# THE ANTI-GLOBALIZATION NETWORK PROTESTS CANCUN'S WTO MEETINGS

Ву

ANDREW CHARLES MILLER

Master of Science

Oklahoma State University

Stillwater, Oklahoma

2004

Submitted to the Faculty of the Graduate College of the Oklahoma State University in partial fulfillment of the requirements for the Degree of MASTER OF SCIENCE December, 2004

# THE ANTI-GLOBALIZATION NETWORK PROTESTS CANCUN'S WTO MEETINGS

Thesis Approved:
Dr. L.M. Hynson III
Thesis Adviser
Dr. Kenneth Stern
Dr. Ron Thrasher
Dr. A. Gordon Emslie
Dean of the Graduate College

## ACKNOWLEDGMENTS

I am extremely grateful to the advice, direction, and support of my thesis committee members Drs. L.M. Hynson, Kenneth Stern, and Ron Thrasher. I am particularly indebted to the extensive editing and review of Dr. Stern and the theory direction of Dr. Thrasher. Also, the extensive time invested into this project by Dr. Hynson and his continuous insight and assistance throughout the process is deeply appreciated. I cannot emphasize enough how beneficial Dr. Hynson was serving as an advisor as well as a mentor to me personally, spiritually, and academically. It was truly divine to have a scholar of his caliber serve as my advisor.

I must also acknowledge the continued support of the School of International Studies and, specifically, Dr. Nancy Wilkinson for believing in the project and securing the grant for my research at the WTO Ministerial. Without her help this thesis could not have been made possible. I also have to thank Donna Birchler for always being willing to lend a helping hand and being truly interested and supportive of my studies and research.

Most importantly, I have to thank God for helping me persevere and giving my wife Yesenia the patience to deal with me continuously locked away at the computer researching and writing. Only with her understanding and encouragement was this thesis ever completed. Additionally, the support of my

parents throughout my entire academic career is more than one could ever expect. Thank you to all.

## TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Definition of Terms Anti-Globalization History Background Statement of the Problem Research Goals Significance of the Study	2 8 10 14 15 17
II. REVIEW OF THE LITERATURE	21
Introduction Social Movements Theories of Social Movements Influence in Social Systems Summary	21 22 27 40 45
III. THEORY	49
Collaborative Networks Complex Adaptive Systems	50 56
IV. METHOD AND PROCEDURE	65
Introduction Social Network Analysis Data Collection & Snowball Sampling	65 66 70
V. FINDINGS	83
Snowball Sample Data Analysis Social Network Analysis Density Centrality Betweenness	83 90 92 94 95
VI. Discussion	97

# LIST OF TABLES

Table	Page
I. Directed Density Inflow Analysis From all 249 Organizations	116
II. Directed Density Outflow Analysis for the 42 Organizations Studied for Links	130
III. Degree Centrality Measures From all 249 Organizations	133
IV. Betweenness and Normalized Betweenness for the 42 Organizations Studied for Links	141

# LIST OF FIGURES

Figure	Page
I. Paradigm of Influence	143
II. A Framework of Interorganizational Relationships	144
III. Rationale for Anti-Globalization Network	145
IV. Sierpinski's Triangle through the Chaos Game	146
V. History of Social Network Analysis	149
VI. Sociogram Example Business Contacts	150
VII. Listing of 51 Organizations' Link Popularity	151
VIII. Graph of Link Popularity	152
IX. Complete Listing of Organizations from Snowball Sampling	153
X. Website Language Totals	159
XI. Listing of Cities and Number of Organizations Located Therein From Network	160
XII. Organizations Excluded from Social Network Analysis	163
XIII. Graph of Link Repeat Averages	164
XIV. Cancun Protest Pictures	165
XV. Anti-Globalization Network Sociogram without Labels	173
XVI. Anti-Globalization Network Sociogram with Labels	174
XVII. Anti-Globalization Network Circle Sociogram with Labels	175
XVIII. Anti-Globalization Network MDS Sociogram without Labels	176

XIX. Anti-Globalization Network Spring Embedding Sociogram without Labels	177
XX. Anti-Globalization Network Principle Component Sociogram with Labels	178

## Chapter 1

#### Introduction

"Reason's biological function is to preserve and promote life and to postpone its extinction as long as possible. Thinking and acting are not contrary to nature; they are, rather, the foremost features of man's nature. The most appropriate description of man as differentiated from nonhuman beings is: a being *purposively* struggling against the forces adverse to his life."

-Ludwig von Mises, Human Action: A Treatise on Economics

The purpose of this research study is to *inform* others about the protest organizations represented at the World Trade Organization's (WTO) Fifth Ministerial in Cancun, Mexico and the larger network they represent. This network is most commonly referred to as the anti-globalization movement. Another way to conceptualize the purpose of this research is to understand the word 'inform;' according to Rogers and Kincaid (1981: 47), "The Latin word, *forma*, means contour, figure, shape, model, or pattern. *Form* is the shape or structure of something, as distinguished from the materal [sic] of which it is composed. Form is the arrangement of matter and energy."

In studying the anti-globalization movement, a distinguishable attribute is the lack of an organizational hierarchy for everyone to see. This presents a dilemma when attempting to operationally define the anti-globalization movement or conduct any type of informative study. There is not a master list for which an organization can sign up to become a new member, hence, the purpose of the

study, to *inform*. Without a master list, the boundaries of the organization cannot be established and research concerning the movement is impeded if not easily mislead. In addition, traditional sampling procedures cannot be completed that tell the world with a 95 percent confidence level that the movement stands for issues x, y, and z. Therefore other methods, such as the social network analysis using a snowball sampling analysis used in this study, must be established. These conclusions were also made by Van Aelst (2002) in his study of the antiglobalization movement and the internet. In addition, Elliott, Kar, and Richardson (2002: 8) stated, in regards to their study attempting to describe who the critics of globalization are, "Because we cannot identify the full universe of alternative globalization groups, it is difficult to determine the criteria for a representative sample."

With regards to *informing*, a 'shape or structure' is created by analyzing the groups that demonstrated at the WTO 5<sup>th</sup> Ministerial and conducting a social network analysis on a select group of the organizations that participated. This network is then represented by a structure that is distinct from the simple compilation of the organizations that participated in the protests. Once the network is identified, the 'form' will showcase the 'arrangement' or linkages of the organizations by which it is composed and an identifiable entity can then be recognized.

### Definition of Terms

Identifying the term anti-globalization can be difficult based upon the frame of the reader and his/her own belief in what it means. Therefore, to have a coherent understanding of what is being stated within this research a definition of "antiglobalization" will be stated.

Depending on which resource is referenced, the anti-globalization movement may be referred to as "Counter Capitalism" as stated by Harding (2001) in his examination of the anti-globalization phenomenon for the *Financial Times*.

Mallaby (2001) simply refers to the movement as "globophobes." Other labels such as "anti neo-liberal," "anti-corporate" and "democratic globalisation" have been suggested as alternatives to the anti-globalization title (Van Aelst 2002).

Elliott et al. (2002: 3) uses the term "alternative globalization movement."

Waterman (2002: 1) lists the movement as the "Global Justice and Solidarity Movement" while Rutherford (2002: 1) simply uses the "Global Justice Movement." For the purposes of this study and to maintain consistency, "anti-globalization" will be used throughout this study as it is the most widely recognized designation for the movement that had its coming out party at the WTO's Seattle Ministerial in 1999 (Buttel 2003).

To explain more appropriately what is meant in this study by the term antiglobalization, the phrase has to be pulled apart. Exploring the depth, history, and scope of the term "globalization" simply can not be done within this study; however, three central usages of the term can be explored: economic, political, and time/space.

Economically speaking, globalization speaks directly of a liberal world order in which capitalism is the prevailing world system and free trade is the goal of international business transactions. The term liberal is defined as the following:

Liberalism aims at a political constitution which safeguards the smooth working of social cooperation and the progressive intensification of mutual social relations. Its main objective is the avoidance of violent conflicts, of wars and revolutions that must disintegrate the social collaboration of men and throw people back into the primitive conditions of barbarism where all tribes and political bodies endlessly fought one another. Because the division of labor requires undisturbed peace, liberalism aims at the establishment of a system of government that is likely to preserve peace, viz., democracy. (Mises 1996: 27)

This system is based upon a liberal economic philosophy of Adam Smith,
Frederic Bastiat, Jean-Baptiste Say, Lord Acton and many other classical liberal
economic thinkers (Say 1855). The idea of 18<sup>th</sup> century British economist David
Ricardo's comparative advantage is the best way to define the goals and
objectives of economic globalization. Ricardo (1996: 93) stated the subsequent,
in regards to comparative advantage:

Under a system of perfectly free commerce, each country naturally devotes its capital and labor to such employments as are most beneficial to each. The pursuit of individual advantage is admirably connected with the universal good of the whole. By stimulating industry, by rewarding ingenuity, and by using most efficaciously the peculiar powers bestowed by nature, it distributes labor most effectively and most economically: while by increasing the general mass of productions, it diffuses general

benefit, and binds together, by one common tie of interest and intercourse, the universal society of nations throughout the civilized world.

While there are many variations of economic philosophy within the current world system, the basic premise is capitalist and liberal in nature. This is the world order promoted primarily by the WTO, International Monetary Fund (IMF) and the World Bank, all of which can be described as "Bretton Woods" institutions, describing the place, Bretton Woods, New Hampshire where the origins of those three institutions occurred in 1944 (Schaffer, Earle, Agusti 2002: 63) or multilateral institutions. According to Nye (2003), the adherents to these international institutions are called neoliberals.

Neoliberalism can also refer to a modern interpretation of 19<sup>th</sup> century liberal economic philosophy as stated previously, but in a much larger and more interdependent world. The goal of today's neoliberal is much the same as described by Mises, to organize a world system to promote international peace and cooperation. Much of the protest against globalization is usually directed towards neo-liberal globalization and the institutions it represents, i.e. the Bretton Woods institutions. For example, at the WTO Ministerial protests in Cancun, this researcher obtained brochure/pamphlet hand outs and photographs of people wearing shirts and holding signs, including a protest schedule, all of which specifically speak against 'neo-liberal' globalization (see Figure XIV). A definition in a periodical put out by Action for Social and Ecological Justice, that purports to "support the struggle for liberation from global inequality, injustice and ecological destruction," claims that "Neoliberalism describes both the ideology and strategy

behind free market policies and 'globalization'" (ASEJ 2004, Choudry 2003: 3). They also claim that neoliberalism "advocates total freedom of movement for capital, goods and services, sees everything as a tradable commodity, and argues that market forces must be left to rule, free from interference from government or communities" (2003: 3). This definition from the perspective of someone contentious to neoliberalism seems to give credibility of the meaning stated previously, by Nye.

Globalization defined politically refers simply to the lessening importance of borders and nation states, as multilateral and international institutions seek to bring about more cooperation and stability in the international environment. This does not necessarily mean that there is a new hierarchy in the international system of anarchy proposed by Kenneth Waltz (1979) in his *Theory of International Relations*, that states the nation state is the highest level of authority internationally, while the organizing principle amongst the states is characterized by anarchy, or the absence of hierarchy. It just means that international institutions mean something to nation state actors and the relations between them. The point is to create some kind of order out of the anarchy without a new subordinate power as Keohane (1986) stated was the problem with a pure realist view ala Waltz. Political globalization also is represented by the moves of various regions of the world to integrate, at varying levels, economically and politically as noted with the European Union, NAFTA, MERCOSUR, ASEAN, etc...

Political globalization is also helped by time/space globalization. Over the course of the past 100 years humans have been able to move from point to point

at a rate faster than all of human history prior to a century ago. Also, computer viruses can literally spread around the world in a matter of moments (Nye 2003). Personal contacts, due to the cheaper and faster rate of international travel, have helped citizens from one country to experience other cultures first hand. Scholte (1996: 45) states, "global events can -- via telecommunication, digital computers, audiovisual media, rocketry and the like -- occur almost simultaneously anywhere and everywhere in the world." What is more, internet communities have sprung to life essentially eliminating nation state boundaries as anyone interested in any topic around the world can subscribe to a listsery or enter a forum with other likeminded people simply with a computer and an internet connection. Many protestors use these and other technologies, such as wireless communications, as important tools in operating and conducting previous protests against globalization and in maintaining the decentralized organizational structure of the anti-globalization movement (Buttel, 2003). However, these are the same technologies that make globalization move more rapidly.

By taking a literal approach in dealing with the "anti" side of anti-globalization, the presumption is that the movement is generically against globalization. As noted in discussing the three different forms of globalization, globalization can and is used as a positive benefit in promoting the cause of the movement against globalization. Therefore, in this study, anti-globalization refers specifically to the campaign against a neo-liberal capitalistic economic form of globalization. In essence, the movement is not against globalization as a whole but a particular definition of it. This can be seen by the popular embracement of the phrase

"Another World is Possible," referring to the track on which globalization is running (George 2002). That phrase is also the slogan of the World Social Forum (WSF), which bills itself as an alternative to the World Economic Forum, a gathering of the world's largest economic powers (Whitaker 2002). The WSF recently drew over 100,000 people to its annual gathering in Mumbai, India in January 2004 (McGregor 2004).

## A Concise Anti-Globalization History

The emergence of an established movement focused on the elimination/alteration of globalization as it is currently progressing was firmly established on November 26, 1999 (Thomas 2000). This was the beginning of the organized protests, the "Battle in Seattle," at the WTO Ministerial in Seattle, WA. Depending on whose account one takes, the protests garnered in the tens of thousands and represented a large breadth of organizations and issues. The protesters were represented by large numbers of organized labor, which helped to lend credibility to the protests, environmentalists, animal rights groups, human rights groups, development groups, and even the governments of the South (Buttel 2003). As referenced, the "South" refers to countries of the third world, most of which are in the southern hemisphere and are former colonial states (Tandon 2001). Much of the contention among the protesters was focused on environmental concerns. There had been a number of decisions, within the WTO, ruling that laws the United States had against certain types of tuna fishing, because of the danger to dolphins, and the laws against forms of shrimp fishing, due to concern about sea turtles, were unfair trade barriers and had to be

removed. The idea is that measures, such as a tax or labeling requirement, that applies to a product are very straightforward and could easily be converted into a tariff under WTO rules while measures against the process, the way a product is made is much more difficult. Therefore, the WTO ruled against the United States and stated "products are 'objective', processes are 'subjective'...The WTO is based on rules, and therefore promotes 'objectivity' in trading schemes in order to ensure that the rules are as clear-cut as possible" (WTO 2004).

In addition, the WTO ruled in favor of Venezuela and Brazil in stating that the U.S. had set up an impermissible trade barrier against the importation of gasoline below certain standards that may be environmentally damaging (Buttel 2003). Prior to these rulings, many of the environmental groups had been in favor or at least non-belligerent towards regional trade agreements and international trade organizations. These rulings provided the fuel for the fire of protest against the WTO for environmentalists and animal rights groups. For labor groups, development activists and human rights organizations, protests against sweat shops and forced labor abroad had been culminating especially with the Nike and Gap examples (Brecher, Costello, & Smith 2002). Worldwide, from Japan to Europe to America and Canada, student groups had started to form and advocate boycotts against those corporations until their labor standards were changed. Thus, in addition to the established networks of environmentalists and labor, there was a grass-roots network forming against the perceived repression caused by globalization.

Those groups consolidated on Seattle and effectively shut down the WTO Ministerial mostly through peaceful means; however, there also emerged a radical anarchist wing made of the Black Bloc and Third Position that managed to cause millions of dollars in damage to businesses in downtown Seattle (La Corte, 2003). Part of the explosion in media attention and sustainability of the movement is due to the violence and vandalism caused at the protests. While most protesters make a point to stay peaceful, a complete lack of any fringe anarchist element may take away much of the attention that the media would pay if that element remained. No anti-globalization protest since Seattle has garnered the attention it received, and no protest has inflicted the amount of damages that Seattle was dealt. It has yet to be seen if these fringe elements will continue to play an element or simply fade out as the movement transitions into a collaborative network organization and is viewed as a mainstream entity with specific alternatives to the established course of globalization.

## Background

Before this thesis process started, this researcher sought to somehow identify or shed light on the anti-globalization movement. It seemed that the majority of references referring to the anti-globalization movement cited a lack of coordination/focus or that the movement was merely a collection of disparate agendas coordinated by anarchists and violent protestors. While those observations may or may not have been correct, the point is that this researcher saw a lack of information within mainstream media in regards to the protestors as a whole. Even as there appeared to be a deficit of knowledge about who the

protestors were, information concerning the organizations that worked to put together the protests against the various international institutions together was just as non-existent.

It is important to note that the frame of this researcher is to look at the antiglobalization movement as an outsider. That is expressly an advantage the vast majority of researchers commenting and writing on the anti-globalization movement cannot proclaim. It was this researcher's perception as an outsider, knowing little of the anti-globalization movement, which led him to find and develop comprehensive information that was non-biased, or at least not produced by movement activists/proponents. Many anti-globalization activists can meticulously explain their cause and produce theories concerning the movement only under the frame of a non-critical eye. As Davies (1976: 59) stated, "All theory (whether it calls itself critical or not) has a vantage-point: that it reveals itself is the distinction of critical theory." This application of critical theory is just to state there are times in which one must look at the whole of the institutions or outside of the structure to see it for what it is. While accurate descriptions of an institution/organization can be given from within, research on oneself can be misleading at best, especially when the 'vantage-point' of the writer or researcher is never addressed. A comparative analysis of an issue utilizing perspectives from multiple sides can provide a much stronger set of conclusions than relying only on academic research written by activists for the promotion of a cause. These conclusions have been reached after extensive coverage of the topic of anti-globalization in academic literature.

Once the idea to research the anti-globalization movement was solidified, this researcher felt that he should experience an episode of anti-globalization protests, in person, as part of a pilot survey and data collection process. This would be done before detailed plans related to how the method and procedures for the thesis would be developed. The objective was to gain a first-hand account of what occurs at the protests, to become a silent observer of the events, and to collect data (in the form of pamphlets, stickers, handouts, and photographs: Figure XIV). Conveniently coinciding with the beginning of this research, the WTO's Fifth Ministerial was to be held from September 10-14, 2003. Cancun would be the first city in an open, Western-styled democracy to host a ministerial since the notorious "Battle in Seattle," where riotous protesters took to the streets and effectively shut down the meeting in November of 1999 becoming one of the first major media recognized demonstrations against globalism (Laxer 2003).

The previous ministerial was held in November, 2001 in Doha, Qatar. Antiglobalization activists cited a fundamental difficulty in staging protests not to mention the costs associated with having to travel to the Middle East.

"Holding this meeting in Qatar would shut down any possibility of peaceful protest," said Kenneth Roth, executive director of Human Rights Watch. "The WTO can't avoid public protests by holding a meeting in a country that doesn't allow public protest. That would send the signal that it's okay to build the global economy on a foundation of repression -- exactly the opposite of the message the WTO should be pronouncing." (Human Rights Watch 2001)

Some complaints were also made about the decision to pick Cancun, one of the worlds largest resort towns, as the Ministerial site because it is isolated in the Yucatan Peninsula of Mexico and is not easily accessed by way of automobile, thus forcing air travel. This may have served to reduce the number of students and other lower income protesters from attending; however, the focus of study here is not on individuals but groups/organizations sponsoring or participating in the protests against the WTO.

A proposal was made to the School of International Studies at Oklahoma State University and approved by the department to obtain funding for the trip to Cancun, for the length of the Ministerial. The majority of the time was spent at what is referred to as "Kilometer 0." The city of Cancun is primarily situated on the mainland, and to arrive in the resort zone, one must travel the only road which is located on a narrow piece of land, similar to an isthmus, here the hotels are located. The entrance to the hotel zone starts at the beginning of this isthmus and at the end of Cancun proper, Kilometer 0. Mexican police forces had barricaded the street at Kilometer 0, completely blocking all travel. This was primarily aimed at protesters who could easily march to the hotel zone causing direct disruption to the Ministerial; however, no one was allowed passage. The alternative was to travel around to what effectively is a back entrance to Cancun from the airport. This could be done via bus travel culminating in a total trip of around 45 minutes including two or three blockades of police checking identification and passports.

The schedule of protest events and the list of organizations that were used as a guide to the demonstrations were obtained from the Mexico Solidarity Network's website. The schedules and event times given on the website all coordinated with action, lending credibility to the schedule and organizational listing. Upon return from the protests it was an organizational listing from the schedule that was used as a basis to create a master list of groups publicly "endorsing" the protests. In other words, while there were groups and organizations that may have participated in the protests, they were not publicly represented through the host committee's listing, which served as the basis to all protest activities. The Communist Party is an example of an organization that was represented in the protests, passing out literature, waving Soviet and Cuban flags, and offering merchandise for a donation. However, they were not listed as endorsers of the protests, for what could be any number of reasons, and therefore, not considered in the master list of organizations that endorsed the WTO protests.

#### Statement of the Problem

As stated above, this researcher had always been intrigued by the protests at various international institution meetings such as the WTO, IMF, World Bank, or international economic summits like the G-8 (group of the eight leading economies in the world) and World Economic Forum (WEF). Whenever attempting to research the protests, details about the events in which the protests occurred or individual protesters are usually found and not the organizations that are represented. To put it in perspective, playing a word association with "animal

rights" may bring to mind the organization, People for the Ethical Treatment of Animals (PETA) or "gun rights" is likely to elicit the National Rifle Association (NRA). However, "anti-globalization" has no common response to a specific organization; in fact, a query of the term "anti-globalization" in the Google search engine, as of May 20, 2004, returns a top 10 listing absent a single organizational website. The results are tilted towards resources and articles through which organizations can be found, but the direct connection of the term with an organization is still missing. The organizations themselves that participate in the protests against globalization may distance themselves from the term "anti-globalization" for certain reasons, causing the search engines to not identify the websites and misrepresenting the results. Nevertheless, that does not take away from the premise that the term is not identified with organizations but with protesters, activists, or a generic movement designation.

The problem that arises when simply labeling the protests at the WTO meetings part of the anti-globalization movement is that there is no structure or organization that can be deciphered and, therefore, it is difficult to understand who is a part of the network. That is the issue this study seeks to address and answer.

#### Research Goals

The questions of this research are summarized in the following: Considering the specific protest activities at the WTO's 5th Ministerial in Cancun, what is the basic organizing principle of the anti-globalization movement, what can explain

its formation and who is part of the broader network of protest organizations?

Answering these questions serve as the goal of this research.

The organizing principle and its formation are explored in Chapter 3, based upon the study's theoretical framework. The organizing principle is detailed as a collaborative network, in which units that are dissimilar work cooperatively, which is a theory of interorganizational relations (Daft 1998). As noted in a study by the Financial Times on the anti-globalization movement or "Counter Capitalism" as they have deemed it, while admitting its formidability, Harding (2001) also describes it as "...inchoate, without a unified agenda or a traditional leadership." That analysis coincides directly with the formulation of a collaborative network. In addition to the analysis of the *Financial Times*, Kavada (2003: 1-2) states that the anti-globalization movement is "characterized by ideological diversity, loose organizing and a global outlook." In establishing the relation between network analysis and the anti-globalization movement, Kavada (2003) believes that networks are the most familiar way to identify the movement. Therefore, employing the concept of collaborative networks, throughout this study, the entity of anti-globalization as a structured organization will be referred to as the antiglobalization network. The use of the term anti-globalization movement will refer to a non-structured group of individual protesters, i.e. the initial stages of the network formation.

The formation of the network is explained from the theory of complex adaptive systems. From this vantage point, the network is created on the premise that "Orderly ensemble properties can and do arise in the absence of blueprints,

plans, or discrete organizers" (Grobstein 1997). In other words, a network or structure can form merely from the interaction of different units with no hand guiding them. This theory is rooted in nonlinear dynamics, differential equations, cellular automata, time series analysis and many other mathematical concepts (Bar-Yam 2004).

Once a theoretical framework is laid out for the structure of the antiglobalization movement a methodology can be presented to analyze the network.

The methodology used in this study is social network analysis with a snowball sampling technique. Organizations are analyzed based on their links to each other via their websites. Through this process a general idea can be formulated as to some of the major network hubs or important organizations within the antiglobalization network.

By combining all three aspects of this research design: organization (collaborative networks), formation (complex systems), and analysis (social network analysis), the original intent of the research can be reexamined to inform others about the anti-globalization movement. Hence, a structure or form is created that is separate and distinct from merely the units that compose it, i.e. the anti-globalization protesters.

## Significance of the Study

The identification of the protest against globalization as a network entity composed of structure and its interacting units more than a movement of individual protesters, serves as a fundamentally different way of viewing the protests. By applying a mathematical concept such as complex adaptive systems,

the anti-globalization protesters can be analyzed outside of the traditional paradigms forced on protest movements. The same can be said of applying network terminology to the anti-globalization protest phenomenon as opposed to a social movement frame. While a movement aspect may surely be applied to the anti-globalization network, it fails to explain the formation of organizations and institutions that actively work against the process of globalization and the recent trend of decreasing numbers of protesters at recent protests against international institutions (Marshall 2002, Fernandez & Reel 2002, Pasek 2004).

The current trend is that of an anti-globalization network working on and designing policy initiatives that address the problems they have with globalization. Even though the organizations are dissimilar, which can be a point of criticism since it is harder for them to create consensus, they still form an institutional structure, a collaborative network, which does not have to focus on simple street protests. That is the significance of this study, to recognize and explain the organizations that protest globalization in a new innovative way using a multi-disciplinary approach.

This research could be easily adapted to serve the purposes of the organizations that identify themselves as part of the network against globalization. The groups could discover others in the network that they may not have known were participants in the cause. Also, organizations and those in favor of an antiglobalization disposition can be reassured in the identification of the movement more appropriately as a network with a structure that would be much more formidable in addressing the concerns of globalization. The differentiation is

found in the difference between an individual who wishes to make his grievances known by picketing, protesting, or demonstrating at specific events versus one who may do the same but also recognizes his/her protest is part of a larger network advocating change and offering alternatives.

On the other side, advocates of globalization will be able to use the information from this study to make the same realizations. Perhaps the most important insight that pro-globalizers could make would be to see the antiglobalization phenomenon not as "completely disappeared" in the way Canadian Trade Minister, Pierre Pettigrew puts it, but as changed from a movement to a network (The Record 2003). At the Cancun protests, demonstrators numbered in the low thousands at best, a rather insignificant amount. The number of incidents involving non-governmental organizations (NGOs) protesting within the WTO meetings was a much more significant cause to the collapse of trade talks (Poomsrikaew 2003). This result would fall in line more with the NGOs and trade activists represented, i.e. the network representatives, within the talks than the protesters, outside the meeting. Even a few years ago, Edwards (2001) and Florini (2001) in *Global Citizen Action*, maintained that there were already 15,000 to 20,000 NGOs operating around the world. Globalization proponents that utilize this study can then place the rise of NGO activism in the proper context of the anti-globalization network instead of thinking these are individual organizations with not much connection.

Moreover, up until now this is one of the few (and possibly the first) attempts made to create a comprehensive resource, of the anti-globalization network

utilizing specific research and data collection measures to ensure some form of validity to the results. Even the *Financial Times* listing of a "who's who" of the anti-globalization movement made no attempt to even describe why those groups were listed or how they were chosen (Harding 2001). Van Aelst (2002: 8), in creating a social network analysis of only 17 organizations, limited due to time and website language concerns, via the web, stated that selecting the 17 websites were the "trickiest part of this study." To validate the websites, Van Aelst (2002: 8) stated that the organizations were chosen based on being "mentioned in the different national and international news reports on the major anti-globalisation protests." Throughout the entire study there is not a single mention of what newspapers were scanned or the protests he was referring to. Besides, being mentioned in a newspaper in relation to a protest could easily be based on an act of violence or something sensational, not on the strength and stability of the organization. Additionally, Elliott et al (2002: 1) sought to identify "who the critics are," and in doing so they used two resources, one, the Financial Times listing and two, a completely arbitrary and subjective opinion. They declared that, after compiling the organizations from the *Financial Times* list, they "then added others with which we were personally familiar and which seem to show up again and again, at protests and in the press" (2002: 8). This researcher seeks to identify organizations that participate and work against globalization without utilizing biased opinions or resources that choose the organizations without any explanation to the method of compilation.

## Chapter 2

### Review of the Literature

The utilitarian function of science, therefore, is not to create causes and effects, not to change man's natural bent, not to foist upon him social orders, injunctions, or even advice, but to show him the good and the evil that results from his own decisions.

- Frédéric Bastiat, Economic Harmonies

### Introduction

Social movements and its various theories presently dominate the literature when referencing the topic of anti-globalization. During the formation of this study, the researcher had a prevailing notion that his research would also align with social movement theories because of the over-arching persistence to incorporate such theories into anti-globalization research. Within this study's framework, the focus is directed towards network formation or a transition from movement to network. While a few researchers have made similar connections, the vast majority are social movement related.

This review of the anti-globalization literature focuses on various topics that keep appear repeatedly in the literature such as social movements. In discussing social movements the following areas and theories will be examined: resource mobilization theory, new social movements (NSMs), and global/transnational social movements. In addition, an exploration of influence theory as it relates to social systems.

## Social Movements

Social movement as a concept connotes different meanings to different people. For example, the civil rights movement could be considered a social movement based on resource mobilization theory and the observable direct results it produced by the sweeping nationwide legislation enacted (Morris 1986). Within the literature a variety of meanings are also found. Langton (1987) defines social movements from an organizational perspective saying that they are focused on a resistance to social change and are made up of non-institutionalized groups acting in coordination with one another. On the other hand, Wilson (1973) believes that calling fraternities or nudists, for example, a social movement stretched the limits of his definition: "A social movement is a conscious, collective, organised attempt to bring about or resist large-scale change in the social order by non-institutionalised means" (1973: 8). While Tilly (1999: 257) claims, "a social movement consists of a sustained challenge to power holders in the name of a population living under the jurisdiction of those power holders by means of repeated displays of that population's worthiness, unity, numbers, and commitment."

The similarities in all the previous definitions include a reference to resisting or challenging an established order, and the definitions all tend to lean towards some sort of organization or coordination; however, Thomas (1996) cites the lack of a consistent order as an attribute of social movements. Byrne (1997: 10-11) summarizes the various aspects of social movements in a comparable way as unpredictable, irrational, unreasonable, and disorganized. Lastly, Zirakzadeh

(1997: 4–5) and Meyer & Tarrow (1998: 2) list four distinct characteristics of social movements: a group of individuals that seek a radical new social order, the movement adherents have diverse backgrounds and are outside the current social order, have a broad ranging networked organization, and the use of civil disobedience and politically confrontational/disruptive strategies.

Another way to view the idea of social movements is through a macro/positivist lens. Immanuel Wallerstein's (1976) world-systems theory is an example a broad generalized view of what constitutes a social movement. He maintains that social movements are anti-systemic movements. In other words, people in the movement want to overhaul the current world-system (Wallerstein 1990). Wallerstein (1976: 229) defines world-system as:

A world-system is a social system, one that has boundaries, structures, member groups, rules of legitimation, and coherence. Its life is made up of the conflicting forces which hold it together by tension and tear it apart as each group seeks eternally to remold it to its advantage. It has the characteristics of an organism, in that it has a life-span over which its characteristics change in some respects and remain stable in others.

Additionally he explains a social system as: "What characterizes a social system in my view is the fact that life within it is largely self-contained, and that the dynamics of its development are largely internal" (1976: 229).

This world-system is one in which capitalists rule and the international hierarchy is ordered on economic dominance. The core element of the world-system is the division of nation-states into either core states, those with

advanced technology and high levels of gross domestic product (GDP), or periphery areas, mostly former colonial states with low levels of GDP and scant industry (note that Wallerstein did not use the phrase "periphery states" because he felt that the local state, in the periphery, was not strong enough to be of any value in the world-system) (Wallerstein 1976: 229-233). He also allowed for a third designation in which the core states essentially allow certain periphery states to develop manufacturing industries to act as a middle point to deflect accusations of the periphery that the core maintains a clear cut dominance by not allowing any development amongst the periphery (1976: 229-233).

Through world-systems theory, social movements are based upon the inequities of the international system. Movements are started by those attempting to redistribute power within the system or to overhaul it entirely. This conflicts with Waltz's (1979) theory of international relations because Waltz asserts that there is no international hierarchy towards which a social movement could be aimed. While Wallerstein speaks of an anti-systemic movement against a specific hierarchical order internationally, Waltz rejects the idea that there is any higher authority than the nation-state. The international system according to Waltz is in a state of anarchy, the absence of hierarchy, because there is no power above the nation-state to dictate rules and force adherence to international law. Those who follow and adhere to the principles proclaimed by Waltz are most popularly called neo-realists, in the classical realist tradition of early 20<sup>th</sup> century ambassador Hans Morgenthau, the King of Prussia: Frederick the Great, and Peloponnesian historian Thucydides (Schweller 1999). From this perspective an

anti-systemic movement or even a global social movement as termed by Cohen and Rai (2000), is a movement against a non-existent entity since nation-states in the end will decide what is in their best interest, not a world-system or international institution. Waltz (1979) believes that states seek, at a minimum, to survive and, at a maximum, total domination and, based on those concepts, states will make decisions and act within the international system. Essentially, social movements should be directed at the nation-state, not at international institutions, since the international institution only acts at the dictate of the state.

Others such as Keohane (1986) believe that the international institutions do matter even though there is not a clear hierarchy above the nation-state.

Durkheim (1964: 115) contends that "growth in the volume and dynamic density of societies modifies profoundly the fundamental conditions of collective society." The term dynamic density refers to "the quantity, velocity, and diversity of transactions that go on within society" (Ruggie 1986: 148). Also, interactions between people via travel, telecommunications, and international business transactions can serve to create an international environment that socializes actors in the international stage to act certain ways with or without a hierarchy. The belief that the world system socializes individuals and states to behave in certain ways is the foundation to constructivism.

Constructivists emphasize the social nature of the institutions that, in turn, shape the behavior of actors in world politics. Concepts taken as given by neo-realists, such as anarchy and structure, or interests and identities, are characterized by constructivists as social in nature. The very

identities and interests of states and other actors are shaped by the social context of international relations in which they participate and these actions, in turn, form the structures of world politics. (Eckert 2002: 57)

While constructivists may or may not identify a hierarchy internationally, they would be willing to see a benefit in using a social movement to protest the actions of international institutions and nation-states. In addition, a constructivist would seek to advocate a particular view through a social movement, rather than simply protest an oppressive entity, as a way to create a perception is reality notion. An example of this is the way South Africa abolished the use of apartheid, not through any type of force, but instead through an international consensus that apartheid was morally wrong and, hence, South Africa was socialized into banishing the practice (Nye 2003).

Part of the process in understanding the nature of a social movement is to understand the different definitions within the literature. While there is no single accepted definition, the majority of social movement theorists agree that a social movement consists of a grouping of individuals, whether organized, as Wilson (1973) maintained, or void of order in the way Thomas (1996) explained social movements. Once this grouping is together, usually either a cause or goal is made by the movement and sought for, or a protest against an institution, law, or state is made seeking change or abolition. As discussed, different researchers make various claims as to what grouping can be included in social movements; however, even more important is the epistemological assumption of the researcher. For example, the strict adherence to world-systems theory quite

easily skews the interpretation of different perceived social movements. The result is a conclusion as to whether the movement is genuine or not, i.e. antisystemic. On the other side, a neo-realist may have the tendency to dismiss an anti-systemic movement as meaningless since there is no over-arching global authority to dictate systemic change to all states, no matter the cause or movement agenda.

### Theories of Social Movements

A thorough examination of the literature relating social movement theory to the anti-globalization protests uncovered two continuously debated and researched topics, old social movement theory versus NSM theory and resource mobilization. Buechler (1995: 447) talks about the old versus new debate in that the "...meaning and validity of designating certain movements as new and others (by implication) as old" is a major area of debate in social movement theory. In addition, global social movement (sometimes called transnational social movements) theory is a less established concept gaining more prominence as more research is conducted and the academic community begins to debate its merits.

Concerning old social movements versus NSMs, Reed (2002) described the debate as Marxist class movements versus group identity movements not based on strict ideology, respectively. From Tarrow's (1991) viewpoint, old social movements are concerned with issues of rights and the distribution of resources, while NSMs are concerned with values and ideals, reflective of post-modern/materialist thinking, and the self-actualization of marginalized peoples

(Klandermans, 1991). Unlike old social movement theorists that believed people acted because of a spike of grievances in a community, NSM theorists believe that the existing societal structure issues at any particular time, such as post-modernity, create the environment for social movements (Buechler, 1995).

Old social movements seek to explain social protests and movements from a Marxist ideology citing economic class conflicts as the catalyst. However, this framework could not explain various recent movements such as homosexual rights, peace, feminism, and nuclear energy (Touraine 1985, Melucci 1985).

According to Polletta and Jasper (2001: 286),

New social movement theorists argued that participation in such movements [such as those previously stated by Touraine and Melucci] could not be predicted by class location. Nor were participants seeking to gain political and economic concessions from institutional actors, to further their "interests" in conventional terms. Rather they sought recognition for new identities and lifestyles.

Hence, the rise of NSM theory to explain the creation of borderless social movements is an import evolution of the old Leftist movement philosophy. No longer are social movements taking place in an industrial oriented economic structure as Marx experienced, but a structural shift has taken place in the economy from industrialization to a service-based economy. The mass-production line and heavy industry is no longer the foundation for the economies of the developed world. It is now (among many other services) research, consulting, and technology. Mayer & Roth (1995: 299-319) explain this shift by

citing the developed world's industrial focus in the early 20<sup>th</sup> century as "Fordist" and the current economic situation as "post-Fordist" referring to Ford's mass production assembly line.

The term "new social movements" can be misleading since it is neither new theoretically or conceptually. Its formation can be cited to European sociology researchers during the late 1960's and early 1970's in the effort to explain the rise in collective action protests. While sociology researchers in the U.S. developed resource mobilization theory to explain the rise, the Europeans formed NSM theory based on 19<sup>th</sup> century European intellectual and political thought (Swain 2001). Also, the notion of revitalization movements and their expressed concern with the removal of foreign domination, deprivation, and creating a new interpretation of an individual's existence has similar functions to NSM theory, nearly 15 years before its formulation (Barnartt & Richard 2001). According to Wilson (1956: 256), revitalization movements have a specific systemic function that forces a "deliberate, organized, conscious effort by members of a society to construct a more satisfying culture." He then goes on to say that the system function must be perceived by the protesters and that they are unsatisfied with the system. This is very similar to the view Swain (2001: 6) holds towards NSMs, claiming they "are the result of increasing domination of the system over the life." Offe (1985) states a comparable situation where NSMs are the product of the inherent contradictions of democracy in a capitalist system.

The identification of NSMs as post-modern and uniquely separate form old social movements represents a way to explain collective action under a new

paradigm. However, being able to explain events is not the only characteristic of NSMs. The following are a few of the major characteristics of NSMs as cited in the literature.

The predominant characteristic of NSMs lies in the distinction with old social movements where the working class defined a social movement, while NSMs tend to be made up of those from various backgrounds not in accordance with Marxist designations. According to Muller-Rommel's (1990) extensive analysis of the Green Party in Europe, NSMs consist of the new middle class whose participants are more likely to be young. Another view is that NSMs are "transclass" or that they span a multitude of classes bringing together sometimes unlikely partners (Fisher & Kling 1994: 9). However, Pichardo (1997: 413) has leveled much criticism towards the new middle class and transclass notions:

Just as the Marxist theories tended to marginalize protest that did not stem from the working class, so too have NSM theorists marginalized social movements that do not originate from the left.

...the NSM paradigm is based solely on observations of left-wing movements and reflects this ideological bias undergirding the NSM paradigm. Yet, movements of both the left and the right are linked to changes in social structure.

From Pichardo's perspective NSM theory is falling into the same trap as Marxist social movements did by limiting itself to the working class. There is no agreement concerning how broad the NSM is since, contrary to Pichardo, Scott (1990) maintains that NSMs transcend traditional left-right divisions.

Another unique trait of NSMs is the maintenance of an identity paradigm.

Shefner (1995: 596) stated, "The new social movement theories (NSM) have been subsumed under what has been called the identity paradigm." And that

The 'identity paradigm' is better suited to understand the new struggles, which are no longer state- or economy-centered, but focused on the democracy of everyday life, communicative action, and an autonomous definition of community identity. (Shefner 1995: 596)

In attempting to explain the identity paradigm of NSMs, Cohen & Kennedy (1998) state that NSMs represent

A shift away from a primary concern with issues relating to inequalities in power, ownership and income between classes, towards a growing focus on the construction of cultural and personal identities. Accordingly, as the agendas pursued by social movements have broadened, so too has 'politics' invaded everyday life and intimate social relationships.

The "shift" is the mark in which the identity paradigm occurs. This shift also relates back to the idea of revitalization movements and how a culture seeks to create a new interpretation of existence. Melucci (1988) explains new social movements as the search for personal identity within the confusion and chaos of post-modern society.

The final characteristics of NSM to be covered from the literature, which apply more directly to an analysis of the protests against globalization, are the tactics used and the protests' decentralized nature. NSM protests are usually colorful, unconventional events comprised of acts of civil disobedience and direct action in

an attempt to gain exposure through media and to attract the attention of the public (Doherty 1999). While this researcher was in Cancun for the WTO Ministerial, many of the creative/colorful acts of protest considered a staple of NSMs were displayed. They fell in line with the examples laid out by Brecher, Costello, and Smith (2002) such as art, song, dance, mobile theatre and parody. However, light-hearted protest actions were not the only unconventional way to attract attention as a former Korean rice farmer, Lee Kyung-hae, committed suicide (see Figure XIV) atop a parade float in front of police barricades. Lee had attempted to kill himself months earlier in the lobby of the WTO headquarters in Geneva (BBC, 2003).

The structures of NSMs lack any resemblance to and reject a multi-leveled hierarchy, and are organizationally decentralized unlike conventional social movements (Holford 1995: 100, Welton 1993: 162). The various chapters operate with autonomy, and open debates are utilized in the decision-making process (Papadakis 1989). In talking about the structure of the protests against the WTO, Starhawk (2000: 36) claims,

"that our model of organization and decision making was so foreign to their picture of what constitutes leadership that they literally could not see what was going on in front of them...our model of power was decentralized and leadership was invested in a group as a whole."

The horizontal organizational makeup of NSMs can be beneficial by giving participants a feeling of ownership in the movement; however, it also ties up the

movement in dysfunctional decision-making since there is no centralized leader or authority.

Anti-globalization activists and researchers have mixed feelings about labeling anti-globalization as a NSM. Some would say that resource mobilization theory (RM) is the most appropriate way to identify social movements, including the anti-globalization protests. In talking about the history of RM Shefner (1995: 597) says:

"Resource mobilization theory (RM) emerged as a response to earlier theories of social movements, which saw protest either as a result of participants' pathologies or the destruction of community affiliations in mass society...One of the great contributions of resource mobilization theory was to push the analysis that collective action was purposive political behavior by less powerful societal sectors. RM theorists realized that structured inequalities lessened access to traditional political processes, and so recognized protest as rational political action in response to limited access to traditional politics."

RM exists for the realist who considered previous social movement theories as dysfunctional and unproductive. McCarthy & Zald (1977) state:

...the new approach [RM] deals in general terms with the dynamics and tactics of social movement growth, decline, and change. As such, it provides a corrective to the practical theorists, who naturally are most concerned with justifying their own tactical choices, and it also adds

realism, power, and depth to the truncated research on and analysis of social movements offered by many social scientists.

RM applies a specific formula to social movements and seeks to explain how some collective action is formed. The presence of grievances in a community or system cannot be the only factor in determining collective action since grievances are nearly at all times present in any system. The difference is that RM states collective action is determined by the availability of resources not just discontentment of people.

The goal of RM theory is to explain why some social movements are more successful than other social movements. Thus success is defined by the ability of an organization to define its goals, efficiently use its resources to encourage action, and have its aims legitimized by institutional political actors (Eyerman & Jamison, 1991: 24).

According to McCarthy & Zald (1977: 1216), there are five central emphases to RM as it has developed. First, the aggregation of money and labor is a crucial aspect of RM because resources are necessary for the engagement in collective action. Second, to aggregate the resources of a movement, a certain level of organization must be present and, thus a focus can be made more on social movement organizations (SMOs) than in previous social movement theories. Third, for a movement to be successful there must be recognition of the importance of the involvement of individuals and organizations from outside the movement. Fourth, a "crude" supply and demand model is applied to the resources flowing into and from the movement. Lastly, there is understanding of

the importance to the costs and rewards of an individual or organization being involved with the social movement.

From Cohen's (1985:675) perspective there are some assumptions that must be understood when analyzing a social movement via RM. First, it is assumed that institutional and non-institutional actors do not need to be separated since they operate in the same range of interest. The next assumption is that each individual or organization operates in a rational pursuit of self-interest. Third, goals and grievances are constants in society and cannot by themselves lead to the formation of social movements. Another assumption according to Cohen is the same as stated by Eyerman & Jamison (1991), in that success is made when institutional actors recognize and legitimize the aims of the movement. Finally, RM makes the assumption that a certain structure is always present and the movement is always large-scale and single-issued.

While most of the research leans towards NSM theory in identifying the current protests against globalization, RM makes significant points that must be considered. Of course, grievances can lead someone to act against an oppressor, but success cannot only be based on determination, a consideration of the resources must be made. The protests against globalization involve not only individuals but, some would say more importantly, social movement organizations (SMOs). It only takes a quick look at the Ford or Rockefeller foundations' respective websites to see the lists of grants given out to organizations, many of which take part in the anti-globalization protests. This funding plays an important role for many SMOs due to their ability to mobilize

resources. RM theory explains this aspect of what NSM looks past. By mobilizing millions of dollars from foundations, SMOs are able to succeed in what otherwise may be a short-lived grass-roots collective action unable to obtain necessary resources outside of bodies at a protest event.

The need for a theory to specifically explain the rise of anti-globalization protests has led some researchers to synthesize an approach that moves social movements to the global level. Cohen & Kennedy (1998: 6) list five reasons why social movements should be displaced to a global level. First, during the 1980's many of the causes and concerns fought for by activists within their own societies were found to be rooted in much larger global structures and problems, hence the understanding of social change was globalized. Next, some grievances cannot be limited to traditional nation-state borders. For example, environmental concerns such as global warming, acid, rain, and ozone depletion cannot be unilaterally prevented by a single state and must, therefore, be enacted at an international level. Third, previously people or SMOs that sought to organize internationally had only limited means, usually prevented by cost, time or access restrictions. Now, movements can easily be organized via the internet which provides a low-cost and much more easily accessible route for people in developing nations to organize. The fourth reason to move social movements to a global level is that much of the activities that people have grievances with are from multi-national corporations that span the globe. Therefore, the most effective way to elicit change is to have a trans-national movement to oppose them. Finally, "people in poor, often authoritarian countries need TSMs

[transnational social movements] and desperately try to link up with them...Only 20 per cent of the world's population live in democracies."

Whereas Cohen & Kennedy (1998: 5) use the term "transnational social movements," Cohen and Rai (2000) alternately use "global social movements" (GSMs). GSMs as an area of study are a relatively new area lacking the wealth of information attributed to social movements in general. According to Cohen and Rai (2000), the reason that global social movements have been neglected in research is because researchers continually focus on the debate between old and new social movements. The authors also maintain that GSMs serve to provide a relevant and practical alternative to economic globalization as the force that is negatively affecting the welfare of people and the environment. To a certain extent, according to this definition, all GSMs are anti-globalization in nature. However, looking back at world-systems theory, GSMs can be referred to as merely a rehash of Wallerstein's anti-systemic social movements. Yet Kohler & Wissen (2003: 943) maintain that GSMs are another way of saying "anti-globalization movement:"

As far as the term 'global social movements' is concerned, we have to admit that it is rather unwieldy. Nevertheless, we consider it more appropriate than the term 'anti-globalization movement', which has gained some discursive publicity...

Part of the move to reform social movements and make them global is the desired or perceived trend across the globe to form a "transnational civil society" (Florini 2000). Guidry, Kennedy, & Zald (2000) state, "Social movements ride the

waves of these global processes and formations [globalization]; in turn, they begin to define new ways of understanding how the world is being transformed." This transformation is the move to a "transnational civil society" where states' power to act within thier own territory is reduced and social movements direct their resources towards international linkages and partnerships (Guidry, et al 2000). Another way to describe this transformation is the building of a "world society:"

World models have long been in operation as shapers of states and societies, but they have become especially important in the postwar era as the cultural and organizational development of world society has intensified at an unprecedented rate. (Meyer, Boli, Thomas, & Ramirez 1997: 145)

The development of transnational social movements does not necessarily have its roots in recent international protest action ranging from the international land mine treaty to global warming crusades to anti-globalization. Keck & Sikkink (2000: 35) provide a detailed case-study of what they refer to as "historical precursors to modern transnational social movements and networks." The analysis consists of the 19<sup>th</sup> century abolitionist movement and the international women's suffrage movement from the late 19<sup>th</sup> century to the early 20<sup>th</sup> century. Keck & Sikkink (2000: 35) claim that both of those movements were based on significant foreign linkages and actors for their success. Within Keck & Sikkinks' (2000: 52) research they utilize the term transnational social movements while maintaining a preference

...to use the term transnational advocacy networks. A transnational advocacy network includes those relevant actors working internationally on an issue who are bound together by shared values, a common discourse, and dense exchanges of information and services.

From new social movements to resource mobilization to transnational/global social movements, the challenge is to explain the phenomenon that is taking place worldwide at the various meetings of international institutions. NSMs seek to remove itself from class-based social movements into post-modern and postmaterialist movements based on the foundation of a new identity paradigm. This paradigm is built on the grievances individuals have against the system and the desire to create new cultural and societal identities. RM theory is not as concerned with the formation or character of the movement as it is with explaining why some movements are successful and others are not. In RM theory a social movement has a minimal structure that organizes and elicits resources. The more efficient a movement can mine resources from its members and other outside actors, the better chance it has to succeed. RM is explicit in stating that grievances can not be the only cause of collective action, instead human capital, money, labor, etc. are the keys to success. Finally, transnational social movements look beyond the previous formulations, and specifically focus on identifying movements that cross borders and seek international change. The protests are usually directed towards international institutions and have, since the presence of those entities and the processes of globalization, significantly weakened the ability of nation-states to obtain significant systemic change.

#### Influence in Social Systems

The purpose of this study was to analyze the anti-globalization network and, since a network generally has no set hierarchal structure and how its influence within the network plays a major factor in the decision making process of the network. Therefore, a review of the literature regarding influence theory in social systems is well heeded. However, much of the study of influence from a social psychological perspective, while it has come a long way, only has limited crossover applicability to the systemic study of influence. Following is brief consideration of the social psychological perspective proceeded by a review of the systemic influence literature.

Banfield (1961: 3) states that influence is "the ability to get others to act, think, or feel as one intends." Many theorists have historically utilized influence through one of two perspectives; Laumann & Knoke (1987: 153) provide an excellent summary of these perspectives. First, there is influence via a Marxist tradition where power and coercion with the subordination of some to the will of those with superior resources is preferred over the assumption of harmony between the influencer and the influencee. Next, is the functionalist approach that maintains a "broad harmony of interests" support the social structure while questioning the efficacy of blatantly coercing individuals in society over a long period of time. Hence, influence as stated above with its connotations of compromise between the influencer and influencee is more applicable to a functionalist framework. Lenski (1966) identified a middle ground allowing the concepts of power and influence to be considered in collective decision-making.

Sternburg (1993) recapitulates the subsequent six principles of influence theory that apply particularly to the dyadic relationship of individuals. The first principle is consistency, based on this; influence takes place when people are put in a position to keep their beliefs consistent with past behavior. Next is reciprocity, where people feel compelled to give when something is given to them. Social proof, behavior is legitimized based on whether others are doing the same thing, is the third principle of influence theory. In a system, the inherent obedience of the individual to authority and societal rules/norms act as another principle within influence theory. Also, people prefer to say 'yes' to another person they know or like, this is referred to liking. Scarcity is the final principle of influence theory as summarized by Sternburg (1993). According to this concept, when freedoms are removed the need to gain them once again causes individuals to desire them more. The previous six principles act as ways to set up an environment conducive to influencing others.

Lewin's (1951) three phase change model and force field analysis were important early attempts to synthesize a theoretical framework for influence. The three phase change model includes: unfreezing, convincing others of the need for change; moving, enacting the change; and refreezing, locking in the changes to prevent regression (1951). This model operationalizes the process of influence to a systematic procedure. Another development of Lewin is the force field analysis, which acts as an alternative change model. The difference is that Lewin (1951) seeks to explain the status quo and by doing so sets up an environment where change can take place, acting as a variable of influence. The analysis

identifies driving forces and restraining forces to change that, when in equilibrium, promote a status quo (1951). Thus, to enact change in a system, the opposing forces must be manipulated and equilibrium displaced. Both of these change models are typically applied to a corporate/managerial application, however the ability to use them as a guide to influencing and creating change in a network has certain potential.

Parsons (1963) attempted one of the most comprehensive explanations of influence and the conceptual foundation of the term. However, according to Laumann & Knoke (1987: 153), Parsons' study was not wholly successful even though they considered it an "ambitious effort." Parsons (1963: 50) describes influence as a medium of exchange in social interactions since it can be exchanged for something of intrinsic value to the exchanger. Next, Parsons (1963: 51) describes the four types of influence. First, there is political influence which he describes as:

...influence operating in the context of the goal-functioning of collectivities, as generalized persuasion without power – i.e., independent of the use of power or direct threat, - used, on the one hand, by units either exercising or bidding for leadership positions and, on the other, by nonleaders seeking to have an effect on the decisions and orientation of leaders. (Parsons 1963: 53-54)

Fiduciary influence, which refers to the influence that takes place between individuals with different goals in a differentiated society, is the next form of influence. It is best related to the allocation of resources within various sectors,

and it depends upon societal norms (1963: 54-55). The third type of influence is influence through the appeal to differential loyalties. Here, Parsons explains the third concept as activating a commitment in another individual, thus, someone will act based upon prior loyalties in order to remain consistent (1963: 55-58). The final category is influence in the interpretation of norms. Parsons (1963: 58) describes it as "the process of interpretation of legal norms in the appellate phase of the judicial process." Essentially, judges have been given a place of authority in which their decisions of interpretation of the law can greatly influence society. Also, Parsons (1963: 52) noted that with the third and fourth categories of influence, because "it is necessary to resort to cumbrous phrases rather than succinct single-word designations [this] indicates clearly that the subject is rather undeveloped and needs elucidation."

From Parsons' research, there are four primary ways in which ego, the influencer, can attempt to influence the behavior of another, the alter, or influencee (Laumann & Knoke (1987: 154). These four modalities are depicted in Figure I. The matrix created to define the four modalities is headed on one axis by *Channel* and the opposing axis by *Sanction*. The *Channel* of influence is dependent on the actor's *Situational* position or on the actor's *Intentional* purpose, while the *Sanction* axis implies whether the course of action taken is *Positive* or *Negative*. Laumann & Knoke (1987: 154) refer to influencer in Parsons' Paradigm of Influence as "ego" and the influencee as "alter." Using these terms, Parsons (1963: 44) claims that all attempts of ego to influence alter fall into one of the four intersections, or modalities, created by the *Sanction* or *Channel*. On the vertical

axis of an *Intentional Channel*, attempts to influence alter by ego are based on either a *Positive* or *Negative Sanction* as stated above. These categories are based on the influence ego has over alter (and ego's ability to directly manipulate it) based upon alter's relationship with ego or alter's previous commitments to a situation.

The first modality created is a positive type of influence, noted by Parsons as persuasion. Parsons (1963: 48) describes this modality as one in which behavior is changed based on information given by a person in which the relationship is valued by alter as one in which the advice given by ego is considered expert or truthful. The example given by Parsons is of a man who continually puts off drafting a will because a false sense that, while death is certain, it will not be tomorrow. However, if a doctor informs the man that he only has a few months to live because of an incurable cancer, the man may well be persuaded by the information to finally write a will. In this modality, alter chooses to change his behavior based on his belief that the information is accurate and truthful, this modality is not coercive and is voluntary in nature. While the second modality created to categorize types of influence is the activation of commitment and it is a Negative Sanction and includes an explicit attempt by ego to manipulate alter by inducing alter to change behavior or make a different decision based on alters commitments to behave a certain way (Laumann & Knoke 1987: 155).

...for example, ego might point out to a publicly avowed civil libertarian that he should not purchase a house in a neighborhood that is known to discriminate against blacks and Jews attempting to purchase houses there.

Note that ego must rely on the alter's already being committed to certain orientations for the influence attempt to be successful. (Laumann & Knoke 1987: 155)

The final two modalities are Situational on the vertical axis being either Positive or Negative. These categories lack the presence of manipulation or soft power; however this lack is replaced by situational control. On the *Positive* axis is inducement, wherein ego finds himself in a position of control over the situation and can offer to induce alter to act by offering a quid pro quo. One important aspect of this modality is that ego follow through on his commitment to deliver the reward or else ego risks the effect that alter will not comply with future requests because of egos past failure to follow through (Laumann & Knoke 1987: 154). The *Negative* modality on this axis is stated as *deterrence* or power. Here, ego deters alter to act based on the threat of punishment or a negative sanction. This category is the most unstable of the four modalities because if alter follows through on the order to act, then ego follows through on his promise, which is nothing. Alter can then increasingly become skeptical of the threat of punishment from ego and risks a breakdown in the attempt to secure compliance from alter (1987: 154).

# Summary

The preceding review of the literature as it relates to theories of international relations, social movements, and influence in social networks lays an important foundation to be expanded by the theories of collaborative networks and complex

adaptive systems, found in the next chapter. There are three main ideas to be recognized and understood after a reading of the literature review.

First, it is significant to realize a certain ordering of the world in which humanity lives. Whether the structure is based on World Systems Theory or Neo-Realism, no direct control/hierarchy currently exists above the nation-state thus creating a problem for social movements that claim to be global in nature. For example, protests could be directed towards the United Nations, WTO, or any number of international multi-lateral organizations, only to realize that the organizations exist only on the basis of complete autonomy and anarchy between the nations. Essentially, decisions are made by sovereign, independent nations, not by the organizations thus making the whole less than the sum of its parts. This conflict is rarely addressed in the burgeoning literature surrounding GSMs. This is not to discredit GSMs but to merely represent a point of divergence between theory and perceived reality.

Second, while social movement theory has a broad and extensive recent history, it is best recognized as the beginning of where anti-globalization as a sum total is today. In no way does this researcher mean to take away from any of the theories analyzed, i.e. RM Theory, NSM Theory, GSM Theory, etc..., but to say that the current state of the protests against globalization cannot be adequately addressed by any social movement theory. While at a time during the history of the protests, social movement theory was sufficient to explain and categorize what was taking place. However, now with the continued decline in the numbers of protesters at events and the ever-increasing rise in anti-

globalization SMOs or NGOs representing the cause of anti-globalists sets the stage for new theoretical applications, like the ones explained in the Chapter 3, i.e. collaborative networks and complex adaptive systems. The new theoretical formation by default allows for a unique set of analyses to be construed which leads to the research of this study found in Chapter 4 utilizing social network analysis.

Lastly, the information covered by a general review of the literature on influence in systems emphasizes an important aspect to interpreting the results of a social network analysis. When a structure is defined as a network, the major players are those that carry the most network influence, since a primary attribute of networks is the lack of a direct hierarchy. Therefore, to understand the decision-making process and overall characteristics of a network, a realization of how influence can be categorized and the different types of influence as represented from the literature must be attained. Given that there is no single authority to guide a networked organization and that the organizations are obligated to work together, Parson's examples of positive influence types are more likely to be utilized over the negative influence types to advance/influence a particular agenda within a network.

In making the decision to research the anti-globalization phenomenon a conscious decision had to be made to pursue a route focusing on organization and the groups represented by the network. This by default leaves out the analysis of individual leaders, spokespeople, and the philosophies maintained by anti-globalization protesters. This leads to a restatement of the intent of this

research, to inform others about the structure and organization of antiglobalization. Finally, understanding and recognizing the need for a new synthesis of ideas and theories is the most important result of covering the literature that was presented in this chapter.

## Chapter 3

#### Theory

False doctrines lead to erratic wishes, destructive misconceptions, and dangerous misinterpretations. Theory must combat and clear away the errors of theories, indicate the general direction of the right way, and establish the true goal; it will thus be easier for practical politics, conducted by experience, to construct every portion of the road with a sure hand and firm footsteps."

-Johann Peter Friedrich Ancillon, Ueber die Staats-wissenschaft

The methodology used in this research to understand the organization of the anti-globalization phenomenon is known as a social network analysis. To even be able to conduct such an analysis the presence of a network must be identified and explained. Previously, and continuing with many thinkers, the notion of anti-globalization brought about images of loosely connected individuals with no cohesive organization or structure. However, this researcher maintains that there is a structure and organization to the fight against globalization summed up as a collaborative network of organizations and not just random protestors at the meetings of international organizations. This chapter seeks to explain through theory how the current formation of anti-globalization is described and organized by collaborative network theory, while the actual process to an organizational formation of the anti-globalization network is found within the mathematical theory of complex adaptive systems.

#### Collaborative Networks

As cited earlier in Chapter 1, the *Financial Times* published a series of articles on the movement against globalization, or as they called it, "Counter Capitalism." Within the articles, Harding explains the movement as a significant entity but also describes it as "...inchoate, without a unified agenda or a traditional leadership" (Harding 2001). In addition, Kavada (2003: 1-2) states that the anti-globalization movement is "characterized by ideological diversity, loose organizing and a global outlook." In creating a relationship between networks and antiglobalization, Kavada (2003) believes that networks are the most precise way to identify the organizational makeup. Also, Van Aelst (2002: 2), in his study of the anti-globalization protests describes the movement as a "network of organizations." With analyses such as these at the forefront of major policy debates within globalization circles, the movements decentralized nature, and the massive amount of NGOs represented at the most recent WTO ministerial entity, the movement exhibits qualities perfectly suited for the distinction of a collaborative network.

Collaborative networks, as a general concept, puts a name on the result of general systems theory, which sought to apply and develop laws and theories that apply across differentiated segments. For instance, Von Bertalanffy (1968: 33) described a system as "complexes of elements standing in interaction." Consistent with the thesis of this research, the anti-globalization movement is sought to be shown developing into a network by way of a complex adaptive *system*, which seeks to explain the creation of systems merely by the interaction

of the units. What Daft (1998) states is that when Von Bertalanffy's "elements" or in the case of this research, organizations, interact in a cooperative way, a collaborative network is formed.

According to Daft (1998) there are four specific types of organizational relationships as seen in Figure II. The four segments of the table are situated based upon their organizational relationship on the horizontal axis as either *competitive* or *cooperative*, or by the organization type on the vertical axis as *dissimilar* or *similar*. The modality created by a relationship that is dissimilar and competitive is a resource dependency. In a system of resource dependency, organizations seek to minimize their dependence on other organizations and to manipulate the external environment to make the resources available. Daft also maintains that resource dependency theory states that the reason organizations do not want cooperation with one another is due to a belief that in doing so there will be negative effects on performance (1998: 527).

The second relationship created by the matrix is population ecology via the intersection of similar organization types and a competitive relationship.

Population ecology is meant to describe how the population of organizations change, this theory is primarily rooted in the various theories of natural selection in a biological setting. For example, a population would be one that engages in similar activities and ways of utilizing resources. Hence, if an organization is not in the appropriate environment it will be selected out and fail (Daft 1998).

The third interorganizational relationship found in Daft's (1998) framework is institutionalism. Institutionalism is recognized as a formation of organizations that

are similar in type and cooperative in relationship. The institutional perspective describes how organizations survive and succeed through equivalence between an organization and the expectations from its environment. An organization in an institutional environment is composed of norms and values of those who participate in the organization, and results in a belief that organizations adopt structures and processes to please outsiders. Once the norms and values are established, an organization seeks to have actions that are desirable, proper, and appropriate which in turns creates organizational legitimacy. Institutional theory is focused on the underlying characteristics of on organization that shape overall behavior. An example commonly used is that of an iceberg, while you may only see the part sticking out of the water, or an organizations public image, it is actually only a small piece of a much larger foundation under the water that cannot be seen.

The final concept, and the one most pertinent to this research, is the theory of collaborative networks. Identified as a type of interorganizational relationship that has dissimilar organization types and cooperative relationships, collaborative networks work together and share scarce resources within the network. Daft (1998: 529) approaches collaborative networks from a strictly corporate point of view. The examples given by Daft are of major corporations working together through joint ventures and partnerships to make each other more efficient and productive. Some of the illustrations utilized by Daft (1998: 529) include AT&T joining up with Viacom and other smaller telecommunications companies in what is supposed to be a departure from their previous do-it-on-their-own style;

Motorola, Sony, Time Warner, IBM, and Kodak partnering with smaller companies to obtain new technology while the small companies can utilize the larger company's financing and marketing capabilities; and GM, Ford, and Chrysler forming twelve research consortia to research topics such as electric vehicle batteries and better crash test dummies. Another example of an organizational framework that would be fit into Daft's definition is that of Al-Qaeda and its terrorist network (Raab & Milward 2003). The individual organizations, or more appropriately called, cells, have a dissimilar makeup with regards to others terrorist cells around the world; however, the cells work cooperatively and show the characteristics of a collaborative network.

While Daft does not set up a specific formula for issue oriented non-profits to organize against a common set of targets, it is a logical extension of his theory to claim that dissimilar and sometimes contradictory organizations, such as human rights groups, environmental rights groups, animal rights groups, labor organizations and anarchists can join together and work, cooperatively, towards a shared goal of changing/preventing neo-liberal globalization. The contention of this researcher is that because of the necessity to join together into a semi cohesive whole to fight globalization, a collaborative network then forms. If organizations were not involved and somehow the anti-globalization movement truly stayed decentralized completely along an individualistic line, a collaborative network could not form since collaborative networks are an interorganizational theory. It is possible, however, that in the future the anti-globalization network could slowly progress to a single institution that had a single set of values, views,

and belief structure due to the constant interaction and cooperation that is necessary in a collaborative network. This researcher makes no specific claims for the future aside from a possibility of an occurrence, otherwise, the network organization seems to be a better long term fit for a phenomenon that is spread world-wide (as will be seen in the social network analysis) and relies on a certain amount of autonomy among the various issue groups to maintain each one's specific agenda.

Raab & Milward (2003) maintain that collaborative networks are seen as a more effective way to handle large complex problems such as homelessness, health care, and crime than are single organizations. Their research is in relation to what they refer to as "dark networks," or networks of illegal activity ranging from terrorism to drug/arms trafficking (2003). The majority of research among network scholars has been to focus on "how to structure collaboration in a way that leads to problem amelioration" (2003: 414). The direction of Raab's & Milward's research is to expand the definition of collaboration networks from merely a positive perspective. For instance, the anti-globalization network is not necessarily considered to be positive when protests lead to violence and property damage prompting the Canadian Security Intelligence Service (CSIS) to prepare a report on the spreading phenomenon of anti-globalization protests (CSIS 2000). The security agency, in the paper stated that, "This paper uses open sources to examine any topic with the potential to cause threats to public or national security" (CSIS 2000:1). No attempt to make a judgment call about the antiglobalization network is being made solely to make the point that a collaborative network does not inherently have to be positive or negative.

Raab & Milward (2003: 414) created a diagram to explain the rationale for network collaboration. First there is a problem in which, for instance, certain organizations, public and private, work to solve the problem. However, since organizations operate autonomously and without any coordination between them, the individual organizations can have only a limited reach in solving the problem. In a similar diagram, found in Figure III, an amorphous figure is shown to represent globalization, the said problem for anti-globalization activists. Around the edges are located ovals representing anti-globalization organizations (e.g.; animal rights groups, labor unions, environmental right organizations) and their area of influence within globalization. If the organizations worked autonomously, then the opposition would come only from narrow issue oriented groups and could more easily be disregarded. However, when a collaborative network is formed, represented by the arrows between the organizations, it is possible for the organizations to occasionally pool their resources and speak as one entity with more resonance than the separate units ever could.

Much of the literature surrounding or speaking about collaborative networks focuses specifically on them being a network, hence, the literature covers networks in general and their history. This section only seeks to explain the nature of a collaborative network as a whole and how it relates to the anti-globalization network, while the literature of networks can be found in Chapter 4 in reference to the research conducted via a social network analysis.

In summary, collaborative network theory represents a way to describe and organize the anti-globalization network. The first step is to identify a network of organizations that work cooperatively, for instance with anti-globalization, groups that sponsor a protest against the WTO. Once cooperation is found, the groups must be dissimilar in nature, or represent different purposes and have a certain amount of autonomy, i.e. groups working to cancel third world debt vs. groups seeking to levy a tax on international money transactions. After these two aspects are established, a collaborative network can be identified from which further study can take place, such as the research conducted in this study. This researcher believes that a collaborative network is the best way to define and organize the anti-globalization network, especially considering the vast array of perspectives among the organizations and the variety of locations from which the organizations reside.

### Complex Adaptive Systems

Considering that much of the literature surrounding the anti-globalization network is focused on its disorganized history, its chaotic protests, or its social movement characteristics, it is important to understand how it could adapt from the frenzied protests of Seattle to the established network of NGOs and activist groups today. The development of the network can be best explained applying the theory of complex adaptive systems. From this perspective, the network is created on the premise that "Orderly ensemble properties can and do arise in the absence of blueprints, plans, or discrete organizers" (Grobstein 1997). In other words, a network or structure, such as anti-globalization, can appear merely from

the interaction of different units while lacking a specific hand that guides the process. This theory is rooted in nonlinear dynamics, differential equations, cellular automata, time series analysis and many other mathematical concepts proven useful in multiple academic and professional disciplines (Bar-Yam 2004).

A good starting point for explaining the process of complex adaptive theory is to explore Sierpinski's Triangle through what Michael Barnsley calls "The Chaos Game" (Figure IV) (Devaney 1995). The triangle is named after Polish mathematician Waclaw Sierpinski, who in 1916, explained many of its properties (Grobstein, Oristaglio, Radojic, & Butoi 2000). The Sierpinski Triangle is noted by its fractals, or self similarity, as shown in Figure IV-f. Essentially the triangle is created by starting with any sized triangle and then placing another triangle inside the first where each of the three points of the second triangle touch the exact middle between each of the three points of the first triangle. This then creates a total of four subdivided triangles. The same process is then repeated within each of the three new triangles created along the sides of the second triangle that was placed inside of the first one. Afterwards, the exact sequence takes place within every subsequent triangle created from then on, theoretically until infinity. While this is one way to create a Sierpinski Triangle it does not explain the nature of a complex adaptive system, this is done through the Chaos Game. Starting with any size or type of triangle, one must label all three vertices with distinct names, Figure IV-a uses A, B, and C for example. Next, one must use a standard six sided die where two sides represent vertices A, then two other sides for vertices B, and the last two for vertices C. Next a starting point must be

chosen at any point on the same plane of the triangle; however it is easier to choose one already within the triangle. From the starting point, roll the die and move exactly half way to the appropriate vertex, this point is called the seed and a dot should be marked in its place. The succession of points produced by the rolls of the die is called the orbit of the seed, while the procedure of repeating the rolls of the die and tracing the resulting orbit is called iteration (Devaney 1995). From the first dot placed the die is rolled again and a need seed is made exactly half way between the previous one and the name vertex from the roll of the die (see Figure IV-b). After 30 such successive rolls, an image somewhat similar to the one in Figure IV-c will have been created. Proceeding on to 400 rolls of the die, a pattern begins to form (Figure IV-d) and eventually after 30,000 rolls a Sierpinski Triangle is formed (Figure IV-e) and the more rolls and seeds placed the pattern continues infinitely.

The concept behind The Chaos Game is essentially the same as the theory of complex adaptive systems; random events/interactions can lead to specific orderly result or structure. Concerning the anti-globalization network, one could postulate that each subsequent reaction to different historical events brought together a random gathering of organizations and activists. One such reaction might be the response against the WTO ruling stating that laws the United States had against certain types of tuna fishing, because of the danger to dolphins, were unfair trade barriers and had to be removed. This, by default randomly brought together various organizations that had environmental and animal rights concerns. Then each subsequent demonstration or attempt to stop the perceived

neo-liberal globalization would be a new seed within the triangle. Thus, when the whole of anti-globalization would be assessed, a mere random assortment of chaotic groups appeared looking more like a non-structured protest movement rather than an ordered structure. However, as the interactions have proceeded between anti-globalization organizations more and more seeds are placed and the structure (collaborative network) forms or becomes more obvious.

Voss (2000: 4) in speaking about complex adaptive systems explains how the theory can be applied in similar way as done by this researcher:

The field of Complex Adaptive Structures is concerned with the application of Complex Adaptive Systems theory to the design of Structures... From such systems, optimized structures will Emerge from the interaction of general building blocks (mechanisms/agents)...

Therefore the study of Complex Adaptive Structures could also be defined as the study of Emergent Structures; in effect the science of growing structures/buildings.

While Voss is speaking specifically about physical structures and this researcher is referring to social network structures, the same analogies can be made. The application of complex adaptive systems theory to the anti-globalization network is concerned with the design of its structure and recognizing emergent structures from unit interaction. This interaction is the critical point within the complex adaptive system, as Holland (2000: 220) says that interaction is the key to all complex adaptive systems.

Focusing strictly on a definition of complex adaptive systems, Voss (2000: 2) defines them as "those systems that are composed of multiple agents, building blocks and internal models; with the inherent capacity to exhibit perpetual novelty when subjected to a changing environment." Voss also states that the application of complex adaptive systems theory is primarily used to represent systems too complex for traditional methods. Under this definition the anti-globalization system or network applies fluidly as an analogous system. First, complex adaptive systems are composed of various agents, building blocks and internal models, not unlike the anti-globalization network through the application of collaborative network theory and the concept that the network is formed via a multitude of dissimilar organizations that work collaboratively as building blocks to build a network system. The latter half of the definition explains complex adaptive systems as being able to conform in unique ways to an ever changing environment. The very identity of the anti-globalization network is based on its ability to modify its tactics and combine its resources all within a structure of globalization that most researchers on both sides of the issue would agree is in perpetual flux.

Honavar (2004) explains complex adaptive systems from a much more mathematical perspective, as is the case with much of the research surrounding complex adaptive systems even though the application of the theory is utilized by disparate academic fields. He maintains that they are "characterized by apparently complex behaviors that emerge as a result of often nonlinear spatiotemporal interactions among a large number of component systems at different

levels of organization." Simply translated, the complex adaptive system is one that exhibits a unique/structured organization even though the units in the system are random and unrelated. It is then the "nonlinear spatio-temporal interactions" of the units that create the distinctive orderly system whose whole is larger than the sum of its parts. Coveney & Highfield (1995: 7) explain that these "interactions lead to coherent collective phenomena, so-called emergent properties that can be described only at higher levels than those of the individual units." This is the representation of a collaborative network when defining antiglobalization and the emergence of the collective organization against neo-liberal globalization, by which no individual organization can represent by itself.

The 'complex' of complex adaptive systems stems from an entire separate field of inquiry known as complexity theory, which can only be slightly explored to give a general knowledge of the term 'complex.' Coveney & Highfield (1995: 7) reference complexity as "the study of the behavior of macroscopic collections of such units that are endowed with the potential to evolve in time." While remarking that there is no commonly accepted definition of complexity, Dent (1999: 1) comments that it is "an approach to research, study, and perspective that makes the philosophical assumptions of the emerging worldview." Dent (1999:1) then lists the attributes of the emerging world view as "holism, perspectival observation, mutual causation, relationship as unit of analysis, and others."

Sussman (2000) compiled an extensive resource of 20 separate ideas on complexity from 20 different researchers as a way to catalogue the perspective of

a variety of systems thinkers. As cited in Sussman (2000: 4), Moses in his paper "Complexity and Flexibility," states that

there are many definitions of complexity. Some emphasize the complexity of the behavior of a system. We tend to emphasize the internal structure of a system. Thus our approach is closer to a dictionary definition of "complicated." A system is complicated when it is composed of many parts interconnected in intricate ways...It has to do with interconnections between parts of a system, and it has to do with the nature of these interconnections (their intricateness)...We shall define the complexity of a system simply as the number of interconnections between the parts.

Sussman (2000: 5) then states that a system is known as complex when "it is composed of a group of related units (subsystems), for which the degree and nature of the relationships is imperfectly known." While this is only a brief, and by no means exhaustive, explanation of complexity and complex systems, it gives a basic direction to the whole of complex adaptive systems. The complexity of antiglobalization shows itself in its global network formation and its use of an even more complex system to maintain unity and structure, i.e. the internet (Van Aelst 2002).

The thesis, in using the theories of collaborative networks and complex adaptive systems, lies in their respective abilities to explain where anti-globalization currently is and how it came about. With respect to collaborative networks, the theory helps to explain the existing situation in which anti-globalization finds itself. No longer are the individual protestors the main unit in

the fight against globalization, now organizations, i.e. NGOs and other non-profit/activist groups comprise the units of organization. The fact that these units are extremely diverse in nature (dissimilarity) based simply upon ideology and the global locations of the organizations while working cooperatively via unified resistance to proposals, actions, and events deemed detrimental form the basis for the collaborative network designation.

The theory of complex adaptive systems applies specifically to how such a network could have come to be. While there certainly are aspects of the theory not covered here, due to the technical mathematical nature of the subject, this researcher does not feel precluded from applying the thematic framework to issues in other disciplines. The move to apply complex adaptive systems to variety of unrelated disciplines is a recent trait of the research surrounding the theory. The specific intent of the theory seeks to coherently explain the process that has formed the anti-globalization network. The network literally consists of thousands of organizations from a broad spectrum of beliefs, but yet there is no single identified coordinator for the network. The history of the network, what is here called the movement aspect was simply that, a movement of individuals and organizations lacking order and structure merely physically protesting a multitude of so-called neo-liberal institutions. The movement lived event by event, hence the perception that the resistance to globalization has diminished since the number of protesters at events have equally diminished. However, with complex adaptive systems theory, one can state that the mere interactions of the different individuals and organizations gathered together at protest events was enough to

spark a process by which a systemic networked structure was born. Therefore, today one can look at anti-globalization and see the specific identity change that has taken place to where a single complex system exists to speak against globalization in a way that each separate autonomous organization never could.

There are surely more areas within both of these theories that could be separate research studies of their own in reference to the anti-globalization network. However, the material covered here helps to provide the theoretical frame from which this research study is conducted through. This researcher maintains that the knowledge of the theory used in a study is important, to grasp the subtleties found within the research. Theory also helps the reader to gain a more through understanding of the results of the research and how those results can be interpreted.

## Chapter 4

#### Method and Procedure

#### Introduction

As stated previously, the anti-globalization movement had the characteristic of no set boundaries, but through the application of the theory presented in the previous chapter, collaborative networks and complex adaptive systems, a structured element can be described. This is the reason for the change in nomenclature from anti-globalization movement to anti-globalization network. However, the question that then develops is how to identify the network and map the structure of the system. There are various methods that could be attempted to identify organizations that are part of the network. Such as: identifying the most mentioned organizations in a news search, compiling lists of organizations that participated in past protests, or surveying protestors as which organizations they think are part of the network. Of course, a list can be developed, but the problem lies in it being a valid representation of the network. With a collaborative network of this nature, a true master list most likely can never be created and does not exist today. This creates the issue of network representation. To resolve the dilemma, this researcher sought out to utilize social network analysis for the method and then develop a procedure from that framework. First, an overview of social network analysis, its history, and reasons for application will be covered. Then a discussion of the method used to conduct this research, a snowball

sampling procedure will take place. Finally, a detailed explanation of the research that was conducted via the method and procedure will be made.

### Social Network Analysis

As referenced in the purpose of this research, identifying the organizing properties of anti-globalization conceptualizing the structure and makeup of these properties are of primary concern. Once a semi-stable network is formed, via a snowball sampling of organizations, a social network analysis can then be performed ascertaining unique characteristics of the network. Some of these network characteristics (explored in detail in Chapter 5) include density, centrality, centralization, components, cliques, cores, clusters, etc...all of which are explored utilizing a social network analysis program.

# Social Network Analysis History

Modern social network analysis has been molded by many separate strands of thought and history, however, one can postulate that three primary areas, sociometric analysis, Harvard researchers of the 1930s, and Manchester anthropologists, of thought and an eventual combination of these traditions led to present day social network analysis (Scott 2000). A figure developed by Scott (2000: 8) concerning the lineage of social network provides a visual representation of its history can be found in Figure V. Also, in reference to the background and literature involving social network analysis, Freeman (1976) lists over sixteen hundred publications and Pitts' (1979) bibliography contains four-hundred eighty-one listings. Both of these references merely refer to the enormity

of literature that has been written about social network analysis of which a summary of social network analysis cannot cover.

The first of the three strands in the history of social network analysis begins with gestalt theory. Gestalt theory is flanked by three primary intellectual founders: Wolfgang Köhler, Kurt Koffka, and Max Wertheimer. Wertheimer explained the theory in the following way in a speech from 1924 found in Ellis (1997):

The fundamental "formula" of Gestalt theory might be expressed in this way. There are wholes, the behaviour of which is not determined by that of their individual elements, but where the part-processes are themselves determined by the intrinsic nature of the whole. It is the hope of Gestalt theory to determine the nature of such wholes.

The Gestalt researchers primarily led the way in the development of sociometrics and group dynamics. In fact, Jacob Moreno first developed the sociogram in 1933 as a way to characterize social configurations (Scott 2000: 9). Moreno's sociogram is part of commonplace visualization of networks, consisting of points and lines. Figure VI is a particular example of a hypothetical sociogram of business contacts. In this diagram contact 1 is a contact of choice for all of the other nodes, or points, in the sociogram. Contacts 2, 3, and 4 are the only other nodes found in 1's list of contacts; while nodes 5 and 6 list 1 as a contact, 1 does not have a reciprocal relationship with 5 and 6. It is this type of sociogram, now computerized, that was previously meticulously hand drawn, that serves as a basis to such complex network visualizations listing literally millions of nodes

such as the internet. The general concept of gestalt researchers was to use various laboratory methods and case studies to see group structure and to study information flow within group networks (Scott 2000: 9).

The next strand according to Scott (2000: 9) that played an important role in social network analysis was the research taking place at Harvard University by anthropologists and sociologists developing the work of social anthropologist Radcliffe-Brown. From this research the famous Hawthorne studies took place whose particular importance to social network is in their use of sociograms to display group structure in real situations with real relations. While the Hawthorne sociograms look very similar to those of Moreno's sociograms, there is no commonly accepted evidence that there was any crossover from one to another, only that Hawthorne's sociograms probably took their look from formal organizational charts and electrical wiring diagrams widely used at that time (Scott 2000: 18). The work of these researchers was very important in emphasizing the significance of informal and interpersonal relationships in social systems.

The final strand leading up to the convergence of social network analysis was that of the Manchester researchers. Here, in a similar way and time as the Harvard researchers, development of the work of Radcliffe-Brown was taking place. The Manchester school investigated the analysis of conflict and contradiction when applied to social systems, i.e. tribes and small towns (Scott 2000: 7). The predominant advancements made by the Manchester school was in combining mathematics with social theory, systemizing the terms web and

network, and developing new terms common to modern day social network analysis such as ego-centered, reciprocity, intensity, density, and cliques, among others (2000: 26-32).

The occurrence of social network analysis as seen today came via the Harvard breakthrough in the late 1960's and early 70's. The researchers at Harvard developed social network analysis into a mathematical structural analysis, modeling all types of social structures with no one theoretical focus to their work with network analysis being the primary unifying factor (Scott 2000: 33-34).

In speaking about the need for a systemic, unified theory of social networks, Barnes & Harary (1983: 236) state, "Network analysis has no analogous lattice of propositional interconnections and its history is contestable." However, as is the case with the usage of social network analysis in this study, Scott (2000: 37) comments that while the drive for a theory is a point of discussion amongst network scholars, social network analysis is best described as "an orientation towards the social world that inheres in a particular set of *methods*. It is not a specific body of formal or substantive social theory."

Social Network Analysis and the Anti-Globalization Network

In seeking to research the anti-globalization network, this researcher had to determine the most appropriate means of analysis. Social network analysis is the method that was chosen to examine the phenomenon of anti-globalization. After determining that the theories of collaborative networks and complex adaptive systems were going to be the theories from which anti-globalization could be

framed, a social network analysis became the obvious choice of study. Since the major aspects of this thesis are in recognizing the shift from anti-globalization movement to anti-globalization network, then identifying the network, its structure, and how it is organized, a social network analysis is one of the few methods available able to do that. Additionally, a social network analysis of anti-globalization helps to answer the pervasive questions of "who" the network is and what the network represents.

By conducting a social network analysis, the main benefit is the ability to visually represent the structure of the anti-globalization network. Once this takes place, depending on the amount of information collected about each individual organization, observations can be made in regard to who some of the major players are, i.e. important/large nodes in the network. Also, from a social network analysis cliques can be determined showing potential stratification within the network. In listing the findings of the social network analysis, Chapter 5 details and defines the various terminologies and how they can be interpreted to the anti-globalization itself.

# Data Collection & Snowball Sampling

When a researcher attempts to perform a network analysis, a network, with available data, must be present. However, with the anti-globalization network there have only been minimal attempts to even compile a simple list of organizations participating in anti-globalization activities. Thus, data must be collected that serves to map a network from which the analysis can be made.

This is the reason it is necessary to incorporate a snowball sampling technique as a research method to identify the organizational make-up of the network.

During the WTO's 5<sup>th</sup> Ministerial in Cancun, Mexico from September 10-14, 2003, this researcher obtained a grant from Oklahoma State University's School of International Studies to conduct a pilot study to observe and collect data, in the form of pamphlets, handouts, photographs, protest itinerary (in addition, no data was collected through interviews, surveys, or questionnaires) of anti-globalization organizations. This researcher believes that the observations made in person of the protest activities of organizations and individuals were an invaluable experience in shaping the whole of this thesis and the direction of the research.

Prior to the research trip to the Ministerial, this researcher found an organization by the name of Mexico Solidarity Network that served as the organizing committee for the protests in Cancun. On their website a listing was found compiling the "endorsing organizations" to "DERAIL THE 5<sup>TH</sup>

MINISTERIAL OF THE WTO (Mexico Solidarity Network, 2003)." The only criteria found by this researcher, on their website, to become an endorsing organization was to simply send an e-mail to be processed by the Mexico Solidarity Network. Various other informational pieces were procured from the website that detailed protest locations and as well as links to protest itineraries, all of which proved to be extremely accurate during the protests in Cancun. All of this lent credibility to the other information put forth by the Mexico Solidarity Network with regards to the list of endorsing organizations. It was from this list

that the first pieces of data were collected concerning the anti-globalization network.

The first step in establishing a set of core anti-globalization groups, from which to perform a snowball sampling in order to set the structure of the network as a whole, was to design a method that rates an organization's popularity/importance. Therefore, utilizing the initial list of endorsing organizations, 75 in total, a procedure, called backward linking, was employed using the search engine Google to determine the number of links pointing to the homepage of the organization. The choice to utilize the Google search engine is due to it being rated the most widely used search engine in the world according to OneStat.com (2003) with 56% of the market (more than double its nearest competitor). By compiling the number of links that a website has directed to its homepage, one can determine how popular that specific website is in the internet community. One step past that is to collect the total incoming links for a number of websites within a specific segment, such as anti-globalization here, and then a general idea can be made as to which organization has a stronger more established presence. The links pointing to each organization's homepage may consist of other organizations that support the anti-globalization organization or links from other pages within the group's website pointing back to the homepage. For example, a group advocating a particular political stance most likely lists a links page directed to other organizations that advocate a similar idea. Also, links can certainly come from those websites that oppose or advocate opposing views from a specific organization. In this case a website may list links directing ones to

other sites of similar interest while listing groups promoting an alternative viewpoint. Moreover, the more famous or well known an organization or person is that is an advocate of a cause, chances are that there are individuals or organizations that maintain websites specifically to oppose those people and/or organizations, of which there will be links directed to the organization that they oppose. Another area from which links are garnered is online magazines or periodicals with news articles or editorials that link to a specific organization. Therefore, the more an organization is in the news at that given moment the more links they will likely be pointing to that organization. In all, the linking system provides a snapshot of the organization and should represent an accurate picture of how important that organization is to lending influence, support, or even just name recognition within the anti-globalization network.

The homepages of each of the 75 organizations were initially analyzed for the number of websites linking to the each organization's website. These 75 organizations did not include any non-public sponsors, i.e. those that participated in the protests at Cancun and had a presence but were not represented through the organizational body of the Mexico Solidarity Network. While surveying the protests, some of the organizations/participants that demonstrated but were not part of the list included anarchist and communist groups. These groups had a strong presence but since they were not active in the public organization of the protests they are outside the scope of this study and therefore have to be left for future research. Out of the 75 organizations only 51 maintained a web site specifically for the organization, 22 of them did not have a website and two

organizations were affiliates of one of the 51 and were not included in the study due to redundancy. The 22 organizations that did not have a web page were also not included in the study because the presence of a website is an obvious requirement for the data that was collected. Therefore, the link analysis was only provided on a total of 51 organizational websites. Figure VII lists the 51 organizations analyzed and in parenthesis are located the number of total links directed towards the homepage of each organization. This particular research took place throughout the month of November, 2003 and was performed by this researcher. Also, Figure VIII graphs the results of the link popularity analysis (each number in Figure VIII directly corresponds with the listing in Figure VII). While looking at the graph it, there are some interesting points to note. First of all, the vast majority of organizations have less than 500 links pointing back towards their home page. Also, it is interesting to point out that 16% of the organizations have fewer than 5 links of which links on one's own website redirected back to the home page would be included.

From the same data the share of total links directed towards all of the organizations, which total 24,930, show a distorted distribution where the top 10% of link earners control 57% of the total links being directed at the groups. Another surprising figure is that the top 20% of link earners control 87% of the total links. While the bottom 50% of link earners obtain an insignificant 2% of all links directed to the anti-globalist organizations, with the bottom 25% being statistically insignificant. The large void between the top few organizations and the rest points to what seems to be a definite distinction of importance between

the various organizations. This researcher decided that the top seven link popularity organizations, all of which have nearly 2,000 links pointing towards their homepage, would be an appropriate cut off point for determining the major organizations within the list of public endorsers of anti-globalization. The total combined links of these seven organizations are 18,250, representing approximately 73% of the total links from all 51 organizations.

Once, the top seven organizations were chosen, a conscious decision had to be made from this researcher to narrow those organizations to the ones that specifically promote and advocate an anti-globalization stance, as determined by publicly available information on each groups' websites. The following represent those top seven link garnering organizations: ATTAC International, Global Exchange, International ANSWER Coalition, Public Citizen, United for Peace and Justice, War Resisters League, and The Women's International League for Peace and Freedom. Upon studying each group's website, it became apparent that four of the seven organizations, International ANSWER Coalition, United for Peace and Justice, War Resisters League, and The Women's International League for Peace and Freedom, were specifically focused solely on antiwar/peace issues. As previously discussed, in this study, anti-globalization is specifically defined as anti-neoliberal and hence organizations may indirectly support the network but are not part of promoting that specific network. Also, at the time of this research in November, 2003, the protests and activity against the war in Iraq were peaking and the anti-war organizations found an accommodating and sympathetic bedfellow with the anti-globalization network.

The most important facet of this aspect of the study was to choose organizations that could be identified as being explicitly against neo-liberal globalization, because it is from these organizations that the anti-globalization network will be formed. Otherwise, the resulting network from the snowball sampling will be skewed representing organizations that are not neceassrily acting to stop globalization. Therefore, of the seven top organizations only ATTAC International, Global Exchange, and Public Citizen were found to be outspoken organizations against neo-liberal institutions and globalization. These organizations became the foundation for the anti-globalization network and the snowball sampling procedure that follows.

## Snowball Sampling

Snowball sampling is the process of starting with an initial data set usually limited by the researcher and then branching out one level at a time by determining who is connected to the initial data set. Rogers & Kincaid (1981: 109) state that "Snowball sampling follows a multistage design in which respondents at each phase sociometrically determine who the respondents are at the following stage." Once the first set of respondents determine who the next set of respondents will be the same process is completed again and again until, after a certain number of levels out from the initial data set, each new level has higher and higher percentages of connection with those of the previous levels. The idea is to start with a pre-determined group of units, for instance friends (to find out who their circle of friends are) and then to find by directly asking them, one of many methods, who each person's best friend is. Once it is known who their best

friends are, one can then ask those persons who their best friends are and so on. Eventually, after a few generations, a network structure has been developed by which a network analysis can be performed. Two important studies in the usage of snowball sampling include Palmore (1967) tracing how a multitude of family planning methods are spread amongst lower-income women in Chicago. Also, Agarwala-Rogers & others (1977) examined how four different methods of teaching were transferred from a group of several thousand college professors who were initially informed about them to two levels of samples called 'secondary receivers' and then to 'tertiary receivers' and further and further. This type of process is the foundation of creating a network that is borderless in nature, in the scope of a complex adaptive network. Assimakopoulos (1998) stated that "tracing and studying the chains of linkages is a process similar to that of a snowball rolling downhill as the sample grows slowly in the beginning and increasingly faster in later stages." A successful snowball procedure requires the researcher to be familiar with the population and the relations within them in order to make the result representative, since the procedure is not a random sample (Scott 2000). This is the reasoning behind systematically excluding four of the top seven organizations.

The three organizations, ATTAC International, Global Exchange, and Public Citizen, form the base for the snowball sampling procedure. Utilizing the concept of the snowball sampling, a link analysis was performed. First, the links of each of the three organizations' websites to other organizations' websites were found. Generally, these links are explicitly listed on a separate page titled "links" other

may have been found under headings such as "Campaigning Partners" in the case of ATTAC international or "Advocacy Organizations" with the Center for Economic and Policy Research (CEPR). While no attempt was made to specifically exclude an individual organization based upon this researcher visiting the organization's website and deciding that it did not advocate an antiglobalization stance (as with the narrowing down of the initial seven organizations to three for the base sample), if an organization listed its links categorically this researcher would choose the appropriate category. For example, Global Exchange maintains two main advocacy categories on its homepage, economic rights and human rights. From these two economic rights fits the definition of anti-globalization used in this study, i.e. anti-neoliberalism. Once economic rights is chosen, there are a number of different sub-categories, but the ones specifically relating to this study were the ones that have to do with neo-liberal institutions, i.e. the WTO, World Bank, and the IMF. By following the links to the sections for each institution, there are links leading to a listing "of other organizations and groups working to stop the WTO (Global Exchange 2004)." If the links were not categorized and simply listed together on a single web page, all of them were included in the study. By allowing this type of macro level exclusion the individual organizations choose which other organizations should be included in the next level of the network without having to explicitly ask each organization to identify the other organizations they believe are working against neo-liberal globalization.

Other criteria for organizations included in this study were that all organizations had to be offered in English, not exclusively though, and if there was a choice, link categories pertaining to "neo-liberal" institutions such as World Bank, IMF, and WTO were chosen over environmental, human rights, or workers rights organizations. Links to those organizations were not included unless, as stated previously they were part of one large list of links with no categorical separation. Also, if the choice was available to choose international over state or regional then International was chosen. For example, some website may list links to organizations that fight globalization in specific countries and then list a separate compilation of organizations that work on an international level, and those would be chosen over the regional or state categories. While a version of the website had to be offered in English, each additional language was noted and listed, but an alternative language option had to have been made available on the homepage of the organization and the language links must work. Collecting the various languages offered, will hopefully display a view as to how international the anti-globalization network is and to show that just because English is required, other languages may be just as prevalent within the network.

The choice to only include organizations that offer an English translation was done for two reasons: first, this study was conducted in English, the researcher's primary language; therefore, if translations were made by the researcher and not the organization, there could be confusion as to how a secondary party interprets what the organization would have translated differently. The other reason is that, on an international basis, if one language was to be used exclusively, English

would most likely prevail, while some may disagree, the idea is that a website with a large international appeal would attempt to have at least an English translation. This contrasts to an Indian or Brazilian website written exclusively in Hindi or Portuguese, while many people surely could read it since the countries are quite populated; it has a very firm border where its international appeal is stopped short. While it is admitted that limiting this study to websites that offer an English version can be restrictive, a list will be kept detailing how many other languages each website offers, to show how strong this restriction can be. From this information, inferences may be made towards the international nature of the websites as opposed to a strictly regional or state movement.

In addition to the languages, the location of each organization was noted, if the location was not available on the website, then using the services of the internet registration company, Godaddy.com was used to look up the domain and the location stated on the public record of the website for the organization was used. If that was not available, the location of the individual who registered the website was used.

After these standards were adopted, the snowball sampling procedure began. Starting from the three organizations, as procured from the list of endorsing organizations in the protests against the WTO's 5<sup>th</sup> Ministerial, the links from each organization's website were compiled with the restrictions previously stated. Once the first level was created, representing the links of ATTAC International, Global Exchange, and Public Citizen the new organizations' websites were then added to the network being created by the snowball sampling. In addition, to

simply collecting the organization's name, the languages in which the website can be viewed, and the location of the organization, two other pieces of information were collected. First, the total number of links pointing to each website was collected using the same Google process of backward linking as used in determining the core organizations of the Mexico Solidarity list. Also the Google PageRank was collected representing a whole number between 0 and 10. On Google's (2004) website they describe the PageRank system as the following,

Google interprets a link from page A to page B as a vote, by page A, for page B. But, Google looks at more than the sheer volume of votes, or links a page receives; it also analyzes the page that casts the vote. Votes cast by pages that are themselves "important" weigh more heavily and help to make other pages "important."

Once all this information is collected about the initial three organizations the same formula was applied to all the websites that were discovered from those three organizations. The process was then repeated to one more level/generation. In other words, the links of the organizations from linked to from ATTAC International, Global Exchange, and Public Citizen were examined and stopped there representing a total of 271 organizations.

In the next chapter the detailed findings of the snowball sampling are analyzed and discussed. Additionally, all the organizations identified as part of the anti-globalization network are examined through the social network analysis program, Netminer II, of which, among many other network analyses, a social network diagram are produced showing linkages based on links originating from

each website to every other website in the network, also called a directional diagram, created from the snowball sample (Scott 2000). This diagram represents the anti-globalization network as formed out of the snowball sample using organizations that endorsed the protest action against the WTO's 5<sup>th</sup> Ministerial.

### Chapter 5

### **Findings**

The research conducted in this study is meant to help explain the nature and structure of the anti-globalization network, by answering questions as simple as 'who is part of the network?' By this measure, material was secured that helped to identify organizations specifically and publicly endorsing the protest activities against the 5<sup>th</sup> Ministerial of the WTO in Cancun, Mexico. Not only is this one of the most recent global protests against globalization it is directed towards the institution that served as the catalyst to worldwide integration of the network at the Battle of Seattle during the 1999 WTO Ministerial in Seattle, Washington (Buttel 2003). From the listing, three organizations were determined to be strong advocates in the fight against neo-liberal globalization, and beginning with those three, a snowball analysis was conducted identifying 271 total organizations deemed to be part of the anti-globalization network. Following, the data from the snowball sampling will be analyzed as well as performing a comprehensive breakdown of the data/network utilizing a social network analysis program.

# Snowball Sample Data Analysis

Starting with ATTAC International, Global Exchange, and Public Citizen, the snowball sampling procedure produced a total of 271 organizations (Figure IX), representing three full relational generations, i.e. the first three organizations, their links and the links of those organizations. From the data collected during the

sampling, there were four sets of information to be analyzed: website languages, organizational origination, number of backward links, and the Google PageRank.

Languages

Taking note of the language was important in determining if the network was maybe overrepresented by English only websites since this researcher only included organizational websites maintaining at least a partial English translational of the website. In a way this helps check to see if the research produced an overtly English bias. Starting with the original three websites, language diversity was found in two of the three. ATTAC had the largest number of possible language translations of the three groups with five; English, French, German, Spanish, and Italian. Public Citizen offered the three language possibilities of English, Portuguese, and Spanish while Global Exchange only offered English. The total sample of organizations numbered at 271 and by default, since they all had to have an English version, all of these organizations' websites offered an English translation. It should be pointed out that there were some websites offering only minimal translation into English; moreover, there were a significant number of websites in the group of 271 in which English was not the primary language. The total number of languages represented among the 271 organizations' websites was 23. Spanish and French were the second and third, respectively, represented languages among the websites with 63 and 51; furthermore, nine of the languages were represented with the website of only one organization. Of the 271 organizations, 178 or about two-thirds of the websites only offered English as the language in which the website could be viewed while

nearly another third represented languages of European origin. Figure X shows a breakdown of the language choices available and the number of websites that offered that particular language; in total there were 478 separate language versions of the websites. Since a solid third of the websites have at least a secondary translation besides English, it is hard to say that the sample is biased towards English only. However, a case could be made that a possible lack of websites with Asian language translations could signal a lack of representation. The next section detailing the locations in which each organization is based helps to shed light on the true international representation of the network sample. Organizational Origination

In deciding to collect the location from which each organization is located, this researcher wanted to obtain a general feel for what parts of the world are most represented by the network. Moreover, it also helps to add to or subtract from the notion that by limiting the organizations to those that offer their websites in English reduces the internationality of the network. This researcher is of the opinion that the network is extremely well represented by organizations around the world. For instance, the distribution of the organizations' headquarters was found to be very balanced in this network, where only two cities, London, UK and Washington, D.C. garnered more than 10 percent of total city originations out of a total of 107 cities. Additionally, no city was linked with more than 20 percent of the organizations; London was the location for the main offices of 28 organizations while Washing D.C. topped the list with 45. In retrospect, it may be a bit surprising that the results show what may well be the most important cities

in the world for political influence house less than a third of the anti-globalization network in this study. It may have helped to spread locality diversity because, of the primary three organizations of the snowball sample, two were from the United States, Global Exchange from San Francisco and Public Citizen located in Washington D.C., while ATTAC is headquarter in Paris, France. Figure XI lists the 107 different cities and how many organizations from the network are located in each city. From those 107 cities an impressive 37 countries are represented, including The Vatican and Hong Kong. From the initial three organizations, from which two were from the United States, only a third of the overall cities represented originate in the United States, a decidedly significant decrease, pointing to a truly international orientation of the network, even though English was a required language. This may also lend credibility to the assumption that the internet operates without borders and truly allows for the first time in history a systematic world-wide organization of advocacy groups for a global network. Besides London and Washington D.C. four other cities stand out, as important cities in the network: Amsterdam, The Netherlands; Brussels, Belgium; Ottawa, Canada; and San Francisco, CA. All of these cities house 11 organizations except for Ottawa which is the location of choice for 12 organizations.

With respect to the decision to choose websites that at least offer English to be part of the network, it does not seem to have affected the global reach of the network. This is especially realized when considering only 6 of the 37 countries represented have English an official or co-official language. The most important aspect of detailing the locations of the organizations in the network is to identify

the major cities in which anti-globalization may be taking place to most importantly show that the anti-globalization network is itself a global entity stretching across the globe.

### Backward Links and Google PageRank

The collection of total number of backwards to each organization's homepage and the PageRank of each homepage serves two primary purposes. First, it allows the organizations to be compared to one another, identifying the organizations, based on third party data that is difficult to manipulate or directly affect, that are at the extremes of both ends of the spectrum. As is the case with many types of data within a particular set, the more interesting data are those that fall outside the average, i.e. outliers. Secondly, the data collected about each organization's website can be used to compare it to other websites, plus the PageRank number is a number created based on overall popularity within the entire global internet network. Therefore from these numbers alone, a general idea should be able to be made about the overall popularity and potential influence each organization has to enact change.

Starting with the backward link analysis, of the 271 organizations there were a total of 265,592 links pointing back into the network. As with first backward analysis performed on the list of endorsing organizations for the WTO 5<sup>th</sup> Ministerial protests, the distribution of links was extremely uneven. While the mean is 980 backward links per website, the median is only 338. The top two link garnering organizations, Human Rights Watch and OneWorld (both of which nearly double the backward links of the third most popular, Greenpeace

International) obtained 19,100 and 17,700 respectively. When these numbers are combined, the sum nearly equals 14 percent of the entire number of backward links amongst the 271 organizations. Further demonstrating the inequality of distribution, a third of all links was controlled by nine organizations or a mere three percent of the total organizations. The bottom half of all link receivers obtained just under seven percent of all links, or 17,961 out of 265,592. Also, the top two organizations, Human Rights Watch and OneWorld, more than doubled the combined entirety of links from the bottom half. Additionally, the top 50 percent of all links were directed towards the top 19, while the bottom 50 percent was directed for the bottom 252 organizations. Organizations ranged from one link to 19,100 links. Possibly pointing to a certain level of insignificance among the general internet community, nearly 22 percent of all organizations had less than 100 links pointed towards their homepages; at the same time, about 21 percent of the organizations had over 1,000 backward links.

The Google PageRank was collected primarily to utilize Google's highly successful algorithm in determining relative 'importance,' as stated earlier by Google, of each particular page on the internet. This serves a similar purpose as the backward link analysis, except the PageRank score is specifically based upon the webpage's position in the entire internet network. In this study, the PageRank was collected only of the homepage of each organization's website. Of the 271 organizations, due to the design of the websites, three of the websites could not be analyzed for PageRank and thus only 268 of the organizations are included in the PageRank analysis. An interesting point to note is that in

comparing the PageRanks of the top 19 organizations for backward links, i.e. those that as a group obtained 50 percent of all links directed towards the network, all of the organizations except one held PageRanks of seven or more. There were no tens and only one nine, the Open Society Network. Moreover, only eight organizations scored and eight, all of which scored in the top 19 of the backward link analysis. The average PageRank score came in at 5.9 while the median was 6 representing a relatively stable distribution as compared to the backward link distribution. The range of PageRank scores for all the organizations was three to nine.

When examining the PageRanks of the individual organizations from the network, apparently a significant portion of the organizations have a considerable amount of 'influence' as Google put it, within the internet community. However, a PageRank score can be greatly inflated based on the link of a single organization. For example, if a website only has one link from a random unimportant website and accordingly has a low PageRank score, and then the website attains one additional link from a very large and important website, the PageRank would increase according to the importance of the website linking to it. While this is only one aspect of the PageRank formula, it may explain why there is relatively equal distribution in PageRank scores while the backward link analysis showed extreme amounts of inequity. Therefore, it is probably best to take note of the extremes of the PageRank scores. For instance, the highest PageRank scores correlate almost identically with those that have the highest number of backward links. The correlation is not as strong with organizations that have a low

PageRank, yet two-thirds of all organizations with PageRanks of four or under are in the bottom 10 percent of backward link garners. The problem starts when analyzing the websites that have a PageRank of five or six (175 such websites), around the mean and median, since there is no differentiation within the ranking, i.e. 5.3 versus 5.8. Therefore, the PageRank is not as useful for comparing within the network as making a broad conclusion towards how the websites compare to the internet as a whole.

### Social Network Analysis

The crux of this research was in developing a method to identify a network via the snowball sampling and then analyzing the network. While there has been a small amount of analysis between the organizations within the network, with the backward links and PageRanks, most of the analysis has been focused on the individual organizations within the network. The social network analysis is intended to give an idea as to the overall structure and description of the network itself. Due to software constraints of the database program and the network analysis software utilized by this researcher, only 249 of the 271 organizations identified through the snowball sampling could be included. Therefore, 22 organizations had to be systematically excluded from the network analysis. The decision was made to remove the bottom 22 organizations of backward links all of which are organizations with no link connections to other organizations within the original 271 and therefore would make the smallest amount of disruption within the analysis. Figure XII lists the 22 organizations eliminated from the social network analysis.

The network was created by conducting the snowball procedure and every link from the first two levels/generations of each website was recorded. This represents a link analysis of 42 organizations and a combined network of 271 organizations. The sum total of all links in the network of the trimmed down 249 member network, minus the 22 as previously stated, was 629, while the sum total of links from the original 271 organizational network was 651. Also, the average outgoing links for each of the 42 organizations came in at 15.5. Overall, approximately two-thirds of all links from each of the organizations pointed back at other groups already in the network; i.e. as more and more organizations were studied fewer and fewer of the links contained links to new organization not yet identified in the network. Figure XIII is a graph showing the rolling average percentage of the links from each organization in the order in which the organizations were studied. The graph shows how quickly the network was formed, for instance, by the time the first five organizations were examined nearly 45 percent of all links were pointing back into the network. After this, the slope smoothes out greatly, however, it still shows a gradual move upward to the final percentage of nearly two-thirds of all links in the study pointing back into the network. While this researcher feels there is room for more study and examination by expanding the scope of the network another generation or two, the significant closure shown to be taking place in the network after examining 42 organizations is important in understanding the makeup of the network. As noted previously, this network contains a diverse range of organizations from across the globe; however, there seems to be a considerable amount of loose

connection among the organizations fighting neo-liberal globalization, as would be postulated by collaborative network theory. Following are the explanations, results, and interpretations of each of the various analyses performed via the network analysis. Additionally, sociograms run via the social network analysis software of the network can be found in Figures XV-XX.

## Density

Perhaps one of the most widely used measures of social network analysis, density, is described as the general level of linkage among nodes in a network (Scott 2000). Using social network analysis software, an analysis was run on both the density of outflow links, those from the website to others and the density of inflow link, those from other websites linked to the website (Borgatti, Everett, & Freeman, L.C. 2002). The computation for both types of density must be made since the network is a directed network, where a particular organization may link to another organization but that organization does not necessarily link back to the other organization. The results from the analysis can be found in Tables I and II. First, in looking at the directed inflow density, Table I, it is important to understand the terminology employed in the analysis. When a reference is made towards "ego," it is meant to refer to a column actor in the matrix that creates the social network, in other words ego is organization under examination. Another term, "alter," refers to column actors in the matrix, which are the actors to whom the egos are linking to in this study (2002). Both of the analyses run on the network create separate reports for each ego, identifying the ego-network and density for every actor in the network. For this researcher, the more important

aspect of density involves the inflow density report which tracks and explores the relationships of links coming into to each of the egos. The reason for this is because an organization such as the Bank Information Center has an outflow ego network of 65 links to other organizations, while this is largest of any organization the relationships are not by default reciprocated since this network is directed. Therefore, the more important figures would be that show the inflow traffic to each organization or alter. While the Bank Information Center has 65 outflow links there are only 8 inflow links. Another way to consider the link relationships in the network is to consider the outflow links (Table II) as votes for other organizations and the inflow links as the total votes received from the network. In that case it is interesting to note that the Third World Network is the only organization to have received over 20 inflow links, with 23 in total, while at the same time having linked to three other organizations. Other organizations with high numbers of inflow links include: Focus on the Global South with 16, Public Citizen's Global Trade Watch with 16, Friends of the Earth International with 15, Corporate Europe Observatory (CEO) with 14, and 50 Years is Enough Network with 14. Two other categories are of particular interest from Figure XIV, 2StepReach and Broker. 2StepReach is quite simple; it represents the percentage of nodes or alters from the entire network that is within two links of ego. The organizations with particularly large percentages of 2StepReaches include Third World Network at 76 percent, Public Citizen's Global Trade Watch at 74 percent, and Friends of the Earth International at 72 percent. These percentages show the possibility of being able to easily organize large segments

of the network without significant effort beyond its own ego-network. While these percentages display reach within the network, broker is a way of displaying potential importance in serving as a middleman in the network. Specifically, it describes an organization that links two separate organizations, with no relationship, together. For instance, node a and c may have large inflow links while node b is only linked to by a and c. In this case, obviously, a and c are significant nodes in the network, but the potential importance node b serves as being the only link, broker, between the two separate clusters cannot not be diminished. The following organizations all serve as brokers between 70 or more organizations: Third World Network - 194, Focus on the Global South - 89, Public Citizen's Global Trade Watch - 83, Friends of the Earth International - 77, and 50 Years is Enough Network - 70.

### Centrality

The purpose of calculating centrality is to figure out how well connected or centrally located a node is in a network, or by figuring the degree and normalized degree centrality of each vertex and gives the overall network degree centralization. (Borgatti, Everett, & Freeman, L.C. 2002)" Scott (2000: 82) refers to the concept of centrality as figuring out who the "star" or "popular" person/organization is in a group. Figure XV shows what has been partially represented by Figure XIV, the overall inflow and outflows of each organization, while additional statistics are shown, including mean, standard deviation, and overall centralization of outdegree, 25 percent and indegree, 8 percent. Also, the normalized data in Figure XV represent the original data converted to a scale of

100. According to Borgatti, Everett, & Freeman (2002), degree centrality is best used to measure network activity, while Scott (2002: 89) states that "centralization describes the extent to which this cohesion is organized around particular focal points." In essence, the closer the percentage of centralization is to 100, the more the network will look like the spokes on a wheel with one point in the exact middle of all other points; while the closer the percentage is to zero, the more uncentered the graph will be. Hence, with the anti-globalization network, the outdegree network shows a much higher degree of centralization while the indegree shows a much more equalized level of centrality.

#### Betweenness

Freeman (1979) developed another aspect of network centrality he calls betweenness. This concept refers, quite simply, to its name in seeking to identify how many nodes a particular node lies between in a network. If node G lies between F and H, while F and H are connected to five other nodes respectively, G has a high level of betweeness and can seek to play an intermediary role with the points connected to F and H. Scott (2000) states that Freeman's betweenness is centered around the concept of local dependency, the notion that a node is reliant on another node if a specific path from other nodes requires travel through that node.

Borgatti, Everett, & Freeman (2002) maintain that when calculating betweenness on a directed network, as is the case with the network in this study, care should be taken. For instance, when looking at the data found in Figure XVI, Bank Information Center is listed as having the highest level of betweenness,

however, as noted before, the results may be skewed towards Bank Information Center due to the sheer number of links listed on their website. Furthermore, the number of in-links, showing network popularity, is not nearly as high. While this may be true, in the network layout it is not the direct links from or to another point that matter for calculating betweenness, but the number of points on the other side of those points. This is why care should be taken in interpreting directed network betweenness. Figure XVI shows a complete listing of organizations and their respective betweenness calculations. Since betweenness can only be calculated on organizations that are linked between two organizations, those with no outgoing links have measures of zero.

# Chapter 6

## Discussion

Throughout the entire decision making process in regards to a research topic, the idea of researching anti-globalization always intrigued this researcher. The attraction lies mostly with the relatively few pieces of research on the network that are not from the viewpoint of an activist attempting to promote the cause through their study or paper. This seems to be common with the study of concepts and ideas that are minority viewpoints in opposition to a vast majority of opinion. The majority opinion seeks to promote their cause through research while the minority viewpoint obviously wishes to do the same while also attempting to debunk the majority view; however, it appears rare to find research, attempting to be non-biased, on the minority subject. This has been the case of this researcher, through the hundreds of articles and the numerous amount of book referenced and scoured through for information, few and far between attempted to give a neutral informational report on the anti-globalization network. Nearly, every single journal article consulted on the issue of anti-globalization sought to support the cause and debunk the notion of neo-liberal globalization. The numbers support this researcher's premise that anti-globalization views are in the minority worldwide while pro/sympathetic views towards globalization are the norm worldwide. According to a Pew Research Center (2003: 84) survey of 44 countries, more than half of the nations surveyed had 60 percent of

respondents rate globalization at least "somewhat good." Also, when asking survey participants from 43 countries about their opinions of the WTO, IMF, and World Bank, only three countries, Turkey, Jordan, and Argentina, had a majority of people claiming the institutions are "bad for the country" (2003: 99). However, the same Pew Research Center said:

To a considerable degree, anti-globalization protestors have simply failed to register on the public's consciousness. Majorities or pluralities in most of Africa, Asia, Latin America, the Middle East and Eastern Europe say they do not know enough about anti-globalization critics to have an opinion or declined to offer one.

Additionally, the Philippines is the only country in the survey that had a majority of respondents maintain that anti-globalization protestors have a positive effect on their country. While a case can be made that the viewpoint of the survey respondents may be different in regards to the protesters and the organizations, this researcher compiled the list of organizations in this study stemming directly from support for the anti-globalization protests. While these are details, the main concept is that the relegation of minority status to the ideas of anti-globalization led this researcher to pursue a study of the network that binds the phenomenon together.

From the initial thought of somehow figuring out who are some of the organizations that promote the fight against neo-liberal globalization to the detailing of the transition to an established organized entity, the experience of researching this topic has been extremely important to my understanding of the

process at which this new era of globalization is moving. Primarily, before this paper ever began, this researcher had no idea the breadth of organization behind the protests surrounding the various international institutions. Through the first hand experience of visiting and observing the protests take place during the WTO's 5<sup>th</sup> Ministerial, this researcher was able to identify organizations directly supporting the protests and thereafter extrapolate data and identify the main proponents of anti-globalization ideology. It was the three organizations, ATTAC, Global Exchange, and Public Citizens Global Trade Watch, from the entire list of sponsoring organizations that set the stage for the ensuing snowball sampling procedure utilizing the websites of each individual organization and detailing the specific outgoing links as a way to create a network. This network was then analyzed based on geographic location, number and type of languages, and total number of backward links, among other data, before analyses were run via a social network analysis program to extrapolate data such as betweenness and density.

An important aspect of this research is the contention that the current status of the protests against globalization is best seen as a network and not through the lens of a movement. While the movement aspect certainly was prevalent in the past with anti-globalization, this researcher, through this research, maintains that the movement has matured and become an organized entity called a collaborative network. The explanation of this process was utilized using the theory of complex adaptive systems showing how basically unintentional and random events lead to organized structured outcomes.

Other intriguing studies could follow up on this research to help solidify or discredit the network created. First, a content analysis could be run employing the 'About Us" pages, the pages that explain the mission, vision and purpose of a website. This would seek to find out what degree each organization markets itself via anti-neo-liberal ideology and what are the most common themes between the organizations.

Next, interviews could be conducted of the executive directors/designated spokespeople of each organization to obtain a more detailed qualitative feel for the perspective of each organization. It would be interesting to know how they group their organization and whether it is in juxtaposition or defiance of globalization. Also, information in regards to how each organization would describe/define globalization and whether they identify themselves more with a network working together against that global force or as an individual organization directly protesting individual events.

As stated previously one of the more difficult aspects of studying the antiglobalization network was the lack of any type of master list to implement random sampling techniques. Now utilizing this network or an expanded one, sampling procedures could be used to gauge the attitudes and feelings of individual members of each organization. While the expansion of the network, i.e. identifying more and more generations of organizations through the snowball sampling internet link method, could be beneficial in creating a network that is even more closed with much higher level of links pointing back into the network, until essentially making a complete network with essentially no new organizations showing up in the analysis of each organization's website.

This study is meant to help define and give shape to what has always been perceived as a movement with no structure. While there surely may be ways, as stated above, to expand the scope of this research or possibly reveal new information that may fundamentally shift the structure of the network created in this study, it is the contention of this researcher that the anti-globalization movement is no longer a movement but a progressive, adaptive network continuously changing with and separately from globalization itself, in whatever way one desires to define it. Furthermore, it is this invisible force, globalization, which all people promote and advance, shun and ignore, or fight and alter. Via technology, trade, and human contact some type of change is inevitable and the levels of all three are at higher rates than ever before in human history. This change includes anti-globalization and the entity that was born in the streets of Seattle morphing from seemingly incompatible individuals with a breadth of clashing beliefs to a structure that globalists and anti-globalists alike should pay notice as the debate of globalization continues.

## References

- Agarwala-Rogers, R. and others (1977), Diffusion of IMPACT Innovations from 1973-1976: Interpersonal Communication Networks Among University Professors, Stanford, CA: Applied Communication research, Report.
- ASEJ (2004). Who we are. Retrieved April 14, 2004, from http://www.asej.org/index.php?set\_table=content&page=who\_we\_are
- Assimakopoulos, D. (1998). Network analysis as a tool for mapping government
  -university industry relations: The Structure of the Greek GIS

  Community. Retrieved February 8, 2004, from

  http://www.intech.unu.edu/publications/conference-workshop
  reports/seville/assimako.pdf
- Banfield, E. C. (1961). *Political influence*. Glencoe, IL: Free Press.
- Barnartt, S. N. & Richard, S. K. (2001). *Disability protests: contentious politics* 1970-1999. Gallaudet University Press: Washington D.C.
- Barnes, J.A. & Harary, F. (1983). Graph theory in network analysis. *Social Networks*, Vol. 5, pp. 235-244.
- Bar-Yam, Y. (2000). The Study of Complex Systems. Retrieved May 15, 2004, from http://necsi.org/projects/yaneer/points.html
- BBC (September 11, 2003). S Korean kills himself over WTO. *BBC News UK Ed.*Retrieved November 19, 2003, from http://news.bbc.co.uk/1/hi/world/asia-

- pacific/3099568.stm
- Borgatti, S.P., Everett, M.G. and Freeman, L.C. 2002. Ucinet for Windows:

  Software for Social Network Analysis. Harvard, MA: Analytic Technologies.
- Brecher, J., Costello, T., Smith, B. (2002). *Globalization from below: The power of solidarity*. Cambridge, MA: South End Press.
- Buechler, Steven M. 1995. New Social Movement Theories. *The Sociological Quarterly* Vol. 36 Issue 3 441-64.
- Buttel, F.H. (2003). Some observations on the anti-globalisation movement.

  \*Australian Journal of Social Issues, Vol. 38 No. 1 February, pp. 95-116.
- Byrne, P. (1997) Social Movements in Britain. London: Routledge.
- Choudry, A. (2003). Neoliberal globalization's triple bottom line: capitalism, colonialism, and commodification. *Green Paper, 4.* Retrieved April 14, 2004, from http://www.cseindia.org/html/geg/pdf/ASEJ.pdf
- Cohen, R. & Kennedy, P. (1998). Transnational social movements: an assessment. Department of Sociology, University of Warwick: UK.

  Retrieved May 18<sup>th</sup>, 2004, from

  http://www.transcomm.ox.ac.uk/working%20papers/cohen.pdf
- Cohen, R., & Rai, S. (2000). *Global social movements*. London, UK: Athlone Press.
- Coveney, P. & Highfield, R. (1995) *Frontiers of complexity: The search for order in a chaotic world*. New York: Fawcett Columbine.
- CSIS (2000). Anti-globalization a spreading phenomenon. *Perspectives*.

  Retrieved November 23, 2004, from

- http://www.csis-scrs.gc.ca/eng/miscdocs/200008\_e.html.
- Daft, R. L. (1998). Organization Theory and Design. 6<sup>th</sup> Ed. South-Western College Pub.
- Davies, I. (1976) "Time, Aesthetics, and Critical Theory," in John O'Neill Ed., *On Critical Theory* 58-77, 59 New York: Seabury Press, 1976.
- Dent, E. B. (1999). Complexity science: A worldview shift. *Emergence*, Vol. 1 No. 4, 5-19.
- Devaney, R. (1995). The chaos game. Boston University Department of Mathematics. Retreived August 5, 2004, from http://math.bu.edu/DYSYS/chaos-game/node1.html
- Doherty, B. (1999). Manufacturing vulnerability: Eco-activist tactics in Britain. *Mobilization* Vol.4: 75–90.
- Durkheim, E. (1964). The rules of sociological method and selected tests on sociology and its method. by George E.G. Catlin ed., Translated by Sarah A. Solovay & John H. Mueller. New York, NY: The Free Press of Glenco (Original work published in French 1895).
- Eckert, A. (2002). Things & Ideas: Explaining Moral Evolution in International Relations Argument and Change in World Politics: Ethics, Decolonization, and Humanitarian Intervention by Neta C. Crawford. New York:

  Cambridge University Press,
- Edwards, Michael. 2001. Introduction, in Eds. Michael Edwards and John Gaventa *Global Citizen Action*. Boulder, CO: Lynne Reinner Publishers.
- Elliott, K.; Kar, D.; & Richardson, D. (2002). Assessing globalization's

- Critics: talkers are no good doers??? Retrieved May 18, 2004, from http://www.cepr.org/meets/wkcn/2/2316/papers/elliott.pdf
- Ellis, W. D. (1997). Source book of gestalt psychology. New York, NY: Gestalt Journal Press.
- Eyerman, R. & Andrew, J. (1991). *Social Movements: A Cognitive Approach.* University Park, PA: Pennsylvania State University Press.
- Fernandez, Manny and Reel, Monte (2002) Against War, a Peaceful March;

  Activists Reassess As Weekend Protests Don't Hit Expectations, *The Washington Post* September 30, 2002 P. B01.
- Fisher, R. & Joe K. (1994). Community Organization and New Social Movement

  Theory. *Journal of Progressive Human Services*, Vol. 5 No. 2, 5-23.
- Florini, A. M. (2001) Transnational Civil Society, in Michael Edwards and John Gaventa Eds., *Global Citizen Action* Boulder, CO: Lynne Reinner.
- Freeman L C (1979). Centrality in Social Networks: Conceptual Clarification.

  Social Networks, 1, 215-239.
- George, S. (2002). "Another World is Possible." *The Nation* January 31, 2002

  Retrieved May 24, 2004, from

  http://www.thenation.com/doc.mhtml?i=20020218&c=1&s=george
- Global Exchange (2004). *World trade organization*. Retrieved April 14, 2003, from http://www.globalexchange.org/campaigns/wto/index.html
- Google (2004). Our search: Google technology. Retrieved August 22, 2004, from http://www.google.com/technology/
- Grobstein, P. (1997). Insights from complex systems. Serendip at Bryn Mawr

- College. Retrieved August 8, 2004, from http://serendip.brynmawr.edu/complexity/complexity.html
- Grobstein, P.; Oristaglio, J.; Radojic, M.; & Butoi, P. (2000) The magic Sierpinski triangle: Order dependent on randomness. *Serendip*, Bryn Mawr College.

  Retrieved August 5, 2004, from

  http://serendip.brynmawr.edu/playground/sierpinski.html
- Guidry, J. A.; Kennedy, M. D.; & Zald, M. N. (2000). Globalizations and social movements, in John A. Guidry, Michael D. Kennedy, & Mayer N. Zald eds. 

  Globalizations and social movements: Culture, power, and the transnational public sphere. Ann Arbor, MI: The University of Michigan Press.
- Harding, J. (2001). Globalisation's children strike back. *Financial Times*.

  Retrieved January 21, 2004, from

  http://specials.ft.com/countercap/FT33EJSLGRC.html.
- Holford, J. (1995). Why social movements matter: adult education theory, cognitive practice and the creation of knowledge. *Adult Education Quarterly*, Vol. 45 No. 2, 95 -111.
- Holland, J. (2000). *Complexity: Life at the edge of chaos.* Chicago, IL: University of Chicago Press; 2nd ed.
- Honavar, V (2004). What are complex adaptive systems? *Complex Adaptive Systems Group*, Iowa State University. Retrieved August 2, 2004, from http://www.cs.iastate.edu/~honavar/alife.isu.html
- Human Rights Watch (2001) Qatar: Inappropriate Venue for Next WTO

- Meeting, *Human Rights News*. Retrieved April 12, 2004, from http://www.hrw.org/english/docs/2001/01/20/qatar217.htm
- Kavada, A. (2003). Social movements and current network research. University of Westminster. Retrieved March 4, 2004, from <a href="http://nicomedia.math.upatras.gr/conf/CAWM2003/Papers/Kavada.pdf">http://nicomedia.math.upatras.gr/conf/CAWM2003/Papers/Kavada.pdf</a>
- Keck, M. & Sikkink, K. (2000). Historical precursors to modern
  transnational social movements and networks, in John A. Guidry, Michael
  D. Kennedy, & Mayer N. Zald Eds. Globalizations and social movements:
  Culture, power, and the transnational public sphere. Ann Arbor, MI: The
  University of Michigan Press.
- Keohane, R. (1986) Theory of world politics: structural realism and beyond, in Robert Keohane Ed., *Neorealism and its critics*. Columbia University Press:
  New York, NY.
- La Corte, R. (2003). Miami braces for thousands of protesters for free trade talks. *Naples Daily News*, November 14, 2003.
- Langton, N. (1987). Niche Theory and Social Movements: A Population Ecology

  Approach , The Sociological Quarterly, Vol. 28, No. 1, Spring, 51
  70.
- Laxer, G. (2003). Stop rejecting sovereignty: Confronting the anti-globalization Movement. *Canadian Dimension*, Jan/Feb2003, Vol. 37, No. 1.
- Laumann, E. O. & Knoke, D. (1987). *The organizational state.* Madison, WI: The University of Wisconsin Press.
- Lenski, G. E. (1966). Power and privilege: a theory of social stratification. New

- York, NY: McGraw-Hill.
- Lewin, K. (1951). Field theory in social science. New York, NY: Harper & Row.
- Mallaby, S. (2001). The Globophobes' Guru. *Washington Pos,t* November 12, 2001, Final ed., p. A25.
- Marshall, Joshua M. (2002). "More World, less bank" -- fewer protesters *Salon.com.* Retrieved May 20, 2004, from http://www.salon.com/politics/feature/2002/09/30/protest/index\_np.html
- Mayer, M. & Roth, R. (1995). New Social Movements and the Transformation to Post-Fordist Society by Marcy Darnovsky, Barbara Epstein and Richard Flacks Eds., *Cultural Politics and Social Movements*. Temple University Press: Philadelphia, 299:319.
- McGregor, A. (2004) Local doc the only US attendee at World Social Forum in India. *Cambridge Chronicle*. Retrieved April 14, 2004, from http://www.townonline.com/cambridge/news/local\_regional/cam\_feaccaro nsonms04082004.htm.
- Melucci, A. (1985). The Symbolic Challenge of Contemporary Movements, in

  Arien Mack and Jean L. Cohen Eds. *Social Research: Social Movements*.

  Vol. 52 No. 4, Winter.
- Melucci, Alberto. 1988. Social movements and the democratization of everyday Life, in J. Keane, Ed. Civil society and the state. London, England: Verso.
- Meyer, J. W.; Boli, J.; Thomas, G. M.; Ramirez, F. O. (1997). World society and the nation-state. *American Journal of Sociology.* Vol. 101 No. 1, 144-181.

- Mexico Solidarity Network (2003). Derail the 5<sup>th</sup> ministerial of the WTO. Retrieved September 10<sup>th</sup>, 2003, from http://www.mexicosolidarity.org/cancun\_call.html
- Mises, Ludwig Von (1996). Human action: A treatise on economics, 4<sup>th</sup> ed.

  Irvington-on-Hudson, NY: The Foundation for Economic Education, Inc.
- Morris, A. (1986). *Origins of the Civil Rights Movements*. 1<sup>st</sup> ed. Paperback, New York, NY: Free Press.
- Muller-Rommel, F. (1990). New Political Movements and 'New Politics' in Western Europe, in Russell J. Dalton and Manfred Kuechler, Eds., Challenging the Political Order. Cambridge: Polity Press.
- Nye, J.S. (2003). *Understanding international conflicts: An introduction to theory* and history. 4<sup>th</sup> ed. New York, NY: Longman.
- Offe, C. (1985) New social movements: challenging the boundaries of institutional politics, in Eds. Arien Mack and Jean L. Cohen. *Social Research: Social Movements*. Vol. 52 No. 4, Winter.
- OneStat.com. (November 18, 2003). *Google No. 1 search site in the world according to OneStat.com.* Retrieved November 19, 2003, http://www.onestat.com/html/aboutus\_pressbox25.html
- Palmore, James A. (1967), "The Chicago Snowball: A Study of the Flow and Diffusion of Family Planning Information," in Ed. Donald J. Bogue Sociology Contributions to Family Planning research. Chicago, IL: University of Chicago Press.
- Papadakis, E. (1989). Struggles for social change: The Green Party in West

- Germany, in Eds. Christine, J. and Randal G. Stewart, *Politics of the Future*. Melbourne: Macmillan, 76-97.
- Parsons, T. (1963). On the Concept of Influence *The Public Opinion Quarterly*.

  Vol. 27, No. 1, Spring 37-63.
- Pasek, Beata (2004). About 1,000 anti-globalization activists march through

  Warsaw streets to protest economic summit. *Associated Press*Worldstream April 29, 2004.
- Pew Research Center (2003). *Views of a changing world*. Washington D.C. June 2003. Retrieved August 15, 2003 from http://www.people-press.org.
- Pichardo, N. (1997). New social movements: A critical review. *Annual Review of Sociology. Vol. 23, 411–30.*
- Polletta, F. & Jasper, J. M. (2001). Collective identity and social movements.

  \*\*Annual Review of Sociology Vol. 27.\*\*
- Poomsrikaew, Jirawat (2003). Three fallacies at the heart of Cancun failure. *The Nation* September 29, 2003
- Raab, J. & Milward, H. B. (2003). Dark networks as problems. *Journal of Public Administration research and Theory*. Vol. 13, No. 4, 413-439.
- Reed, T.V. (2002). Glossary of terms used to study social movements. Retrieved

  November 19, 2003, from

  http://www.wsu.edu/~amerstu/smc/glossary.html.
- Ricardo, D. (1996). *Principles of political economy and taxation*. New York: Prometheus Books. Original work published 1817.
- Rogers, E.M. & Kincaid, D.L. (1981). Communication networks: Toward a new

- paradigm for research. New York: Free Press.
- Ruggie, J. G. (1986). Continuity and transformation in the world polity: Toward a neorealist synthesis, in Ed. Robert Keohane, *Neorealism and its critics*.

  Columbia University Press: New York, NY.
- Rutherford, S. (2002) Manufacturing discontent: Knowledge construction in the global justice movement. University of Guelph, Thesis. *Digital Dissertations*, Publication AAT MQ76115.
- Say, J. B. (1855). *A treatise on political economy.* Philadelphia: Lippincott,

  Grambo & Co. Translated by C. R. Prinsep ed. Clement C. Biddle. 45<sup>th</sup> ed. *Library of Economics and Liberty*. Retrieved May 20, 2004, from

  http://www.econlib.org/library/Say/sayT33.html (Original work published in French 1803).
- Schaffer, R., Earle, B., Agusti, F. (2002). *International business law and its*environment. 5<sup>th</sup> ed. International Thompson Publishing: United States.
- Scholte, Jan Aart (1996), "Beyond the Buzzword: Towards a Critical Theory of Globalization," in Eds. Eleonore Kofman and Gillians Young *Globalization:*Theory and Practice. London: Pinter.
- Schweller, R. (1999). From Wealth to Power: The Unusual Origins of America's World Role. [Review of the book *From Wealth to Power: The Unusual Origins of America's World Role*]. American Political Science Review, Vol. 93, No. 2, June, 447-449.
- Scott, A. (1990). *Ideology and the New Social Movements*. London, UK: Routledge.

- Scott, J. (2000). *Social network analysis: A handbook.* 2<sup>nd</sup> ed. London, UK: Sage Publications.
- Shefner, J. (1995). Moving in the wrong direction in social movement theory. *Theory and Society* Vol. 24, 595-612.
- Starhawk. (2000). How we really shut down the WTO, in Eds. Danaher, K. & Burbach, R., Globalize this! The battle against the World Trade

  Organization and corporate rule, 31-45. Monroe, ME: Common Courage

  Press.
- Sternburg, T. J. (1993). An empirical investigation of deterrence theory and influence theory on professional tax preparers' recommendations. Ph.D.
   Dissertation, Arizona State University. Digital Dissertations, Publication AAT 9320663.
- Sussman, J. M. (2000). Ideas on complexity in systems twenty views.

  Massachusetts Institute of Technology Engineering Systems Division

  Working Paper Series. Retrieved August 9, 2004, from

  http://esd.mit.edu/wps/esd-wp-2000-02.pdf
- Swain, A. (2001). Using Northern Tools to Evaluate Southern Protests.

  Department of Peace and Conflict Research, Uppsala University.

  Retrieved May 30, 2004, from

  http://www.pcr.uu.se/publications/UPRP\_pdf/UPRP\_No. 4.pdf
- Tandon, Y. (May 5, 2001). *TNCs and countries of the South.* Retrieved

  November 19, 2003, from

  http://france.attac.org/site/page.php?idpage=517&langue=2

- Tarrow, S. (1991). "Aiming at a moving target": Social science and the recent rebellions in Eastern Europe. PS, Political Science and Politics, Vol. 24 No. 1, 12-20.
- The Record (2003). Anti-globalization movement has petered out, Pettigrew says. *The Record*, June 7, 2003 P. A5 Canadian Press.
- Thomas, J. (2000). The battle in Seattle: the story behind and beyond the WTO demonstrations. Golden, CO: Fulcrum Publishing.
- Thomas, S. (1996). What are social movements today? *International Journal of Politics, Culture and Society*, Vol. 9, No. 4, Summer, 579-585.
- Tilly, C. (1999). From interactions to outcomes in social movements. in Eds. M. Giugni, D. McAdam and C. Tilly, *How social movements matter* (p. 257). Minneapolis, MN: University of Minnesota Press.
- Touraine, A. (1985). An Introduction to the Study of Social Movements, in Eds.

  Arien Mack and Jean L. Cohen *Social Research: Social Movements*. Vol. 52 No. 4, Winter.
- Van Aelst, P. (2002). New media, new movements? The role of the internet in shaping the 'anti-globalisation' movement. University of Antwerp, Belgium. Retrieved March 6, 2004, from http://apsaproceedings.cup.org/Site/papers/040/040005VanAelstPe.pdf
- Von Bertalanffy (1968) *General System Theory: Foundations, Development, Applications.* New York: George Braziller.
- Voss, M (2000). Complex Adaptive Systems + Soft Computing

  = Emergent Design Systems (EDS). Presented At The Third IASTED

- International Conference Artificial Intelligence and Soft Computing (ASC'2000) July 24-26, 2000. Banff, Alberta, Canada. Retrieved August 6, 2004 from http://www.evolutionarystructures.com/papers/316-071pdf.PDF.
- Wallace, A. 1956. Revitalization movements. *American Anthropologist* Vol. 58, April: 264-81.
- Wallerstein, I. (1976). The modern world-system: Capitalist agriculture and the origins of the European world-economy in the sixteenth century. New York: Academic Press.
- Wallerstein, I. (1990). Antisystemic movements: History and dilemmas," in Eds.

  Samir Amin, Giovanni Arrighi, Andre Gunder Frank, Immanuel Wallerstein, *Transforming the revolution: Social movements in the world-system.* New

  York: Monthly Review Press, 1990.
- Waltz, K. (1979). *Theory of international politics*. Reading, MA: Addison-Wesley.
- Waterman, P. (2002). The Global Justice and Solidarity

  Movement: A Bibliography. *Transnational Institute*. Retrieved February 15, 2004, www.tni.org/tat/docs/bibliography.pdf
- Welton, M. (1993). Social revolutionary learning sites: The new social movements as learning sites. *Adult Education Quarterly*. Vol. 43 Issue 3: 152-164.
- Whitaker, F. (2002). World Social Forum: origins and aims, *World Social Forum*.

  Published June 22, 2002. Retrieved May 25, 2004, from

  http://www.forumsocialmundial.org.br/main.asp?id\_menu=2\_1&cd\_langua

  ge=2

Wilson, B., R. (1973). Magic and Millennium. London: Heinemann.

WTO, (2004). Environment: cte agenda part 3: How environmental taxes and other requirements fit in. *World Trade Organization*. Retrieved May 25, 2004, from

http://www.wto.org/english/tratop\_e/envir\_e/cte03\_e.htm#productvprocess

TABLE I Directed Density Inflow Analysis of all 249 Organizations

		1	2	3	4	_	9
		Size	Ties	Pairs	Density	nWeakC	pWeakC
	11:11:11	1.00	00.0	00.00		1.00.1	0.00
	50 Years is Enough Network	14.00	41.00	182.00	22.53	2.00	14.29
	Action Aid	2.00	2.00	2.00	100.00	1.00	50.00
	Action for Social and Ecological Justice (ASEJ)	1.00	00.00	00.00		1.00	100.00
Action For Solidarity, Equa	lity, Environment	7.00	10.00	42.00	23.81	3.00	42.86
	AFL-CIO	1.00	00.0	00.00		1.00	100.00
	Africa Action	2.00	2.00	2.00	100.00	1.00	20.00
	African Centre for Technology Studies (ACTS)	1.00	00.0	0.00		1.00	100.00
	African Services Committee	1.00	00.0	0.00		1.00	100.00
	AID/WATCH	2.00	1.00	2.00	50.00	1.00	50.00
IIA	Alliance for a Plural, United and Responsible World	1.00	00.00	00.00		1.00	100.00
	Alliance for Democracy	1.00	00.0	00.00		1.00	100.00
	Alliance for Responsible Trade (ART)	2.00	00.0	2.00	00.0	2.00	100.00
	Alternative Information and Development Centre	2.00	2.00	2.00	100.00	1.00	50.00
	AmazonWatch	1.00	00.0	00.00		1.00	100.00
	Asia Pacific Research Network	2.00	2.00	2.00	100.00	1.00	50.00
	Association for Ethical Finance (Afe)	1.00	00.00	0.00		1.00	100.00
Association for Inte	or International Water and Forest Studies (FIVAS)	1.00	00.00	0.00		1.00	100.00
	ATTAC	8.00	11.00	56.00		1.00	12.50
	ATTAC Germany	3.00	2.00	6.00	33.33	2.00	66.67
	ATTAC Japan	1.00	00.00	00.00		1.00	100.00
	Australian Fair Trade & Investment Network	3.00	4.00	6.00	29.99	1.00	33.33
	Banana Link	1.00	00.00	0.00		1.00	100.00
	Bank Information Center	8.00	20.00	56.00	35.71	1.00	12.50
	Berne Declaration	4.00	4.00	12.00		1.00	25.00
	Both ENDS	2.00	1.00	2.00	20.00	1.00	50.00
	Bread for the World	2.00	2.00	2.00	100.00	1.00	20.00
	Bretton Woods Project	7.00	22.00	42.00	52.38	1.00	14.29
	Campaign Against Arms Trade	1.00	00.00	00.00		1.00	100.00
	Campaign for Labor Rights	1.00	00.00	0.00		1.00	100.00
	Canadian Auto Workers	1.00	0.00	0.00		1.00	100.00
	Canadian Centre for Policy Alternatives (CCPA)	4.00	4.00	12.00	33.33	1.00	25.00
	Canadian Council on Social Development (CCSD)	1.00	00.0	00.00		1.00	100.00

Canadian Federation of Students   100   0.00   0.00   1.00   100	34	Canadian Environmental Law Association	2.00	1.00	2.00	50.00	1.00	50.00
Canadian Health Coalition 100 0.00 0.00 1.00 1.00 1.00 1.00 1.00	35	Canadian Federation of Students	1.00	00.00	00.00		1.00	100.00
Canadian Labour Congress         100         0.00         0.00         1.00           Canadian Union of Postal Workers         1.00         0.00         0.00         1.00           Canadian Union of Polstal Workers         1.00         0.00         0.00         1.00           Canadian Union of Polstal Workers         1.00         0.00         0.00         1.00           Catholic Agency for Overseas Development (APCDD)         3.00         3.00         6.00         5.00           Center for Economic and Policy Research (CAPCD)         3.00         3.00         0.00         1.00           Center for Economic and Policy Research (CAPCD)         3.00         3.00         5.00         1.00           Center for Economic and Policy Research (CAPCD)         3.00         3.00         0.00         1.00           Center for International Environmental Law         4.00         2.00         1.00         1.00           Center for International Environmental Law         4.00         2.00         1.00         1.00           Center for International Environmental Law         4.00         2.00         1.00         1.00           Center for Science and Environment CAPCD Law         3.00         0.00         0.00         1.00           Center for Science and Environment CAPCD La	36	Canadian Health Coalition	1.00	00.00	00.00		1.00	100.00
Canadian Union of Postal Workers         100         0.00         0.00         1.00         1.00           Candadian Union of Public Employees         1.00         0.00         0.00         1.00         1.00           Cameragia Endowment for International Peace         1.00         0.00         0.00         0.00         1.00           Catholic Agency for Overseas Development (CAFOD)         3.00         3.00         6.00         2.00         2.00           Center for Economic and Policy Research (CERR)         9.00         3.10         72.00         43.06         1.00           Center for Economic Justice         8.00         2.00         1.00         1.00         1.00           Center for Economic Justice         1.00         0.00         0.00         0.00         1.00         1.00           Center for Economic Justice         1.00         0.00         0.00         0.00         1.00         1.00           Center for Economic Justice         1.00         0.00         0.00         0.00         1.00         1.00           Center for Economic Justice         1.00         0.00         0.00         0.00         1.00         1.00           Center for Economic Justice         1.00         0.00         0.00         0.00	37	Canadian Labour Congress	1.00	00.0	00.0		1.00	100.00
Cantegie Endowment for International Peace 100 0.00 0.00 0.00 0.00 0.00 0.00 0.00	38	Canadian Union of Postal Workers	1.00	0.00	00.0		1.00	100.00
Campage Endowment for International Peace         1.00         0.00         0.00         0.00         1.00 </td <td>39</td> <td>Canadian Union of Public Employees</td> <td>1.00</td> <td>0.00</td> <td>0.00</td> <td></td> <td>1.00</td> <td>100.00</td>	39	Canadian Union of Public Employees	1.00	0.00	0.00		1.00	100.00
Catholic Agency for Overseas Development (CAFO) 3.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	40	Caritas Internationalis	1.00	00.00	00.0		1.00	100.00
Center for Economic and Policy Research (CEPR) 300 3100 72 00 43.06 1.00  Center for Economic and Social Rights (CESR) 1.00 0.00 0.00  Center for Economic and Social Rights (CESR) 1.00 0.00 0.00  Center for International Environmental Law 4.00 2.00 0.00 0.00  Center for International Environmental Law 4.00 2.00 0.00 0.00  Center for Social Rights (CESR) 1.00 0.00 0.00 0.00  Center for Science and Environment (CSC) 2.00 0.00 0.00  Center for Science and Environment (CSC) 1.00 0.00 0.00  Center of Concern (COC) 2.00 0.00 0.00  Center of Concern (COC) 2.00 0.00 0.00  Chizens Network on Essential Services 2.00 0.00 0.00  Citizens Network on Essential Services 2.00 0.00 0.00  Consumer the Abolition of the Third World Service 1.00 0.00  Consumer Unity & Trade Campaign 2.00  Consumer Unity & CEO 0.00  Consumer Unity & Trade Campaign 2.00  Consumer Unit	41	Carnegie Endowment for International Peace	1.00	00.0	0.00		1.00	100.00
Center for Economic and Policy Research (CEPR)         500         4.00         20.00         20.00         20.00         20.00         20.00         20.00         20.00         20.00         20.00         20.00         20.00         1.00	42	Catholic Agency for Overseas Development (CAFOD)	3.00	3.00	00.9	20.00	1.00	33.33
Center for Economic and Policy Research (CEPR) 9 00 31.00 72.00 43.06 1.00 1.00 Center for Economic and Social Rights (CESR) 1.00 0.00 0.00 1.00 1.00 1.00 1.00 1.0	43	CEE Bankwatch	2.00	4.00	20.00	20.00	2.00	40.00
Center for Economic and Social Rights (CESR) 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	44	0.00	9.00	31.00	72.00	43.06	1.00	11.11
Center for International Environmental Law 4.00 2.00 1.00 1.00 1.00 1.00 1.00 1.00 1	45	Center for Economic and Social Rights (CESR)	1.00	00.00	0.00		1.00	100.00
Center for International Environmental Law 4.00 2.00 12.00 16.67 2.00 Center for International Lustice 1.00 0.00 0.00 0.00 1.00 1.00 1.00 1.0	46	Center for Economic Justice	8.00	28.00	56.00	50.00	1.00	12.50
Center for Social Justice         1.00         0.00         0.00         1.00	47	Center for International Environmental Law	4.00	2.00	12.00	16.67	2.00	50.00
Centrer of Concern (COC) 2.00 0.00 2.00 1.00 2.00 1.00 Chicken Chicken (COC) 2.00 0.00 0.00 0.00 0.00 1.00 1.00 1.00	48	Center for Social Justice	1.00	00.00	00.00		1.00	100.00
Church Vord Service (Christian Aid 3.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	49	Center of Concern (COC)	2.00	00.00	2.00	0.00	2.00	100.00
Choike         1.00         0.00         0.00         1.00         <	20	for	1.00	0.00	0.00		1.00	100.00
Christian Aid         3.00         1.00         6.00         16.67         2.00           Church World Services         1.00         0.00         0.00         1.00         1.00           Church World Services         2.00         2.00         2.00         1.00         1.00           Chan Clitzens Trade Campaign         1.00         0.00         0.00         0.00         1.00           Clean Clothes Campaign         2.00         1.00         0.00         0.00         1.00           Conalition against BAYER-Dangers         1.00         0.00         0.00         0.00         1.00           Common Frontiers         2.00         1.00         0.00         0.00         1.00         1.00           Consumer Unity & Trust Society (CUTS)         1.00         0.00         0.00         0.00         1.00           Consumer Unity & Trust Society (CUTS)         1.00         1.00         0.00         0.00         1.00           Consumer Unity & Trust Society (CUTS)         1.00         0.00         0.00         1.00           Consumer Unity & Trust Society (CUTS)         1.4.00         71.00         1.00           Consumer Unity & Trust Society (CUTS)         1.4.00         71.00         50.00         1.00	51	Choike	1.00	00.00	00.00		1.00	100.00
Church World Service         1.00         0.00         0.00         0.00         1.00<	52	Christian Aid	3.00	1.00	00.9	16.67	2.00	66.67
Citizens Network on Essential Services         2.00         2.00         100.00         1.00           Citizens Trade Campaign         2.00         2.00         0.00         1.00         1.00           Clean Clothes Campaign         2.00         1.00         0.00         0.00         1.00         1.00           Committee for the Abolition of the Third World Debt (CADTM)         1.00         0.00         0.00         0.00         1.00         1.00           Common Frontiers         2.00         1.00         0.00         0.00         1.00         1.00         1.00           Consumer Unity & Trust Society (CUTS)         1.00         0.00         0.00         0.00         0.00         1.00         1.00           Consumer Unity & Trust Society (CUTS)         1.00         1.00         0.00         0.00         1.00         1.00         1.00           Consumers International (CI)         1.00         1.00         0.00         0.00         1.00         1.00         1.00         1.00           Corporate Europe Observatory (CEO)         14.00         10.00         50.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00	53	Church World Service	1.00	00.00	0.00		1.00	100.00
Citizens Trade Campaign         1.00         0.00         0.00         1.00           Clean Clothes Campaign         2.00         1.00         2.00         1.00           Committee for the Abolition of the Third World Debt (CADTM)         1.00         0.00         0.00         1.00           Common Frontiers         2.00         1.00         0.00         0.00         1.00           Consumer Unity & Trust Society (CUTS)         1.00         0.00         0.00         1.00           Consumer Unity & Trust Society (CUTS)         1.00         0.00         0.00         1.00           Consumer Unity & Trust Society (CUTS)         1.00         0.00         0.00         1.00           Consumer Unity & Trust Society (CUTS)         1.00         0.00         0.00         1.00           Consumer Unity & Trust Society (CUTS)         1.00         0.00         0.00         1.00           Consumer Unity & Trust Society (CUTS)         1.00         0.00         1.00         1.00           Consumer Europe Observatory (CEO)         1.00         50.00         1.00         1.00           Council of Canadians         8.00         21.00         50.00         1.00           Development Alternative Policies (GAP)         2.00         2.00         10.	54	Citizens Network on Essential Services	2.00	2.00	2.00	100.00	1.00	50.00
Clean Clothes Campaign         2.00         1.00         2.00         50.00         1.	22	Citizens Trade Campaign	1.00	00.00	0.00		1.00	100.00
Committee for the Abolition of the Third World Debt (CADTM)         1.00         0.00         0.00         1.00	56	Clean Clothes Campaign	2.00	1.00	2.00	50.00	1.00	50.00
Committee for the Abolition of the Third World Debt (CADTM)         1.00         0.00         0.00         1.00	22	Coalition against BAYER-Dangers	1.00	00.00	0.00		1.00	100.00
Conservation International (CI)         1.00         0.00         50.00         1.00         1           Consumer Unity & Trust Society (CUTS)         1.00         0.00         0.00         1.00         1           Consumer Unity & Trust Society (CUTS)         1.00         0.00         0.00         0.00         1.00         1           Consumer Unity & Trust Society (CUTS)         1.00         0.00         0.00         0.00         1.00         1           Consumer Unity & Trust Society (CUTS)         1.00         0.00         0.00         0.00         1.00         1           Corporate Europe Observatory (CEO)         14.00         71.00         182.00         39.01         1.00         1           Corporate Europe Observatory (CEO)         14.00         71.00         16.00         30.00         1.00         1           Corporate Europe Observatory (CEO)         16.00         16.00         30.00         1         1         1           Development Alternatives With Women For a New Era (DAWN)         1.00         6.00         20.00         30.00         1         1         1           Development Group for Alternative Policies (GAP)         2.00         2.00         2.00         1         1         1         1         1 </td <td>28</td> <td>1886</td> <td>1.00</td> <td>00.00</td> <td>00.00</td> <td></td> <td>1.00</td> <td>100.00</td>	28	1886	1.00	00.00	00.00		1.00	100.00
Conservation International (CI)         1.00         0.00         0.00         1.00	59	Common Frontiers	2.00	1.00	2.00	50.00	1.00	50.00
Consumer Unity & Trust Society (CUTS)         1.00         0.00         0.00         0.00         1.00	9	Conservation International (CI)	1.00	00.00	0.00		1.00	100.00
Consumers International         2.00         1.00         2.00         50.00         1.00           Corporate Europe Observatory (CEO)         14.00         71.00         182.00         39.01         1.00           CorpWatch         8.00         10.00         56.00         17.86         1.00           Council of Canadians         8.00         21.00         56.00         37.50         1.00           Development Alternatives With Women For a New Era (DAWN)         1.00         0.00         0.00         0.00         1.00           Development Group for Alternative Policies (GAP)         5.00         2.00         20.00         30.00         1.00           Drop the Debt         2.00         2.00         2.00         1.00         1.00           EarthRights International         1.00         0.00         0.00         1.00         1.00	61	Consumer Unity & Trust Society (CUTS)	1.00	00.00	0.00		1.00	100.00
Corporate Europe Observatory (CEO)         14.00         71.00         182.00         39.01         1.00           Corporate Watch         8.00         10.00         56.00         17.86         1.00           Copwatch         6.00         16.00         30.00         53.33         1.00           Council of Canadians         8.00         21.00         56.00         37.50         1.00           Development Alternatives With Women For a New Era (DAWN)         1.00         0.00         0.00         1.00         1.00           Development Group for Alternative Policies (GAP)         5.00         6.00         20.00         30.00         1.00           Drop the Debt         2.00         2.00         1.00         1.00         1.00           EarthRights International         1.00         0.00         0.00         1.00         1.00	62	Consumers International	2.00	1.00	2.00	20.00	1.00	50.00
Corporate Watch         8.00         10.00         56.00         17.86         1.00           Council of Canadians         8.00         21.00         56.00         37.50         1.00           Development Alternatives With Women For a New Era (DAWN)         1.00         0.00         0.00         0.00         1.00           Development Group for Alternative Policies (GAP)         5.00         6.00         20.00         30.00         1.00           EarthRights International         1.00         0.00         0.00         1.00         1.00	63	Europe	14.00	71.00	182.00	39.01	1.00	7.14
Council of Canadians         6.00         16.00         30.00         53.33         1.00           Development Alternatives With Women For a New Era (DAWN)         1.00         0.00         56.00         37.50         1.00	64	Corporate Watch	8.00	10.00	56.00	17.86	1.00	12.50
Council of Canadians         8.00         21.00         56.00         37.50         1.00         1.	65	CorpWatch	00.9	16.00	30.00	53.33	1.00	16.67
Development Alternatives With Women For a New Era (DAWN)         1.00         0.00         0.00         1.00	99	Council of Canadians	8.00	21.00	56.00		1.00	12.50
Development Group for Alternative Policies (GAP)   5.00   6.00   20.00   30.00   1.00	67		1.00	00.00	0.00		1.00	100.00
Drop the Debt   2.00   2.00   100.00   1.0	68	Development Group for Alternative Policies (GAP)	5.00	00.9	20.00	30.00	1.00	20.00
EarthRights International 1.00 0.00 0.00 1.00	69	Drop the Debt	2.00	2.00	2.00	100.00	1.00	50.00
	20	EarthRights International	1.00	00.00	0.00		1.00	100.00

7	Ecumenical Program on Central America and the Caribbean (EPICA)	1.00	0.00	00.00		1.00	100.00
72		1.00	00.00	0.00		1.00	100.00
73	Environmental Defense (EDF)	1.00	00.00	0.00		1.00	100.00
74	Environmental Media Services	1.00	00.0	00.00		1.00	100.00
75	Environmental Mining Council of British Columbia (EMCBC)	1.00	00.0	00.00		1.00	100.00
9/	Essential Information	4.00	1.00	12.00	8.33	3.00	75.00
77	Ethical Consumer Research Association (ECRA)	2.00	00.0	2.00	00.00	2.00	100.00
78	Ethical Trading Initiative	2.00	00.00	2.00	00.00	2.00	100.00
79	European Federation of Public Services Unions (EPSU)	1.00	00.0	0.00		1.00	100.00
80	European Network On Debt And Development (Eurodad)	3.00	2.00	6.00	33.33	1.00	33.33
81	European Solidarity Towards Equal Participation Of The People	1.00	00.0	00.00		1.00	100.00
82	European Youth For Action	1.00	00.00	0.00		1.00	100.00
83	Export Credit Agency (ECA) Watch	3.00	3.00	00.9	20.00	1.00	33.33
4	Fair Trade Foundation	1.00	00.00	00.00		1.00	100.00
85	Fairtrade Labelling Organizations International (FLO)	1.00	00.00	00.00		1.00	100.00
9	Focus on the Global South	16.00	61.00	240.00	25.42	1.00	6.25
7	Food First aka Economic Justice	4.00	00.9	12.00	50.00	1.00	25.00
88	Foreign Policy In Focus	1.00	00.00	0.00		1.00	100.00
89	Forest Peoples Programme	1.00	0.00	0.00		1.00	100.00
90	Forests and the European Union Resource Network (FERN)	1.00	00.00	0.00		1.00	100.00
91	Forum on Environment & Development	1.00	0.00	0.00		1.00	100.00
92	Foundation for International Law and Development (FIELD)	1.00	0.00	0.00		1.00	100.00
93	Freedom From Debt Coalition	2.00	1.00	2.00	20.00	1.00	50.00
94	Friends of River Narmada	1.00	00.00	0.00		1.00	100.00
95	Friends of the Earth (FOE) Europe	4.00	3.00	12.00	25.00	2.00	50.00
96	Friends of the Earth International	15.00	56.00	210.00	26.67	1.00	6.67
97	Friends of the Earth Middle East (FoEME)	2.00	0.00	2.00	00.00	2.00	100.00
86	Friends of the Earth UK	2.00	1.00	2.00	20.00	1.00	50.00
66	Friends of the Earth USA	5.00	00.9	20.00	30.00	2.00	40.00
100	Friends of the Earth, Japan	1.00	00.00	00.00		1.00	100.00
101	GATS Watch	7.00	13.00	42.00	30.95	2.00	28.57
102	Germanwatch	1.00	00.00	0.00		1.00	100.00
103	Global AIDS Alliance	1.00	0.00	0.00		1.00	100.00
104	Global Arcade	1.00	00.00	0.00		1.00	100.00
2	Global Exchange	11.00	22.00	110.00	20.00	2.00	18.18
106	Global Issues Organization	2.00	0.00	2.00	0.00	2.00	100.00
7	Global Justice	1.00	0.00	0.00		1.00	100.00

108	Global Policy Forum	1.00	0.00	0.00		1,00	100.00
109	Global Response	1.00	00.00	00.00		1.00	100.00
110	Greenpeace International	3.00	1.00	00.9	16.67	2.00	29.99
111	Halifax Initiative	7.00	17.00	42.00	40.48	1.00	14.29
112	Health GAP Coalition/Act Up Philadelphia	1.00	0.00	00.0		1.00	100.00
113	Heinrich Boell Foundation	1.00	0.00	0.00		1.00	100.00
114	Human Rights Watch	1.00	0.00	00.00		1.00	100.00
115	Ibon Foundation, Inc.	2.00	1.00	2.00	20.00	1.00	50.00
116	IFI watch	3.00	5.00	00.9	83.33	1.00	33.33
117	India Resource Center	1.00	00.0	00'0		1.00	100.00
118	Indian Law Resource Center	1.00	0.00	00.00		1.00	100.00
119	Institute for Agriculture and Trade Policy (IATP) Trade Observatory	11.00	32.00	110.00	29.09	1.00	9.09
120	Institute for Economic Democracy	1.00	0.00	0.00		1.00	100.00
121	Institute for Global Communications (IGC)	2.00	1.00	2.00	20.00	1.00	50.00
122	Institute for Global Justice (IGJ)	2.00	1.00	2.00	20.00	1.00	50.00
123	Institute for Policy Studies	2.00	00.00	2.00	0.00	2.00	100.00
124	Inter Pares	1.00	00.00	0.00		1.00	100.00
125	InterAction	1.00	00.00	00.00		1.00	100.00
126	International Baby Food Action Network (IBFAN)	1.00	00.00	00.00		1.00	100.00
127	International Centre for Trade and Sustainable Development (ICTSD)	3.00	4.00	00'9	29.99	1.00	33.33
128	International Coalition For Developmet (ICDA)	2.00	1.00	2.00	50.00	1.00	50.00
129	International Confederation of Trade Unions (ICFTU)	1.00	00.00	00.00		1.00	100.00
130	International Cooperation for Development and Solidarity (CIDSE)	2.00	1.00	2.00	20.00	1.00	50.00
131	International Council of Nurses (ICN)	1.00	00.00	0.00		1.00	100.00
132	International Federation For Alternative Trade	1.00	0.00	00.00		1.00	100.00
133	International Federation for Human Rights(FIDH)	2.00	00.00	2.00	0.00	2.00	100.00
134	International Forum on Globalization (IFG)	9.00	27.00	72.00	37.50	1.00	11.11
135	International Gender And Trade Network (IGTN)	3.00	1.00	6.00	16.67	2.00	66.67
136	International Institute for Sustainable Development (IISD)	1.00	00.00	0.00		1.00	100.00
137	International Rivers Network	00.9	2.00	30.00	16.67	3.00	50.00
138	Jobs With Justice	2.00	1.00	2.00	50.00	1.00	50.00
139	Jubilee Debt Campaign (UK)	1.00	00.00	0.00		1.00	100.00
140	Jubilee Research	8.00	14.00	56.00	25.00	1.00	12.50
141	Jubilee South	5.00	8.00	20.00	40.00	1.00	20.00
142	Jubilee USA Network	8.00	20.00	56.00	35.71	1.00	12.50
143	JustAct: Youth Action for Global Justice	1.00	00.00	00.00		1.00	100.00
144	Landless Workers Movement	1.00	00.00	00.00		1.00	100.00

145	Latin American Integration Association (ALADI)	1.00	00.00	0.00		1.00	100.00
146	Maquila Solidarity Network	1.00	00.00	0.00	-	1.00	100.00
147	McSpotlight	1.00	00.00	0.00		1.00	100.00
148	Medact	1.00	0.00	0.00		1.00	100.00
149	Millennium Institute	1.00	0.00	0.00		1.00	100.00
150	Mineral Policy Institute	1.00	0.00	0.00		1.00	100.00
151	Multinational Monitor	2.00	0.00	2.00	00.00	2.00	100.00
152	National Farmers Union	1.00	0.00	0.00		1.00	100.00
153	National Organization for Women (NOW)	1.00	0.00	0.00		1.00	100.00
154	National Research and Development Centre for Welfare and Health	1.00	0.00	0.00		1.00	100.00
155	National Tertiary Education Union (Australia)	1.00	0.00	0.00		1.00	100.00
156	National Wildlife Federation, US	3.00	1.00	00.9	16.67	2.00	29.99
157	New Economics Foundation (NEF),	1.00	0.00	0.00		1.00	100.00
158	New Internationalist	3.00	0.00	00.9	0.00	3.00	100.00
159	North Sea Foundation	1.00	0.00	0.00		1.00	100.00
160	Norwatch (The Future in Our Hands)	1.00	0.00	0.00		1.00	100.00
161	Odious Debts	1.00	0.00	0.00		1.00	100.00
162	One World Trust	1.00	0.00	0.00		1.00	100.00
163	OneWorld	9.00	14.00	72.00	19.44	1.00	11.11
164	Open Society Institute	1.00	0.00	0.00		1.00	100.00
165	Our World Is Not for Sale	6.00	10.00	30.00	33.33	2.00	33.33
166	Oxfam America	3.00	0.00	6.00	0.00	3.00	100.00
167	Oxfam Australia	1.00	0.00	0.00		1.00	100.00
168	Oxfam International	5.00	00.9	20.00	30.00	1.00	20.00
169	Pacific Environment	2.00	0.00	2.00	0.00	2.00	100.00
170	PanAsiaNetworking	1.00	0.00	0.00		1.00	100.00
171	Panos Institute	1.00	0.00	0.00		1.00	100.00
172	People And Planet	2.00	0.00	2.00	0.00	2.00	100.00
173	People Centred Development Forum	1.00	0.00	0.00		1.00	100.00
174	People for Fair Trade	1.00	0.00	0.00		1.00	100.00
175	People's Food Sovereignty Network	2.00	2.00	2.00	100.00	1.00	50.00
176	Peoples Global Action (PGA)	4.00	7.00	12.00	58.33	1.00	25.00
177	Pesticide Action Network North America (PANNA)	1.00	0.00	0.00		1.00	100.00
178	Philippine-European Solidarity Centre (PESC-KSP)	1.00	0.00	0.00	5.7	1.00	100.00
179	Polaris Institute	3.00	2.00	6.00	83.33	1.00	33.33
180	Presbytarian Church(USA)'s Just Trade	2.00	1.00	2.00	50.00	1.00	50.00
181	Probe International	3.00	1.00	00.9	16.67	2.00	66.67

182	Program on Cornorations Law and Democracy	1 00	000	000		1 00	100 00
183		2.00	00.0	2.00	0.00	2.00	100.00
184	Public Citizen's Global Trade Watch	16.00	74.00	240.00	30.83	1.00	6.25
185	Public Services International (PSI)	2.00	1.00	2.00	20.00	1.00	50.00
186	Quixote Center	1.00	00.00	00.00		1.00	100.00
187	Rainbow/PUSH Coalition	1.00	00.0	0.00		1.00	100.00
188	Rainforest Action Network (RAN)	1.00	00.00	00.00		1.00	100.00
189	Research Foundation for Science, Technology, and Ecology (RFSTE)	3.00	4.00	6.00	29.99	1.00	33.33
190	Resource Center of the Americas	1.00	00.00	0.00		1.00	100.00
191	RESULTS	2.00	00.00	2.00	00.00	\2.0	0.0010
192	Rising Tide Coalition	1.00	00.00	00.00		1.00	100.00
193	Ruckus Society: Mobilization for Global Justice	1.00	00.0	0.00		1.00	100.00
194	Sahabat Alam Malaysia (SAM)	2.00	1.00	2.00	20.00	1.00	50.00
195	Seattle to Brussels Network	2.00	2.00	2.00	100.00	1.00	50.00
196	Sierra Club	1.00	00.00	0.00		1.00	100.00
197	Sierra Club Canada	1.00	00.00	0.00		1.00	100.00
198	Social Consultation for the Abolition of Foreign Debt	1.00	00.00	00.00		1.00	100.00
199	Social Investment Forum	1.00	00.00	00.00		1.00	100.00
200	Social Justice Committee	1.00	00.00	00.00		1.00	100.00
201	Sojourners	1.00	00.00	0.00		1.00	100.00
202	Solidarity Center	1.00	00.00	0.00		1.00	100.00
203	SOMO, Research on Multinational Corporations (Netherlands)	1.00	00.00	00.00		1.00	100.00
204	South Centre	1.00	00.00	0.00		1.00	100.00
205	StateWatch	1.00	00.0	00.00		1.00	100.00
206	Stockholm Environment Institute (SEI)	1.00	00.00	00.00		1.00	100.00
207	Stop The Free Trade Area of the Americas (FTAA)	2.00	1.00	2.00	50.00	1.00	50.00
208	Structural Adjustment Participatory Review International Network	5.00	5.00	20.00	25.00	1.00	20.00
209	Students United for a Responsible Global Environment (SURGE)	1.00	00.00	0.00		1.00	100.00
210	Survival International	1.00	00.00	0.00		1.00	100.00
211	Sustainable Development Policy Institute (SDPI)	1.00	00.00	0.00		1.00	100.00
212	Sustainable Energy and Economy Network	5.00	10.00	20.00	20.00	1.00	20.00
213	Swedish Society for the Conservation of Nature (SSNC)	1.00	00.00	0.00		1.00	100.00
214	Tearfund	1.00	00.00	0.00		1.00	100.00
215	The Corner House	1.00	00.00	0.00		1.00	100.00
216	Third World Institute (ITeM)	1.00	00.00	0.00		1.00	100.00
217	Third World Network	23.00	117.00	506.00	23.12	1.00	4.35
218	Third World Network - Africa	1.00	00.00	0.00		1.00	100.00

219	Tobin Tax Initiative	2.00	2.00	2.00	100.00	1.00	50.00
220	Trade Justice Movement	5.00	00.9	20.00	30.00	1.00	20.00
221	Trade Law Centre for Southern Africa (TRALAC)	1.00	00.0	0.00		1.00	100.00
222	Trades Union Congress (TUC)	1.00	00.00	0.00		1.00	100.00
223	Traidcraft	1.00	0.00	0.00		1.00	100.00
224	Transfair	1.00	0.00	0.00		1.00	100.00
225	Transnational Foundation for Peace and Future Research	1.00	0.00	0.00		1.00	100.00
226	Transnational Institute (TNI)	4.00	00.9	12.00	20.00	1.00	25.00
227	Transnationale	1.00	0.00	0.00		1.00	100.00
228	Union Network International (UNI)	1.00	00.0	0.00		1.00	100.00
229	UNISON Public Services Union	1.00	00.00	0.00		1.00	100.00
230	United States Students Association	1.00	0.00	0.00		1.00	100.00
231	United Students Against Sweatshops (USAS)	2.00	0.00	2.00	0.00	2.00	100.00
232	Via Campesina	4.00	4.00	12.00	33.33	2.00	50.00
233	War on Want	5.00	7.00	20.00	35.00	1.00	20.00
234	Washington Office on Africa	1.00	0.00	0.00		1.00	100.00
235	West Coast Environmental Law	2.00	0.00	2.00	0.00	2.00	100.00
236	Whirled Bank Group	2.00	2.00	2.00	100.00	1.00	50.00
237	Women's Environmental and Development Organization (WEDO)	1.00	0.00	0.00		1.00	100.00
238	World Conservation Union (IUCN)	2.00	0.00	2.00	0.00	2.00	100.00
239	World Council of Churches (WCC)	1.00	0.00	0.00		1.00	100.00
240	World Development Movement (WDM)	9.00	18.00	72.00	25.00	1.00	11.11
241	World Ecology, Economy and Development (WEED)	5.00	5.00	20.00	25.00	1.00	20.00
242	World Forum of Networks - Ubuntu	1.00	0.00	0.00		1.00	100.00
243	World March of Women	1.00	0.00	0.00		1.00	100.00
244	World Rainforest Movement (WRM)	1.00	0.00	0.00		1.00	100.00
245	World Resources Institute (WRI)	2.00	1.00	2.00	20.00	1.00	50.00
246	World Social Forum	2.00	0.00	2.00	0.00	2.00	100.00
247	World Wildlife Fund (WWF)	3.00	1.00	00.9	16.67	2.00	66.67
248	Worldwatch Institute	1.00	0.00	0.00		1.00	100.00
249	ZNet	1.00	0.00	0.00		1.00	100.00

7
2StepR ReachEff
11:11:11 9.27 1 0.00
Network 58.06 46.30
Action Aid 33.06 84.54

African Centre for Technology	AFL-CIO	9.68	100.00	00.0		00.00	
8	Africa Action	15.73	73.58	0.00	00.00	0.00	0.00
	African Centre for Technology Studies (ACTS)	10.48	100.00	0.00		0.00	
	African Services Committee	9.68	100.00	0.00		0.00	
	AID/WATCH	33.47	81.37	0.50	0.25	00.00	0.00
	Alliance for a Plural, United and Responsible World	17.34	100.00	00.00		00.00	
	Alliance for Democracy	13.71	100.00	0.00		0.00	
	Alliance for Responsible Trade (ART)	6.85	85.00	1.00	0.50	0.00	0.00
	Alternative Information and Development Centre	15.73	73.58	00.00	00.0	00.0	0.00
	AmazonWatch	12.90	100.00	00.00		0.00	
	Asia Pacific Research Network	9.27	85.19	00.00	0.00	0.00	0.00
	Association for Ethical Finance (Afe)	17.34	100.00	00.00		00.00	
	Association for International Water and Forest Studies (FIVAS)	12.90	100.00	00.00		00.00	
	ATTAC	41.53	55.98	22.50	0.40	39.50	70.54
	ATTAC Germany	22.18	78.57	2.00	0.33	0.00	0.00
	ATTAC Japan	11.69	100.00	00.00		00.00	
	Australian Fair Trade & Investment Network	22.98	68.67	1.00	0.17	00.00	0.00
	Banana Link	6.05	100.00	0.00		0.00	
	Bank Information Center	37.10	47.92	18.00	0.32	11.25	20.09
	Berne Declaration	43.95	70.78	4.00	0.33	00.00	0.00
	Both ENDS	33.47	81.37	0.50	0.25	0.00	0.00
	Bread for the World	33.06	84.54	0.00	0.00	00.00	0.00
	Bretton Woods Project	50.81	57.01	10.00	0.24	00.00	0.00
	Campaign Against Arms Trade	12.90	100.00	00.00		00.00	
	Campaign for Labor Rights	10.89	100.00	0.00		00.00	
	Canadian Auto Workers	11.69	100.00	0.00		0.00	
	Canadian Centre for Policy Alternatives (CCPA)	34.27	73.91	4.00	0.33	0.00	0.00
	Canadian Council on Social Development (CCSD)	11.69	100.00	0.00		0.00	
	Canadian Environmental Law Association	15.73	85.98	0.50	0.25	00.00	0.00
	Canadian Federation of Students	11.69	100.00	0.00		00.00	
	Canadian Health Coalition	11.69	100.00	0.00		0.00	
	Canadian Labour Congress	11.69	100.00	0.00		0.00	
	Canadian Union of Postal Workers	11.69	100.00	0.00		0.00	
	Canadian Union of Public Employees	11.69	100.00	00.00	9-2	00.00	
	Caritas Internationalis	17.34	100.00	00.00		00.00	

41	Carnegie Endowment for International Peace	10.48	100.00	0.00		0.00	
42	Catholic Agency for Overseas Development (CAFOD)	35.89	79.46	1.50	0.25	00.00	0.00
43	CEE Bankwatch	31.85	69.91	8.00	0.40	0.00	0.00
44	Center for Economic and Policy Research (CEPR)	47.18	47.95	20.50	0.28	5.25	7.29
45	Center for Economic and Social Rights (CESR)	28.23	100.00	00.00		0.00	
46	Center for Economic Justice	43.95	53.69	14.00	0.25	1.33	2.38
47	Center for International Environmental Law	28.63	73.20	5.00	0.42	00.00	0.00
48	Center for Social Justice	11.69	100.00	0.00		0.00	
49	Center of Concern (COC)	33.87	89.36	1.00	0.50	0.00	0.00
20	Centre for Science and Environment (CSE)	10.48	100.00	00.0		00.00	
51	Choike	28.23	100.00	00.00		00.00	
52	Christian Aid	22.98	83.82	2.50	0.42	0.00	0.00
53	Church World Service	9.68	100.00	00.0		0.00	
54	Citizens Network on Essential Services	33.06	84.54	00.0	00.00	0.00	0.00
22	Citizens Trade Campaign	3.23	100.00	00.00		00.00	
26	Clean Clothes Campaign	25.81	91.43	0.50	0.25	0.00	0.00
22	Coalition against BAYER-Dangers	12.50	100.00	00.00		0.00	
28	Committee for the Abolition of the Third World Debt (CADTM)	99.7	100.00	00.00		00.00	
29	Common Frontiers	15.73	85.98	0.50	0.25	00.0	0.00
09	Conservation International (CI)	28.23	100.00	00.00		0.00	
61	Consumer Unity & Trust Society (CUTS)	10.48	100.00	0.00		0.00	
62	Consumers International	25.81	92.75	0.50	0.25	0.00	0.00
63	Corporate Europe Observatory (CEO)	46.37	38.33	55.50	0.30	33.07	18.17
64	Corporate Watch	46.77	60.10	23.00	0.41	0.00	0.00
65	CorpWatch	33.87	57.93	7.00	0.23	4.83	16.11
99	Council of Canadians	44.35	56.41	17.50	0.31	9.67	17.26
67	Development Alternatives With Women For a New Era (DAWN)	9.27	100.00	00.00		0.00	
99	Development Group for Alternative Policies (GAP)	38.71	65.75	7.00	0.35	0.00	0.00
69	Drop the Debt	20.97	83.87	0.00	00.00	0.00	0.00
70	EarthRights International	28.23	100.00	0.00		0.00	
71	Ecumenical Program on Central America and the Caribbean (EPICA)	9.68	100.00	00.00		00.00	
72	Education International	13.71	100.00	0.00		00.00	
73	Environmental Defense (EDF)	28.23	100.00	0.00		0.00	
74	Environmental Media Services	28.23	100.00	0.00		0.00	
22	Environmental Mining Council of British Columbia (EMCBC)	11.69	100.00	00.00		00.00	
9/	Essential Information	40.73	81.45	5.50	0.46	00.00	0.00
77	Ethical Consumer Research Association (ECRA)	26.61	89.19	1.00	0.50	00.00	0.00

79         European Fe           80         European Net           81         European Solidarity           82         84           85         Fairtrade           86         Forests and the E           91         Foundation for I           92         Foundation for I           93         96           96         97           98         98           99         99           90         90	ederation of Public Services Unions (EPSU)  twork On Debt And Development (Eurodad)  Towards Equal Participation Of The People European Youth For Action European Youth For Action Export Credit Agency (ECA) Watch Fair Trade Foundation Focus on the Global South Forest Peoples Programme Forest Peoples Programme	13.71 45.56 6.85 6.85 6.85 6.85 6.85 6.85 6.85	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00		0.33	00000	0.00
For	Towards Equal Participation Of The People  European Youth For Action  Export Credit Agency (ECA) Watch  Fair Trade Foundation  Focus on the Global South  Focus on the Global South  Food First aka Economic Justice  Foreign Policy In Focus  Forest Peoples Programme	45.56 6.85 6.85 6.85 6.85 6.85 6.85 6.85	77.93 100.00 100.00 100.00 100.00 100.00 100.00 100.00		0.33	0000	00:0
Euro	Towards Equal Participation Of The People  European Youth For Action  Export Credit Agency (ECA) Watch  Fair Trade Foundation  Focus on the Global South  Focus Peoples Programme  Forest Peoples Programme	17.34 6.85 6.85 6.85 6.169 61.69 28.23 28.23	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00		0.25	0.00	
	European Youth For Action Export Credit Agency (ECA) Watch Fair Trade Foundation Fair Trade Foundation Focus on the Global South Food First aka Economic Justice Foreign Policy In Focus Forest Peoples Programme	6.85 36.69 6.85 17.34 17.34 61.69 33.06 28.23 28.23	100.00 100.00 100.00 100.00 100.00 100.00		0.25	000	0
	Export Credit Agency (ECA) Watch Fair Trade Foundation Labelling Organizations International (FLO) Focus on the Global South Food First aka Economic Justice Foreign Policy In Focus Forest Peoples Programme	36.69 6.85 61.69 33.06 28.23 28.23	72.80 100.00 41.02 69.49 100.00 100.00		0.25	0.00	000
	Fair Trade Foundation Labelling Organizations International (FLO) Focus on the Global South Food First aka Economic Justice Foreign Policy In Focus Forest Peoples Programme	6.85 17.34 61.69 33.06 28.23	100.00 100.00 100.00 100.00 100.00 100.00			0.00	0.00
	Eabelling Organizations International (FLO) Focus on the Global South Food First aka Economic Justice Foreign Policy In Focus Forest Peoples Programme	17.34 61.69 33.06 28.23 28.23	100.00 100.00 100.00 100.00			00.0	
	Food First aka Economic Justice Foreign Policy In Focus Forest Peoples Programme	61.69 33.06 28.23 28.23	41.02 69.49 100.00 100.00 100.00			0.00	
	Food First aka Economic Justice Foreign Policy In Focus Forest Peoples Programme	33.06 28.23 28.23	69.49 100.00 100.00 100.00		0.37	53.14	22.14
	Forest Peoples Programme	28.23	100.00	0.00	0.25	2.00	16.67
	Forest Peoples Programme	28.23	100.00	0.00		00.0	
	Lingagor Haion Docourso Mohinory (EEDM)		100.00	0.00		0.00	
	European Omon Resource Network (FERIN)	12.90	100.00	000		0.00	
	Forum on Environment & Development	13.71	00000	00.00		00.00	
	nternational Law and Development (FIELD)	10.48	100.00	0.00		0.00	
	Freedom From Debt Coalition	33.47	81.37	0.50	0.25	0.00	0.00
	Friends of River Narmada	28.23	100.00	0.00		0.00	
	Friends of the Earth (FOE) Europe	31.85	75.96	4.50	0.38	5.50	45.83
	Friends of the Earth International	71.77	44.06	77.00	0.37	66.43	31.63
	Friends of the Earth Middle East (FoEME)	25.00	91.18	1.00	0.50	00.00	0.00
	Friends of the Earth UK	20.56	89.47	0.50	0.25	0.00	0.00
	Friends of the Earth USA	42.34	68.63	7.00	0.35	00.00	0.00
	Friends of the Earth, Japan	12.90	100.00	00.00		00.00	
	GATS Watch	23.79	46.09	14.50	0.35	18.83	44.84
	Germanwatch	10.48	100.00	00.00		00.00	
103	Global AIDS Alliance	9.68	100.00	00.00		00.00	
104	Global Arcade	7.26	100.00	0.00		00.00	
105	Global Exchange	40.32	45.05	44.00	0.40	62.33	56.67
106	Global Issues Organization	12.90	84.21		0.50	0.00	0.00
	Global Justice	9.68	100.00	00.00		0.00	
108	Global Policy Forum	9.27	100.00	00.0		0.00	
109	Global Response	28.23	100.00	00.00		00.00	
110	Greenpeace International	42.34	80.15	2.50	0.42	00.00	0.00
	Halifax Initiative	53.63	59.11	12.50	0.30	9.75	23.21
112	Health GAP Coalition/Act Up Philadelphia	9.68	100.00	00.00		00.00	
113	Heinrich Boell Foundation	10.08	100.00	00.00	-	00.00	
114	Human Rights Watch	28.23	100.00	00'0		0.00	

116	IDON FOUNDATION, INC.	14.11	76.09	0.50	0.25	1.00	50.00
2	IFI watch	35.48	77.19	0.50	0.08	00.00	0.00
117	India Resource Center	11.69	100.00	00.00		0.00	
118	Indian Law Resource Center	28.23	100.00	00.00		0.00	
119	Institute for Agriculture and Trade Policy (IATP) Trade Observatory	47.98	47.04	39.00	0.35	30.17	27.42
120	Institute for Economic Democracy	4.03	100.00	0.00		0.00	
121	Institute for Global Communications (IGC)	8.47	84.00	0.50	0.25	0.00	0.00
122	Institute for Global Justice (IGJ)	16.94	80.77	0.50	0.25	0.00	0.00
123	Institute for Policy Studies	37.50	93.94	1.00	0.50	0.00	0.00
124	Inter Pares	11.69	100.00	0.00		0.00	
125	InterAction	28.23	100.00	00.0	,	00.0	
126	International Baby Food Action Network (IBFAN)	12.50	100.00	00.00		0.00	
127	International Centre for Trade and Sustainable Development (ICTSD)	27.42	73.91	1.00	0.17	0.00	0.00
128	International Coalition For Developmet (ICDA)	24.19	86.96	0.50	0.25	0.00	0.00
129	International Confederation of Trade Unions (ICFTU)	13.71	100.00	00.00		00.00	
130	International Cooperation for Development and Solidarity (CIDSE)	17.74	91.67	0.50	0.25	0.00	0.00
131	International Council of Nurses (ICN)	13.71	100.00	00.00		0.00	
132	International Federation For Alternative Trade	17.34	100.00	00.00		0.00	
133	International Federation for Human Rights(FIDH)	27.82	92.00	1.00	0.50	00.00	0.00
134	International Forum on Globalization (IFG)	39.52	51.31	22.50	0.31	9.23	12.82
135	International Gender And Trade Network (IGTN)	30.24	78.95	2.50	0.42	00.00	00.00
136	International Institute for Sustainable Development (IISD)	10.48	100.00	00.00		00.00	
137	International Rivers Network	52.82	65.50	12.50	0.42	00.00	00.00
138	Jobs With Justice	12.50	83.78	0.50	0.25	0.00	0.00
139	Jubilee Debt Campaign (UK)	6.45	100.00	00.00		0.00	
140	Jubilee Research	49.60	57.48	21.00	0.38	7.00	12.50
141	Jubilee South	30.65	66.67	00.9	0.30	00.00	0.00
142	Jubilee USA Network	27.02	44.67	18.00	0.32	7.33	13.10
143	JustAct: Youth Action for Global Justice	10.89	100.00	00.00		00.00	
144	Landless Workers Movement	5.24	100.00	00.00		0.00	
145	Latin American Integration Association (ALADI)	17.34	100.00	00.00		0.00	
146	Maquila Solidarity Network	11.69	100.00	00.00		0.00	
147	McSpotlight	12.50	100.00	00.00		0.00	
148	Medact	13.71	100.00	00.00		0.00	
149	Millennium Institute	28.23	100.00	00.00		0.00	
150	Mineral Policy Institute	12.90	100.00	00.00		00.00	
151	Multinational Monitor	27.82	95.83	1.00	0.50	00.00	00.00

152	National Farmers Union	10.48	100 00	00.0		00.0	
153	National Organization for Women (NOW)	4.44	100.00	00.00		0.00	
154	National Research and Development Centre for Welfare and Health	10.48	100.00	00.00		00.00	
155	National Tertiary Education Union (Australia)	13.71	100.00	00.00		00.00	
156	National Wildlife Federation, US	41.13	79.69	2.50	0.42	0.00	0.00
157	New Economics Foundation (NEF),	28.23	100.00	0.00		0.00	
158	New Internationalist	18.95	90.38	3.00	0.50	00.0	00.00
159	North Sea Foundation	6.85	100.00	00.00		00.00	
160	Norwatch (The Future in Our Hands)	12.50	100.00	00.0		0.00	
161	Odious Debts	10.89	100.00	00.0		00.00	
162	One World Trust	10.89	100.00	00.00		00.0	
163	OneWorld	56.45	60.61	29.00	0.40	0.00	00.00
164	Open Society Institute	28.23	100.00	0.00		0.00	
165	Our World Is Not for Sale	24.19	51.28	10.00	0.33	13.50	45.00
166	Oxfam America	36.29	82.57	3.00	0.50	00.00	0.00
167	Oxfam Australia	28.23	100.00	0.00		0.00	
168	Oxfam International	52.82	72.38	7.00	0.35	0.00	0.00
169	Pacific Environment	20.56	92.73	1.00	0.50	00.00	00.00
170	PanAsiaNetworking	10.48	100.00	00.00		00.00	
171	Panos Institute	4.03	100.00	0.00		0.00	
172	People And Planet	27.82	89.61	1.00	0.50	0.00	0.00
173	People Centred Development Forum	2.82	100.00	00.00		00.00	
174	People for Fair Trade	10.48	100.00	00.00		0.00	
175	People's Food Sovereignty Network	9.27	85.19	00.00	00.00	0.00	0.00
176	Peoples Global Action (PGA)	33.06	29.99	2.50	0.21	0.83	6.94
177	Pesticide Action Network North America (PANNA)	28.23	100.00	0.00		00.00	
178	Philippine-European Solidarity Centre (PESC-KSP)	2.02	100.00	0.00		0.00	
179	Polaris Institute	23.79	67.05	0.50	0.08	0.00	0.00
180	Presbytarian Church(USA)'s Just Trade	16.94	85.71	0.50	0.25	0.00	0.00
181	Probe International	42.34	80.15	2.50	0.42	0.00	0.00
182	Program on Corporations, Law and Democracy	11.69	100.00	0.00		0.00	
183	Project Underground	37.50	92.08	1.00	0.50	0.00	0.00
184	Public Citizen's Global Trade Watch	73.79	44.53	83.00	0.35	66.15	27.56
185	Public Services International (PSI)	18.55	80.70	0.50	0.25	0.00	0.00
186	Quixote Center	9.68	100.00	00.00		0.00	
187	Rainbow/PUSH Coalition	4.44	100.00	0.00		0.00	
188	Rainforest Action Network (RAN)	28.23	100.00	00.00		0.00	

189	Research Foundation for Science, Technology, and Ecology (RFSTE)	16.94	65.69	1.00	0.17	0.00	00.00
190			100.00	0.00		0.00	
191	RESULTS	0 33.8	7 89.3	6 1.00	0.50	0.0	0.00
192	Rising Tide Coalition	12.50	100.00	0.00		0.00	
193	Ruckus Society: Mobilization for Global Justice	7.26	100.00	0.00		0.00	
194	Sahabat Alam Malaysia (SAM)	17.74	83.02	0.50	0.25	0.00	0.00
195	Seattle to Brussels Network	14.11	83.33	00.0	00.0	0.00	0.00
196	Sierra Club	10.48	100.00	0.00		0.00	
197	Sierra Club Canada	10.48	100.00	0.00		0.00	
198	Social Consultation for the Abolition of Foreign Debt		100.00	0.00		0.00	
199	Social Investment Forum	17.34	100.00	00.0		0.00	
200	Social Justice Committee	2	100.00	0.00		0.00	
201	Sojourners	9.68	100.00	0.00		0.00	
202	Solidarity Center	28.23	100.00	0.00		0.00	
203	SOMO, Research on Multinational Corporations (Netherlands)	13.71	100.00	00.00		0.00	
204	South Centre	6.05	100.00	0.00		0.00	
205	StateWatch	12.50	100.00	0.00		0.00	
206	Stockholm Environment Institute (SEI)	10.48	100.00	0.00		0.00	
207	Stop The Free Trade Area of the Americas (FTAA)	15.32	84.44	0.50	0.25	0.00	0.00
208	+	35.89	68.99	7.50	0.38	0.00	0.00
209	Students United for a Responsible Global Environment (SURGE)	9.27	100.00	00.00		0.00	
210	Survival International	6.05	100.00	00.00		0.00	
211	Sustainable Development Policy Institute (SDPI)	10.48	100.00	00.00		0.00	
212	Sustainable Energy and Economy Network	40.73	62.35	5.00	0.25	0.00	0.00
213	Swedish Society for the Conservation of Nature (SSNC)	12.90	100.00	00.00		0.00	
214	Tearfund	10.89	100.00	00.00		0.00	
215	The Corner House	12.50	100.00	0.00		0.00	
216	Third World Institute (ITeM)	28.23	100.00	00.00		0.00	
217	Third World Network	7	37.38	194.50	0.38	0.00	0.00
218	Third World Network - Africa	2.02	100.00	0.00		0.00	
219	Tobin Tax Initiative		83.87	00.0	0.00	0.00	0.00
220	Trade Justice Movement	25.00	62.63	7.00	0.35	0.00	0.00
221	Trade Law Centre for Southern Africa (TRALAC)	10.48	100.00	00.00		0.00	
222	Trades Union Congress (TUC)	6.05	100.00	00.00	-	0.00	
223	Traidcraft	6.05	100.00	0.00		0.00	
224	Transfair	17.34	100.00	0.00	4	0.00	
225	Transnational Foundation for Peace and Future Research	4.03	100.00	00.00		0.00	

226	Transnational Institute (TNI)	22.58	61.54	3.00	0.25	00.00	00.0
227	Transnationale	12.50	100.00	0.00		00.0	
228	Union Network International (UNI)	13.71	100.00	0.00		0.00	
229	UNISON Public Services Union	13.71	100.00	0.00		0.00	
230	United States Students Association	4.44	100.00	0.00		0.00	
231	United Students Against Sweatshops (USAS)	14.52	94.74	1.00	0.50	0.00	0.00
232	Via Campesina	22.18	70.51	4.00	0.33	0.00	0.00
233	War on Want	24.19	26.60	6.50	0.32	4.00	20.00
234	Washington Office on Africa	9.68	100.00	0.00		0.00	
235	West Coast Environmental Law	19.76	98.00	1.00	0.50	0.00	0.00
236	Whirled Bank Group	12.90	78.05	00.0	00.00	0.00	0.00
237	Women's Environmental and Development Organization (WEDO)	10.48	100.00	0.00		0.00	
238	World Conservation Union (IUCN)	35.89	92.71	1.00	0.50	0.00	0.00
239	World Council of Churches (WCC)	2.82	100.00	0.00		0.00	
240	World Development Movement (WDM)	48.79	52.38	27.00	0.38	32.50	45.14
241	World Ecology, Economy and Development (WEED)	55.65	69.70	7.50	0.38	9.00	45.00
242	World Forum of Networks - Ubuntu	17.34	100.00	0.00		0.00	
243	World March of Women	5.24	100.00	0.00		0.00	
244	World Rainforest Movement (WRM)	28.23	100.00	0.00		0.00	
245	World Resources Institute (WRI)	33.47	81.37	0.50	0.25	0.00	0.00
246	World Social Forum	7.66	100.00	1.00	0.50	0.00	0.00
247	World Wildlife Fund (WWF)	41.13	79.69	2.50	0.42	0.00	0.00
248	Worldwatch Institute	28.23	100.00	0.00		0.00	
249	ZNet	4.03	100.00	0.00		0.00	

- Size. Size of ego network.
- Ties. Number of directed ties.
- Pairs. Number of ordered pairs.
  - 4. Density. Ties divided by Pairs.
- 5. nWeakComp. Number of weak components.
  - 6. pWeakComp. NWeakComp divided by Size.
- 7. 2StepReach. # of nodes within 2 links of ego.
  - 8. ReachEffic. 2StepReach divided Size.
- 9. Broker. # of pairs not directly connected.
- 10. Normalized Broker. Broker divided by number of pairs.
- 11. Ego Betweenness. Betweenness of ego in own network.
- 12. Normalized Ego Betweenness. Betweenness of ego in own network.

Table II
Directed Density Outflow of the 49 Organizations Studied for Links

		Ē	2	3	4	5	9
		Size	Ties	Pairs	Densit	nWeakC	pWeakC
2	50 Years is Enough Network	21.00	47.00	420.00	11.19	2.00	23.81
7	Africa Action	7.00	15.00	42.00	35.71	2.00	28.57
14	Alternative Information and Development Centre	3.00	00.00	00'9	00.0	3.00	100.00
19	ATTAC	17.00	44.00	272.00	16.18	1.00	5.88
24	Bank Information Center	65.00	64.00	4160.00	1.54	31.00	47.69
44	Center for Economic and Policy Research (CEPR)	5.00	4.00	20.00	20.00	3.00	00.09
46	Center for Economic Justice	00'9	00.00	30.00	00.0	00'9	100.00
28	Committee for the Abolition of the Third World Debt (CADTM)	43.00	64.00	1806.00	3.54	20.00	46.51
63	Corporate Europe Observatory (CEO)	25.00	29.00	00.009	4.83	12.00	48.00
65	CorpWatch	16.00	41.00	240.00	17.08	2.00	12.50
99	Council of Canadians	12.00	18.00	132.00	13.64	00'9	50.00
89	Development Group for Alternative Policies (GAP)	2.00	0.00	2.00	00.00	2.00	100.00
69	Drop the Debt	1.00	00.00	00.00		00.00	00.00
83	Export Credit Agency (ECA) Watch	29.00	5.00	812.00	0.62	24.00	82.76
98	Focus on the Global South	17.00	20.00	272.00	7.35	00'9	35.29
87	Food First aka Economic Justice		18.00	156.00	11.54	4.00	30.77
92	Friends of the Earth (FOE) Europe	15.00	20.00	210.00	9.52	4.00	26.67
96	Friends of the Earth International	16.00	28.00	240.00	11.67	00'9	37.50
101	GATS Watch	31.00	00.09	930.00	6.45	14.00	45.16
105	Global Exchange	24.00	121.00	552.00	21.92	1.00	4.17
106	Global Issues Organization	8.00	1.00	56.00	1.79	7.00	87.50
108	Global Policy Forum	8.00	11.00	26.00	19.64	3.00	37.50
111	Halifax Initiative	11.00	17.00	110.00	15.45	3.00	27.27
115	Ibon Foundation, Inc.	3.00	2.00	00.9	33.33	1.00	33.33
119	Institute for Agriculture and Trade Policy (IATP) Trade Observatory	20.00	34.00	380.00	8.95	7.00	35.00
127	International Centre for Trade and Sustainable Development (ICTSD)	23.00	3.00	506.00	0.59	20.00	86.96
134	International Forum on Globalization (IFG)	12.00	50.00	132.00	37.88	1.00	8.33
140	Jubilee Research	21.00	20.00	420.00	4.76	7.00	33.33
142	Jubilee USA Network	18.00	00.9	306.00	1.96	14.00	77.78
165	Our World Is Not for Sale	21.00	50.00	420.00	11.90	4.00	19.05
176	Peoples Global Action (PGA)	00.9	12.00	30.00	40.00	1.00	16.67
179	Polaris Institute	28.00	26.00	756.00	3.44	18.00	64.29
184	Public Citizen's Global Trade Watch	17.00	51.00	272.00	18.75	4.00	23.53

3.00 20.00 15.00 3.00 60.00	0.00 0.00 0.00 0.00	0.00 6.00 0.00 3.00 100.00	2.00 12.00 16.67 2.00 50.00	1.00 110.00 0.91 10.00 90.91	46.00 272.00 16.91 3.00 17.65	22.00 110.00 20.00 2.00 18.18	3.00 12.00 25.00 1.00 25.00
Research Foundation for Science, Technology, and Ecology (RFSTE) 5.00	Students United for a Responsible Global Environment (SURGE) 1.00	Third World Network 3.00	Tobin Tax Initiative 4.00	War on Want 11.00	Whirled Bank Group 17.00	World Development Movement (WDM) 11.00	World Ecology, Economy and Development (WEED) 4.00
189	209	217	219	233	236	240	241

2StepR Re 50 Years is Enough Network 51.61 Africa Action 30.24 ATTAC 49.19 Bank Information Center 54.84 for Economic and Policy Research (CEPR) 23.39 Center for Economic Justice 13.71 Abolition of the Third World Debt (CADTM) 62.90 Corporate Europe Observatory (CEO) 36.29 Corporate Europe Observatory (CEO) 36.29 Council of Canadians 25.00 Drop the Debt 1.00	ReachE Bi 42.24 54.35 100.00 41.64 37.26 20 59.79 91.89 40.73 88.96 42.90 45.26	Broker   186.50   13.50   3.00   114.00   2048.00   8.00   15.00   285.50   99.50   57.00	0.44 0.42 0.50 0.40 0.40 0.48 0.48 0.48 0.48 0.48	EgoBet   120.67   120.67   5.00   0.00   112.12   328.67   4.00   5.00   270.58   145.08   38.27   27.75   27.	28.73 11.90 0.00 41.22 7.90 20.00 16.67 14.98 24.18 15.94 15.94
		13.50 13.50 3.00 114.00 8.00 871.00 871.00 15.00 10.00 10.00	0.44 0.50 0.50 0.40 0.40 0.48 0.48 0.48 0.48	120.67 5.00 0.00 112.12 328.67 4.00 5.00 270.58 145.08 38.27 27.75	28.73 11.90 0.00 20.00 20.00 14.98 24.18 15.94 21.02
		13.50 3.00 114.00 2048.00 8.00 871.00 871.00 99.50 57.00	0.32 0.42 0.49 0.40 0.40 0.48 0.48 0.41 0.43	5.00 0.00 112.12 328.67 4.00 5.00 270.58 145.08 38.27 27.75	11.90 0.00 7.90 20.00 16.67 14.98 24.18 21.02 0.00
		3.00 114.00 248.00 8.00 15.00 871.00 285.50 99.50 1.00	0.50 0.42 0.49 0.48 0.48 0.48 0.48 0.48	0.00 112.12 328.67 4.00 5.00 270.58 145.08 38.27 27.75	0.00 41.22 7.90 20.00 16.67 14.98 24.18 21.02 21.02
		114.00 248.00 8.00 15.00 15.00 285.50 99.50 1.00	0.42 0.49 0.50 0.50 0.48 0.48 0.41 0.43	328.67 328.67 4.00 5.00 270.58 38.27 27.75	7.90 20.00 20.00 16.67 14.98 24.18 15.94 21.02
	<del></del>	8.00 8.00 15.00 871.00 285.50 99.50 57.00	0.40 0.40 0.50 0.48 0.48 0.41 0.43	328.67 4.00 5.00 270.58 145.08 38.27 27.75	7.90 20.00 16.67 14.98 24.18 15.94 21.02
		8.00 15.00 15.00 871.00 285.50 99.50 57.00	0.40 0.50 0.48 0.41 0.43 0.50	4.00 5.00 270.58 145.08 38.27 27.75	20.00 16.67 14.98 24.18 15.94 21.02 0.00
		15.00 871.00 285.50 99.50 57.00	0.50 0.48 0.48 0.41 0.43	5.00 270.58 145.08 38.27 27.75	16.67 14.98 24.18 15.94 21.02 0.00
		99.50 99.50 57.00	0.48 0.41 0.43 0.50	270.58 145.08 38.27 27.75	24.18 24.18 15.94 21.02 0.00
		285.50 99.50 57.00 1.00	0.48	38.27 27.75	24.18 15.94 21.02 0.00
	42.90 45.26 100.00	99.50 57.00 1.00	0.43	38.27	15.94 21.02 0.00
N	45.26	1.00	0.43	27.75	21.02
	100.00	1.00	0.50	00.0	0.00
		100000000000000000000000000000000000000			
	100.001	3.63	100.001	0.00	0.00
Export Credit Agency (ECA) Watch 26.21	55.56	403.50	0.50	0.00	0.00
Focus on the Global South 45.97	20.67	126.00	0.46	75.83	27.88
Food First aka Economic Justice 29.84	40.88	00.69	0.44	34.00	21.79
Friends of the Earth (FOE) Europe 29.03	44.17	95.00	0.45	26.67	12.70
Friends of the Earth International 39.11	41.81	106.00	0.44	53.87	22.44
GATS Watch 46.37	38.98	435.00	0.47	188.74	20.29
Global Exchange 76.21	36.21	215.50	0.39	154.67	28.02
Global Issues Organization 14.52	81.82	27.50	0.49	0.00	0.00
Global Policy Forum 22.98	43.18	22.50	0.40	7.08	12.65
Halifax Initiative 41.94	56.83	46.50	0.42	10.33	9.39
lbon Foundation, Inc. 9.27	85.19	2.00	0.33	0.00	0.00
		173.00	0.46	112.14	29.51
30.65		251.50	0.50	0.00	0.00
		18121212141 15181	5.50 5.50 5.50 6.50 3.00 1.50		0.39 15 0.40 0.40 0.33 0.33 0.50

134	International Forum on Globalization (IFG)	58.47	44.34	41.00	0.31	10.05	7.62
140	Jubilee Research	47.58	51.75	200.00	0.48	65.50	15.60
142	Jubilee USA Network	25.40	65.63	150.00	0.49	44.17	14.43
165	Our World Is Not for Sale	43.95	40.07	185.00	0.44	86.42	20.58
176	Peoples Global Action (PGA)	32.26	54.42	9.00	0.30	6.50	21.67
179	Polaris Institute	33.87	45.41	365.00	0.48	112.75	14.91
184	Public Citizen's Global Trade Watch	99'29	45.69	110.50	0.41	109.08	40.10
189	Research Foundation for Science, Technology, and Ecology (RFSTE)	14.92	53.62	8.50	0.43	4.50	22.50
209	Students United for a Responsible Global Environment (SURGE)	1.00	100.00	10.89	100.00	0.00	0.00
217	Third World Network	4.84	100.00	3.00	0.50	0.00	0.00
219	Tobin Tax Initiative	15.32	74.51	5.00	0.42	1.00	8.33
233	War on Want	17.34	65.15	54.50	0.50	10.00	60.6
236	Whirled Bank Group	52.02	43.43	113.00	0.42	25.50	9.38
240	World Development Movement (WDM)	42.74	46.70	44.00	0.40	35.83	32.58
241	World Ecology, Economy and Development (WEED)	23.39	70.73	4.50	0.38	3.00	25.00

- 1. Size. Size of ego network.
- Ties. Number of directed ties.
- Pairs. Number of ordered pairs.
- 4. Density. Ties divided by Pairs.
- nWeakComp. Number of weak components.
- pWeakComp. NWeakComp divided by Size.
- 7. 2StepReach. # of nodes within 2 links of ego.
  - 8. ReachEffic. 2StepReach divided Size.
- 9. Broker. # of pairs not directly connected.
- 10. Normalized Broker. Broker divided by number of pairs.
- 11. Ego Betweenness. Betweenness of ego in own network.
- 12. Normalized Ego Betweenness. Betweenness of ego in own network.

TABLE III
Degree Centrality Measures From all 249 Organizations

4	ρ	9	33	33	7	7	5	35	7	15	6	97	35	9	90	22	22	9	6	8	3	3	56	6	23	9	6	90	90	)3	90	9	3	6
	NrmInDeg	3.226	0.403	2.823	1.2	1.2	5.645	4.435			2.419		4.435	3.226	908'0	6.452	6.452	3.226	2.419	6.048	1.613	1.613	3.226	3.629		2.016	3.629	908'0	908'0	0.403		3.226		3.629
3	NrmOutDeg	26.21	17.339	12.5	11.694	11.29	10.081	9.677	9.274	8.468	8.468	8.468	8.065	7.258	6.855	6.855	6.855	6.855	6.452	6.452	6.048	5.242	4.839	4.839	4.435	4.435	4.435	3.629	3.226	3.226	2.823	2.419	2.419	2.016
2	InDegree	8	-	7	3	3	14	11	က	14	9	8	11	8	2	16	16	8	9	15	4	4	8	6	7	9	6	2	2	1	2	8	4	6
l	OutDegree	99	43	31	29	28	25	24	23	21	21	21	20	18	17	17	17	17	16	16	15	13	12	12	11	11	11	6	8	8	7	9	9	2
		Bank Information Center	Committee for the Abolition of the Third World Debt (CADTM)	GATS Watch	Export Credit Agency (ECA) Watch	Polaris Institute	Corporate Europe Observatory (CEO)		International Centre for Trade and Sustainable Deve	.09			Institute for Agriculture and Trade Policy (IATP) Trade Observatory	Jubilee USA Network	: Whirled Bank Group	Public Citizen's Global Trade Watch	Focus on the Global South	ATTAC	CorpWatch	Friends of the Earth International	Friends of the Earth (FOE) Europe	Food First aka Economic Justice		International Forum on Globalization (IFG)	2Н	War on Want	World Development Movement (WDM)	Jobs With Justice	Global Issues Organization	Global Policy Forum	Africa Action	Center for Economic Justice		Center for Economic and Policy Research (CEPR)
		24	28	101	83	179	63	105	127	7	165	14(	118	142	236	187	86	19	65	96	95	87	99	134	111	233	24(	138	106	108	7	46	176	44

research roundation lot science, recliniology, and Ecology (Nr.S.L.)	0 0	2.0.0	
World Ecology, Economy and Development (WEED)	4 5	1.613	2.016
Tobin Tax Initiative	4	1.613	0.806
Alternative Information and Development Centre	3 2	1.21	0.806
Third World Network	3 23	1.21	9.274
lbon Foundation, Inc.	3 2	1.21	0.806
Development Group for Alternative Policies (GAP)	2 5	908.0	2.016
Students United for a Responsible Global Environment (SURGE)	1	0.403	0.403
Drop the Debt	1 2	0.403	0.806
Association for Ethical Finance (Afe)	0 1	0	0.403
Bretton Woods Project	2 0	0	2.823
Campaign for Labor Rights	0	0	0.403
African Services Committee	0	0	0.403
Canadian Centre for Policy Alternatives (CCPA)	0 4	0	1.613
Center for Social Justice	0 1	0	0.403
Action For Solidarity, Equality, Environment And Development Europe	2 0	0	2.823
Alliance for Democracy	0 1	0	0.403
Canadian Health Coalition	0 1	0	0.403
Canadian Labour Congress	0 1	0	0.403
Australian Fair Trade & Investment Network	0 3	0	1.21
African Centre for Technology Studies (ACTS) (TRIPs & Genetic Resources)	0 1	0	0.403
Caritas Internationalis	0 1	0	0.403
Alliance for a Plural, United and Responsible World	0 1	0	0.403
ATTAC Germany	0 3	0	1.21
Bread for the World	0 2	0	0.806
Common Frontiers	0 2	0	0.806
Campaign Against Arms Trade	0 1	0	0.403
Consumer Unity & Trust Society (CUTS)	0 1	0	0.403
Consumers International	0 2	0	0.806
11:11:11 AM	0 1	0	0.403
Catholic Agency for Overseas Development (CAFOD)	0 3	0	1.21
Canadian Federation of Students	0 1	0	0.403
	0 1	0	0.403
Development Alternatives With Women For a New Era (DAWN)		0	0.403
AFL-CIO	0 1	0	0.403
Carolinal Months of Department	,	•	00,0

70	EarthRights International	0	+	0	0.403
99	Clean Clothes Campaign	0	2	0	0.806
26	Both ENDS	0	2	0	0.806
73	Environmental Defense (EDF)	0	1	0	0.403
74	Environmental Media Services	0	1	0	0.403
13	Alliance for Responsible Trade (ART)	0	2	0	0.806
45	Center for Economic and Social Rights (CESR)	0	1	0	0.403
15	AmazonWatch	0	1	0	0.403
78	Ethical Trading Initiative	0	2	0	0.806
62	European Federation of Public Services Unions (EPSU)	0	1	0	0.403
80	European Network On Debt And Development (Eurodad)	0	3	0	1.21
4	Action for Social and Ecological Justice (ASEJ)	0	-	0	0.403
82	European Youth For Action	0	1	0	0.403
21	ATTAC Japan	0	1	0	0.403
84	Fair Trade Foundation	0	1	0	0.403
23	Banana Link	0	1	0	0.403
71	Ecumenical Program on Central America and the Caribbean (EPICA)	0	1	0	0.403
72	Education International	0	1	0	0.403
88	Foreign Policy In Focus	0	L	0	0.403
88	Forest Peoples Programme	0	1	0	0.403
06	Forests and the European Union Resource Network (FERN)	0	1	0	0.403
91	Forum on Environment & Development	0	-	0	0.403
92	Foundation for International Law and Development (FIELD)	0	1	0	0.403
31	Canadian Auto Workers	0	1	0	0.403
94	Friends of River Narmada	0	1	0	0.403
64	Corporate Watch	0	8	0	3.226
81	European Solidarity Towards Equal Participation Of The People (Eurostep)	0	L	0	0.403
26	Friends of the Earth Middle East (FoEME)	0	2	0	0.806
86	Friends of the Earth UK	0	2	0	0.806
66	Friends of the Earth USA	0	2	0	2.016
100	Friends of the Earth, Japan	0	L	0	0.403
39	Canadian Union of Public Employees	0	1	0	0.403
25	Berne Declaration	0	4	0	1.613
103	Global AIDS Alliance	0	-	0	0.403
104	Global Arcade	0	τ-	0	0.403
43	CEE Bankwatch	0	9	0	2.016

75	Environmental Mining Council of British Columbia (EMCBC)	0	_	0	0.403
107	Global Justice	0	1	0	0.403
22	Ethical Consumer Research Association (ECRA)	0	2	0	0.806
47	Center for International Environmental Law	0	4	0	1.613
110	Greenpeace International	0	3	0	1.21
49	Center of Concern (COC)	0	2	0	0.806
20	Centre for Science and Environment (CSE)	0	1	0	0.403
113	Heinrich Boell Foundation	0	-	0	0.403
114	Human Rights Watch	0	-	0	0.403
53	Church World Service	0	-	0	0.403
24	Citizens Network on Essential Services	0	2	0	0.806
102	Germanwatch	0	1	0	0.403
118	Indian Law Resource Center	0	1	0	0.403
25	Coalition against BAYER-Dangers	0		0	0.403
120	Institute for Economic Democracy	0	1	0	0.403
121	Institute for Global Communications (IGC)	0	2	0	0.806
122	Institute for Global Justice (IGJ)	0	2	0	0.806
123	Institute for Policy Studies	0	2	0	0.806
124	Inter Pares	0	1	0	0.403
125	InterAction	0	1	0	0.403
126	International Baby Food Action Network (IBFAN)	0	1	0	0.403
34	Canadian Environmental Law Association	0	2	0	0.806
128	International Coalition For Developmet (ICDA)	0	2	0	0.806
129	International Confederation of Trade Unions (ICFTU)	0	1	0	0.403
130	International Cooperation for Development and Solidarity (CIDSE)	0	2	0	0.806
131	International Council of Nurses (ICN)	0	_	0	0.403
132	International Federation For Alternative Trade	0	1	0	0.403
133	International Federation for Human Rights(FIDH)	0	2	0	0.806
10	AID/WATCH	0	2	0	0.806
135	International Gender And Trade Network (IGTN)	0	3	0	1.21
136	International Institute for Sustainable Development (IISD)	0	1	0	0.403
137	International Rivers Network	0	9	0	2.419
92	Essential Information	0	4	0	1.613
139	Jubilee Debt Campaign (UK)	0	_	0	0.403
16	Asia Pacific Research Network	0	2	0	0.806
141	Jubilee South	0	2	0	2.016

Association for international vater a	International Water and Forest Studies (FIVAS)	0	T.	0	0.403
JustAct: Yout	JustAct: Youth Action for Global Justice	0		0	0.403
Lai	Landless Workers Movement	0	1	0	0.403
Latin American Integ	Latin American Integration Association (ALADI)	0	_	0	0.403
	Maquila Solidarity Network	0	-	0	0.403
	McSpotlight	0	~	0	0.403
	Medact	0	-	0	0.403
	Millennium Institute	0	~	0	0.403
	Mineral Policy Institute	0	-	0	0.403
	Multinational Monitor	0	2	0	0.806
	National Farmers Union	0	-	0	0.403
National Organ	National Organization for Women (NOW)	0	-	0	0.403
National Research and Development Cer	and Development Centre for Welfare and Health	0	1	0	0.403
National Tertiary E	Tertiary Education Union (Australia)	0	~	0	0.403
Nation	National Wildlife Federation, US	0	3	0	1.21
Canadian Council on Sc	Canadian Council on Social Development (CCSD)	0	~	0	0.403
	New Internationalist	0	3	0	1.21
	North Sea Foundation	0	~	0	0.403
Norwatch	(The Future in Our Hands)	0	1	0	0.403
	Odious Debts	0		0	0.403
	One World Trust	0	_	0	0.403
	OneWorld	0	6	0	3.629
	Open Society Institute	0	1	0	0.403
Carnegie Endowment for International Peace (Trade	e, Equity & Development)	0	-	0	0.403
	Oxfam America	0	3	0	1.21
	Oxfam Australia	0	~	0	0.403
	Oxfam International	0	2	0	2.016
	Pacific Environment	0	2	0	0.806
	PanAsiaNetworking	0	_	0	0.403
	Panos Institute	0	-	0	0.403
	People And Planet	0	2	0	0.806
People Ce	Centred Development Forum	0	_	0	0.403
	People for Fair Trade	0	-	0	0.403
People's	Food Sovereignty Network	0	2	0	0.806
	Christian Aid	0	3	0	1.21
Toutoll acita A abioitaca	Doctions Action Notwork North America (DANINA)	c	7	•	COVO

1/8	Philippine-European Solidarity Centre (PESC-KSP)	5		>	0.400
55	Citizens Trade Campaign	0	1	0	0.403
180	Presbytarian Church(USA)'s Just Trade	0	2	0	0.806
181	Probe International	0	8	0	1.21
182	Program on Corporations, Law and Democracy	0	-	0	0.403
183	Project Underground	0	2	0	0.806
09	Conservation International (CI)	0	-	0	0.403
185	Public Services International (PSI)	0	2	0	0.806
186	Quixote Center	0	-	0	0.403
187	Rainbow/PUSH Coalition	0	-	0	0.403
188	Rainforest Action Network (RAN)	0	-	0	0.403
3	Action Aid	0	2	0	0.806
190	Resource Center of the Americas	0	-	0	0.403
191	RESULTS	0	2	0	0.806
192	Rising Tide Coalition	0	1	0	0.403
193	Ruckus Society: Mobilization for Global Justice	0	₹	0	0.403
194	Sahabat Alam Malaysia (SAM)	0	2	0	0.806
195	Seattle to Brussels Network	0	2	0	0.806
196	Sierra Club	0	1	0	0.403
197	Sierra Club Canada	0	1	0	0.403
198	Social Consultation for the Abolition of Foreign Debt	0	1	0	0.403
199	Social Investment Forum	0	1	0	0.403
200	Social Justice Committee	0	1	0	0.403
201	Sojourners	0	1	0	0.403
202	Solidarity Center	0	1	0	0.403
203	SOMO, Research on Multinational Corporations (Netherlands)	0	1	0	0.403
204	South Centre	0	1	0	0.403
205	StateWatch	0	1	0	0.403
206	Stockholm Environment Institute (SEI)	0	1	0	0.403
207	Stop The Free Trade Area of the Americas (FTAA)	0	2	0	0.806
208	Structural Adjustment Participatory Review International Network (SAPRIN)	0	5	0	2.016
85	Fairtrade Labelling Organizations International (FLO)	0	1	0	0.403
210	Survival International	0	1	0	0.403
211	Sustainable Development Policy Institute (SDPI) (Trade & Environment)	0	-	0	0.403
212	Sustainable Energy and Economy Network	0	5	0	2.016
213	Swedish Society for the Conservation of Nature (SSNC)	C	•	C	0 402

214	Tearfund	0	-	0	0.403
215	The Corner House	0	-	0	0.403
216	Third World Institute (ITeM)	0	1	0	0.403
93	Freedom From Debt Coalition	0	2	0	0.806
218	Third World Network - Africa	0	1	0	0.403
157	New Economics Foundation (NEF),	0	1	0	0.403
220	Trade Justice Movement	0	2	0	2.016
221	Trade Law Centre for Southern Africa (TRALAC)	0	1	0	0.403
222	Trades Union Congress (TUC)	0	1	0	0.403
223	Traidcraft	0	1	0	0.403
224	Transfair	0	τ-	0	0.403
225	Transnational Foundation for Peace and Future Research	0	1	0	0.403
226	Transnational Institute (TNI)	0	4	0	1.613
227	Transnationale	0	1	0	0.403
228	Union Network International (UNI)	0	1	0	0.403
229	UNISON Public Services Union	0	1	0	0.403
230	United States Students Association	0	1	0	0.403
231	United Students Against Sweatshops (USAS)	0	2	0	0.806
232	Via Campesina	0	4	0	1.613
109	Global Response	0	1	0	0.403
234	Washington Office on Africa	0	1	0	0.403
235	West Coast Environmental Law	0	2	0	0.806
112	Health GAP Coalition/Act Up Philadelphia	0	1	0	0.403
237	Women's Environmental and Development Organization (WEDO)	0	1	0	0.403
238	World Conservation Union (IUCN)	0	2	0	0.806
239	World Council of Churches (WCC)	0	1	0	0.403
116	IFI watch	0	3	0	1.21
117	India Resource Center	0	1	0	0.403
242	World Forum of Networks - Ubuntu	0	1	0	0.403
243	World March of Women	0	1	0	0.403
244	World Rainforest Movement (WRM)	0	1	0	0.403
245	World Resources Institute (WRI)	0	2	0	0.806
246	World Social Forum	0	2	0	0.806
247	World Wildlife Fund (WWF)	0	3	0	1.21
248	Worldwatch Institute	0	_	0	0.403
249	ZNet	0	_	0	0.403

	DESCRIPTIVE STATISTICS				
		1	2	3	4
		OutDegree	InDegree	NrmOutDeg	NrmInDeg
1	Mean	2.526	2.526	1.019	1.019
2	Std Dev	7.5	3.014	3.024	1.215
3	Sum	629	629	253.629	253.629
4	Variance	56.249	9.085	9.146	1.477
5	SSQ	15595	3851	2535.607	626.138
6	MCSSQ	14006.08	2262.08	2277.263	367.794
7	Euc Norm	124.88	62.056	50.355	25.023
8	Minimum	0	1	0	0.403
9	Maximum	65	23	26.21	9.274

Network Centralization (Outdegree) = 25.293% Network Centralization (Indegree) = 8.289%

NOTE: For valued data, both the normalized centrality and the centralization index may be larger than 100%.

TABLE IV
Betweenness and Normalized Betweenness for the 42 Organizations Studied for Links

15.5	1	2
	Betweenness	nBetweenness
Bank Information Center	1508.942	2.463
Public Citizen's Global Trade Watch	1153.645	1.883
Global Exchange	1143.312	1.866
50 Years is Enough Network	1106.315	1.806
Focus on the Global South	1059.96	1.73
ATTAC	987.316	1.612
Friends of the Earth International	863.405	1.41
GATS Watch	763.932	1.247
Corporate Europe Observatory (CEO)	762.484	1.245
Jubilee USA Network	693.538	1.132
Institute for Agriculture and Trade Policy Trade Observatory	637.941	1.041
Polaris Institute	522.734	0.853
Committee for the Abolition of the Third World Debt	503.639	0.822
International Forum on Globalization (IFG)	503.407	0.822
Our World Is Not for Sale	490.619	0.801
International Centre for Trade and Sustainable Development	480.612	0.785
CorpWatch	416.897	0.681
Export Credit Agency (ECA) Watch	409.353	0.668
Jubilee Research	379.603	0.62
World Development Movement (WDM)	361.043	0.589
Halifax Initiative	233.783	0.382
War on Want	215.134	0.351
Council of Canadians	209.167	0.341
Friends of the Earth (FOE) Europe	189.759	0.31
Global Issues Organization	166.307	0.271
Jobs With Justice	145.71	0.238
Food First aka Economic Justice	139.721	0.228
Center for Economic Justice	118.44	0.193
Whirled Bank Group	111.732	0.182
Center for Economic and Policy Research (CEPR)	108.4	0.177
World Ecology, Economy and Development (WEED)	96.226	0.157
Third World Network	78.739	0.129
Research Foundation for Science, Technology, and Ecology	75.132	0.123
Alternative Information and Development Centre	74	
Global Policy Forum	55.197	0.09
Peoples Global Action (PGA)	23.365	0.038
Tobin Tax Initiative	18.5	0.03
Development Group for Alternative Policies (GAP)	16.053	0.026
Ibon Foundation, Inc.	13.201	0.022
Africa Action	1.497	0.002
Students United for a Responsible Global Environment	0.834	0.001
Drop the Debt	0.408	0.001

	1	2
	Betweenness	nBetweenness
Mean	67.631	0.11
Std Dev	220.285	0.36
Sum	16840	27.491
Variance	48525.594	0.129
SSQ	13221771	35.236
MCSSQ	12082873	32.201
Euc Norm	3636.175	5.936
Minimum	0	0
Maximum	1508.942	2.463

Network Centralization Index = 2.36% nBetweenness = Normalized

Figure I

Paradigm of Influence (Figure from Parson 1963: 44)

# Channel Intentional Situational Positive Persuasion Inducement Activation of Operation Deterrence Commitment

Figure II

A Framework of Interorganizational Relationships (Figure from Daft 1998: 527)

# **Organization Type**

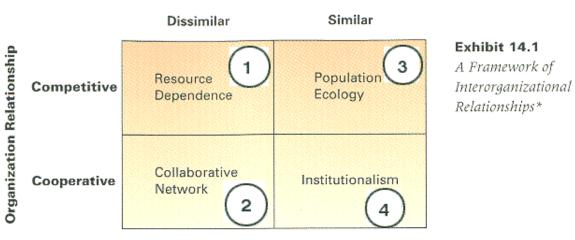


Figure III

Rationale for Anti-Globalization Network

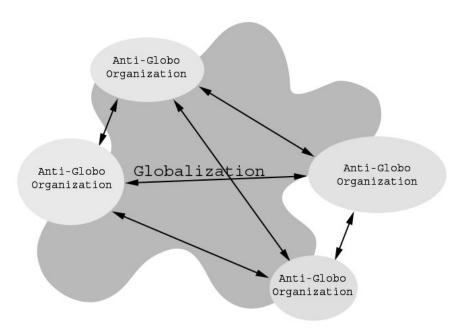
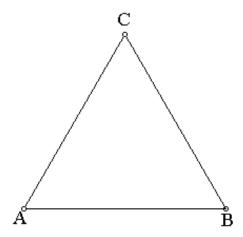


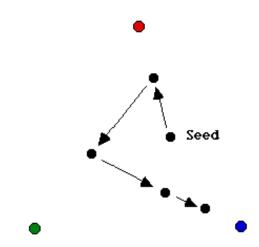
Figure IV

Sierpinski's Triangle Through the Chaos Game (borrowed from http://ccins.camosun.bc.ca/~jbritton/jbchaos.htm & http://math.bu.edu/DYSYS/chaos-game/node1.html)

# A) Equilateral Triangle



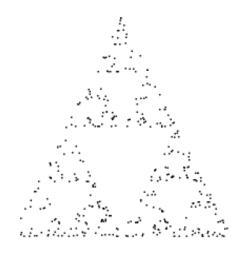
B) The process of iteration of the seed:



C) After 30 rolls of the die in one play of the game, the following points were plotted:



D) After 400 rolls of the die, a pattern begins to emerge:



E) And after 30,000 rolls of the die, a Sierpinski Triangle is formed:

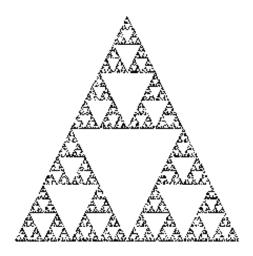


Figure V
History of Social Network Analysis

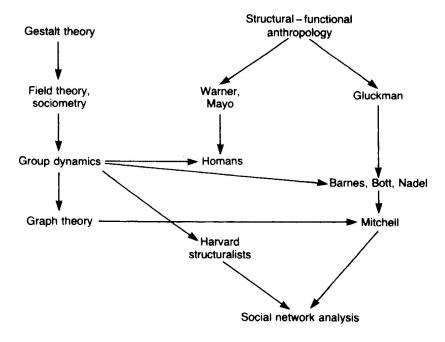
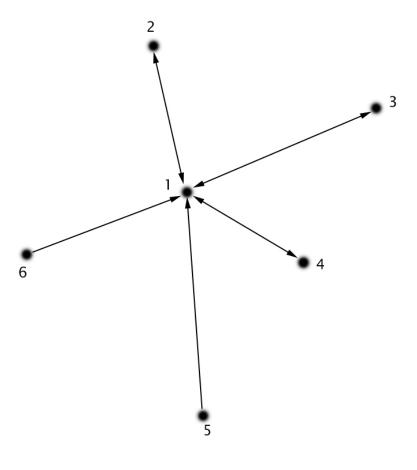


Figure VI
Sociogram Example Business Contacts



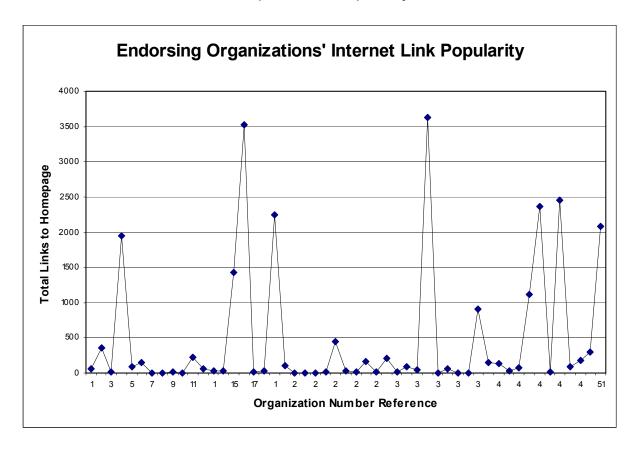
# Figure VII

# Listing of 51 Organizations' Link Popularity

- 1. Action for Community and Ecology in the Regions of Central America, ACERCA (62)
- 2. Alliance for Democracy (361)
- 3. ARISE for Social Justice (19)
- 4. ATTAC International (1,950)
- 5. Baobabconnections (91)
- 6. Committee in Solidarity with the People of El Salvador, CISPES (143)
- 7. Bolivariancircles (4)
- 8. Central Coast Peace and Environment Council (0)
- 9. Chicago Jobs with Justice (12)
- 10. Citizens for a Vehicle Free Nipomo Dunes (2)
- 11. Coalition of Immokalee Workers (228)
- 12. Doctors for Global Health (66)
- 13. Fellowship of Reconciliation, Charlotte, NC (27)
- 14. Florida Fair Trade Coalition (27)
- 15. Focus on the Global South (1,430)
- 16. Global Exchange (3,530)
- 17. Higher Grounds Trading Co. (11)
- 18. Human Bean Company (26)
- 19. International ANSWER Coalition (2,240)
- 20. International League of Peoples' Struggle, ILPS-US (98)
- 21. Ithaca Fair Trade Coalition (7)
- 22. Jesus Christ Prince of Peace Parish-Social Justice & Peace Community (1)
- 23. Jubilee Economics Ministries (0)
- 24. Knights of the Socially Conscious (14)
- 25. Labor Notes (450)
- 26. Latin American Solidarity Committee of Western New York Peace Center (26)
- 27. Marin Interfaith Task Force on the Americas (12)
- 28. Mexico Solidarity Network (164)
- 29. Migrante International, Philippines (12)
- 30. Mobilization for Global Justice (214)
- 31. Nonviolence International (22)
- 32. The Nicaragua Network (85)
- 33. Progressive Librarians Guild (47)
- 34. Public Citizen (3630)
- 35. Queers For Peace And Justice (0)
- 36. RANT Trainers Collective (54)
- 37. Rights Action (2)
- 38. San Antonio Youth Speak Out!, SAYSO (1)
- 39. School of the Americas Watch (906)
- 40. Stop US Tax Aid to Israel Now, SUSTAIN (144)
- 41. Syracuse Cultural Workers (127)
- 42. Texas Fair Trade Coalition (25)
- 43. Theaters Against War, THAW (68)
- 44. The Tikkun Community (1,110)
- 45. United for Peace and Justice (2,370)
- 46. The United Peoples (16)
- 47. War Resisters League--Executive Committee (2,450)
- 48. Washington Peace Center (91)
- 49. Why War? (182).
- 50. Witness for Peace (293)
- 51. The Women's Intl. League for Peace and Freedom, US Section (2,080)

Figure VIII

Graph of Link Popularity



# Figure IX

# Complete Listing of Organizations from Snowball Sampling

- 1. 11.11.11
- 2. 50 Years is Enough Network
- 3. Action Aid
- 4. Action for Social and Ecological Justice (ASEJ)
- 5. Action For Solidarity, Equality, Environment And Development Europe (A SEED)
- 6. AFL-CIO
- 7. Africa Action
- 8. African Centre for Technology Studies (ACTS) (TRIPs & Genetic Resources)
- 9. African Services Committee
- 10. AID/WATCH
- 11. Alliance for a Plural, United and Responsible World
- 12. Alliance for Democracy
- 13. Alliance for Responsible Trade (ART)
- 14. Alternative Information and Development Centre
- 15. AmazonWatch
- 16. ARENA (New Zealand)
- 17. Asia Pacific Research Network
- 18. Association for Ethical Finance (AFE)
- 19. Association for International Water and Forest Studies (FIVAS)
- 20. ATTAC
- 21. ATTAC Germany
- 22. ATTAC Japan
- 23. Australian Fair Trade & Investment Network
- 24. Banana Link
- 25. Bank Information Center
- 26. Berne Declaration
- 27. Both ENDS
- 28. Bread for the World
- 29. Bretton Woods Project
- 30. Campaign Against Arms Trade
- 31. Campaign for Labor Rights
- 32. Campaign for the Welfare State
- 33. Canadian Auto Workers
- 34. Canadian Centre for Policy Alternatives (CCPA)
- 35. Canadian Council on Social Development (CCSD)
- 36. Canadian Environmental Law Association
- 37. Canadian Federation of Students
- 38. Canadian Health Coalition
- 39. Canadian Labour Congress
- 40. Canadian Union of Postal Workers
- 41. Canadian Union of Public Employees
- 42. Caritas Internationalis
- 43. Carnegie Endowment for International Peace (Trade, Equity & Development)
- 44. Catholic Agency for Overseas Development (CAFOD)
- 45. CEE Bankwatch
- 46. Center for Economic and Policy Research (CEPR)

- 47. Center for Economic and Social Rights (CESR)
- 48. Center for Economic Justice
- 49. Center for International Environmental Law
- 50. Center for Social Justice
- 51. Center of Concern (COC)
- 52. Centre for Science and Environment (CSE)
- 53. Choike
- 54. Christian Aid
- 55. Christian Education Development and Relief (CEDAR)
- 56. Church World Service
- 57. Citizens Network on Essential Services
- 58. Citizens Trade Campaign
- 59. Clean Clothes Campaign
- 60. Coalition against BAYER-Dangers
- 61. Coalition for Justice in the Maguiladoras
- 62. Committee for the Abolition of the Third World Debt (CADTM)
- 63. Common Frontiers
- 64. Conservation International (CI)
- 65. Consumer Unity & Trust Society (CUTS)
- 66. Consumers International
- 67. Convergence of Movements of Peoples of the Americas (COMPA)
- 68. Corporate Europe Observatory (CEO)
- 69. Corporate Watch
- 70. CorpWatch
- 71. Council of Canadians
- 72. Development Alternatives With Women For a New Era (DAWN)
- 73. Development Group for Alternative Policies (GAP)
- 74. Drop the Debt
- 75. EarthRights International
- 76. EcoNews Africa
- 77. Ecumenical Program on Central America and the Caribbean (EPICA)
- 78. Education International
- 79. Environmental Defense (EDF)
- 80. Environmental Media Services
- 81. Environmental Mining Council of British Columbia (EMCBC)
- 82. Environmental Monitoring Group
- 83. Essential Information
- 84. Ethical Consumer Research Association (ECRA)
- 85. Ethical Trading Initiative
- 86. European Federation of Public Services Unions (EPSU)
- 87. European Network On Debt And Development (Eurodad)
- 88. European Solidarity Towards Equal Participation Of The People (Eurostep)
- 89. European Youth For Action
- 90. Export Credit Agency (ECA) Watch
- 91. Fair Trade Foundation
- 92. Fairtrade Labeling Organizations International (FLO)
- 93. Find Your Feet
- 94. Finnish ECA Campaign
- 95. Focus on the Global South
- 96. Food First aka Economic Justice

- 97. Foreign Policy In Focus
- 98. Forest Peoples Programme
- 99. Forests and the European Union Resource Network (FERN)
- 100. Forum on Environment & Development
- 101. Foundation for International Law and Development (FIELD)
- 102. Freedom From Debt Coalition
- 103. Friends of River Narmada
- 104. Friends of the Earth (FOE) Europe
- 105. Friends of the Earth International
- 106. Friends of the Earth Middle East (FoEME)
- 107. Friends of the Earth UK
- 108. Friends of the Earth USA
- 109. Friends of the Earth, Japan
- 110. GATS Watch
- 111. Gender Action
- 112. Germanwatch
- 113. Global AIDS Alliance
- 114. Global Arcade
- 115. Global Exchange
- 116. Global Issues Organization
- 117. Global Justice
- 118. Global Network
- 119. Global Policy Forum
- 120. Global Response
- 121. Greenpeace International
- 122. Halifax Initiative
- 123. Health GAP Coalition/Act Up Philadelphia
- 124. Heinrich Boell Foundation
- 125. Human Rights Watch
- 126. Ibon Foundation, Inc.
- 127. IFI watch
- 128. India Resource Center
- 129. Indian Law Resource Center
- 130. Institute for Agriculture and Trade Policy (IATP) Trade Observatory
- 131. Institute for Economic Democracy
- 132. Institute for Global Communications (IGC)
- 133. Institute for Global Justice (IGJ)
- 134. Institute for Policy Studies
- 135. Inter Pares
- 136. InterAction
- 137. International Baby Food Action Network (IBFAN)
- 138. International Centre for Trade and Sustainable Development (ICTSD)
- 139. International Coalition For Development (ICDA)
- 140. International Confederation of Trade Unions (ICFTU)
- 141. International Cooperation for Development and Solidarity (CIDSE)
- 142. International Council of Nurses (ICN)
- 143. International Federation For Alternative Trade
- 144. International Federation for Human Rights(FIDH)
- 145. International Forum on Globalization (IFG)
- 146. International Gender And Trade Network (IGTN)

- 147. International Institute for Sustainable Development (IISD)
- 148. International Rivers Network
- 149. Jobs With Justice
- 150. Jubilee Debt Campaign (UK)
- 151. Jubilee Research
- 152. Jubilee South
- 153. Jubilee USA Network
- 154. JustAct: Youth Action for Global Justice
- 155. JustWorld International
- 156. Land Research Action Network (LRAN)
- 157. Landless Workers Movement
- 158. Latin American Integration Association (ALADI)
- 159. Macro Scan
- 160. Maquila Solidarity Network
- 161. McSpotlight
- 162. Medact
- 163. Millennium Institute
- 164. Mineral Policy Institute
- 165. Multinational Monitor
- 166. National Farmers Union
- 167. National Labour Economic Development Institute
- 168. National Organization for Women (NOW)
- 169. National Research and Development Centre for Welfare and Health (STAKES)
- 170. National Tertiary Education Union (Australia)
- 171. National Wildlife Federation, US
- 172. Network Institute for Global Democratization
- 173. Network Women In Development Europe (WIDE)
- 174. New Economics Foundation (NEF),
- 175. New Internationalist
- 176. North Sea Foundation
- 177. Norwatch (The Future in Our Hands)
- 178. Odious Debts
- 179. One World Trust
- 180. OneWorld
- 181. Open Society Institute
- 182. Our World Is Not for Sale
- 183. Oxfam America
- 184. Oxfam Australia
- 185. Oxfam International
- 186. Pacific Environment
- 187. PanAsiaNetworking
- 188. Panos Institute
- 189. People And Planet
- 190. People Centered Development Forum
- 191. People for Fair Trade
- 192. People's Media Center (PMC)
- 193. People's Food Sovereignty Network
- 194. Peoples Global Action (PGA)
- 195. Pesticide Action Network North America (PANNA)
- 196. Philippine-European Solidarity Centre (PESC-KSP)

- 197. Polaris Institute
- 198. Presbyterian Church(USA)'s Just Trade
- 199. Probe International
- 200. Program on Corporations, Law and Democracy
- 201. Project Underground
- 202. Public Citizen's Global Trade Watch
- 203. Public Services International (PSI)
- 204. Quixote Center
- 205. Rainbow/PUSH Coalition
- 206. Rainforest Action Network (RAN)
- 207. Religious Working Group on the World Bank & the IMF
- 208. Research Foundation for Science, Technology, and Ecology (RFSTE)
- 209. Resource Center of the Americas
- 210. RESULTS
- 211. Rising Tide Coalition
- 212. Ruckus Society: Mobilization for Global Justice
- 213. Sahabat Alam Malaysia (SAM)
- 214. Seattle to Brussels Network
- 215. Sierra Club
- 216. Sierra Club Canada
- 217. Social Consultation for the Abolition of Foreign Debt
- 218. Social Investment Forum
- 219. Social Justice Committee
- 220. Sojourners
- 221. Solidarity Center
- 222. SOMO, Research on Multinational Corporations (Netherlands)
- 223. South Asia Watch on Trade, Economics and Environment (SAWTEE)
- 224. South Centre
- 225. South Eastern European Environmental NGOs Network (SEEENN)
- 226. Southern Links
- 227. StateWatch
- 228. Stockholm Environment Institute (SEI)
- 229. Stop The Free Trade Area of the Americas (FTAA)
- 230. Structural Adjustment Participatory Review International Network (SAPRIN)
- 231. Students United for a Responsible Global Environment (SURGE)
- 232. Survival International
- 233. Sustainable Development Policy Institute (SDPI) (Trade & Environment)
- 234. Sustainable Energy and Economy Network
- 235. Swedish Society for the Conservation of Nature (SSNC)
- 236. Tearfund
- 237. The Corner House
- 238. Third World Institute (ITeM)
- 239. Third World Network
- 240. Third World Network Africa
- 241. Tobin Tax Initiative
- 242. Trade Justice Movement
- 243. Trade Law Centre for Southern Africa (TRALAC)
- 244. Trades Union Congress (TUC)
- 245. Traidcraft
- 246. Transfair

- 247. Transnational Foundation for Peace and Future Research
- 248. Transnational Institute (TNI)
- 249. Transnationale
- 250. Union Network International (UNI)
- 251. UNISON Public Services Union
- 252. United States Students Association
- 253. United Students Against Sweatshops (USAS)
- 254. Via Campesina
- 255. War on Want
- 256. Washington Office on Africa
- 257. West Coast Environmental Law
- 258. Whirled Bank Group
- 259. Women's Environmental and Development Organization (WEDO)
- 260. World Conservation Union (IUCN)
- 261. World Council of Churches (WCC)
- 262. World Development Movement (WDM)
- 263. World Ecology, Economy and Development (WEED)
- 264. World Forum of Networks Ubuntu
- 265. World March of Women
- 266. World Rainforest Movement (WRM)
- 267. World Resources Institute (WRI)
- 268. World Social Forum
- 269. World Wildlife Fund (WWF)
- 270. Worldwatch Institute
- 271. ZNet

# Figure X

# Website Language Totals

- Arabic (1) Basque (1) Catalan (4)
- 1. 2. 3. 4. 5. 6. 7.
- Catalan (4)
  Chinese (6)
  Dutch (5)
  English (271)
  Finnish (3)
  French (51)
  German (21)
- 8.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- German (21)
  Indonesian (1)
  Italian (10)
  Japanese (5)
  Mongolian (1)
  Nepali (1)
  Norwegian (3)
  Polish (1)
  Portuguese (15)
  Russian (7)
  Spanish (63)
  Swedish (5)
  Tibetan (1)
  Turkish (1) 17.
- 18.
- 19.
- 20. 21.
- 22.
- Turkish (1)
  Vietnamese (1) 23.

Figure XI

# Listing of Cities and Number of Organizations Located Therein From Network

1.	Amsterdam, The Netherlands	11
2.	Aotearoa, New Zealand	1
3.	Arcata, CA	1
4.	Arlington, VA	1
5.	Australia	1
6.	Bainbridge Island, WA	1
7.	Baluwatar, Nepal	1
8.	Bangkok, Thailand	1
9.	Barcelona, Spain	2
10.	Berkley, CA	2
11.	Berlin, Germany	2
12.	Bicester, UK	1
13.	Bonn, Germany	3
14.	Boston, MA	1
15.	Boulder. CO	1
16.	Brooklyn, NY	1
17.	Brussels, Belgium	11
18.	Burlington, VT	1
19.	Cambridge, UK	1
20.	Cape Town, S. Africa	1
21.	Cedex, France	1
22.	Chapel Hill, NC	1
23.	Chicago, IL	1
24.	Delhi, India	1
25.	Denver, CO	1
26.	Dorset, UK	1
27.	Duesseldorf, Germany	1
28.	East Legon, Ghana	1
29.	El Cerrito, California	1
30.	Elkhart, IN	1
31.	Erskineville, Australia	1
32.	Fitzroy, Australia	1
33.	Frankfurt, Germany	1
34.	Gateshead, UK	1
35.	Geneva, Switzerland	5
36.	Gland, Switzerland	1
37.	Gloucestershire, UK	1
38.	Helena, MT	1
39.	Helsinki, Finland	3
40.	Herndon, VA	1
41.	Honduras	1
42.	Hyattsville, MD	1
43.	Islamabad, Pakistan	1
44.	Jaipur, India	1
45.	Jakarta, Indonesia	1
46.	Johannesburg, South Africa	1

47.	Koln, Germany	1
48.	Kowloon, Hong Kong	1
49.	Le Bousquet d'Orb, France	1
50.	Liège, Belgium	1
51.	London, UK	28
52.	Lund, Sweden	1
53.	Malibu, CA	1
54.	Manchester, UK	1
55.	Manila, Philippines	5
56.	Minneapolis, MN	2
57.	Modena, Italy	1
58.	Montevideo, Uruguay	4
59.	Montréal, Québec	2
60.	Moreton-in-Marsh, UK	1
61.	Mowbray, South Africa	1
62.	Nairobi, Kenya	2
63.	New Delhi, India	3
64.	New York, NY	7
65.	Nyon, Switzerland	1
66.	Oakland, CA	5
67.	Oslo, Norway	3
68.	Ottawa, Ontario	12
69.	Oxford, UK	5
70.	Paris, France	3
71.	Penang, Malaysia	2
72.	Port-au-Prince, Haiti	- 1
73.	Prague, Czech Republic	1
74.	Quezon City, Philippines	3
75.	Reston, VA	1
76.	Roseneath, Ontario	1
77.	S. Yarmouth, MA	1
78.	San Antonio, TX	1
79.	San Francisco, CA	11
80.	Sao Paulo, Brazil	1
81.	Seattle, WA	1
82.	Silver Spring, MD	1
83.	Skopje, Macedonia	1
84.	Somerville, MA	1
85.	South Melbourne, Australia	1
86.	St. Norwich, UK	1
87.	Stellenbosch, South Africa	1
88.	Stockholm, Sweden	2
89.	Sun City, AZ	1
90.	Suva, Fiji	1
91.	Sydney, Australia	1
	• •	1
92. 93.	Tanglin, Singapore	1
	Teddington, UK	1 1
94. 05	Tel-Aviv, Israel	-
95. oe	Tokyo, Japan	2
96.	Toronto, Ontario	6

97.	Utrecht, The Netherlands	2
98.	Vancouver, BC	1
99.	Vatican City, Vatican	1
100.	Victoria, B.C.	1
101.	Waltham, MA	1
102.	Washington, D.C.	45
103.	Wheaton, MD	1
104.	White Plains, NY	1
105.	Winnipeg, Manitoba	1
106.	Woods Hole, MA	1
107.	Zurich, Switzerland	1

# Figure XII

# Organizations Excluded from Social Network Analysis

- 1. ARENA (New Zealand)
- 2. Campaign for the Welfare State
- 3. Christian Education Development and Relief (CEDAR)
- 4. Coalition for Justice in the Maquiladoras
- 5. Convergence of Movements of Peoples of the Americas (COMPA)
- 6. EcoNews Africa
- 7. Environmental Monitoring Group
- 8. Find Your Feet
- 9. Finnish ECA Campaign
- 10. Gender Action
- 11. Global Network
- 12. JustWorld International
- 13. Land Research Action Network (LRAN)
- 14. Macro Scan
- 15. National Labour Economic Development Institute
- 16. Network Institute for Global Democratization
- 17. Network Women In Development Europe (WIDE)
- 18. People's Media Center (PMC)
- 19. Religious Working Group on the World Bank & the IMF
- 20. South Asia Watch on Trade, Economics and Environment (SAWTEE)
- 21. South Eastern European Environmental NGOs Network (SEEENN)
- 22. Southern Links

Figure XIII

Graph of Link Repeat Averages

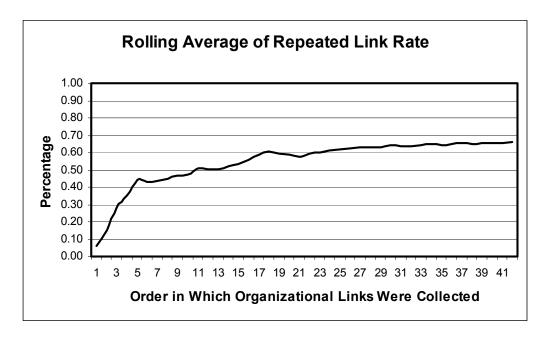


Figure XIV

Cancun Protest Pictures



Protesters gathered at Kilometer 0, representing the entrance to the Hotel Zone, near a blockade set up by Mexican officials.



Memorial set up for Korean farm activist that committed suicide.



Protesters tearing down sign...



...protesters carrying away the same sign.



Graffiti by protesters.



Group of protesters, the Korean protester wears a sign that says "No to Neo-liberal Globalization!"



Area of main protest activity, at the entrance to the Hotel Zone.



More graffiti by protesters.



A large banner at an anti-globalization protest rally.



Mexican Police arriving to watch protesters blocking a road.



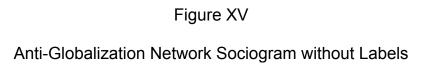
Area of main protest activity.

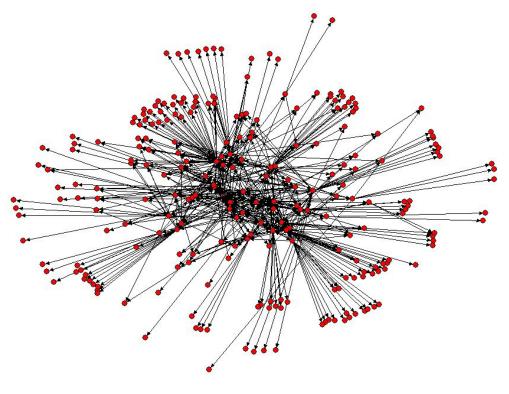


A large banner hung on a extremely tall crane next to the WTO convention center by protesters telling the WTO participants to leave Cancun.



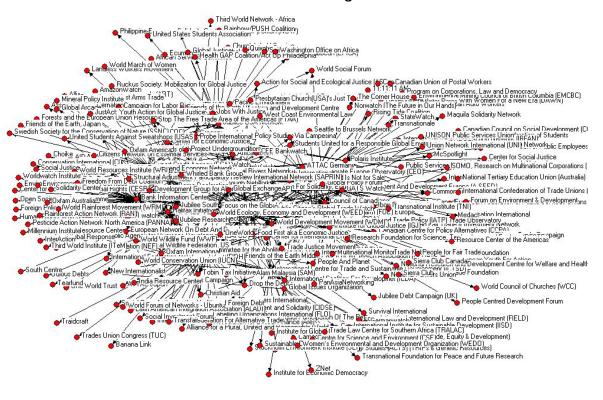
A copy of the front page of a local newspaper.





# Figure XVI

#### Anti-Globalization Network Sociogram with Labels



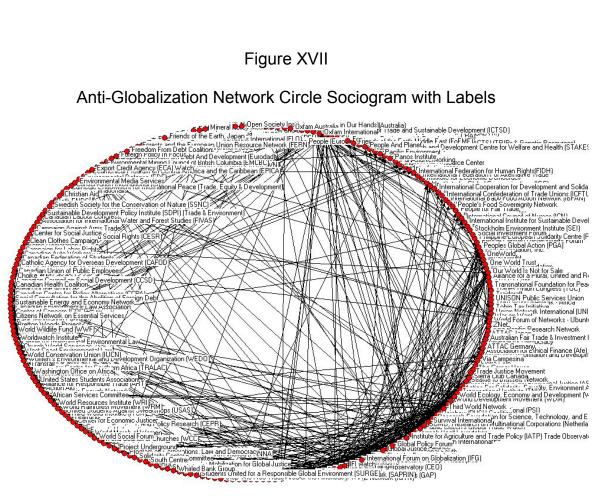
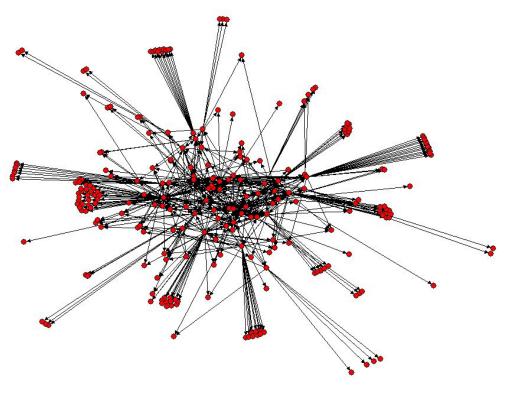
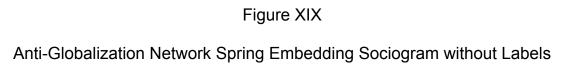


Figure XVIII

Anti-Globalization Network MDS Sociogram without Labels





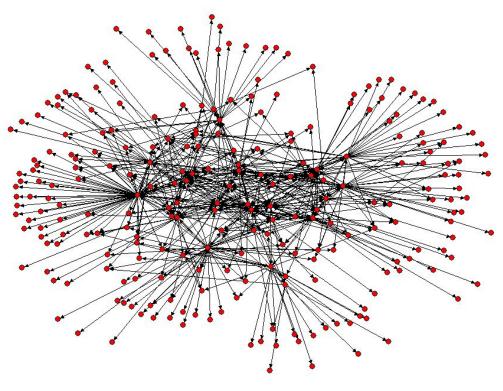
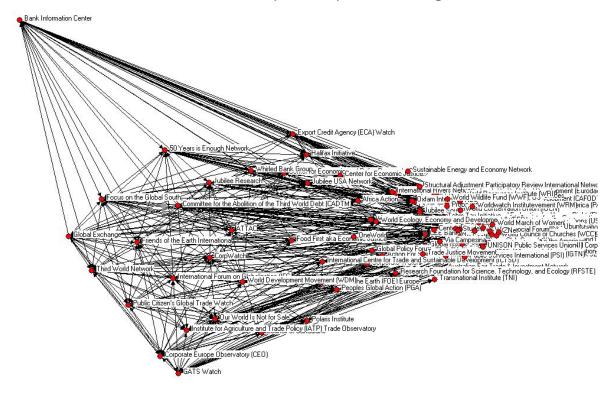


Figure XX

Anti-Globalization Network Principle Component Sociogram with Labels



#### **VITA**

#### Andrew Charles Miller

#### Candidate for the Degree of

#### Master of Science

Thesis: THE ANTI-GLOBALIZATION NETWORK PROTESTS CANCUN'S WTO

**MEETINGS** 

Major Field: International Studies

Biographical:

Education: Graduated from Carl Albert High School, Midwest City,
Oklahoma in December 1996; received Bachelor of Science degree
in Business Administration and minors in Advertising/Public
Relations and Psychology from Oral Roberts University in May
2001. Completed the requirements for the Master of Science
degree with a focus area of International Trade and Development at
Oklahoma State University in December 2004.

Experience: Worked as a sales and marketing assistant for three years through college with a leading corporate training company; started and operated an international import and Mexican folk art retail store with my wife for three years; employed by Oklahoma State University, School of International Studies, as a graduate assistant and teaching assistant; Studied intensive Spanish in Mexico during summer 2004.

Professional Memberships: Phi Kappa Phi, Student Association of Global Affairs.