Dexter Dunphy: Pushing the Boundaries of Change

28

Doug Stace

Abstract

Dexter Dunphy is an Australian who contributed to organization development theory in the early 1970s and then in the 1990s (with colleague Doug Stace) introduced to the field of organization theory a comprehensive contingency model of organization change. He held academic appointments at Harvard University, the University of New South Wales (UNSW), and the University of Technology Sydney (UTS).

He also contributed to the internationalization of management theory through studies of management, including change management, in East Asia. Subsequently, after 2000 (with colleagues Andrew Griffiths and Suzanne Benn), he developed a comprehensive phase model outlining key stages through which organizations can progress to become both sustainable and sustaining. These models were supported by detailed organizational case studies describing how change programs were undertaken and evaluating the outcomes in terms of a variety of performance criteria. These conceptual developments were responses to major challenges occurring in the environments of organizations subsequent to the end of World War II through to the second decade of the twenty-first century.

Dunphy worked with senior executives of corporations, companies, and organizations, in Australia and internationally, in designing large-scale in-house and system-wide change programs. He was involved in training organizational change agents and creating and maintaining active networks of change consultants for the exchange of ideas and approaches. The chapter concludes with an outline of key issues for the future development of the field.

D. Stace (✉)
AGSM, University of New South Wales Business School, Sydney, NSW, Australia

Cass Business School, City University, London, UK
e-mail: doug.stace@agsm.edu.au; dougsta@stacenet.com.au

451

Contents

Introduction

Dunphy was born in 1934 in Sydney, Australia, to a family with strong environmental and social convictions. His father, Myles, is known as the father of Australian wilderness. Like John Muir in the United States, he spent his life working to establish major national parks. Dunphy's mother, Margaret, of Huguenot and Methodist ancestry, held strong values supporting justice and freedom. His elder brother, Milo, was an environmental activist. Dunphy's consciousness was formed in this family matrix where ecology and people were valued and strong convictions translated into action.

At age 18, Dunphy established a youth club and was intrigued by how individuals changed their behavior when they joined a group. He enrolled in an arts degree program at Sydney University, majored in education, and was introduced to John Dewey's progressive education philosophy and pragmatism (Dewey 1933). These writings emphasized intervening to make change and learning by doing and through seeking feedback. His undergraduate honors thesis in education was supervised by Hugh Philp, who held a PhD in social relations from Harvard. Philp introduced him to contributions to small-group theory by Robert F. Bales, professor of social relations at Harvard, and colleagues (Bales 1950). Their research findings demonstrated the power of groups to influence individual behavior. These writers sought to understand social systems as dynamic entities and to intervene to enhance goal achievement and member satisfaction.

In his undergraduate honors thesis, Dunphy repeated and extended Bales's laboratory experiments – studies of developmental processes in leaderless student groups (Bales and Strodtbeck 1951; Heinicke and Bales 1953). Dunphy's study showed similar results despite the different cultural environment (Philp and Dunphy 1959). He became fascinated by how roles differentiate in small groups: social evolution on a microscale.

After receiving his BA with honors, he enrolled in a master's in education degree program at Sydney University in 1960, again supervised by Philp. His thesis explored how peer groups influence the psychosocial development of adolescents. For 3 years, Dunphy located informal teenage groups in Sydney and joined these groups on street corners, at beaches, wherever they hung out. He developed a new theory of the evolution of peer-group structures and leadership, showing how this affected adolescent development as the peer group replaced the family as the prime socialization influence. The study was published in a widely reprinted and quoted article (Dunphy 1963) and a book (Dunphy 1969) that became standard reading for teachers in training in Australia.

Influences and Motivations: Defining an Intellectual Agenda

Philp encouraged Dunphy to undertake a PhD abroad, preferably at Harvard in the Department of Social Relations. Dunphy mailed a summary of his MEd thesis to Bales and received a very encouraging response. He applied for admission and, after being awarded a first-class honors MEd, was accepted into the Harvard social relations department PhD program in sociology. He joined a research team on the General Inquirer Project, directed by Bales and Philip J. Stone. This was a ground-breaking use of computer technology to analyze content in small-group interaction – an early initiative in computer-based text processing. Dunphy contributed to the development of the automated content-analysis system the General Inquirer (Stone et al. 1966) and used the methodology in his PhD thesis (Dunphy 1968). The thesis was a study of group process in self-analytic groups. While at Harvard, he also enrolled in postgraduate classes in sociology, social psychology, clinical psychology, and social anthropology. He worked with and was influenced by Robert F. Bales, Talcott Parsons, Philip J. Stone, Marshall Smith, and Daniel Ogilvie.

At Harvard, he met leading figures in small-group theory and organization theory. He also taught courses in the Department of Social Relations – one was the team-led Social Relations 120: Analysis of Interpersonal Behavior, taught in parallel classes by Bales and leading psychoanalysts. He spent hundreds of hours systematically observing group process in these classes. About this time Dunphy decided "to continue to climb the sociological ladder" (Personal communication, May 3, 2016). He felt that he had a reasonable grasp of personality psychology and small-group theory. The organization is the next step up the ladder after the individual and the small group. So he began working with Harvard Business School (HBS) faculty who were actively involved in researching and consulting in organizations. Beyond that he envisioned going further to understand societal structure and culture, and this guided much of his subsequent career development.

Dunphy gained his PhD in sociology at Harvard in 1964 and was offered a position as assistant professor jointly in the Department of Social Relations and HBS. At HBS he taught in another team-led course: Human Behavior in Organizations, a foundation MBA course. Colleagues who influenced his thinking at this time

were Paul Lawrence, Jay Lorsch, Renato Tagiuri, and Richard Walton, who were actively involved in researching organizational change and in change consulting.

In 1967 Dunphy returned to Sydney, Australia, to take up a senior lectureship in sociology at the University of New South Wales (UNSW). There was strong growth in student numbers in sociology – a new academic discipline in Australia.

After 2 years, he accepted a chair in Organizational Behavior in the Faculty of Commerce, UNSW. Apart from administering the OB department and contributing to the MBA program, Dunphy researched, particularly with colleague Bill Ford, new developments in work redesign, industrial democracy, and the impact of new technologies on work organization. These studies involved field research in a variety of industries where new technologies were being introduced, change interventions, and evaluation of the impact of changes on variables such as productivity, work satisfaction, and industrial relations. Also at this time he and his colleagues initiated personal and organizational change workshops for executives. These residential workshops attracted many private and public sector executives. Dunphy also supervised PhD students who went on to occupy senior academic positions or establish successful consulting companies.

The work of the Department of Organization Behavior had a major impact on the policies of national and state governments, particularly policies for workplace change, job redesign, and productivity improvement. Ongoing links were established with Scandinavian and British researchers driving workplace redesign in their countries, and faculty interchanges took place. In the 1970s, Dunphy's colleague Bill Ford worked closely with the national Labor government and gained commitment and funding to exchange between Australia and Sweden, senior civil servants and academics with work redesign, and industrial relations expertise. Some researchers were attached directly to the Department of Organization Behaviour.

In 1972 Dunphy delivered the Australian Broadcasting Commission's Boyer Lectures on "The Challenge of Change" (Dunphy 1972). The Boyer Lectures are a series of five radio lectures delivered annually by an outstanding individual (the Australian equivalent of the BBC's Reith Lectures). Dunphy used this opportunity to examine the impact of the increasing speed of technological and social change on the economy, society, the workplace, and personal life. The printed version of the lectures went through four editions and were widely read and referenced.

He became increasingly interested in broadening management theory beyond what he saw as the cultural insularity of US theories. So in the 1970s with colleague Bill Ford, he initiated studies of management in Asia, particularly Japan and China, where some of the largest organizational changes in history were in process (Dunphy and Stening 1984; Dunphy 1986; Dunphy and Shi 1988). This led in 1985 to organizing an academic conference with Professor Gordon Redding, University of Hong Kong. The conference, the Enterprise and Management in East Asia (Clegg et al. 1986), held in Hong Kong, brought together a select group of 30 academics from around the world, each specializing in some aspect of management in East Asia. Later that year he organized the lead symposium in the International Division of the (American) Academy of Management on management in East Asia and delivered the opening paper, "A Comparative Study of Enterprise Management in

Japan and the People's Republic of China." His work was informed by several invited visits to Japanese and Chinese universities; in China, in 1974, he gave what may have been the first lectures in post-revolutionary China on Western management (until then a forbidden subject).

In 1981 Dunphy authored *Organizational Change by Choice* (Dunphy 1981), widely used by managers in Australia as well as in MBA courses. Reprinted several times over the next 10 years, it became an Australian best-selling management book that broadened the OD model of change to include large-scale organizational redesign. An early chapter "change begins with me" discussed the importance of managers and supervisors at all levels exemplifying in their personal behavior the changes they wanted to bring about in the organization, thus directly linking personal to structural and cultural change.

In 1977 the Australian government set up a commission of international business academics to inquire into management education in Australia. The commission, headed by Dean Cyert of Carnegie-Mellon University, in Pittsburgh, Pennsylvania, recommended that a national school of management be set up at the University of New South Wales; eventually the Australian Graduate School of Management (AGSM) was founded. From 1982 Dunphy played a significant role in the school's development. At the AGSM, he designed and taught the school's first organizational change course. Each year he invited 10 practicing managers, with ongoing organizational change programs, to attend. They participated in class discussion sessions, and the students worked in change programs under their direction. Dunphy and colleagues also instituted an executive MBA program for managers delivered online nationally, with face-to-face tutorials in capital cities. An integral part of the program was a Change Management Qualification (CMQ) designed by a team of change agents under Dunphy's direction; the curriculum development was financed by Andersen Consulting.

In 1990, 18 Australian special research centers were funded by the Australian federal government – the Australian Research Council's most prestigious and highly funded centers. Each was established under the leadership of an academic with an outstanding research record. Dunphy was awarded one of these centers, the Centre for Corporate Change (CCC), the only special research center funded to conduct research on management. This allowed him to recruit staff and initiate multiple organizational change research projects. The CCC working paper series was written for executives and widely read across Australian-based organizations. They presented results from the broad range of research being conducted in the CCC into leading edge change in contemporary organizations. He was concerned to ensure that developing organizational theory and research were put into immediate practice.

In 1994 Dunphy initiated the first International Conference on Organizational Change, jointly sponsored by the University of Southern California and the University of Warwick, in England. The conference was held at the AGSM over 2 days and assembled 30 leading researchers in organizational change from around the world. Immediately following this, selected conference participants spoke at the Australian Human Resources Institute's national conference, Empowering People for High-Performance Organizations. The presentations were to a large audience of human-

resource practitioners in Sydney and relayed by satellite to audiences in other capital cities. Again this reflected a commitment to ensuring practitioners had timely access to the best contemporary research findings.

In 1998 Dunphy cooperated with Michael Beer (Harvard Business School) to hold a second international conference on organizational change, Breaking the Code of Change, held at HBS. Ninety leading change researchers and practitioners attended, and the conference resulted in a major publication (Beer and Nohria 2000).

Dunphy was also integrating issues of sustainability into his developing understanding of organizational change because he perceived the increasing impact of organizations on the natural and social environment (Dunphy and Griffiths 1998). He therefore began developing a new model of change, the sustainability phase model, to define a path for enterprises to move toward more sustainable operations. In this he was influenced by his love of the natural world and by developments in sustainability and corporate social responsibility. Dunphy saw that successful organizations pursued larger goals than simply financial returns. The sustainability phase model was first outlined in *Sustainability: The Corporate Challenge of the 21st Century* (Dunphy et al. 2000) and more fully developed and elaborated in *Organizational Change for Corporate Sustainability* (2003, 2007, 2014) and in other books and articles. Key collaborators were Andrew Griffiths and Suzanne Benn. The model has been used worldwide and influenced the practice of many managers. The principles in this and other related publications were extensively illustrated with international case studies. Work on this comprehensive change model has continued and been reported in many publications coauthored with colleagues Andrew Griffiths, Suzanne Benn, and others (for further discussion of this model, see "Key Contributions: Developing Contingency Theories of Change" and Fig. 2 below).

While on the AGSM faculty, Dunphy designed and led many executive programs. Some programs included participants from a range of private and public sector organizations, while others were in-house programs. An example of one such in-house program was the Zurich Asia Academy, designed by Dunphy for Zurich Insurance's Asian managers and repeated annually for 5 years. Each program consisted of three 1-week residential segments held successively in Sydney, Singapore, and Hong Kong. The program was designed around executive development and emphasized managing personal, career, and organizational change.

In 2007 Dunphy was made a Member of the Order of Australia (AM) in the Australian Honors List for service to education, particularly in the fields of organization change, corporate sustainability, and management. This recognized that his contributions in these areas deserved national recognition.

Dunphy has consulted to over 170 organizations in Australia and abroad, including many of Australia's largest companies and multinationals operating in Australia. His consulting has covered a wide range of projects mainly in large- and medium-sized organizations in different industries and centered on the effective management of change. In most cases he has worked directly with the CEO and executive team, often reporting directly to the CEO, although his work has usually taken him to all organizational levels. A leading aim has been to improve organizational performance and employee satisfaction – for example, Agnew Mining and Fuji Xerox Australia

(see "Key Contributions: Developing Contingency Theories of Change" below). His consulting has usually involved working with senior executive teams managing large-scale organizational transformation.

In 2000 Dunphy left the AGSM and moved to the University of Technology Sydney (UTS) as a distinguished professor. While there he concentrated primarily on research on organizational change but with increasing emphasis on corporate culture. A research collaboration with the international consulting firm Human Synergistics analyzed their large quantitative database of organizational change cases. Results were published as *In Great Company: Unlocking the Secrets of Cultural Transformation* (Jones et al. 2006); the second edition (2011) included a follow-up study of how the same organizations fared in the subsequent financial crisis.

Dunphy has also led training courses and programs for change consultants. For example, from 2011 to 2014, he designed and led annual residential organizational and workforce development workshops for the 60 full-time change agents in the Queensland State Department of Communities. The department was undergoing extensive change, and these change agents were embedded with senior managers across the state to implement the planned changes. The workshops introduced practicing change agents in the organization to current theory and research in organizational change and included custom-designed experiential exercises to develop the understandings and interpersonal skills needed for participants to work directly with area managers. For instance, participants used role plays to experiment with different influence strategies and to develop the most promising ones. Each workshop was followed by weekly teleconferences with Dunphy when the change agents, scattered across a large state, raised ongoing issues in their change implementation.

Key Contributions: Developing Contingency Theories of Change

Dunphy's early work on small groups provided insights into how individual and small-group behavior are modified by their social setting, how leadership roles emerge, social structures evolve, and how culture – "the way we do things around here" – is created and internalized by those in the system. These early insights informed the following major contributions.

In *Organizational Change by Choice* (1981), Dunphy developed a comprehensive model for managers, showing how to initiate and implement change at different levels and to manage organizations as ongoing systems. It provided analytic and intervention strategies appropriate for individual change as well as change in workgroups, intergroup relations, corporate structure, and culture. The prevailing organization development (OD) model had emphasized intervention at the individual and work-group level, the dominant financial models stressed restructuring organizations from above, and technological models focused on redesigning workflows. This book integrated these approaches and was widely used in business and management courses in Australia and by Australian managers. The book also

drew on change research from the U.K. and Europe, particularly covering innovative work redesign on sociotechnical design principles and industrial democracy (ID).
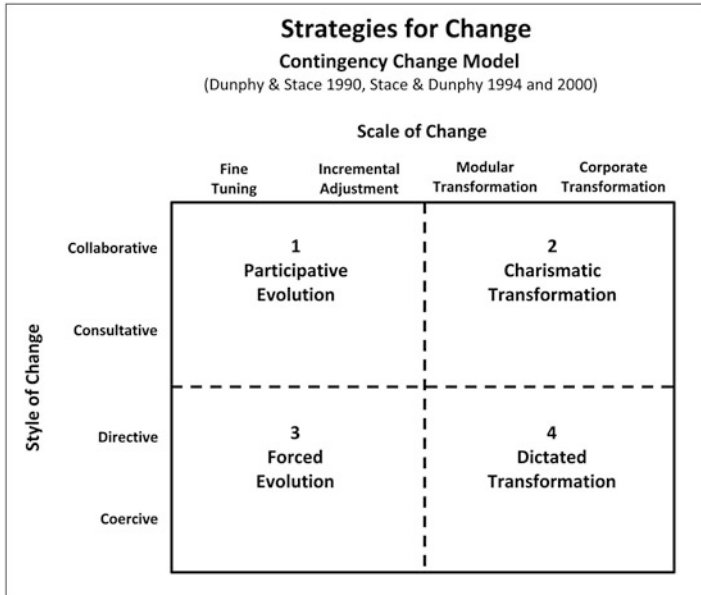
In the 1970s and 1980s, Dunphy and his colleagues initiated cross-cultural research, making a systematic comparison of differences between East Asian management approaches and the dominant US model. These studies examined approaches to organizational change in China under the communist revolution and innovative post-World War II Japanese management transformations of production systems. This research analyzed how contrasting cultural assumptions led to differing management and change processes. For example, the collective orientation of Japanese cultures contrasted to the individualistic orientation of US managers and led to more widespread consultation (nemawashi) at the early stages change initiation. At the time these studies commenced, most theorists in the United States assumed that US management principles were superior to those of others and applied universally. Only when the Japanese began to dominate world markets and compete successfully against US enterprises in the United States were these cultural assumptions challenged by US-based management writers, such as Ezra Vogel in *Japan as Number One* (1979).

Another theoretical breakthrough was the development of a contingency theory of organization change. The dominant OD and ID models advocated a "one best way" to manage organizational change, specifically incremental, participative bottom-up approaches with internal stakeholders. Dunphy and Stace (1988) were the first to apply contingency theory in organizational change theory, by linking the strategic scale of change to the dominant styles of change leadership. Nadler and Tushman's model followed closely in 1989. The Dunphy-Stace research controversially formed a critique of the OD and ID models, particularly of their suitability as universal prescriptions for change. The research demonstrated that, under certain conditions, directive/coercive top-down strategies for change could be successful.

The point was made that no *one* strategic change approach should be universally prescribed; different change strategies are called for in different circumstances. If the organization itself is at risk because of failure to adapt to widespread environmental and industry change, dictated transformation may be necessary to transform the organization and ensure its survival. In particular, the model (see Fig. 1) provides for different strategies of change according to the organization's current "fit" or lack thereof with its environment. This was an innovative idea at the time; the OD, ID, and OB literatures mostly ignored the importance of the strategic environment for the organization, an important omission as the pace of Western economic restructuring, geopolitical, and technological change increased. If organizations failed to change to meet these changed conditions, they faced inefficiencies and eventually extinction.

The model proposes that the strategy for managing change should be based first on the degree or scale of change needed to bring the organization back into environmental fit or to retain its fit in a fast-moving environment. The other axis in the model specifies the style of change leadership that will best bring about the degree of change needed (on a scale from collaborative to coercive). The choice as to what style will work best depends on the speed with which the change needs to be

Strategies for Change
Contingency Change Model
(Dunphy & Stace 1990, Stace & Dunphy 1994 and 2000)

Scale of Change

	Fine Tuning	Incremental Adjustment	Modular Transformation	Corporate Transformation
Collaborative	1 Participative Evolution		2 Charismatic Transformation	
Consultative				
Directive	3 Forced Evolution		4 Dictated Transformation	
Coercive				

Style of Change

Fig. 1 Stace-Dunphy contingency model (Dunphy and Stace 1990)

brought about and the latent support from key interest groups within and beyond the organization. Where there is little urgency and a fair degree of support for change by stakeholders, participative approaches are called for. Where there is urgency and little support, a directive/coercive approach may be more effective in ensuring the organization's survival and/or success.

This study was also innovative in the way case studies were selected for research. To this point in the field's development, organization theorists had generally chosen as cases organizations where they consulted. Clearly there is a potential built-in bias in this approach that may invalidate the conclusions. Stace's PhD thesis, the basis of this study, created a systematic arm's length sampling frame for the selection of case study organizations. The financial services and insurance industries were chosen for analysis (later extended to the manufacturing sector and the public sector). Chosen within each of these industries were four high-performance organizations and two low-performance organizations. The choice was based on independently assessed factors – financial performance, industry rankings, and leadership – by a panel of three senior industry analysts. These organizations were then approached to agree to be subject to a case study. Most agreed. Where the CEO did not agree the organization was replaced by the same method. Thus the choice of organizations was independent of any investigator biases. The study involved up to 120 individual and focus-group interviews in each organization and collected qualitative data along with the administration of a "scale of change" and "change leadership style" diagnostic instrument. The study covered three time periods so that the path of organizational change could be tracked.

Publications from this research were widely sourced and referenced. The early paper "Transformational and Coercive Strategies for Planned Organizational Change: Beyond the O.D. Model" (Dunphy and Stace 1988) and the subsequent "The Strategic Management of Corporate Change" (Dunphy and Stace 1993) presented the core thinking, the latter article being the second "Most-Frequently Read" article in the *Human Relations* journal for several years. The research was also published in two books, widely used in Australia, the United Kingdom, and Asia – *Under New Management: Australian Organizations in Transition* (Dunphy and Stace 1990) and *Beyond the Boundaries: Leading and Re-creating the Successful Enterprise* (Stace and Dunphy 1994, 2001), both with multiple reprintings. The core change model is still widely used in academic teaching and by practitioners.

A more recent contribution has been the incorporation of ecological and human (social) sustainability into a systematic phase model of organizational change. The sustainability phase model (Dunphy et al. 2003, 2007; Benn et al. 2014) extends the prevailing economic/financial model of performance to include social and ecological outcomes as legitimate and necessary goals. The model outlines developmental phases through which corporations' progress toward human and ecological sustainability. Organizations can progress from active rejection of sustainability principles to becoming fully sustainable and sustaining of their social and ecological environment. Six phases are distinguished, ranging from active opposition to investment in sustainable practices to fully incorporating sustainability practices throughout the organization's operations. The six phases are:

1. Rejection
2. Non-responsiveness
3. Compliance
4. Efficiency
5. Strategic proactivity
6. The sustaining corporation

In addition, each phase distinguishes actions appropriate to achieving the sustainable outcomes typical of that phase for both human sustainability and for ecological sustainability.

Rejection involves an attitude on the part of the organization's dominant elite that resources are to be exploited for immediate financial gain and that devoting resources to reducing destructive ecological or social impacts of the organization's activities is to be avoided. The prevailing cultural theme at this phase is *exploit resources for maintaining short-term financial gain.* **Non-responsiveness** usually results from lack of awareness or ignorance rather than opposition to taking sustainable measures. Sustainability is regarded as irrelevant rather than actively opposed, and the central cultural theme is *business as usual.* **Compliance** focuses on reducing the risk of sanctions for failing to meet minimum standards as an employer or producer, avoiding legal action for breaches of regulations prescribing safety measures or prohibiting environmental pollution. The central cultural theme is to *avoid risk.* **Efficiency** reflects a growing awareness on the part of the corporation's

dominant elite that there are real advantages to be gained by proactively instituting sustainable practices. For example, what was defined as "waste" can be reprocessed and become a valuable resource. This is the beginning of incorporating sustainability as integral to the business. The central cultural theme of this phase is *do more with less.* **Strategic proactivity** sees sustainability becoming an important part of the organization's business strategy. Sustainability provides a competitive advantage through innovation and adding value. The central cultural theme is *lead in adding value and innovation.* **The sustaining corporation** phase emerges as the corporation's elite, and most corporate members have internalized the ideology of working for a sustainable world. The corporation works to "change the rules of the game" to model best practice in sustainability and to build political and social commitment to creating a fully sustainable world. The central cultural theme is *transforming ourselves: lead in creating a sustainable world.*

At each stage, performance is enhanced by adding value and eliminating waste, but the kind of value added and waste eliminated differs. At the efficiency phase, value is typically added by achieving new efficiencies through significant cost reductions by, for example, reuse of material resources formerly defined as waste and sent to landfill. But there are also efficiencies to be achieved using formerly wasted human potential such as loss of key skills through turnover or poorly integrated work systems. At the strategic proactivity phase, value added comes through the contribution sustainability makes to building stronger stakeholder support and winning increased market share. At this phase also the concept of waste is enlarged to include unrealized or missed strategic opportunities in sustainability, particularly lost market share through lack of innovation, failure to develop more high-added-value products that secure market leadership, or too-slow divestment of unsustainable operations.

Another contribution of the model is that it specifies a wide range of change leadership roles needed to guide organizations through the phases and shows the direct relevance of historical theories of leadership to phases in the model. So the kind of change leadership needed for the efficiency phase is distributed/enabling; for the strategic proactivity phase, it is enabling/transformational; and for the sustaining corporation phase, it is transformational/complexity management (Benn et al. 2014). Key change-agent competencies are also specified. Overall the phase model defines the central managerial task as the leadership of change but also documents the necessity of leadership styles being modified as the organization moves through the phases. The knowledge and skills needed for successfully moving an organization into the efficiency phase are therefore different from those needed for moving it into the phase of strategic proactivity or sustainable organization phase. Maintaining high performance in the sustainable organization phase involves managing a process of continuous transformation (reinvention) of the organization and managing high levels of internal and external complexity.

The model also integrates developments in human-resource management and corporate social responsibility with change-management theory. Achieving corporate sustainability is seen as managing an integrated development in the organization between ecological sustainability (e.g., eliminating waste, using natural resources

more efficiently) and social sustainability (e.g., building workforce capabilities, generating stakeholder support). Before this model was developed, the role of human-resource strategies in developing ecological sustainability was largely ignored; HR and OD were not seen as integral to successful achievement of corporate contributions to creating and maintaining a healthy natural environment. The model stresses the interdependence of human and ecological sustainability.

Overall the model shows that achieving corporate sustainability is a change process and that successive phases enable the organization to achieve higher levels of performance in the traditional financial sense but also in the increasingly important areas of ecological and human sustainability. Figure 2 shows how optimal development across phases balances change on each of these dimensions to reach the point of becoming a fully sustainable organization. A large number of carefully researched case studies that accompanied the development of the model document how this performance enhancement takes place (see, e.g., Benn et al. 2011b).

The sustainability phase model is widely used internationally in business programs and by practicing managers. A fourth edition of *Organizational Change for Corporate Sustainability* is in preparation.

Dunphy's work also shows the importance of using large-scale databases in research on organizational change. Over several years, he collaborated with the consulting firm Human Synergistics International, strongly represented in Australia and New Zealand. Human Synergistics uses the organizational Culture Inventory (OCI) and the Life Style Inventory (LSI), systematic survey instruments designed to measure organization culture and leadership behavior. From the existing
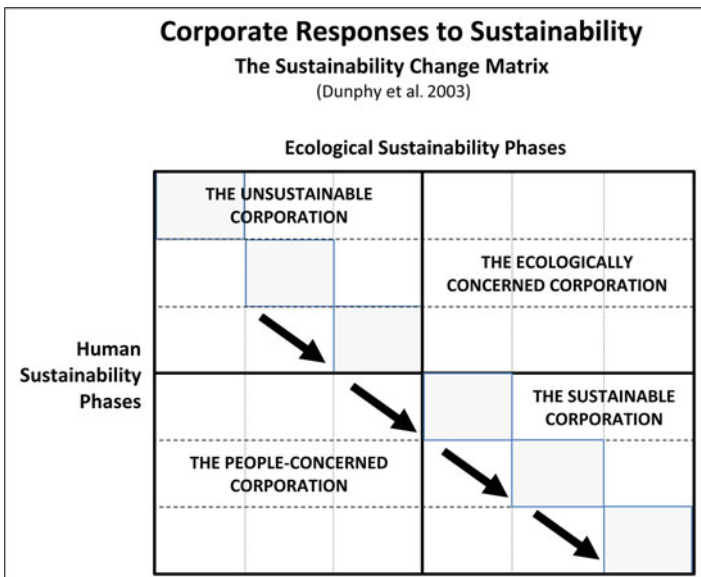
Fig. 2 The sustainability change matrix

database, Dunphy and colleagues at Human Synergistics extracted data on 40 organizations that had undertaken an initial survey and at least one other survey over the following 2 years (Jones et al. 2006, 2011). These organizations were then ranked by degree of cultural shift from a passive/defensive culture and aggressive/defensive culture toward a constructive culture (the goal of the culture change programs).

Five organizations were chosen that had made the most successful transformations toward their ideal culture as measured by results on the OCI. In these organizations, all OCI categories showed highly statistically significant shifts in the desired direction. An intensive case study of the change process was then carried out in these organizations. The CEO, all senior executives, internal change leaders, and external change consultants were interviewed, and systematic samples of employees used to form focus groups. Data was gathered on all performance measures, including financial, used by each organization. The shift to a more constructive culture in these five organizations was accompanied by maintenance or improvement, sometimes dramatic improvement, in almost all financial and nonfinancial performance measures.

Detailed case studies of the five organizations are presented in *In Great Company*, and a model is presented of the common characteristics of these successful change projects. The study was completed in 2006. In 2011 the same organizations were studied again to see how their cultures had affected their ability to survive and thrive through the global recession of 2008 to 2010. A second edition updates the case studies and shows that the investment in creating more constructive cultures not only had an overwhelmingly positive impact on performance measures in good times but also enabled these organizations to better handle tough times (Jones et al. 2011).

The way change was successfully achieved in these five organizations supported much of what has been written in the change literature about how to create successful corporate change; what was unusual was that these organizations actually did what the literature recommends. A summary "metacapability model" details four key activities emphasized in all five organizations: leading, engaging, redesigning, and reflexivity. The first three are well documented in the change literature. Reflexivity however represents a new contribution and includes building self-awareness through feedback, creating a reality check through appreciating others' viewpoints, and monitoring of progress toward the preferred culture (Jones et al. 2011).

The study results also supported the sustainability phase model and helped add detail to an understanding of the relationships between the phases (Jones et al. 2011) as well as the impact of progressing through the phases on variables such as performance and workforce satisfaction.

The research carried out by Dunphy and his colleagues demonstrates the value of using a variety of research methods to ensure the validity of conclusions about effective change interventions. The studies have often combined surveys, interviews, gathering, and analysis of existing organizational performance data, focus groups with employees and stakeholders, and field observation. Using data derived with differing methods from different sources has proved invaluable in describing ongoing organizational change processes and the impact on performance. Using these methods at different hierarchical levels and in different departments and units also captures the multiple perspectives that underlie the complexity of change.

In working sessions, managers can readily apply the model to their own organizations. This increases their understanding of their organizations as a system undergoing change and helps them design and monitor interventions to improve corporate performance. In developing this approach, Dunphy was strongly influenced by his early study of John Dewey's idea that practical application is the best way to refine developing theory.

New Insights: Aligning Theory and Practice

Dunphy has always sought to move between theory and practice. This is to ensure that theory illuminates practice, that practice ensures the relevance of theory, and that theory is modified on the basis of experience. He has used qualitative research methods and field research extensively but tried to move qualitative research toward the more quantitative and/or to supplement qualitative research with quantitative approaches.

Ongoing consulting relationships, executive teaching, and field research in a variety of organizations ensured that he was engaged in an ongoing dialogue with practicing managers about what constitutes best practice under different circumstances and the issues encountered leading organizational change. These activities also provided opportunities to develop ways of communicating theory and research findings to practicing managers. Dunphy has preferred simple direct English expression and an absence of jargon in both speaking and writing – characteristics welcomed by busy managers. He has also had a commitment to accepting the complexity of the managerial task and the importance of making theory relevant to management practice.

Dunphy holds the University of NSW Vice-Chancellor's Award for Teaching Excellence. In teaching he had a preference for using a variety of experiential learning processes – simulations, role plays, case studies, coaching, and problem-solving workshops – to create active learning through doing rather than passive absorption of knowledge. Because he closely observed ongoing group processes over many years, he feels at ease working with the "hot human process" of experiential learning. He is strongly committed to educating the whole person – mind, emotions, and behaviors. He has been concerned not only with ideas but how individuals translate ideas into action. This means ensuring that each individual has the repertoire of requisite behaviors to make the needed changes in their workplace. Knowledge is not enough; people also need the skills to intervene effectively.

Dunphy works to help organizational change leaders understand the organization as a living social system in which people share some similar understandings but also have different views depending on where in the organizational hierarchy and departmental/unit structure they are situated. The organization is a phenomenological entity with some common cultural elements but also subcultures based on interests that may conflict. The organization is a social fiction that lives in the minds, emotions, and wills of its members and stakeholders. The managerial task is to build, among organizational members and stakeholders, a sufficient sense of

ownership, commitment, and understanding of the organizational goals to create efficient and effective movement toward those goals. Working with corporate culture is vital to ensure that organizational change initiatives are effective. These views represent a strong move away from "the rational person" view of the individual and the economic view of the organization as primarily a financial entity.

The essence of each of the theoretical models developed is readily explained to executives in a single session. The depth is specified in greater detail in books, articles, and teaching/learning units and can be actively explored and applied within the target organization in collaboration with practicing managers. These are both descriptive and prescriptive models. They allow managers to identify where in a spectrum of change their organization is located and also what actions are required for improved performance outcomes.

The models are supplemented with detailed case studies providing practical information on how change had been made and with what results. In addition, Dunphy organized active networks to facilitate ongoing exchange of information between change agents (managers and consultants). Organizations making successful change were brought to public attention through workshops, seminars, and publications to ensure that managers and other change agents became aware of positive models from which they can learn.

Dunphy's work has had a major influence particularly on organizations operating in Australia. Two examples are consulting with Agnew Mining, which involved the successful planning and establishment of a new mining organization and new town in Western Australia, and Fuji Xerox Australia, which involved the planning and establishment of the innovative eco manufacturing plant in Sydney. These are now briefly summarized.

For 5 years from 1975, Dunphy undertook a major consulting assignment with a new mining organization, Agnew Mining, which involved the design, construction, and operation of a new nickel mine and town in a remote desert region of Western Australia. He worked with the senior executive team who asked him to challenge all assumptions they held for the design and operations of a mining organization and town. The executives wished to avoid the industrial unrest, high turnover, and male-dominated culture of binge drinking that prevailed in existing mining operations. The Agnew Mine and the associated new town, Leinster, saw the successful redesign of traditional forms of mining organization, for instance, by handing much more decision-making to self-managing work teams and by opening jobs to women. It also resulted in a town designed on innovative principles – former residents in a recent book describing their time there as some of the most fulfilling of their lives (Siddall 2015). The dedication to the book thanks Dunphy for "his original input that changed the philosophy of mining town projects" (p. xiii).

Fuji Xerox is an international company that produces a wide range of products designed to manage electronic or paper documents. In the 1990s the company sought to establish itself as a leader in the development and application of sustainable manufacturing operations. Fuji Xerox Australia played a leading role in this worldwide development; its new remanufacturing plant, the Fuji Xerox Eco Manufacturing Plant, established in Sydney in 1993, introduced the remanufacturing principles

later adopted worldwide by the Japanese parent company. Dunphy worked with the plant managers to establish these principles and put them into practice.

A key step in the change to sustainable manufacturing at Xerox was a decision to replace selling printers with leasing service contracts to repair or replace consumables. The manufacturing process was completely redesigned so that worn and failed items, once considered waste, were redefined as potential valuable resources. Instead of worn or broken parts being discarded to landfill, they were fed back into the production process and remanufactured. Eventually all waste was eliminated, product design was improved to increase reliability and enhance performance, and major savings were made from import substitution and new export earnings. This had major environmental benefits, reduced costs to consumers, and increased profits. In 2010 the company reported that, over 10 years of its operations, the Eco Manufacturing Center had achieved AU$240 million return on AU$22 million investment (Benn et al. 2011a).

Legacies and Unfinished Business: The Way Forward

Throughout his career, Dunphy has pushed the boundaries of change theory in response to emerging issues in the environment of organizations. Documenting how approaches to change in Asian economies differed from Western models was a response to the increasing internationalization of business. Advancing a novel contingency model of change, as against a simplistic adherence to OD theory regardless of situation, was a response to the sharp economic downturn of the late 1980s, particularly in Western economies, and large-scale restructuring and reshaping of organizations. The sustainability phase model was a response to climate change and the deterioration of the environment under the impact of modern industrial technologies. Change theory cannot be a static body of knowledge but must deal with the enterprise as a complex self-organizing system that needs to adapt to its dynamic environment and strategically influence that environment to create favorable conditions for future high performance.

This raises the question of how organizational change theory can change *itself* to prepare for the impacts of the dramatic processes now transforming our world. Many theorists, including Dunphy, see future organizational success as dependent on managing the constant self-renewal of organizations as highly complex socio-technical systems. Given that managerial leadership is crucial to change success, this has major implications for the ability of the senior executives to live with ambiguity, constant change (including self-change), and complexity (Benn et al. 2014; Jones et al. 2010; Parry 2015). To achieve this, executives and others require real-time, ongoing feedback from a system undergoing change that differs in scale and pace from one part of the organization to another. Systems theory is clearly the way to go but, despite its long history in the field (Kirsch et al. 2008), has delivered few practical outcomes because the technology to monitor complexity didn't exist.

To overcome this, Dunphy saw the need to work with large databases of organizational change programs, but few such databases existed. The Human Synergistics

database referred to above was a rare exception. Academics seldom have the resources needed to amass longitudinal-change data from across many organizations and industries. Some consulting firms with large change-consultancy arms have the clients, personnel, and financial resources to gather organizational data on a large scale. But creating the database is not enough; the data gathered must be continually updated, use relevant valid variables, employ sophisticated multivariate statistical methods for analysis, and suggest useful "interventions" with predictive validity. In a digital world, the use of sophisticated technologies to provide real-time analytical feedback to leaders, enabling self-correction, will become the new norm, taking change management into the next level of evolution.

One such recent development, Change Tracking, is documented by Parry and his colleagues (Parry 2015; Parry et al. 2013). "Over more than 15 years of research, he and his team have created the most comprehensive data set on what happens during the process of change. To date they have collected data from more than 750,000 individual respondents across hundreds of change programs in more than 150 organizations across all sectors and sizes . . . and this data set continues to grow" (2015, p. ix). Elsewhere Parry comments that the Change Tracking model that uses this resource "provides the basis for the development of a 'situational' or 'contingency' model, called for by Dunphy and Stace (1993), which will allow for the ongoing feedback required to produce actionable data to guide the adaptation of change strategies and interventions required to keep projects on track to achieving intended objectives" (2013, p. 23). We need more pioneering work like this in developing sophisticated theoretically based analysis and predictive intervention strategies.

However, the world faces revolutionary changes at least equivalent to those of the industrial revolution. Central to these changes are new developments in information and communication technologies (ICT), digital transformation, and what McKinsey & Company refer to as the "Internet of Things" (McKinsey Classics 2016). Add to this mix sophisticated robotization. A fully integrated global communication system is developing with sensors and activators increasingly embedded in things such as roads, homes, cars, our bodies, and human substitutes such as robots. This system will smash existing business models and see much current executive work subsumed by complex autonomous decision-making systems that sense conditions in real time, make instant decisions, and then monitor the impact.

All these developments will transform organizations, impacting most obviously on employment of both low-skilled and highly skilled workforces. As yet unknown is how the new digital world, increasingly peopled by "digital natives," will affect the shape, size, and functioning of organizations themselves.

There are also the major uncertainties of geopolitical tensions. Globalization seemed an unstoppable force but is now challenged by the strengthening centrifugal forces of localization. Ease of mobility across the planet is being challenged by forces of terrorism and large-scale refugee migration. Most threatening is the deterioration of the natural world under the impact of human population increase and unsustainable organizational practices and lifestyles. In 2015 the global average temperature rose 0.9% degrees above the twentieth-century average, just one of many indicators showing that human-caused climate change is a current reality

threatening the viability of civilization (NASA 2016). The world's organizations must be rapidly transformed so they act as living cells in the biosphere and society, contributing to the health of the planet and human society. Dunphy has contributed to this transition by charting phases through which organizations can move to sustainability – an important step in redefining the goals and functions of organizations.

Conclusion

The field of organization theory must adapt to and inform these changes. Contingency theory will be critical in improving the effectiveness of change programs in meeting their objectives – the critical contingences will emerge from the sophisticated computer-based models developed in concert with these changes. But change theory needs to be concerned with more than *means*; it must also be concerned with *ends*, particularly the ends to which change is directed. Dunphy argues that: "At this time, we must ask of all organizations in our society: What value do you add to the earth, the source of our being, and to society, which is our home?" (Personal communication, May 3, 2016). In Dunphy's view, theorists and practitioners need to contribute both to redefining the goals of organizational change and to researching how change projects can be designed to achieve these goals. The future of the field will depend on how future theorists and practitioners meet these challenges.

References

Bales, R. F. (1950). *Interaction process analysis*. Cambridge, MA: Addison-Wesley.

Bales, R. F., & Strodtbeck, F. L. (1951). Phases in group problem solving. *Journal of Abnormal and Social Psychology, 46*, 485–495.

Beer, M., & Nohria, N. (Eds.). (2000). *Breaking the code of change*. Cambridge, MA: Harvard Business School Press.

Benn, S., Dunphy, D., & Angus-Lappan, T. (2011a). Fuji Xerox Australia Eco Manufacturing Centre: A case study in strategic sustainability. In S. Benn, D. Dunphy, & B. Perrott (Eds.), *Cases in corporate sustainability and change: A multidisciplinary approach* (pp. 28–41). Prahran: Tilde University Press.

Benn, S., Dunphy, D., & Perrott, B. (Eds.). (2011b). *Cases in corporate sustainability and change: A multidisciplinary approach*. Prahran: Tilde University Press.

Benn, S., Dunphy, D., & Griffiths, A. (2014). *Organizational change for corporate sustainability*. London: Routledge.

Clegg, S. R., Dunphy, D., & Redding, S. G. (1986). *The enterprise and management in East Asia*. Hong Kong: Centre for Asian Studies, University of Hong Kong.

Dewey, J. (1933). *How we think*. Boston: Heath.

Dunphy, D. (1963). The social structure of urban adolescent peer groups. *Sociometry, 26*(2), 230–246.

Dunphy, D. (1968). Phases, roles and myths in self-analytic groups. *Journal of Applied Behavioral Science, 4*(2), 195–225.

Dunphy, D. (1969). *Cliques, crowds and gangs: Group life of Sydney adolescents*. Melbourne: Cheshire Press.

Dunphy, D. (1972). *The challenge of change: 1972 Boyer lectures*. Sydney: Australian Broadcasting Commission.

Dunphy, D. (1981). *Organizational change by choice*. Sydney: McGraw-Hill.

Dunphy, D. (1986). An historical review of the literature on the Japanese enterprise and its management. In S. E. Clegg, D. Dunphy, & S. G. Redding (Eds.), *The enterprise and management in East Asia* (pp. 343–368). Hong Kong: Centre for Asian Studies, University of Hong Kong.

Dunphy, D., & Griffiths, A. (1998). *The sustainable corporation: Organizational renewal in Australia*. Sydney: Allen & Unwin.

Dunphy, D., & Shi, J. L. (1988). A comparison of enterprise management in Japan and the People's Republic of China. In C. Osigwey (Ed.), *Applying indigenous science abroad: Constraints and perspectives* (pp. 178–200). New York: Plenum.

Dunphy, D., & Stace, D. (1988). Transformational and coercive strategies for planned organizational change: Beyond the OD model. *Organization Studies, 9*(3), 317–334.

Dunphy, D., & Stace, D. (1990). *Under new management: Australian organizations in transition*. Sydney: McGraw-Hill.

Dunphy, D., & Stace, D. (1993). The strategic management of corporate change. *Human Relations, 46*(8), 905–920.

Dunphy, D., & Stening, B. W. (1984). *Japanese organization behavior and management: An annotated bibliography*. Hong Kong: Asian Research Service.

Dunphy, D., Benveniste, J., Griffiths, A., & Sutton, P. (Eds.). (2000). *Sustainability: The corporate challenge of the 21st century*. Sydney: Allen & Unwin.

Dunphy, D., Griffiths, A., & Benn, S. (2003). *Organizational change for corporate sustainability*. London: Routledge.

Dunphy, D., Griffiths, A., & Benn, S. (2007). *Organizational change for corporate sustainability* (2nd ed.). London: Routledge.

Heinicke, C., & Bales, R. F. (1953). Developmental trends in the structure of small groups. *Sociometry, 16*(1), 7–38.

Jones, Q., Dunphy, D., Fishman, R., Larne, M., & Canter, C. (2006/2011). *In great company: Unlocking the secrets of cultural transformation*. Sydney: Human Synergistics.

Kirsch, C., Parry, W., & Shaw, D. (2008). *A history of change management: Historical overview of management approaches to organizational change projects* (RO308). Sydney: ChangeTrack Research. www.accenture.com

McKinsey Classics. (2016). Digitizing the world. publishing@email.mckinsey.com

NASA. (2016). Retrieved from http://climate.nasa.gov, 31 Mar 2016.

Parry, W. (2015). *Big change, best path: Successfully managing organizational change with wisdom, analytics and insight*. London: Kogan Page.

Parry, W., Kirsch, C., Carey, P., & Shaw, D. (2013). Empirical development of a model of performance drivers in organizational change projects. *Journal of Change Management, 13*(2), 1–27. doi:10.1080/14697017.2012.745894.

Philp, H., & Dunphy, D. (1959). Developmental trends in small groups. *Sociometry, 22*(2), 162–174.

Siddall, S. (Ed.). (2015). *An unlikely oasis: Leinster: The first ten years – The town and its people*. Perth: Leinster Residents Association.

Stace, D., & Dunphy, D. (1994). *Beyond the boundaries: Leading and re-creating the successful enterprise*. Sydney: McGraw-Hill.

Stace, D., & Dunphy, D. (2001). *Beyond the boundaries: Leading and re-creating the successful enterprise* (2nd ed.). Sydney: McGraw-Hill.

Stone, P. J., Dunphy, D., Smith, M., & Ogilvie, D. (1966). *The general inquirer: A computer approach to content analysis in the behavioral sciences – Studies in psychology, sociology, anthropology and political science*. Cambridge, MA: MIT Press.

Vogel, E. (1979). *Japan as number one: Lessons for America*. Cambridge, MA: Harvard University Press.

Further Reading

Dunphy, D., & Shi, J. L. (1986/1988). *Management and the enterprise in the People's Republic of China: An annotated bibliography.* Sydney: Australian Graduate School of Management.

Nadler, D. A., & Tushman, M. L. (1989). Organizational frame bending: Principles for managing reorientation. *Academy of Management Executive, 3*(3), 194–204.