



## UvA-DARE (Digital Academic Repository)

### Population Ecology of Interest Representation

Berkhout, J.

**DOI**

[10.1007/978-3-030-13895-0\\_51-1](https://doi.org/10.1007/978-3-030-13895-0_51-1)

**Publication date**

2020

**Document Version**

Author accepted manuscript

**Published in**

The Palgrave Encyclopedia of Interest Groups, Lobbying and Public Affairs

[Link to publication](#)

**Citation for published version (APA):**

Berkhout, J. (2020). Population Ecology of Interest Representation. In P. Harris, A. Bitonti, C. S. Fleisher, & A. Skorkjær Binderkrantz (Eds.), *The Palgrave Encyclopedia of Interest Groups, Lobbying and Public Affairs* (Living ed.). Palgrave Macmillan.  
[https://doi.org/10.1007/978-3-030-13895-0\\_51-1](https://doi.org/10.1007/978-3-030-13895-0_51-1)

**General rights**

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

**Disclaimer/Complaints regulations**

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, P.O. Box 19185, 1000 GD Amsterdam, The Netherlands. You will be contacted as soon as possible.

## Population ecology of interest representation

Author: Joost Berkhout

Key words: interest group system, population ecology, organizational ecology, niche theory, density dependency theory

### Definition

The population ecology of interest representation refers to a set of theoretical models that explain the numbers and types of interest groups in political systems. It derives its key assumptions from population ecology in biology (Gray and Lowery, 1996a). Population ecology critically assumes that the numbers of organizations in a given system depends on the resources available for organizational survival and the number of competitors for these resources. Competitive pressure affects the birth (entry) and death (exit) rates of organizations and, eventually, sets the limits of the number of organizations in a given environment. These assumptions are exactly the same as organization ecological models in sociological organization theory (Hannan and Freeman, 1989) Organizations live in multidimensional resource environments (niches) that function as 'guilds' within which organizations partition (or directly compete) resources among each other (Gray and Lowery, 1996b). This chapter explains the central concepts used in the perspective.

### Introduction: disciplinary roots

Population ecological models fill an important gap in the disciplinary knowledge on interest representation. Prior to the mid-Nineties, scholarly interest in the organizational composition of interest group systems was largely of an implicit nature:

To start, Truman (1951) exemplifies the pluralist view that there must be a natural banding together of people in latent groups. Such latent groups are triggered into political action by relevant disturbances (of policy or otherwise). How the social base of politics in terms of citizens' concerns or economic interests manifests itself in an organizational system of political representation is hardly noted.

Furthermore, corporatist scholars take a different view. Their assumptions are similarly implicit, but for a different reason. Interest groups, in their view, relate to each other in a hierarchical manner and their numbers are almost self-explanatory; they either follow the political-economic logic of conflict between capital and labor or effectively align with the main dimension of conflict in the party-system such as religious denomination of the 'pillars' in the Dutch case (or some combination of these forces). Traditional corporatist scholarly interest focusses on the mechanisms of institutional persistence (or infrequent change), and its capacity to accommodate 'new' interests. In such views, the enumeration of interest groups is only of interest as an indicator of the internal politics of capital, labor or some other constituent part of the political body.

Last, Olson (1965, 1982) is more specific but his views on organizational systems are strongly rooted in his theory on organizational formation. In his view, free-riding leads collective action to

require selective incentives or coercion. This creates substantial organizational hurdles that are typically only passed by narrowly focused, 'specific' interests. But organizational establishment also entrenches such interests and this leads societies 'to accumulate (...) organizations for collective action over time' (Olson, 1981, 41). This means that interest groups, in stable societies, tend to grow in number, plausibly to such an extent that they may create 'institutional sclerosis'. In this view, what matters are the differences among interests in their capacity to organize selective incentives (this explains diversity) and the age of the system (this explains density).

Population ecologists find these views insufficiently attentive to the interdependency of interest groups among each other and their dependency on their environment, or, as regards the corporatist views, too limited in its external validity. Their alternative answer is further specified in the following section, followed by a couple of examples of contemporary studies.

#### Theory: limited carrying capacity

Gray and Lowery's 1996 book *The Population Ecology of Interest Representation* is the seminal departure for this sub-field of study. Gray and Lowery (1996a) and researchers following their approach explain the density of niches on the basis of the political 'energy' ('demand') factors such as political uncertainty or legislative activity, and socio-economic 'area' ('supply') such as the number and interest concentration of potential constituents. This so-called 'Energy-Stability-Area' model may be assessed in several designs and with a distinct context-dependent operationalisation such as by explaining the number of lobbyists per economic sector on the basis of the market size and structure (area) and amount of regulation pertaining to the sector (energy).

Population ecology assumes that interest groups' main goal is to survive as organization. Their survival determines all other things, including whether interest groups lobby or not. The survival of interest groups is critically conditioned by the finite carrying capacity for organizations in a given environment. This environment consisting of organizations relying on the same resources is called a guild or a niche (or sometimes domain or sector or (sub-)population). The *carrying capacity* refers to the availability of organizational resources. In the case of interest groups, such resources are commonly related to potential constituents willing to pay membership dues and an intersection of the interests of constituents with public policy (motivating policymakers to provide policy access as 'resource'). The ultimately scarceness of such resources leads to a 'natural' limitation on the growth of the number of organizations (Gray and Lowery, 1995). This argument directly and forcefully contradicts Olson's (1981) remarks on the indeterminate growth in numbers of interest representatives.

Competitive pressure makes sure that those organizations that best 'fit' the environment maintain their existence in the long run. This process leads organizations to be relatively similar in their structure. This likeness is called *isomorphism*. Any measurement of diversity is thus within the scope of relatively similar organizations, such as all organizations that maintain a lobby function. This isomorphism is the result of selective survival of some organizations rather than by means of organizational adaptation to the environment (Hannan and Freeman, 1989). This is because organizations are assumed to find it difficult to change their core set of activities and goals. This is the assumption of *structural inertia*.

The key source of differences among organizations in terms of organizational structure or goals must come from the *birth* of new organizations. It is assumed that there is some variation in terms of the new organizations entering the system. Population ecologists are largely agnostic about whether this variation arises from a strategic calculation on the part of organizational leaders about the likelihood of organizational success, results from learning, relates to ideological conviction or has some other driver.

*Competition* for organizational resources occurs within multidimensional niches and largely takes the form of an effective *partitioning* of critical resources (Gray and Lowery, 1996b, 1998). For instance, within the niche of environmental protection groups, some groups may focus on relatively conservative potential members whereas others target relatively progressive citizens. Commonly, partitioning is positively related to organizational specialization. The effective availability of organizational resources, i.e. the carrying capacity in a given organizational environment, limits the extent to which specialization is a viable mode of survival.

These assumptions imply that, when comparing organizational environments, the number of organizations present depends on the carrying capacity and the extent to which the carrying capacity is already exhausted by existing organizations. This is called *density dependence* and is the critical linkage between cross-sectional and longitudinal ecological models. Longitudinal models, more explicitly addressed in organizational rather than population ecological studies, identify a tilted S-shaped growth pattern in which (sub-)populations of organizations develop in three stages: nascent, growing, and maturely grown stages (Nownes, 2004). In the early stages, organizations, as form, require *legitimation*. For instance, a gay-rights cause group is unthinkable prior to the Fifties but a legitimate organizational form in the Seventies. This stage is followed by a period of growth in the number of relatively similar organizations, made possible by the abundance of resources available. Populations reach a mature stage when competitive pressures make themselves felt and the carrying capacity is effectively fully realized. At this stage, the number of organizations stays at the same level, even though there may still be entry, exit and therefore organizational turnover.

This coherent set of assumptions pertains to the density of niches, or, more broadly, interest groups systems or any system of organizations. However, we would also like to explain the *diversity* of interest group systems, especially given its likely normative implications related to the extent to which there is a mismatch between interests in society and those represented before government. Population ecologists identify diversity as the aggregation of the niche specific density models, constructed along the lines noted (Lowery et al , 2005). That is, each niche (or guild) varies in its stage of development and its sensitivity to environmental change. This leads to substantial variation in the growth rates across niches, similar to the variation in the effective scale of industrial organization. For instance, when the tourism sector in a given city grows, this may lead to larger numbers of interest representatives for that sector because more specialized groups tend to be formed (e.g. the association of tourist bus companies splits off the association of taxi companies). In this case, the growth in the size of the potential constituency is more or less proportional to the growth in the size of the interest group community. In contrast, when the number of hospitals grows in a given city, it may be that the growth rate in terms of numbers of interest representatives lags or is only partially proportional to the growth of hospitals. The differential density growth rates across niches form the base for estimations and explanations for interest group diversity. In other words, one needs to calculate a large number of slope-coefficients of niche-specific density models in a

given polity, in order to predict the diversity of the group system in terms of the relative numbers of niche-interest organizations present.

### Conclusion

The volume edited by Lowery and colleagues (2015) represents the current state of the art of studies on the population ecology of interest representation (See Halpin and Jordan (2012) and 'group populations' in this encyclopedia for data and methods for mapping interest group populations). To start, the theoretical assumptions have broadly been found to be empirically valid, or at least, of greater validity than any other conceptual model, most notably Olsonian ones. This is substantiated by direct empirical assessments of the core ESA model, of distinct parts of population ecology, most notably the concept of density dependency, and of empirical studies that indirectly pertain to population ecological assumptions, such as studies on the demand-side of lobbying.

Second, population ecology concepts have a balance between abstractness and concreteness that facilitates conceptual 'traveling capacity' to several political systems, contexts and circumstances. It is a theory of the middle range that has shown to be valid in a broad range of advanced democracies. Third, macro-organizational studies are now a broadly accepted sub-field of study within the field of study of interest group politics. This is largely due to the theoretical innovation that population ecology provided. Last, the current challenge lies in connecting these system- or macro-views to studies at lower levels of aggregation such as those related to policy access, strategies or particular policy outcomes on issues. Such connections are certainly plausible: for instance, a lobbyist will probably more likely develop an exchange-relationship with a legislator in case there are no other lobbyists around, but will have to compete for access on more crowded issues (e.g. Hanegraaff et al 2019).

To conclude, the population ecology of interest representation offers an exhaustive view on the numbers and types of interest groups and therewith fills the macro-organization gap left unaddressed in earlier studies of interest representation.

Cross-references: Pluralism, Corporatism, Mancur Olson

Further readings:

Gray, V. & Lowery, D. (1996a) *The Population Ecology of Interest Representation Lobbying Communities in the American States*, University of Michigan Press, Ann Arbor, MI.

Halpin, D., & Jordan, G. (Eds.). (2012). *The scale of interest organization in democratic politics: Data and research methods*. Basingstoke: Palgrave Macmillan.

Lowery, D., Gray, V., & Halpin, D. (Eds.). (2015). *The organization ecology of interest communities: An assessment and an agenda* Palgrave.

## References

- Aldrich, H.E. (1979) *Organizations and Environments*, Prentice-Hall, London.
- Gray, V. & Lowery, D. (1996a) *The Population Ecology of Interest Representation Lobbying Communities in the American States*, University of Michigan Press, Ann Arbor, MI.
- Gray, V., & Lowery, D. (1996b). A niche theory of interest representation. *The Journal of Politics*, 58(1), 91-111.
- Gray, V., & Lowery, D. (1998). To lobby alone or in a flock: Foraging behavior among organized interests. *American Politics Research*, 26(1), 5-34.
- Halpin, D., & Jordan, G. (Eds.). (2012). *The scale of interest organization in democratic politics: Data and research methods*. Basingstoke: Palgrave Macmillan.
- Hanegraaff, M., van der Ploeg, J., & Berkhout, J. (2019). Standing in a Crowded Room: Exploring the Relation between Interest Group System Density and Access to Policymakers. *Political Research Quarterly*, 1065912919865938.
- Hannan, M. T., & Freeman, J. (1989). *Organizational ecology*. Harvard university press.
- Hannan, M.T. & Carroll, G. (1992) *Dynamics of Organizational Populations: Density, Legitimation, and Competition*, Oxford University Press New York.
- Lowery, D., & Gray, V. (1995). The population ecology of Gucci Gulch, or the natural regulation of interest group numbers in the american states. *American Journal of Political Science*, 39(1),
- Lowery, D., Gray, V., & Fellowes, M. (2005). Sisyphus meets the Borg: economic scale and inequalities in interest representation. *Journal of Theoretical Politics*, 17(1), 41-74.
- Lowery, D., Gray, V., & Halpin, D. (Eds.). (2015). *The organization ecology of interest communities: An assessment and an agenda* Palgrave.
- Olson, M. (1982). *The rise and decline of nations*. New Haven: Yale University Press.
- Nownes, A. J. (2004). The population ecology of interest group formation: mobilizing for gay and lesbian rights in the United States, 1950–98. *British Journal of Political Science*, 34(1), 49-67.