

**REFLECTIONS ON SCALE AND SUBSIDIARITY IN URBAN DEVELOPMENT AND
POVERTY ALLEVIATION: A PERSONAL VIEW OF DEVELOPMENT BY PEOPLE**

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John F. C. Turner

SUMMARY

Along with many others, I argue that that the improvement of material conditions of the poor everywhere, and of the quality of life for all, depend on respect for the principle of subsidiarity, and the consequent principles of diversity and resource economy.

As I report in this paper, my own thought began to take shape when confronted with the huge scale of informal urban settlement in the newly urbanizing and industrializing world of the mid 20th Century. Soon after arriving in Peru from my own country, England, I was amazed and inspired by how much low-income people can achieve with so little. Like my Peruvian friends and hosts, I was appalled by the ignorant blindness of the governing élites at that time – the 1950s. All too briefly, this paper acknowledges the pioneering work of my Peruvian colleagues. By the early 1960s, they were pioneering ways in which agencies of governments with very low per capita budgets can support the self-improvement home and neighborhood conditions on a significantly large scale: through well-managed projects for sites with initially minimal services, large-scale programs of settlement up-grading, and the legalization of squatter tenure.

My initial reflections were shared with International Bank for Reconstruction and Development's Special Project Department in 1971 and anticipated the policy broadly followed by the World Bank (as the IBRD is now known) since 1972. Following the lead of the United Nations department of Housing, Building and Planning (UN Habitat's predecessor) direct housing provision was not supported. Complementing people's own self-managed home-building the Bank started with sites and services projects, soon moving to infrastructure provision, and supporting the reduction of legal and bureaucratic blocks through institutional reform – a widening process of restructuring that still has some way to go. More recently I have come to see home and neighborhood improvements as a vehicle for community building and, especially in the supposedly 'developed world', for community regeneration.

While focusing mainly on my own provincial English home town for the past decade, I have come to see the universal consequences of misconceived powers as the common denominator of the escalating and polarizing threats of deprivation and over-consumption: the first meaning of power is the ability to do, and the second is power over people and, therefore, of what they can do. The poor in the poor countries of the world have few or no expectations of what can or will be provided by the state. They know their own capacities and act on them when they can. But where local economies and self-managing communities have been absorbed and turned into consumers by corporate state and market systems there is no obvious need for community regeneration. Even so, there is a growing demand for knowledge of tools and sharing experience in all contexts. Tools for Community Regeneration (TCR), introduced in the last part of this paper, is a tool for the dissemination of those essential tools.¹

¹ <http://www.toolsforcommunityregeneration.org/> Readers wishing to know more about TCR should access this website which will provide the current e-mail address.

1.0 POWER TO DO AND POWER OVER

- 1.1 In 1957, shortly after arriving in Peru from the Port of London, I saw so-called ‘informal urban settlements’ for the first time. (Figs 1 to 4) My vision was deeply colored by adolescent experience of a threatened nation with a common purpose and, post World War II, committed to social and physical reconstruction. I had left England bored by the preoccupation with technology at the expense of community development, not to mention disillusionment with the post war political world. Inspired by Patrick Geddes’ pioneering example of working with low-income people in Scotland and India,² and disappointed to find no opportunities of following his example anywhere in the highly institutionalized United Kingdom, I seized the opportunity to work with Peruvian friends, then promoting Acción Popular, the political party expected to win a forthcoming election. They lost but I accepted the invitation anyway. On seeing the *barriadas*, the vast “informal settlements”, later re-named *pueblos jóvenes* (literally young towns, a less defamatory label) I was amazed and inspired by seeing how much can be done by people with so little. Reflecting on what I first saw and thought over 40 years ago, the deterioration following excessive metropolitan growth has not diminished my admiration and respect for what people still manage to achieve. In the present light I see a deeper and wider significance than I then felt but could not express or explain. For example, I was literally dumbfounded on two occasions when ranking politicians asked me to take them on a tour of those huge, self-planned, self-built and self-managed settlements. The first invitation was by a national newspaper proprietor and presidential hopeful. He pitied “those poor souls” and was on the point of tears. The second was by a British Minister of State who was shocked and appalled by what he saw and, I believe, a bit scared. That was decades ago. I could not even attempt to explain that they were looking at ordinary people’s building sites not temporary camps of desperately poor outcasts. Few informed people can now fail to share admiration for what even very low-income people in countries with very low per capita budgets can achieve, given the freedom to do so – and to see the implications for genuinely sustainable development.
- 1.2 The next two photographs (Figs 5 & 6) were taken in Arequipa, Peru’s second city. They show *Urbanización Popular* (as *barriadas* are more appropriately self-labeled) in 1958 and 1990, proving what the visiting politicians were unable to see. The photograph taken over the capital city Lima, in 1962 (fig.8)³ shows the San Martín de Porres and Mirones *barriadas*, outlined in red. They had a population of well over 100,000 low and very low-income residents at the time. The area outlined in orange, Valdivieso, was a pioneering sites and services project in which the government housing agency provided plots with a temporary shelter, electric light and water supplied by public faucets and a combined school and community center. It is now a flourishing, mainly lower-middle class neighborhood. The yellow dot in the middle distance to the right is the only public housing scheme in the area covered by the photograph. Like most highly subsidized schemes, it has been occupied by mainly middle-income households ever since it was first built in the late 1940s.
- 1.3 I suggest that the issue underlying our concern with tools is the relationship between the two meanings of power: the power to do, and power over what people do when free to do what they can. When checking the Oxford English Dictionary’s definition of power I was surprised to see the double meaning of power: the “Ability to do or effect something or anything or to act upon a person or a thing.” In either case tools are extensions of power in the hands that hold them. And, as

² Geddes was a leading pioneer of urban ecology based on his training as a biologist under Thomas Huxley. His book, *Cities in Evolution*, London 1915, inspired Lewis Mumford’s and many others’ works and lives.

³ Albertyo Rojas for the Instituto Nacional de la Vivienda

Ivan Illich so clearly explains, that power is far from neutral, even when referring only to tools in the conventional sense.⁴

- 1.4** For simplicity, I refer to three levels of action involving one or both kinds of power the local powers *to do*, so dramatically evident in the scale of home and neighborhood building by people; and the central powers *over what can or may be done* exercised by corporate industrial and government bodies. Below I refer to mediating roles and regional or local powers of intermediary organizations whether municipal, medium-sized businesses or non-governmental civic bodies and, last but by no means least, the power of community-based networks and federations. At the risk of over-simplifying I refer to actions of the kinds on which I focus as local community-based development projects, development programs, generally consist of several projects; and development policies, generally consist of several programs.

2.0 FROM HOUSING TO INSTITUTION BUILDING

- 2.1** In order to alleviate poverty, government intervenes at each of the three levels in three characteristic ways 1) by providing the poor with subsidized dwellings, directly or through quangos (quasi non-governmental organizations); 2) by providing infrastructures (Fig. 7); and 3) by modifying institutional structures in order to stimulate commercial investment in low-cost housing, infrastructures or in community-based improvements. The diagram showing the levels of public intervention and private returns (Fig. 9) demonstrates the now well-known fact: that there is an inverse ratio between the effectiveness of the three public levels of intervention and their respective per capita costs. It exaggerates the returns on investment in conventionally subsidized housing projects, as they are usually negative.
- 2.2** That interpretation of cost effectiveness by level of public intervention has its origins in my first of very few personal intrusions into the World Bank's urban policy-making. (Fig 10) Diagrams 9 and 10 are from a note requested by Robert Sadov, the then director of the Bank's first department for urban development. We had given mutually supportive papers at a conference in Israel in 1971 where Sadov announced the Bank's new initiative.⁵ My note suggested that the Bank's initial sites and services projects were a first and important step away from the least effective level of intervention. Also that that initiative should lead on to a focus on infrastructure installation and that, in turn, on institutional restructuring. The photograph of the water tower under construction (Fig.7) also shows the Valdivieso sites and basic services project in the background (outlined in orange in Fig.8). Both projects were set up by my Peruvian friends in 1961. They also initiated a highly effective program for securing plot tenure. My recommendations to IBRD were little more than passing information on what others had already achieved.
- 2.3** If that rather crude generalization of the policy route followed is essentially correct, then the question now is what policy and institutional changes remain to be made that can maintain a momentum toward the achievement of a sustainable development in the proper sense that must include the alleviation of poverty? In other words, what are the principal means and the immediate ends for moving toward a socially just and ecologically stable civilization?

⁴ Ivan Illich, *Tools for Conviviality*, Harper and Row, New York and London, 1973 SBN 06-012138-6

⁵ The Rehovot Conference on Urbanization and Development in Developing Countries, Israel, 16-24 august, 1971. My own paper *Housing Issues and the Standards Problem* was presented at the conference.

3.0 NEW AND EMERGING DIMENSIONS OF DEVELOPMENT

- 3.1 Before the now widespread recognition of a third, community or civic sector, political thinking was confused, even more than it is now, by a highly misleading generalization of society as a public-private dichotomy. A much more realistic view of the much wider, actual political arena is seen when the second, 'top-down' – 'bottom-up' dimension is recognized. One can take different political positions on different areas. I incline to a 'conservative anarchist' (i.e. autonomist) or rightist bottom-up position on local politics and to a top-down, leftist view of macro-economic issues. From the views revealed to me by an increasing number of those whose interpretations I follow, the apparently contradiction between simultaneously held left and right hand views is resolved when the nature of the activity from which the political issues arise are also recognized (Fig.11): the spectrum of activities between those that are originally local and vernacular and those that are necessarily supra-local and corporate. By 'vernacular' I mean not just local or regional language but also those activities that are traditionally produced or provided personally or locally for personal and local use, not for commercial or political exploitation, for instance: having children, homebuilding, most food production and all food processing.⁶ Corporate actions, on the other hand, are those that are beyond the reach of semi-autonomous local communities of the past and beyond the capacity of democratic bodies today, even genuinely local authorities whose loyalty to their community overrides the policies of their national political parties.
- 3.2 An idealized model of the three social sectors identifies their overlaps: local government or governance, local commerce or production and trading, and public enterprise.⁷ (Fig 12) Without genuine three-way partnership a community-building, sustainable world cannot be achieved. In the real world, past and present, interpretations vary along with the relative weights and relationships of these primary and the many secondary sectors that may be recognized. It is indisputable, however, that there has been an ever-encroaching absorption of traditionally personal and local responsibilities by the corporate powers. (Fig 13) The vulnerable brittleness of corporate urban-industrial society is all too evident in recent and current events.

4.0 SUBSIDIARITY

- 4.1 Subsidiarity is the principle that, if understood and followed, guarantees the proper uses of power:

"It is an injustice and at the same time a grave evil and disturbance of right order to assign to a greater and higher association what lesser and subordinate organizations can do. For every social activity ought of its very nature to furnish help to the members of the body social and never destroy and absorb them." Encyclical *Quadragesimo*, 1931.

The principle of subsidiarity has been traced back to Thomas Aquinas but it was first articulated along the above lines in the 1870s, as an attack on state socialism – and now on corporate financial capitalism in equal if not greater measure.⁸ The word subsidiarity is now heard with increasing

⁶ The contrast between industrialized and traditional food production and the consequences of the former are described and explained in Eric Schlosser, *Fast Food nation, what the all-American meal is doing to the world*; Penguin Books, 2001.

⁷ DSE (Deutsche Stiftung für internationale Entwicklung) *Report of the International Round Table Sustainable city Development: from Urban Crisis to Healthy Cities*, Berlin, 1994.

⁸ Joshua P. Hochschild, *The Principle of Subsidiarity and the Agrarian Ideal*, Notre Dame University, <http://www.nd.edu.-ndphilo/papers/Subidiarity.html>

frequency but almost always with regard to the rights of states. In the proper meaning of subsidiarity there is an equal, if not greater emphasis on responsibilities, the corollary of rights. The original teaching gives equal emphasis to responsibilities at all levels from within the family to within society and toward life as a whole. It does not seem to occur to most of those associated with the establishment or the mass media that subsidiarity is equally relevant to relationships between regions, cities, districts, neighborhoods and families. Even in my own adult lifetime I have witnessed a huge decline of local community: the absorption by corporate commercial chains of what remained of local trading and production, especially in provincial and rural England since the 1950s. At that time I lived for a few years in Yalding, a Kentish village only 30 miles from London. Our basic needs were supplied by local shops; there was plenty of quite well paid work on the farms, served by the blacksmith and which still supplied hops to nearby breweries. My friend the blacksmith gave up decades ago, there is only one struggling local 'convenience' store left, the farm opposite the house I lived in no longer grows hops and the brewery has been absorbed by an international lager producer. A recent report by a distinguished economist showed that the local economy of Hastings, my present home town, has an imbalance of payments equivalent to £4000 sterling per capita per annum – and very little trading with local producers.⁹

- 4.2** My own and many friends' hopes for the future are kept alive by two facts especially relevant to the discussion here: first and foremost, the fact that the community base survives in most low-income countries. Their local communities still have an economic base, eroded and poor as they may be. We talk a great deal about community building and regeneration. The poor of the poor countries have at least one great advantage over the rich: they provide a community base upon which to rebuild a sustainable civilization. That there is an already great and growing demand for community regeneration in rich countries has been recently confirmed. A study of values and beliefs in the USA showed that the top priority for all three cultural categories identified is for rebuilding of neighborhood communities.¹⁰ This is accompanied by a smaller but even more rapidly growing realization that the economic and socially constructive uses of our real resources, constantly renewing and present lifetime, space and land, natural materials and energy, all depend on responsible use, especially in and around our homes and neighborhoods where so much of our natural and manufactured resources are spent and invested.¹¹
- 4.3** Those who cling to the myth of total power, the monstrous notion that 'power over' subsumes 'power to do', are deaf and blind to such facts. The danger that those people unwittingly pose for us all accelerates the growth of unsustainable institutional and industrial structures. They are also unaware, or prefer to ignore the above-mentioned and clearly escalating vulnerability of the systems on which they pin their hopes. I hope that our discussions will help to refocus on sustainable systems that are still with us. The importance of building up existing local economies and their communities, and rebuilding those that have been lost, can hardly be exaggerated – if the arguments I am putting forward are largely true.

⁹ Owen Nankivell, *A Hastings for the Twenty-first Century*, a strategic plan, for Hastings Trust, 1995, An up-dated version is being prepared for discussion in June, 2002.

¹⁰ Paul H Ray and Sherry Anderson, *The Cultural Creatives, How 50 Million People Are Changing the World*, Harmony Books, 2002, summarized in *Yes! Magazine*, a journal of positive futures, Winter 2001, Frances Korten, executive Editor, www.yesmagazine.org

¹¹ Vandana Shiva, *Resources in Power*, Wolfgang Sachs, editor, *The Development Dictionary, A guide to knowledge as power*, Zed Books, London and New Jersey, 1992. 1 8569 044 0

5.0 THE NECESSITY OF LOCAL CONTROL OVER LOCAL LIFE

5.1 Home and neighborhood building, improvement and management are the most accessible material vehicles for fulfilling the further ends of living. Together with neighborhood improvement and management, they are among those universally necessary immediate ends that, when controlled by their users, can reinforce or even generate local community in all real senses: by ‘real senses’ I mean those which fulfill the life of persons, that promote co-operation between mutually tolerant communities and the ecological community of life.¹² This necessity of responsible local control over home and neighborhood building was evident from my co-authors’ and my own experiences of working in different high-income and low-income countries. In *Freedom to Build, dweller control of the housing process*, we wrote:

"When dwellers control the major decisions and are free to make their own contributions in the design, construction or management of their housing, both this process and the environment produced stimulate individual and social well-being. When people have no control over nor responsibility for key decisions in the housing process, on the other hand, dwelling environments may instead become a barrier to personal fulfillment and a burden on the economy."¹³

The only change I would now make to our statement is that dwelling environments *will* instead become a barrier to personal fulfillment and a burden on the economy – if, as is increasingly evident, real economy depends on the responsible use of resources (of all kinds) by people in their own local and work space and life time. As I suggest in this paper, I believe we can now answer the question begged: what are the “major decisions” that people must control if housing (and so many other goods and services) are to be vehicles for rather than burdens on people and their economies? As I am about to argue, they are the decisions to be made on the choices of tools for carrying out the tasks common to all projects that they undertake.

6.0 THE MEANINGS OF A TOOL

6.1 In the broad sense used in the Forum for which this paper was prepared, all ‘tools’ translate principles into practices and vice versa, whether observed and understood or not. A hammer drives a nail explained by Newtonian principles. In this paper I argue that tools for community regeneration must accord with subsidiarity, a principle outside Newton’s reductionist terms of reference - and that subsidiarity is evidently a common factor in effective and sustained community building, along with real resource economy. Tools are indeed the lynch pin of sustainable development. They are highly political and cannot be seen in isolation and be used responsibly.¹⁴ As Mark Twain observed, for the ignorant with a hammer, everything is a nail.

6.2 Most people understand ‘tool’ in the narrow, conventional sense of a technical or mechanical instrument.¹⁵ Many are confused when we refer to other objects, processes, physical or mental

¹² Herman E. Daly and John B. Cobb Jr. *For the Common Good, redirecting the economy towards community, the environment and a sustainable future*, Rider, London 1992. 0 716 4663 9 pp. 169-170.

¹³ John F C Turner and Robert Fichter, editors; *Freedom to Build, Dweller Control of the Housing Process*, Macmillan, New York, 1972, page 241.

¹⁴ Ivan Illich, 1973 op. cit.

¹⁵ The Oxford English Dictionary and all the others I have checked so far, define tools as technical instruments only.

procedures, or organizations and institutions as tools. This was impressed upon me when Ivan Illich asked me if I could see anything from where we were sitting, that could *not* be used as a tool. I could not. The knives and forks on the table, the table itself, the room in which we sat, and the building itself were all tools or instruments for actual or potential purposes. Even persons and whole communities are used as tools, all too often.

- 6.3** Since most readers are now committed to the broader meaning of a tool we must take care not to confuse each other as well as those with the conventional understanding. The meaning of ‘tool’ also changes according the level and context of action. For designers and builders of a house, ‘tools’ are those conventionally defined and understood for building construction. For a developer, completed houses are tools for the development. And for a policy-maker the development as a whole is a tool for the realization of the policy’s objectives.
- 6.4** Care must be taken with the broadened use of ‘tool’ or it will become yet another “amoeba-word” in the dictionary of jargon that is so useful to those more interested in an appearance of authority than in understanding and the communication of ideas and knowledge.¹⁶

7.0 IDENTIFYING THE “MAJOR DECISIONS”

- 7.1** The following briefly summarizes a case history illustrating many of the points discussed above. A more detailed description is provided in the Annex. It is about a community-based housing project on the outskirts of a Latin American city that I visited in 1986. The project was planned and initiated by a team of young professionals seeking an opportunity to earn a living by releasing pent-up housing demands. The team was aware that there were very large numbers of low-income people with a modest savings margin but who could not afford market prices and who were unqualified for the very limited supply of publicly subsidized dwellings. The team showed how that demand could be released by collective land purchase and self-built or self-managed dwelling construction by 200 families or more. A collective purchase of land was organized by the team who then prepared authorized plans for the development. Implementation was delayed by regulations that demanded the installation of utilities before house building could commence – despite the fact that there was no prospect of connections with the public mains for years to come. Financial assistance depended, however, on compliance. So the traditional process of progressive development was partly blocked. The rejection of a model house design by the client body provoked a further crisis but that led to a contractual partnership of the professional team and a formally consolidated association of the residents – the necessary partnership of the professional team and the participants. By the time of my visit the unusable utilities had been installed and self-building was well under way. I asked the team whether they had investigated possibilities for a wind-powered system using the relatively high water table, and of using adjacent low-lying land for an oxidation pond. They were unaware of such possibilities – and were anxious to know where they could get technical information.
- 7.2** While discussing the team’s problem of access to knowledge of tools, and the importance of sharing their own experience, I was reminded of the meeting my wife and partner Beth and I had with the organizer and manager of a Tools Library set up at the Free University in Amsterdam some years before. As a test of that library’s usefulness for our own work, we asked for examples of references. Neither of us remember the subjects of our questions but we do remember the long

¹⁶ Ivan Illich and Barry Sanders, *ABC The Alphabetization of the Popular Mind*, Marion Boyars, London 1988. 0 7145 2891 9

computerized printout made in answer to our request. It included several documents in Russian available, if at all, only by post.

- 7.3** In the early 1980s Beth and I were working on what then seemed to be a practical database of tools. In order to discuss ways and means of exchanging and disseminating ideas and information, piggy-backed on a UNESCO-sponsored conference on Appropriate Technology for low-income housing in 1983, we organized a meeting of friends working with communities in Africa, Asia and Latin America. We were all fully aware of the sheer quantity of data available to us and similarly privileged field workers and researchers. We were also aware of the difficulties of ensuring the reliability and manageability of up-to-date information.
- 7.4** This challenge was dramatically illustrated over a lunchtime conversation with Hugo Houben at the UNESCO conference. Houben is a leading authority on building with earth. When he mentioned that his organization Craterre had a library of materials on building with Earth we wanted to know about it. Hugo told us that the library contained over 3000 documents of various kinds. How many, we asked, would he be prepared to recommend to users new to the field? About 300 he replied, about 10 per cent. Beth or I then asked a hypothetical question: supposing it were possible to select from the 300 all the reliable information needed, what proportion would remain? About 10 per cent, Hugo replied. So, in theory at least, Hugo confirmed that just one per cent of his library contains what is really needed. If that was a fair representation of just one subject in the field of local building, then the challenge is to find that one per cent or, at the very least, the relevant and reliable 10 per cent. On returning to our office in central London, I saw and photographed a graffiti stating that 99 per cent is shit – a bit unfair but 90 per cent might be a reasonable estimate for many aspects of modern life!
- 7.5** My visit to the above-mentioned Latin American project was during the search for examples of good, community-based housing practices. These were for Habitat International Coalition's contribution to the United Nation's International Year of Shelter for the Homeless, 1987. The city project I describe was not included as it was decided to use only those projects that had a history of five years or more. The HIC project produced a set of magnificent A1 size posters by the Habitat Forum Berlin team - the group that organized the principal conference of the year at the Reichstag – with armed East Germans guarding the Wall staring into our workshop. As the posters, designed for school and institutional use, were unwieldy for personal use, we published *Building Community, a Third World Case Book* in 1988.¹⁷
- 7.6** All the cases were based on materials and information supplied by those responsible as well as by independent observers. We took care to highlight the key lessons learned but we had not yet articulated the all-important distinctions of the independently variable generic tasks and tools for carrying them out, as in the Tools for Community Regeneration project, referred to below. By the late 1980s Beth and I were aware that with such a large and growing body of documentary source materials, it was clear that for even one limited sector in the field of the built environment, the quantity of information would be substantial – and considerably larger if references to organizations and specialists were added as well as case examples. So a database for all tools for all sectors would be unmanageably large – even if limited by their quality and usefulness for local community-based project.

¹⁷ Bertha Turner, editor, *Building Community, A Third World Case Book* from Habitat International Coalition, with a Foreword edited from the keynote address given at the Habitat Forum Berlin conference, Learning from One Another in Berlin (West), June 1987 by the late Dom Helder Câmara, Archbishop Emeritus of Olinda and Recife, Brazil. Introduction, Issues and Conclusion by John F C Turner, 1987. Building Community Books and Habitat Forum Berlin, 1988.

8.0 TASKS ARE BARRIERS, TOOLS ARE GATEWAYS¹⁸

8.1 Whatever the field of action and the levels at which local projects, intermediate programs or central policies are carried out, there are a number of obligatory tasks whatever the ends pursued. (Fig 14) As far as I know, there is no general agreement yet on the nature of the common or generic tasks for all premeditated and organized projects, programs or policies. Based on ideas developed and early attempts to practice them, the current Tools for Community Regeneration database and website relate all selected tools and sources of information to the seven generic tasks.¹⁹ Experience will modify the definitions and, perhaps, the number of generic tasks. Judging by the high degree of correspondence with other interpretations of project cycles that colleagues at the Max Lock Centre at the University of Westminster, London, and I have found, the number of generic tasks recognized and needed is likely to remain small – a dozen at the most, I believe. For the time being the following are in use with reference so far only to local projects, not yet to supra-local programs or policies.²⁰

- **Visioning:** a clear idea and proposal in whatever form required in the circumstances.
- **Organizing:** setting up a decision-making and management structure.
- **Locating** (and Securing Tenure) of the space required for the duration of the project and its products.
- **Funding:** ensuring adequate monetary or non-monetary exchange for the acquisition of human and material resources required.
- **Planning:** detailed design and scheduling of the project.
- **Implementing:** carrying out the operations for production.
- **Maintaining:** managing and sustaining the product or service.

All these tasks have to be carried out if the immediate ends of a project are to be achieved. And, if those immediate ends are to meet the further ends of the users, then the tools must accord with the principles that guide their use. If the further end is to achieve a sustainable civilization, the tools chosen and the ways they are used must comply with the principle of subsidiarity.

8.2 Almost all tasks need tools with which to carry them out. Tools that can carry out a generic task are shown as gateways in the barriers. (Fig. 15) As there are relatively few generic tasks the tools for carrying them out in a given context will also be limited in number, especially as any one set of tools will be limited to a particular institutional context, usually a nation state. Any set of tools for a generic task must be compatible, of course, with the national or regional institutions and economy. Securing tenure, for example, depends on the law of the land as do all actions to some extent. It will be noted that ‘technics’, the task of obtaining technical tools, is not included in the list of generic tasks. That is not because they are inessential, still less because they are politically and culturally neutral as still believed by some. The omission is simply because any required set of technical tools is specific to the field of action. The case described in the Annex ends with a sample schedule of tools used. The current selection of tools is displayed on the TCR website: www.toolsforcommunityregeneration.org .

¹⁸ See website address footnoted on page 1. TCR is described at an early stage of development by Renate Ruether-Greaves and John F C Turner in chapter 8 of Building Civil Society, current initiatives in voluntary action, editors Barry Knight, Matthew Semerdon and Cathy Pharoah, Charities Aid Foundation, West Malling, Kent ME19 4TA UK, 1998. ISBN 1-85934-085-7

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²⁰ It will be noted that all 7 Generic Tasks listed have discrete outputs: Visioning a sketch scheme and/or a feasibility study; Organizing a management set up, and so on. All productive tasks have to be managed and all, including the managerial tasks involved, should be vehicles for learning and subjects of evaluation.

- 8.3** When alternative tools for the tasks are known to the users, when their compatibilities are recognized, and when the users are free to make those key decisions, then there are many ways of achieving an immediate end. Almost certainly very many more ways and end forms can be found than can be provided by agencies limited by bureaucratic organization. The notional diagrams (Fig.16 and 17) illustrate the vital difference between closed hierarchies and open networks: assuming 16 decision-making points in each, the hierarchy provides 8 alternative routes while the network offers 624.²¹ By distinguishing tools from the tasks for which they are intended in any particular case the possible ways of carrying out any combination of tasks greatly increases the chances of matching needs with limited resources – as long as the tasks are recognized and available alternative tools are known.
- 8.4** Tools for Community Regeneration provides a framework for people building their own activity or place specific database, with or without their own website. The current version of TCR includes a database that is specific to local projects in all fields in the UK (with some variations for Scotland which has its own laws governing property tenure). However, most if not all of the tools selected for the UK will have their equivalents in other cultures and contexts. The data will be a useful guide for adaptation.
- 8.5** A decision-making and control structure that respects the principle of subsidiarity by putting the willing and able in charge of what they can do, as well as or better than higher levels of organization, and that also ensures access to knowledge of appropriate tools, will meet the demands of Requisite Variety: the law that states that

"If stability (of a complex system) is to be attained, the variety of the controlling system must be at least as great as the variety of the system to be controlled."²²

Any project or program in which people with different interests, needs and priorities have to cooperate in order to achieve and maintain properties or services, are complex by definition. As my friend Michael Franks points out, there is a corollary to Requisite Variety in that "any organization seeking management control over a complex system inevitably reduces its diversity to below that of the system itself."

9.0 TASKS & TOOLS IN CONTEXT

- 9.1** With the tasks and tools matrix at the core of activity, supported by the community base, the relationships of the powers and their responsibilities can be clearly seen.²³ (Fig 18) The 'powers over' exercised by the central state and corporate market systems highlight their responsibilities for maximizing the 'powers to do' through the influences that they have on the provision of and access to tools. A critical responsibility is the setting of limits to what those with the 'powers to do' may do instead of specifying what they must do in order to minimize specifying routes that they are obliged to follow. I am surprised the widespread ignorance or misinterpretation of the crucial

²¹ John F C Turner and Robert Fichter, 1972, op.cit, .pages 155-6.

²² W.R. Ashby, *Self-regulation and requisite variety*, chapter 11, Introduction to Cybernetics, Wiley, London 1956

²³ Turner, John F.C., *Barriers, Channels and Community Control*, chapter 9 in David Cadman and Geoffrey Payne, editors, *The Living City, Towards a sustainable future*, Routledge, London and new York, 1990. ISBN 0 415 01250-3

difference between proscriptive over prescriptive law and regulation – upon which people’s freedom to find their own ways depend. The two key mediating roles and responsibilities are:

- Those for intermediate organizations, both governmental and non-governmental, between the powers over and the powers to do, and
- those mediating between the latter and the community from which the initiatives spring.

It is also important to note that there are key advisory roles at all levels: to assist legislators and policy-makers with decisions affecting access to tools; to assist local groups and organizations undertaking initiatives at the local level; and to assist communities with advice on possibilities and the promotion of initiatives from the base.

9.2 A global Information network linking databases on key fields of activity is now technically and financially feasible. On the scale required, however, there are at least three major challenges:

- The definition and maintenance of criteria controlling the data selection;
- the selection and maintenance of a manageable quantity of data, and
- the progressive improvement of the data’s quality while maintaining an affordable and manageable limit.

These challenges can be met, I am sure, as long as:

- A practical, translatable, widely accepted and short series of generic tasks is established; those that are common to all projects in all fields of action and for all contexts and places (for example, those in use by TCR);
- if the distinctions between tasks, tools and governing principles are made and consistently maintained and
- the terms describing the parameters, such as the scales and levels of action and the context, are clearly stated

Finally, this hands-on development work must feedback into the continuing clarification of our language, and recognition of the guiding principles and the paradigm change in which we are all involved.

ANNEX A CASE HISTORY

- A1** The project I visited in a Latin American city, in 1986 showed me what can be achieved when professionals and a local group work together. I chose this unique case as it illustrates most of what I see to be key issues raised by the current concept of 'tools'. I visited the project while researching cases of good practice for Habitat International Coalition's contribution to the UN International Year of Shelter for the Homeless, 1987 (IYSH'87). As it was still in development the project did not meet the requirement that selected projects should have a history long enough to prove their worth as demonstrations. The account is based on information given me on site. I have added a few projections. Like so many rapidly growing cities in low, or upper-low income countries, the City had and, no doubt, still has a large sector of people unable to afford the market prices of acceptable dwellings and who are disqualified from publicly subsidized housing.
- A2** A small, inter-disciplinary team of newly qualified professionals had set themselves up to seek community-building ways of earning their living. Aware of the pent-up demand of that sector with some but insufficient savings for the purchase of a building plot as well as construction, the team worked out a highly successful procedure: They calculated that between 200 and 250 households in that low-income sector could pay cash for a sufficiently large, undeveloped site at much lower unit area price than for individual plots. So they searched for and found three sellers willing to offer an acceptable price for adequately sited development land. The team then advertised the opportunity to those able and willing to take part in a privately organized self-build housing scheme. Those interested were invited to hear about the project the following weekend. Many more than the required 200 attended the Saturday meeting. Over 200 committed themselves after the terms were spelled out; those included a cash deposit for the land purchase. The 200 or so able and willing to meet the conditions were invited to view the three undisclosed sites in a convoy of buses the next day. After discussion on their return, sufficient funds were collected and the land was purchased.
- A3** Conflicts arose for two main reasons: the local authority's refusal to waive regulations requiring the installation of water and drainage lines and street paving before construction could begin, in order that limited funding could be provided. No guaranteed dates were given for connections with the still distant mains water supply and drainage systems. And, secondly, the project participants' rejection of the demonstration house, designed and built by the team. The participants' had not been able to read the architect's drawings of an over-ambitious design. These crises had the benefit of consolidating the participants' own organization which changed their relationship with the team: from that of a dependent client to full partnership - from the team's working *for* the participants to working *with* them. A second demonstration house, designed with the use of models and participants' knowledge, was a success.
- A4** By the time of my visit home building had started with one group of a dozen houses based on the second successful model. But, because of the enforced development regulations, the usual 'progressive development' process was blocked. In case the reader is unfamiliar with the process, homebuilders who cannot afford credit or previously developed land usually live in a provisional shack on their plot as soon as it is obtained and in order to secure it. If tenure is sufficiently secured permanent building will progress as fast as savings out of income allow. Barring long periods of unemployment a two-story home with about 1500 square feet (150 square meters) of locally acceptable modern standards will take between 10 and 20 years to complete. By which time, in most cases, the usual complement of public utilities will have been installed. Meanwhile local commerce will have grown and most amenities, such as schools and places for worship and meeting will have been built. On completion the market value of such dwellings is likely to be equal to

about 20 years' gross household income – between four and five times more equity than the typical mortgage borrower can usually achieve.

A5 The project paid a very heavy price for its unavoidable conformity with the law. I have been unable to confirm the rumor that its early and much deserved promise was only very partially fulfilled. That price could have been reduced, if not eliminated, if the team had had adequate knowledge of and access to the right tools. Walking over the already serviced site with team members we discussed what could be done to avoid the seemingly inevitable deterioration of the installations and the probability that they will need major repairs if not replacement by the time mains connections are made. I asked about the water table, which I supposed to be relatively close to the surface, as a huge estuary was nearby. None of the team members knew the depth of the table or anything about the quality of the water. I suggested that if the water was potable, and if the regular land and sea breezes were enough to run a wind-powered pump, their water and drainage installations could be used as soon as a well, pump and water tank were completed. I also suggested that the nearby depression in the land could be used for an oxidation pond. I had to explain what an oxidation pond was. I was asked where such information could be obtained. I was told that no such source was available in the country and that they knew of no other elsewhere. A situation that has changed greatly but not enough as I have just learned during my recent visit to Ecuador.

A6 An example of tools for the generic derived from the City Project.

Visioning (feed-forward: motivating expectations)

- Participants' hopes & expectations
- Team's feasibility study
- Team's presentation
- Demo house design model

Organising

- Team's Partnership
- Participant's Association

Funding

- Participants' savings
- Government grant for infrastructure

Locating / Securing Tenure

- Land purchase
- Registration
- Co-operative tenures

Planning

- Professional Consultancy Participatory design for dwellings

Implementing

- Community self-build for infrastructure preparation
- Contractor for infrastructure installation
- Self-build & Management for dwellings

Maintaining

- Co-operative for installations & public space (proposed)
- Households for dwellings & private space