

# Government-Nonprofit Service Delivery from Resource Dependence Theory: Revising with System Dynamics\*

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## Abstract

This study explores the partnership between government and human service nonprofits in the United States from the perspective of resource dependence theory and extends the theory with system dynamics in order to better explain government-nonprofit service delivery. The article is structured as follows. First, I introduce the historical development of the government-nonprofit partnership in service delivery in the United States. Second, I present an overview of resource dependence theory for government-nonprofit service delivery, including assumptions, key elements, claims, how well it explains the government-nonprofit service delivery, and limitations. Third, I highlight the advantages of system dynamics along with the limitations of resource dependence theory, as an attempt to revise the theory. Finally, I conclude with a summary and suggestions for the next steps in theoretical development and research.

**Keywords:** Government, Human Service Nonprofits, Partnership, Government-Nonprofit Service Delivery, Resource Dependence Theory, System Dynamics

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\* The present research has been conducted by the Bisa Research Grant of Keimyung University in 2007.

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## I . Introduction

Nonprofits in the United States have dramatically expanded in both scope and scale (Burke, 2001; Gronbjerg, 2001; Hammack, 2001), playing active roles in service delivery, which is the main role of nonprofits in a democratic welfare state (Kramer, 1981). Along with the government's efforts to enlarge the frontiers of the welfare state (Lipsky & Smith, 1990), government support of human service nonprofits increased, especially since 1960s in the United States, even though the colonial governments started to provide assistance to nonprofits even before the American Revolution (Salamon, 1987a).

There are several theories (e.g., theory of welfare state, market failure, government failure, and contract failure) explaining the government-nonprofit partnership in financing and delivering human services (Salamon, 1987b). These theories, however, are neither clear nor realistic enough to fully explain the relationship, because they focus on one facet, i.e., either government or market or nonprofits, of the sectors involved. This article explores the partnership between government and human service nonprofits in the United States from an interorganizational relations perspective, specifically resource dependence theory, and further seeks to revise the theory with system dynamics in order to better explain government-nonprofit service delivery. Although there are different levels of governments and different types of human service nonprofits, I focus mainly on the aggregate of government and human service nonprofits. Throughout this article, the term government support or funding refers to both the government contracts and grants.

The article is structured as follows. First, I introduce the historical development of the government-nonprofit partnership in service delivery in the United States. Second, I present an overview of resource dependence theory for government-nonprofit service delivery, including assumptions, key elements, claims, how well it explains the government-nonprofit service delivery, and limitations. Third, I highlight the advantages of system dynamics along with the limitations of resource dependence theory, as an attempt to revise the theory. Finally, I conclude with a summary and suggestions for the next steps in theoretical development and research.

## II. Historical Development of the Government-Nonprofit Relationship in the United States

A number of studies (e.g., Abramson & Salamon, 1986; Johnson & Musselwhite, 1984) reveal that beginning in the 1960s a great portion of federal government expenditures was devoted to nonprofits rather than to government agencies or for-profits to deliver publicly funded services in 1980s (Lipsky & Smith, 1990). Other studies (e.g., Liebschutz, 1989; Malm & Maza, 1988; Myllyluoma & Salamon, 1992; Social Policy Research Group, 1991) also demonstrate that government sources account for approximately half of nonprofit revenues among their revenue sources especially from late 1970s through early 1990s. That is, government and nonprofits have developed active partnerships for service delivery in order to meet their own needs (Coston, 1998). In the partnership, government mainly finances and nonprofits deliver publicly funded service programs instead of government (Salamon & Anheier, 1998), which Gidron, Kramer, and Salamon (1993) characterize as third-party government.

Scholars have suggested a range of possible relationships between the government and nonprofits on the basis of the following key variables: 1) government's dependency on nonprofit and dominance of proprietary service sector (Gronbjerg, 1987); 2) the intensity of interaction between the two sectors (Esman & Uphoff, 1984; Henriksen, 1996); 3) level of the government-nonprofit relationships for service provision (Kramer, 1987); 4) government's attitude toward institutional pluralism, government-nonprofit connection, its power relationship, extent of formality, and position of government policy toward nonprofits (Coston, 1998); 5) activity relationship and goal relations (Gillespie & Mileti, 1979).

Among these, I chose Gillespie and Mileti's typology (1979), which provides a broad and specific framework to explain its relationships from an interorganizational perspective. Gillespie and Mileti (1979, p. 27) cross-classify two basic dimensions - activity relationship and goal relations - to identify the following eight theoretical dimensions: 1) cooperation through conflict for high interdependence; 2) exchange to competition for medium interdependence; 3) accommodation through monopoly for low interdependence; 4) cooperation to accommodation for common or positive goal relations; 5) coalition through coexistence for separate or neutral goal relations; 6) conflict to monopoly for opposed or negative goal relations; 7)

cooperation-exchange-monopoly; 8) conflict-exchange-accommodation. Table 1 illustrates the typology of goal and activity relations. As shown in the table, the relations between organizations vary in accordance with the degree of goal and the activity relations.

[Table 1] Gillespie & Mileti's Typology of Goal and Activity Relations

		Activity Relationship		
		High Interdependence	Medium Interdependence	Low Interdependence
Goal Relations	Common or positive	Cooperation	Exchange (Bargaining)	Accommodation
	Separate or neutral	Coalition	Exchange (Compromise)	- (Coexistence)
	Opposed or negative	Conflict	Competition	Monopoly

\* Source: Gillespie & Mileti (1979, p. 27)

To apply the above typology to government-nonprofit relationship, discussion in this section is mainly based on the nonprofit revenue supplied by the government. There are primarily three different forms of relations identified in describing relations between government and nonprofits throughout the U.S. history: 1) coexistence before 1960s; 2) exchange in 1960s; 3) cooperation from 1970s through the present.

First, the primary pattern of the relationship between government and nonprofits before 1960s represents coexistence, which is characterized as low interdependence and separate (or neutral) goal relations between them. Salamon's (1987a) historical overview suggests that there had been nearly insignificant interaction between government and human service nonprofits during this period. In addition, they both had separate goals for service delivery. During this period, on the one hand, there was no institutional or federal policy for service programs to help poor people, even though President Roosevelt initiated a large quantity of employment promotion programs through "New Deal" (1933-1939) to fight against the "Great Depression." On the other hand, even though the role of nonprofits expanded in line with the "New Deal" (Burke, 2001), nonprofits were not adequately prepared to provide systematic assistance programs for people in need (Close Up Foundation, 1998). Before 1960s, government was a direct provider for services (Kramer, 1985). The main income sources of nonprofits were

donations, service fees, and so on, except for a limited service categories (Lipsky & Smith, 1990).

Second, exchange, which is represented as medium interdependence and common goal relations, seems to be prevalent in 1960s. During this period, government and nonprofits developed more active relationships than before 1960s, sharing their common goals for service delivery. Both came to see what each of them could obtain from the other and wanted to obtain resources needed through exchange relationship. Coming into 1960s, the relationships between two sectors experienced "a landmark shift" (Kramer, 1981, p. 68), compared to those of the previous period. The government funding increased dramatically for implementation of service programs as the "War on Poverty" during the Johnson administration (1963-1969). This administration, under the plan of "Great Society," implemented service programs, such as food stamps, Medicare and Medicaid, to help the poor and older get sufficient food and health care (Close Up Foundation, 1998; Froelich, 1999; Kramer, 1981; Lipsky & Smith, 1990). Under these circumstances, nonprofits experienced a significant increase in receiving government funds for service delivery.

Last, the trend of relationship between government and nonprofits from 1970s through the present can be characterized as cooperation in high interdependence and common goal relations. Both government and nonprofits have the common goals for service delivery and are highly interdependent. The trend of government support to nonprofits for service delivery during this period reveals fluctuation, depending on the government policy. Nixon administration (1969-1974), which expanded service programs from "New Deal" and "Great Society" programs (Close Up Foundation, 1998; De Vita, 1999), increased support to nonprofits in 1970s. Reagan administration (1981-1989), which attempted to reduce the size and scope of the federal government, cut down service programs such as Social Security, Medicare, and Medicaid (Close Up Foundation, 1998; De Vita, 1999). Nonprofits especially in those service areas experienced a significant loss in their revenues. Even though the Reagan administration retrenched the budgets for government support to nonprofits drastically in the early 1980s, government funding has been still a main income source of nonprofits (e.g., Froelich, 1999; Gronbjerg, 1993; Salamon, 1995).

### III. Resource Dependence Theory to Understand Government-Nonprofit Service Delivery

As shown above, government and human service nonprofits are mutually dependent for service delivery. As such, all of the organizations are dependent on their environments to some extent and respond to them in order to survive and achieve their goals (Hall, 1991). Interorganizational relations theory, the focus of which is on the relationship between the organizations and their environments, has been broadly applied to the government-nonprofit relationships. There are two general models considering environment as resources: resource exchange theory (Aiken & Hage, 1968; Gillespie & Perry, 1975; Levine & White, 1961) and resource dependence theory (Aldrich 1976; Aldrich & Pfeffer, 1976; Cook, 1977; Cook, Emerson, Gillmore, & Yamagishi, 1983; Emerson, 1962; Pfeffer & Salancik, 1978).

Resource exchange theory assumes that organizations short of needed resources voluntarily enter into exchange relationships for mutual benefits. It highlights the symmetrical nature of the relationship between organizations. However, resource dependence theory goes beyond it and pays special attention to imbalanced relationships or power differentials between organizations, assuming that exchange relationships always have the possibility of asymmetrical power relations. It is a special case or expansion of resource exchange theory (Mulford, 1984).

#### 1. Basic assumptions

Resource dependence theory is closely related to political-economy model of organizations in that it brings attention to the concept of power differentiation or dependency in figuring out organizational processes (Zald, 1970). The theory assumes that "organizations are not able to internally generate all the resources required to maintain themselves, and therefore organizations must enter into transactions and relations with elements that can supply the required resources and services" (Aldrich & Pfeffer, 1976, p. 83). In this sense, organizations continue to increase interactions with other organizations as long as they need resources (Aiken & Hage, 1968). This theory, however, posits that organizations are not passive, but active. In other words, they are capable of changing and dealing with the environment (Aldrich & Pfeffer, 1976). This theory further assumes that organizations survive and thrive to the degree that they can surpass other organizations in obtaining scarce resources (Yuchtman & Seashore,

1967). That is, organizations will be able to continue to exist if they obtain sufficient resources needed for their functions or goals.

## **2. Key elements of the theory**

Resource dependence theory focuses on the environment to explain the relationship between organizations. Hawley (1968) defines environment as "all phenomena that are external to and potentially or actually influence the population under study" (p. 330). The environment has two faces. It provides possibilities as well as constraints and uncertainties for organizations. While organizations need to deal with the external environments that have control over valued resources as a result of their resource scarcity (Pfeffer & Salancik, 1978), they may also have opportunities to control the resources.

Resource dependence perspective pays attention to scarce or valued resources in explaining the interdependence between the organizations and their environments (Yuchtman & Seashore, 1967). Cook (1977) defines resources as "any valued activity, service or commodity" (p. 64). Saidel (1991) employs a little broader definition, referring to "anything of value, tangible or intangible, that can be exchanged between organizations" (p. 544). These can be funding, personnel, information, technology, clients, services, social support, access, authority, and the like (Rhodes, 1981).

Organizations are active entities in dealing with their external environments (Aldrich & Pfeffer, 1976). They attempt to handle the external environments for their own benefits, actively interacting with other actors that control resources (Aldrich, 1979; Aldrich and Pfeffer, 1976; Pfeffer & Salancik, 1978). In other words, this perspective attends to the active role of organizations in management (Aldrich & Pfeffer, 1976; Pfeffer & Salancik, 1978), emphasizing the concept of strategic choice as a key element (Child, 1972). It implies that organizations make their own decisions among a set of alternatives in dealing with the environmental constraints and uncertainties. Thus, all the strategic decisions made by the organizations are closely related to the environmental situations organizations encounter (Hall, 1991).

## **3. What the theory claims**

According to resource dependence theory, organizations are constrained to interact with

external environments or organizations to acquire the resources needed to survive as well as to achieve their goals. Oliver (1990) lists reasons why organizations establish relationships or linkages with other organizations, indicating that the organizations usually have one or more of several reasons for the relationships: 1) to meet requirements (necessity); 2) to exercise power over another organizations (asymmetry); 3) to pursue common goals or interests (reciprocity); 4) to improve internal efficiency (efficiency); 5) to ensure the future certainty (stability/predictability); 6) to justify their activities (legitimacy).

Resource dependence theory calls attention to the distribution and use of power between two actor organizations in a dyadic exchange relation. It highlights "power dependency" or "the asymmetrical nature of exchange relationships" (Cook, 1977; Cook, Emerson, Gillmore, & Yamagishi, 1983; Emerson, 1962; Galaskiewicz, 1985; Molm, 1988; Pfeffer & Salancik, 1978). Power is generally defined as influence between actors or organizations in exchange relationships (Blau, 1964). It implies the other's dependency or vice versa (Emerson, 1962). Dependence is defined as "the product of the importance of a given input or output to the organization and the extent to which it is controlled by a relatively few organizations" (Pfeffer & Salancik, 1978, p. 51). It is a measure of the power or influence of the external organizations in the environment (Pfeffer & Salancik, 1978).

Both power and dependence are relational concepts. Aldrich (1979) explains, "dependence of A on B provides the basis for B's power over A, as B is in control or otherwise has influence over goods and services A desires. To the extent that A cannot do without the resources and is unable to obtain them elsewhere, A is dependent on B. The power to control or influence others thus resides in control over things they value..." (p.268). If actor A has more valued resources that actor B needs, actor A will have more power over actor B in the exchange process. In addition, the power relationships are not equal, even when both actors are interdependent. Less dependent actor in the exchange relationship executes more power in most situations, while more dependent actor needs to comply with conditions given by less dependent one (Molm, Quist, & Wisely, 1994)

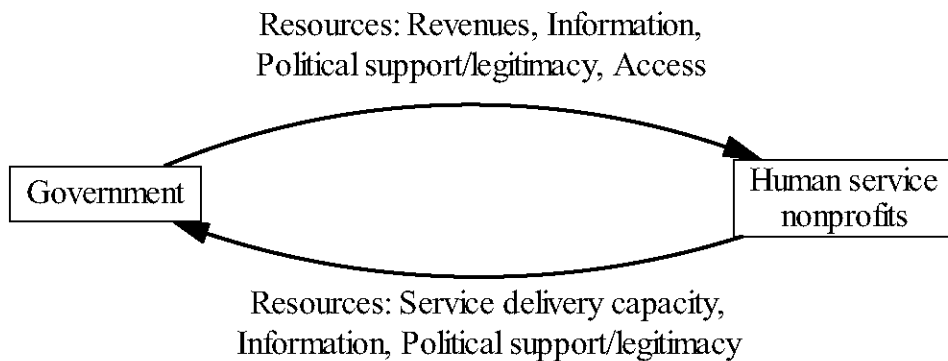
#### **4. How well the theory explains government-nonprofit service delivery**

Resource dependence theory offers reasons why both government and nonprofits voluntarily enter into exchange relationships. They both are willing to have those cooperative interactions



for mutual benefits in achieving their own goals. However, those relationships lead to unintended consequences (e.g., imbalanced relationship). On the one hand, as a major provider of service, government short of service delivery capacity is willing to enter into transaction with nonprofits that have enough capability for an extensive service infrastructure. On the other hand, as major representatives of civic voice, nonprofits in financial needs for service delivery are willing to interact with the government that has sufficient financial resources. Salamon's (1995) argument that "the voluntary sector's weaknesses correspond well with government's strengths, and vice versa" (p. 48) adequately explains the needs of both sectors. Both of them want to have control over each other to some extent.

Saidel (1991) illustrates the dynamics of government and nonprofits from a resource dependence perspective, as shown in Figure 1. The figure is adapted from the Saidel's diagram (1991) on resource dependence relationship. Resources flow from government to nonprofits and vice versa. Government provides nonprofits with such resources as revenues, information, and political support or legitimacy, whereas nonprofits offer government with resources such as service delivery capacity, information, and political support or legitimacy. In this process, the importance of the resource, the availability of alternatives, and the ability to compel provision of the resource determine the degree of dependency between them (Saidel, 1991, p. 545).



\* Source: as cited in Cho & Gillespie (2006)

Figure 1. Saidel's diagram on relationships between government and human service nonprofits

Resource dependence theory also draws attention to dysfunctional or unintended consequences resulting from interdependence between the government and nonprofits. The theory indicates that the power relationship between government and nonprofits is not balanced, because government is, through institutional tools, more advantaged to control nonprofits than vice versa. Government tends to take more institutional control over nonprofits through the federal tax code and regulations accompanied with government funds. Government support, such as funding and tax-exempt status, usually comes along with rules or regulations that may lead to organizational change and dependency in the resource dependence process (Powell & Friedkin, 1987).

The literature demonstrates several nonprofit negative consequences stemming from the government-nonprofit contracts: 1) dilution of the advocacy role (Salamon, 1987b); 2) goal displacement (Bernstein, 1991; Liebschutz, 1992); 3) loss of autonomy (Gronbjerg, 1993); 4) increase in overhead costs (Gronbjerg, 1990); 5) poor quality services from an overemphasis on fiscal accountability (Interface, 1986). If nonprofits highly depend on the government funds for their revenue, they are more likely to experience negative consequences especially under the contracting environment.

## 5. Limitations

Resource dependence theory has provided a useful framework to understand the relationship between government and human service nonprofits from an interorganizational perspective, but also received several criticisms. The limitations of this perspective have been revealed in the studies examining mechanisms underlying the partnership between government and nonprofits.

First, the focus of resource dependence theory is limited to the specific level of dyadic exchange relationship between each actor, i.e., government and nonprofits. In other words, it pays little attention to the possibility and impacts of the relations between government and nonprofit alliances on the government-nonprofit relationship (Galaskiewicz, 1985). In reality, however, various kinds of nonprofit coalitions or associations (e.g., the creation of umbrella organizations among nonprofit organizations) can impact on the relationship between government and human service nonprofits. Those nonprofit alliances may provide nonprofits with a strong potential not only to balance power between them, but also to reduce, to a degree, their dysfunctional consequences resulting from contracts.

Second, this theory ignores to a great degree the effects of environmental constraints or variations, such as resource and institutional environment, on the strategic choice both government and human service nonprofits may make (Galaskiewicz, 1985). Variation in the resource environment could influence the choices available to decision-makers of both sides. For instance, if nonprofits find funding environment stable and diverse, they may be able to make more strategic choices in exchange relationships with government. In addition, resource dependence theory assumes that organizations make a strategic choice among alternatives, which may not always be true especially to nonprofits in the government-nonprofit relationships. The government-nonprofit relationships are, to a great extent, explained by the institutional (e.g., law) and political environments (e.g., societal priorities). Nonprofits entitled as tax-exempt status by the federal tax law and financed under contracts are mandated to comply with government regulations, while government is obliged to supervise or control the nonprofits by mandates. That is, options of nonprofits mandated by the law are very limited.

Third, resource dependence model has failed to notice the issue of goals that two actor organizations may pursue in the interaction process (Hall, 1991). This perspective admits that resource acquisition is the main activities of both sides, but overlooks what kind of goals both sides pursue in the transaction or collaboration process (Hall, 1991). If the goals are not included, the relationship is very abstract. Organizations may always have some higher level of purposes for obtaining resources. Acquiring resources for their own sake is pointless (Cho & Gillespie, 2006).

Fourth, resource dependence theory fails to notice the recipients of services, which represent the main reason for the government-nonprofit relationship (Cho & Gillespie, 2006). Meeting the needs of citizens, customers or clients (service recipients) is an important part to both the government and nonprofits, as both of them enter into exchange relationships to achieve this goal.

Last and most importantly, this theory reveals another serious drawback, since it was originally formulated as structurally static. It overlooks historical and dynamic perspective for resource dependence in explaining the underlying process of the partnership between government and nonprofits, even though partnerships are inherently dynamic processes (Cho & Gillespie, 2006). Throughout the American history, partnerships between government and nonprofits have risen at a point in time, developed, and changed over time. However, the theory does not fully explain this process over time, i.e., how partnerships come into existence,

how they grow, how they decline, or they disappear.

In sum, resource dependence theory provides useful insights to understand the relationship between government and human service nonprofits for service delivery. However, the theory is incomplete and inadequate to allow an accurate analysis of government-nonprofit service delivery. In explaining complicated exchange dynamics, it tends to emphasize a very limited number of factors such as resource constraints and interorganizational power dependency, only focusing on static nature of partnerships. In this regard, I provide insights on how to resolve the limitations of resource dependence theory with system dynamics in the following section.

#### **IV. Discussion: Extending and Revising Resource Dependence Theory**

System dynamics approach is "a method of dealing with questions about the dynamic tendencies of complex systems, that is, behavioral patterns they generate over time" (Meadows, 1980, p. 31). The system dynamics paradigm assumes that key variables are interrelated in a circular form or feedback loops (Richardson & Pugh, 1981). Relationships among variables are the result of feedback loops. Most variables in a system dynamic model are endogenous, because they are operating in closed causal loops (Richardson & Pugh, 1981). The dynamic structure among a set of variables enables us to understand the qualitative behavioral pattern rather than just the quantitative predictions of relationships among particular variables at a particular time (Meadows, 1980). Examining the behavioral pattern of variables over time allows us to chart behavior reference patterns and predict with respect to assumptions in the model what is going to happen in the next (Sterman, 2000). This shifts our way of thinking from static, correlation, and straight-lines to dynamic, operational, and circular causal relationships (Richmond, 2001). In this section, I stress advantages of system dynamics along with the limitations of resource dependence theory examined in the prior section.

First, system dynamics can take into account impacts of aggregate actors or sets of actors in the exchange relationship resource dependence theory overlooks. Since system dynamics pictures the pattern of the underlying dynamic structure with the whole group of the actors included (Richardson & Pugh, 1981), it also allows us to examine the effects of the relationship

between government and nonprofit alliances on the government-nonprofit relationship.

Second, system dynamics can handle the effects of environmental constraints on strategic decision-making process (Sterman, 2000), which resource dependence theory ignores. In other words, by employing system dynamics we can possibly incorporate resource and institutional environments into the model, making those variables endogenous in the system. An example could be to include variations of resource environment and impacts of government laws on the nonprofit decision-making process as auxiliary variables in the model.

Third, system dynamics can recognize the goals both actors seek for in the exchange process, other than the main activities occurring in the relationship (Cho & Gillespie, 2006). Goals pursued by either government or nonprofits are important factors to understand the relationship between government and nonprofits, because any organizations have various kinds of goals. The goals of any system, whether implicit or explicit, and their impacts can be included in the model. For instance, impacts of goals pursued by both government and nonprofits in the exchange relationship can be integrated as endogenous in the dynamic model.

Fourth, system dynamics can help improve resource dependence theory, by explicitly recognizing citizens or the service recipients in the government-nonprofit resource exchange process (Cho & Gillespie, 2006). Both of them decide to voluntarily enter into exchange relationships to achieve their own goals for service delivery, and thus meeting the needs of citizens or service recipients in the service delivery system is fundamental to both of them.

Last, system dynamics paradigm can also help improve the static nature of resource dependence theory to fully understand the government-nonprofit dynamics. System dynamics explicitly deals with the dynamics of the feedback loops driving government-nonprofit relations, which are essential for understanding the continuously evolving relationship (Cho & Gillespie, 2006). Without careful deliberation of the feedback loops operating in the government-nonprofit partnership, it is almost impossible to fully capture how the relationship works over time and solve problems emerging from the relationship (Gillespie, 2000).

## V. Conclusion

Resource dependence theory assumes several elements to explain the relationships between organizations. The theory highlights assumptions such as scarce and valued resources in interaction process, active roles of organizations in management, and strategic choices of organizations. Especially when applied to government-nonprofit relationships, the theory provides a good explanation on motivations for collaboration of each sector, interaction process, and impacts of the relationships. The theory is useful to understand why both government and nonprofits enter into exchange relationships, how imbalanced they are in the power relationships, and what dysfunctional consequences of interdependence look like. However, several weaknesses were also revealed in the theory. The system dynamics paradigm, which is designed to understand complex dynamics, can resolve the limitations resource dependence theory has shown.

System dynamics can resolve the limitations of resource dependence theory as follows. First, resource dependence theory only focuses on the specific level of dyadic exchange relationship between government and nonprofits, but system dynamics can add impacts of aggregate actors in the exchange relationship to complement resource dependence theory. Second, the former pays little attention to the effects of environmental constraints or variations on the strategic choice of both government and nonprofits, but the latter allows us to integrate their effects on the strategic choice as endogenous in the model. Third, the former overlooks the issue of goals that two actor organizations pursue, but the latter can include the goals of both actors in the exchange process. Fourth, resource dependence theory fails to consider the recipients of services, which is the main reason for government-nonprofit service delivery, but system dynamics explicitly can include the service recipients in the government-nonprofit exchange process. Last, the main focus of resource dependence theory is on static relationships between government and nonprofits, but system dynamics can add dynamic nature of the relationship.

Since there has been no attempt, except Cho and Gillespie's work (2006), to dynamically understand the relationship between government and nonprofits, immediate attempts should be made to thoroughly specify the dynamic process of the government-nonprofit relationship. To do this effectively, developing both causal loop diagrams and stock-flow diagrams mapping the government-nonprofit service delivery are recommended. The causal loop diagram allows us to conceptually understand the resource dependence relationship of the government and

nonprofits, although such diagrams lack precision (Richardson, 1986). Further, stock-flow diagrams carefully mapping the interdependencies between the facets of government support and attributes of nonprofit operations are strongly recommended (Cho & Gillespie, 2006). Simulation models with explicit equations capturing the mapped structure and time series data are needed to test the dynamics of government and nonprofits (Richardson & Pugh, 1981).

## [ References ]

- Abramson, A. J., & Salamon, L. M. (1986). Government spending and the nonprofit sector in New York city(Urban Institute Research Report). Washington, DC: The Urban Institute.
- Aiken, M., & Hage, J. (1968). Organizational interdependence and intra-organizational structure. *American Sociological Review*, 33, 912-929.
- Aldrich, H. E. (1976). Resource dependence and interorganizational relations: Local employment service offices and social services sector organizations. *Administration and Society*, 7(4), 419-454.
- Aldrich, H. E. (1979). *Organizations and environment*. Englewood Cliffs, NJ: Prentice-Hall.
- Aldrich, H. E., & Pfeffer, J. (1976). Environments of organizations. *Annual Review of Sociology*, 2, 79-105.
- Bernstein, S. R. (1991). Contracted services: Issues for the nonprofit agency manager. *Nonprofit and Voluntary Sector Quarterly*, 20(4), 229-443.
- Blau, P. M. (1964). *Exchange and power in social life*. New York: John Wiley and Sons.
- Burke, C. B. (2001). Nonprofit history's new numbers (and the need for more). *Nonprofit and Voluntary Sector Quarterly*, 30(2), 174-203.
- Child, J. (1972). Organizational structure, environment, and performance: The role of strategic choice. *Sociology*, 6, 1-22.
- Cho, S., & Gillespie, D. F. (2006). A conceptual model exploring the dynamics of government-nonprofit service delivery. *Nonprofit and Voluntary Sector Quarterly*, 35(3), 493-509.
- Close Up Foundation (1998). *Federalism*, Close Up Foundation. Retrieved May 26, 2002, from <http://www.closeup.org/federal.htm>
- Cook, K. S. (1977). Exchange and power in networks of interorganizational relations. *The Sociological Quarterly*, 18, 62-82.
- Cook, K. S., Emerson, R. M., Gillmore, M. R., & Yamagishi, T. (1983). The distribution of power in exchange networks: Theory and experimental results. *American Journal of Sociology*, 89(2), 275-305.
- Coston, J. M. (1998). A model and typology of government-NGO relationships. *Nonprofit and Voluntary Sector Quarterly*, 27(3), 358-382



- De Vita, C. J. (1999). Nonprofits and devolution: What do we know? In E. T. Boris, & E. Steuerle (Eds.), *Nonprofits & Government: Collaboration and Conflict* (pp. 214-233). Washington, DC: The Urban Institute.
- Emerson, R. M. (1962). Power-dependence relations. *American Sociological Review*, 27, 31-40.
- Esman, M. J., & Uphoff, N. T. (1984). *Local organizations: Intermediaries in rural development*. Ithaca, NY: Cornell University Press.
- Froelich, K. A. (1999). Diversification of revenue strategies: Evolving resource dependence in nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly*, 28(3), 246-268.
- Galaskiewicz, J. (1985). Interorganizational relations. *Annual Review of Sociology*, 11, 281-304.
- Gidron, B., Kramer, R. M., & Salamon, L. M. (1993). *Government and the third sector: Emerging relationships in welfare states*. San Francisco: Jossey-Bass.
- Gillespie, D. F., & Perry, R. W. (1975). The influence of an organizational environment on interorganizational relations. *The American Journal of Economics and Sociology*, 34(1), 29-42.
- Gillespie, D. F., & Mileti, D. S. (1979). *Technostructures and interorganizational relations*. Lexington, MS: Lexington Books.
- Gillespie, D. F. (2000). Organizational structure and performance. In R. J. Patti (Ed.), *The Handbook of Social Welfare Management* (pp. 155-168). Thousand Oaks, CA: Sage Publications.
- Gronbjerg, K. A. (1987). Patterns of institutional relations in the welfare state: Public mandates and the nonprofit sect. In S. A. Ostrander (Ed.), *Shifting the debate: Public/private sector relations in the modern welfare state* (pp. 64-80). New Brunswick, NJ: Transaction Books.
- Gronbjerg, K. A. (1990). *Managing nonprofit funding relations: Case studies of six human service organizations* (PONPO working paper No. 156 & ISPS working paper No. 2156). New Haven, CT: Institution for Social and Policy Studies, Yale University.
- Gronbjerg, K. A. (1993). *Understanding nonprofit funding*. San Francisco: Jossey-Bass.
- Gronbjerg, K. A. (2001). The U. S. nonprofit human service sector: A creeping revolution. *Nonprofit and Voluntary Sector Quarterly*, 30(2), 276-297.
- Hall, R. H. (1991). *Organizations: Structures, processes, and outcomes*. Englewood Cliffs, NJ: Prentice-Hall.
- Hammack, D. C. (2001). Introduction: Growth, transformation, and quiet revolution in the nonprofit sector over two centuries. *Nonprofit and Voluntary Sector Quarterly*, 30(2), 157-173.

- Hawley, A. H. (1968). Human ecology. In D. L. Sills (Ed.), *International encyclopedia of the social sciences*, New York: Macmillan.
- Henriksen, L. S. (1996). Voluntary organizations and local government: Lessons from a Danish case study. *Voluntas*, 7(2), 177-194.
- Interface (1986). *Public contracts for human services*. New York: Interface.
- Johnson, D. A., & Musselwhite, J. C. (1984). *Government spending and the nonprofit sector in Boise/Ada county, Idaho* (Urban Institute Research Report). Washington, DC: The Urban Institute.
- Kramer, R. M. (1981). *Voluntary agencies in the welfare state*. Berkeley, CA: University of California Press.
- Kramer, R. M. (1985). The future of the voluntary agency in a mixed economy. *Journal of Applied Behavioral Science*, 21(4), 377-391.
- Kramer, R. M. (1987). Voluntary agencies and the personal social services. In W. W. Powell (Ed.), *The nonprofit sector: A research handbook* (pp. 240-257). New Haven, CT: Yale University Press.
- Levine, S., & White, P. E. (1961). Exchange as a conceptual framework for the study of interorganizational relationships. *Administrative Science Quarterly*, 5, 583-601.
- Liebschutz, S. F. (1989). *The coping response of nonprofit organizations to governmental policy shifts: Evidence from Rochester, New York (#87RDL12)*. Albany, NY: Nelson A. Rockefeller Institute of Government, State University of New York.
- Liebschutz, S. F. (1992). Coping by nonprofit organizations during the Reagan years. *Nonprofit Management and Leadership*, 2(4), 363-380.
- Lipsky, M., & Smith, S. R. (1990). Nonprofit organizations, government, and the welfare state. *Political Science Quarterly*, 104(4), 625-648.
- Malm, K. E., & Maza, P. L. (1988). *Sources of agency income*. Washington, DC: Child Welfare League of America.
- Meadows, D. H. (1980). The unavoidable a priori. In J. Randers (Ed.), *Elements of the system dynamics method* (pp. 23-57). Cambridge, MA: Productivity Press.
- Molm, L. D. (1988). The structure and use of power: A comparison of reward and punishment power. *Social Psychology Quarterly*, 51 (2), 108-122.
- Molm, L. D., Quist, T. M., & Wiseley, P. H. (1994). Imbalanced structures, unfair strategies: Power and justice in social exchange. *American Sociological Review*, 59 (1), 98-121.

- Mulford, C. L. (1984). *Interorganizational relations*. New York: Human Science Press.
- Myllyluoma, J., & Salamon, L. M. (1992). *The San Francisco Bay area nonprofit sector: An update*. San Francisco: The San Francisco Foundation.
- Oliver, C. (1990). Determinants of interorganizational relationships: Integration and future directions. *Academy of Management Review*, 15(2), 241-265.
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations*. New York: Harper & Row.
- Powell, W. W., & Friedkin, R. (1987). Organizational change in nonprofit organizations. In W. W. Powell (Ed.), *The nonprofit sector: A research handbook* (pp. 180-192). New Haven, CT: Yale University Press.
- Rhodes, R. A. W. (1981). *Control and power in central-local government relations*. Westmead, England: Gower.
- Richardson, G. P. (1986). Problems with causal-loop diagrams. *System Dynamics Review*, 2(2), 158-170.
- Richardson, G. P., & Pugh, A. L. (1981). *Introduction to system dynamics modeling*. Cambridge, MA: MIT Press.
- Richmond, B. (2001). *An introduction to systems thinking*. Hanover, NH: High Performance Systems, Inc.
- Saidel, J. R. (1991). Resource interdependence: The relationship between state agencies and nonprofit organizations. *Public Administration Review*, 51(6), 543-553.
- Salamon, L. M. (1987a). Of Market failure, voluntary failure, and third-party government: Toward a theory of government-nonprofit relations in the modern welfare state. In S. A. Ostrander, & S. Langton (Eds.), *Shifting the debate: Public/private sector relations in the modern welfare state* (pp. 29-49). New Brunswick, NJ: Transaction Books.
- Salamon, L. M. (1987b). Partners in public service: The scope and theory of government-nonprofit relations. In W. W. Powell (Ed.), *The nonprofit sector: A research handbook* (pp. 99-117). New Haven, CT: Yale University Press.
- Salamon, L. M. (1995). *Partners in public service: Government-nonprofit relations in the modern welfare state*. Baltimore: The Johns Hopkins University Press.
- Salamon, L. M., & Anheier, H. (1998). The third route: Government-nonprofit collaboration in Germany and the United States. In W. W. Powell, & E. Clemens (Eds.), *Private action and the public good* (pp. 151-162). New Haven, CT: Yale University Press.

- Social Policy Research Group (1991). No substitute for reform. Boston: Social Policy Research Group, Inc.
- Sterman, J. D. (2000). Business dynamics: Systems thinking and modeling for a complex world. New York: Irwin McGraw-Hill.
- Yuchtman, E., & Seashore, S. E. (1967). A system resource approach to organizational effectiveness. *American Sociological Review*, 32(6), 891-903.
- Zald, M. N. (1970). Political economy: A framework for comparative analysis. In M. N. Zald (Ed.), *Power in organizations*, (pp. 221-261). Nashville, TN: Vanderbilt University Press.