The Affect of Cross Cultural Management Factors on the Design of Global Business Systems

James Drogan

Norwich

Abstract

Organizations run potentially significant risks in the design of effective and efficient global

management systems through inadequate consideration of cross-cultural management factors.

The failure of the Seoul G20 to agree a set of clear actions and make firm commitments to

implement these actions to deal with international currency, imbalances in current accounts,

and the general global economic malaise is the most recent example of the failure of cultural

understanding and political will. This paper draws upon the literature in cross-cultural

management and systems theory to describe the issue, then identifies potential diagnostic

tools and techniques for developing the level of understanding required to support actions to

mitigate the risk of inaction on global issues.

Introduction

The G20 met in Seoul, South Korea (officially the Republic of Korea) on November 11-12, 2010, to address a number of significant issues.

The G20 Seoul summit aims to ensure ongoing global recovery, develop a framework for long-term sustained and balance growth, strengthen the international financial regulatory system for banks, and modernize international financial institutions like the IMF and World Bank.

In the short-term, it seeks to support the "less-than-robust" global recovery and "further enhance international cooperation to generate" growth. The phrase "international cooperation" references the growing currency and trade tensions among the United States, China, and several other countries ("G20 Seoul Summit Agenda," 2010).

The Group of Twenty (G-20) Finance Ministers and Central Bank Governors was established in 1999 to bring together systemically important industrialized and developing economies (Argentina, Australia, Brazil, Canada, China, European Union, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, UK, USA) to discuss key issues in the global economy ("What is the G-20," 2010). The G20 was represented at the Seoul Summit by the heads of government from the twenty member countries, central bankers and finance ministers, and the heads of key international

institutions, including the United Nations, the International Monetary Fund, the World Bank and the Financial Stability Board. Despite the presence of the key decision makers and influencers from the G20 countries, the overall result is uninspiring.

> How much was accomplished at the just-concluded G20 summit in Seoul, South Korea likely depends upon whom you are asking. While some observers feel the summit cannot really do anything to address the fundamental differences between diametrically opposed economies (see: U.S. vs. China), others feel that progress of any such summit has to be measured in slow, patient doses (Ghosh, 2010).

One is reminded of a similar result from The UN Climate Change Conference in Copenhagen in December 2009. Organizations, be they transnational corporations, non-governmental organizations, or international organizations exist at the pleasure of the states and in the environment created by agreements (multilateral, plurilateral, and multilateral) negotiated between states. A reasonable starting point for this paper is thus in examining the milieus in which these agreements ("rules of the game") are created. It is these agreements that define the context in which other organizations function.

Impact Assessment

Impact assessments are of three general types; pre-event, concurrent, and post-event. Pre-event assessments examine the proposed strategy and tactics to be used during the event with an eye towards adjustments that will improve the probability that the desired outcome will be achieved. For example, the US introduced a program (quantitative easing two, QE2) wherein the US Treasury buys a substantial amount of long-term treasury securities. The

intent is to reduce the interest rate and raise the price of equity. This also tends to depreciate the dollar in the global market at a time when the US is pressing China to allow its currency to strengthen against the dollar. That is, US exports becomes more affordable on the world market and Chinese exports less affordable. This is good for the US according to the US, but not the Chinese according to the Chinese and, understandably, the Chinese have rejected this line of reasoning. The Chinese feel they have a better alternative than a negotiated agreement. If this alternative had been understood, perhaps different tactics leading to an outcome agreeable to the US and China could have been reached. Instead, as Mark Tepper, managing partner of Strategic Wealth Partners, says

> The biggest failure of the G20 is that we're hearing the same old story; albeit in different words. There is a commitment to 'move toward more market-determined exchange rate systems and enhance exchange rate flexibility to reflect underlying economic fundamentals and refrain from competitive devaluation of currencies.' However, China has made hollow commitments in the past to allow this to happen. Additionally, the US denies that it is actively seeking to weaken the dollar in the first place. So, all of the verbiage might be for naught (Ghosh, 2010).

Concurrent assessments happen as an event is taking place. Sensitivity to the feedback, constant understanding of its implications, and a willingness to change tactics have the potential of leading to changes that will correct trajectories thus increasing the odds of a favorable outcome. This requires some forethought in developing a set of alternatives that can be easily put into play depending upon the manner in which the event develops. Instead,

what we seem to be getting on the international stage are positions that are firmly held,

perhaps because of consideration for local politics, and moves are made only grudgingly.

Post-event assessments look back at what happened to determine why and what

lessons can be learned such as to create an environment for event that will yield more value

faster.

These three types of assessment are specific examples of a sense, interpret, decide,

act, and learn loop. This loop has its origins in work by Stephan H. Haeckel and Adrian J.
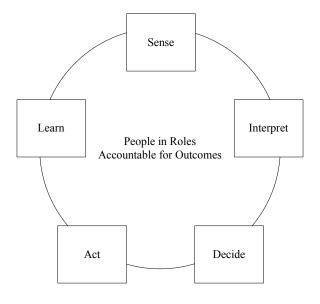
Slywotzky (Haeckel & Slywotzky, 1999).

Figure 1 SIDAL Loop

Implementation of SIDAL loops is dependent upon the characteristics of the culture

in which in which it will function. For example, in a culture exhibiting strong power distance

or in-group collectivism, efficient and effective SIDAL loops may threaten existing social

and power structures in as much as these loops tend to work against power distance and

in-group collectivism by providing transparency of data and information. Hence, impact

assessment may not be effective or even possible in cultures exhibiting these characteistics.

There needs to be an agreement on two sets of metrics for measuring impact; one at the international level and the other at the state level. As a starting point consider The Economist Quality of Life Index (The Economist Intelligence Unit, 2005). This index uses nine quality-of-life indicators; material well-being, health, political stability and security, family life, community life, climate and geography, job security, political freedom, and gender equality. The dependency identified regarding the SIDAL loop applies here. Namely, existing cultural system will inhibit its effectiveness.

David W. de Long and Liam Fahey take up this issue of cultural influences on impact assessment (De Long & Fahey, 2000) in terms of the leveraging of intellectual assets. Culture influences include:

- Culture shapes assumptions about what knowledge is worth attention. This influence may be present in the G20 case cited above.

- Culture mediates relationships. This is true if the culture in question represents the sum of the cultures of the parties in the relationships. It is doubtful that sum of cultures is considered by the parties.

- Culture creates context for the social interactions essential to cross-cultural management. The value of these relationships depends upon trust. Jim Kelly, former CEO of UPS, once remarked, "I believe that we're about to witness what may turn out to be the last competitive frontier business will see…Time. And when it comes, trust may turn out to be the best investment anyone's made" (Remarks to the Commonwealth Club of San Francisco & Oakland Chamber of Commerce, February 23, 2000).

- Culture shapes the process whereby knowledge, essential for effective cross-cultural management, is created, most importantly legitimized, and subsequently distributed.

While de Long and Fahey conclude that new frameworks are required to enable management to design interventions to deal with the issues raised in their paper, they do not provide suggestions as to what these frameworks should be. The contribution by de Long and Fahey is in the identification of the issues from which framework development may proceed.

The metrics also provide the basis for risk assessment of alternative actions, including declining any overt action whatsoever in forlorn hope that the issues will resolve themselves. Assume, for example, the metrics from The Economist Quality of Life Index are captured in a model (to be discussed in the next section), calibrated to the real environment, that allows the understanding how change in the global system affects the metrics. This model would allow an assessment of the risk associated with inaction as well as alternative actions.

What is lacking in the cases (G20 and Copenhagen) cited above is an agreed SIDAL process and set of metrics. Lacking these, a less potent solution relies only on the understanding of the environment from the point of view of others. Sadly, this too is lacking. An example of this is the Chinese assertion that the US quantitative easing represents currency manipulation and the inability or the unwillingness of the US to understand China's point of view.

Diagnostic

The SIDAL loop and metrics provide an indication of the output of a culture (i.e. system), but not how that output is produced. A mechanism for explaining how the output is produced – a diagnostic – is needed. System dynamics is just such a mechanism.

> The professional field known as system dynamics has been developing for the last 35 years and now has a world-wide and growing membership. System dynamics combines the theory, methods, and philosophy needed to analyze the behavior of systems in not only management, but also in environmental change, politics, economic behavior, medicine, engineering, and other fields. System dynamics provides a common foundation that can be applied wherever we want to understand and influence how things change through time (Forrester, 1991).

While Michael D. Myers and Felix B. Tan have written within the context of information systems research (Meyers & Tan, 2002), their conclusion that "…researchers should adopt a more dynamic view of culture – one that sees culture as contested, temporal and emergent" is relevant to the thesis of this paper.

> We suggest a research agenda that adopts a more dynamic view of the relationship between culture and global information systems – one that does not simply take culture as given and one which uses appropriate research methodologies to develop thick descriptions of the culture and its impact on IT development, implementation, management and use (p. 13).

Meyers and Tan tie in to Forrester's system dynamics and also to the matters (SIDAL and metrics) raised in the previous section. Meyers and Tan caution us to be alert for the "contested, temporal and emergent" nature of culture. That is, the understanding needed to appreciate culture, especially cultural differences, as a force shaping the observed behavior may not be in the generally accepted repertoire of managers. The risk contingent in using the accepted repertoire is that we may be tempted to massage the problem to fit a known solution. "I have no data yet. It is a capital mistake to theorize before one has data. Insensibly one begins to twist facts to suit theories, instead of theories to suit facts" (Sherlock Holmes, A Scandal in Bohemia).

System dynamics provides a sound and tested approach to capturing the dynamics of the systems.

However, while cultural dimensions, such as those identified in Project GLOBE (House & Global Leadership and Organizational Behavior Effectiveness Research Program, 2004), intuitively affect the behavior that affects the dynamics of forces, there needs to be a method for linking these dimensions with the guidance provided by Meyers and Tan to better inform the system dynamics model. It is not obvious at this stage of the research that there is an algorithmic way to do this. Yet, it is equally obvious that such a relationship exists. The proposal herein is to effect this linkage through a highly qualified individual (culturalist) or team possessing deep knowledge, skills, and experience in cross-cultural management and system dynamics.

At this point the model should be able to describe the observed behavior of the system, the proximate causes of this behavior, and the linkages to cross-cultural management considerations. The model provides a statement of the as-is situation.
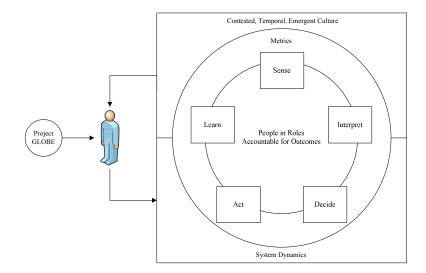

Figure 2 As-Is Model

Behavior and Performance Related to Goals

The need for cross-cultural management arises because the performance of a system affected by cultural issues is not at the desired level. This suggests the existence of a more desirable system represented by a to-be model as well as a transformative process for moving from the current state to the desired future state.

The to-be model emerges from a comparison of current performance, illuminated and explained by the as-is model, to the goals of the organization. Setting the goals represents the one of the two most significant and difficult tasks that is undertaken in a multi-cultural environment. Without goals it is highly unlikely that the most effective and efficient transformation process can be designed. However, goal setting at a global level is sufficiently complex as to suggest a successful outcome is highly unlikely, perhaps impossible. The nine dimensions of culture and the ten societal groups identified in Project

Globe, 192 member countries in the United Nations, changing power amongst the states, different agendas and ambitions, all contribute to this complexity. The failure of the G20 in Seoul to come to agreement on goals and actions, the similar results from the UN Climate Change Conference in Copenhagen and the Doha Round of Trade Negotiation confirm the intractability of global system change.

Nevertheless, because something is hard is not sufficient reason to put it aside, especially given the growing global interdependence (Keohane & Nye, 2004). Systems theory suggests that when complexity stymies progress the complexity be reduced by selecting a smaller problem that is a relevant part of the larger problem. Moran and Harris give such as example of this technique in the second part of their book (R. T. Moran, Harris, & S. V. Moran, 2007, chap. 11-16). Project GLOBE, another example, reviews the impact of culture on management decision making in terms of ten societal groups.

Transnational corporations (TNCs) and nongovernmental organizations (NGOs) are examples of this approach to simplifying the complexity through focus. Whilst global leaders can and should learn from these examples (and perhaps they do given the rising number of regional blocs and bilateral treaties), there are two latent issues to be considered. The first is that success and ambition inevitably leads to growth in reach (people and places affected) and range (function provided) (Keene, 1991) hereby taking the organization into the more complex environment from which it was more or less insulated in the beginning. The second is that abstracting part of the global system for focus cannot dismiss the global system. It is still there and must be dealt with. The global system makes "the rules of the game."

Keeping the above in mind, the goals must be established knowing full well that these goals will not, to paraphrase Clausewitz, survive first contact with reality.

The To-Be System

It is the to-be system that will deliver to the goals. The to-be can be viewed, at its most abstract, as a SIDAL loop (see Figure 1 SIDAL Loop, p 6). The differences between the as-is and the to-be are found at a lower level of detail. The goals are deconstructed by asking a series of questions (Drogan, 2007).

1. What decisions must be made and why?

2. How will these decisions be made and why?

3. What data will be required and where will it be sourced?

Answers to these questions allow the construction of the to-be model of the desired system. The culturalist has an essential role to play here. Aided by, for example, the guidance provided by Moran and Harris on cross-cultural management (R. T. Moran et al., 2007, chap. 1-10) and Project GLOBE, the culturalist, knowing the target societies for the intended system, can and must assure that the questions and answers are relevant to the environment. "Systems aligned with human motivational factors will sometimes work. Systems opposing such vectors will work poorly or not at all" (Gall, 1977). The culturalist is essential for assuring this alignment.

System dynamics is used in the discovery and specification of the as-is model and it is expected that this technique will be deployed here. This process of goal creation and the intervention of the culturalist are depicted in the following figure.
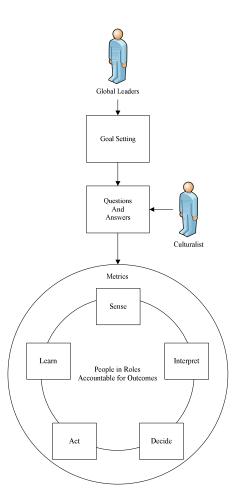
Figure 3 To-Be Model

Transformation

The second of the two most significant and difficult tasks undertaken in a

multi-cultural environment is transformation. In transformation a commitment is made to

change, resources are allocated, and progress is made towards the to-be system. Treaties

represent an example of a commitment to transformation. It is therefore somewhat

disconcerting that states can unilaterally make "reservations, understandings, and

declarations" that alter their responsibilities under the treaty (D'Amato & Abbassi, 2006, p.

49). Thus, international law enters in to this process and cannot be ignored. The

transformation spoken of so far is likely to be taken under treaty protocol or other appropriate

agreements. An example of this is the transformation of government procurement processes

between American and Canada that gives each country easier access to the other country's

government market ("Agreement Between The Government of Canada and The Government

of the United States of America on Government Procurement," 2010). Agreements between

non-governmental organizations will be governed by applicable international law.

Cultural differences will play a major role in shaping the nature of the transformation.

Cases discussed during the seminar for which this paper has been written illustrate this role

(Campbell, Schlichting, & Tellis, n.d.; Ohmer & Kilian, n.d.; Puia, n.d.; "Qinghai Quandry,"

n.d.). The culturalist, introduced in the diagnostic section of this paper will continue to play

a key role, perhaps his or her most important role, in the transformation process. The author

has been involved in transformative projects for the past 45 years and this experience shows

that all the issues are never uncovered prior to transformation, nor are all the alternative

resolutions of known issues identified. The key to successful transformation is adaptability.
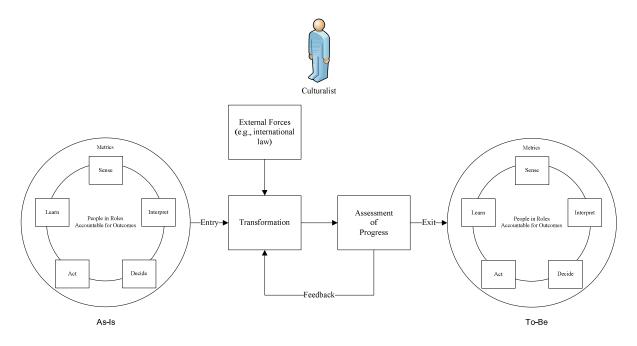

Figure 4 Transformation

This discussion of transformation is summarized in this figure. Several points are to be made.

First, the transformation process is changed by the feedback that originates from the assessment of progress. Progress is never made as expected. It is a poor leader who does not adjust his or her plans and processes based upon actual performance.

Second, the transformation process is further changed by the dynamics of the external forces (e.g., international law). These forces may originate from socio-political-economic, customer, competitor, collaborator, technology, and geoclimatic sources (Drogan, 2009). These external forces cannot usually be controlled, but rather exert control on the transformation process. "You have to sail where the wind will let you sail to get to where you want to go" (David B. Livingston; personal correspondence).

Third, exit to the to-be system is not guaranteed. Many attempts at transformation fail. Some examples are given earlier in this paper. Success is planned and hoped for, but preparations for dealing with failure need to be in hand. Failure should never be such as to preclude another attempt.

Fourth, the culturalist cannot be the *supremo* in transformations of this type. Transformation in a multi-cultural world is too complex for a single individual or a narrow set of knowledge, skills, and experience. The Leon case, for example, included, in addition to the Nicaraguans, experts in information systems, operations management, and sociology. Major issues that are likely to be encountered need to be identified early and the people with the knowledge, skills, and experience to resolve these issues need to be brought into the transformation team.

Issues

A number of issues emerge from this examination of how global business systems are affected by cross-cultural management factors. These issues are presented, from the author's point of view, in sequence from the most to least significant.

1. **Common Cause:** Global business systems, whether public or private, arise from a realization that there is common cause, a joint interest, where each does well when all do well. Little else is possible sans common cause. In a multi-cultural world marked by changing power distribution this becomes increasingly difficult.

2. **Issue Recognition:** Issues, as used in this paper, includes opportunities as well as threats. The tendency is to take a parochial view of issues. This is driven at the state level by the significance of sovereignty. At the commercial level it is driven by the responsibilities of the firm to its owners. At the NGO level it is driven by idealism. At the international organization (e.g., World Bank) it is driven by mandate. It is little wonder, therefore, that common agreement on an issue is so difficult to obtain.

3. **Willingness to Change:** Machiavelli has perhaps summarized it best.

    There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction of a new order of things. Because the innovator has for enemies all those who have done well under the old conditions, and lukewarm defenders in those who may do well under the new (Machiavelli, 1995).

The Melian Dialogue reminds us that "The strong do what they have the power to do and the weak accept what they have to accept" (Dunne & Schmidt, 2008, pp. 97-98). The former do not wish to change for it implies compromise and potential loss of power. The latter would like to change but lack the power to do so. The current debate regarding the reorganization of the United Nations Security Council to more accurately reflect the real distribution of power in the world is a case in point.

4. **Common View:** There is a lack of a common view of the world system, not only amongst world leaders, but also amongst the theorists (Kaufman, Parker, Howell, & Doty, 2004).

5. **Human Capabilities:** Capabilities is taken here to mean sets of knowledge, skills, experience, attitudes, and behavior. A hypothesis is that if sufficient capabilities were at hand, the world would not be struggling with the current set of significant issues. The need is for more people with the capability to understand the world as it is and then the means for turning that understanding into action to provide global benefit.

<div style="text-align:center">Conclusions And Recommendations</div>

This paper deals with considerations for developing global business systems for the management of spaceship earth ("Spaceship Earth," 2010). The point of view is global. The reasoning is that global management is the most difficult of all and even if global management cannot be realized, thinking about the subject raises important questions that

need to be addressed when considering management systems of less reach and range than global.

There is little doubt that the issues described above – Common Cause, Issue Recognition, Willingness to Change, Common View, Human Capabilities – are formidable. However, the societal risks of not attending to these issues are equally formidable and demand attention. The suggestion of **top down thinking** made in the previous paragraph now becomes a recommendation.

The thinking required needs to be done on a cross-cultural basis since these issues will prevail regardless of the system level (i.e., above state, at state, below state) at which this thinking is done. A **team of people** is required capable of dealing with external forces (see the discussion on page 16), cultural matters, systems analysis and design, and the management of transformation.

This team needs to operate under the **sponsorship of a global organization** and granted access to all resources that may be required to conduct its work. These recommendations are not so naïve as to ignore the fact that some states (North Korea, Myanmar, Zimbabwe come to mind) that may benefit the most from the potential transformation will exclude the effort at their borders because of its potential impact on existing power structures. Other emerging states (e.g., China and Brazil) may show little or no interest because of the perceived threat to their established trajectory. Some developed nations (America and France, for example) may see in this thinking the seeds of diminishment of their global power.

The hypothesis is that while the thinking is best done at the above the state level, the best odds for transformation lie below the state level.
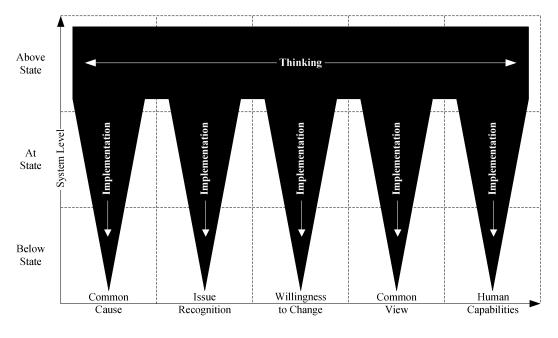
Figure 5 Strategy for Global Business System Development

Opportunities for implementation are likely to emerge as the thinking develops. Hence, the team must be **alert for opportunities** to create successes from which to build. Since these opportunities are likely to be first seen by the team, there needs to be a capability to sense and quickly qualify these opportunities. This means that the team needs to keep **an active sensor in the real world**. This could mean the inclusion of a person who has demonstrated this sort of "nose." The underlying premise is that thinking that does not turn into action is pointless.

Entry into the undertaking described in this paper is on the basis that it will be successful. If the odds of success are not seen as high then the team called for (see page 19) will not attract the quality of people required for success. Success is, in the end, based on the change achieved. This means that there needs to be the availability of an **implementation team** comprising different capabilities than that of the thinking team. This team needs to be established as the opportunities begin to emerge. In as sense, it needs to be imbued with

rapid response capabilities, attitude, and behavior. That may be one of the lessons of the Leon case. Time passed, but little was achieved. Perhaps a sense of urgency did not or could not prevail.

Johann Wolfgang von Goethe advised, "Dream no small dreams for they have no power to move the hearts of men." The author suggests this paper represents "no small dream." It engages in idealism, but tempers it with realism. The paper lays out the issues, associated risks, and steps to mitigate those risks.

Cross-cultural management is inextricably intertwined with international relations, law, economics, commercial endeavors, international power, all of which are undergoing complex, fast-paced, and sometimes opaque change. Failure to keep up with this change in terms of critical thinking, communications, and action will not slow the change.

References

Agreement Between The Government of Canada and The Government of the United States

of America on Government Procurement. (2010, February 16). . Retrieved from

http://www.gnb.ca/0099/tenders/Procurement/Canada-

USA%20Government%20Procurement%20Agreement%20EN.pdf

Campbell, G., Schlichting, K., & Tellis, W. (n.d.). Helping from Afar to Develop a

Municipal Database for Leon, Nicaragua. The Society for Case Research.

D'Amato, A., & Abbassi, J. (2006). *International Law Today*. St. Paul MN: Thomson/West.

De Long, D. W., & Fahey, L. (2000). Diagnosing Cultural Barriers to Knowledge

Management. *Academy of Management Executive*, *14*(4). Retrieved from

http://www.lostknowledge.com/pdfs/DeLong-

DiagnosingCulturalBarriersToKnowlMgt.pdf

Drogan, J. (2007). The Relevance of Data, Information, and Knowledge. Retrieved from

http://jmsdrgn.squarespace.com/storage/Data%20Information%20and%20Knowledge

%20-%20Relevance%20and%20Understanding.pdf

Drogan, J. (2009, August 19). *The Context of Interest*. Retrieved from

http://jmsdrgn.squarespace.com/storage/The%20Context%20of%20Interest.pdf

Dunne, T., & Schmidt, B. C. (2008). Realism. In *The Globalization of World Politics* (4th

ed.). Oxford University Press.

Forrester, J. (1991). *System Dynamics and the Lessons of 35 Years*. Massachusetts Institute

of Technology. Retrieved from http://sysdyn.clexchange.org/sdep/papers/D-4224-

4.pdf

G20 Seoul Summit Agenda. (2010, November 11). *International Business Times*. Retrieved

   November 21, 2010, from http://www.ibtimes.com/articles/81029/20101111/g20-

   seoul-summit-agenda.htm

Gall, J. (1977). *Systemantics: How Systems Work and Especially How They Fail*. San

   Antonio, TX: Quadrangle.

Ghosh, P. R. (2010, November 16). How to Interpret G20? *International Business Times*.

   Retrieved November 21, 2010, from

   http://www.ibtimes.com/articles/82536/20101116/g20-summit-korea-china-u-s-

   currency-war-trade.htm

Haeckel, S., & Slywotzky, A. (1999). *Adaptive Enterprise: Creating and Leading Sense-

   And-Respond Organizations*. Harvard Business School Press.

House, R. J., & Global Leadership and Organizational Behavior Effectiveness Research

   Program. (2004). *Culture, Leadership, and Organizations: the GLOBE Study of 62

   Societies*. Thousand Oaks, Calif.: Sage Publications.

Kaufman, D. J., Parker, J. M., Howell, P. V., & Doty, G. R. (2004). *Understanding

   International Relations* (5th ed.). United States Military Academy: McGraw-Hill

   Custom Publishing.

Keene, P. (1991). *Shaping the Future: Business Design Through Information Technology*.

   Harvard Business School Press.

Keohane, R. O., & Nye, J. S. (2004). Complex interdependence. In *Understanding

   International Relations* (5th ed., pp. 503-518). Boston: McGraw-Hill Custom

   Publishing.

Machiavelli, N. (1995). *The Prince (1513)*. (D. Wootton, Tran.). Indianapolis/Cambridge:

Hackett Publishing Company, Inc.

Meyers, M. D., & Tan, F. B. (2002). Beyond Models of National Culture in Information

Systems Research. *Journal of Global Information Management*, *10*(2). Retrieved

from

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.88.5738&rep=rep1&type=

pdf

Moran, R. T., Harris, P. R., & Moran, S. V. (2007). *Managing Cultural Differences* (7th ed.).

Amsterdam: Elsevier.

Ohmer, D. C., & Kilian, C. M. (n.d.). Zelte USA. The Society for Case Research.

Puia, G. M. (n.d.). ControlCorp's Saudi Arabian Adventure. The Society for Case Research.

Qinghai Quandry. (n.d.). .

Spaceship Earth. (2010, November 4). *Wikipedia*. Retrieved November 20, 2010, from

http://en.wikipedia.org/wiki/Spaceship_Earth

The Economist Intelligence Unit. (2005). The Economist Intelligence Unit's Quality-of-Life

Index. *www.economist.com*. Retrieved July 18, 2009, from

http://www.economist.com/media/pdf/QUALITY_OF_LIFE.PDF

What is the G-20. (2010). *Republic of Korea 2010*. Retrieved November 21, 2010, from

http://www.g20.org/about_what_is_g20.aspx