Abstract: Three revolutions are coming together to shift people's social lives away from tight-knit family and neighborhood relationships towards more far-flung, less tight, more diverse personal networks. The internet revolution, the mobile revolution, and the social network revolution are producing a new societal reality we call 'networked individualism.' Analysts argue over whether this leads to social decay or utopia; we argue instead that social change is occurring that has both benefits and drawbacks. We use evidence from the Pew Internet and American Life project and the Connected Lives project to document key aspects of the transformation: Communication is from and to the person. This is a major change from situations when the household, the village or even the urban neighborhood were the major source of connectivity. For better or worse, people are connected as networked individuals. This means they have community, but it is less palpable than the organized groups of the past. People don't live online. Rather, they integrate a variety of communication media to stay connected - in-person encounters, formal meetings, phone calls by landline and mobile phones, emails, instant messaging, and more public Web 2.0 activities, such as listservs, social network sites, and blogs. Many of the minority who say they are not directly on the internet use it anyway, with their family and friends communicating and seeking information for them. Households are networks, not groups. Household members are in frequent contact, but not necessarily getting together as a solitary group. These are smaller households than in past decades, often with only one parent and often with no or only one child. Household members communicate in a variety of ways - hugs in passing, post-it notes, mobile phoning, and email. What they don't do is sit down and have family dinners every night or stay together on weekends. Relationships in the wider world are built around looser, rather than denser network groupings. Among other things, this means that people have a variety of social ties to count on, but not one sure-fire community home. Unlike people's lives in Pleasantville, they don't have the security of one big happy community. But they also escape the social control that comes from being in a densely-knit, bounded community. In these networks, people have more uncertainty, but also more maneuverability. People are their own switchboards, making, maintaining and breaking ties. Rather than sitting back and letting Mom or Sis take care of their networks, they must work more actively on maintaining each tie separately. People rely on multiple specialized relationships, rather than a few all-encompassing relationships. They access different parts of their networks to solve certain problems and to gain social support. They must shop in specialized boutiques for help instead of turning to close friends and family who, like a general store, provide all sorts of help People have partial membership in multiple networks and rely less on permanent memberships in settled groups. In this environment, people must deal with frequent turnover and change in their friendships, and they must be forever calculating where they can turn for different kinds of help. People have more long-distance relationships and more transitory relationships than in the past. While they still have neighbors, neighbors are only a small portion of their interpersonal lives. As a result, their life routines are different from the lives that their parents or grandparents led. They are traveling more by car and plane to see friends and relatives; and they are spending much more time using the internet and mobile phones to socialize with distant ties. The internet, mobile chatter, and in-person contact are in constant interplay in people's lives. Most still meet in person, and continue contact in between meetings via the internet. People expend new energy and effort to manage their networks through electronic and mobile connectivity. They also hyper-coordinate their schedules by using mobile phones to plan gatherings. Those who first meet online usually arrange to get together in person. People's networks are now larger. While the number of their strong ties - socially close relationships with friends and relatives - has stayed about the same, they have greater numbers of weaker ties. They have more 'friendsters' than friends. Yet such weak ties can help them at times with crucial elements of information, sociability and support - e.g. as they seek jobs, cope with health issues, and make purchase decisions. People's work lives are built
around more creative jobs rather than manufacturing or standardized paper pushing. This means that they have more reporting relationships and fewer hierarchical relationships. They typically work in multiple teams, rather than with one boss. They rely heavily on the internet, within-organization intranets, and mobile phones to obtain and share information. People now can obtain information from a greater variety of sources and are heavily using the internet for that purpose. This diversity both empowers people - they no longer need rely on ‘the experts’ - but it also creates uncertainty about whom and what to trust. The result is that people cycle back and forth between the internet and dialogue with their friends - using in-person conversations, phone chats and emails to exchange opinions. People can now use the internet and other digital tools to create and contribute information to public discourse. They can do so with considerably greater ease and impact than in the past. This allows them to build new branches on their networks as they contribute to knowledge, conduct conversations, and rate/rank/review the content created by others. These social changes are consequential in their own right, but they especially matter because people rely on their social networks more than in the past to help them learn things, assess options, make decisions, and solve problems. The explosion of information and communication sources has pushed people onto the path of greater involvement with their extended networks of people as they negotiate the complexity of modern life. At the same time, it has increased the potency of those who are active and important in their networks - who bridge different social circles, advise people, and help them to connect with each other.
Networked Individualism & The Triple Revolution: Networks, Internet, Personal Mobile

Barry Wellman
Director, NetLab
Department of Sociology
University of Toronto
wellman@chass.utoronto.ca
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The Triple Revolution:
Networks, Internet, Personal Mobile

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Director, NetLab
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The Triple Revolution

How the Intersection of

1. The Turn from Groups to Social Networks
2. The Proliferation & Differentiation of The Personal Internet
3. The Personal Mobile Availability of Information & Communication

→ → Networked Individualism
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The Internet Revolution

- Instant Access to Diverse, Copious Information
  - If You Know Where and How to Look

- Rapid, Low-Cost Communication
  - Distance, Time Much Less of a Constraint
  - Email as Frequent with Ties 3K km & 3 km
  - Yet most ties remain local – people have bodies!

- Increasing Volume and Velocity of Info & Comm
The Internet Revolution at Home

Toronto (East York): our major research site
Key Social Affordances of the Internet Are Often Taken For Granted: Time and Space Have Become Soft

- Bandwidth
- Ubiquity – Anywhere, Anytime
- Convergence – Any Media Accesses All
- Portability – Especially Wireless
- Globalized Connectivity
- Personalization
Mobile (Connectivity) Revolution

The Newest:
- Wireless Laptops, Mobile Phones, Smart Phones

Information & Communication Available
- Wherever You Are
- Wherever You Go
- Always On, Always Connected

It’s Personal – Not to the Household or the Office

Multiple Venues of Connectivity –
- Social Venues
- Physical Venues – home, work, coffee shop
Connectivity on the Beach

“Playing in the Sand”,
Rolf Bruderer/CORBIS
The Social Network Revolution

- A new perspective for understanding social behavior
- Not just a method, but a cognitive perspective that has developed methods or applying that perspective to empirically studying societies
- We’ve always functioned in networks – we’re just more aware of it now
- From: Functioning in encompassing, densely-knit, bounded groups →
- To: Maneuvering in fragmented, sparsely-knit, permeable & specialized networks
The Turn to Networked Individualism

- We think of groups; we function in networks
  - No longer densely-knit
  - Fragmented – people switch & maneuver among nets
  - Specialized role relationships
    - Social capital from boutiques & not general stores

- Premium on individual agency, rather than letting the group do it
  - Find your own information – no more 2-step flow
  - Maneuver/manipulate thru your networks.
Traditional Ways of Looking at Social Interactions

- **Individuals as Aggregates of Attributes**
  - All Possess one or more properties as an aggregate of individuals
  - *Examples:* sex, education, developed countries

- **Norms & Attitudes as Drivers of Behaviour**
  - Individuals socialized ("injected") with norms
  - Norms begat attitudes that tell people what to do

- **Groups as Key Organizational Units**
  - (Almost) All densely-knit within tight boundaries
  - Thought of as a solidary unit (*really a special network*)
  - Family, workgroup, community, organization
The Network Analytic Contrast (to GroupThink)

- Ties are usually asymmetrically reciprocal, differing in content and intensity.
- Ties link network members indirectly as well as directly. Hence they must be defined within the context of network structures.
- The structuring of ties creates non-random networks, hence clusters, boundaries, and cross-linkages.
- Networks (unlike groups) are not necessarily densely-knit, tightly-bounded or all-enclusive.
- Cross-linkages connect clusters as well as individuals:
  - Networks of networks
- Asymmetric ties & complex networks differentially distribute scarce resources.
Twelve Points about the Triple Revolution

1. People function more as networked individuals
   .. and less as group members
   Social ties and events organized around the individual rather than a social unit such as a family, neighborhood, or organization
   The person has become the individual unit of social connectivity; and not the place,
   be it household or workplace

Agency: Each person operates own network

Cell phones and internet allow person-to-person contact to supplant place-to-place communication.
Traditional Small Groups: Door-to-Door

- Old workgroups/communities based on proximity and kinship
  - Pre-industrial villages, wandering bands
- All observe and interact with all
- Deal with only one group
- Knowledge comes only from within the group – and stays within the group
Groups: Door to Door

GloCalization: Place-to-Place

Networked Individualism: Person-to-Person

Three Models of Interpersonal Interaction
Place To Place

(Phones, Networked PCs, Airplanes, Expressways, RR, Transit)

- Home, office important contexts,
  - Not intervening space
- Ramified & sparsely knit: not local solidarities
  - Not neighborhood-based
  - Not densely-knit with a group feeling
- Domestication of socializing
- Partial membership in multiple communities
  - Often based on shared interest
- Connectivity beyond neighborhood, work site
- Household to household / work group to work group
Person To Person: Networked Individualism

(Cell Phones, Portable Computing)

- Little awareness of context
- Individual, not household or work group
- Personalized networking
- Tailored media interactions
- Private concerns replace public civility
- Less caring for strangers, fewer weak ties
- Online interactions linked with offline
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Groups: Door to Door

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Three Models of Interpersonal Interaction
2. Families function more as networks than as groups

- Family members spend less in-person time together than they did in the 1970s.
- Yet they are in more frequent contact, via internet and cell phones through the day.
- Knowing what family members are doing all the time fosters unobtrusive surveillance:
  - the “ball and chain” has become the electronic leash.
Family Togetherness in the 1950s

Ozzie & Harriet
Ricky & David
**Family Togetherness in Dick & Jane**

**Father Helps the Family**
Mother said, "Oh, Father! Will you do something for me? Will you please help me?"
"I will see," said Father.
"I will see."

**Jane said, "Look, Father. Will you please help me? You work for Mother. Can you work for me, too?"
"I will see," said Father.**
21st Century Families

“Child Wants Cellphone: Reception is Mixed” Lisa Foderaro, NY Times, 27-3-07

“Mother carrying child talking on mobile phone” Ariel Skelley, Corbis
Networking Households

I’m going here, we’re going there; they have to go here, they have to go there: “Can you take them?” “Well, now I’m taking them to dentist at such and such, [so] put this in your schedule at work”

Female respondent, East York

Chatting with partner on mobile phone speakers the entire 45 minute separate drives to work

Toronto student
Interpenetration of Home and Work

I do it from work all the time - to my husband in particular.... I know he’s honestly on the computer a lot during the day, and I know he checks his emails frequently, so I can usually catch him there.

Not that he doesn’t have a mobile phone all the time with him, but I’d rather just zip off an email to him .... Like: “are you going to be home today after school to take the dog out?”

Texting spouse 50x a day – every day

Twitter
3. **Networked individuals tap into sizeable, loose networks**

Networked individuals have a variety of relationships to count on:

- Less likely to have one all-encompassing “home” community

Specialized social, emotional, and economic support:

- Rather than tight connections with a small number of friends and relatives

Escape social control of being in a place where everyone knows what everyone is doing:

Move among shifting, fluid, less palpable social structures:

- More uncertainty; more maneuverability
4. People’s social networks larger than their forbearers’

- Technology helps people to manage larger and more diverse networks
  - Adds to their capacity to stay connected with socially remote and spatially remote relationships
  - Larger networks use internet more

- 30% rise since 2002
  - World Internet Project US National Surveys
  - Wang and Wellman 2008
  - Contra Putnam (Bowling Alone) and McPherson, et al.

- Email, MyFace, VoIP, cellphone
Networks are Getting Larger

Number of friends seen in-person weekly+

![Bar chart showing the average number of friends for non-users, moderate users, and heavy users in 2002 and 2007.]

<table>
<thead>
<tr>
<th>Year</th>
<th>Non-users Mean</th>
<th>Adj. Mean</th>
<th>Moderate users Mean</th>
<th>Adj. Mean</th>
<th>Heavy users Mean</th>
<th>Adj. Mean</th>
<th>Adj. diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>9.7</td>
<td>8.9</td>
<td>10.2</td>
<td>0.5</td>
<td>(n.s.)</td>
<td>10.5</td>
<td>1.6 *</td>
</tr>
<tr>
<td>2007</td>
<td>11.2</td>
<td>11.7</td>
<td>16.5</td>
<td>5.3 **</td>
<td>16.5</td>
<td>4.8 **</td>
<td>15.3</td>
</tr>
</tbody>
</table>

Note: Multiple classification analysis (MCA) controlled for age, sex, education, income, race, and marital status. *p < .01; **p < .05

Center for the Digital Future, World Internet Project
(Wang/Walkman, 2008)
5. Partial membership in multiple networks

- Rely less on memberships in stable groups
- Must manage loose and diverse social networks.
- Deal with frequent turnover in relations
  - "MyFace" may overload with too much information
- Calculate where to get different kinds of help
  - Need to access different parts of their networks
  - And calculate what kind of help to offer others
  - Reciprocity based more on "what have you down for me recently?" than on communal norms of support
6. New ways to form communities around interests and needs – not just kin, locality

- Shift from spatial propinquity to shared interests
  - More long-distance relationships
  - Easier time reattaching to those from their past
  - MyFace overload
- Do not have to depend on plugging into big organizations to meet work, political, personal or leisure goals
  - Compare *The Man in the Grey Flannel Suit; The Organization Man*
- Networked individuals can create new communities around themselves, their interests:
  - From politics to hobbies to illnesses.
Ryan Lackay ran an isolated data haven in a WWII anti-aircraft platform in the English Channel: the “Principality of Sealand”. He is a libertarian and has only Internet contact, except for monthly supplies.
The GloCalization Paradox

- Globally connected, locally invested
- Surf and email globally
- Desire for local/distant services, information
- Internet augments F2F
  - Doesn’t replace it; rarely used exclusively
  - Media choice? available, normative, organizational
- Local becomes just another interest
- Immigrants especially heavy users of internet
Number of virtual friends (online only)

Wang/Wellman, 2008
Number of migratory friends (online → offline)

Wang/Wellman, 2008
Yet Internet Fosters Neighbouring

- Rooted at home computer →
  Jane Jacobs “eyes on the street” – unless mobile
- Multiplied number & range of neighbours
- Many emails, IM, cell calls/texts are local
- Increased contact with existing neighbours
  - Email adds on to F2F, phone contact – doesn't replace
- Demand for local information
“Wired” and “Non-Wired” Neighbouring in Netville
Hampton & Wellman (2002)

<table>
<thead>
<tr>
<th>Mean Number of Neighbors in “Netville”</th>
<th>Wired (37)</th>
<th>Non-Wired (20)</th>
<th>Wired/NonWired Ratio</th>
<th>Signif. Level ($p &lt;$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognized by Name</td>
<td>25.5</td>
<td>8.4</td>
<td>3.0</td>
<td>.00</td>
</tr>
<tr>
<td>Talk with Regularly</td>
<td>6.3</td>
<td>3.1</td>
<td>2.0</td>
<td>.06</td>
</tr>
<tr>
<td>Invited into Own Home</td>
<td>3.9</td>
<td>2.7</td>
<td>1.4</td>
<td>.14</td>
</tr>
<tr>
<td>Invited into Neighbours’ Homes</td>
<td>3.9</td>
<td>2.5</td>
<td>1.6</td>
<td>.14</td>
</tr>
<tr>
<td># of Intervening Lots to Known Neighbours</td>
<td>7.5</td>
<td>5.6</td>
<td>1.4</td>
<td>.08</td>
</tr>
</tbody>
</table>
7. Often work differently than in the past

- Part of several teams; Report to several bosses.
- Technologically connected jobs built around creative effort rather than manufacturing or standardized paper
  - Flexible work organization encourages creativity
  - More autonomy and authority
- Communicate frequently, easily, rapidly and cheaply over distance, using a battery of media
  - Peer teams; medical transcriptions in India
- Costs are:
  - Fragmented attention
  - Surveillance of the flow of information and communication
Traditional “Fishbowl” office

- All work together in same room
- All visible to each another
- All have physical access to each other
- All can see when a person is interruptible
- All can see when one person is with another
  - No real secrets
  - No secret meetings
  - Anyone can observe conversations & decide to join
- Little alert to others approaching
8. ICTs provide more information from more sources

- More access to more people
- Internet + larger, fragmented networks --> enhances capacity to obtain diverse information
- Empowers people
  - Less need to rely on “the experts”
  - More self-directed in more wide-ranging searches.
- Uncertainty about whom & what to trust
  - Rely on networks to learn things, make decisions, and solve problems
- No more two-step flow: an infinite regress
  - People cycle between the web and their social networks to exchange opinions and weigh options
  - Whenever I read/hear something, I think “who can I send this to?”
- Withering of the internal: more knowledge is stored externally
  - But still requires skill in finding information and creating knowledge
9. Cultures of identity multiply

- People use the new technologies to find - and build - networks with --
  - Those who share their background, their passions, their work or their lifestyle

- Networked selves: multiple social identities

- 84% of internet users belong to an online community built around an organization, website, or personal interest
All ages find interests online

“Oh baby... oh baby... oh baby...”

J.C. Duffy. The New Yorker February 16, 2004
10. Number of interest groups growing in diversity and size

- New media make it easy for niche interests to split off and form new groups
- So much spillover of information and ties to multiple groups
  - People gaining a wide range of information
- They don’t just get informed by the like-minded.
- Bridging and bonding ties
11. ICTs + networks → creation + transmission

Transition to a new technological window: creators, not just consumers of media
- Mass media → ubiquitous media (William Gibson, Spook Country)
- Newspapers, TV losing audience: blogs, videos gaining audience

Internet → create media and distribute "voices" "views"
- Political, economic, social, religious, music, videos

Nearly 1/2 of adults and 2/3 of teens have published material through blogs and social network sites such as Facebook and Flickr
- No longer need to get access to mass media to tell stories

Creations draws commentary and broader audience
→ Start another branch of a personal network

Communities of interest built around productions

Creating and consuming such media takes up more time
- Traditional mass media takes up less
12. Interpenetration of private & public

- Reveal inner thoughts & daily lives to a wide audience
  - Public spaces colonized by private/intimate activity: personal musings & performances: online diaries, home movies

- Social availability software tell others of your whereabout
  - Twitter, Facebook, IM “away” messages

- Few concerns about protecting privacy
  - From friends, institutions or government
  - New expectations about the transparency and availability of people and institutions

- Breaking down walls between: education & entertainment, work & play, consumer & producer
In a Nutshell

1. People function more as networked individuals
2. Families function more as networks than as groups
3. Networked individuals tap into sizeable, loose networks
4. People’s social networks larger than their forbearers’
5. Partial membership in multiple networks
6. New ways to form communities around interests and needs – not just kin, locality
7. People often work differently than in the past
8. ICTs provide more information from more sources
9. Cultures of identity multiply
10. Number of interest groups growing in diversity and size
11. ICTs + networks → creation+broadcast
12. Interpenetration of private and public
The Rise of Networked Individualism
In the Networked Society

- An individualized, but networked, world supplies social capital, sociability, information, and a sense of belonging separately to each person.
- Individual agency is constrained by networks:
  - Personalization rather than group behaviour
- Interpersonal ties are dancing dyadic duets:
  - Sparsely-knit, socially and spatially dispersed ties
- Within social networks
  - Multiple, ad hoc
  - Portable, personal
Bounded Groups ➔ Ramified Networks

- United Family ➔ Serial Marriage, Mixed Custody
- Shared Community ➔ Multiple, Partial Personal Nets
- Neighbourhoods ➔ Dispersed Networks
- Voluntary Organizations ➔ Informal Leisure
- Face-to-Face ➔ Computer-Mediated Communication
- Public Spaces ➔ Private Spaces
- Focused Work Unit ➔ Multiple Teams
- Hierarchical Org. ➔ Networked Organization
- Job in a Company ➔ Career in a Profession
- Autarky ➔ Outsourcing
- Car, Transit ➔ Airplane, Internet, Cellphone
- Ascription ➔ Achievement
- Conglomerates ➔ Virtual Organizations/Alliances
- Cold War Blocs ➔ Fluid, Transitory Alliances
*Book in preparation*

Lee Rainie (Pew Internet) & Barry Wellman

MIT Press

wellman@chass.utoronto.ca

www.chass.utoronto.ca/~wellman

(lots of research articles)