efficacy and psychological qualities necessary for participation in the political system.

STRAUSS takes an early and important sceptical look at the development of American industrial relations and social science theory and practice. He notes that the reaction against Taylorism has led to a number of idealistic advocacies against centralized autocratic behaviour which are likely to be unsustainable in practice, for example, supervisors are urged to become more sensitive and considerate; and bosses are encouraged to delegate, institute participative practices, and induce behaviour and attitude changes in order to achieve the goal of power equalization. He argues that strong value-judgements lie behind these exhortations to change, which show all the hallmarks of their academic origins.

COLE develops a critical analysis of the differences between Japan, Sweden, and the United States, based on existing studies, and mainly related to quality circles. His thesis is that participatory work practices were introduced for economic reasons in Japan, and for political and economic reasons in Sweden. The same conditions did not apply to the United States, where participative practices were advocated - and he believes oversold - by social scientists who did not understand the reasons for the use of these practices in other countries.

QVALE reviews four generations of programmes for developing participative democracy in Norwegian working life since 1964. He approaches the topic from the broad perspective of European experience, including the important organizational democracy programmes in Sweden. Both programmes, heavily supported by successive government grants, endorsed the view that participative forms of management are necessary for economic competition in the modern world, because it is only through participation that human resources can be adequately utilized. Ovale's chapter ends with a brief description of a follow-up programme that will continue into the 21st century.

The INDUSTRIAL DEMOCRACY IN EUROPE (IDE) research is a large-scale comparative study in 12 European countries, carried out during two periods separated by ten years (1977-87). The study was designed to inform policy at the organizational and European Community level about the relationship between formally prescribed power-sharing structures, such as laws or binding agreements, and the de facto degree of participation available to employees at different levels of organization. Several policy-relevant conclusions emerged. In both studies, there was a significant statistical relationship between formal legally supported structures and the de facto amount of influence-sharing available to lower levels of organization, and this influence varied with the nature of the issue being decided.

Decisions In Organizations (DIO – see HELLER et al. 1988) is a five-year longitudinal study in three countries and seven organizations, which followed the IDE studies, and used very similar variables to assess participatory democracy. By using in-depth processual field methodology, the objective was to test and extend the findings from IDE and to give them additional practical policy relevance. A major inhibiting factor in participation is employees' lack of relevant experience and competence, and for this reason, a distinction has to be made between routine, tactical, and strategic decisions, with lowerlevel employees being more interested in, and having more say in, routine workplace issues than higher-level employees.

MILES has established a reputation for linking participation with the human asset potential and its utilization. He argues that current and future requirements, based on economic pressures, foreign competition, and dramatic technological changes, are for highly adaptive organizational networks. In this context, participative management will be increasingly viewed as essential rather than optional. By participative management, he means the design of greatly empowered jobs at the rank-and-file level, and the development of self-directing work teams.

HELLER et al. (1998) reviews and critique the still rapidly growing area of theory, field research, and organizational experience, looking at work that is now covered under many different terms including: employee involvement, participation, organizational democracy, empowerment, semi-autonomy, codetermination, teamworking, quality circles, works councils, and joint consultation. Although attempting to present a balanced view, the conclusions stress the unsatisfactory nature of much research that is instrumental and focused on limited areas instead of taking a holistic systems approach, which is likely to be more successful. The final chapter looks towards the next century and allows for a limited degree of optimism.

WAGNER analyses a considerable number of published results using meta-analysis, which is confined to certain statistical data on defined variables, and therefore excludes many important studies in this field. Nevertheless, his conclusions are important: there is reliable evidence of small but statistically significant changes in performance and satisfaction associated with participative behaviour. He concludes that these small improvements would only be worthwhile for management if they cost little to implement.

FRANK HELLER

Party politics

Beck, Paul Allen, Party Politics in America, 8th edition, New York: Longman, 1997

Daalder, Hans and Peter Mair (editors), Western European Party Systems: Continuity and Change, London and Beverly Hills, California: Sage, 1983

Duverger, Maurice, Political Parties: Their Organization and Activity in the Modern State, 3rd edition, London and New York: Methuen, 1969 (French edition 1951)

Geer, John G. (editor), Politicians and Party Politics, Baltimore: Johns Hopkins University Press, 1998

Hix, Simon and Christopher Lord, Political Parties in the European Union, Basingstoke: Macmillan, 1997

Katz, Richard S. and Peter Mair (editors), How Parties Organize: Change and Adaptation in Party Organizations in Western Democracies, London and Thousand Oaks, California: Sage, 1994

Kohno, Masaru, Japan's Postwar Party Politics, Princeton, New Jersey: Princeton University Press, 1997

Lipset, Seymour Martin and Stein Rokkan, Party Systems and Voter Alignments: Cross-National Perspectives, New York: Free Press, and London: Collier Macmillan, 1967

Lovenduski, Joni and Pippa Norris (editors), Gender and Party Politics, London and Thousand Oaks, California: Sage, 1993

Panebianco, Angelo, Political Parties: Organization and Power, Cambridge and New York: Cambridge University Press, 1988 (Italian edition 1982)

Party Politics, London: Sage, 1995—
Sartori, Giovanni, Parties and Party Systems: A Framework for Analysis, Cambridge and New York: Cambridge University Press, 1976

Political parties are central to the political process, and so much is written and published about them that no short list could ever do justice to the field. The problem of selecting a few representative works is compounded by the fact that recent years have witnessed an exponential growth in the literature on party politics. Considerations of individual parties abound, ranging from broad histories to detailed analyses of particular aspects of partisan activity. Democratization has increased the number of parties whereas new forms of political organization continue to alter the partisan landscape of the more established democracies. There are many excellent monographs and collections of essays on party systems within individual states, but some of the most intriguing work in the field of party politics considers political organizations from comparative or theoretical perspectives.

First published in French in 1951 and in English in 1954, the classic work by DUVERGER was a touchstone for subsequent work on the subject of political parties. Used as a text and reference book for generations of scholars, its description and analysis of the different types of party systems remain influential although perhaps somewhat outmoded by the recent proliferation of new theories. Equally central to the study of party politics is the volume edited by LIPSET & ROKKAN, which set the terms of debate for decades after publication. The introduction by the editors is still frequently cited, while essays by luminaries such as Juan Linz and Immanuel Wallerstein were of more than passing interest. While the case studies are today perhaps somewhat dated, the tome's lasting relevance relates to its persuasive arguments about the centrality of cleavage structures and other societal characteristics to party politics. The extensive list of selected reading on parties and elections included at the end of the book reflects the difficult task of providing a short reader's guide to the literature on party politics.

The 14 papers in DAALDER & MAIR represent a powerful review of party politics from a comparative perspective. Examining such diverse phenomena as changing patterns of electoral volatility, the importance of turnout, the composition of parties, party competition, and internal structure of political parties, the collection retains its utility almost two decades after publication. The introduction and conclusion by the editors usefully frame the terms of debate in the comparative study of political parties and present various theories of change for party politics and party systems more generally. The more recent collection edited by KATZ & MAIR provides an update on a number of specific cases, including an examination of the formation of parties in the European Parliament. Mair's introductory chapter helpfully examines the place of parties as intermediaries between civil society and the state. One weakness of the volume, however, is that all of the cases except one (the US) are drawn from Western Europe, thus neglecting party politics in democracies elsewhere and, indeed, the actions and impact of political parties in regimes that are more authoritarian than polyarchic or democratic.

No survey of major works related to party politics would be complete without mentioning Giovanni Sartori, whose theoretical and empirical work continues to command respect. SARTORI builds a framework for understanding the nature and operation of party politics in a variety of contexts across time and space, not simply Western and democratic but also non-Western and non-democratic. The volume is perhaps somewhat lacking in causal explanation, because it is unclear why some states develop one type of party system while others are characterized by different party politics. This minor weakness is more than made up for, however, by the volume's strong analytical distinctions, classification, and the typology of parties and party systems.

In studying party development and transformation, PANEBIANCO argues that the leaders of political parties are entrepreneurs who seek to achieve and maintain power. Once power is achieved, the party leadership will move to stabilize and solidify its organizational structure. The book's key arguments concern the evolution of the mass-bureaucratic party into what the author terms electoral-professional parties. These are, essentially, fickle teams of political entrepreneurs who seek power and utilize the structure and institutions of parties as means to that end. While the empirical evidence adduced is wide ranging, the book neglects the US, which provides perhaps the closest approximations to the model of electoral-professional parties.

The literature on party politics in the US is immense. The standard account of the American partisan landscape is BECK, now in its eighth edition. The recent collection edited by GEER builds upon this tradition yet moves beyond its constraints in a number of innovative ways. Dedicated to Stanley Kelly Jr., the book also includes chapters by such as leading political scientists as Robert A. Dahl, Fred I. Greenstein and David R. Mayhew. The essays are grouped under three headings, which examine the actions of parties in, respectively, mobilizing, campaigning, and governing. Beck is essential for introductory and general purposes, but the Geer volume is perhaps better suited to more advanced or specialized topics in the study of American party politics.

After studies of American political parties, considerations of party politics elsewhere abound as well. There are so many excellent collections and monographs concerned with political parties and party systems in specific jurisdictions outside the US that attempting a list here would be futile. Nevertheless, KOHNO and HIX & LORD merit particular attention. The former is noteworthy for its use of a microanalytic framework to examine Japanese party politics. Rejecting conventional views and traditional methods - what the author terms the political-culture, historical, and socio-ideological approaches the book instead adopts a rational choice perspective by focusing on the decisions of individual politicians and parties. The latter volume examines the complex and sometimes confusing partisan landscape of the European Union. The authors show that, while the Union is characterized by a system of very weak party organization, decision making is nevertheless systematically affected by political parties; party politics is central to the European Union's operation.

Some works on party politics are primarily thematic in nature. A good example of this kind of work is the volume edited by LOVENDUSKI & NORRIS. Most of the contributors have since written related pieces published elsewhere, but

the collection remains useful for its broad geographic scope and thematic focus.

Finally, the relatively new journal PARTY POLITICS provides a vital forum for new research in the field. Students and scholars of party politics are well advised to consult the journal to keep abreast of the most important developments in this vast yet ever-evolving field of study.

WILLEM MAAS

See also Catch-all parties

Patents

- Archibugi, Daniele and Mario Pianta, "Measuring Technological Change through Patents and Innovation Surveys", *Technovation*, 16/9 (1996): 451-68
- Arundel, Anthony and Isabel Kabla, "What Percentage of Innovations Are Patented? Empirical Estimates for European Firms", Research Policy, 27 (1998): 127-41
- Basberg, B.L., "Patents and the Measurement of Technological Change: A Survey of the Literature", Research Policy, 16 (1987): 131-41
- David, Paul A., "Intellectual Property Institutions and the Panda's Thumb: Patents, Copyrights, and Trade Secrets in Economic Theory and History" in Global Dimensions of Intellectual Property Rights in Science and Technology, edited by M.B. Wallerstein, M.E. Mogee and R.A. Schoen, Washington, DC: National Academy Press, 1993
- Dutton, H.I., The Patent System and Inventive Activity during the Industrial Revolution, 1750-1852, Manchester: Manchester University Press, 1984
- Granstrand, Ove, The Economics and Management of Intellectual Property: Towards Intellectual Capitalism, Cheltenham, Gloucestershire: Elgar, 1999
- Griliches, Zvi, "Patent Statistics as Economic Indicators: A Survey", Journal of Economic Literature, 28/4 (1990): 1661-1707
- Kaufer, Erich, The Economics of the Patent System, Chur: Harwood, 1989
- Levin, R.C., A.K. Klevorick, R.R. Nelson and S.G. Winter, "Appropriating the Returns from Industrial Research and Development", *Brookings Papers on Economic Activity*, 3 (1987): 242-79
- Ordover, J.A., "A Patent System for both Diffusion and Exclusion", Journal of Economic Perspectives, 5 (1991): 43-60
- Pavitt, Keith, "Uses and Abuses of Patent Statistics" in Handbook of Quantitative Studies of Science and Technology, edited by Anthony F.J. van Raan, Amsterdam and New York: North Holland, 1988
- Scherer, F.M. and David Ross, Industrial Market Structure and Economic Performance, 3rd edition, Boston: Houghton Mifflin, 1990
- Van Dijk, Theon, The Limits of Patent Protection, Maastricht: Universitaire Pers Maastricht, 1994
- Winter, Sydney, "Patents in a Complex System: Incentives and Effectiveness" in Owning Scientific and Technical Information, edited by Vivian Weil and John W. Snapper, New Brunswick, New Jersey: Rutgers University Press, 1989

Economists are interested in patents for four reasons: they represent an important and early institution of market economies; they grant a legal monopoly to the exploitation of inventions whom coverage and length is decided by government; they represent a strategic tool that firms use to protect their technological innovations; and they are a useful statistical measure of technological change.

KAUFER shows how the patent system progressively moved from a privilege granted by the sovereign to please given individuals to a right based on an objective assessment of the inventions. It was the Republic of Venice in 1474 that firstly introduced the modern patent system based on the criteria of novelty and usefulness of the inventions. DUTTON provides a detailed account of how the patent system flourished during the British Industrial Revolution showing that it had a significant role to induce individuals and scientists to search for economic applications of their new ideas. A wider historical perspective on patents and, more generally, on intellectual property rights is supplied by DAVID.

SCHERER & ROSS present the patent system as a deal between inventor and society: society provides the right to the inventor to fully exploit the returns of its own inventions for a limited period of time and the individual discloses his or her scientific and technical information. From the deal, the economic agents will be able to be rewarded for the time and money invested in inventive activity, and society benefits from scientific and technical advance.

Since its introduction in industrial economies the usefulness of the patent system has been challenged. Scherer & Ross and Kaufer report the arguments of the defenders and of the detractors of the patent system. The former argue that to reward inventors increases the pace of technical change and the investment in technical change. The latter argue that the legal monopoly granted by patents block the diffusion of innovations.

VAN DIJK shows that there are a number of policy instruments that governments can use to tune the scope of the patent protection in order to achieve a welfare optimum. They include: the degree of novelty required to obtain a patent, the costs associated to the patent procedure, the level of the renewal fees, the scope and length of the patent protection, the penalties for patent infringement. ORDOVER argues that governments should use these tools in order to obtain a patent system to guarantee both diffusion and exclusion. The weak patent protection that dominated until the end of the 1980s has favoured the international transfer of technologies and, in turn, the industrial growth of several countries.

LEVIN et al. move from the theory that has inspired government action to the practice of the business world and, on the basis of a fresh survey, they show that patents are less important to firms than generally believed. First, they show that neither the disclosure of the invention contained in the patent file nor the protection granted is total: on the one hand, the inventor has an interest to disclose as little as possible; on the other hand, the possibility of legally protecting inventions through patents is limited. Second, while in selected industries, and most notably chemicals, pharmaceuticals, and instruments, patents are an important competitive tool, in other industries they are not. Firms use a variety of methods to appropriate the returns of their technological activity, including lead time and marketing. These methods do not conflict with patent