with what the old master actually wrote — even in his undergraduate textbook (still in print in paperback after a century), but particularly in his 1919 *Industry and Trade*. "The preeminent figure in what has come to be called the neoclassical school" (as J.K. Galbraith terms him) was, in his mid-70s, keeping himself up to date with industrial engineering on both sides of the Atlantic, and occasionally extrapolating from it — for example, giving a succinct description of what we now know as containerisation. Where are the economists of yesteryear?

In fact, I cannot resist giving old Marshall the last word on the commercial republic. Addressing the Royal Economic Society in 1907, he attempted to give new meaning to an old slogan: "Laissez faire: — let the State be up and doing".

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\* If I am wrong in this identification, it is because it is easier to find clear definitions in Smith than in Caton. As R.L. Stevenson said of Hazlitt, "though we are mighty fine-fellows nowadays, we cannot write like Smith."

Information and Legislative Organisation by Keith Krehbiel (The University of Michigan Press, Ann Arbor, US, 1991), pp. vii + 314, \$US27.95, ISBN 0-472-09460-2.

This book is a political analysis of theories of legislative organisation of the US Congress, based on the premise that the structural features of legislatures have great influence on the policy outcomes and the operation of political systems.

I question its practical use to the political decision-makers. Interesting theoretical concepts are often expressed in tangled jargon, making elementary ideas unnecessarily complicated. Many of the basic notions could be far more simply expressed. However, the author is redeemed by using examples from committee proceedings, which give the theories immediacy. Further, it does expand the academic debate with regard to theories of legislative practice, at least as it has been conducted from the economic theorist's viewpoint.

Theories have fashions. In the late 1970s, research on legislative politics moved from informal descriptions to formal theories, which explored the theoretical underpinnings of the system — in this case, the US Congress. Throughout the book, the historical context is well covered and puts the current debate into perspective. According to Krehbiel, current wisdom is towards 'distributive' theory.

The author contrasts two broad theoretical constructs: the distributive and the informational. The former states that Congress operates principally by 'distributive' mechanisms — to provide 'gains from trade' between legislators and selected electors, that is, who gets what at whose expense, also variously described as log rolling and pork barrelling.

The distributive perspective on legislative organisation depicts the legislature as a collective choice body whose principal task is to allocate policy benefits (p. 3).

The informational theory incorporates the notion of policy expertise as a collective good. To illustrate the operation of uncertainty and the need for consistent expert information, the author gives an example of the Star Wars

debate. Following a reference to the fact that US spends almost as much on pantyhose as on Star Wars, Mrs Boxer, a member of the House and Senate Armed Services Committee, commented:

Pantyhose has a mission which does not change every day. The Star Wars mission has changed from being a protective shield to military information defense to accidental launch protection to brilliant pebbles to terrorist deterrence. Let us face it, Star Wars has changed more times than Imelda Marcos has changed her shoes (Congressional Record, July 25, 1989, H4207) (p.63).

The information framework of legislature must capture the gains from specialisation in collecting and using information while "minimising the extent to which enacted policies deviate from majority-preferred outcomes" (p. 3).

The objective of the book is to evaluate the major principles of legislative organisation as predominantly distributive or informational. "The more important aim of this book has been to advance an alternative, informational theory of legislative organisation. To do this, it was useful and ultimately constructive to refute the predictions of distributive theories" (p. 248). Krehbiel concludes that while who gets what, i.e. distributive aspects, is an integral part of politics, informational theories better embody uncertainty and are better predictors.

An index of predictive factors to forecast committee composition and choice of procedures was developed, and probability analysis was used to test the hypothesis against actual outcomes in the 99th Congress.

Five unique predictors were identified. In each of the three stages of the legislative process — the formation and composition of standing committees, the choice of bill-specific rules on the floor, and the development and use of post-floor procedures — information theories predicted substantially better than their distributive forerunners (p. 249).

However, a cynic might observe that it is possible to find supportive evidence for differing theories from committees procedures.

Using case studies, Krehbiel demonstrates the complex interaction of legislature and the electors, in the context of uncertainty. He brings to the equation the vexed question of imperfect information. "The proper inference from the findings is that legislators care about distributional AND informational benefits" (p. 260).

However, the author states that because of uncertainty in the political environment, legislators are more limited in gaining pork barrel benefits than is generally suggested in theoretical research. He states that theoretical frameworks are necessary to avoid intuitive conclusions which may be "ambiguous, logically imcompatible, or both" (p. 15).

Krehbiel points to the benefits of joint theoretical/empirical research. In a cyclical way, theories arise from observed behaviours, and are explicit. They can be used to predict outcomes, and can be tested empirically, evaluated, and adapted or discarded.

The author introduces two postulates, majoritarianism — "objects of legislative choice in both the procedural and policy domains must be chosen by a majority of the legislature" (p. 16) and uncertainty — "Legislators are often uncertain about the relationship between policies and their outcomes" (p. 20). The two postulates are tested in relation to the distributive and informational theories, and the conclusion drawn that informational theories are better predictors of legislative organisation.

Theoretical constructs are necessarily incomplete. They cannot take account of political reality. However, as tools, they can be used to predict possible outcomes, given a set of circumstances.

The author concludes with a plea for active researchers in the field of US politics or legislative research ". . .to read skeptically and to respond critically with additional research" (p. 265). In fact, informational theory was foreshadowed by Anthony Downs, whose classic work deals explicitly with the causes and effects of uncertainty (i.e., information or lack of it) in politics. More recently, Calvert surveyed the theoretical literature on the effects of imperfect information in politics, concentrating on treatments using the rational actor methodology.

I noticed that no account is really taken of the implications of the new communication and information technologies in the democratic process, in relation to access to or dissemination of information. For a book which has information in the title and is published in 1991, this is surprising.

An interesting aspect of this work would be to compare the US and Australian systems in the operation of pork barrelling and the role of information, to see if there are cultural differences. An important question arises if pork barrelling is accepted as the sole motivating factor in the legislative process. If influence is exerted only by the powerful minorities in a society, what are the implications for pluralist democracy? This book will be of interest particularly to economists (needing to diversify), political scientists and sociologists studying the interaction of the social sciences and, generally, to people who are watchers of the political process.

## REFERENCES

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- Randall L. Calvert, Models of Imperfect Information in Politics, Harwood, London, 1986.

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Australian Science & Innovation Impact Brief 1991: Measures of Science and Innovation 2. A Report in a Series on Australia's Research and Technology, and their Utilisaton by Australia, by the Department of Industry, Technology and Commerce (DITAC), Science and Technology Policy Branch (Australian Government Publishing Service, Canberra, 1991), pp. 46, \$6.95, ISSN 1036-3173.

This publication is the second in a series being published by DITAC on *Measures of Science and Innovation*. The first was published in 1987; a third volume on resources is due out shortly. The publication under review has been designed so that decision-makers, policy advisers and analysts have quantitative and comparative information about Australia's performance in a number of critical areas available in a brief and graphic format. It covers a broad area of science and technology research and development, as well as issues of industry, manufacturing and trade. Some types of information not previously available are included.

The *Impact Brief* is divided into five sections: 1) A Technological Perspective on Industry and Trade; 2) Diffusion of Advanced Manufacturing Technology; 3) Patents — Innovation and Internationalisation; 4) Scientific Literature —