed' society or 'open' versus 'closed' form, cherished by astute architects today, is, in my opinion, untenable and erroneous. I detect in Tange's intellectual excursions into the realm of social, economical, aesthetic and historical criticism, with which he attempts to fortify the open-versus-closed-form concept, a continuation of the same overestimation of technology and productive progress for their own sake which also infected the minds of so many architects and urbanists of the previous generation. A 'closed' concept, to use Tange's word just once!

In view of Japan's incredible technological development and its formidable impact on an enormous impoverished population, Tange's attitude is very understandable. His audacious Tokyo Bay plan could only have been conceived in a country confronted with such terrific plurality. The Smithsons also attribute major importance to the structures that must be invented to identify a city as a city, but they very wisely use the term 'infrastructure'! It must be remembered that their Berlin and London circulation schemes came after many years of thinking about association in the sphere of the intimate 'minor structures' that concern the spaces, houses, and articles we use in our 'daily activities.' The danger that the Smithsons will put the cart before the plodding horse is therefore so small that there is still hope for Team 10! Their concept of motive, means and end, it seems to me, is sound, simple and safe, – 'open' if I may use that word as well, just once!

To return to the problem of mobility and how it affects the configurative discipline for which this essay makes a plea. A city's effective transmutability depends on whether the various aspects of urban mobility have been structurally recognised. I mean by the various aspects of mobility everything which appertains to urban movement, growth, and change. This includes so many things that they cannot be listed (as long as they are appreciated!). Yet it is important here to point to a few primary aspects:

- the sensorial and emotional impact of urban environment on the citizen as he moves through it in general – the nature of this impact in the light of the different ways and speeds the citizen moves from one place to another and what he experiences en route;
- mutations of use, aspect and functional potential due to the natural cycles, small and large – the seasons (including weather), night and day, age-phases of the human being;

- the relation between the nature and the tempo of the different phases of human life and the overall nature and tempo of urban life – and the way the latter changes;
- change of dwelling, neighbourhood or city with regard to the individual or a particular group of citizens (the right and the desire for such change is increasing, whereas the possibilities are decreasing!);
- furthermore all mutations in size, quantity, place, kind, form and function of all urban components – the incongruity as to speed, time, extent and place of one mutation in relation to others.

(See also Dubrovnik report on Mobility, in *The Story of Another Idea*, p. 258–260.)

I am prone to suggest that our cities will not be able to exist in time and space unless all these aspects are supported by the configurative discipline which is being evolved to re-establish and perpetuate their identity for the sake of the purpose cities stand for... because it is so blatantly obvious.

And yet, when Willem van Bodegraven read an essay<sup>12</sup> he had written on urbanism and the time factor to the Dutch CIAM group in 1952, the reaction of the older generation was such that it is perhaps best forgotten. *'We are faced with the necessity of creating a structure or forms which are able to develop in time without losing their structure or form. These structures must, following their inception and during their further growth, continue to form a whole and maintain the coherence among their parts. The failure to do so will lead to self-destruction.'*

This means that the identity of the whole should be latent in the components whilst the identity of the components should remain present in the whole. It does not imply, however, that these identities need or should remain constant in the face of mutations. On the contrary, it is exactly this potential to change face without losing it which cities must acquire in order to fulfil their purpose in space and time: the provision of places where vast numbers of people can live, benefiting liberally from all the varied forms of human association and activity large cities can best furnish.

A city should embrace a hierarchy of superimposed configurative systems multilaterally conceived (a quantitative not a qualitative hierarchy). The finer-grained systems – those which embrace the multiplied dwelling and its extension – should reflect the qualities of ascending repetitive configurative stages as has already been put forward. All systems should be familiarized one with the other in such a way that their combined impact and interaction can be appreciated as a single complex system – polyphonic, multi-rhythmic, kaleidoscopic and yet perpetually and everywhere comprehensible. A single homogeneous configuration composed of many subsystems, each covering the same overall area and equally valid, but each with a different grain, scale of movement, and association potential. These systems are to be so configured that one evolves out of the other – is part of it. The specific meaning of each system must sustain the meaning of the other. Structural qualities must contain textural qualities and vice versa – in terms of consecutive place-experience,

structure and texture must be ambivalent, for only then can wrong emphasis of the structural and amorphousness of the textural be avoided, i.e. the reciprocal meaning of small and large, many and few, part and whole, unity and diversity, simplicity and complexity, be established and right-size guaranteed.

The large structures (infrastructures) must not only be comprehensible in their own right, they must above all – this is the crucial point – assist the overall comprehensibility of the minutely configured intimate fabric which constitutes the immediate counterform of each and every citizen's everyday life. They must not only be able to absorb reasonable mutations within themselves but also permit them within the intimate smaller fabric they serve. Reasonable mutations should be possible without loss of the identity of that which changes; of that which is immediately effected by it, or of the whole; without one reasonable change hindering or invalidating another reasonable change.

### **Flexibility and false neutrality**

Take the flexophiles, for example. They have turned flexibility into yet another absolute, a new abstract whim. The tendency to desire great neutrality for the sake of extreme transmutability is as dangerous as the prevailing urban rigidity from which this tendency springs as a reaction. Significant archetypal structures should have enough scope for multi-meaning without having to be continually altered. Beware of the glove that fits all hands and therefore becomes no hand. Beware of false neutrality.

### **Identifying devices**

In our first Forum number we referred to the need for new 'identifying devices' brought forward by Team 10 at Dubrovnik in 1956. Without these a house will not become a house, a street not a street, a village not a village, and a city not a city. They should be structurally bolder and far more meaningful than those which satisfy architects and urbanists today. They must, above all, be of a higher order of invention, so that the congeniality and human immediacy of the small, intimate configuration can become of a higher order through them.

Make a bunch of places of each house and each city, for a city is a huge house and a house a tiny city. Both must serve the same persons in different ways and different persons in the same way.

At a city level many closely-related identifying devices will be necessary to establish a rich scale of comprehensibility. Identifying devices can be artefacts – new or historical – or given by nature and more or less intensely exploited. In the past it was often a church, a palace, a great wall, a harbour, a canal, an important street or square – often, too, a river, valley, hill or seafront. Many of these are still valid beyond their visual impact.

We know this well enough, but I am not so sure if we are sufficiently aware of the fact that it is those identifying devices – call them images – which not only articu-

late visually but also frame civic association between people, i.e. which still possess direct physical meaning and still bear witness to this day by day, which remain in our memory most persistently. They articulate places for simple occasions in which we are able to participate directly. I need not name them since everybody has found his own – and more than can ever be listed. They make continents your own. Yet although the human validity of such places is recognized again and again, as soon as they are reencountered, the wonderful effect they have is sorrowfully forgotten the moment architects and urbanists grab a pencil. But we cannot continue to exploit old identifying images – those we have inherited – passively without impunity. They cannot possibly survive continual molestation nor can their identity be maintained unconditionally.

The time has come to invent new significant identifying devices that perpetuate in a new way the essential human experiences the old ones provided for so well. At the same time those new ones must provide for equally essential experiences the older ones no longer provide' for or never did.

Voilà the meaning of the examples that follow. In each case an evocative image was chosen from the past to put its essence across. The previous number showed how people, supported by the colossal remains of a Roman palace, built and modified continually from age to age an entire city within them, against them, on them and between them. The present number shows the wonderful 'houses' – each like a small city – which Pueblo Indians of the South West built for themselves. They were built by free men of their own volition and for their own benefit. They memorize the lives of the people – not of kings – for they had no kings. They are of the people, by the people and for the people.

### **Split and the pueblos**

The Split and the Mesa Verde images demonstrate magnificently to what extent the right exploitation of large given structural elements can help to identify a fairly small habitat. In the case of the former it was the enormous ruin left by the Romans; in the case of the latter the enormous cavities in the cliffs. The Chaco Pueblos of New Mexico demonstrate, in contrast to those already mentioned, to what extent a large structural form, conceived and built stone by stone by the people themselves, has resulted in large structures as emphatically comprehensible as the topographical setting to which they respond. I refer to the majestic all-enclosing walls, the terraced 4 to 5 storey houses they support and the central ceremonial plaza they surround. The structural, spatial and constructive potential one single element can offer a very small cluster, should, I believe, help to shed light on the necessity to invent other new structural elements for our rigid and amorphous cities.

Both Split, Mesa Verde and the Pueblos of the Chaco Canyon and the Rio Grande area, furthermore, clearly demonstrate what I mean by unity through diversity and diversity through unity; the ambivalence of large-small and many-few (the way the



one determines the other); the individual and the collective as a twin phenomenon; and the mutation potential within a fixed indestructible element.

It is also clear, with reference to the structural mobility, that in each case the people, relying on the simple means usually at their disposal for simple home-building, could not only build both more compactly and higher because of the great constructive support the ruins, the cavities and the built walls offered, but were also able to effect continual modifications and additions according to need without impairing the clarity and the adequacy of the whole. A truly wall- and rock-fast support and protection against the wild elements, endless space and menacing enemies.

### An incriminating misinterpretation

Having allowed these images to speak to the imagination, I suggest that the reader should turn once more to the final page of our first *Forum* number, *The Story of Another Idea*. Having furthermore discovered, on this final page, two pictures of Taos Pueblo, he will now perhaps no longer stumble over the words '*vers une casbah organisée*' printed there in large letters. I tried to make it clear (in *Forum* 1960-61, no. 4, p. 154), that this word-image calls for a reevaluation of the meaning of the word organized and the word Casbah in terms of their junction; that is why Van Eesteren is wrong when he suggests that the one excludes the other, rendering the image useless. The image shows the ultimate limit towards which the configurative discipline, set forth in this essay, can lead as to density and meshing of functions – *can* but *need not* lead. The secondary form associations the word casbah calls up are quite arbitrary and have nothing to do with the main issue.

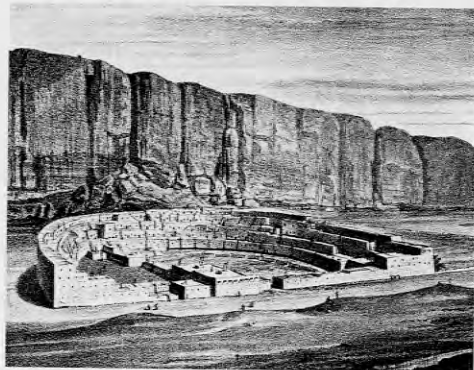
It is however incriminating enough that such sentimental associations were able to blur the essential meaning of the word-image. Incriminating with regard to the intellectual feebleness of these readers! The word-image as such has nothing to do with what they and others thought fit to label 'casbahism'.



Diocletian's Palace in Split



Cliff Palace, Mesa Verde Photo Vincent Ligtelijn



Pueblo Bonito in Chaco Canyon  
Reconstruction drawing by H.H. Nichols