

Little Boxes, Glocalization, and Networked Individualism

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Abstract. Much thinking about digital cities is in terms of community groups. Yet, the world is composed of social networks and not of groups. This paper traces how communities have changed from densely-knit “Little Boxes” (densely-knit, linking people door-to-door) to “Glocalized” networks (sparsely-knit but with clusters, linking households both locally and globally) to “Networked Individualism” (sparsely-knit, linking individuals with little regard to space). The transformation affects design considerations for computer systems that would support digital cities.

1 From Little Boxes to Social Networks

The developed world is in the midst of a paradigm shift both in the ways in which people and institutions are actually connected. It is a shift from being bound up in homogenous “little boxes” to surfing life through diffuse, variegated social networks. Although the transformation began in the pre-Internet 1960s, the proliferation of the Internet both reflects and facilitates the shift.

The “little boxes” metaphor (from Malvena Reynolds’ 1963 song) connotes people socially and cognitively encapsulated by homogeneous, broadly-embracing groups. Members of traditional little-box societies deal principally with fellow members of the few groups to which they belong: at home, in the neighborhood, at work, or in voluntary organizations. They work in a discrete work group within a single organization; they live in a household in a neighborhood; they are members of one or two kinship groups; and they participate in structured voluntary organizations: churches, bowling leagues, the ACM, and the like. These groups often have boundaries for inclusion and structured, hierarchical, organization: supervisors and employees, parents and children, pastors and churchgoers, organizational executives and members. In such a society, each interaction is in its place: one group at a time.

Much social organization no longer fits the little-boxes model. Work, community and domesticity have moved from hierarchically arranged, densely knit, bounded groups (“little boxes”) to social networks. (Formally, a group is a special type of social network, but it is cognitively easier to compare the “group” metaphor with the “network” metaphor.) In networked societies, boundaries are more permeable, interactions are with diverse others, linkages switch between multiple networks, and hierarchies are both flatter and more complexly structured.

The change from groups to networks can be seen in many milieus and at many levels. Trading and political blocs have lost their monolithic character in the world system. Organizations form complex networks of alliance and exchange, often in transient virtual or networked organizations. Workers (especially professionals, technical workers, and managers) report to multiple peers and superiors. Work relations spill over their nominal work group’s boundaries, and may even connect them to outside organizations. In virtual and networked organizations, management by network has people reporting to shifting sets of supervisors, peers, and even nominal subordinates.

Rather than fitting into the same group as those around them, each person has her own personal network. Household members keep separate schedules, with family

get-togethers – even common meals – on the decline. Instead of belonging to two stable kinship groups, people often have complex household relations, with stepchildren, ex-marital partners (and their progeny), and multiple sets of in-laws. Communities – in the flesh as well as in the ether – are far-flung, loosely-bounded, sparsely-knit and fragmentary. Most people operate in multiple, partial communities as they deal with shifting, amorphous networks of kin, neighbors, friends, workmates, and organizational ties. Their activities and relationships are informal rather than organizationally structured. If they go bowling, they rarely join formal leagues [7]. Only a minority of network members are directly connected with each other. Most friends and relatives live in different neighborhoods; many live in different metropolitan areas. At work, people often work *with* distant others and not those sitting near them [8].

This is a time for individuals and their networks, and not for groups. The proliferation of computer-supported social networks fosters changes in “*network capital*”: how people contact, interact, and obtain resources from each other. The broadly-embracing collectivity, nurturing and controlling, has become a fragmented, variegated and personalized social network. Autonomy, opportunity, and uncertainty are the rule.

Complex social networks have always existed, but recent technological developments have afforded their emergence as a dominant form of social organization. Just as computer networks link machines, social networks link people. When computer-mediated communication networks link people, institutions and knowledge, they are *computer-supported social networks*. Often computer networks and social networks work conjointly, with computer networks linking people in social networks, and with people bringing their offline situations to bear when they use computer networks to communicate.

The technological development of computer-communications networks and the societal flourish of social networks are now affording the rise of “*networked individualism*” in a positive feedback loop. Just as the flexibility of less-bounded, spatially dispersed, social networks creates demand for collaborative communication and information sharing, the rapid development of computer-communications networks nourishes societal transitions from little boxes to social networks [1]

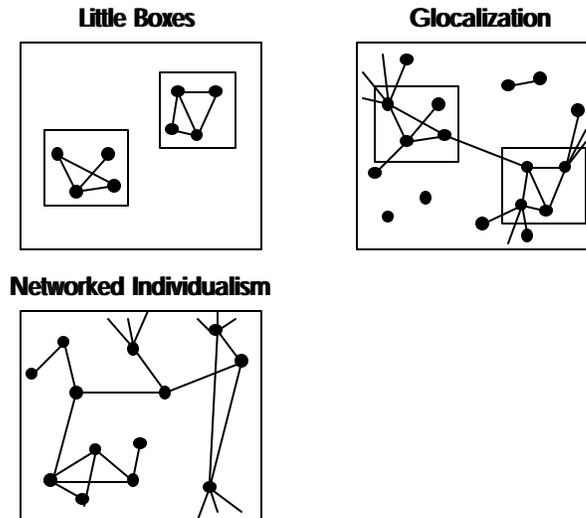
How has this transition come about? What implications does it have for computing, humanity and society? To address these questions, I build this article around a tripartite typology:

- Groups
- Glocalization
- Networked Individualism

This typology, illustrated in Figure 1, reflects our NetLab’s cumulative work. More details are in Table 1 and in the references. I offer it provisionally as a heuristic. In so doing, I invoke three escape clauses.

1. The typology is over-generalized: what sociologists call “ideal types”. In practice, groups have cleavages and links to the outside; networks are lumpy like the universe, with regions of high and low density, coupling and decoupling.
2. The three ideal types are not mutually exclusive in societies or in people. In practice, societies and people’s lives are often mixtures of groups and networks.
3. This is an attempt to highlight interpersonal phenomena relevant to computer scientists. It does not attempt to be an exhaustive list of such phenomena. There are overlapping phenomena and debatable fit into broader organizing categories. I have tried to be useful rather than produce a comprehensive account. This is a start, and hopefully, a helpful start.

Figure 1: Three Models of Community and Work Social Networks



2 Towards GloCalization

2.1 Little Boxes:

The jump from traditional group solidarities to the evolving networked individualism has not been instantaneous. One transition was the twentieth century move from group to glocalized relationships at work and in the community. (“Glocalization” is a neologism meaning the combination of intense local and extensive global interaction.) This transition was driven by revolutionary developments in both transportation and communication. It was a move away from a solidary group in a single locale to contact between people in different places and multiple social networks. Households and worksites became important centers for networking; neighborhoods became less important. This shift has been afforded both by social changes – such as liberalized divorce laws – and technological changes – such as the proliferation of expressways and affordable air transportation [9]

Pre-industrial social relationships were based on itinerant bands, agrarian villages, trading towns, and urban neighborhoods. People walked door-to-door to visit each other in spatially compact or densely-knit milieus. If most settlements or neighborhoods contained less than a thousand people, then almost everybody would know each other. Communities were bounded, so that most relationships happened within their gates rather than across them. Much interaction stayed within neighborhoods, even in big cities and trading towns. When people visited someone, most neighbors knew who was going to see whom and what their interaction was about. Contact was essentially between households, with the awareness, sanction and control of the settlement.

This is the world that much CSCW “groupware” has been developed for, including videoconferencing, collaborative writing, and workflow. Groupware assumes a defined, fully visible population; focused on aspects of a single joint task; with all directly accessible to all. These are viable solutions, but incomplete solutions and possibly minority solutions in their assumption that the small group is all-encompassing and all-important.

2.2 Glocalized Networks

The transition from group to networked connectivity meant a shift from the settlement to the household and workgroup as the primary units of activity. If

“community” is defined socially rather than spatially, then it is clear that contemporary communities rarely are limited to neighborhoods. They are communities of shared interest rather than communities of shared kinship or locality. People usually obtain support, companionship, information and a sense of belonging from those who do not live within the same neighborhood or even within the same metropolitan area. Many people’s work involves contact with shifting sets of people in other units, workplaces, and even other organizations. People maintain these ties through phoning, emailing, writing, driving, railroading, transiting, and flying [9].

Neighborhoods and large work units have become more residual: variably safe and salubrious milieus from which people sally forth from their households and workplaces in their cars, telephone from their kitchens and offices, or email from their dens and desktops. Most North Americans have little interpersonal connection with their neighborhoods; they are only lightly subject to the social control of neighborhood groups. Community interactions have moved inside the private home — where most entertaining, phone-calling and emailing take place — and away from chatting with patrons in public spaces such as bars, street corners and coffee shops. The percentage of North Americans regularly socializing with neighbors has been steadily declining for three decades [7]. Few neighbors are known, and those known are rarely known well.

Glocalized networks operate more independently of their surrounding environment than little-box groups. This is not social disintegration. People and places are connected. Yet there is little social or physical intersection with the intervening spaces between households. It is place-to-place connectivity, and not door-to-door. People often get on an expressway near their home and get off near their friend or colleague’s home with little sense of what is in-between. Airplane travel and email are even more context-less.

Place – in the form of households and work units does remain important – even if neighborhood or village does not. People go from *somewhere* to *somewhere* to meet *someone*, usually inside their homes. Or people telephone *somewhere* to talk to *someone*. The household or work unit is what is visited, telephoned or emailed. Relations within the household or work unit continue to be somewhat communal, supportive and controlling. They are the home bases from which people reach out in-person and ethereally, to engage with their networks. Yet home and office often function in private spaces that do not involve surrounding local areas. Social closeness does not mean physical closeness.

Home and office have become bases for privatized relationships that are more voluntary and selective than those that functioned in the public spaces of the past. Only a minority of ties in the developed world operate in the public contexts of neighborhood, formal organizations, or work. By contrast to traditional meetings in village squares or pubs, friends and relatives get together in private as small sets of singles or couples, but rarely as communal groups. Relationships are more selective. Networks now contain high proportions of people who enjoy one other. They contain low proportions of people who are forced to interact with each other because they are juxtaposed in the same neighborhood, kinship group, organization, or workplace.

Many characteristics of the Internet reinforce glocalized, place-to-place connectivity. Although an Internet account is usually for a person and not for a place, Internet communications are usually sent and received from a fixed place: home or office. People usually have a good idea of the sociophysical places in which the people they know are reading their messages. If they send messages to their mothers, they have a high expectancy that others at home will also read it.

The Internet both provides a ramp onto the global information highway and strengthens local links within neighborhoods and households. For all its global access, the Internet reinforces stay-at-homes. Glocalization occurs, both because the Internet makes it easy to contact many neighbors, and because fixed, wired Internet connections tether users to home and office desks.

At work or at home, many emails are local and refer to local arrangements. For example, 57% of the email messages received by computer-intensive students in my Berkeley graduate course came from within Berkeley, with another 15% coming from within the Bay area. Both friendship and involvement in joint tasks drive the frequency of emailing and face-to-face meetings, at work as well as at home. Rather

than being exclusively online or in-person, many relationships are complex dances of face-to-face encounters, scheduled meetings, two-person telephone calls, emails to one or more persons, and online discussions among those sharing interests. Thus, the glocalized type is a mixed model: containing elements similar to both the little boxes and the networked individualism types (see Appendix: Table 1).

At work or in the community, glocalized connectivity affords fluid systems for using ramified networks to access resources at work and in the community: material, cognitive, and influential. No more are people identified as members of a single group; they can switch among multiple networks. Switching and maneuvering among networks, people can use ties to one network to bring resources to another. Indeed, the very fact of their ties to other networks will be a resource, creating the possibility of linkage, trade and cooperation. Knowing how to network (on and offline) becomes a human capital resource, and having a supportive network becomes a social capital resource [2]. The cost is the loss of a palpably present and visible local group at work and in the community that could provide social identity and a sense of belonging. The gain is the increased diversity of opportunity, greater scope for individual agency, and the freedom from a single group's constrictive control.

3 The Rise of Networked Individualism

3.1 From Place-To-Place to Person-To-Person

When someone calls to a telephone that is hardwired into the telephone network, the phone rings at the *place*, no matter which *person* is being called. Indeed, many place-to-place ties have connected workgroups and households as much as individuals. The Internet is changing this: People have individual Internet accounts accessible from any place.

We are now experiencing another transition, from place-to-place to person-to-person connectivity. Moving around with a mobile phone, pager, or wireless Internet makes people less dependent on place. Because connections are to people and not to places, the technology affords shifting of work and community ties from linking people-in-places to linking people wherever they are. It is I-alone that is reachable wherever I am: at a house, hotel, office, freeway or mall. The person has become the portal [9].

Where high speed place-to-place communication supports the dispersal and fragmentation of organizations and community, high speed person-to-person communication supports the dispersal and role-fragmentation of workgroups and households. The shift to a personalized, wireless world affords *networked individualism*, with each person switching between ties and networks. People remain connected, but as individuals rather than being rooted in the home bases of work unit and household. Individuals switch rapidly between their social networks. Each person separately operates his networks to obtain information, collaboration, orders, support, sociability, and a sense of belonging (see Table 1).

The organization of information-based work, manipulating bits instead of atoms, is shifting to networked individualism. By contrast to traditional organizational structures, employees in *networked organizations* have (a) multiple and shifting work partners, and (b) partial involvements with shifting sets of workgroups. Work relations are dispersed, with ties often extending across cities, provinces, nations, and even continents. Structurally, these ties extend to multiple units within the organization and, at times, to organizations elsewhere. Workers have discretion about whom they deal with, how they interact, and the time and place of their interactions.

Virtual organizations go one step further, cutting across the home organization's structure to link people from multiple organizations in temporary networks to deal with tasks. Participants inherently have multiple loyalties and partial commitments. They have other projects and task groups in which they are involved, and within-organizational careers to nurture.

Networkware affords needed flexibility to interactions in networked and virtual organizations as well as in networked communities [2, 6]. With portable

communication or its flipside — ubiquitous connectivity to computer networks — physical context becomes less important. Supportive work and community convoys travel with people ethereally. They can link what they are doing at the moment to their far-flung networks, as when Bell Canada technicians climb telephone poles while wear their computers or when a lover uses her mobile phone to describe a Rembrandt exhibition to a distant partner. Physical surroundings must be described, rather than assumed because people have uncertain knowledge about the immediate whereabouts and social contexts of their mobile network members. Often, the sociophysical context is ignored, as when people talk loudly on their mobile phones in public. They are not being anti-social: the very fact of their conversation means they are socially connected. Rather, people's awareness and behavior are in private cyberspace even though their bodies are in public space.

3.2 Specialized Roles

Many interpersonal relationships are based on the specialized roles that people play. Such specialized relationships are abundant in work and community situations where people cycle through multiple social networks. At times, people prefer specialized relationships. For example, scholarly collaborators often prefer the autonomy of emailing others at a distance to the more compelling, less specialized, face-to-face relationships. They balance a desire to function according to their own independent rhythms and a desire to obtain the intellectual, material and social rewards of membership in scholarly communities. Shifting from face-to-face contact to disembodied email contact is a possible means of obtaining autonomy: Isolation is achieved without effort. These scholars can interact in narrow roles without being constrained to deal with the whole person.

At times, the Internet's lack of communicative richness can foster contact with more diverse others. The lack of social and physical cues on-line makes it difficult to find out if another online community member has similar social characteristics or attractive physical characteristics. Asynchronous communication gives participants more control over the timing and content of their self-disclosures. This allows specialized relationships to develop from shared interests rather than be stunted at the onset by differences in social status. This focus on shared interests rather than on similar characteristics can be especially empowering for members of lower-status and disenfranchised groups.

Specialized social networks consist of either like-minded people — BMW 325ix drivers or collaborating web designers — or people with complementary roles — violinists and cellists, supervisors and employees. Although such networks predate the Internet, they are flourishing as the Internet's capabilities develop and groups give way to personalized connectivity. People participate in many ways. They work almost concurrently on multiple projects that come across their computer desktop. They subscribe to multiple discussion lists and newsgroups, letting others organize the membership and course of the communities. Discussion lists and newsgroups provide permeable, shifting sets of participants, with more intense relationships continued by private email.

People vary in their involvements in different networks, participating actively in some, occasionally in others, and being silent "lurkers" in still others. Friends forward communications to third parties. In so doing, they provide indirect contact between previously-disconnected people who can then make direct contact. The proliferation of computer-supported specialized relationships provides a basis for interest-based structures that provide support, partial solidarity, and vehicles for aggregating and articulating interests. This is an Internet *cum* Tocquevillian substitute for the decline of organized community groups in America [7].

When strong ties are unable to provide information, people are likely to seek it from weak ties. Because people with strong ties are more likely to be socially similar and to know the same persons, they are more likely to possess the same information. By contrast, new information is more apt to come through weaker ties better connected with other, more diverse social circles. Hence, computer-supported solutions are developing for working through trusted interpersonal relationships to identify, locate, and receive information within and between organizations.

Will networked individualism deconstruct holistic individual identities? A person would become the sum of her roles, and need to present multiple personas to the world. This compartmentalization of personal life—within the household, at work, and in communities — may create insecure milieus where people do not fully know each other.

4 Implications for Computer Supported Social Networks

If Novell had not gotten there first, computer users might be saying “netware”™ instead of “groupware”. Why is groupware a misleading term? For one thing, a group is only one special type of a social network. We need to think about the broader social processes that occur outside of groups. What is more important, “group” inaccurately describes how people interact today in the developed world, at work, in the community, and even at home. Designers need to know how the world actually functions rather than trying to force their interactions into misspecified templates. People live and work in networks, not in groups. Realizing this can aid the design and use of the right computer tools for our times.

As networked individualism develops, computer systems are being increasingly used to support person-to-person and role-to-role relationships at work, in the community and at home. To be sure, some people continue to function in traditional groups most of the time; many people function in traditional groups some of the time. Hence, groupware remains useful, but only as one part of a differentiated tool-kit to support a variety of interaction modalities. Issues of shifting connectivity, trust, knowledge management, and privacy become important as networkware evolves to support glocalization and networked individualism. A decade of research has dispelled fears that computer-mediated communication would destroy community and hinder work [3, 5, 9]. Abundant questions remain:

1. Is the online-offline dichotomy overdone? The cyberspace-physical space comparison is a false dichotomy. Many ties operate in both cyberspace and physical space. They do not exist only online but use online contact to fill the gaps between in-person meetings. Computer mediated communications supplements, arranges and amplifies in-person and telephone communications rather than replacing them. The Internet provides ease and flexibility in who communicates with whom, what means they use to communicate, what they communicate, and when they communicate. Most people communicate with their friends, relatives, neighbors and workmates, using whatever online or offline means is available, convenient, and appropriate at the moment. The stronger the tie, the more media are used.

2. Are online relationships as good as face-to-face relationships where people can see, hear, smell and touch someone, usually in a social context? Probably not, but the question has an utopian assumption that if people were not online, they would be engaged in stimulating community, household, or personal activities. In reality, online relationships often fill empty spots in people’s lives now that residential dispersal and dual careers mean that they no longer wander to the local pub or café to engage with their community members. Participating in online community substitutes for television watching. As the networked individual substitutes for the lonely crowd, online relationships may be increasing the frequency and intensity of community ties, although at the potential cost of strained household ties. At times, online relationships and social networks develop their own strength and dynamics. Participants can develop interpersonal feelings of belonging, being wanted, obtaining important resources, and having a shared identity. Yet our survey of 40,000 visitors to the *National Geographic* website finds that the *more* people are online, the *less* their sense of belonging to an online community [10]. Is this a result of overload, routinization, or greater exposure to dismaying online communications?

3. What are the organizing criteria of interaction? To what extent does the Internet reduce the importance of traditional social organizing criteria such as: gender, social class, ethnicity, language, life-cycle stage, and physical location. Are these residues of little boxes, or do they reflect continuing interests? There appears to be much involvement in teams and communities of shared interest and practice.

Moreover, the supplanting of little boxes by networks means more cross-cutting social ties interweaving formerly disconnected social groups and categories. With fuzzy network boundaries, individual autonomy and agency become more important, as each person becomes the responsible operator of her own personal network. Yet the traditional social organizing criteria continue to command continual attention.

4. *Is the map of the world disappearing?* Proximity continues to matter, but is losing its dominance. Although the work unit and the household are important bases from which to sally forth, they are only two of the multiple networks in which people are engaged. Teams and communities are more spatially and temporally dispersed. Interactions beyond the immediate work unit and household home bases are losing their privileged positions. Spatial and social peripheries have come closer to the center. Yet, globalization expands local interactions as well as global reach. Although the Internet has its unique affordances, people continue to value the in-person experiences the proximity affords. Moreover, people, including CSCW researchers, travel long distances to hold frequent get-togethers *in-person*.

5. *Does the Internet increase, decrease or supplement other forms of interaction?* The evidence is mixed. At work, those who use email a lot also see each other a lot. Both working together on a task and being friends are the independent drivers. Indeed, friendship has a slightly more powerful effect than working together. In the community, those residents of “Netville” who are connected to a very high speed network know and visit more neighbors than the less-wired residents of this suburb. For example, wired residents know twenty-five neighbors, while the unwired know eight. Nor is this just local connectivity: wired families maintain more social contact and supportive exchanges with friends and relatives living outside of Netville [4]. Similarly, our *National Geographic* study reveals that people who are involved with organizations offline are also involved with them online [10]. Yet this same study shows that Internet use supplements — rather than increases — in-person and telephone contact with friends and relatives, both near and far.

6. *Will the use of computer-mediated communication become more transparent as people get more experienced, and as such communication develops more verisimilitude through the use of video, et al?* Is the comparison with face-to-face relationships always a rigged game in which online relationships can never be quite equal? Or would it be wiser to ask if online interaction is developing its own strengths and creating its own norms and dynamics? There already are unique Internet dynamics: folding-in two disconnected friends into the same conversation, asking personal messages of posters to online discussion groups, developing personal relationships in these groups, typographical conventions of embedding interleaved responses inside original messages, and responding to messages at the top of the message exchange rather than on the bottom. Online communication also extends the reach of networks: allowing more ties to be maintained and fostering specialized relationships in networks. Unlike face-to-face ties, the Internet simultaneously affords: (a) *personal communications* between one or multiple friends, (b) *within-network broadcasts*; and (c) *public addresses* to strangers.

7. *Does the Internet promote two-person interactions at the expense of interactions happening in group or social network contexts?* Such a situation emphasizes “individualism” over “networked”. On the one hand, it is easy to include others in a computer-mediated conversation by sending a message to multiple others or forwarding an already-received message. On the other hand, these are always deliberate choices. By contrast, happenstance as well as deliberate choice leads people to public, in-person interactions. Such public interactions are observable and afford opportunities for others to join in.

8. *As connectivity becomes person-to-person (and not door-to-door or even place-to-place), do people feel responsible for their strong relationships but not for the many acquaintances and strangers with whom they rub shoulders but are not connected?* Private contact with familiar friends and workmates is replacing public gregariousness so that people pass each other unsmiling on streets, highways and hallways. Such privatization may be responsible for the lack of informal help given to strangers in public spaces. It may also explain the paradox of well-connected people feeling lonely because of the lack of physically present members of their social networks.

9. Does glocalization and networked individualism create new social needs?

The good and bad thing about traditional little boxes is that they are always there. The membership and their resources are known and potentially available, whether wanted or not. The costs of this are high social control and resources limited to what is available within the group. By contrast, it is more difficult to locate and access resources in socially and spatially dispersed networks. Hence the move to a networked society places an increased importance of network capital in the fund of desirable resources, along with financial capital, human capital, organizational capital, and cultural capital. Such network capital includes the fund of others who provide tangible and intangible resources: information, knowledge, material aid, financial aid, alliances, emotional support, and a sense of being connected. It includes knowing who such people are, what resources they possess and would make available, and the indirect ties they provide to resourceful others. For example, networked individuals need to know how to maintain a networked computer; search for information on the Internet and use the knowledge gained; create and sustain online relationships; and use these relationships to obtain needed resources, including ties to friends of friends.

10. Can groupware be networkware? Networkware is not just a larger form of groupware. They serve fundamentally different social models (see Appendix: Table 1). Groupware assumes that all participants are known and largely trusted, while the essence of networkware is (a) shifting sets of interactors, and (b) the search for information and the selective disclosure of one's own information. Yet, reality rarely contains pure ideal types: Most people's lives are mixtures of groups and networks. The real question is: can groupware and networkware co-exist in the same or conjoint computer systems? Or do their disparate social characteristics inherently foster incompatible design implications?

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Appendix -Table 1: Three Modes of Interaction

A. Boundaries

<i>Phenomenon</i>	<i>Little Boxes</i>	<i>Glocalization</i>	<i>Networked Individualism</i>
<i>Physical Context</i>	Dominance of Immediate Context	Relevance of Immediate Context	Ignorance of Immediate Context
<i>Modality</i>	Door-to-Door	Place-to-Place	Person-to-Person
<i>Predominant Mode of Communication</i>	Face-to-Face	Wired Phone Internet	Mobile Phone Wireless Modem
<i>Spatial Range</i>	Local	GloCal = Local + Global	Global
<i>Locale</i>	All in Common Household Work Space	Common Household Workspace for Core + External Periphery	External
<i>Awareness and Availability</i>	All Visible & Audible to All High Awareness of Availability	Core Members are Immediately Visible, Audible Little Awareness of Others' Availability Must be Contacted	Little Awareness of Availability Must be Contacted Visibility & Audibility Must be Negotiated
<i>Access Control</i>	Doors Wide Open to In-Group Members; Walled Off from Others External Gate Guarded	Doors Ajar Within and Between Networks Look, Knock & Ask	Doors Closed Access to Others by Request Knock & Ask
<i>Physical Access</i>	All Have Immediate Access to All	Core Have Immediate Access. Contacting Others Requires a Journey or Telecommunications	Contact Requires a Journey or Telecommunications
<i>Permeability</i>	Impermeable Wall Around Unit	Household & Workgroup have Strong to Weak Outside Connections	Individual Has Strong to Weak Connections
<i>Interruptibility</i>	<i>High</i> (Open Door): Norm of Interruption	<i>Mixed</i> : Core Interruptible. Others Require Deliberate Requests: Answering Machine; Knocking on Door that May be Ajar or Closed. Norm of Interruption Within Immediate Network Only	<i>Low</i> : Contact Must be Requested; May be Avoided or Refused: Prioritizing Voice Mail Internet Filter Knocking on Door that May be Ajar or Closed Norm of Interruption within Immediate Network Only
<i>Observability</i>	<i>High</i> : All Can See When Other Group Members are Interacting	<i>Mixed</i> : Core Can Observe Core. Periphery Cannot Observe Core or Interactions with Other Network Members	<i>Low</i> : Interactions with Other Network Members Rarely Visible
<i>Privacy</i>	Low Information Control: Few Secrets Status-Position are Important Capital	Low Information Control Few Secrets for Core Variable Information Control for Periphery Material Resources & Network Connections are Important Capital	High Information Control: Many Secrets Information & Ties Become Important Capital
<i>Joining In</i>	Anyone Can Observe Interactions Anyone Can Join Interactions	Interactions Outside the Core Rarely Observable Difficult to Join	Interactions Rarely Observable Difficult to Join
<i>Alerts</i>	Little Awareness of Others Approaching Open, Unlocked Doors	High Prior Awareness of Periphery's Desire to Interact. Telephone Ring Knock on Door	High Prior Awareness of Others' Desire to Interact. Formal Requests

B. Social Structure

<i>Phenomenon</i>	<i>Little Boxes</i>	<i>Glocalization</i>	<i>Networked Individualism</i>
<i>Metaphor</i>	Fishbowl	Core-Periphery	Switchboard
<i>Unit of Analysis</i>	Village Band Shop Office	Household Work Unit Multiple Networks	Networked Individual.
<i>Social Organization</i>	Groups	Home Bases Network of Networks	Networked Individualism
<i>Social Structure</i>	Hierarchically -Organized Workgroups Discrete Neighborhoods	Work Unit in Soft Hierarchy; Otherwise Amorphous	Amorphous Individual Status Determines
<i>Era</i>	Traditional	Contemporary	Emerging

C. Interpersonal Interactions

<i>Phenomenon</i>	<i>Little Boxes</i>	<i>Glocalization</i>	<i>Networked Individualism</i>
<i>Predominant Basis of Interaction</i>	Ascription (What You are Born Into): e.g., Gender, Ethnicity	Mixed Ascription & Achievement	Achievement (What You Make of Yourself): e.g., Social Class
<i>Personal Style</i>	Conformity	"Protect Your Base Before You Attack" (attributed to Mao)	Free Agent
<i>Frequency of Contact</i>	High Within Group	Moderate Within Core; Low to Moderate Outside of Core	Low with Most Others; Moderate Overall
<i>Recurrency</i>	Recurrent Interactions Within Group	Recurrent Interactions Within Core Intermittent with Each Network Member	Intermittent Interactions with Each Network Member
<i>Duration</i>	Long-Duration Ties (Cradle -to- Grave, Employed for Life)	Long Duration for Household Core (Except for Divorce) Short Duration Otherwise	Short Duration Ties
<i>Domesticity</i>	Cradle -to-Grave Mom & Dad: Dick (9) & Jane (6)	Long-Term Partners Serial Monogamy Dick Lives with Divorced Spouse	Changing Partners; Living Together, Singles, Single Parents Nanny cares for Jane
<i>Scheduling</i>	Drop-In Anytime	Drop-In Within Household & Work Core Appointments Otherwise	Scheduled Appointments
<i>Transaction Speed</i>	Slow	Variable in Core Fast in Periphery	Fast
<i>Autonomy & Proactivity</i>	Low Autonomy High Reactivity	Mixed Reactivity & Autonomy Within Household & Work Cores High Proactivity & Autonomy with Others	High Autonomy High Proactivity
<i>Tie Maintenance</i>	Group Maintains Ties	Core Groups Maintain Internal Ties Other Ties Must Be Actively Maintained	Ties Must Be Actively Maintained, One-By-One
<i>Predictability</i>	Predictability, Certainty & Security Within Group Interactions	Moderate Predictability, Certainty & Security Within Core Interactions with Others Less Predictable, Certain & Secure	Unpredictability Uncertainty Insecurity Contingency Opportunity
<i>Latency</i>	Leaving is Betrayal Re-Entry Difficult	Ability to Re -Establish Relationships Quickly with Network Members Not Seen in Years	Ability to Re -Establish Relationships Quickly with Network Members Not Seen in Years

D. Social Networks

<i>Phenomenon</i>	<i>Little Boxes</i>	<i>Glocalization</i>	<i>Networked Individualism</i>
<i>Number of Social Circles</i>	Few: Household-Kin, Work	Multiple: Core Household, Work Unit + Multiple Sets of Friends, Kin, Work Associates, Neighbors	Multiple: Dyadic or Network Ties with Household, Work Unit, Friends, Kin, Work Associates, Neighbors
<i>Maneuverability</i>	Little Choice of Social Circles	Choice of Core & Other Social Circles	Choice of Social Circles
<i>Trust Building</i>	Enforced by Group Betrayal of One is a Betrayal of All	Core Enforces Trust Network Members Depend on Cumulative Reciprocal Exchanges & Ties with Mutual Others	Dependant on Cumulative Reciprocal Exchanges & Ties with Mutual Others
<i>Social Support</i>	Broad ("Multi-stranded")	Broad Household & Work Core Specialized Kin, Friends, Other Work	Specialized
<i>Social Integration</i>	Within Group Only	Cross-Cutting Ties Between Networks Integrate Society Core is the Common Hub	Cross-Cutting Ties Between Networks Integrate Society
<i>Cooperation</i>	Cooperation & Joint Activity for Clear, Collective Purposes	Core Cooperation; Otherwise, Short-Term Alliances Tentatively Reinforced by Trust Building & Ties with Mutual Others	Independent Schedules Transient Alliances with Shifting Sets of Others
<i>Knowledge</i>	All Aware of Most Information Information Open to All Within Unit Secret to Outsiders	Core Knows Most Things Variable Awareness of – and Access to – What Periphery Knows	Variable Awareness of – and Access to – What Periphery Knows
<i>Social Control</i>	Superiors & Group Exercise Tight Control	Moderate Control by Core Household & Workgroup, with Some Spillover to Interactions with Periphery Fragmented Control Within Specialized Networks Adherence to Norms Must Be Internalized by Individuals	Subgroups, Cleavages Partial, Fragmented Control Within Specialized Networks Adherence to Norms Must Be Internalized by Individuals
<i>Resources</i>	Conserves Resources	Acquires Resources for Core Units	Acquires Resources for Self
<i>Basis of Success</i>	Getting Along Position Within Group	Getting Along & Position Within Core Networking	Networking Filling Structural Holes Between Networks

E. Norms and Perceptions

<i>Phenomenon</i>	<i>Little Boxes</i>	<i>Glocalization</i>	<i>Networked Individualism</i>
<i>Socialization</i>	Obey Group Elders	Obey Your Parents, Cherish Your Spouse, Nurture Your Children Defer to Your Boss Work & Play Well with Colleagues & Friends	Develop Strategies & Tactics for Self-Advancement
<i>Sense of Solidarity</i>	High Group Solidarity Collective Name & Identity.	Moderate Solidarity within Core Household & Workgroup Vitiating by Many Individual Ties to Different Peripheries.	Sense of Being an Autonomous Individual. Fuzzily Identifiable Networks
<i>Loyalty</i>	<i>Particularistic:</i> High Group Loyalty	<i>Public & Private Spheres:</i> Moderate Loyalty to Home Base Takes Precedence over Weak Loyalty Elsewhere	<i>Self and Global:</i> Weak, Divided Loyalties
<i>Conflict Handling</i>	Revolt Coup Irrevocable Departure	Back-Biting Keeping Distance	Avoidance Exit
<i>Commitment to Network Members</i>	High Within Groups	High Within Core Variable Elsewhere	Variable
<i>Zeitgeist</i>	Communitarian	Conflicted	Existential