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Mapping the Great Beyond:
Identifying Meaningful Networks in Public Diplomacy

by Ali Fisher

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CPD Perspectives on Public Diplomacy

CPD Perspectives is a periodic publication by the USC Center on Public Diplomacy, and highlights scholarship intended to stimulate critical thinking about the study and practice of public diplomacy.

Designed for both the practitioner and the scholar, this series will illustrate the breadth of public diplomacy—its role as an essential component of foreign policy and the intellectual challenges it presents to those seeking to understand this increasingly significant factor in international relations.

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The USC Center on Public Diplomacy (CPD) was established in 2003 as a partnership between the Annenberg School for Communication & Journalism and the School of International Relations at the University of Southern California. It is a joint research, analysis and professional training organization dedicated to furthering the study and practice of global public diplomacy.

Since its inception, the Center has become an ambitious and productive leader in the public diplomacy research and scholarship community. The Center has benefited from international support from the academic, corporate, governmental and public policy communities. It is host to one of the most comprehensive online public diplomacy web sites and has become the definitive go-to destination for practitioners and scholars in public diplomacy around the world.

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INTRODUCTION

> Accompanying [the] access and ability to move information via the Internet, cell phone, fax, and emerging digital technologies is a shift from hierarchies to network forms of organization. These two factors are ushering in an era of asymmetric threats, where non-state actors can extend their influence and challenge states and their institutions to gain social, political, or economic influence.[1]
>
> John Sullivan

Networks matter—and the ability of organizations to identify and visualize significant networks matters too. Understanding how networks work is not easy, but quality analysis of networked communication, produced by commentators like Brian Hocking and R.S. Zaharna, are already available to Public Diplomacy organizations. The nature of networked or relational approaches to communication has been highlighted, for example, as an alternative to assertive, message orientated communication, or as Brian Hocking described it, a movement from "competition to collaboration." Whether comparing traditional diplomacy to "netwar" or hierarchical to networked approaches, "Governments have at their disposal two fundamental diplomatic strategies: bilateral and multilateral modes of action and influence."[2]

Particularly salient in this discussion, Hocking continues: "it is possible to identify two interlinked but distinct images of diplomacy emerging within the discourse of public diplomacy. One of these flows from a traditional conception of diplomacy as a predominantly hierarchical and intergovernmental process. The other sees public diplomacy as one facet of an environment in which international policy is increasingly conducted through complex policy networks. In the latter image, publics are partners in and "producers" of diplomatic processes."[3]

He goes on to note "Twenty-first century diplomacy is being conducted in an environment where national and international knowledge networks are proliferating. A central challenge for national governments, international organizations and NGOs alike is knowing how to connect to them, build alliances and utilize these networks to exercise effective advocacy in support of policy objectives."[4]

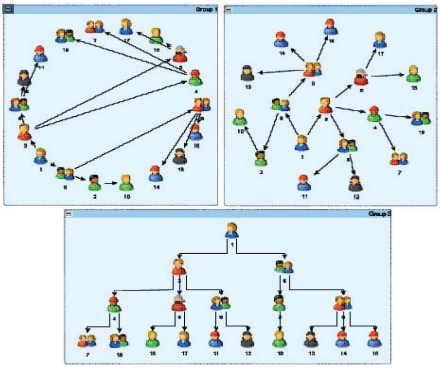

Figure 1. Hierarchies as networks

The distinction between networked approaches and networks may appear semantic but requires explicit clarity; Brian Hocking identifies modes of action and concomitant with those modes of action is a focus on behavior. The importance of recognizing this focus on behavior is not least because hierarchy is a form of network structure. It is not a question of drawing false distinctions between hierarchies and networks, but rather the need to focus on the behavior and power relationships which exist in the different forms of network. Figure 1 shows the same network arranged using three different algorithms. None of the relationships is altered by the different arrangements, just the way we visualize them and the assumptions we make as a result.

This may be easier to argue at a conceptual level than for the individual on the ground to do while operating within existing reporting mechanisms, bureaucratic structures or organizational cultures. Indeed, the degree to which a Public Diplomacy organization itself is a hierarchy may well limit the ability of one of its representatives to become immersed in an external network of activists.

While it is necessary to be clear that hierarchy is a form of network, the emphasis on shifting approaches of communication to acknowledge other network forms alongside the more traditionally applied hierarchy creates important considerations for Public Diplomacy. An individual or organization's position in a network creates a perspective through which relationships with other network members have to be viewed. Hierarchies create the classic look up or look down perspectives; other forms of network create the potential to look in many directions. The variety of network arrangements provides the potential for numerous positions, perspectives and understandings of importance and power. In some hierarchies, everyone may be looking to a particular actor, creating a centralized or star network), and in others relationships may take on a cyclical form of communication or the image of hub and spoke, among the wide variety of options. These network forms are shown in Figure 2.

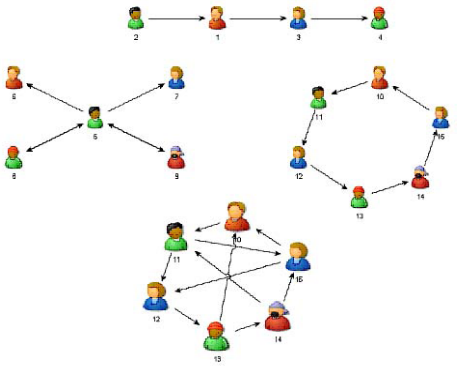

Figure 2. Types of networks

Each form requires a different behavior which is influenced by the perspective of the network viewed by each member. Understanding the perspectives resulting from myriad positions in the variety of networks will influence the way an organization interacts with different communities, and will influence the odds of achieving success in Public Diplomacy.

It is neither the existence of new technology alone nor solely the understanding of networks which has the potential to empower Public Diplomacy operations; it is how effectively they are combined to empower those "on the ground," whether physically or metaphorically. The potential power of this combination was shown during the 1999 protests that took place during the WTO Ministerial Conference held in Seattle. The notorious and violent encounters between protesters and police became known as "*N30*" or the "*Battle in Seattle*," and are depicted in a movie of the same name directed by Stewart Townsend.[5] Despite the use of tear gas and pepper spray, followed later by concussion grenades and rubber bullets, the protestors managed to defy the police and block streets, thereby limiting access to the WTO conference for three days. A significant factor in the protesters' ability to achieve their aims was the combination of their skill at interacting within a dispersed network and the numerous different types of communication devices which they used to coordinate at street level while communicating with national and even international audiences through the infosphere.

A key element of the *N30* protests was the Direct Action Network's (DAN) use of "an improvised communications network of cell phones, radios, police scanners, and portable computers. Protesters in the street with wireless handheld computers were able to link into continuously updated Web pages giving reports from the streets." As Paul de Armond noted, "floating above the tear gas was a pulsing infosphere of enormous bandwidth, reaching around the planet via the Internet."[6] Despite occurring ten years ago, the effective combination of actions on the street linked to the infosphere floating above while under intense pressure, still outstrips many Public Diplomacy organizations today. Understanding physical and digital networks along with the way they interact will be key to the further development of "New" Public Diplomacy or even "Guerrilla Diplomacy."[7]

The ability for "New" Public Diplomacy organizations to make the shift from centralized to genuinely non-centralized (whether decentralized or dispersed) communications will require a strong understanding of the networks with which they interact, and through this understanding adopting structures and methods which empower individuals on the ground. The non-centralized approach has the advantage of emphasizing interaction rather than message dissemination and is significantly harder for other protagonists to disrupt than is communication through a single technology or central coordination point. This draws on the ideas developed by Paul Baran in considering how to protect critical U.S. communications in the event of a Soviet nuclear strike, and the concept of Netwar.[8]

John Arquilla and David Ronfeldt depict Netwar:

> as having two major faces, like the Roman god Janus—one dominated by terrorists and criminals that is quite violent and negative, and another evinced by social activists that can be militant but is often peaceable and even promising for societies.[9]

Yet the negatives—terrorists and criminals, combined with militant activists and protests—align the discussion of Netwar with elements of society with which few Public Diplomacy organizations or Foreign Ministries wish to align. This has parallels with the way Daryl Copeland contrasts actors within his image of a new diplomacy:

> Unlike all too many serving envoys, the guerrilla diplomat will know how to swim with comfort and ease in the sea of the people rather than flop around like a fish out of water, and prefer to mix with the population rather than mingle with colleagues inside the embassy walls.[10]

Those likely to mingle within the embassy walls are unlikely to align themselves with the approaches adopted by criminals, terrorists and anarchists. Furthermore, the use of militaristic sounding terms such as Netwar may in itself have been off-putting for organizations delivering forms of cultural diplomacy and cultural relations or even exchange or scholarship programs, such as JET, Fulbright or Chevening. However, there must be differentiation between objectives, methods and ways of organizing; non-centralized approaches place emphasis on the way individuals connect and the way groups function. As a result, they highlight the importance of understanding the networks with which an organization seeks to engage and the relationship between the digital and physical elements of a network.

We live in a world of networks. After all, whether known as family, kinship group, tribe, village, neighborhood, virtual community, work place colleagues, community of practice or online social network, these are all networks in the sense of being a series of connections or relationships. As a result, whether adopting a network or hierarchical approach, understanding the nature of the networks with which a Public Diplomacy organization interacts can ensure behavior in line with the type of network. In addition, it has the potential to support the development of better targeted initiatives which utilize to a greater extent the networks with which an organization interacts.

The following sections aim to identify some of the potential perspectives which could allow an organization to engage meaningful networks. The first section considers perspectives which could empower individuals making tactical decisions in their day-to-day interaction with different networks. Section two considers perspectives on understanding networks for developing organizational strategy and, finally, section three begins to explore the potential of network analysis as a means to evaluate Public Diplomacy initiatives.

Part 1: Empowering Public Diplomacy in practice

We all know the argument. In a changing world of increasing technological connectivity, Foreign Services, and the diplomats they employ, have a responsibility to engage with publics in as innovative a manner as possible. Blogs, social networking websites and Twitter are all, so the commentators tell us, the essential new domain of the Foreign Service officer. Diplomats ignore them at their peril.

The fact is, however, that academics operating in the field of Public Diplomacy have rightly been quick to make the argument in favor of this new web-based engagement—and to find evidence to support it. Not long after President Barack Obama's election victory, Monroe Price highlighted the role and power of Mr. Obama's online campaign, and Tori Horton has written on the use of social media for Public Diplomacy.[11] Daryl Copeland's piece on Virtuality makes a valuable contribution, from a practitioner perspective, to thinking about engagement via the Internet.[12] Equally, stories about #Mumbai amidst the tragic events in 2008 in India and the 2009 elections in Iran further drew Twitter to the attention of those seeking to communicate with a foreign public.[13] But while there are already some engagements with this type of technology, many Public Diplomacy organizations still have considerable ways to go to fully empower their staff to work online.

The recent Gov2Gov meeting held at Canada House in the U.K. focused on the use of social networking to move toward Government 2.0 and highlighted the challenges large bureaucracies face in engaging with and through this technology.[14] Liveblogging, along with links to many of the commentaries, were available after the event on Twitter via #g2g.[15]

Equally, MountainRunner's earlier commentary on Dipnote picked up by Zenpundit among others, poses some important questions about the agility of current government users when using such a format.[16] The U.S. Department of Defense certainly seems to be leading the way in blogger engagement, while the U.K.'s Foreign Office blogs (including comment on Gov2Gov) is also starting to feel their way.[17] While Stephen Hale effectively admitted he could neither understand who read his blog nor find an online community discussing digital diplomacy (an unfortunate confession from the Head of Engagement, Digital Diplomacy, given the ease with which most bloggers in the field could complete this task), for the most part the FCO blogs are better than nothing.[18] I do, however, have to share MountainRunner's assessment of the situation, and add that the current approach is too restrictive of staff rather than allowing them to take part in a genuine conversation during these still early steps into an environment dominated by human voice rather than corporate monotone. As the Cluetrain Manifesto puts it: They will only sound human when they empower real human beings to speak on their behalf.[19] Interaction online presents the opportunity and demand for genuine engagement, not just information dissemination; it is time to make the most of this opportunity for engagement, through both a culture shift and embracing the tools available.

The Alliance for Youth Movement Summit, Exchanges Connect and the Democracy Video Challenge provide some examples of the attempt to use social media, they are however based on interaction through a centralized network.[20] However, many Public Diplomacy organizations have not gotten that far (and equally a centralized approach may not be the right direction for all of them either).

Invisible conversations

If staff are limited in the ways they can engage with individuals, particularly in the means of communication, conversations will continue without them and the ability to listen, engage or influence those interactions will be lost. It is also becoming increasingly clear that, beyond the cultural/bureaucratic limitations identified by MountainRunner, some organizations conducting Public Diplomacy are limiting the access their staff have to spaces or platforms, while others who may have access are actively discouraged from doing so at work.[21] These platforms include Skype, YouTube, Facebook and vkontakte, as well as other regionally successful platforms highlighted by Vincenzo Cosenza in a recent mapping exercise and shown in Figure 3.[22]

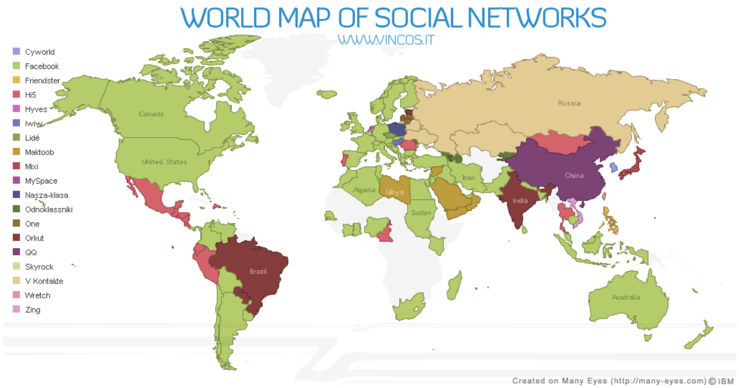

Figure 3. World Map of Social Networks

Other organizations are using "nanny net" software to block sites; my own blog has been blocked by at least one organization's software that categorized it as "Occult" or "Substance Abuse" (not a great loss to the world admittedly, but what other more important things is it blocking?).[23] The effect of these restrictions is to limit the conversations in which PD practitioners engage, or of which practitioners are aware when access to sites is blocked by nanny nets —important conversations become invisible.

I've even heard anecdotal stories of individuals taking their personal laptops and mobile dongles to work to get around this blocking and gain access material needed for doing their job. How can these public diplomats be expected to fully engage with an online public when at least one hand is tied behind their back by organizational policy and its approach to technology?

At a time when a number of bureaucracies seem to restrain staff, there is great potential for empowerment, both in terms of organizational culture and technology. While some are already vastly better than others in this area, both scholars and practitioners of Public Diplomacy could also push a lot further (myself included).

Currently, many PD engagements with bloggers are heavily centralized, inviting others "in" rather than getting out and engaging as a peer; leaving the safety of the officially sanctioned walled garden still appears in many cases just a little too risky for more than information dissemination. I argue to the contrary: not engaging in genuine conversation in an external dispersed engagement and merely staying where it is safe carries vastly greater risk. After all, those prepared to "come in" to your safe space may not be those with the opinions you need to be most worried about.

Understanding the dispersed approach and embracing it; ultimately recognizing there are times when going to the bazaar rather than building a cathedral has great potential.[24] Those few practitioners already out there genuinely engaging in a network are to be commended.

Empowering staff

Achieving greater dispersed engagement will require a culture shift, and also empowering staff with the new tools. Once the culture shift is made, and public diplomats set out on a dispersed engagement, some of the important questions will be: with so many possibilities, where will these diplomats go? Should they head to the places they have heard of or go elsewhere, and if elsewhere, how can they find those places?

The tendency to go to those sites you know, while a credible approach, leads to interactions with a particular network that has already been able to raise its profile with government. Another tendency is to focus on news sites to offer alternative interpretation, focus on accurate information or engage in rebutting particular perspectives, again credible and uses an important coordination point. However, the ability to branch out to engage with networks that are not coordinating around these points requires an understanding of the way information flows through the network. It also requires PD to develop an awareness and understanding of conversations which up until now have been invisible due to various factors, including those described above.

Mapping the environment

There are a few easy ways that this can be achieved. Some are seriously high tech solutions, complex and potentially high cost, while others are longer term projects, such as mapping the Iranian, Arabic or Australian blogging public.[25] Further examples are based on the centralized collection of information to understand the development of a network over time.[26] These and other dynamic models are credible and powerful, but largely beyond the means of the busy and resource poor public diplomat who is attempting "credit crunch Public Diplomacy," as Caroline Jaine from *Imediate* recently called it.

There are, however, a few easy tools open to any practitioner which can provide an insight to aid engagement when some of the analysis noted above may cost more than the entire project budget. An additional advantage is that these tools can be used by people who have very little prior knowledge or training.

Tools

Among the many tools on the Web, the following are three possibilities for public diplomats to consider, using the network of bloggers about Public Diplomacy as an example:

1. Find the hub points in a network that are collecting or aggregating information and ensure they are receiving your information (either through linking, in the hope of tracking back, or direct contact—which may or may not be successful depending on the particular culture).

   How?

   Some of these hubs can be found through Conversation tracker (blogpulse)—for example, a quick search for "Public Diplomacy" will likely provide a couple of insights.[27] Results will depend on the search parameters set, but most likely they will demonstrate which sites regularly continue a "conversation" through linking to pieces posted by others. This may take the form of commentary or providing content aggregation (e.g. John Brown's Public Diplomacy Press and Blog review).[28] This will demonstrate a particular type of hub within the network. Chances are others are using these sites as a place to find aggregated content, and as such they represent a useful point at which to engage the network.

2. Understand how search engines see the Web. This has the advantage of providing a particular perspective on how pages or places relate to each other online. The downside is that this is certainly not a complete picture, but as many people are guided by the way search engines see the world, it is a useful insight. Specifically an individual can understand what else users might be directed to when they search for a particular term, and what may be related to the work of an organization but as yet not recognized by it? This can be a fairly blunt tool at times, but equally can throw up out some useful suggestions of areas in which to engage.

How?

TouchGraph offers one possibility which "reveals the network of connectivity between websites, as reported by Google's database of related sites."[29] Figure 4 demonstrates the connections produced by a search for "Public Diplomacy."

Figure 4. Touch Graph

A public diplomat faced with having to identify useful hub points for online engagement might find this tool useful for providing some start points when leaving the safely walled garden of centralized engagement. (A very limited variation of this could be attempted through Flickrgraph.)[30]

3. Once the engagement has begun, the second option can be taken a step further if other tools are available. Specifically, with only a little resource it would be possible to map the network with which you are currently engaging to see who else is acting as hub points in the network.

   One option to achieve this is to map the incoming links to a series of sites. This can provide an insight into who is directing traffic toward a particular site operated by the PD organization. On the map other individuals or hubs with which an organization can engage in future may become evident. Some may already be known to the organization, others may not; however, it matters less whether they are known to the organization and more that they are known to others dispersed throughout the network with which the organization may not have direct contact.

How?

To demonstrate this method I enlisted the help of MountainRunner, the CPD Blog, and Enduring America, and used data from my own blog, Wandren PD.[31] The data used here are via Google's database on incoming links to the top level domain, a site provided to the site owner via a Google Webmaster tool in the form of a CSV download of all incoming links. Google will also provide a different form of this data through a search, although the format is less easily usable.[32] Once the data are gathered they can be mapped. Figure 5 shows incoming links to the CPD Blog, MountainRunner, Enduring America and Wandren PD, each represented by a sphere on the map.[33]

The resulting image shows the links to each of the sites that provided data in 2009. The image also identifies those sites which are linking to the front page of each of these blogs. Each large colored sphere represents one of the sites that shared data. The color and position of the small dots is determined by which of the sites that particular Web page has linked. The resulting clusters around the larger spheres demonstrate all those pages which link to that site.

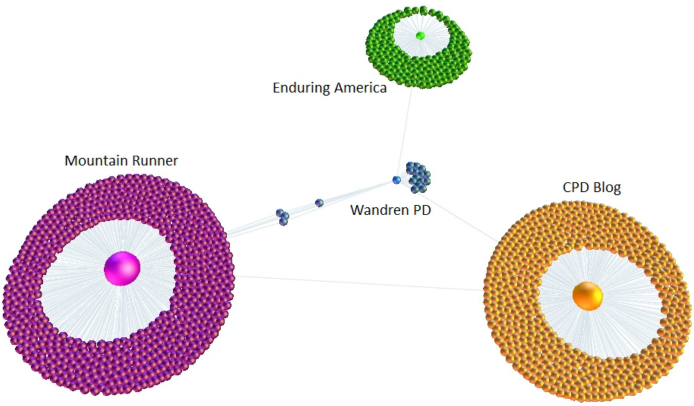

Figure 5. Mapping link data

> This analysis could be expanded to show the links to all posts on the blogs, giving a greater understanding of the interaction in the network. The current map demonstrates the interaction between the networks. It also highlights the importance of not merely focusing on size. Traffic and attention are unquestionably important, but only taking a centralized view of a site's stats can ignore the potential of a dispersed approach and lead to missed opportunities.
>
> In a dispersed approach, importance is placed on small sites providing connections between larger sites, Wandren PD in this case. Furthermore, while not particularly visible here, the potential exists to use the sites run by a PD organization to triangulate other blogs working in the area and connecting different networks together or acting as key nodes of influence in the context. This can improve the understanding of the networks with which an organization seeks to engage, providing access for practitioners with limited experience of this context to some of the knowledge which the "in group" would hold.

Looking deeper into a network

This process could have two extensions. First, is understanding the links to key sites online. This can utilize some free-to-use SEO tools to further understand the online environment.[34] For example, this could be used to visualize those sites that are linking to the front page of a range of websites, to investigate who else is actively producing similar material. This is different from the discussion above, as you do not need to have control of the blogs/sites. However, the level of detail will be slightly lower (unless a large amount of time is allotted to it).

Figure 6 visualizes the links established to a number of blog sites discussing Public Diplomacy. The sites were generated through a search for "Public Diplomacy" on google.co.uk. Sub-domains were removed from the listing so only top level domains were used. This map includes Foreign and Commonwealth Office, MountainRunner, Dipnote, Wandren PD, John Brown's Public Diplomacy Press and Blog Review 2.0, and the CPD Blog.

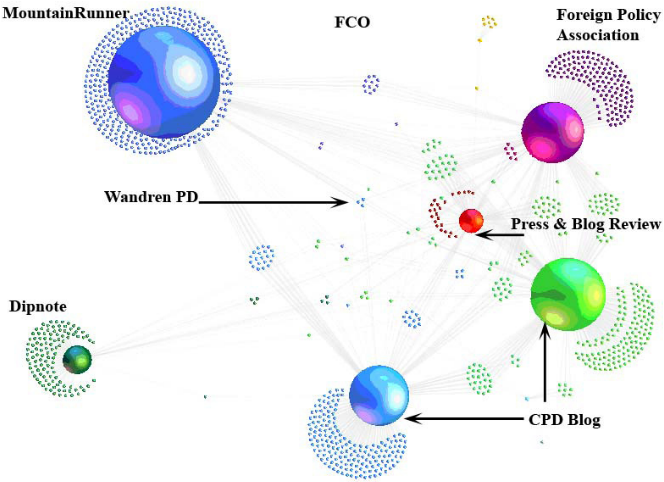

Figure 6. Mapping using SEO Data

The large clusters around the edge of the image are sites linking to only one of the sites. The smaller clusters between the larger groups have links to more than one of the sites/blogs. The CPD Blog appears as two spheres because the new blog site had recently been launched when the data were collected. If the map were displayed with each node labeled it would be possible to see the key nodes and to understand to an extent their position within this network. This would allow a PD initiative to target particular members of the network to increase its odds of success.

The second extension can allow scholars and practitioners to identify communities using Twitter, and to identify communities where there is overlap and those where conversations are happening in isolation from other communities. This can support Public Diplomacy by mapping the environment in which these initiatives are taking place. Figure 7 shows communities using different #tags in the month after the Iranian election. The map uses a #tag as the central point of each of these clusters. Figure 8 shows the same network five months later.

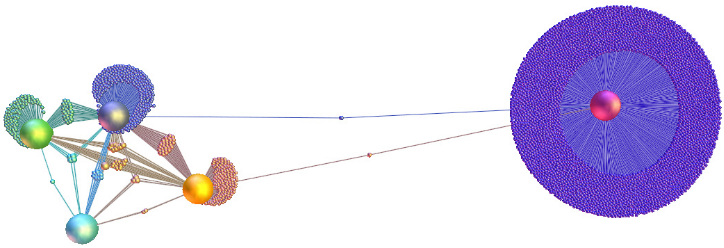

Figure 7. Mapping Tweet Data

Visualizing this information means it can be interpreted quickly. On the right of the image some of the communities overlap and some individuals are posting to numerous tags. There is also a large network, on the left of the image, which is largely isolated and has only two links to the interwoven communities on the right of the image. Using such images in Public Diplomacy could ensure that any use of Twitter is focused where it was intended rather than interacting with an isolated group, believing the communities to be interconnected.

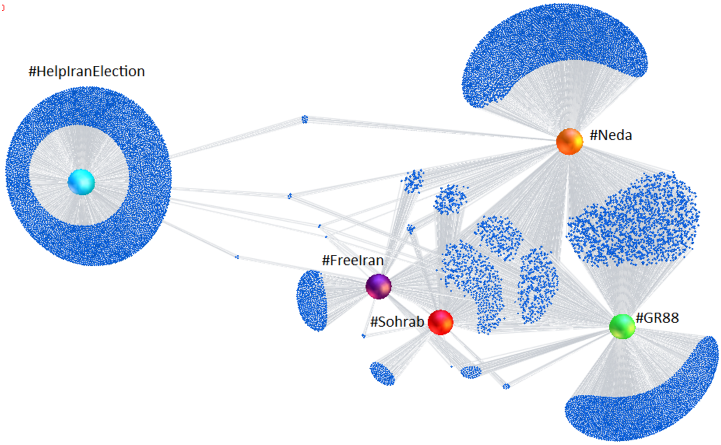

Figure 8. Mapping Tweet Data 2

As with everything online, there is a rapid evolution of the tools and means of communication available online. Many social networking tools now come with an API (application programming interface) which allows other programs to interface with the operating system of the social networking platform to, for example, request information.[35] This provides the ability for programmers to develop their own programs and tools which interact with Twitter or Facebook among many others. This provides the ability to access data about the themes, individuals or issues and communities with which a Public Diplomacy organization seeks to interact.

Trendsmap can demonstrate the location of people talking about particular issues. Figure 9 demonstrates the location of those tweeting about Pakistan at the time of writing.[36] It has the limitation that not everyone has geo-location data enabled on their Twitter account, nor do those stating their location give their actual location. Some users will provide locations such as "the world" or "earth" or, as some users did following the Iran Election, change their location to Tehran as an attempt to confuse anyone trying to target individuals tweeting from Tehran. Despite the limitations, *Trendsmap* can help a practitioner whose role relates to a particular geographic region to understand the relationship between tweets and location.

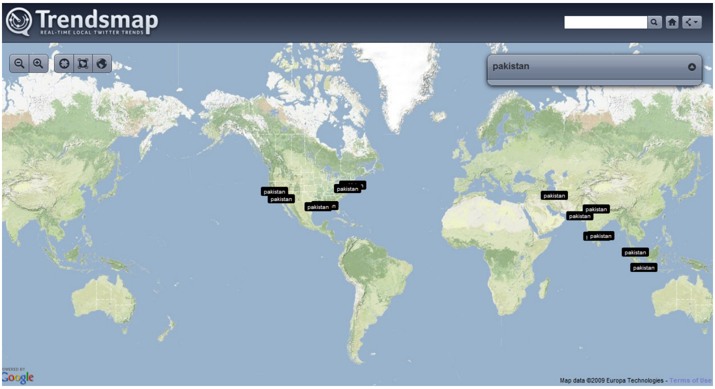

Figure 9. Trendsmap

Mentionmaps, produced by Asterisq, is a Web app for exploring your Twitter network.[37] Through this tool an individual can discover which people interact with each other and what they're talking about. This starts by inserting a username (not necessarily your own) and *Mentionmap* identifies whom this user is interacting with. A practitioner or scholar can identify the users and themes with which a user of particular interest is engaged. For example, Figure 10 started with MountainRunner (blue) and shows recent interaction with Comops, AndrewKneale and PriceFloyd (orange). *Mentionmap* also demonstrates the people and #tags with which those users are in turn interacting (grey). This can be used to quickly identify networks which interact on Twitter along with an indication of the themes the network coordinates around, so any Public Diplomacy effort can be enacted with greater focus.

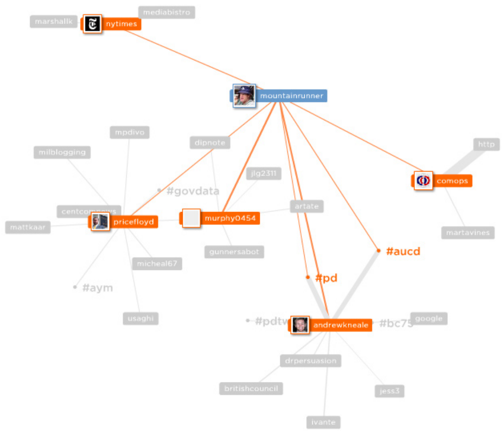

Figure 10. Mentionmap

Tweetstats can help understand when an, account is particularly active, along with which people are most likely to re-tweet (RT) messages. This can be useful in understanding when and how to engage with key nodes, but could also be used to analyze the way Public Diplomacy organizations use accounts.

Figure 11a shows the use of Twitter by America.gov: top shows tweet volume by month, below the most common time of tweet, while on Figure 11b are those to whom America.gov sent direct messages, RT and the interface used to access Twitter. There are many other apps which use the Twitter API to represent data; most have the advantage of being Web-based, thereby getting around IT systems that limit the ability to download programs, and they have the ability to be accessed almost anywhere. Finding the right combination of these tools for the particular Public Diplomacy initiative can provide greater understanding of the network with which the organization interacts. This analysis in turn has the potential to increase impact for an organization and allow for more effective use of limited resources. Other apps such as *Twitter Grader* or *Twinfuence* provide further insight into influence of particular Twitter accounts.[38]

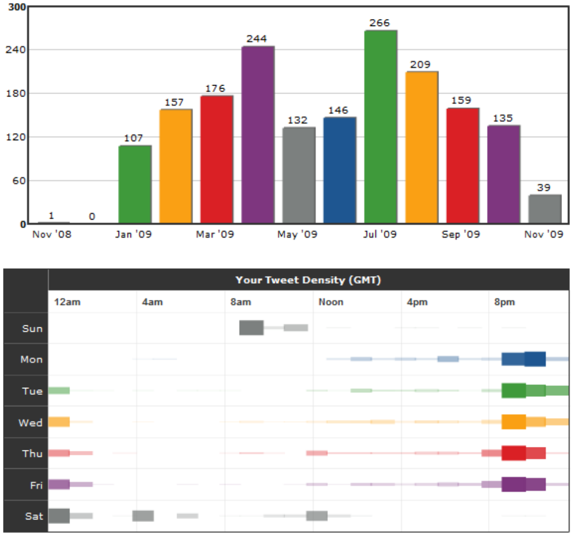

Figure 11a. Tweetstats

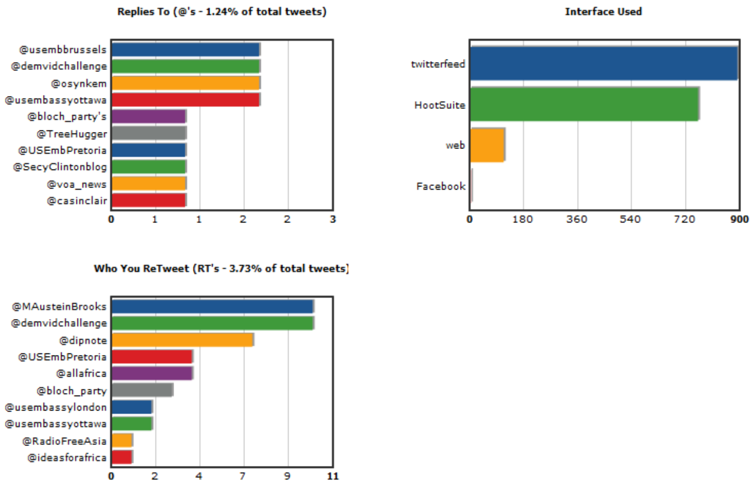

Figure 11b. Tweetstats

This type of Web-based analysis is not limited to Twitter. The Facebook API also provides the ability to understand networks with which you are interacting. For example, Web-based analysis can be used to identify the individuals a user engages who also know each other. This can be done through online tools such as *Social Graph*. Alternatively, data can be extracted using *My online social network* and visualized using mapping software.[39] This type of mapping opens the potential use of numerous mapping algorithms to visualize different perspectives on the network and a possibility of combining information from different accounts.

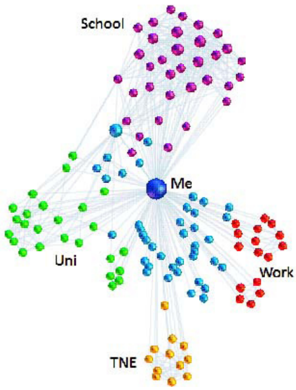

Figure 12. Mapping Facebook

The ability to understand who in your network also knows each other can allow an organization to identify clusters related to particular interests, themes or events. In Figure 12 different colors have been used to represent the different clusters from my own Facebook network using data extracted using *My online social network*. This has the potential, if practitioners have large networks on Facebook, to demonstrate how their contacts have clustered together and may turn up a few surprises about who knows who. Extracting the data through the Facebook API also allows the networks from numerous accounts to be combined. This would allow an organization to begin to analyze its network on Facebook and offer the potential to identify key nodes of influence that exist within that network.

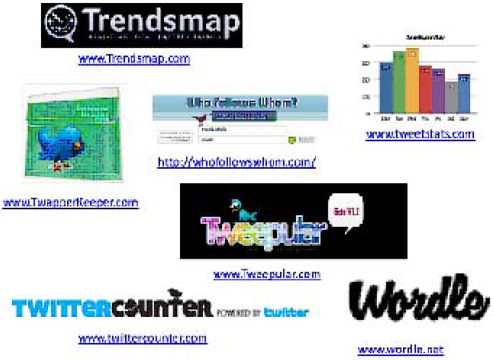

Figure 13. Further Tools

There are many tools freely available online which can provide the data and even a means to represent or analyze that data (some examples appear in Figure 13). This provides a wealth of possibilities for those on the ground to find the particular tool that meets their needs, rather than waiting for a catch-all "corporate solution" which may not be as flexible, rapidly available or directly applicable to the task at hand.

Conclusion

As PD 2.0 and social networking become commonly used approaches to extending influence, the importance of understanding and visualizing these networks will grow. Identifying nodes of influence and taking a holistic approach to stakeholder engagement are increasingly identified as important elements of Public Diplomacy and strategic communication.[40] As a result, finding means for practitioners and scholars to easily visualize these elements will continue to be of pressing concern, similar to the importance of mapping the communities with which an organization engages in the physical world. Empowered by easily accessible information, public diplomats can begin to make decisions about engagement on the basis of a richer understanding of the online environment in which they interact.

The information and these tools are out there and for the most part freely available. My hope is that many international actors are already engaged with much if not all of these tools, but my fear is that examples of genuine engagement, rather than micro-broadcast systems, are the exception rather than the rule.

This is not an attempt to provide a comprehensive overview of the available tools. It merely identifies a few examples of various tools available to demonstrate the deeper point that they can explain the nature of social networks with which a Public Diplomacy organization engages. It equally is intended to suggest possibilities for using the tools; these are not gadgets for gadgets' sake but, as the following sections further demonstrate, visualizing the available data can be used in both strategy and evaluation. Individuals will have their personal favorites. Different tools are more useful for different purposes, and some approaches will suit some organizations more than others. However, whichever gadget or tool is used, the key element is that finding the appropriate method to understand the networks with which an organization interacts can empower practitioners to have greater impact at the level of practical day-to-day engagement. Looking beyond the gadgets and focusing on the networks will provide a means to understand ongoing interaction as the technology continues to evolve. However, I'm afraid Public Diplomacy organizations are still culturally, bureaucratically and technologically limiting their staff. As MountainRunner put it: "It would be great to be wrong. Prove me wrong."[41]

Part 2: A network based approach to resource mapping, information coordination and planning at the strategic level

It has taken some time, but in the face of new challenges—and the availability of new technologies—governments are, at last, facing up to the crucial policy value, both domestic and foreign, of networks. This extends well beyond the level of day-to-day practice, to visualizing a network to aid strategic level planning. The April 2009 Strategic Communication Science and Technology Plan from the U.S. Department of Defense, for example, highlighted the perennial challenges of interagency interactions and the need to equip for an evolving information-based future.[42] The challenge faced working across government agencies is further expanded by the recognition that governments have been gradually losing their grip on communication with communities abroad.[43]

The Defense Science Board has also stressed "the need for people and organizations involved in [Strategic Communication] to share both data and results across the entire community."[44] This need has arisen because "many federal, state, and local nongovernmental, corporate, and individual enterprises originating in the United States are involved in strategic communication with foreign audiences."[45]

The Department of Defense was not the only one to recognize this. Condoleezza Rice, when Secretary of State, argued: "The solutions to the challenges of the 21st Century are not going to be met by government working alone. They come from all sectors of American society working together."[46]

This need for coordination and a holistic approach to engaging across departments, and with stakeholders outside government, was also reemphasized by the White Oak Recommendations, which called for greater coordination and a "quarterback" for PD to enforce and facilitate this coordination.[47] These attempts at fostering coordination, including the Carter Review in the U.K., focus predominantly on bureaucratic responses to overcoming the silos, "organizational stovepipes" or "departmental rivalry."[48] An alternative, in line with a holistic approach to stake-holder engagement, would be to take a network based approach to understanding the use of resources and the communities with which government engages. Information is one of the keys to coordination with both government agencies and the private sector. The ability to visualize this information and rapidly identify opportunities for coordination provided by network analysis has potential to multiply the impact of Public Diplomacy initiatives. For years now the importance for an individual to engage in networking to get ahead has been understood; the network is equally important for organizations in their strategic decision making. The alternative is that impact will continue to leak away through gaps in an organization's knowledge.

Humans huddle: The benefit of a networked approach

Knowing which groups you work with and with which communities you engage is essential when preparing for an information based future and when facing the challenges of the 21st Century.[49] Mapping the network of communities with which an organization has contact should form a central part of the wider planning for Public Diplomacy and related communications. This is ultimately because network mapping allows an organization to easily see what resources, broadly conceived, it has available.

Humans huddle; we all live in networks and any data we receive, from orders through a chain of command, to gossip, emails and social media, are the result of information flowing through networks. Each of these networks will huddle around particular places, interests or behaviors which give the network its specific nature. Recognition of aspects of similarity (homophily) and coordination effects can have strong influences over human behavior and the resultant flow of information.[50] As a result, an organization's attempt to engage and influence a community should be conceived in network terms, as this is the mechanism upon which the flow of information rests. Considered as a network, information can then be visualized through network/data mapping to allow timely dissemination of information to the relevant parts of an organization, to inform their work engaging with key nodes of influence.

An organization using a network mapping approach can empower its workforce to identify duplication, validate potential cost efficiencies and recognize opportunities for information sharing to multiply impact, scale up programs, and foster best practices.

Network mapping and network analysis may initially appear abstract. However, they are actually graphical representations of real world connections as demonstrated earlier through Twitter and Facebook.

Practical application at the strategic level

While being able to map your friendship network might be of only personal interest, mapping and visualization of data can result in significant progress on key issues and challenges for an organization, corporation or Public Diplomacy strategy.

One of the most important historical examples is the work of 19th century physician John Snow mapping Cholera deaths, leading to the identification of the likely cause of an outbreak during 1854 in London.[51] Through his work and the production of a data map,

Figure 14, he was able to identify the community water pump in Broad Street as the source of the outbreak; there was a marked reduction in deaths from cholera after the handle was removed from the pump.

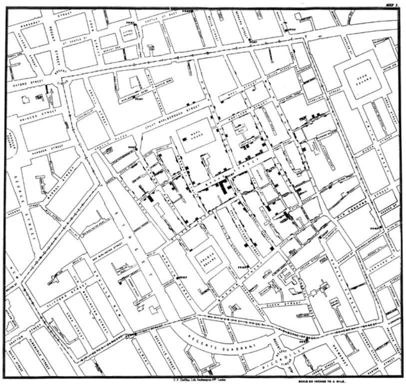

Figure 14. John Snow's data map of Cholera deaths

Results like these, achieved using data maps, are also available to the governments and NGOs of today as they seek to pursue their objectives by engaging with numerous communities around the world.

Network analysis can achieve greater impact because mapping provides a better understanding of how key individuals or communities get their information and the themes the users define as important. Mapping can also show the links between different communities to identify key nodes of influence. As a result, an organization can make informed decisions about which initiatives reach the same communities and which operate largely in isolation from each other. This can reduce the potential of projects coming into conflict due to their differing emphasis, and identify areas where projects could collaborate to multiply the impact of the individual initiatives.

How can this be used to increase success in Public Diplomacy? Of the many possibilities, the ability to understand the links between and influences on bloggers, given the increasing focus on digital engagement/PD 2.0, stands as a tool that could greatly empower officials seeking to engage with a community online. Similarly those seeking to further understand the use of Twitter may also find such approaches useful as discussed earlier.

Research demonstrating the value of this approach has been conducted by Lars Kirchhoff and others who have been conducting, on a large scale, the analysis of blogs through PageRank or Technorati.[52] Equally, articles in Connections have focused on terrorist networks, highlighting the impact this type of mapping can have on understanding an issue.[53] More recently, approaches in this area include the mapping of the Iranian, Arabic and Australian Blogosphere, along with an analysis of the networks between bloggers in U.S. Cities.[54]

When these digital environments are mapped, some information gathered from this type of analysis will be intuitive for the in-group immersed in the network: "of course, we all read X and naturally we all have Y on our blogroll, but Y doesn't have us on theirs." Other things can be assumed or worked out, while further information comes as a surprise and may seem counterintuitive.

However for an outsider to the network, this "insider" knowledge is harder to come by. Understanding the network can develop over time through engagement, it could be explained by a friendly/co-opted member of the network, or uncovered through a network analysis. Most likely, the best approach would be a combination of the three, as firsthand experience or information from a participant will provide an introduction to certain cultural norms and expectations. However, network mapping and analysis are also important, as the understanding of the network provided by an individual member will be colored by their perspective and may be based on assumptions which the network mapping demonstrates to be untrue. Equally, when approaching a friendly insider it may be hard to know whether the individual is at the core or periphery of the network and their status can influence the degree of credibility with which their perspective can be taken to provide an overview of the wider network.

Mapping bloggers and a blogosphere in this way can provide an understanding of the context in which a Public Diplomacy initiative might take place. Equally, it can be used as an evaluative tool to assess the extent to which an initiative designed to develop a network of bloggers has managed to successfully stimulate ongoing links between these individuals. An alternative would be to map the position of a blog which had been created as part of a Public Diplomacy initiative. This type of mapping could be used to investigate which other bloggers were engaging with or referencing the blog in their own writing.

While these varied approaches to using blogger analysis to demonstrate linkages and tendencieshave many different potential applications, their use for evaluation and online engagement are discussed elsewhere.[55] Mapping resources online may be easier, due to the way information is maintained; however, the potential of applying network analysis to resource mapping is equally applicable to Public Diplomacy initiatives in the physical world and those that engage across both spaces.

How Can Network Mapping & Analysis Help?

Focusing on the resources available both inside the organization and outside can provide a better understanding of the options available when designing or refining an initiative. In a similar manner to the inverted power relationship in listening exercises, an organization can identify its options more effectively and achieve greater impact from the resources allocated to an initiative if they map *all* the available resources. This is only possible through the greater understanding of the community with which they seek to engage.[56] In doing so, programs can make more efficient use of resources and potentially have higher impact.

Example of mapping

The importance of effective resource management has been recognized and promoted as part of the United Nation's FAO assessment of soil nutrient balance.[57]

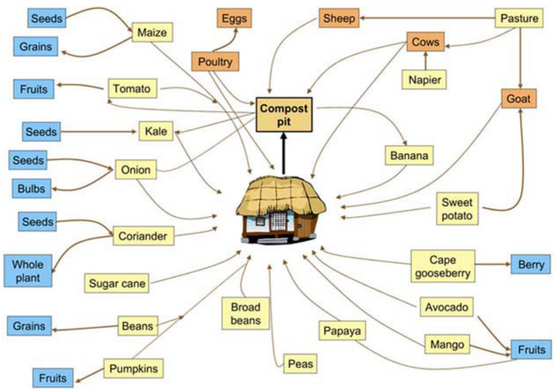

Figure 15. FAO Assessment of soil nutrient balance

In Figure 15, "waste" is heading to the compost pit, from which it will re-enter the system at the start of the process of growing crops. In communications terms, this waste may be individuals who were participants in projects that are finishing or had a finite length of engagement with a community, for example a fixed length exchange program or a touring exhibition.

Developing contact, networks and relationships with these communities is an investment. Building a map of resource deployment and engagement provides a means to recognize where this "waste" would occur and find ways of channeling it into other initiatives if desired. As resources become restricted in the current economic climate, the ability to do more with less will become a common mantra; visualizing the network can support the process of creating more effective engagements with reduced resources.

Improving network engagement in Public Diplomacy

As John Hagel highlighted in Net gain; expanding markets through virtual communities, "*Success in the virtual community business hinges not on technology-driven differentiation but on strategies designed to accelerate member acquisition and to create deep understanding of the needs of those members.*"[58]

The same argument can be made for the network visualization of internal resources and external contacts in physical or virtual communities. An organization must be able to identify (and share either internally or with allied organizations) useful information about the communities engaged by the range of projects across a country or region. Understanding which communities are being engaged can support the attempt to identify nodes of influence through network analysis as the Defense Science Board argued.[59] Understanding the methods and to what end communities are being engaged can provide information for strategic decisions to be made about the effective use of resources and the increased impact of initiatives.

The utility of resource mapping can be demonstrated in two examples. The first, conducted by Mappa Mundi Consulting, is an internally focused analysis of a client organization that identifies which part of the organization was in contact with different communities, allowing for coordination and cooperation.[60] The second example looks at the external environment to provide information about groups with which an organization could potentially engage, in this case on Twitter following the Iran election.

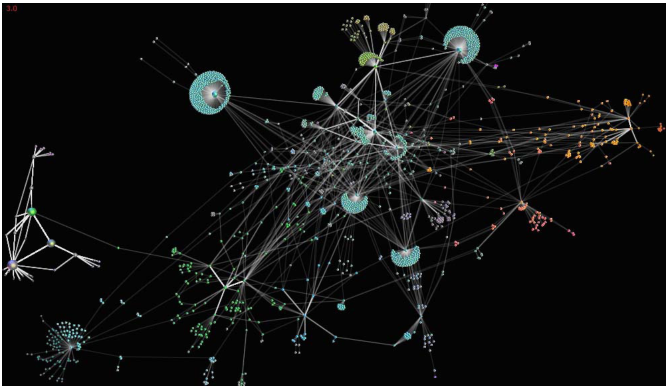

Figure 16. Project and contact mapping

The mapping exercise analyzed the communities across a country with which the government engaged via numerous agencies. As can be seen in Figure 16, the result was a complex network which had a number of key nodes of influence (nodes were not just individuals in this process but values including location, education, religion, organization or institution). Through this process it was possible to identify organizations or individuals with which various government agencies were engaging. This helped to identify potential conflicts in priorities and created an opportunity for these groups to collaborate or coordinate to increase impact or create more efficient use of resources.

The clearer lines demonstrate greater levels of contact between these nodes. Concentrations of color demonstrate the high density of connections to and around certain points of contact. These may be physical locations, but may also be delivery partners or a community defined by their religious beliefs or ethnic origin. Through this network based approach, key communities or organizations can be identified. Their importance may be due to their network position or status in society, but as these vary between different operational environments each interpretation of importance in a network is specific to both the context and purpose of a project. This physical world mapping has clear overlap in terms of understanding resources of potential contacts with the network mapping of the Blogging public.[61]

Just as John Snow not only identified the most likely pump affected by cholera, he also investigated why some people living by the pump survived and some much nearer to other pumps were dying. Similarly, modern day network mapping of resources can be put to further uses. Through the process of building network maps it is also possible to identify budget, resources, or audience type by geographic region, Figure 17. Communities can be segmented by the types of projects in which they have been engaged or the predominant gender, ethnic, religious or occupational foci of the project.

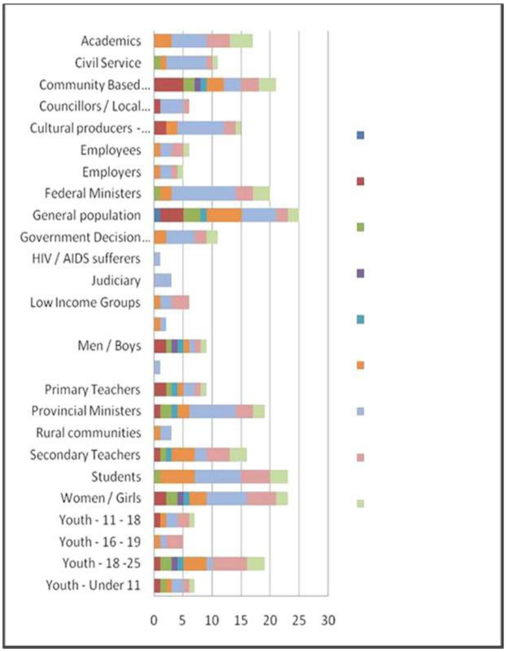

Figure 17. Audience type by area

Figure 18 shows the number of projects reaching each audience type. As a result, if in refining operational priorities a particular audience is considered important in a region, it is easy to see whether that audience has previously been engaged.[62]

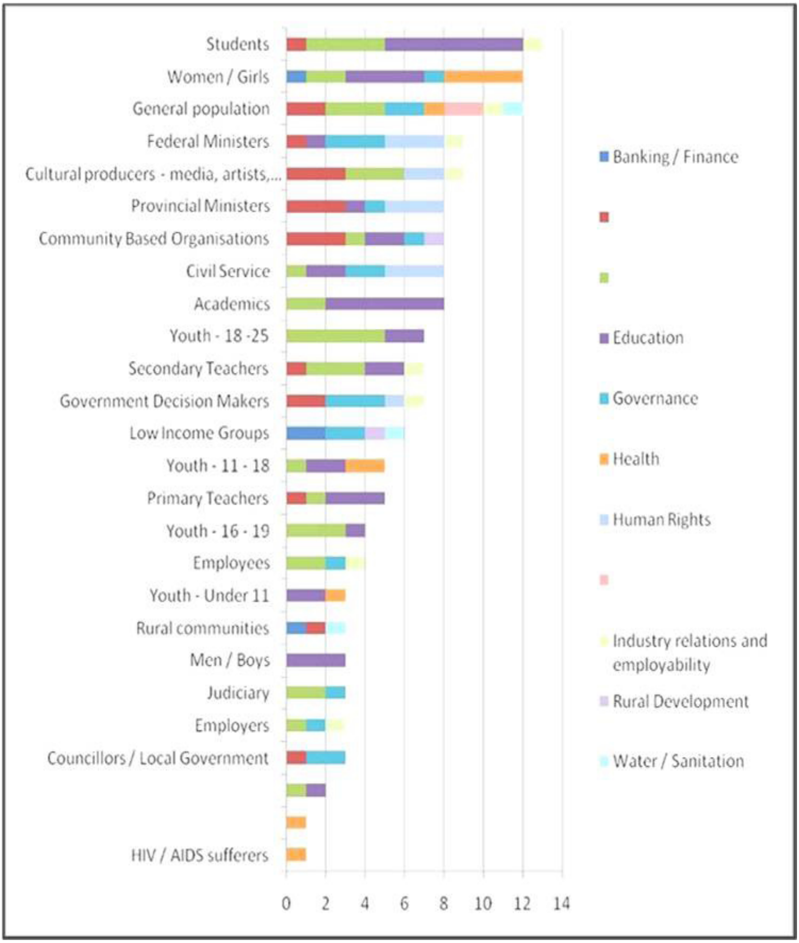

Figure 18. Audience type by project

Finally, if a type of project or particular issue were to become particularly important, Figure 19 could be used to investigate the extent to which projects and what type were already being run in that region. Along with the ability to show budgetary spending by geographic location, these charts can provide means to ensure that projects and resources are being focused in the correct direction. Should multiple projects be engaging the same audience type in the same region, network mapping can ensure this is identified and eliminate unnecessary duplication.

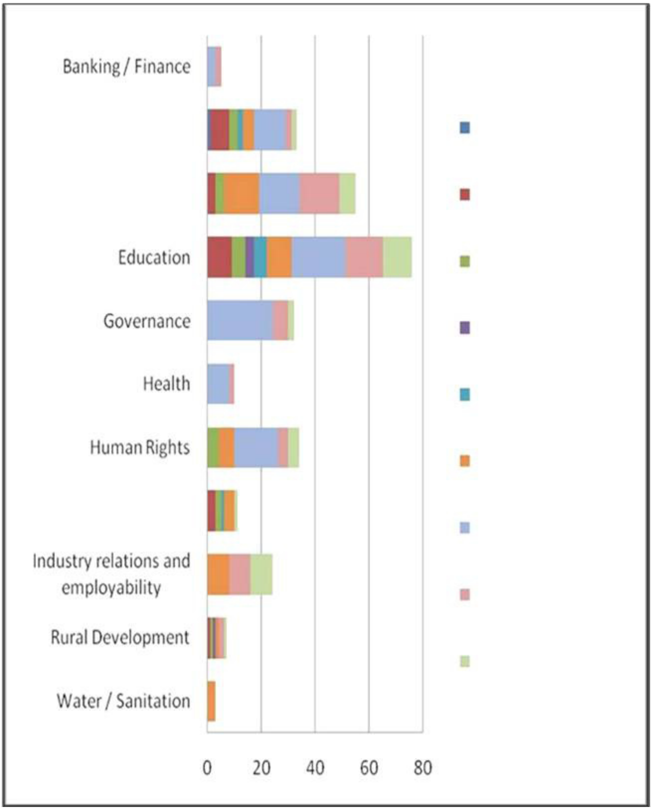

Figure 19. Projects by type

This network based analysis provides a means to identify duplication, validate potential cost efficiencies, identify opportunities for information sharing to multiply impact, scale up programs and foster best practices. Furthermore, the impact of cutting certain projects could be mitigated by identifying other projects toward which those communities could be directed, if that were desired.

New toys: reducing waste

Once the resources invested in engaging communities have been mapped, in either physical or virtual worlds, they can be visualized to identify efficiencies, duplication and opportunity for increased impact, ultimately to ensure resources are not wasted.

Beyond simple examples such as overpaying for a service, what is waste in Public Diplomacy? One source of waste is failure to build on past engagements with communities or organizations—in part due to a failure in information management. Calculating cost per member added to a network created or engaged by an organization would focus minds on the need for more effective network analysis and information management in Public Diplomacy.[63] Developing a network of contacts is an investment which is wasted if an organization fails to follow up the initial engagement with further programs in that community.[64]

The simple process of reducing or eliminating waste is more important than investing in the latest tool for engaging individuals through social media. When launching a new initiative, many individuals can be reached using new tools and social media toys. However, it would be more effective if individuals who had been in contact with the organization before were treated as returning 'friends' rather than lumped together with those for whom it is the first contact. Using resource mapping, individuals or communities with which an organization has had contact in the past can be identified and engaged with the potential of providing links into previously unengaged networks.

Figure 20 is a network map from a project tracking Twitter users concerned with health related topics. The process would work with any theme people tweet about, but this image is used to show a “real world” application rather than a theoretical possibility.

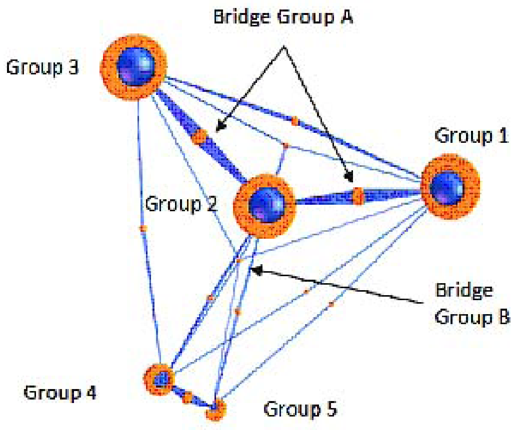

Figure 20. Network map

Each orange dot represents a Twitter user and the blue dots represent the #tags they use to identify the theme of their tweet.

If an organization has spent time in the past engaging with group 1 through Twitter, they can neither assume they have been communicating with the members of groups 2 to 5 nor should they merely start again in their engagement. Effective resource mapping would allow them to identify the groups which could provide a bridge into other networks. The importance of engaging with those providing a bridge into the community rather than attempting to project across cultural barriers has been discussed further by R.S. Zaharna in The Soft Power Differential.[65]

In Figure 20, Bridge Group A would have already been engaged as part of group 1 and could work as the bridge into group 2. Bridge Group B would provide a similar link from group 1 to group 3. With this information, resources could be targeted at members of the bridging groups first, with the aim of allowing the content of the initiative to enter groups 2 and 3 via the bridge groups. Furthermore, if targeting group 4 directly has little impact, a strategy could be created to engage group 5 first, through those individuals who bridge across to group 4.

The second example, an externally focused assessment of resources for example groups with which an organization could cooperate, maps #tags used around the Iranian election. Figure 21 demonstrates what those key nodes and bridge groups might look like in a real-world example. It would, for example, be little use to be communicating with those using #HelpIranElection if those you wanted to reach were actually predominantly using #GR88. Equally, there are a few bridge groups, the largest being between #Neda and

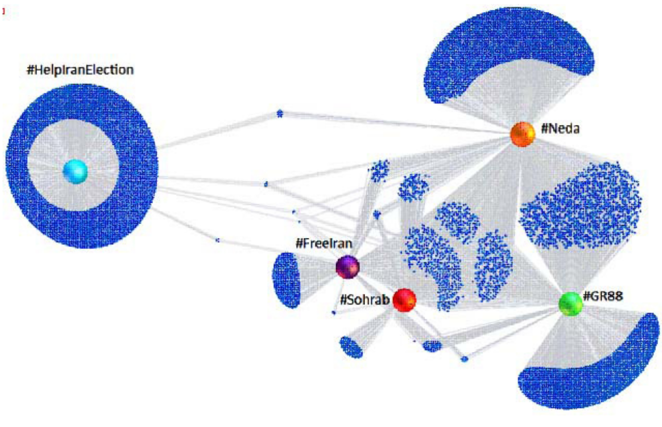

Figure 21. Tweet data after Iranian election

#GR88, which might be useful to engage if their objectives were to align with those of a Public Diplomacy organization. Once the data has been prepared for the network mapping, further data can be visualized which would also aid decision making. For example, the content of the tweets could be analyzed to identify common themes, words or users.

A frequency or cluster analysis could be conducted to identify key words or phrases. An easy way of rendering such data might be through a word cloud; an image that shows most common words used in a text with the most frequent words appearing largest. Figure 22, created through wordle.net, demonstrates a basic analysis of the most common words appearing in tweets using #Sohrab. The size of the words represent their frequency, with a large amount of smaller words giving further detail.[66]

Figure 22. #Sohrab word cloud

The difference in content can be rapidly seen when a comparison of #Sohrab (Figure 22) and #HelpIranElection (Figure 23) is made. There are fewer small words visible and those commonly used include 1-click, avatar and overlay. The reason for this is that 78% of tweets between June and November using this tag were identical and read:

#helpiranelection - show support for democracy in Iran add green overlay to your Twitter avatar with 1-click—http://helpiranelection.com/

Figure 23. #HelpIranElection word cloud

The evidence from content supports that of the mapping: the level of engagement is higher by users of #Sohrab, #FreeIran and #Neda than #HelpIranElection. A further distinction between the more engaged individuals and those who were involved with #HelpIranElection can be demonstrated by the average tweets an individual user contributed to a particular tag. In the case of #FreeIran the average tweets per user was 15.4; #Sohrab was 11.99; while #HelpIranElection was used on average 1.09 times—effectively the difference between "1-click to show your support" of #HelpIranElection and genuine engagement.

When deciding which #tags to use, it can be useful to consider how often a #tag is used over time. This may help track when a tag is falling out of use or identify times at which some #tags are particularly active. For example, this can be seen by comparing trends, as seen through the comparison of #GR88 and #Neda,

Figure 24. There are clear points where usage peaks while the overall trend is a reduction in the number of tweets per day.

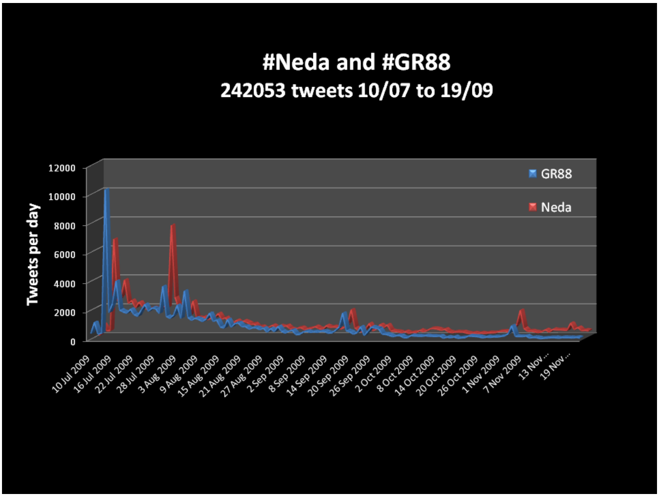

Figure 24. #Neda and #GR88 Tweets per day

This declining trend in usage is also demonstrated by Figure 25 showing the volume of tweets using the popular #IranElection tag. The spike in usage in the days after the election to almost 100,000 tweets a day is followed by a series of smaller spikes during the following two months.

The downward trend presents serious strategic considerations. First, should an organization maintain excess capacity to allow some individuals to be on alert looking for opportunities to interact on trending topics? This may allow an organization to engage while volume is still increasing, perhaps seeking to frame the discussion. Second, would an organization emphasize broad and shallow engagement or deeper and narrower engagement? Would engaging with a "tweet to show your support" tag such as #HelpIranElection have any value? While these may be tactical decisions individually, collectively they require a strategic decision in terms of empowering staff to use their time in the most effective manner and providing them with appropriate resources.

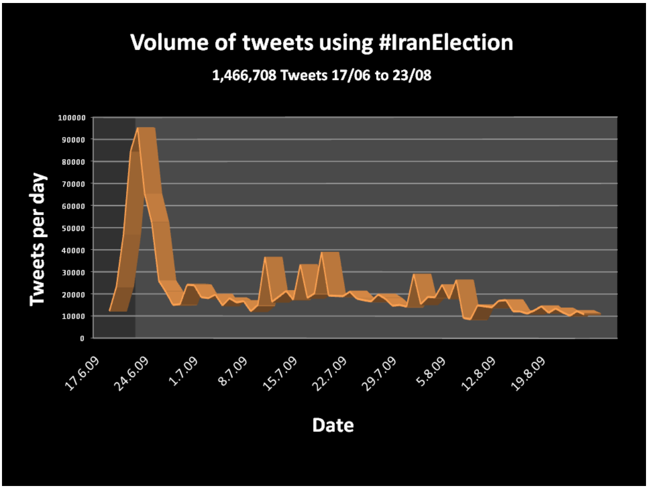

Figure 25.

Conclusion

This type of mapping has many applications; these techniques provide scholars with the potential to study in nearly real time how some initiatives are evolving at an early stage, and analyze how these developments influenced projects over time. Similarly the above examples demonstrate that effective knowledge management and data mapping through network analysis can be effective means of increasing impact and efficiency within the practice of Public Diplomacy through visualizing the available resources. If a Public Diplomacy quarterback is going to be of any use, that person will have to have a way of reading the field quickly; we all know what happens to a quarterback who can't! Network mapping is one way to achieve the ability to visualize the available options.

Just as John Snow applied data mapping to meet one of the great challenges of his age, the spread of cholera, data mapping is a tool available to organizations focusing on engaging foreign audiences in meeting today's challenges.

Part 3 Evaluation: a network based approach

Evaluation has been a growing issue for Public Diplomacy practitioners over the past decade, and one which will become increasingly pressing in the current financial context. In January 2008, the U.S. Defense Science Board (DSB) noted: "Task Force on Strategic Communication recommended that the DoD should make greater use of existing tools and technologies to support strategic communication—tools such as network analysis, machine translation, sentiment analysis, and innovative evaluation and measurement technologies."[67]

This perspective was reiterated in 2009 by the Strategic Communication Science and Technology Plan.[68] The DSB recommendation appears in the above quote to divide network analysis and innovative evaluation. This is more than a grammatical separation; the recommendation to "identify nodes of influence through network analysis" (discussed earlier in the section on resource mapping) is bulleted separately from evaluation. However, given that a large degree of emphasis has been placed on engagement, exchange, working with networks and developing relationships, an evaluation through network analysis would be a logical means of understanding the impact of a strategic communication initiative.

How can this network approach be applied to the evaluation of Public Diplomacy campaigns and initiatives?

The potential applications of network mapping in Public Diplomacy initiatives and campaigns are numerous. These range from creating a strategy for the use of Twitter or social networking sites to evaluating the result of physical world events such as conferences and exchanges. Exchanges Connect attempts to link both physical world and online initiatives, opening up interesting avenues for evaluation.[69] Daniel Kimmage's piece, to Fight Terror With YouTube, and Steven Corman's post on COMOPS have previously presented arguments about the importance of consciously using networks in the contemporary context and understanding the way information flows through these networks.[70] As Steven Corman has argued, this requires genuine contextual understanding as there is a danger of technological determinism if only selective lessons are taken from initiatives which were perceived to be a success.[71]

Much writing about Twitter is largely superficial, for example in reference to the Iranian election and the attacks in Mumbai. Alexander Wolfe's observation of Mumbai, "Never before has a crisis unleashed so much raw data—and so little interpretation," is a useful observation which is relevant to much of the commentary about Twitter.[72] However, the recent articles on Twitter usage produced by Harvard and the earlier in depth analysis in First Monday are a couple of notable exceptions, in seeking to develop an in-depth understanding of the way these networks operate.[73] Using insights from these studies and similar analysis has the potential to increase the impact of Public Diplomacy through Twitter for example.[74]

While there are many potential uses for network based evaluation, the depth of analysis and the approach used will depend on the type of initiative, as well as the context in which it is conducted and the evaluation requirements of the organization. One size or one approach does not fit all; each approach must be specifically focused on the purpose of the campaign or initiative. The case study below is therefore an example of one approach, rather than the only method of application.

Case Study 1: The Network Effect

One application for this type of analysis is to understand the impact of a network building initiative in the physical world, in this case a British Council initiative, The Network Effect (TNE).[75]

The Network Effect was created to "nurture networks between the next generation of leaders." The concept was to use "a variety of methods, learning-by-doing, challenging content, teamwork, and online networking … to sustain a network of future European leaders committed to making a difference."[76]

Given the focus of the project, the evaluation sought to analyze whether the network had developed after individuals had participated in the British Council initiative.

As this project was a direct engagement with participants over a period of time it was possible to use a questionnaire-based evaluation to understand the extent to which TNE had nurtured a network. The questionnaire allowed the construction of a case-by-affiliation matrix identifying which individuals had been in contact with other participants.

This approach allowed a range of questions to be asked to participants to demonstrate the nature of the contact between them. For this evaluation, the elements of specific interest were:

1. Whether participants had contact prior to attending the event.
2. Whether participants had stayed in contact after the event.
3. Whether participants had stayed in social or work related contact.

4. Whether anything had resulted from the work related contact.
5. Whether a participant had recommended a fellow participant to non-participants.
6. Whether a participant had recommended a fellow participant to other participants.

The first priority of the evaluation was to investigate whether a network remained in contact after the conference, Figure 26.

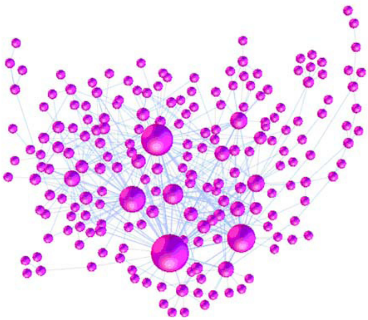

Figure 26. TNE Network

From the responses to these questions, any growth of the network could be identified, in this case those who had contact with fellow participants before and after the conferences.

In Figure 27, color and size are used to identify those with the most contacts, large blue, with the size and color becoming smaller and orange the fewer contacts are identified. A grey line between two nodes identifies contact between the participants these two nodes represent. This demonstrates that while there were a number of participants who were in contact before the conferences, many new connections had been developed, with the network increasing in size and density.

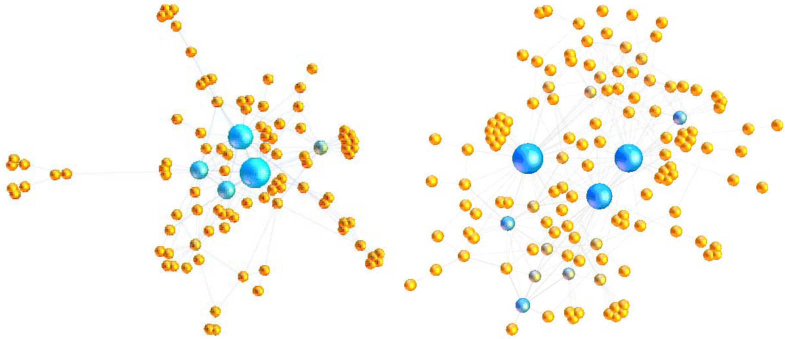

Figure 27. Network before and after TNE events

Along with the nature of the interaction between participants, it is also possible to demonstrate how the network grew following different events. Each event was designated a different color so that ties resulting from the different events could be identified. The growth of the network also increased the number of blue nodes, those with higher numbers of connections. This provides an insight into which members of the network were particularly active in maintaining contact after the event, allowing these participants to be differentiated from those who were well connected already. By analyzing the range of maps which were produced from the questionnaire, potential key nodes of influence can be identified. This insight could be used in the development of further conferences, passing messages to the network with the minimum of direct contact with participants, or in developing new projects which might benefit from re-engaging participants of previous projects.

In addition, the process of identifying the links between participants provides a means to collate the initiatives which resulted from the network building initiative. Evaluation of many initiatives can become centralized in focus and only consider material produced directly from an initiative, as discussed after Gov2Gov. The network based approach of TNE captured dispersed data by identifying the collaborations that resulted from the collaborations between Network Effect participants working independently of the British Council.

Conclusion from Case Study 1

The ability to build a case-by-affiliation matrix and visualize the resulting data provided a way to rapidly analyze or demonstrate the impact of a network based initiative.

This analysis can identify:

- Whether participants are using the network for the intended project purpose.
- Whether the network has evolved over time and which events were most effective in engaging participants in the network.
- Where there are key hub points (or nodes of influence) within the network. This information can be useful not just for the ongoing project, but equally important to be able to recall for projects in the future.
- Whether there are lessons to be learnt from this project which can support more effective planning in future.

With this type of analysis:

- Project planning and articulation can be enhanced through understanding and being able to visualize what success looks like.

- The language of network analysis can support the language of Public Diplomacy, from bridges to sphere of influence, and even Valdis Krebs' phrase, "Boundary Spanners."

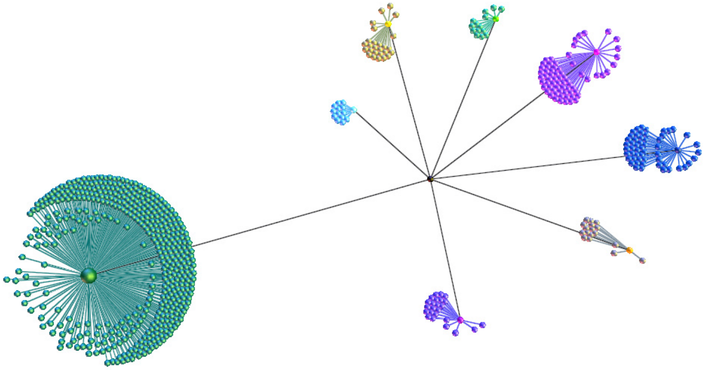

Figure 28. Location of @America.gov followers

Case Study 2: Tweeting America

Many Public Diplomacy organizations and scholars have highlighted the importance of a two-way engagement, usually framed as dialogue or conversation. Many newspaper column inches and blog posts have been taken up discussing the potential for social media including Twitter to facilitate this conversation and to provide a means to allow public diplomats to reach new audiences directly. Unfortunately, many of these articles and blog posts lack serious analysis of the way a PD organization could actually use Twitter in practice and how it would know its work was successful. This can perhaps be discussed best in relation to U.S. Foreign Policy and particularly Dipnote and America.gov.

There have been many anecdotal references to individual engagements and occasionally reference has been made to numbers of followers—for the record, Dipnote had 6,624 followers and America.gov had 2,260 when I first wrote about this in July. Although as Dipnote was following 4,186 people I wonder if they have time to read all those tweets with any degree of engagement, never mind keep track of all the direct messages, replies and mentions.[77] If they cannot deal with this level of interest then the idea of engagement may already be under pressure, or at least the level of resources required to run the initiative may be disproportionate to the return. However, does looking at these numbers thus indicate success? At time of writing, Lance Armstrong had 1,551,850 followers, but is a numbers competition really what a PD organization should consider success when using Twitter?

While numbers of followers can be interesting and Armstrong is undoubtedly vastly outstripping Dipnote and America.gov with pictures of his pasta, this really does not get to the heart of engaging with individuals.

A closer analysis of the geographic location stated by those following America.gov, demonstrates the largest cluster of followers are actually in the USA, Figure 28.[78] The remaining clusters represent data broken down by geographic regions including the Middle East, Europe and Latin America, along with an additional category for those who stated "earth," "the world", "www" or similar.

Visualized through a word cloud, Figure 29, the data for Dipnote show a tendency toward followers in the U.K., and particularly Washington, D.C.[79]

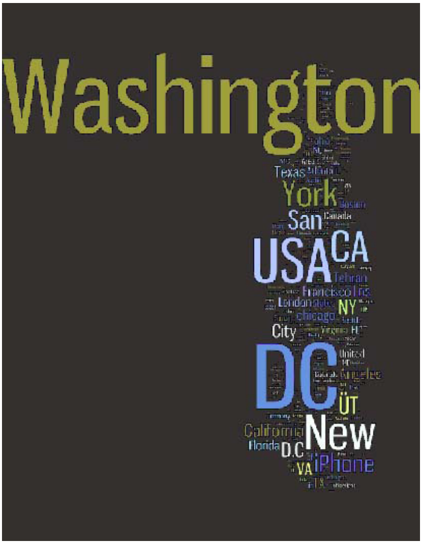

Figure 29. Word Cloud locations of Dipnote followers

Twitter can easily be used as a micro-broadcast system to followers to change events, send out key messages and highlight stories which an organization wants to promote. However, this is a one-way projection approach, not a two-way engagement. It is also heavily centralized, as individuals have to decide to head on over to Dipnote/America.gov to follow these accounts specifically. This approach rarely speaks to individuals around the issues which concern them and about which they wish to tweet, but instead focuses on what Dipnote/America.gov wants to say. Currently there are a few re-tweets (RT), but even these are clearly transmitting similar messaging to the follower group largely from other parts of government. What alternative is there than thinking of Twitter in terms of tweets to followers?

An option is to consider looking at an organization's relationship with the key themes which individuals are choosing to discuss (where they intersect with natural themes for the organization—I'm not suggesting Dipnote should be rushing to comment on Armstrong's pasta). This in effect involves moving away from micro-broadcast or direct message dialogue to becoming part of a wider conversation. This can best be achieved through mapping the network of individuals contributing to particular discussions through #tags.

Mapping #tags

"Hashtags are a community-driven convention for adding additional context and metadata to your tweets."[80] They're like tags on Flickr, only added inline to your post. You create a hashtag simply by prefixing a word with a hash symbol: #hashtag.

Hashtags were developed as a means to create "groupings" on Twitter without having to change the basic service.[81] The hash symbol is a convention borrowed primarily from IRC channels, and later from Jaiku's channels.[82] Importantly for Public Diplomacy, they represent what individuals identify with and what they want others to know their tweet to be about. This is a narrowing of the search from merely searching for a particular subject within all tweets; #tags are based on the conscious identification with a particular group or theme, rather than the potentially coincidental word choice.

Chris Messina wrote *Twitter hashtags for emergency coordination and disaster relief* following the San Diego forest fires in 2007.[83] This shows #tags in their infancy on Twitter, but even then it demonstrated the power of being able to identify a theme/context for a tweet that would allow other users to coordinate around this point *even if they did not follow each other*. Rather than thinking in terms of engaging with individuals, a useful approach would be to engage with themes which the dispersed community decides to discuss rather than hoping people want to hear what the organization wants to say. This would provide a means to create the much talked-up engagement rather than using Twitter to micro-broadcast.

Take for example this tweet from America.gov which appeared while data were being collected; *Got questions about film and democracy? Our @demvidchallenge winner from the Philippines will answer them!* http://ow.ly/i2oF.

No use of #tag at all, despite there being an active #democracy tag available at the time. The likely result is that those using #democracy carried on their discussion without engaging with the winner of the Democracy Video Challenge. This is just one example of the level of isolation which can occur when a centralized approach is taken to engaging with a dispersed community. The wider problem is best shown through a network map of users contributing to particular discussions using that #tag.

The following map, Figure 30, was created using recent contributions to #democracy, #Freedom, #America, #Foreignpolicy, #US, #politics, #Obama, #ObamaGhana, #HillaryClinton and #HillaryIndia.

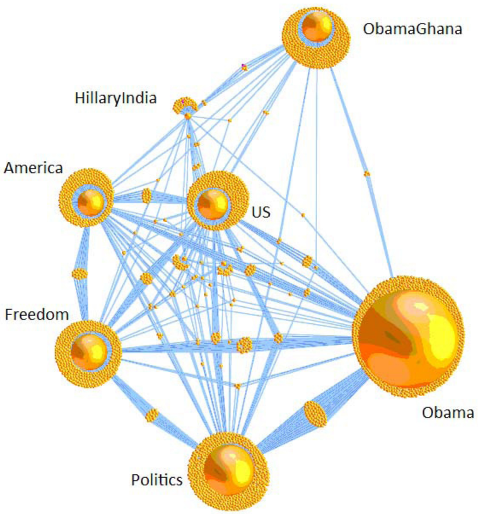

Figure 30. Users of particular #tags

Small orange dots represent individual users while the large orange spheres are #tags. A blue line between a user dot and #tag sphere indicates a contribution to that #tag. The smaller groups between the larger clusters around the spheres are users contributing to more than one #tag. The labels show to which #tag the cluster refers.

Viewing the information in this way, a number of elements can become apparent. One is that the Obama and ObamaGhana clusters have very few individuals contributing to both discussions. Perhaps a result of the Smith-Mundt Act which meant "no SMS updates on the President's Ghana speech for you!"[84]

The final point, and the one which relates directly to Public Diplomacy evaluation, is the position of America.gov and Dipnote. Figure 31, shows a close up view of the network, focusing on HillaryIndia and ObamaGhana. America.gov and Dipnote are identified by the purple dots. They are languishing at the very edge of the periphery of the network, neither linking conversations together nor contributing to numerous themes (which would be positive interpretations of periphery within a network). Instead, both

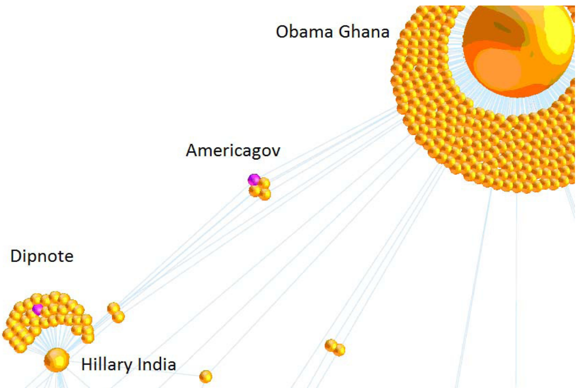

Figure 31. Detail view of image 30

America.gov and Dipnote can be considered within the negative and more colloquial use of periphery: largely unengaged with these discussions between Twitter users.

Simply micro-broadcasting to a small group of followers is not enough. To be fully engaged in a conversation, an organization must consider the way others engage in discussions of particular themes and identify ways to interact with them. Ultimately, these discussions will occur whether or not PD organizations engage in them; at the moment it is clear neither organization is going to have much impact on those conversations using their current approach.

Conclusion from Case Study 2

The benefit of mapping #tags is that it engages with the themes which people are talking about. It seeks to understand the relationship between the organization and individuals discussing certain key topics: whether they are taking part in the same discussions; whether they are engaged in more than one discussion; what topics users recognize as related; and whether organizations are hitting some key conversations and not others. While success relating to behavior change may be difficult at this stage of analysis (although identifying RT/Mentions may be one possibility, along with extensive analysis of tone), the first step in any initiative must be to engage a community. Mapping #tags clearly demonstrates what is going on from a thematic perspective—similar methodology could be used for assessing clusters for geographic location, within constraints of the data.

If Public Diplomacy is to fully engage with social media and Twitter in particular, a shift in operational mindset from broadcast to engagement with networks clustering around themes and ideas will be central to delivering successful initiatives.

Case Study 3: Mapping the Twitter network for a Public Diplomacy organization

This example, Figure 32, demonstrates the mapping of FCO interaction on Twitter.[85] It allows the key nodes to which most people subscribe to be identified. This goes beyond comparing follower numbers, since it identifies the individuals who are following more than one account from the same organization, the bridge groups between clusters.[86] Understanding these groups can provide valuable insight into the interests of individuals who have chosen to take an active interest in a particular organization. This is not to suggest that serious research is done on every individual, but rather to understand those individuals who are particularly active in following an organization, or to follow a particular combination of feeds. Mapping bridge groups can allow an organization to consider refining tweets or strategies for particular feeds. The particular refinements will depend on the organization, its priorities and its network of followers. However, consideration should also be given to a degree of expectation among some Twitter users who consider it a matter of etiquette for following to be reciprocated. This etiquette, and programs such as *Your Twitter Karma* and *Friend or Follow* that allow users to identify those who do not reciprocate, may distort the follower numbers if an organization has been actively following some people who reciprocate to be polite rather than through genuine interest.[87]

When using numerous Twitter accounts deliberately focused on a particular geographic location, an awareness of the groups of users following numerous feeds can create insight to hone the Twitter effort through developing a greater understanding of the interests of followers. Figure 32 demonstrates this through mapping the followers of FCO Twitter accounts focused on the U.S.

Using a map, rather than attempting to compare lists of thousands of followers, quickly identifies the bridge groups, including a small group that is following all the FCO feeds in the U.S. In addition, around a quarter of those following the U.K. in New York account also follow either U.K. in L.A. or U.K. in Orlando. They may be itinerant, however; there may be an alternative reason that an individual would follow the FCO on the east and west coasts.

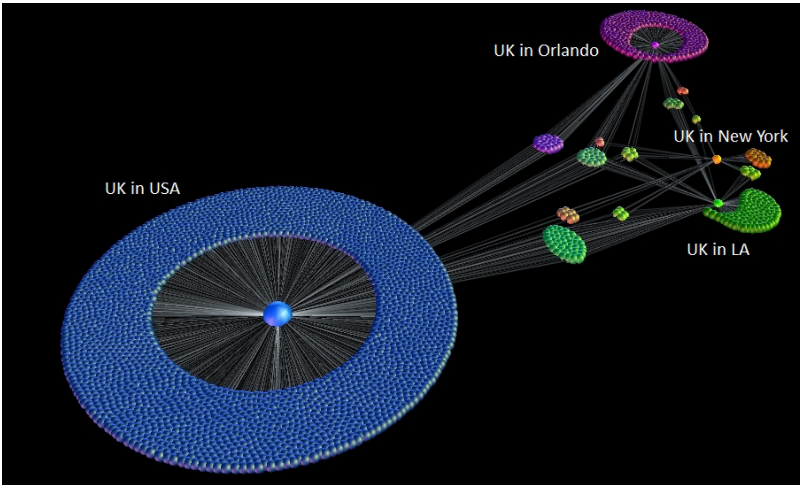

Figure 32. Followers of US based FCO Twitter accounts

The map itself cannot give the whole answer, but identifying this group and understanding the content of the tweets they are following can help an organization refine its strategy through understanding its followers. Looking at followers who are following numerous feeds has the potential to help identify potential friends or foes of which an organization was previously unaware, perhaps because they were involved in different conversations than the organization. The potential existence of different conversations was shown in the previous case study and in the use of Twitter following the election in Iran.[88]

This perspective can be extended to consider all the feeds from an organization or even two organizations working in similar fields to potentially engage the same audiences. The FCO works alongside its key grant-in-aid-funded Public Diplomacy partner, the British Council, which sits alongside the FCO on the U.K. Public Diplomacy Board and received in 2008/09 £193 million in grant-in-aid funding.[89] Both FCO and British Council use Twitter feeds, although the British Council has more Twitter accounts than it's "Follow us on Twitter" page lets on. At time of writing, in addition to the five on the British Council Web site, there are another twenty Twitter accounts from offices or projects being run by the organization around the world. Mapping British Council and Twitter accounts produces the image in Figure 33.

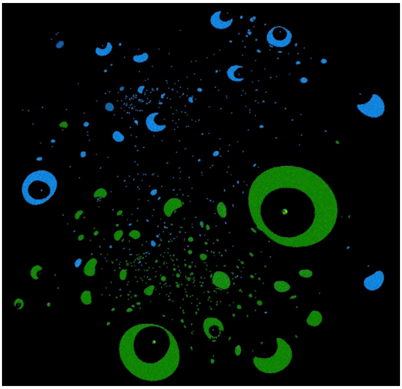

Figure 33. FCO and BC followers

Figure 33 is initially displayed without the connections to highlight the position of the clusters. Green spheres represent FCO Twitter accounts, and blue those from the British Council. The color of the dots making up the clusters is determined by the mixture of green and purple to the extent that individual users have links to the FCO and British Council accounts; for example a user who only follows FCO would be entirely green. This demonstrates that while there are some users who overlap between the organizations, in the vast majority of cases there is a division between the users; they have a strong tendency to follow significantly more feeds from one organization than the other. This tendency is further shown when the connections between users and accounts are added to the map, Figure 34. The density of the connections is visibly higher within the green or blue sections of the network than the area in the middle between the predominantly FCO and British Council networks.

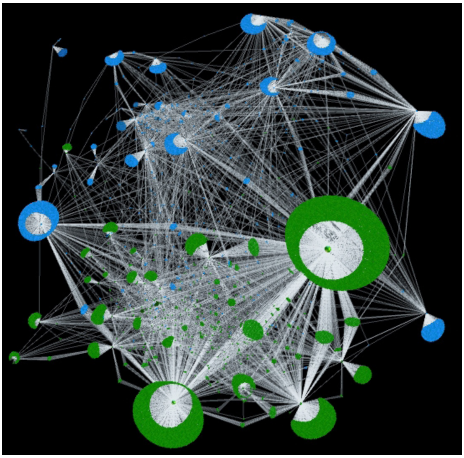

Figure 34. FCO and BC followers 2

At a basic level this demonstrates that the two organizations are communicating directly with largely different audiences. This may be preferable. On the other hand, organizations might prioritize sharing audiences, potentially RT. The specific audiences will influence the success of this approach. An equally important observation is that two British Council feeds are integrated into the network of FCO followers to a greater extent than the network of British Council followers (seen middle left and lower right of Figure 34). Understanding why this is the case would provide further information which can aid the refinement of strategy for each of the organizations, depending on their priorities.

In addition, there is a small group of individuals that follows numerous accounts of both FCO and British Council. Identifying them through mapping may provide insight into their interests:

- Are they journalists, project participants, academics or interested private individuals?
- Do they appear to be following general information tweets, or are they seeking specific information such as careers or opportunities to be involved in projects?
- Are these individuals looking for inconsistencies or information through which to attack an organization, perhaps through their blogs?
- Do they RT your tweets, if so to whom?

The answers to these questions, and further analysis of the results against organizational priorities, would provide a starting point for the process of evaluating the interaction with Twitter users on an organization-wide scale.

Conclusion from Case Study 3

The FCO-British Council Twitter mapping demonstrates that only considering the number of participants in a discussion is not the real issue. However, if you can come up with a number of people reached or engaged and identify them--then their interaction with an initiative can be mapped. Evaluation of the choices made by individuals within the networks created or engaged by Public Diplomacy organizations can provide insight to further hone these initiatives. Furthermore, the new knowledge provided by evaluation can contribute to the strategic planning of future initiatives, subsequent tactical decisions and the day-to-day actions of practitioners. Importantly, this insight can be based on the understanding of actual behaviors of those with whom an organization interacts, not reported perceptions.

Developing insight into networks of influence creates potential questions for practice in the future of Public Diplomacy

Using a network based approach to evaluation can in the future allow the consideration of questions that can further enhance the planning and impact of a project. These questions might include:

- What is the best context to nurture a network; which environments, events and methods achieve the best results for Public Diplomacy?
- How does shifting the emphasis between homophily and diversity influence the network, and the impact of the initiative?
- What are the most effective markers of homophily within different audiences around which participants can recognize similarity or coordinate?
- Where should emphasis be placed between increasing the density of a network and increasing the overall size? (While doing both would initially appear preferable, there is a clear limit to how long the network participants can spend communicating with their fellow participants, so a huge and very dense network is likely to quickly overwhelm participants.)

To achieve this insight, an organization may consider longitudinal studies focused on the effect that particular activities deliver over time. Network mapping has the potential to be an invaluable source of information. If the networks are still paying off years after investment, it makes little sense to only measure or report on the activities undertaken during the current year. Longitudinal studies may provide greater credibility to contemporary claims about the anticipated longevity of impact. Equally, if an initiative does not pay off over the intended timescale, longitudinal studies might provide insight into the reasons these networks were not meaningful over the longer term.

There are numerous Public Diplomacy initiatives around the world which are attempting to build or engage networks. Their success, or at least their ability to demonstrate success, will lie in applying evaluation techniques that focus on measuring the same behaviors as the project aims to influence. If an initiative is designed to influence participants to join or behave within a particular network, then a network based evaluation may well provide a means of evaluating that initiative. Effective evaluation will ultimately rest on combining new data from the evaluation of a project with the data an organization may appropriately gather and maintain as a part of everyday business. Resources expended are an investment not just in activity but in information!

Conclusion: a networked future for Public Diplomacy

Why meaningful networks?

When considering networks, it is not enough that one exists or can be identified, it must be meaningful. This means that meeting or having contact with vast numbers of people does not represent a meaningful network or networks. When Public Diplomacy organizations, or any organization claiming to interact with networks, announces their annual reach or audience size there is a risk they are using this data as a proxy for understanding the available networks. While audience size may give an idea of the potential size of a network, it gives little if any indication whether the network is meaningful.

Creating meaningful understanding of networks provides the ability to interact in a more effective way with those with whom an organization chooses to interact. Anyone can create a list of individuals and call it a network; ensuring that the network is meaningful requires finding ways to analyze that network:

- Empower staff, through access to networks and the tools to recognize those networks.

- Understand the networks with which you seek to engage.

- Evaluate the impact of activities through the behavior of participants or communities with which an organization has interacted. We live in a world of networks, physical and digital, so changes in behavior will inevitably influence interactions within a network.

Using these tools, organizations can engage with networks and technological developments which, as John Sullivan has argued, are "ushering in an era of asymmetric threats, where non-state actors can extend their influence and challenge states and their institutions to gain social, political, or economic influence."[90]

While the groups may be seen as threats in some cases, the methods of interacting in networks need not be seen as threats and challenges to influence. These methods are also options for a Public Diplomacy organization to seek to extend its influence. Understanding the networks is key to realizing the potential impact of a Public Diplomacy initiative. This is more than being on YouTube, Vimeo, Facebook, Hi5, or Twitter. To harness this potential for day—to-day practice, strategy development and evaluation, an organization will need to consider the nature of the networks with which it interacts, followed by a change in *behavior* which follows that interaction. Concomitant with understanding the external context, an organization should consider the internal networks, culture and provision of the right technology to empower public diplomats to harness the power of multilateral collaboration or disseminate messages in the most effective manner.

Understanding networks has the potential to take PD into the levels of consideration similar to those discussed in 4G warfare, and considering information as a 4th dimension.[91] Organizations will move toward interacting more effectively in the infosphere, floating above the streets to drive influence through 4G PD, if you will. This is not about maintaining Orwellian databases on entire populations, nor militarizing Public Diplomacy. It is about being able:

- To recall/visualize with whom an organization has had contact with in the past, particularly if the organization has invested in nurturing a network;

- To understand the interests of individuals with whom an organization interacts—there is no point repeatedly inviting someone to events about one subject when they only come to events about something different. Nor is it worth prioritizing whom to engage only to then fail to record a profile of these individuals, and what factors establish them as important actors with whom to interact;

- To visualize and understand what others are interested in and discussing within digital networks. If individuals are interacting within networks and expressing their interests there is little excuse to be "flying blind." This approach should not consider some discussions irrelevant largely on the basis that they are not occurring in the areas which are traditionally considered important, without understanding whether the interlocutors are having a meaningful impact;

- To rapidly engage with new or "trending" themes if those areas are important to the work of the Public Diplomacy organization; and

- To understand the *influence* which interaction is having on a network.

Being able to make the shift to a more network focused approach to Public Diplomacy will rely on recognizing the value of the information which an organization already holds. If this information can be utilized more effectively there is potential to interact with the networks which exist to increase impact and efficiency.

As barriers to international communication are reduced, the creation of digital networks becomes increasingly possible. The ability to have large offices in numerous countries, meet with ministers or outspend competitors is not the dominant marker of potential influence to the degree it once was. Being able to commit the equivalent to hundreds of thousands of dollars to transporting people around the world does not guarantee an organization influence in networks with which it seeks to interact. While these historic factors are still important, the ability to create actionable insight from the vast amount of information which is available, either publicly or held by an organization, and to act in a way which makes effective use of this networked world will increasingly influence success in Public Diplomacy.

Whether PD 2.0, “New” Public Diplomacy, Guerrilla Diplomacy, Open Source PD or 4G Public Diplomacy, it will be vital for an organization to value data, visualize the results in a way those “on the ground” or developing strategy can interpret quickly, and evaluate whether interactions have been meaningful in a networked world. The infosphere will float above every action a Public Diplomacy organization undertakes. Success will in part depend on the extent to which an organization can connect with networks *through* the infosphere rather than merely projecting *into* it.

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32 To identify incoming links to a Web site via Google search for "link: mountainrunner.us" or "link:wandrenPD.com"

33 CPD Blog: http://uscpublicdiplomacy.com/index.php/newsroom/pdblog_main; MountainRunner: http://mountainrunner.us; Enduring America: http://EnduringAmerica.com; Wandren PD: http://WandrenPD.com

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