Elgar Introduction to Designing Organizations

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1. Introduction to the *Elgar Introduction to Designing Organizations*

We have written this book to help advanced management students and practising managers to think about designing their organization to be fit for contemporary purpose. In traditional terms, design was conceived as a rational, top-down decision relating to the structuring of responsibilities, accountabilities and organization processes. In contemporary terms, design is often a process with paradoxical attributes. We focus on major trends in and types of design without exhausting the palette of possibilities; for instance, cooperatives (e.g., Berti & Pitelis, 2021; Bretos & Errasti, 2017) are not discussed because to do so would require another book. The focus is on theory as it contributes to practice.

We try to avoid ivory tower theorizing as well as pure prescription or "best practice". For this reason, in each of the core chapters we include notes on how practitioners have appropriated the concepts discussed herein but we do not make practice our sole concern. We believe that, as Kurt Lewin once put it, "there is nothing so practical as a good theory" (Lewin, 1951, p. 169). As we and others have discussed (Clegg et al., 2022), academics have one advantage when it comes to explaining organizing: they see it from a distance without having to assume that they have solutions to practical problems. Such critical distance is beneficial in helping practitioners reflect on their practice; while it is not possible for us to know their organization, we do know a large literature and we have researched many organizations in a breadth that no practitioner could match.

WHAT'S NEW FOR OUR AUDIENCE

There are many books on organizational design. In this book we do not aim to *prescribe* (e.g., how to design a holacracy?) but rather aim to *understand* and *explain* (e.g., why holacracies are emerging?). We see organization design as essentially paradoxical: to design something is to try and arrest process by arriving at a finished design – but no design is perfect and the imperfections mount as time elapses and organization design stands still and is only infrequently updated. While designs may not change, they date, the fashion moves on and what was once fit for purpose no longer fits so well. A paradox lens

offers a fresh view on managing organizational design. In the past, organizational design and organizational change have been treated as discrete events. Design introduces stasis and structure; change disrupts it with process and flow. As anomalies mount between design and fit over time, design is increasingly strategically challenged, subsequently changing in a refit to better align with the new times (Donaldson, 1987).

In a process-dynamic view, design and change constitute two sides of the same coin; design is not an event that stays in place while the times change; times are changing and so is design. In such a perspective, organization is about movement – in contrast with more traditional perspectives that presume the world to be at rest (Simpson & den Hond, 2021). Movement, such as the layering of new initiatives over past changes and structures, introduces tensions between what has been designed to be and what is becoming; between what ought to have been in the past and what is unfolding in practice. Contradictions and paradoxical relations emerge between goals enshrined in design and those that change makes salient (Bednarek et al., 2017, 2021; Pamphile, 2021). Navigating paradox is a difficult endeavour (Lewis, 2000; Vince & Broussine, 1996; see also Highlight 1.1) but it may help individuals (Liu, Xu & Zhang, 2020), teams (Silva et al., 2014) and organizations (Visnjic, Jovanovic & Raisch, 2021) to use contradictions as energizing forces. To explore design from a paradox perspective we have included in this book:

- A glossary (Table 1.1) that clarifies the meaning of the words we use. Management is vulnerable to fads and fashions, making it important to align our vocabulary with that of our readers.
- Highlights, with illustrations of the concepts discussed, to enrich connection between concepts and real organizational cases.
- The book incorporates "For practice" boxes that aim to derive ideas for managerial application from academic debates. Management and organization studies is often criticized for its lack of application. As scholars tend to defer to other scholars when writing in an incestuous form of closed loop communication (Joullié & Gould, 2021), this criticism is hardly novel. In fact, it can be raised against all fields of theoretical practice. The "For practice" boxes aim to open communication with managers' designs in their professional experience.
- We also use examples of real organizations for illustrative purposes. It goes without saying that these examples aim to illustrate, not to endorse. Given what we have said about organizations being in perpetual process, endorsement would be foolish if only because whatever was endorsed would have ceased to be. Organizations are dynamic realities and what might have been exemplary practice at the time of writing may, when being read, be anything but an exemplar. For this reason, we encourage our readers to

complement our examples with their own and to question the examples provided with a critical eye.

We hope that our readers will gain an appreciation for design as a process rife with paradoxical features (Highlight 1.1). As scholars have pointed out, paradoxes can be exhilarating and a source of renewal or they can be a source of tension and frustration (Gaim, Clegg & Cunha, 2021). We aim, with this book, to assist managers in their explorations of design as paradox, not to hinder them; we will try to minimize the costs of tension and frustration and maximize the benefits of exhilaration and renewal.

HIGHLIGHT 1.1   A NOTE ON THE DIFFICULTY OF MANAGING PARADOX

Paradoxes refer to contradictions between interdependent poles that persist, such as between change and stability. In this book we discuss design as a paradoxical challenge, meaning that organizations may design themselves to cope with paradoxes. Yet, managing paradox is challenging because:

Paradox is dynamic, which means that balance is temporary.
Balance is always understood retrospectively.
Therefore, being in balance is always a matter of uncertainty.
Paradox cannot be tamed, meaning that there is always a possibility of surprise.

As such, managing through paradox is no panacea or recipe but instead a way of thinking about the *dynamics* of organizing. The implication is that management is a learning journey, rich in success and failure, hope and despair, excellence and imperfection. For this reason, paradox is better thought of as a way of thinking than as a problem-solving strategy. In case you want to clarify the distinction between paradox and adjacent constructs, consider Gaim et al. (2018).

Design is a tool to operationalize the mix of stability and change, control and freedom, order and disorder, conformity and dissent that organizations need. It is a socio-organizational technology aimed at keeping an organization relevant in a relentlessly changing environment (Highlight 1.2).

HIGHLIGHT 1.2   FOR PRACTICE: ON TECHNOLOGY AND ORGANIZING

History teaches practitioners that technological change is inexorable. As Furr and Eisenhardt (2021) remind us, the shift from mechanical engineering resources to electronics and software has been slow. Established automakers had time to prepare for the shift but are still playing catch-up to a start-up, Tesla. In the same vein, the transition from chemistry resources to biology-based resources, such as gene sequencing, is taking place slowly in the pharmaceutical sector.

The fact that these changes are slow does not mean that they are not drastic in their consequences. Instead of adopting defensive approaches, such as assuming past success predicts continuing success, organizations may instead scrutinize technological trajectories and prepare for the future by embracing future technologies, that is, existing technologies that may have potential effects in potential technological trajectories. The past will inevitably be a foreign country, one day. Successful firms do not get stranded there.

A WORD OF CAUTION

We punctuate the book with illustrative examples of real companies. These examples are not intended to endorse (or criticize) the case or to present it as best practice. It is well known that lauded managers and companies may rise and fall and rise again. GE, once the darling company of MBA programmes, fell out of favour (Gryta & Mann, 2020). Kodak, the driving force behind photography, faced bankruptcy before trying to rise from the ashes (Raffaelli & Snively, 2018). For these reasons, consider our examples only as illustrative cases. If they may now illustrate something other than we highlighted when you read this book, we would not be surprised – that this might well be the case is consistent with our core message about change.

Table 1.1   Glossary of keywords used throughout the book

Term	Definition	Based on
Adaptation	Intentional decisions aiming at reducing the distance between an organization and its environment.	Sarta, Durand & Vergne (2021)
Agility	The quality of staying flexible, open to evidence and ready to change direction.	Doz & Kosonen (2008)
Ambiguity	Losses of interpretability.	Furr & Eisenhardt (2021)
Boundary spanners	People whose work consists in coordinating the work of others outside their domain of authority.	Galbraith (1974)
Bricolage	The process of making do with existing resources through the reinvention of their use.	Baker & Nelson (2005); Busch & Barkema (2021)
Business model	"The logic of the firm, the way it operates and how it creates value for its stakeholders."	Casadesus-Masanell & Ricart (2010, p. 196)
Centralization	The concentration of decision-making power at the top.	Wulf (2012)
Collaboration	The process of voluntarily helping partners in the direction of common goals.	Castañer & Oliveira (2020)
Configuration	"The full pattern … of design", or the mutual internal fit of the elements of design. The more abstract and the more systematically complex elements are, the more difficult it is to achieve configurational fit.	Greenwood & Miller (2010, p. 79)
Cooperation	The joint implementation of some goal.	Castañer & Oliveira (2020)
Coordination	The interactional processes responsible for integrating collective interdependencies in organizations.	Okhuysen & Bechky (2009)
Delayering (or flattening)	The elimination of layers of management.	Wulf (2012)

Term	Definition	Based on
Digital transformation	"The use of new digital technologies to enable company-wide change … involving the reframing of cognitive models of management (by envisioning new digital business models), the building of new digital routines (for the seizing of digital opportunities), and the implementation of new organizational forms (for setting up and integrating digital operations) for creating and appropriating anew value in an established or new ecosystem."	Volberda et al. (2021, p. 6)
Dynamism	A construct that combines normally correlated dimensions such as uncertainty, velocity, ambiguity and complexity.	Furr & Eisenhardt (2021)
Ecosystems	"The alignment structure of the multilateral set of partners that need to interact in order for a focal value proposition to materialize."	Adner (2017, p. 40)
Environment	The entities situated outside an organization's boundary, which provide it with what they need and that absorb their outputs.	Hatch & Cunliffe (2006)
Fit	The alignment of the major internal elements of an organization, as well as the overall alignment of the system with its environment and its changing contingencies.	Rivkin & Siggelkow (2003)
Governance	Corporate governance refers to "the structures, processes, and institutions within and around organizations that allocate power and resource control among participants".	Davis (2005, p. 143)
Hierarchy	The mechanism of supervision and coordination of workers' activities.	
Holacracy	A flat organizational design based on the principle of purpose-driven self-management.	Robertson (2015); Schell & Bischof (2021)
Leadership	The process of direction – based on the attributes of office and of individual creativity or being an *auctor*, meaning building one's authority; anartist who applies a highly centralized and subjective control to many aspects of collaborative creative work.	Cunha, Clegg, Rego & Berti (2021a)
Less hierarchical organizations	Organizational forms that rely less on hierarchical mechanisms than do traditional organizational designs.	Lee & Edmondson (2017)

Term	Definition	Based on
Management	The process of orienting people to use resources to achieve the direction of some collective purpose, or, informally, the process of getting work done through other people.	Mintzberg (2009)
Organization	Stable associations of persons concerted in the pursuit of collective goals.	Bittner (1965)
Organizational design	"The plan of an organization's rationally designed structure and mode of operation."	Clegg et al. (2011, p. 520)
Paradox	Elements that are contradictory yet interdependent and that persist because they cannot be resolved – but only managed or navigated.	Lewis (2000); Smith & Lewis (2011)
Process	"A sequence of individual and collective events, actions, and activities unfolding over time and in context."	Pettigrew (1997, p. 338)
Purpose	The concept used to "signal and define a firm's benevolent and pluralistic approach to its stakeholders beyond its focus on shareholders".	George & Schillebeeckx (2022, p. 1)
Restructuring	The process of reconfiguration of organizational units – through disaggregation, combination, or spinoffs.	Wulf (2012)
Self-organization	The "bottom-up creation of a large-scale structured conglomerate arising exclusively from interactions between individuals, without following a pre-established plan or receiving top-down guidance".	Moffett et al. (2021, p. 57)
Servitization	A form of product-service innovation or solutions whose value derives from use and performance from the perspective of the customer rather than on traditional product offerings.	Bustinza, Vendrell-Herrero, Gomes et al. (2018)
Simple rules	"Efficient yet flexible rules of thumb."	Furr et al. (2020, p. 560)
Structure	The relationship between the parts composing the organizational whole.	Hatch (1997)

2. The fundamentals of organizational design

Organizations are a central element in the social landscape of our lives. There are many types of organizations fulfilling highly diverse functions. The diversity of organizational forms is astonishing, according to some scholars (Hannan & Freeman, 1977). Others claim that, on the contrary, because of the presence of pressures for isomorphism, organizations tend to be relatively similar (DiMaggio & Powell, 1983). It is possible though that organizations are both very similar (they share several recognizable attributes) and very different (they try to design and use these attributes differently to reach different goals and achieve competitive advantage). In other words, organizations share similarities and emerge in a limited number of configurations (Miller, 1990) but at the same time they are also unique: each organization is singular and specific.

   In a different perspective, while each organization may be unique some core "good management" practices are universal in dealing with probable contingencies that can arise, meaning that the absence of these tends to be problematic (Scur et al., 2021). Contingencies count and the nature of the organization of work influences design choices for dealing with these contingencies. When this work is highly interdependent, uncertain and time sensitive, relational designs are more important than when tasks are more independent, routine and less time sensitive. Relational designs are based on ongoing mutual adjustment rather than formal attributions, creating a system of organization systems (Bolton et al., 2021; Gittell & Douglass, 2012). The challenge is compounded by conflicting expectations. Consider the role of competing demands:

> While a relational ethics might promise dialogue, reciprocity and unqualified generosity, its practice is never so straightforward as real leaders are always faced with contradictory ideals and multiple competing agendas and demands. (Badham & Rhodes, 2018, p. 1)

   Organizations thus face a design paradox: organizations need to be able to differentiate themselves from others but at the same time they must be recognizably legitimate: too much difference can be as problematic as excessive similarity. Thus, organizations should be designed to reach a degree of optimal distinctiveness (Zhao et al., 2017). How they do this is of the utmost

importance as the way organizations design themselves critically affects their functioning, effectiveness and readiness for change. The way managers design their organizations and put this design into practice defines the essence of membership as, for example, highly structured or loose, as well as significant others' experience of the organization that designs these relations, such as employees, customers and stakeholders (Ghoshal & Bartlett, 1998).

In contemporary organizations there has been a shift from what was customarily highly centralized and formally rule bounded bureaucracy governed by imperative command to a more acentric design, one characterizing "post-bureaucratic" organizations (Adler & Borys, 1996; Barry & Rerup, 2006). The change occurred as "limitations of the managerial hierarch have become increasingly apparent" (Lee & Edmondson, 2017, p. 36). Relatively less-hierarchical designs have been explored. These include self-organizing and self-managing organizations (Stacey, 2011), de-structured organizations (Mabey, Salaman & Storey, 2001) as well as boundaryless organizations (Ashkenas et al., 2015). These forms are evident in many architecture and design firms, software developers, advertising firms, and so on, where a classical machine model that relies on complex systems of well-defined rules and hierarchy (Ashmos et al., 2002) is no longer thought applicable. Such firms are "centered on the primacy of creativity and innovation" and the "creative instinct is venerated as the source of the innovation" (Martin, 2009a).

Though such organizations have changed towards adopting loosely coupled and autonomous designs, that does not mean that they are devoid of an element of bureaucracy and hierarchy, albeit in different forms (Brown et al., 2010; Weick, 1976). Similarly, Hodgson (2004) argues that a legacy of bureaucratic control pervades even creativity-intensive firms called post-bureaucracies. In such firms, although the organizing differs and deviates from the classic managerial hierarchy, a manager-subordinate authority relationship is often retained (Lee and Edmondson, 2017), something that explains aspects of the contradictory and hybrid nature of their design (Josserand, Teo & Clegg, 2006, p. 54).

Organizations are characterized by counteracting forces of order and chaos (Brown & Eisenhardt, 1997), the former pushing towards stability whereas the latter is a source of instability (Thietart & Forgues, 1995). A design that is predominantly flexible and low on hierarchy that is designed to accommodate creativity will be one that is prone to chaos (Davis, Eisenhardt & Bingham, 2009) that will not become systematized as the organization will "wax and wane with individual intuitive leaders" (Martin, 2009a, p. 6). By the same token, a hierarchal design that is rigid, primarily oriented to control and stability, runs the risk of stagnation (Davis, Eisenhardt & Bingham, 2009) and structures organizations to operate much as they have done in the past (Martin, 2009a). Hence, a balance between structure and flexibility is called for (Kamoche & Cunha, 2001). James Thompson labelled the challenge of balancing the paradox of

administration, which involves "shooting at a moving target of co-alignment", being flexible and at the same time trying progressively to eliminate or absorb uncertainty (Thompson, 1967, pp. 148ff.) and this paradox remains a relevant research topic today, appearing in themes such as ambidexterity, paradox, plurality and hybridity, to mention but a few (see Denis, Lamothe & Langley, 2001; Lewis, 2000; O'Reilly & Tushman, 2013).

For Greenwood and Miller (2010), design *should* constitute *the* core concern of organization theory. In this book we will discuss different types of organizational design and their fit with changing times. We see the intersection of design and change as throwing up paradoxes because fit implies not only the search for congruence/coherence; it also accepts that tensions are an inevitable product of process and complexity (Farjoun & Fiss, 2021). The imperative to regain fit signifies that there is tension being produced by the fit of current design with current contexts; otherwise, there would be no issue. Such is the paradox of design: it only become salient when it is not working smoothly.

A paradox refers to contradictions between interdependent forces that cannot be solved because they persist over time (Schad et al., 2016). Paradox theory has a long history in many disciplinary domains (Bednarek et al., 2021) and has recently gained prominence as a lens through which to understand organizations' tensions arising from balancing a variety of goals, stakeholders and responsibilities. Organizations are crosscut by tensions, not as anomalies or unwanted aberrations (Farjoun & Fiss, 2021) that can be ironed out, so much as inherent and constitutive features (Putnam, Fairhurst & Banghart, 2016). Tensions may be contested, they can be embraced, or they might be ignored. Where they are neither contested as anomalies nor ignored as irrelevancies the creation of organizations characterized by paradoxical thinking is possible (Smith, Lewis & Tushman, 2016). Paradoxical thinking can lead to paradox-accommodating designs such as ambidextrous structures (Andriopoulos & Lewis, 2009) that can help organizations cope with competing goals.

It is very difficult to know what the appropriate balance is between desired tensions such as exploration and exploitation (March, 1991), stability and change (Farjoun, 2010), freedom and control (Kamoche & Cunha, 2001), quality and safety (Love et al., 2021), as these are complex processes, so rich in contradictions that they do not easily amount to what Marques and Mintzberg (2015, p. 8) qualify as "win-win wonderlands". Designing hierarchy that is kept to a minimum does not mean hierarchy is absent. First, eliminating hierarchy, even when viewed as desirable, is easier said than done. There is a sentimental, cultural as well as economic attachment to being a boss, not to mention self-interest. Suggesting a diminution in the power of hierarchy is culturally suspicious for many managers who have struggled hard to gain ascendancy. For instance, a CEO asked Margaret Heffernan "Are you a com-

munist?" after she endorsed flatter organizational structures (in Heffernan, 2017, p. 8). Hierarchy often proves necessary for practical and symbolic reasons. Second, the absence of hierarchy can lead to disorganization (Cooper, 1986) while third, organizing without hierarchy requires an infrastructure of accountability (Cunha, Rego & Clegg, 2011, p. 500) which is hard to build and even harder to maintain. Thus, the search for balance is aggravated by the fact that organizations have a multiplicity of goals that are also competing and ambiguous (Badham, 2021; see also Highlight 2.1). As Starbuck and Nystrom (1981, p. 5) summarize:

> Designers perceive quite diverse realities. They also disagree with each other about what ought to be. There are those who advocate making organizations more rational, more playful, more efficient, more humane, more useful for societies, more profitable for owners, more satisfying for members, more stable, more flexible, more proactive, more adaptive, more democratic, more obedient to top managers, and so on … and on.

Inappropriate choices can produce undesirable results. In one practical case, as the *Financial Times* (2021a, p. 16) reported about Danone's choice of a social orientation over one oriented to shareholder value:

> Pivoting too soon faces its own risks. Earlier this year, investors forced out the chief executive of Danone, saying that a focus on social responsibility eclipsed the drive for profits.

HIGHLIGHT 2.1   BALANCING GOALS AS A BALANCING ACT

In his book on financial frauds, *Lying for Money* (2021), Dan Davies, an author with experience as a financial regulator, discusses the difficulties of articulating distinctive goals, namely, costs, quality and customer satisfaction. *The Economist* (2019, p. 50) summarized the challenge as follows: "focus too narrowly on cost and the quality of goods may suffer; concentrate on quality and costs will rise. Try to ensure both and the business may become so obsessed with its own production processes that it ignores customer needs."

Seen from a paradoxical perspective, good management is an exercise in dynamic balancing, not 50/50 types of balance, so much as a creative and ongoing attempt to maintain commitment to opposite polarities in process. The incapacity to maintain balance may lead to perceptions of the undermining of

an organization's mission, such as when medical care is rendered secondary to financial concerns (Hartzband & Groopman, 2014). Yet, financial concerns do matter, which means that managerial life, not only for clinicians and medical administrators, would be much easier if paradoxes did not exist. Exist they do, however.

As Starbuck and Nystrom (1981) observed, the design of organizations is rich in paradox because organizations need to preserve different capabilities to keep opposite demands active. Tensions arise between existing design and emerging designs because competitive landscapes are constantly transformed by new technologies and new risks, new social demands, even new viruses, creating new business models in response (Ahlstrom et al., 2020; Bettis & Hitt, 1995). Sometimes the risks and technologies, the demands and viruses, coincide in major transformational ways. Take, for instance, COVID-19 and digital meeting technology, such as Zoom. Organizations that have used the latter to deal with the former have discovered, by accident, new designs for organization that do not require the centralizations of functions in an office and co-presence of people. Social, organizational, epidemiological and digital relations are all transforming simultaneously.

There are also paradoxes of the ideational sphere. All organizations articulate and materialize ideologies in their design. In parallel with the need to be instrumentally efficient, organizations are increasingly faced with new themes, such as sustainability, a humanistic ideology cast wide enough to encompass the preservation of species and their habitat, demanding that managers address competing demands simultaneously, including corporate, environmental and social wellbeing goals (Hahn et al., 2014). Organizations need to manage a duality of instrumental and humanistic ideologies (Petriglieri & Peshkam, 2021). The former will tend to stress productivity, the latter wellbeing. Working from home may well serve both ends for people without children to home school. There is no productive trade-off between being at work while being at home for those that assume care responsibilities, for children, the ill or the elderly. Paradoxes between being a caring parent and being a digital worker can generate conflict and ambiguity about how time is spent. Nonetheless, paradoxes, when properly handled, can contribute to creating organizational uniqueness and vitality, perhaps by organizations recognizing that the day will be punctuated by demands other than those of the office; hence, making temporal allowances for a working day that splits between home and office work.

The pandemic has been a win for organizational sustainability; greatly reduced commuter traffic, subways and buses almost empty of congestion. When not everyone is heading for the city centre to work similar hours in similar offices, organizational design of necessity changes. Almost all organizational design in the past has been laced with implicit spatial assumptions about the concentration of people in buildings. Historically, as these reached

ever higher in the sky and spread more across the land, consuming space, a whole lifestyle predicated on the office and its design was created that governed flows from the suburbs to the city, imposing a common rhythm of dressing for work, commuting to work, being at work, working in similar organizations, lunching in or from similar fast food service stops, before joining the exhausting commute at the end of the day.

Corporate contenders populate these offices, suited up for the day's struggles, their performance "mathematically measured" such that each contender "becomes a little cog in the machine, and, aware of this", they have "one preoccupation … to become a bigger cog" (Weber, 1956, p. 127). The essence of the design is hierarchy with the essential motivation being movement, cog by cog, through its interstices in an upward progression, mastering its mathematical and other measurements. To talk of the office speaks of a specific design, a specific kind of organization, with a particular architecture of social relations inside the architecture of corporate castles in the sky. By contrast, a distributed digital workspace is a more sustainable workspace as well as one that is more humane from the viewpoint of those that enjoy working from home. It is also one that is no less gendered, as many mothers of school age children would attest. While the design of organizations has changed markedly because of the coincidence of risk and technologies, the social relations of gender, redesigned in many workplaces, now exist in an organizationally ungovernable space of the domestic sphere.

Prior to the pandemic and the shift to working from home, the designs of organizations seemed to be moving in the following directions:

- Flatter organizations, with less hierarchical layers and higher delegation of authority (Rajan & Wulf, 2006), as exemplified by Haier's "pancake flat" structure (Hamel & Birkinshaw, 2021). Lee and Edmondson (2017) also indicated the less hierarchical design found in organizations such as Oticon, Zappos, Morning Start and GitHub. Although such organizations all epitomize flatter design, there are also radical cases where design changed radically to fully self-managing (Lee & Edmondson, 2017) such as Valve (Puranam & Håkonsson, 2015).
- Vertical integration (à la Ford) giving way to horizontal intermediation (à la Toyota).
- "Power-with", that is, non-coercive and jointly developed, becoming favoured over "power-over", hierarchically mandated (Morlacchi, 2021).
- Temporary forms, such as projects, becoming increasingly adopted (Clegg, Skyttermoen & Vaagaasar, 2021).
- Culture becomes a prominent, sometimes even transparent, control mechanism (Cunha, 2002).

- Power (hierarchical, top down) as a source of authority is being replaced by authority that is not only a matter of the power of office but also is personal and distributed, premised on creativity and innovation of contributions (Joullié et al., 2020).
- Agility and responsiveness are increasingly important organizational attributes, which implies that organizations need simultaneously to express planning and improvisation capabilities (Shankar, Muller & Druin, 2020). In some cases, though, agile is little more than an empty word as organizations claim to be agile but maintain command and control practices (Dunning, 2018).
- The need to plan and improvise, to explore and exploit, to protect stability while engaging in change, invites organizations to adopt a paradoxical stance (Berti et al., 2021).
- The existence of one solid, identifiable organizational boundary between the focal organization and the rest of the world fades away, leaving room for the emergence of multiple, blurred, porous organizational boundar*ies* in which relations of various kinds (e.g., as outsourced staff, temporary workers, crowd contributors, interns and volunteers) connect with organization employees (Giustiniano, Griffith & Majchrzack, 2019).

To discuss these ideas the book is structured as indicated in Table 2.1. We present the key concepts as well as specific paradoxical challenges on the topic of the chapter.

Before you engage with the main design types discussed in the book's pages, it is important to consider that the types are not isolated from one another: they compose a continuum much as do the images in Escher's *Day and Night*. For example, even though the idea of platform capitalism is associated with the fourth industrial revolution and its iconic firms (Amazon, Google, Microsoft), its roots can be found in the Toyota production system (see Steinberg, 2021 and the discussion in Chapters 2 and 3). For this reason, epochal paradigms (du Gay, 2003) should be used with a critical mind, as "epochs" overlap. Instead, we favour a "continuist lineage" (Steinberg, 2021). Types mix and mingle; typification is merely a frozen moment of possibilities, possibilities coexisting, emerging and dying. Leading through context rather than control appears as a major change in the adoption of less hierarchical designs; if in the "real world" other possibilities do not die as the new emerges, in the interregnum, as Gramsci (1971) suggested, diverse forms, combinations and hybrids take shape.

Table 2.1 The roadmap for the book

Chapter 1 Introduction	In this chapter we introduce the theme of organizational design by explaining why design matters. Main topics discussed: First ideas Design as competitive advantage Roadmap
Chapter 2 The fundamentals of organization design	In this chapter we discuss what organization design is, namely, the difference between structure and design, as well as the complementarity between the hard and soft sides of design. Main topics discussed: Structure and design Bureaucracy and hierarchy Paradoxical challenges: flexibility vs stability, exploitation vs exploration; differentiation vs recognizability; administering vs facing uncertainty
Chapter 3 Organization design and change	In this chapter we discuss the characteristics of the traditional hierarchical organization. More than a mere historical curiosity, the study of traditional organization is an important endeavour as the shadow of Taylor's imagination is still present in today's organizations. Main topics discussed: Hardware Software The "one best way": scientific management Weber's bureaucracy Fayol's line/staff distinction Control through hierarchy Task design and allocation Employees Paradoxical challenges: design involves formal vs informal organization, with an excess of control limiting creativity and adaptability

| Chapter 4 The traditional organization: hierarchy meets bureaucracy | In this chapter we engage with the idea of less hierarchical organizations. Many organizations, as they evolve, are diminishing in hierarchy. As organizations become less hierarchical, they need to devise new ways of structuring work and control. Main topics discussed: Control through premises Hard power vs soft power Orchestration of competences Paradoxical challenges: less hierarchy, to increase flexibility, may generate dispersion that demands more control |
| Chapter 5 Less hierarchical organizations: the fall of the traditional pillars (part 1: hierarchy) | In this chapter we discuss how complex "elaborateness" of organizational design creates more fluidity, as organizational structures are only partially defined at the top and that some elements are kept undefined, to allow more bottom-up contributions and to accelerate response capacity and a higher pace of innovation. In a liquid world, careers, teams and organizations changed, giving way to novel career paths, teaming and project-based organizations. Main topics discussed: Post-modern organizing Matrix structure Horizontal structure Knowledge work Leaders as coaches "Spaghetti organizing" Paradoxical challenges: the coexistence of top-down and bottom-up organization design |

Chapter 6 The agile organization: the fall of the traditional pillars (part II: task design and allocation)	In this chapter we consider the emergence of the agile organization, organizations abandoning traditional elements, such as task design and allocation. Agile organizations use new technologies to discover new ways of reaching their customers. More than a strictly technological theme, "agile" implies a significant exercise of reimagining organizational design. Main topics discussed: From executors to co-designers Purpose-driven jobs Concertative control Co-leadership Customer-centrism Paradoxical challenges: meaningful and autonomous work coexisting with microtasks and the gig economy
Chapter 7 Final reflections: patterns, principles and practices	In this final chapter we consider forces that might influence the future of organizational design. These are illustrative. We also look backwards and forwards to discuss patterns, principles and practices. We encourage our readers to add their own topics. Main topics discussed: New trends Sustainable Development Goals Space for business B-corps Crowd-based organizing Patterns Principles Practices Design

WHY DESIGN MATTERS?

As an introduction, it can be said that "organization design matters just as much as any other kind of design … ugly organization design produces bad management" (Clegg et al., 2011, p. 520). Design shapes the way organizations work and confronts managers with important choices, for example, increasing process and control or facilitating creativity; flexibility or routine; order or chaos; efficiency or effectiveness, and so on. As Netflix's Reed Hastings put it regarding Pure Software, a company he created, "We had become increasingly efficient and decreasingly creative" (Hastings & Meyer, 2020, p. xix). Strategy defines where and how organizations decide to compete, but their strategic execution will be guided, to a great extent, by the way the organization is designed, as will be discussed in Chapter 3. Design defines what matters most, the way an organization works, who decides what and when.

Design as a Source of Competitive Advantage

Organizational design may be a source of competitive advantage as it stabilizes how organizations direct multiple resources, including collective attention and intelligence, material resources, as well as technologies and ideas, to develop the products or services offered. In cases where these resources are not well directed, the organization's efforts will be wasted. For example, directing too much attention and resources to convergent goal-oriented activities can be lethal in the long term, as many cases of failure of giant firms attest. It is easy for an organization to become increasingly efficient and decreasingly innovative: think of Blockbuster – great at renting videos globally but hopeless at seeing the switch to digital and streaming. Spreading firm resources too thin is equally as problematic as being fixated on one goal defining the business. Such a situation is illustrated in the case of start-ups whose excessive creativity is not matched by a capacity to gain the scale and efficiency necessary to create viable businesses. Design centred *only* on *either* efficiency *or* creativity is a recipe for disaster. Falling too much to the extreme (Burton et al., 2017; Foss, 2003) poses a problem, even for creativity-intensive firms. When an organization leans too much on organic structures, it runs the risk of creating chaos with little sense of direction. For example, Brown and Eisenhardt (1997) showed the ineffectiveness of a predominantly organic design. In organic structures too many degrees of freedom lead to chaos because such organizations lack internal complexity and have few internal connections (Stacey, 2011). Hence, the utmost flexibility of organic structure cannot be a panacea, regardless of environmental dynamics and the peculiarity of an organization's needs.

Focusing on the invention of business at the cost of administering a business or on originality at the cost of mastery is a common error (Martin, 2009a).

Designing too much prescriptive structure assumes that organizational members are essentially "simple people" (Cunha & Rego, 2010), best managed by control by rules. Such a design option, popular in the early 20th century, characterized by too much structure (Davis, Eisenhardt & Bingham, 2009) and a lack of flexibility, was the epitome of scientific management (Taylor, 1911). Designed for a largely immigrant workforce and one only newly introduced to industrial production and unlikely to be fluent in English, making the jobs as simple to understand as possible made some sense. "In the last two decades of the 19th century, the U.S. was shifting – uneasily – from a loosely connected world of small towns, small businesses, and agriculture, to an industrialized network of cities, factories, and large companies linked by rail" (Kiechel, 2012, p. 64).

Organizational members were expected to be obediently trained to-do-as-told. Burns and Stalker (1961) describe this as mechanistic design in which member's functions, together with the methods, responsibilities and the delegated power appropriate to them, are well defined. In the mechanistic design, individuals are told what to do, how to do it, what not to do, what is expected of them, and what they can eschew as the responsibility of others. Adler and Borys (1996) call such organizational archetype coercive bureaucracy in which firm boundaries are set for members. By contrast, we suggest, optimal design is somewhere in between, a paradoxical mix of flexibility and stability (Gaim et al., 2018).

Design can become a source of competitive advantage if it fosters sets of dynamic capabilities that can strive to adjust an organization's unique competencies to cope with relentlessly shifting, progressively hypercompetitive environments (D'Aveni, 2010). Organizational environments never stop changing. Organizations need to improve not only existing competencies for exploiting what they know they are doing and know how to do but they also need to develop new competencies. With these they can explore changing environments and future possibilities as means and goals of organizing. Again, think of the pandemic and the rapid shift that this prompted during lockdowns to working from home, using Zoom and other technologies. The capacity to engage simultaneously in exploration of new ways of delivering old forms of exploitation requires paradox management competences. Too much of one or a focus on either to the detriment of the other sets a deadly direction; death by exploitation of opportunities that are known too well or death by innovations that do not gain acceptance. The two approaches are opposites.

Given the importance of being organized and being able to respond with agility, several authors warn that design is becoming a strategic factor (Roberts & Eisenhardt, 2003). In this perspective strategy and design converge.

Departing from the tradition of Austrian economics, Eisenhardt and Roberts argue that in highly competitive markets, more than defending turf, organizations need to sense and seize opportunities. For this to happen they need to rely on agile designs:

> Pushing these ideas a step further, an Austrian orientation (perhaps uniquely) implies the confluence of strategy and organization. Indeed, in turbulent settings the organization itself may be the strategy. (Roberts & Eisenhardt, 2003, p. 345)

In the Austrian view, the market is represented as a process in perpetual motion, with a propensity to disequilibrium, composed of organizations that constantly introduce streams of innovation to surprise competitors. Managers follow a logic of opportunity by relying on flexible designs that favour fast moves, rather than strict routines. Routines increase efficiency and reliability but at the cost of organizational inflexibility and the inability to respond swiftly to new opportunities. Flexible designs, however, bring other dangers, such as lack of coordination and potential for strategic drift.

In different words, the traditional logic of planning must be supplemented by a logic of agile adaptation and improvisation (Abrantes, Cunha & Miner, 2022), which expresses what Pablo Isla, the CEO of Inditex, qualified as a "capacity to react from moment to moment" (Dombey, 2021, p. 17). Being able to improvise in the face of threats and opportunities may thus be a critical factor for organizational adaptation to fast-changing environments and crisis situations. Strategic dynamics rarely conform to an organization's intentions or plans (Tsoukas, 1993), which recommend that organizations should plan and be prepared for improvisation. For example, the successful response of the Taiwanese government to the first wave of the COVID-19 pandemic was a combination of preparation and improvisation (Wang, Ng & Brook, 2020). Plans and preparation without responding to cues amount to nothing more than wasted effort; improvisation without rules and preparation is like "shooting from the hip" (Furr, Eisenhardt & Bingham, 2020), brave but potentially ineffective at precise targeting.

Improvisation refers not only to reparative moves in the operational realm (Cunha & Clegg, 2019) but also to the capacity to reposition the organization strategically through deliberate but unplanned moves, to respond swiftly to unimagined threats (Giustiniano et al., 2020). Given the pace of change in many sectors, the capacity to move fast in scoping and realizing new opportunities becomes central. Rigid designs, in this context, may become a source of disadvantage but designs that offer insufficient flexible-routine consistency may be a source of problems.

Design as a Reflection of Socioeconomic Conditions

As Barley and Kunda (1992) have explained, design is also a reflection of social and economic conditions. In their study of the evolution of theories of organization the authors concluded that different economic circumstances tend to give primacy to different philosophical approaches to design. In times of economic bonanza, the functional side tends to prevail where it is control of the core technologies that deliver profits. As the implications of the leading technologies gain shape (and are copied effectively and often more cheaply elsewhere), returns to these strictly *technical rational* approaches diminish. When this happens, the emphasis shifts to *sociotechnical* interventions to wring out more returns from the previous wave of technical rationality though sociotechnical redesign of work to gain more from the technology in use (Trist & Bamforth, 1951). Design is not a strictly technical issue but one that is always sociotechnical. Seen thus, design is a social process, deeply embedded in the circumstances in which it is created. For this reason, readers should keep in mind that all discussions of design always need to be contextualized.

A design that might do wonders in one context may be inadequate in another. In more hierarchical and authoritarian cultures, flatter and more distributed forms of organization may not work as well as in more social democratic contexts; in less individualistic cultures, the family, rather than just the employee, may have to be considered as a core stakeholder (Cunha, Fortes et al., 2019). In summary, there is no such a thing as a one-best organizational design; design solutions depend on context, a central element of the contingency approach to designing, which typically stresses factors such as organizations' environments, technologies and size (Clegg, Pitsis & Mount, 2021).

DRIVERS OF CHANGE IN ORGANIZATIONAL DESIGNS

Change is the natural state. The world is constantly changing (Tsoukas & Chia, 2002) and all things in it; some perceptibly, others less so. No organization stands still if only because their environments are changing. Even historically long-standing organizations such as churches, political parties and orchestras need to match environmental change with constant adaptation. Adaptive effort is hard as it involves multiple dimensions. On the one hand, a hyper-agentic view of organizations (Sarta, Durand & Vergne, 2021) sometimes assumes, albeit implicitly, that managers have the power to adapt their organizations to their environments if they want to and are competent enough. The hyper-agentic view is problematic for several reasons: (1) stakeholder and governance issues constrain the decision latitude of executives; (2) even when companies have knowledge and resources (such as Polaroid's patents on

digital imaging; e.g., Tripsas & Gavetti, 2000) they may fail to adapt because of internal belief systems or the traps of previous success (Miller, 1992; Vuori & Huy, 2016); additionally (3) change needs to be integrated within an existing organization system, the success of doing which is never guaranteed, when inertial forces are often too powerful to be defeated. System integration can be a powerful inertial force; moreover, changing while maintaining existing relationships can be extremely difficult (Neumann et al., 2019).

Creating designs that redesign themselves is of fundamental importance. Firms need to gain and regain fit, not in irregular moments of changes as occasional structural readjustments but as a dynamic process. Rather than a stable quality, change is dependent on the organization as well as the nature of the environment, including social, competitive and institutional facets. Robust institutional settings make the rules of the game that businesses are engaged in clear and enforced with winning and losing competitive and reasonably transparent activities. In weak institutional environments (Peprah et al., 2021), corruption and cronyism are more likely to prevail and kleptocracy, oligarchy and the favouring of specific organizational interests on other than wholly rational criteria are also more likely to prevail. Organizational decisions incorporate political dimensions and political dimensions inculcate organizational decisions, such as channelling major funding decisions to marginal seats without accountability shortly before a government goes to the polls (Ng, 2021). Design thus mixes technical, social, organizational, economic, cultural, philosophical and political facets.

We next turn to two major sources of change in organizational designs: changes in *culture* and *society* and changes in *technology*. We explain how design coevolves with changes in these domains (e.g., Birkinshaw, Gudka & D'Amato, 2021), showing that design, rather than being a strictly technical domain, is intricately tied to social factors, as noted above.

Changes in Society

Throughout the 20th century, urban families became smaller and more democratic, children became better educated, women gained new roles in family, work and society, creating a progressive interpenetration of the domains of work and family (Cunha, Hernández-Liñares et al., 2022). Technological innovations, such as oral contraception, allowed women to make decisions regarding maternity and to manage their careers in independent ways. These changes altered work and organizational domains, superseding the times of the organizational men, those men in the grey flannel suits (Whyte, 1956; Wilson, 1956).

By the 1960s, protests in the US against the Vietnam war redefined the relations of consent between citizens and the state. Young Americans were

no longer prepared to be drafted to die in some ultimately pointless war in a faraway land. Cultural change was dramatically present, in draft dodging, drug taking, as well as cultural expressions of self and sexuality that loosened many past strictures. Demography was important in these changes. As the post-war generation of boomers reached maturity, they gained a sense of generational identity that for many was fiercely critical of the perceived complacency and existential meaninglessness of their parents' generation. Adversarial relations with formal authority in general, not just the draft but also with institutions, including the ways in which work, organizations and capitalism were organized, irrupted. In Europe these were exemplified by the May 1968 protests in France (Willener, 1970). Protests sometimes resulted in open violence:

> From Berkeley to Berlin, from Paris to Rome, students were struggling against mass consumerism, the commercialization of human relationships, the commodification of sexuality. The capitalist system was blamed for creating disparities in the world between centres and peripheries. (Boldizzoni, 2020, p.115)

The outcomes of these changes persist still, including the emergence of new ways of understanding relationships between power and authority. Authority was no longer to be accepted a-critically as something bestowed by office, incumbency or rank. The hierarchical structures of capitalism, founded on master and servant relations, were increasingly taken as anachronistic and oppressive (Boldizzoni, 2020). As the shock waves of the movements of the 1960s gave way to the spread of social alternatives grounded in hippiedom, we can see the relation to today's philosophies, especially the increasing emphasis on people doing their own thing, which has heightened individualism and anti-hierarchical sentiments – even in business – where it encourages entrepreneurship rather than corporativism. The corporates took note, albeit slowly; for example, the considerations of Cristina Campos, from Novartis (Portugal) regarding hierarchy are relevant and representative:

> At Novartis we are conducting a major transformation, internationally: a transition to an *un-boss*, more informal culture, flat and transparent. (Mateus, 2019, p. 14)

Similar sentiment is shared by a renowned Norwegian architectural and design firm where work is collaborative and informal, based on flat structure. Such design is reflected in their organization chart where there is no hierarchy but rather a weave of collaborating organizational members.

Comparing his current employer (Snøhetta) with another more traditional employer (Rafael Viñoly), an interior architect, in one of our studies, told us:

> Rafael Viñoly, he has done a lot of international architecture offices, he is from Argentina and is well known in New York. The firm, Rafael Viñoly, it is his firm and his name. Even when you open up the website, you see his hand drawing. It is all him, there is a strong hierarchy in his office. Here, the organization is flat, contributions are welcomed by everyone. Over in New York, even though you can walk up to a colleague and suggest something, it is a very structured and corporate architectural practice. (Interior Architect, Snøhetta)

Changes result from demographic generational differences (Myers & Sadaghiani, 2010; see also Highlight 2.2) altering consumption habits (Bardhi & Eckhardt, 2017) and influencing societal expectations around topics such as climate change (Club of Rome, 2019; Williams, Heucher & Whiteman, 2021), diversity and inclusion (Williams & Bauer, 1994) as well as digital transformation (Rigby, Elk & Berez, 2021). The latter increasingly creates a plethora of digital "bubbles" in which like-minded interpretations of the world form, unconstrained by the legislations of science or other authorities (Bauman, 1987). As Maccoby (2007) observed, a "social interactive" rather than more bureaucratic social character accentuated free agency instead of loyalty as an adequate cultural orientation and individual mindset for our age.

HIGHLIGHT 2.2   FOR PRACTICE: ORGANIZATIONS NAVIGATING THROUGH GENERATIONS

Generational differences make a difference regarding how one sees the world. To make better sense of the world through the lens of your organization's future customers you may consider the relevance of reverse mentoring: find a teenage mentor and learn from them. Ask:

> How do you and your peers view technology?
> What are the latest technological fashions?
> What do they think about your favourite company?
> How do they imagine the future of your business: is it seen as indispensable or irrelevant; old-fashioned or innovative?

Reverse mentoring may help to understand how your business might be – to use today's words – disrupted. Find a group or groups of internal agents to let you know how your company might be rendered irrelevant or stronger.

To make sense of changes, organizations may also scrutinize the peripheries of their attention, discerning subtle changes at the micro level, using a direct sensitivity rather than indirect, second-hand data (Cunha & Chia, 2007). Cultivating good boundary-spanning competencies (see glossary), scrutinizing the periphery, being close to customers, may help to design organizations as a process of adaptation.

Being aware of cultural shifts and trends can also play a similar role. The arts represent the scale and scope of changes taking place economically *and* culturally. Any given value basis for an economy is always a cultural achievement because it is dependent on being culturally legitimated (Land & Śliwa, 2009). Reports from the front line of ongoing changes can be found in cultural works that have addressed problems of contemporary society. In the 20th century, for instance, notable reports included Charlie Chaplin's (1936) critique of the dehumanizing effects of industrialized capitalism in *Modern Times*; Fritz Lange's (1927) critique of urban anomie and oppression in *Metropolis* (Halper & Muzzio, 2011), J.R.R. Tolkien's (1954) pastoral elegy against the forces of darkness and the disruption of nature in *Lord of the Rings* (Urick, 2014); George Orwell's (1949) warning against the abuses of authority, language and surveillance through a panoptical ordering of society in *Nineteen Eighty-Four* (see Adelstein & Clegg, 2016 on the "doublethink" language of ethical codes such as Microsoft's, with references to "constructive self-criticism" and "continual self-improvement"); Franz Kafka's (2000) depiction of labyrinths of bureaucracy in *The Trial* (Warner, 2007), or Robert Musil's (2015) prefiguring of the emptiness of the eloquent men from marketing that have never subjected themselves to an idea with staying power, outlined in *The Man Without Qualities* (Loacker, 2021).

Changes in Technology

Changes in technology propel organizational changes. In designing organizations, technological changes have effects on elements such as complexity, centralization and formalization. Complexity denotes the number of activities or subsystems within the organization which include vertical (number of levels in the hierarchy), horizontal (number of job titles and departments) and spatial (number of geographical locations) (Daft, 1988). Centralization is the degree to which coordination or control are managed by core personnel to whom others report. Differing technologies give rise to different preferences in terms of the degree to which power is concentrated – or dispersed (Burton & Obel, 2004). Formalization denotes the degree to which the organization specifies a set of rules or codes to govern how work is done (Burton & Obel, 2004).

To situate these technological evolutions in historical perspective, in the next section we revisit the four industrial revolutions, as they had a fundamen-

tal impact on the way organizations are designed. While the precise historical sequencing and overlap of these revolutions is a matter of interpretation, that technology has evolved with consequently major changes in other domains of life, the way we live and the way we work, is widely shared. One point is certain: technologies revolutionize our lives. Some aspects are positive such as longer life expectancy in most Organisation for Economic Co-operation and Development (OECD) countries, while others are less positive, including increasing breaches of a more balanced relation with nature as humans pollute the planet – particularly the more affluent these humans are, on a per capita basis.

As a rule, existing technologies afford possibilities that organizations use to obtain higher levels of efficiency or effectiveness. Technologies coevolve, including the technology of management, qualified by Hamel and Birkinshaw (2021) as "the technology of human accomplishment", which evolves with other technologies and coevolves with these. Once new technologies are invented their affordances will be up for creative use, with many technologies being used to reinvent organizations, as we next discuss.

THE ROLE OF TECHNOLOGY: FOUR TECHNOLOGICAL REVOLUTIONS

The world of work has been shaped by successive waves of technological change and revolution. A technological revolution has been defined as interrelated breakthrough technologies that compose a system of systems, a meta-system (Perez, 2010). Some authors consider there have been four such notable waves (but there are alternative classifications, as discussed in Highlight 2.3). Here is a summary of the first three: in the 18th century, new inventions such as the steam engine propelled a first industrial revolution. In the 19th and early 20th centuries, electrification, telegraphy, the combustion engine and the methods of mass production took the process of industrialization to a new level, ushering in modern globalization, suburbanization and commoditization as goods poured out of the new industrial economy. In the 1980s, the personal computer and the Internet initiated the third revolution, whose consequences are obvious by now. Table 2.2 summarizes some key ideas associated with each moment in the evolution of technology and their revolutionary effects.

First Industrial Revolution

The industrial revolution occurred in the United Kingdom, beginning in the late 18th century. For Perez (2010), Manchester was the cradle and symbol of the age of steam as much as Silicon Valley functioned as the centre of

Table 2.2   *Four industrial revolutions*

	First revolution	**Second revolution**	**Third revolution**	**Fourth revolution**
Era	1765 to late 19th century	Late 19th century to early 20th century or 1870–1914	Starting in 1969	Ongoing
Main technologies	Steam engine, mechanization	Electrification	Computers, electronics	Artificial intelligence, Internet of Things, big data
Implications for work and organization	Replacement of agriculture by industry as prevalent sector	Standardization and industrialization	Information intensity, virtualization of work, dominance of the service economy	Digital transformation and adoption of "agility"

the microelectronics revolution. However, one should not ignore that on the other side of the Pennines, cities and towns such as Leeds, Bradford, Halifax and Huddersfield could equally lay claim. East of the Pennines, wool was king; west of the Pennines, it was cotton. Cotton was globally integrated into the world economy through slave modes of production in plantations in the Americas. These plantations were made possible because of the global trade in black bodies stolen and sold from Africa. In addition, the East India Company and later the colonial state were to systematically sabotage and inhibit competition from the Indian subcontinent, often using unscrupulous and inhumane practices.

The industrial revolution consisted of the application of new forms of energy to productive processes. Initially water was dominant, channelled into canals for trade routes and powering the early textile manufactories in which labour was becoming concentrated. After Boulton and Watts developed the steam engine in 1786, a new source of power was available. The use of steam allowed the mechanization and centralization of production, creating a role for the surveillance of "hands" in the many factories that emerged, replacing the putting out system of merchant capitalism, premised on distributed domestic weaving which the merchants coordinated, with the manufactory as a place in which production was concentrated (Marglin, 1974). Initially these factories, as they came to be called, had been situated by fast running streams that powered water wheels for energy. Steam power rapidly superseded the water wheel, which allowed much greater liberty in the location of industry.

The design of firms changed with the times. With industrialization, as Simon (1965) put it, an increasing programming of more and more sophisticated work

activities could occur. Every activity is unprogrammed the first time it is done but with repetition it tends to stabilize around a set of standard procedures. The outcome was the rise of new, capital-intensive forms of production, as well as the constitution of vertical hierarchies in which the hands were controlled by panoptical supervision. Work was long and arduous, began early in life in childhood and was fundamentally unregulated by effective legislation. The fate of all who lacked property and had to sell their labour power to survive (Marx, 1976) was to create value for the capitalist while diminishing the value of lives lived in dark satanic mills and the substandard properties thrown up to house them (Engels, 1983). For the factory owners, the capitalists, productivity increased with the creation of the factory but so did alienation from a life that was often brutal, poor, nasty and short for the men, women and children labouring within. For these unfortunate souls "work was a form of violence, 15 hours a day, six days a week" (Coelho, 2019, p. 16).

These hard times were at the origin of important literary works. As Boldizzoni (2020, p. 22) observed:

> In Victorian Britain, social criticism was most often carried out by literary writers, who were divided by ideology but united by a common uneasiness with the times. One does not have to wait until Charles Dickens (for who could deny that *Hard Times* is a novel about capitalism?).

Second Industrial Revolution

Between the mid-19th century and the early 20th century, a new wave of change took place with modern forms of transportation, including the railroad. The invention of electricity towards the end of the century was a major innovation: work was no longer confined to the daylight hours but could be illuminated at any time. Major transformations in transportation and communication networks in the 19th century through steam powering the railways made possible the dominance of increasingly large and vertical integrated firms. The combination of innovations in transport and the electrification of factories generated mass production on a 24-hour cycle. Design wise, the visible hand of the hierarchy was gaining space over the invisible hand of the market (Chandler, 1977). The visible hand was especially evident to the hands inside the factories, tending and working on machines.

Production increased massively and prices decreased significantly. Taylorism, as the application of "scientific management" is sometimes known eponymously after its founder (Taylor, 1911), became the form of work organization, par excellence. Scientific management allowed significant efficiency gains as well as the explosion of mass production. The process innovated significant human burdens, such as the transformation and intensification of

work into highly routinized manual labour under the direction of mental labour that planned both the design of work and its pay and enacted its supervision (Braverman, 1974). Taylorism brought important changes, including the first emergence of modern management with its focus on time, process and efficiency. In line with the zeitgeist, fascination with science and engineering, stimulating the pursuit of a management science, re-emphasized the beauty of the mechanical, in Guillén's words (1997). In time, the Taylor system was modified to the moving production line introduced by Henry Ford in 1913 in his Detroit factory based on the abattoirs of Chicago (Clegg, Courpasson & Phillips, 2006), a combination of ideas that spread globally after the First World War.

In the same decades in which Taylorism was conceived and gained momentum, in the Old Continent the French Henri Fayol, a mining engineer, executive and later director of a mining firm, developed a "general theory of business administration" (Fayol, 1918), that is often referred to as Fayolism. Although contemporary, Fayolism and Taylorism were conceived independently, with the two leading authors still considered by some as two of the most prominent founders of management theory and methods.

While Taylor derived the principles of "scientific management" by starting from a focus on task execution and design, Fayol adopted a different perspective: the whole organization. Having that as focus, thanks to his experience in mines, he identified five main activities that any (industrial) organization should control: technical, commercial, financial, security, accounting and *managerial* activities. The novelty was the qualification of "managerial activities" in terms of planning, organizing, commanding, coordinating, *controlling*, forecasting. While Taylor associated control with the idea of (physical) supervision and time management, Fayol's control function – as derived from the French *contrôler* – was based on the idea that managers should receive feedback about the process that they were charged with, so as to have the chance to investigate deviations and make necessary adjustments where needed (for the equivalence between management and control in Fayolism, see Chapter 3).

Although conceived in two different sectors and continents, the principles of management distilled by Taylor and Fayol have a great deal in common despite the former's focus on the shopfloor and the latter's focus on the whole organization. The division of work and specialization of workers (both in technical and managerial activities), discipline and obedience as the main mechanisms for enforcing hierarchy, hierarchy considered as a scalar chain of power, with subordination of the individual interest to the general interest characterizing both. Nonetheless, differently from Taylor, Fayol defended organizations having a "unity of command" while Taylor exposed workers to several forms of control (and therefore different "controllers"); Fayol allowed some space for individual initiative (i.e., the origination of novel plans) while Taylor did

not: he believed that workers had no need to think as the system of scientific management had already done their thinking for them. Fayol emphasized *esprit de corps* as a source of team cohesiveness and harmony, while Taylor saw collective social relations as a potential source of "systematic soldiering".

Third Industrial Revolution

A new wave of economic restructuring was initiated in the 1950s, propelled by new developments in fields such as electronics, information and communication technologies and the computer. As Vallas and Schor (2020, p. 274) summarize, from a situation in the post-war period when computers were rare, massive and hugely expensive machines, this trend involved "the advent of the minicomputer in the 1970s, the popularity of the personal computer in the 1980s, and the spread of the internet in the 1990s and thereafter".

The computer was the key device in this third industrial revolution. It became a critical tool for the programming of work, especially mental work, supporting the rapid growth of the discipline of operations research, leading to the reprogramming of several tasks, such as the organization of work on the assembly line or the management of stock in the warehouse or decisions on inventory levels. Herbert Simon assumed that, in principle, any decision process could be programmed, including the unprogrammed decisions of managers (Simon, 1960). The Internet, created in 1983, significantly contributed to propelling this wave of innovation, although only slowly in its initial inception, largely as a tool for scientific communication between university-based researchers (Zittrain, 2007). After the Internet became more widely developed with the advent of the world wide web in 1989, its impact on organizations was to be enormous, as summarized by Csaszar and Steinberger (2021): concepts derived from artificial intelligence and the notion of organization theory as a science of the artificial increasingly pervaded the field, namely, via the work of Herbert Simon and James March (e.g., March & Simon, 1958 [1993]; Simon, 1969).

Computers changed the way we live and work, something that became evident for those who shifted into a largely digital mode during the COVID-19 pandemic. Computers created new automation possibilities and became omnipresent in the workplace and in everyday life with the advent of the portable personal computer in the early 1980s. Humans increasingly dedicated themselves to knowledge and creative work, which rendered processes such as everyday creativity increasingly central (Villanova & Cunha, 2021). In some cases, factory workers became knowledge workers, as in the case of Toyota (Osono, Shimizu & Takeuchi, 2008).

Fourth Industrial Revolution

According to McAfee and Brynjolfsson (2015), the fourth revolution is doing for human brainpower what the previous revolutions have done for muscle power. The fourth revolution, which is rapidly progressing, blurs the frontiers between the physical, digital and biological worlds. It is founded upon digitalization, a general-purpose technology affecting "every aspect of business and society" (Autio, Mudambi & Yoo, 2021, p. 3). The process has been unfolding for decades but began with the introduction of the integrated circuit, in the late 1960s, with which speed and processing power doubled roughly every 18 months to two years (the so-called "Moore's law", after Moore's 1965 intuition). Brynjolfsson and McAfee (2014) argue that the inflection points of Moore's law took place around 2006. Since then, the world of business has been transformed, a process that COVID-19 accelerated. The fourth revolution is founded upon four technologies (Lanzolla et al., 2020):

- Efficiency technologies ("cloud")
- Connectivity technologies (5G and IoT – the Internet of Things)
- Disintermediation of trust technologies (Blockchain)
- Automation technologies (big data and artificial intelligence).

Schwab (2016) noted that the passage from the third to the fourth revolution was founded upon transitions made possible by digitalization and the production of innovations based on combinations of technologies. The speed and breadth of these processes are so significant that they have been qualified as revolutionary and "creatively destructive", to use Schumpeter's (1950) term. The Schumpeterian potential is best illustrated by the emergence of platform economy companies, such as Uber and Airbnb, which significantly altered the competitive landscape (Vallas & Schor, 2020) of their respective industries. Platforms do not simply favour the emergence of new behemoths: they often play "back-office roles" for micro-enterprises that would not be viable otherwise (Luo et al., 2018). These new forms have combined algorithms, crowdsourcing and reputational information (i.e., ratings) to refashion the way markets operate.

Digitalization led to multiple innovations. People and robots are increasingly co-situated side by side in organizations big and small, in mature or emerging economic sectors. Mesa Ceramics, from northern Portugal, took benefit from digital printing to differentiate itself from low-cost producers from other parts of the world (Pinto, 2020). Adidas is switching the production of some models from low-cost Asian locations, adopting instead 3D printing in Germany (The Economist, 2017). These technologies increase process flexibility and allow departures from traditional economies of scale. With 3D technologies it is

possible to manufacture small scale with high efficiency. Amazon operates some warehouses almost entirely with robots (Bagdasarov, Martin & Buckley, 2020), epitomizing the fourth industrial revolution company through its three extraordinary businesses: its ecommerce platform, cloud computing division and marketplace for other sellers (Thornhill, 2021a).

As usually happens, technological transitions bring opportunities and threats (see Highlight 2.3). The digital revolution is creating a new class, the "coding elite" (Burrell & Fourcade, 2021): a group of tech CEOs, software developers, investors and computer science academics leading transformations. A bifurcation is evident, however. Nowhere is the emergence of this elite more visible than in Silicon Valley. While firms such as Amazon are immediately associated with high-tech exploitation of ideas such as their use of algorithms to push products to consumers, they are equally as well known for industrial practices vis-à-vis their warehouse labourers that, while deploying high tech, seem barely to have moved much at all past traditional forms of exploitation (Englert, Woodcock & Cant, 2020). Rather than a proletariat, these workers are a "cybertariat" (Huws, 2014), a new peripheral workforce that is largely informal and marginalized, epitomized by the gig economy.

HIGHLIGHT 2.3   MAKING SENSE OF TECHNOLOGICAL REVOLUTIONS: DIFFERENT PERSPECTIVES

I   K cycles

A different conceptualization of technological change follows Kondratieff cycles or "K cycles": (1) steam (1780–1830), (2) trains (1831–80), (3) electrification (1881–1930), (4) automobile (1931–70), (5) IT (1971–2010) and (6) green industries (since 2011). The cycles are called long waves as each cycle has an accelerating phase followed by a decelerating phase of innovation. Overall, the cycles last about 50 years on average, with 25 years upswing and 25 years downswing, over about five or six decades before it gives way to a new cycle. In this reasoning, the current era would correspond to a sixth industrial revolution. More important than debating the right number of cycles is, for the present discussion, the observation of change dynamics and their impact.

II   Technological revolutions

Bodrozic and Adler consider that a sequence of technological revolutions led to the development of new management models. First, there was water-

power and the iron revolution, followed by steam power and railways, then steel and electric power. Starting from the 1880s, the automobile and oil conquered the world to be followed by computers and telecommunications.

These technologies sustained the creation of new business models. The implication is simple: managers that do not pay due attention to cycles of technological evolution do so at the peril of being stuck in the past in a present without much future.

Source: Naumer, Nacken and Scheurer (2010) (I); Bodrožić and Adler (2018) (II).

FINAL REMARKS

The representation of organizations as solid, stable entities is giving rise to their view as processes (Pettigrew, 1997; Tsoukas & Chia, 2002), sequences of activities that are fluid and liquid (Clegg & Baumeler, 2010; Clegg & Cunha, 2019). The great organizations of the past enhanced their institutional quality, among other reasons, because of their solid appearance, epitomized by prestigious buildings (Siebert, Wilson & Hamilton, 2017). The buildings defined the organization: the classical Art Deco of the Hoover Building in London and the pinnacle of the Chrysler Building in New York being examples. The COVID-19 pandemic saw organizations experimenting with people working from home. Thinking back to Hedberg, Nystrom and Starbuck (1976), perhaps the pandemic has created the world that they imagined, one in which designers should help organizational members to erect "tents" rather than "palaces", meaning that their role consists in facilitating self-organizing in a changing world. Whole swathes of the world knowledge economy are camping out now.

Such a change in perspective is not purely conceptual but has several important implications for practice. As will be discussed in the following chapters, changes in organizations' designs, not only the architecture of their buildings, have been profound. As a result, organization designers are confronted with important challenges in the way they conduct their work as their designs are constantly tried and tested by ever-changing contexts and events. In the next chapter we discuss the relationship between design and change.

3. Organization design and change

The notion that we are living on the brink of a new technological revolution has become familiar, even trivially so. Such a transformation has been labelled the fourth industrial revolution and it is generally agreed that it is changing the face of management, work and organization. It finds expression in phenomena such as algorithms, telework, digital veillance and electronic surveillance (Zorina et al., 2021). The impact of these technologies will shape the future. Many questions arise: will work become more creative; will repetitive tasks be assigned to machines; will work become a hybrid of human and technological augmentation or will it disappear? These are not just issues for futurists and scenario planners but for major investment decisions to be made now and in future with regard to technologies, equipment and buildings. For instance, in the US, Facebook announced the creation of a new crypto currency, libra, which threatens the financial sector (Waters & Murphy, 2019), already under attack from a vanguard of Fintechs. Global markets may be changing dramatically. Decisions made around technology-related issues have important geopolitical impacts: China's strategy, *China Manufacturing 2025*, aims to transform the country into one of the world leaders in fields such as robotics, semi-conductors and electric vehicles (https://www.europeanchamber.com.cn/en/china-manufacturing-2025).

The revolution has been unfolding for years. In the transitional landscape, "most companies were designed for the industrial age of the past century, when capital was the scarce resource, interaction costs were high, and hierarchical authority and vertically integrated structures were the keys to efficient operation" (Bryan & Joyce, 2007, p. 22). Adopting the new structures might not be easy though. Writing in 1998 for *Fortune* magazine, Hamel and Sampler (1998) discussed the traits of what, back then, they called the *e-corporation*. Some of their ideas are easier to discern today. For example:

1. Inefficiency is a lesser risk than irrelevance, meaning that efficient organizations unable to adapt to change will become irrelevant.
2. Customer expectations in terms of access, speed and personalization are not comparable with the same expectations as in the past.
3. Customers are less interested in products and more interested in solutions. Services and products merge under a new logic of service/servitization (Bustinza, Gomes et al., 2018). New generation automobiles, for example

Tesla's, can be seen as computers and batteries on wheels, rather than a traditional mechanical machine for mobility. With the Internet of Things, objects can be connected to other objects. Are they still a product or are they becoming a service? As the *Financial Times* (2021b) suggested, the diffusion of the electric vehicle marks an "epochal shift", with cars receiving updates created by software engineers.

4. To prosper in these new landscapes, organizations must realize that, in many sectors, the old rules of competition are becoming obsolete. Competition requires a blend of agility, creativity, reliability and quality. As Keidel (1994) summarized, organizations imply a paradoxical combination of opposites (agile but reliable). This explains why the language of paradox is penetrating discussions of organizational design (Eisenhardt, 2000). As Ilinitch, D'Aveni and Lewin (1996, p. 214) observe: "organizations must develop languages and models that encourage the achievement of constantly contradictory goals when coping with adversity (flexibility through stability, diversification through focus, freedom to break rules in the context of a strong culture, etc.).

Hamel and Sampler (1998) explained early in the adoption of the new digital technologies that they constituted the foundations of a new organizational order. It would be too much of a simplification to assume any equivalence between the appearance of this new organizational order and its technological facets; technology does not determine its uses; people and organizations do. New agile forms represented possibilities for novel ways of organizing work and production (Westerman et al., 2014). Technology is a means, not an end, neither a toolbox nor a new tech-portfolio (of drones, blockchain, robots, artificial intelligence and machine learning, inter alia) but rather a gateway to possible new ways of organizing work to create and fulfil customer needs in new and profitable ways.

Digital transformation refers to the capacity to reach customers faster, in customized ways. In this spirit, the fast-fashion chain Zara measures distance in time rather than physical metrics such as kilometres and foreshortens time in its core processes through feeding the central organization with data on customers' purchases from the global shopfloor. In other words, if efficiency was the metric of Taylorism, speed is a key indicator for agile organizations (Ferdows et al., 2003). The need for speed may even be aggravated when conditions change, as happened during the pandemic, confronting organizations with the need to repurpose their activities through ultrafast innovation initiatives – for example, gin, rum and whisky distilleries refashioning their activities to produce hand sanitizer (Sarkar & Clegg, 2021; Von Krogh, Kucukkeles & Ben-Menahem, 2020). Paradoxically, new digital firms may be highly Taylorist in some of their activities, locating process design in highly qualified

experts and providing microtasks for the rest, in a version of Taylorism for the 21st century organization (Capelli, 2020).

In this chapter we will discuss the meaning of organizational design by asking what is an organization's design? What components define an organization's design? How do designs shape business models?

ORGANIZATIONAL STRUCTURE AND DESIGN

Organizational design refers to the process of structuring an organization so that it can fulfil its mission and adapt to an ever-changing environment. Definitionally, organizational design is "composed of the structure rewards, and measurement practices intended to direct members' behaviour toward the organization's goals as well as the criteria used to select persons for the organization" (Lorsch, 1987, p. 1). Structure, the most salient design element, is the "pattern of job definition, authority and communication relationships represented in the organization charts, position descriptions, and so on" (Lorsch, 1987, p. 1). It has also been defined as

> the structures of accountability and responsibility used to develop and implement strategies, and the human resource practices and information and business processes that activate those structures. (Greenwood & Miller, 2010, p. 78)

Design is not the same as structure. In general terms it refers to "the orchestration of collective cooperation" (Greenwood & Miller, 2010, p. 78) and is composed of three basic elements:

- *Structure*, that is, the formal system defining the distribution of work, power, decision-making and responsibility (overall, the hardware).
- *Mission*, or the organization's *raison d'être* and the corresponding definition of purpose and goals (overall, the software).
- *Capacity* to respond to an ever-changing environment, dynamically: internally (hardware-software) and externally (organization-environment) in terms of fit.

Historically, the idea of design has been equated with structure. Structure refers to the organization's attributions of power and responsibility and typically presumes an element of stability: structures are stable *things*. Structure can be metaphorically thought of as the organization's skeleton. It is typically captured in an organizational chart, the diagram that depicts the way the organization is divided. It refers, in summary, to the formal lines of power that are *thought* to define an organization; in practice, power relations may not map directly on to authority relations.

Over time, organizations have manifested a preference for different types of structures. Structures have evolved as indicated in Figure 3.1. In our simplified representation (for more detailed analysis, see, for example, Galbraith, 1995), ideal organizational types are evolving from complex structures with simple people, to simpler structures with complex people (Cunha & Rego, 2010), meaning that deep hierarchies and highly detailed employee job descriptions are being replaced by flatter designs with a measure of autonomy. Initially, however, organizational structures were complex and detailed, prescribing tasks and their execution, as will be discussed in Chapter 4.
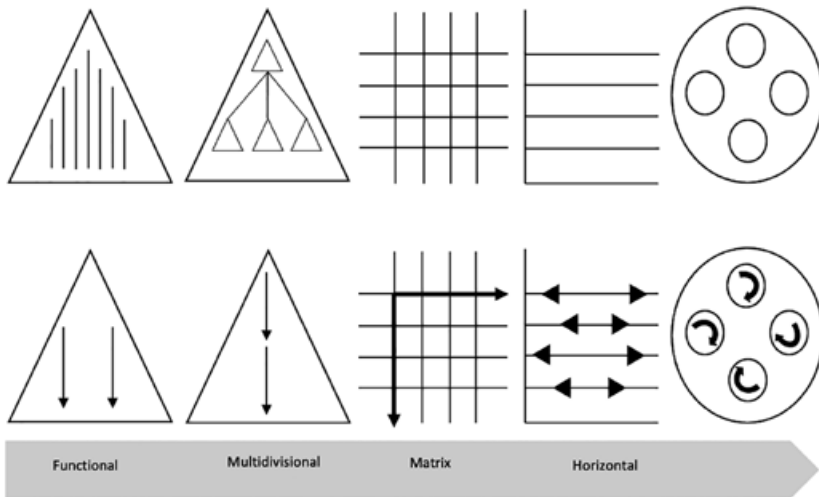

Figure 3.1   *How organizational structures evolved*

FUNCTIONS OF ORGANIZATIONAL DESIGN

Design refers to something different from structure. It encompasses not only the hardware (or structural) but also the software (or process) elements of organizations or the practice through which managers approach structure and culture while striving to reach their goals (Jones, 2013). While the hardware-software relationship may sound natural, even effortless, it is a tense relation. The tension is reflected in the mantra that "soft can be hard"; as ten Bos (2007) noted, a little provocatively, there can be a masochistic element to the relationship, with organizations often using soft words to frame hard objectives.

In the same way that morphology and physiology are necessary to understand the functioning of the human body, the study of organizations implies

these two dimensions, the plan of an organization's rationally created structure and the mode of operation that is shaped and shaping the structure on an ongoing basis. In this perspective, design is a dynamic matter, incorporating soft elements, such as purpose and identity (Keidel, 1994), as well as a capacity to adjust to an ever-changing organizational environment. In Keidel's (1994) formulation, design management implies the articulation of structure, processes and cognitions.

In the recent past, as critics point out, the formal, hard, durable part of "organization" has been neglected in favour of phenomena such as processes, flows, practices, discourses, and so on. It was a trend prefigured by Weick's (1969) defence of organiz*ing* rather than organi*zation* and Silverman's (1970) focus on an action approach. Because of these pendulum swings, du Gay (2020) noted that a focus on formal organization has basically disappeared in favour of one that concentrates on processual, informal, less hierarchical views; a shift he interprets as in part retrograde.

Organizational designs are expected to be internally coherent and congruent with their environments so that they can deliver better performance (efficiency, reliability, effectiveness). Misfit results in organizational problems that decrease performance. Four criteria for fit have been advanced by Burton and Obel (2004):

- Strategic fit among an organization's external contingencies.
- Contingency of strategy to design fit.
- Design fit among internal contingencies.
- Total fit among the previous three.

Organizational contingencies are then embedded in wider situations that introduce their own contingencies, throwing up events that obviously defy managerial control, lessons that literary classics such as *War and Peace* (Tolstoy, 1957) teach us (Michaelson, 2021). National cultures can count, such that flat structures may be more aligned with some contexts (e.g., Israel) than others (e.g., Russia; see Meyer, 2014). History and institutions help to explain these preferences (e.g., Senor & Singer, 2011), factors that should not be ignored in adopting some organizational design. As Burton (2020) notes, the fit between elements is dynamic, meaning that design implies ongoing redesign; as contingencies change, design must change. It is in this sense that design implies redesign as a process: fit is a process. Such an effort of redesign confronts designers with the importance of multiple, competing values (Figure 3.2).

Organizational design serves multiple functions. Considering the competing values framework (Cameron & Quinn, 2011), four critical functions should be performed by organizational design:

- Control, which often denotes the bureaucratic dimension of organization.

- Collaboration, reflecting the clannish element.
- Creativity, resulting from an ad hoc approach.
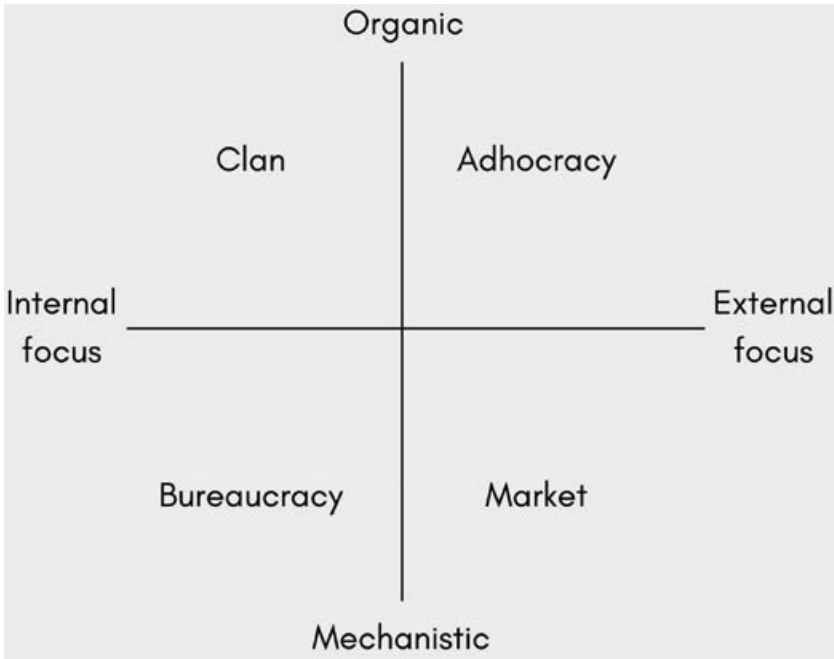- Competition, driven by a market focus.

Figure 3.2   Competing organizational values

Even if simple on paper, these four functions are difficult to balance and integrate dynamically. The difficulty partly stems from the fact that establishing these four processes is mutually contradictory. As Lavine (2014) explained, their relationship is paradoxical, meaning that they constitute opposing yet mutually defining forces (Berti et al., 2021; Smith & Lewis, 2011). For example, control and creativity exist in an obvious state of tension, as do control and collaboration. One of the fundamental challenges of design thus consists in articulating these contradictions in a constructive way, taking advantage of tensions to energize an organization rather than add to its confusion. We next discuss the importance of the four core processes.

Control

Organizations, seen in their hierarchical-bureaucratic dimension, can be conceived as control mechanisms. Managing means many things but one of the most important things it means is control (Clegg & Dunkerley, 1980). Control is critical, as organizations fail, especially when they have poor control mechanisms (Barber et al., 2019). Control is integral to organization and there are good reasons for the use of hierarchy (Child, 2019; Leavitt, 2003) and bureaucracy, understood as a system that guarantees equality before the rule. Organizational structures can be envisaged as the formal conduits of an organization's power circuits (Clegg, 1989). Seen thus, the organization is a collection of articulated routines arranged in a pattern of consistent relationships of differentiation, decision-making and domination, whose role consists in creating predictable forms of work coordination embedded in an ethos of authority. Such predictable coordination is critical to assure several desired outcomes.

Predictable coordination increases efficiency by removing resource waste (including time and materials), explaining the search for the "one best way" (Clegg, Courpasson & Phillips, 2006); it keeps cost structures viable; it increases operational consistency and safety by creating standard operating procedures or automatic rules (Gavetti et al., 2012); it defines the rules of the organizational game, protecting an organization's behavioural expectations and therefore its culture and identity. Traditional managerial activities such as planning, organizing and directing, all refer, basically, to control mechanisms (Fayol, 1918).

Control can be too much of a good thing; it sometimes becomes an end rather than a means. When bureaucracies become obsessed with rule following rather than with the missions that rules are supposed to assist, they can acquire the traits attributed to Kafkaesque organizations, systems so obsessed with their inner workings that they put the rules above the mission. Bureaucracy may treat policies as black boxes that cannot be understood/influenced by those who execute them, with pernicious effects such as a reduction of effectiveness and ethicality (Benbenisty & Luria, 2021). In a sense, the organization can be said to exist so that the rules work; when the rules are violated, the bureaucratic ethos may be noted as being corrupted (Cunha, Clegg, Rego & Berti, 2021a). It is because rules are imperfect and contradictory that sometimes they confront people with pragmatic paradoxes and Catch-22 situations, in which they must be disobeyed to be obeyed (Berti & Simpson, 2021; Cunha, Rego & Berti, 2022). The order to "Be creative!" or "Be independent. Do not always follow my orders" would be cases in point.

An excess of inner focus and a mentality inclined to total control often coexists with poor external scrutiny, resulting in the corruption of the mission,

something that happens in state organizations, expressed in deviance from the noble state bureaucracy (Weber, 1946), as well as in business firms, blindly following rules. In paradoxical terms, an excess of control will invariably lead to resistance to the control being enforced (Wiedemann, Cunha & Clegg, 2021).

Collaboration

Organizations are often presumed to be collaborative spaces in which people build trust and social capital as they work (Grant & Shandell, 2021). Collaboration has been defined as the process of voluntarily helping some other unit by partnering to direct and achieve a common purpose (Castañer & Oliveira, 2020). Voluntary help is a defining element of collaboration. To some extent help can be formalized but its *voluntary* character means that collaboration is not a strictly formal process and that it rests on a volitional choice by organizational members. As such, even if the coordination dimension might be formally defined, genuine collaboration extends beyond the formal circuits of coordination.

Collaboration is one of these concepts that illustrates the interplay of hardware and software. Collaboration is a voluntary relational process (software) built into and through the organization's structure (hardware). The process is relational and path dependent, meaning that, over time, organizations build (or fail to build) cultures of collaboration. Cultures of helping cannot be mandated from the top: they rest on the rich relational infrastructure that organizations develop over time. These cultures may be an important source of competitive advantage, defining the organization's identity, as is said to have happened with IDEO (Amabile, Fisher & Pillemer, 2014). Rich relationships create the conditions for collaboration to flourish without being mandated, which also explains why some organizations are more resilient than others (Giustiniano et al., 2018). In every organization, some individuals create personal ecosystems, meaning that instead of being passive receivers of context they create a context that replicates their personal approaches (Friedman & Olekalns, 2021). Organizations may benefit from identifying and positioning these individuals in core positions in organizational networks and reward others for acting similarly.

In addition to emergent collaboration, organizations may structurally nudge the emergence of collaboration by defining "guardrails" for organizational action. Southwest Airlines for example created a structural mechanism informally known at some point as "Come to Jesus meetings" (Gittell & Bamber, 2010), aimed at guiding disagreeing parties into some shared solution. Through this mechanism two quarrelling areas learn to see collaboration as culturally expected and structurally supported. Some organizations also

incorporate roles in their design so that there is someone facilitating cooperation between those who hold opposite views. In one of our studies, a Danish architectural firm introduced a role called "construction architect" as part of a team consisting of architects and engineers. Here, the autonomy of architects and discipline of engineers was bridged by introducing a third person (Gaim, 2018). The third person is there to ensure an equal say is given to the search- and exploration-based tasks which necessitate autonomy of architects and the choice- and refinement-based tasks of engineers, which necessitate disciplined efficiency. Through such a design, the third person serves as

> a facilitator to bridge architects and engineers … this person's role is to serve as a third person and make sure one side (either poetics or techne) does not dominate the other and that the interdependence between these competing forces is sufficiently exploited. The third person facilitates and makes sure that multiple voices are heard. (Gaim, 2018, p. 507)

The construction architect said:

> Working with architects; we might think it is a better solution, but we have to talk to the engineers, so everyone always has to get their opinions heard … in a way that everybody has to be happy with before the problem is considered solved. If not, the project will be distracted. So, the architects are just as important as the engineers. We (construction architects) are the binding link to get the opinions to work in a higher synthesis (in a technical way, not in a spiritual way). (Gaim, 2018, p. 508)

An excessive presence of this dimension may culminate in clannism, especially if the external context accepts reciprocal relations as the normal focus of management (Minbaeva & Muratbekova-Touron, 2013).

Creativity

Organizations create products and services that help people satisfy some need. Creativity is important because nothing can ever be permanent. Product portfolios, service routines and organizational designs will all change over time. For this reason, creativity is fundamental. Organizations work with ideas and their transformation into solutions to problems or needs. Creativity is typically defined in terms of both novel and useful ideas (Amabile, 1997). However, things are less clear in practice: organizations can create by imitating and improving what other organizations do to make complex designs more complicated knowing that not every new idea will be useful.

The process of creativity implies giving people time and space to turn ideas into something novel, to conduct idea work (Carlsen, Clegg & Gjersvik, 2012; Coldevin et al., 2019). This requires, in turn, a certain approach to

people, respecting their potential leadership in being creative thinkers rather than obedient executants. In this sense, informed design implies that the organization is clear what is its strategy. Strategy will define how people will be expected to perform, in terms of creativity. For some organizations, often those with a knowledge orientation, stimulating creativity is fundamental. For efficiency-oriented organizations, including traditional manufacturing and low-cost airlines, for example, creativity is of secondary importance.

The relation between efficiency and creativity admits of exceptions: as noted, Toyota, a car manufacturer with decades of activity, operates its units in a way that turns the factory worker into a knowledge worker (Osono, Shimizu & Takeuchi, 2008), stimulating the creativity of its members. The so-called Toyota Production System was devised by the company's chief engineer, Ohno Taiichi (1988), to achieve the *kaizen* goal of eliminating waste (see Highlight 3.1). In line with *kaizen* philosophy, every member is expected to advance novel and useful (i.e., creative) solutions to organizational problems.

HIGHLIGHT 3.1   TOYOTA

In the 1950s Toyota initiated a series of changes that produced the so-called Toyotist form. Steinberg (2021) proposed that this was a form that aggregated many elements that would become central in platform capitalism, such as:

- Data gathering and mobilization.
- The consideration of the firm as a hub or intermediary.
- Recourse to temporary workers.
- A central role to logistics.
- Just-in-time production.
- Platform models.
- Outsourcing of risks and warehousing.

Collaboration and creativity are critical for organizational designers aware of the fact that creativity fuels the long-term competitive process. An excessive emphasis in creativity, though, may create confusion and lack of focus and consistency.

Competition

The free market is a space driven by competition. In contrast with other, more regulated systems, firms compete for the favour of their customers, expressed

in demand for their products and services. Hence, competition is key to organizations constantly upgrading their offerings to make sure that these do not become outdated and irrelevant. Competition can be harsh. Small, young firms may have difficulty in securing the resources they need to survive (Hannan & Freeman, 1977), while even the most powerful companies can be victims of their own success, a process called the Icarus Paradox: success creates inertia and a tunnel vision that focuses organizations on doing better by doing more of the same (Miller, 1992).

In some cases, doing more of the same will create forms of organizational narcissism, as some analysts attributed to McKinsey's consultancy turbo-charging of the opioid crisis that caused so much pain and misery in the US (Edgecliffe-Johnson, Hill & Kuchler, 2021). There are allegations that the company presented high abuse-risk patients as a business "opportunity" (Edgecliffe-Johnson, Hill & Kuchler, 2021). Narcissistic propensities may have played a role, impeding the organization from ethical consideration of its questionable practices.

Under the spell of success, organizations tend to emphasize exploitation over exploration. That this is a danger is noted by Jeffrey Pfeffer when he observes that having a good memory about what they do is not a good substitute for organizational thinking about what the possibilities for future memories might be (in Webber, 1998). As a result, over time organizations make themselves more vulnerable to more innovative competitors. The competitive process can be dangerous both to established firms (Vuori & Huy, 2016) as well as to new ventures (Hannan & Freeman, 1977), which lack the resources and legitimacy of the incumbents.

Competition is a complex process with many nuances: competing organizations cooperate with other organizations in complex projects, supply chains and ecosystems, to accomplish things. Sometimes, in these complex, costly and risky projects, they collaborate with competitors, in a process termed "coopetition". Culturally, organizations need to brace themselves to develop competitive advantages by focusing on the market and the competitive process. The competitive dimension is normally present in the form of goals and results, a fundamental dimension of design.

The Paradoxical Challenges of Organization Design

The four functions are all important. When some prevail, the organization may become unbalanced (Table 3.1). For example, an excess of control can create an excess of organization, as rules proliferate; as Hamel (2007) observed, this can become manifest as rigidity. Additionally, organizations can become tangled up in their rules so that implementing them becomes not a form of simplification but a complexification as there are so many rules imbricating

Table 3.1   *Paradoxical effects of cultural dimensions*

Dimension	Positive effects	Negative effects
Control	Brings discipline and rigour.	Can introduce rigidity; may become an end in itself.
Collaboration	Opens spaces for collective work. Introduces a logic of mutual support.	May create a sense of protection that devitalizes the organization. Develops tolerance for underperformance.
Creativity	Instils a measure of novelty. Increases adaptiveness. Tends to be stimulating for the members of the organization.	An excessive focus on creativity can introduce inconsistency and lack of focus. It can reduce efficiency when creativity is seen as itself a goal rather than as a means to an end.
Competition	Focuses the organization on competitors and competitive dynamics.	An excess of a competitive orientation can intoxicate the organization in terms of goal pursuit and the need to win at any price.

each other. An over-reliance on rules can come at the cost of emergence or bottom-up initiatives resulting from informal interactions between members of the organization that allow it to adapt and learn in response to everyday problems, often through minor, infra-ordinary improvisations (Cunha & Clegg, 2019). Thus, designers must manage ingenious, intricate and confusing Daedalian risks. Designers might create risk if the design is based on either/or because a sharp swing to one of the poles will either melt the wax from flying too high or soak the feathers from flying too low over the sea. Thus, organizational designers are challenged by the need to operate in paradoxical modes:

- They need to define rules but allow space for emergence; define routines but allow a space for improvisation; define boundaries to maintain control but keep them fluid to invite new energy.
- They are expected to balance instrumental and humanistic aims or advance the goals of the organization and the rights of its members (Petriglieri & Peshkam, 2021).
- They have to create discipline and to allow the goodwill that defines social capital, without which the organization lacks the necessary "we feeling", which characterizes communities of work (Kwon & Adler, 2014).
- They need stability but change is necessary to preserve stability. As noted by Rivkin and Siggelkow (2003, p. 291), "often, a form that adopts an element that pushes it toward broad search benefits from a second element that pulls it toward stability" (see also Highlight 3.2).

HIGHLIGHT 3.2   CULTIVATING ORGANIZATIONS

Organizations need to change to remain the same. Think about cultivating a garden: in case you want to conserve its beauty, you cannot just let plants grow. You must organize their effects. Intervention is necessary to keep the garden well tended, season after season. Different seasons require different interventions, so that constant pruning, weeding, fertilizing and planting is necessary to preserve the character of the garden.

If a gardener just lets the flora grow, the result, predictably, will be that the garden will deteriorate. The same precept is valid for organizations: unless they are well cared for and constantly tended, they will deteriorate rather than simply remaining the same. If not "fertilized", strategic resources decay (Karadag & Poppo, 2021). That is why management approaches, such as *kaizen*, with its focus on continuous improvement, are so important. In an organization practising *kaizen* every member has opportunity to tend part of the organization, to keep it in good shape, just as one might cultivate a garden.

Instead of misrepresenting change as something that leaders-qua-change agents do, *kaizen* indicates that every organizational member is a change agent that learns how to introduce change by changing the organization on an everyday basis (Aiken & Keller, 2009).

DESIGN COMPOSED OF HARDWARE AND SOFTWARE

Organizational designs have been described as composed of both hardware and software. The two are mutually defining (Figure 3.3). For example, the capitalist system depends on the complementarity of the rule of law and the justice system as hard instrumentalities whose limits, when breached and offenders apprehended, can lead to penalties. It is also composed of informal institutions, such as the attitudes of people towards economic freedoms of the individual against those of the community, a soft aspect of social relations that can have a profound aspect on creating liberal individualist or social collectivist nurturing of the democracy of the market (e.g., Mathers & Williamson, 2011). We next discuss the components of organizational hardware and software.

STRUCTURAL HARDWARE

The metaphor of hardware refers to the organization's morphology, or its skeletal structure, the hard elements around whose development soft organic
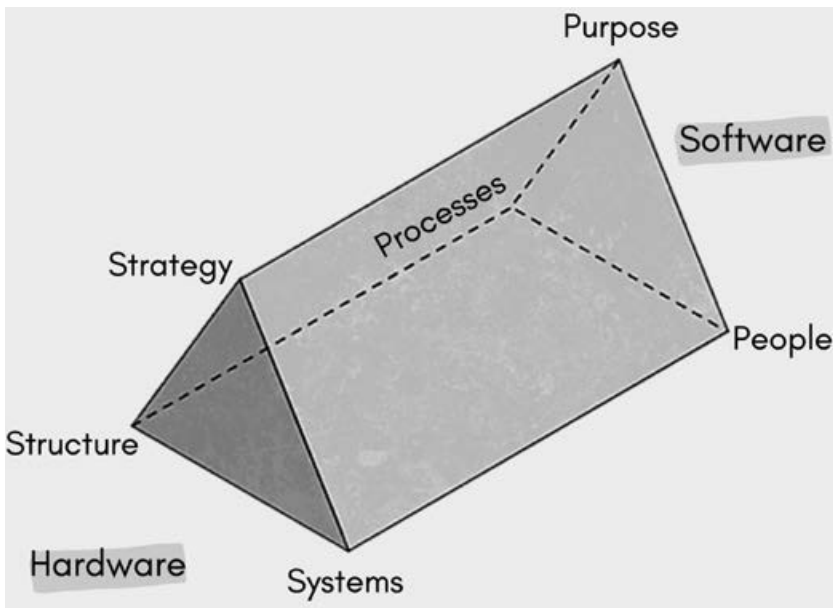
Figure 3.3   Organizational hardware and software

tissue grows. In organizational language, hardware refers to the three Ss of strategy, structure, systems (Bartlett & Ghoshal, 1995). These are the elements that function as the structuring of the organization. They support the type of software that the organization creates.

Strategy

Designing an organization implies knowing its strategy (Miles & Snow, 1978): structure follows strategy, in the well-known Chandlerian formulation (Chandler, 1962). Strategy consists in aligning an organization in a shared direction or positioning the organization in a way that will help it create the future it wants (Nonaka & Takeuchi, 2021). This involves knowing both the organization (What do we want? What is our purpose?) as well as knowing the environment (What do our customers want? How can we match stakeholder needs?). Thus, strategy synthesizes inside-out and outside-in perspectives (Day, 2021; Nonaka & Takeuchi, 2021) or the articulation of elements at the interface of the organization (purpose, plans, resources) and its environment (learning capabilities, customer knowledge). This defines an organization's strategic position. As an example, if a firm wants to be perceived as a prospector organization (i.e., innovation-oriented), it must be designed in such

a way that it can let information flow freely, so that the organization can move quickly in new directions. Doing this might imply developing external linkages such as open innovation (Chesbrough, 2003) or user innovation (Oliveira & von Hippel, 2011). Once a design is adopted, it can be seen to pose constraints for strategy: "design drives the way strategies are formulated or formed and determines whether and how they can be implemented" (Greenwood & Miller, 2010, p. 79).

An organization's strategy may be denoted as the response to two fundamental questions:

- *Where* will the organization compete? (Competitive strategy).
- *How* will it compete? (Organizational strategy).

The answer to these two questions helps to define an organization's design in important ways. The first question refers to the choice of competitive terrain: deciding in what markets the organization is or will be operating. The second refers to the sources of organizational advantage in those markets. Treacy and Wiersema (1993) argue that success relies on mastering one of three disciplines: operational excellence, customer intimacy, and exemplary product.

Strategy scholars explore this dimension of organizational design, including how organizations defend market "territories" in their respective industry structures (Caves & Porter, 1977; Porter, 1981). Miles and Snow's (1978) typology explains how the strategic choices made by companies affect their operations. Depending on whether firms focus on exploration or exploitation, or both, their choice on strategy (defender, analyser, reactor, or prospector) dictates their design. For example, innovative companies (e.g., Google) must design themselves and function in ways that must be significantly different from conservative defenders (e.g., Coca Cola) whose strategy is based on efficiency. A luxury hotel chain must be organizationally different from its low budget equivalent. If the two models coexist, then an organization must be able to operate in an ambidextrous mode. As these cases attest, strategic choices have critical design implications.

Strategy, in summary, informs and shapes the organization's attention, resource allocation, metrics and Key Performance Indicators (KPIs). It establishes what matters and what does not. It defines priorities and processes of resource allocation. It is necessary to keep in mind that strategy is a reactive process, meaning that competitors respond to another organization's moves by changing their moves. Therefore, strategy is elusive because competition is dynamic. As organizations change, so does the nature of strategy: the strategy of an organization such as Netflix is a continuous process of relating to local, decentralized actions guiding direction. New products and technologies are tactical wins that help to make the strategy real. The centrally defined strategy

(encapsulated by the metaphor of a "North Star", a guiding point of organizational reference) originates countless tactical innovations in a highly decentralized and agile process of decision-making (Kornberger & Vaara, 2021).

Structure

An organization's structure refers to formal circuits of power and decision-making. Organizational structures, typically hierarchies of different shapes, define who can decide what. They influence how decisions are made and how the strategy unfolds (Wulf, 2012). An organization's formal structure is a complex combination of elements (see Highlight 3.3) and plays a critical role in the coordination of an organization's complex activities and in the definition of compensation schemes aimed at aligning the different parts of the organization (Wulf, 2012).

If coordination is simple, then the organization can operate mostly in an informal mode, as in the case of Mintzberg's (1980) simple structure. A small sole proprietor coffee shop needs no more than a simple structure. However, if the organization starts growing because it offers what customers or clients regard as something unique in the value it delivers, then the simple structure will no longer be enough to keep the operation organized.

HIGHLIGHT 3.3   STRUCTURAL COMPONENTS

Structure is a short name for a complex idea. To characterize an organization's structure, several elements are necessary.

Administrative component: the percentage of employees with administrative jobs.
Centralization: the concentration of decision-making.
Differentiation: the number of hierarchical levels (vertical differentiation) and the number of departments (horizontal).
Formalization: the extent to which the organization uses formal systems (rules, communication, procedures).
Integration: the mechanisms used to coordinate activities.
Size: the number of employees.
Standardization: the depth of use of pre-defined procedures.

I   Mintzberg's "Fives"

Mintzberg (2021) divided organizational designs into five major components:

The operations, the base of the organization where the input is transformed into an output.

The management, the administrative function, charged with articulating the whole.

The analytic staff, the people doing work of control (such as operational planning or budgeting) and analysis (data analysts, strategic planning).

Support, indirect backers of the operations, such as human resources, legal experts.

External influencers, the people who try to shape the organization from the outside, such as the owners, associations, the state, relevant stakeholders in general.

Source: Hatch and Cunliffe (2006).

Formal structure inevitably coexists with an informal structure, the social organization behind the formal chart (Krackhardt & Hanson, 1993), consisting of social relations, collaborations and enmities, forged beneath the surface that the charts depict. That "behind the chart", informal side of the organization, is integral to good management, something well known since the Human Relations school was thought to have put people at the core of the organization (Hassard, 2012). Good teams, for example, maintain an informal life that connects their members as well as to other teams without leader intermediation (Ancona, Ancona & Bresman, 2007). Innovation happens not only in high-tech R&D labs but also in improvised conversations happening "under the radar" of the formal organization (Larsen & Bogers, 2014).

The formal and informal sides of structure are thus fundamental to permit both control and creative forms of collaboration. Organizations need to plan and formalize as much as they need to improvise and let the informal organization flourish. Organizing happens as much in the meeting room as in the vicinity of the watercooler (Fayard & Weeks, 2007), sometimes continuing after hours and over beers (Flores-Pereira, Davel & Cavedon, 2008). Thus, the boundary is not stable. In one of our case firms, Snøhetta, membership in specific projects was not necessarily formal (Gaim et al., 2018). In Snøhetta, there are organization members that look at the progress of a project from a safe distance outside the formal dynamics of the project team. Although they are not necessarily members, they contribute informally. This notion is somehow formalized. One architect told us:

We have someone called a "groupie", a person from another project who can come in and give you some advice. Then we have this Swedish guy called Andreas and he will be here every Thursday. He is doing a Ph.D. in some environmental thing. He is a really good friend of mine as well. When I was really frustrated, he sat down beside me and came with some ideas after I had told him about the projects and the

problems I faced. So, he gave me some ideas about urban farming which I incorporated in the project, and it suited the project so well because we knew we wanted to do something green with an area.

In Snøhetta, every project has someone known colloquially as a "groupie", invited to observe and listen to the team's ideas and reflections at regular intervals during the project period, not as a member of the team but as an outsider, free to criticize and strengthen ideas (Carlsen, Clegg & Gjersvik, 2012). In such setting, as in any creativity-intensive setting, given collaboration and input regardless of membership, any contribution is hard to trace to a single individual. That ideas have ownership is illusory given that who said what is not easy to trace. Moreover, because contributions are not labelled, individuals tend to contribute and feel the shared ownership of a project. One architect told us:

> We do not know whose idea it was but the design came out of the collaborative effort. It is a collaborative process and that is what is so special about Snøhetta. It is very democratic process. (Architect, at Snøhetta)

Thus, plans and improvisations (Cunha, Cunha & Kamoche, 1999), stability and change (Farjoun, 2010), differentiation and integration (Lawrence & Lorsch, 1967), conformity and resistance (Courpasson, Dany & Clegg, 2012) are all necessary dimensions to be accommodated in organizational designs. The challenge lies in the fact that these dualities are difficult to integrate because they contain paradoxical traits that require leaders able to handle tensions as opportunities to balance opposites rather than dilemmas in search of either-or choices.

Systems

The idea of a system, in general, refers to parts that "interact, overlap, are interdependent, and work together as a coherent whole" (Liker & Morgan, 2006, p. 16). The nature of a system establishes that "changes to one subsystem will always have implications for the others" (Liker & Morgan, 2006, p. 16). In organizations, systems refer to "all the procedures, formal and informal, that make the organization go, day by day and year by year: capital budgeting systems, training systems, cost accounting procedures, budgeting systems" (Waterman, Peters & Phillips, 1980, p. 21). Increasingly, organizations comprise systems within systems of strategic alliances, collaborations, projects, and so on.

Systems are fundamental because the procedures and the metrics they establish are critical for operational management – yet such metrics often prove

inadequate (Hammer et al., 2007). Binding together an assemblage of people, processes and tools implies subsystems that are designed purposefully and are carefully integrated. For this reason, even though we might take system as a hardware component, system integration encapsulates all the other dimensions. As Liker and Morgan (2006) observe in reference to the case of Toyota, the culture is the system – to which one might add that the system moulds the culture.

CULTURAL SOFTWARE

The organization's software refers to the "physiology", that is, the functioning of its soft organs, its culture at large. It corresponds to the three Ps of *purpose*, *people* and *processes* (Bartlett & Ghoshal, 1995; Ghoshal & Bartlett, 1998). Culture "reflects how employees act and interact, how they rise to challenges and respond to change" (Howard-Grenville, 2020, p. 29). Cultures are constituted through formal codes and statements but more especially through practices that can run counter to these or subvert them in many ways which inform the socially symbolic work-lifeworld of those in the organization. It shapes the daily functioning of organizations and defines an organization's ethicality (Roszkowska & Melé, 2021).

Culture is not so much a thing as a representation and the representation varies with the beholders: communities, customers, partners, prospective employees, interest groups can all presume a stakeholding interest. Culture can be an important substitute for rules and formalisms but can also be an empty shell: "official statements of corporate values are often a maddening mix of hokum and gibberish" (Masters, 2021, p. 17), expressed in a form of managerialism whose inanity is evident to thoughtful inspection and reflection, although perhaps not so to legal opinion and insurers. Statements of culture that are far from practice, whether good or bad, are especially likely when leaders are not in touch with personnel but are at some distance, perhaps "chewing over spreadsheets" (Peters, 2021, p. 17) rather than being engaged with practices.

The software side of organizing is processual, relational, symbolic, emergent (see Highlight 3.4). While structure is an attempt to channel organizational behaviours, these often generate practices that avoid structural constraints: it is said that culture eats strategy for breakfast, meaning that the "soft stuff" is more difficult to manage than it is to pronounce a strategy. In the same way, even though it is expected that structure follows strategy, strategy is often neutralized by structural inertia, impeding practices and their corresponding culture.

HIGHLIGHT 3.4 THE POWER OF SYMBOLS: LIONS, SWORDS AND BOOKS IN THE AGE OF *LA SERENISSIMA*

The importance of symbols is neither new nor limited to organizational culture. Sometimes they conveyed subtle but powerful messages for the connoisseur. Inspect the two winged lions below. Does this have any special meaning or is it just an image that visitors will see repeatedly in modern day Venice?

Source: "File: Italy, Venice, late 17th, early 18th Century banner with the lion of St. Mark – 1916.1807 – Cleveland Museum of Art.jpg" is licensed under CC0 1.0.

Figure 3.4a   The Saint Mark's winged lion

Figure 3.4b   Banner with the Lion of Saint Mark

The pictures here (Figure 3.4a, b) symbolize the Republic of Venice, also known as La Serenissima. It shows the Lion of Saint Mark, the iconic representation of Mark the Evangelist as a winged lion, and can be found in many forms like bas-relieve (see Figure 3.4a), banners (see Figure 3.4b), sculptures, paintings, and so on). The legend tells that Mark, castaway in the Venice lagoon while travelling through Europe, met an angel that appeared to him in the morph of a winged lion. The angel pronounced the words: "Pax tibi marce, evangelista mevs. Hic requiescet corpus tuum" ("Peace to you, Mark, my evangelist. Shall rest here your body), anticipating that in that land he would one day find rest and veneration (Figure 3.4b). When the winged lion is represented with an open book, the open pages show the first part of the angel's sentence. However, the book also appears closed, under the paw of the feline. Some popular interpretations assert that the open book symbolized that the image was made at a time of peace, or present in places considered friends by the Republic of Venice; per symmetry, a closed book, pressed under the feline's paw, meant war or hostility. The story appears to be more complicated than that though (Iskrić, 2014).

In some other representations of the Serenissima the winged lion holds

a sword. In some images the sword is put in the ground, in others it is wielded in a menacing manner. The presence of the book (open, closed) and the sword (down, up) allows four possible combinations (for all the pictures: Iskrić, 2014). Although the Serenissima never codified these symbolic meanings, some hypotheses appear to be suggestive (Iskrić, 2014):

- if the Lion has an open Book and no Sword, then it represents the Republic of Venice itself;
- if the Lion has a closed Book and no Sword, then it is from times of delegated or diminished sovereignty of Venice;
- if the Lion has an open Book and raised Sword, then it represents the justice of Venice;
- if the Lion has a closed Book and raised Sword, then it is a sign that the town got an honour of being a tax-free zone within the Republic of Venice.

What lessons from St Mark's lion can we draw to our organizations? Can you identify organizational equivalents for these subtle symbolic differences? Why do we pay so much attention to symbols? How to pay attention to symbols?

Source: S. Iskrić (2014), Of Lions and Books (and Swords): What Do Fearsome Companions of St Mark Tell Us About Venice, Peace, and War. https://medium.com/history-fragments/of -lions-and-books-and-swords-a0a5dc1f164 (accessed 16 January 2022).

Purpose

An organization's purpose (see glossary) defines its *raison d'être*, the reason why it exists, the audience it serves, the impact it wants to have in the world (Clegg, Cunha et al., 2021). Purpose explains why the organization exists or what functions it accomplishes. The fact that organizations have a purpose does not constitute a novel discovery (e.g., Merton, 1936), despite recent popularity of the theme seeing it become "already a perilously overused buzzword in modern business" (Hill, 2015, p. 10). Recent research has shown that a genuinely experienced purpose is a meta-goal that transcends profit, obliquely effecting performance (Gartenberg, Prat & Serafeim, 2019; see also Highlight 3.5). Purpose refers to some contribution premised on an ultimate value that is greater than merely making a profit (Chandy et al., 2021). While, from a shareholder's view, organizations exist to make a profit, a profit is not a purpose; curing persistent poverty, producing a vaccine for a pandemic, reducing illiteracy, pollution and climate change, human trafficking and modern slavery,

discrimination, or Sustainable Development Goals (SDGs) in general would constitute a purpose.

HIGHLIGHT 3.5   PURPOSE AS EMPTY VESSEL

Purpose can be a powerful organizational tool as well as a handful of words used for effect, *pour épater le bourgeois*, as they say in French. As Brooke Masters (2021, p. 17) wrote in the *Financial Times*, "integrity, innovation, respect, responsibility and sustainability topped the list of popular buzz-words", possibly because they are very hard to measure. Purpose can in some situations constitute a strategy that is nothing but a form of blind-ness, a seeing of some things while also a way of not seeing some others, a metaphor used by Spoelstra (2009) inspired by Saramago's (1997) novel *Blindness*.

In other cases, the inconsistency between words and deeds seems to be blatant: PepsiCo's mission is to "Create more smiles" but its workers at the FritoLay plant in Topeka, Kansas, are not smiling much after 12-hour shifts. Masters concludes that for many organizations the words of Groucho Marx seem to apply: "Those are my principles, and if you don't like them … well, I have others."

Source: Masters (2021).

Purpose refers to the contribution an organization makes to the groups it serves (see Highlight 3.6), providing a compelling story that explains why the organization exists as it has in the past and why it needs to reinvent itself for the future as the world and the needs of customers change. Ideally, this compelling narrative should have the capacity to inspire stakeholders and customers as well as functioning as a source of interpellation for individual employees. In contemporary views, it is accepted that such a calling arises from the individ-uals' sense of vocation. Organizations, in principle, can nurture the search for a calling by giving people enhanced agency at work (Bloom, Colbert & Nielsen, 2021), allowing them to craft their jobs (Wrzesniewski & Dutton, 2001), being able to change them to suit their personal motives while serving the customer in more personalized ways.

HIGHLIGHT 3.6   PURPOSE STATEMENTS: ILLUSTRATIVE EXAMPLES

Purpose became popular recently, with companies adhering to the formal-ization of mission/purpose statements. Mission statements have been de-

scribed as the vehicles through which organizations transmit their purpose. As illustrations, consider the following cases:

Disney – "To make people happy".
Coca-Cola: "To refresh the world".
Nike: "If you have a body you are an athlete".

Source: https://www.entrepreneurshipinabox.com/3507/12-mission-statements-worth -checking/ (accessed 21 May 2022).

Purpose has been distilled in two main ways: as goal-based and duty-based (George et al., 2021). The first centres on the main, high-order objectives of an organization; the second focuses on the organization's central values, expressing a moral dimension associated with the organization's action (see Clegg, Cunha, Rego & Santos, 2021).

Purpose therefore defines the way an organization measures its contributions. A purpose is not a strategy but rather an aspirational formulation of the organization's impact, something it strives to achieve. It is expected to reflect the organization's identity, to express its deep values and to be operationalized in a strategy that will make the purpose real. When an organization defines a purpose and an associated identity with a credo, a set of values and a public persona, it is not making an inconsequential choice – even if, in some contexts, a purpose statement is seen as a platitude that become a "must have" for public relations reasons.

In fact, as organizations try to express what they are and what they stand for, they are making a choice and some choices have more impact than others. Consider the case of companies doing business in Xinjiang, China. Many Western companies are complying with political calls to avoid sourcing cotton from Xinjiang, because of accusations of forced labour, human rights abuse and genocide against the Uyghurs. As described in the *Financial Times* (Magnus, 2021, p. 17),

> many foreign companies may find themselves on the wrong end of corporate coercion in China, or of corporate governance in their own country, or both.

The established purpose may place companies between profit or principle. The Marriott has been accused by the Chinese government of diffusing "illegal content" because it failed to identify Taiwan as part of China; also, the Beijing government pressured Hong Kong's Cathay Pacific airline to fire employees who supported the pro-democracy movement (Magnus, 2021). What should companies do in such circumstances? Ignore purpose as a part of their design *or* jeopardize important markets?

Defining a purpose may constitute, in interesting times, much more than a vague statement, acting instead as a Pandora's box, a source for a cornucopia of paradoxes. One thing seems certain: "paying lip service to the idea of 'purpose' will only lead to further disappointment" (Financial Times, 2018, p. 8). If purpose, with its implications for impact and social responsibility inter alia, is viewed instrumentally as a form of branding (Brown, 2021), with internal and external reach, it can become an organizational liability.

Processes

A process view of organizations has recently gained prominence in the research community. In a process view, organizations are conceptualized as ongoing practical accomplishments, not as fixed things. As processes, they are dynamic realities that are continuously being refashioned as time passes. The process view emphasizes the role of time, path dependence and feedback loops in the process of organizing (Langley et al., 2013).

Processes, in a stricter sense, can be defined as "how work gets done in organizations – whether it is hiring, product development, internationalizing, and so forth" (Furr, Eisenhardt & Bingham, 2020, p. 560). Work gets done in organizations by organizing it, turning processes into capabilities when they translate experience into organizational change. As processes, organizations are constantly being organized; as Weick (1979) put it, we may be better speaking of organizing as an activity rather than organization as a structure, using verbs not nouns. Organizing portrays organizations as ongoing constructions, never-ending processes, open-ended realities. Very solid organizations may suddenly disappear; winning technologies become outdated, replaced by new ones; charismatic bosses giving way to new star CEOs while the previous stars disappear, as happened with Carlos Ghosn (Highlight 3.7). It is for this reason that organizations are better viewed as part of larger competitive dynamics to which they temporarily contribute.

Organizations are not things but unfolding accomplishments. In a processual view, everything is temporary, including success. It is thus better to be prudent and humble without losing ambition (i.e., being "humbitious") than assume that managerial greatness is a persisting state. The implication for the design of organizations, therefore, is that organizations, as much as the act of designing these organizations, is a continuous process of organizing, of becoming, of not freezing into being something statically stable. Stability in a world of change equals death.

HIGHLIGHT 3.7   CARLOS GHOSN AND MANAGERIAL STARDOM

Carlos Ghosn was the celebrity CEO who headed Renault-Nissan. He became the CEO of Renault in 2005 and when he assumed leadership at Nissan became the first person to lead two Fortune 500 companies simultaneously. Known as *le cost cutter*, Ghosn was applauded as a great strategist, the man who was able to save Nissan and manage a global mega intercontinental organization. He was even the character of a manga in Japan.

His star, however, faded away and he was arrested in Japan, accused of financial misconduct in what was called the "Ghosn shock". He escaped in secret from central Tokyo to Lebanon, using a private jet, with the help of a former Green Beret and his son, who concealed him in a modified crate designed to look like concert equipment (Inagaki & Lewis, 2021).

Ghosn claims his innocence as a victim of a plot of the Japanese justice system. This story, like many others, has a moral: bigger-than-life managers are sometimes afflicted by hubris, the disease of the powerful. Hubristic managers easily lose touch with reality, becoming victims of their own success and self-image. Celebrity, one concludes, is not strictly in the person but in the celebrity's relationship with her/his audience (Van Krieken, 2018).

I   Why Leaders Derail

As larger-than-life, star CEOs develop self-confidence, they gain discretion and may start deviating from norms of behaviour (Ranft et al., 2006). They develop the syndrome of hubris, a combination of over-confidence, focus on self-interest, contempt for critical feedback and recklessness coupled with abusive behaviour (Tourish, 2020). It is because these leaders may perceive themselves as important persons with VIP status that they may assume that rules do not apply to them, something that bedevilled former British Prime Minister Boris Johnson.

II   Other Causes of Leader Derailment

There are many different causes of leader failure. Zenger and Folkman (2009) enunciated ten causes for leader derailment: (1) lack of energy and enthusiasm; (2) acceptance of mediocre performance; (3) lack of clear vision and direction; (4) poor judgement; (5) lack of collaboration; (6) poor integrity; (7) resistance to new ideas; (8) failure to learn from mistakes; (9)

lack of interpersonal skills; and (10) failure to develop others.

Source: Greimel and Sposato (2021).

People

Even if it may sound like a truism, it is relevant to note that organizations do not exist without people (Schneider, 2020) and that people play a central role in the functioning of organizations. People, from an "economistic" perspective (Pirson & Lawrence, 2010), are variously termed personnel, human resources, talent and human capital, all ways of not admitting their essential individual humanity. From a humanistic view, they are not as much a means but the end of organized activity: business should exist above else to serve human dignity and flourishing (see Table 3.2 and consult Dierksmeier, 2016; Pirson & Lawrence, 2010).

Nonetheless, it is essential individual capabilities and talents that constitute a potential source of competitive advantage (Pfeffer, 1994). On the day this sentence was written, this point was made particularly clearly in the obituaries composed for Charlie Watts, drummer with the Rolling Stones. He was essential to the Rolling Stones as an organization, as all the obituaries on the day made clear and his capabilities were honed by being the bedrock of the most long-lived and successful band ever in the rock genre.

For humans to constitute a source of advantage and for an organization to care about people, they need to be treated as VRIN resources: valuable, rare, inimitable and non-substitutable (Bingham & Eisenhardt, 2008) – people like Charlie Watts. VRINess, referring to the creation of dynamic capabilities (Furr & Eisenhardt, 2021), expresses the deep articulation of hardware and software, especially in more dynamic settings, where strategy is less a process detached from operations and more a product of "strategizing by doing", often incorporating activities such as experimentation, learning and bricolage.

All the above means that selecting and developing talented people, creating an organizational infrastructure that stimulates their creativity and using this creativity to inform the business may help construct difficult to imitate companies. People, in summary, need to be treated like people rather than factors of production (Webber, 1998). In other words, are people expenses or assets?

Gaining advantage through people is a difficult endeavour: it requires care and proximity, good ideas, consistent practice and hard work (Pfeffer, 1994), as well as a measure of transparency. As Schneider (2020, p. 3) put it: "people are engaged and committed when they know what the heck is happening in

Table 3.2   *Structure in two perspectives*

Economistic	Humanistic
The organization as a nexus of contracts	The organization as a human community of work
Strategy maximization	Sustainable strategy
Efficiency-oriented	Balance of interests
Hierarchical structures	Flatter structures
Top-down decision-making	Top-down and bottom-up
Transactional leadership	Transformational leadership

Source: Pirson and Lawrence (2010), with modifications.

their companies – and likely to happen in the future". Netflix's Reed Hastings summarized it in the following way:

> managing people well is hard and takes a lot of effort. Managing mediocre-performing employees is harder and more time consuming. (Hastings & Meyer, 2020, p. 79)

The way people are managed for competitive advantage can vary significantly but when people are part of the design for competitive advantage, they may contribute to create distinctive organizations. Consider the case of Toyota: through the *kaizen* approach the company has been able to mobilize its people constantly to improve the organization (Imai, 1986). Toyota offers an example of how highly bureaucratic organizations may be competitive if they ally their reliability with a learning ethos, composing what Adler and Borys (1996) called learning bureaucracies. It should be noted that even learning bureaucracies retain their control element, meaning that they will be perceived as simultaneously enabling and alienating (Adler, 2012). In contrast, the coercive version of the bureaucracy tells people what they are supposed to do and how they are supposed to execute. Obviously, in this case, people will hardly constitute a source of competitive advantage. For the sake of contrast, let us consider two profiles from one single industry (Highlight 3.8).

HIGHLIGHT 3.8   HIGH VS LOW ROAD HUMAN RESOURCES MANAGEMENT

High road or high involvement-high commitment practices treat people from a humanistic perspective – think about a company such as Southwest Airlines. People are taken as core to an organization, as *the organization*. According to Pfeffer and Veiga (1999), this approach can lead to substantial economic returns. As it is said, if people are treated as if they make a difference, they will potentially make a difference: if they care more and are

better motivated, they express citizenship behaviours instead of acting as mere employees or hired hands.

The low road approach takes a different path: people are represented as a costly means to an end that can and should be minimized – think about Ryanair or Air Asia. In this paradigm organizations should not hesitate in taking measures such as downsizing, delocalization of plants and cost efficiency measures, in cases where they make economic sense, regardless of the human consequences.

The two types of companies can be very successful, but they are effective in very different ways as expressed in the notion of high and low road HRM (Highlight 3.8). Their potential for learning is also distinct and the professional requirements they pose are also different, some implying more leadership competences than others (Highlight 3.9).

HIGHLIGHT 3.9   HARDWARE AND SOFTWARE, MANAGEMENT AND LEADERSHIP

Having discussed hardware and software we now establish conceptual links between the design elements and the notions of management and leadership. The debate in management has some supporters that think that the two concepts should be separated, whereas others consider the separation artificial: strategies are created by people. Illustratively, Jean-Marie Messier (or ironically J6M: *Jean-Marie Messier Moi Même, Maître du Monde*) transformed Vivendi, a French water-and-sewage company, into a global entertainment giant. Possibly the change spoke more about Messier than about the organization, which crashed in the process (The Economist, 2021a).

The two activities of managing and leading are critical but they represent differing profiles. Management can be equated with the administration of the hardware (the creation of sound strategies, clear structures, adequate systems), whereas leadership refers to the incarnation of the software (clarifying purpose, energizing people, supporting fluid processes).

March and Weil (2009) characterize this duality by saying that good leaders/managers are both poets and plumbers. As Weick (2010, p. 105) observed, "while occasional managers may be lunatics or lovers, almost all function as poets who preside over organizing". He added, regarding the processual, flowing nature of organizing, that "change becomes things in the hands of poets when imagination shapes, locates and names differences amidst the sameness. The differences that are stabilized become objects of focal awareness" (p. 110).

> Because the two activities are critical, one without the other is inoperant, producing either well-functioning but soulless organizational machines or comfortable workplaces that fail to deliver. The future is not bright for organizations lacking either of these characteristics. Organizations need winning and meaning; as is sometimes said, "winning without meaning doesn't feel like winning at all" (Cath Bishop, an Olympic silver medal winning rower, in Jones, 2021, p. 14).

HOW DESIGNS ARE EVOLVING

In the remainder of the book we contrast three ideal types of organizational designs. We use the idea of the "ideal type" in a Weberian sense, not as meaning that these are ideal organizations but rather that they function as pure types, that is, descriptions of a given design in its idealized form. Ideal types are important because they help to form contrasts between type; however, real organizations will normally be hybrids rather than pure types (Smith & Cunha, 2020), in the sense that they combine features of the different types. We never meet pure types other than in acts of the imagination that strive to model features of the real in a "pure" form, to try and capture the essence of a particular form of life.

Table 3.3 depicts that the types and subsequent discussion should also not be understood as meaning that organizations are teleologically evolving from a difficult past to a bright future. In fact, hybrids of the three types coexist in the present. Some organizations have futuristic attributes whereas others look traditional. Virtual teams are used in some companies, whereas others retain modern forms of slavery (Crane, 2013). In some cases, avant-garde companies have in their supply chains organizations staffed with forced labour. Cool clothing brands buy from suppliers in Bangladesh where wages are super-low and working conditions problematic, bordering on modern slavery (Pouryousefi & Freeman, 2021). An example was the collapse of a building outside Dhaka, Bangladesh, the Rana Plaza disaster, which killed more than 800 workers in a garment factory (Reinecke & Donaghey, 2015). As Pietra Rivoli, author of *The Travels of a T-Shirt in the Global Economy*, told *BusinessWeek* magazine, "This is what an early industrial revolution looks like" (Srivastava & Devnath, 2013, p. 15) in terms of exploitation of labour power. Indeed, a woman working in one of these assembly lines likened the place to a "cage" (Indvik, 2021).

In other words, we are not proposing a Whiggish account in which things are getting better all the time. It is not our intention to suggest that organizations were bad (Leavitt, 2007) and are becoming good (Cunha et al., 2020). Good and

Table 3.3   *A summary of ideal types*

	Modern/traditional hierarchical organizations	**Less hierarchical organizations**	**Agile organizations**
Work	Manual	Knowledge, cognitive	Artificial intelligence and human skills
Control	Hard power, centralization	Soft power, selective decentralization	Panoptical, radical decentralization
Supervisory roles	Boss	Coach	Dispersed leadership
People	Employees	Human capital owners	Co-designers
Configurational dynamics	Complex organizations, simple people	Complex organizations, complex people	Simple organizations, complex people
Overall logic	Mechanistic	Organic	Panarchical
A metaphor for the organization	A well-drilled orchestra	A fluid, improvisational jazz combo	A project, such as a festival, or a commando raid into alien territory

bad coexist, and some 19th century traditional companies were certainly more respectful and humane than some cool 21st century companies. Throughout the book we will discuss three ideal types, briefly described in Table 3.3: the modern, the less hierarchical, and the agile organizational archetypes.

Recapitulating: these types are, necessarily, ideal types. They do not describe reality as it manifests in any specific case. Organizations are hybrids, with different characteristics and types. In the real world, organizations are frequently digital and bureaucratic, operating in hypercompetitive markets, with a legal system of the time of the fax machine. These inconsistencies may be accidental and unintended. In other cases, such as in the case of Toyota Motor Co., they are used to take advantage of multiple competences such as agility and rigour, in a paradoxical way (Takeuchi, Osono & Shimizu, 2008).

As Table 3.3 indicates, organizations are adopting less hierarchical, simpler designs based on simple rules (Sull & Eisenhardt, 2015), rather than intricate regulations, a practice consistent with evidence showing that simple methods can sometimes work better in complex environments (Aikman et al., 2021). These designs allow organizations to no longer view people as obedient employees. Instead, by reducing the hierarchy, people are provided with more space to express their agency and adjust their actions to changing environments (Brown & Eisenhardt, 1997). New organizations offer opportunities for more complex organizing expressions based on emergence rather than on planning, processes that can be a challenge for established organizations (Highlight

3.10). Designs are shaped from the top down and from the bottom up, rather than strictly pushed from the top down, as in the traditional hierarchy.

HIGHLIGHT 3.10 FOR PRACTICE: "INTERESTING, BUT NOT FOR US …"

While designs must be able to respond to or anticipate change, several processes conspire against change, which is natural, given the oxymoronic nature of "organizational change" (Badham & Santiago, 2021).

One such process hindering change is the "same weather tomorrow as today" phenomenon. Managers act as if the future is a linear progression of the present. As a result, according to Handelsbanken's Jan Wallander (1999, p. 409), it is all too easy to block change.

> We will say of some revolutionary technological innovation that it will be of no interest on the market, will be of only minor importance, will meet with unsurpassable technical obstacles etc. Anyhow we will say, we have analyzed the data a long time ago and found that it was of no interest.

For reflection think about the following: how can organizations counter the tendency towards inertia and resistance to change?

FINAL REMARKS

In this chapter we have discussed the fundamentals of organizational design. Structural components, such as hardware and software were distinguished, as well as the evolution of design archetypes over time. Overall, we concluded that designing an organization involves more than formalizing a structure. Design incorporates elements of structural hardware and cultural software that need to be harmonized.

At this point, one clarification is due: the separation between configurations invoked here is artificial and used for conceptual clarity only. In the "real world", organizations are hybrids in which hardware and software communicate and are entangled. As Foroohar (2021, p. 19) asked, "Does caring for humans count as infrastructure?" We propose that it should.

4. The traditional organization: hierarchy meets bureaucracy

The "modern" Tayloristic organization, now a traditional form, imagined organizations as hierarchical machines aimed at reaching high levels of efficiency through subordination of the many to the few who oversaw them. These organizations were imagined into being by figures such as Frederick W. Taylor (1856–1915) and Henry Ford (1863–1947), both of whom conceived organizations after the image of machinery (Morgan, 1986): as something composed of human labour that was or should be made as predictable, reliable, repetitive and as efficient as well-oiled machinery. These organization designs on machine lines reflected some characteristics of their time (Hamel & Birkinshaw, 2021) and place. The time was the turn of the 19th into the early 20th century; the place was the United States, a linguistic Babel because of the millions of emigrants from feudal Europe that sailed there and who spoke many different languages.

The consequences were that these new immigrants typically had low levels of literacy in the dominant language of English. They may have been skilled peasant farmers but were unused to industry writ large; consequently, they had low levels of administrative skill in managing either people or complex machinery. Illiteracy made gaining information slow, arduous and expensive. They were joining massive factories organized to a scale designed to create competitive advantage in which costs of establishment were high and so gradual incremental change was the norm: whatever routines had been already established by scientific management were ones to which the new recruits would have to become accommodated, as these routines were not going to change easily, given their recent adoption replacing contract and custom (Clegg & Dunkerley, 1980).

Given these attributes, the "scientifically-managed" organization (Taylor, 1911) changed the world. In the 1880s, Frederick Taylor, a mechanical engineer, began a life-long programme of experiments directed at improving the efficiency of manufacturing, founded upon two core ideas: a systematic empirical study (the "science") and the distinction between design by analysts and execution by operators, composing the philosophy known as Taylorism (Mintzberg, 2021). The impact of scientific management was so significant that it has influenced organizational design until today.

66

The organization that Taylor designed was a control mechanism exerted through *hard power*, a blend of hierarchy and bureaucracy. Bauman (1987, p. 1) characterized modernity as an obsession with order. Modernity, among other things, represents severing the individual from traditional ways of life; it inscribes the use of reason to govern and limit uncertainty. Taylorism imposed severance, order and reason in the factory from where it spread elsewhere, to offices and other places of work. He did so through a rigorous utilitarianism. His utilitarianism was teleological in its orientation to means designed to secure desired consequences. The utilitarianism was marked by dogged empiricism in service to the end of efficiency. The result was that, after Taylor's designs, the individual workman no longer existed merely as a creature of habit, tradition or craft but could become an *object* of scientific knowledge and a *subject* produced by the application of that knowledge. The worker became a utilitarian subject through the exacting measurement and refinement of time and motion, wreaking a political economy of the body on industrial recruits that taught obedience to the rules that (scientific) management made. The rules served three principles: empirical examination, division of labour and individual competition in work in the factory. The rules were transmitted visually, through visual non-verbal "cartoon" instructions, pinned up close to machinery, to train the non-literate. Taylor's system was based on a standardized description of every job, abstracted from what was determined as the "one best way", then recorded on cards and filed, to be used as the measure for anyone doing the task in question. A lack of task variability and the repetitious nature of the tasks involved in the occupations studied extended the usefulness of the approach (see Clegg, Courpasson & Phillips, 2006). From the factory it spread to offices in the 1910s (Caro, 2018), establishing artefacts of what were to become modern organization including:

> time clocks, locked supply closets, desks arranged by departments and other similar fixed seating arrangements, superior offices for executives and managers, reserved parking spaces, hierarchical organizational charts, and titles or ranks. (Getz, 2009, p. 39)

In the regime created, people were expected to do what they were told. Those in command were mandated by the organization to do so within the frame of a rational-legal system. The bureaucracy depersonalized the chain of command and put control at the heart of the system. At the limit, rules were followed because they were rules, even when their rationale was not understood or unintelligible, producing an image of organization as Kafkaesque (Clegg, Cunha, Munro et al., 2016; Warner, 2007). Design in such paradigm corresponded to a visual pyramid, with power concentrated at the top. In such context, people are executants (Jacques, 1995) or, as was commonly said,

"manpower" (at this time young women were only just entering the industrial workforce, accelerated by the First World War which removed the participation and lives of many of the young men).

   To discuss the foundations of modern management, we organize the chapter in the following way. First, we discuss the major design exemplars defining the pillars of modern organization, functional and divisional structures, erected on the base that Taylor designed. Next, we dissect the main attributes of these organizations as well as the reasons why these designs created several organizational advantages. We complete the chapter with a discussion of the limitations of what became traditions of modern design.

DESIGN EXEMPLARS

The most representative design exemplars of this era were the functional and the divisional forms, which we describe next. It should be remembered that these exemplars should be viewed as ideal types (see Highlight 4.1).

HIGHLIGHT 4.1   A NOTE ON IDEAL-TYPICAL EXEMPLARS

Throughout the book we describe half a dozen design exemplars. They should be viewed as ideal basic forms (Frost & Purdy, 2017), forms that represent a type in its purest concretization. It is important to note that in the real world most organizations are hybrids, or as Martela (2019, p. 3) put it, "real life is always more complicated than ideal types". Real life organizations do not correspond to the ideal type in its entirety; they could not if only because the type is an artificial accentuation of reality designed as a conceptual model. However, most organizations may, in general terms, be recognized as hybrids that were closer to one of the basic types. In this sense, the word "hybrids" here does not even refer to organizations that embrace different institutional logics (Smith & Besharov, 2019) but rather to organizations that mix structural arrangements of different orders, with the objective of responding to the specific needs they confront.

Functional Structure

It is possible that most people associate structure with "functional structure": "this is a highly traditional structure deriving from the Taylorist view of organizations" (Stanford, 2007, p. 49). The functional structure divides work according to areas of functional expertise (the functions that designate the

type) such as marketing, human resources, finance, production, and so on, to obtain economies of scale and specialization (Figure 4.1).
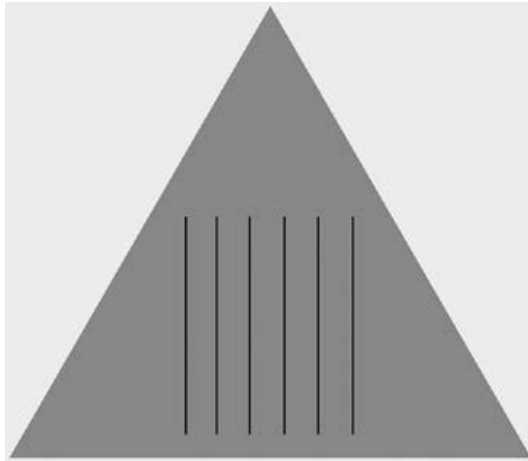
Figure 4.1   The functional structure

The functional structure is effective when markets are relatively stable. Efficiency gains are associated with routine operations. When product lines are stable and markets mature enough to allow a measure of predictability, the functional structure brings advantages. These include the relative simplicity of this approach, the potential to expand functional knowledge and expertise, because people work side by side with others with equivalent areas of knowledge, in addition to the reliability resulting from more mechanistic approaches. Proverbially, practice makes perfect, while repetition can increase reliability. As organizations fabricate the same products for decades or even centuries, they gain an extra-reputation that is derived from technical mastery of their respective fields. When organizations have limited product lines, they can gain a competitive advantage from a functional approach. They do a limited number of things and they do them very well.

The functional structure tends to be graphically depicted as a pyramid. Organizations as pyramids have the advantages already mentioned but also limitations. For example, they tend to incentivize top-down departmentalization, decision-making that creates problems, including a silo mentality (see Highlight 4.1), conformity, internal competition for resources and a reduced sensitivity for problems felt by other areas. Diminished cooperation and even mutual understanding further reduce the willingness to cooperate.

In the functional organization, the functions (e.g., strategy, human resources, marketing, finance, operations, etc.) constitute the backbone of structure. People are divided on vertical lines, canalized in the structure along with other people working in the same area of expertise. The structural approach has obvious advantages such as the densification of expertise, as people will learn with others from the same field. It is also a clear way of organizing work, as it defines tasks in a logical way, grouping people by area of expertise. The functional structure also brings difficulties. The clarity introduced by the division of work creates problems: boundaries are so clear that they become a source of separation, compounding the differences introduced by hierarchy. We next discuss the two problems of hierarchy and silos.

Hierarchies serve to coordinate but they create some by-products. For example, power differentials introduced by hierarchies create predictable patterns. People in powerful positions receive more attention and other resources than others at lower levels. This is comprehensible and legitimate but creates organizational castes that may end up viewing the organization in very different ways from very different knowledge interests that leads to rivalry for resources and conflict with one another, often manifest in "moaning" or "grumbling" (see Highlight 4.2).

HIGHLIGHT 4.2   THE GOLDEN RULE ABOUT MOANING

Hierarchies separate people in different layers. Normally the layers shape the relationships between levels. As Lucy Kellaway (2021, p. 9) explained in the *Financial Times*,

> There is a golden rule of management …: if you are above someone in the pecking order you must never tell them off for moaning. Not only will you fail to stop the moaning, the moaners will automatically double down and you will find yourself at the top of the list of the things they are moaning about.
> Your reprimand will go down badly for two reasons. You earn more than they do, have more power and will be deemed to be having a better time – which disqualifies you from disparaging their frame of mind. Second, as their manager, you are meant to be motivating them – if everyone is moaning it is your job to find out why and do something about it.

Regarding silos, the functional structure creates functional walls of expertise that make organizational collaboration difficult. Collaboration rests to some extent on a voluntary desire to work together as well as a capacity to understand the other. By separating people, functional structures create silos

spatially and in terms of shared knowledge, inhibiting collaboration (see Highlight 4.3 and Tett, 2015).

HIGHLIGHT 4.3   SILOS AND ORGANIZATIONS

Silos were originally the structures used to store grain (Figure 4.2). In organizational terms a silo refers to one area of expertise that exists as almost independent from the other areas with which it is supposed to articulate. Given the fact that silos create separate but parallel spaces, organizations can become victims of the lack of communication between these independent realities.

When each silo develops its own way of thinking, its "thought world", organizations are unable to articulate communication among their internal organs, creating lack of coordination, political competition as well as challenges to collaboration inside organizations.

Note: "Maize Silos, Atherton, NQ, c 1935" by Queensland State Archives is licensed under CC PDM 1.0.
Source: https://search.creativecommons.org/photos/a5ad4b64-5fae-491e-a48a-333d116f458f (accessed 21 May 2022).

Figure 4.2   *Maize Silos, Atherton, NQ, c. 1935*

Source: Dougherty (1992); Tett (2015).

Organizations may counter the silo effect by creating cross-cutting structures, that is, structures that incorporate shared goals, shared knowledge, mutual respect and other ways to promote relational coordination (Bolton et al., 2021). As Bolton and colleagues explain, "traditionally designed human resource practices tend to divide stakeholders who carry out different functions, therefore failing to support the development of relational coordination" (Bolton et al., 2021, p. 294). Organizations can also be designed in ways that appreciate interdependence and that stimulate collaboration across boundaries. Instead of thinking about collaboration as a value to cultivate they can regard it as a teachable skill, in which bridges are actively created by leaders (Gino, 2019).

Silos create what Dougherty (1992), drawing on Douglas (1986; see Logue, Clegg & Gray, 2016), refers to as thought worlds. Thought worlds refer to ways of seeing that reflect one's technical background and which are specifically informed by such a background. Thought worlds are important because a way of seeing is always a way of not seeing. A way of seeing an organization from a marketing perspective is certainly different from the same organization approached from an engineering perspective. New product development, for example, differs when seen from a technical or a customer perspective. Because the views differ, conflicts over solutions often take place, illustrating the limits of functional structures – alternatively, conflicts can be represented as the way differences appear in the world (Morlacchi, 2021). Over time, if animosity is not countered, the desire for collaboration decreases, which, in the worst scenarios, creates a vicious circle of internal competition. Technical expertise creates interpretive barriers between areas, with each area taking care of itself. Functional structures, when lacking effective coordination mechanisms, become organizational problems. The problem becomes more severe when organizations grow beyond Dunbar's number (see Highlight 4.4).

HIGHLIGHT 4.4   DUNBAR'S NUMBER FOR ORGANIZATIONAL DESIGNERS

Robin Dunbar (e.g., Dunbar, 2010) proposed that human networks can comprehend a maximum of about 150 people. Until a group reaches this limit, interactions are characterized by proximity. After this limit, people can no longer directly and easily interact with other people, given that the organization has grown too big for that to be possible. Gerard Fairtlough's (1994) earlier work on "creative compartments" agrees with this finding.

Considering this case, the implication for organizations is that once an organization exceeds this number, important design challenges will arise. The founder and CEO of a company known by us, was concerned, at some

point, with the fact that his organization was about to reach this number. For the same reason, when successful units at W.L. Gore – a manufacturer of breathable, waterproof fabrics, a company with over 10,000 employees – reach the 150–200 employees, they are split in two equal parts and will occupy adjacent buildings (Van Vugt, 2017).

Think about the following questions:

Is this number really a problem? After all we all know organizations that are much bigger than that …

What are the possible disadvantages of overcoming the number?

How can organizations grow yet respect the limits of 150 people? (Figure 4.1 may be helpful for this reflection).

M-form or Divisional Structures

Divisional or M-form (for multidivisional) structures were adopted to respond to growth and diversification (Figure 4.3). The organizational architecture works as a set of independent structures coordinated by a corporate centre. A divisional structure can be conceptualized as a group of functional structures belonging to the same company. These are organized by output (product, geography, client). Given that each unit is supposed to focus on, say, a product, it can be expected that all the necessary resources to handle the product will be available. The day-to-day operations are conducted by each functional structure, whereas the headquarters monitor the whole operation.
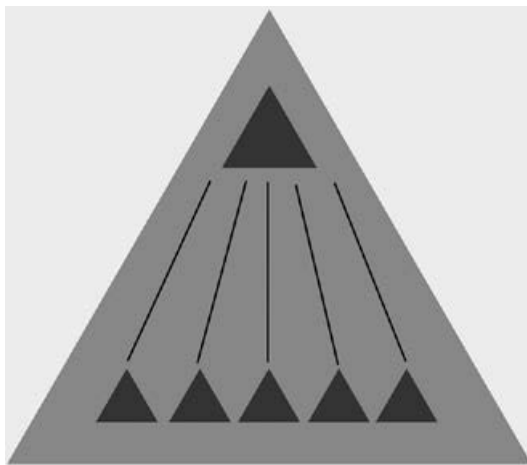
Figure 4.3   Multidivisional structure

Table 4.1   *Advantages and disadvantages of functional and divisional forms*

	Functional	Divisional
Main advantages	Efficient use of resources. Facilitation of professional development. Promotion of socialization at the level of the technical expertise.	Adequate to manage large companies. Adequate to highly diversified companies. Improved coordination of activities.
Main disadvantages	Difficulties with group coordination. Organizational overall goals may become secondary to area goals. Propensity towards formalization.	A measure of redundancy in functions (e.g., HR, accounting) across the divisions. Duplication of resources. Rivalry between SBUs.

Source: Frost and Purdy (2017).

As organizations become bigger and diversify their business portfolios (think about Yamaha as a conglomerate that manufactures products as diverse as motorbikes and pianos), the functional structure became limited in its responses to organizational problems. A divisional structure splits the different businesses into units that function as strategic business units (SBUs) with a measure of autonomy. A corporate strategic centre coordinates the SBUs.

The divisions may be organized according to products (as in the case of Yamaha) but also geographies (US, Southern Europe, etc.) or processes (customers, logistics). When organizations differentiate businesses in different industries rather than hosting them all in one (as Boeing does with defence and commercial units), they are called conglomerates (as is the case of Yamaha or Alphabet). The divisional structure fits the needs of organizations that respond to different customers in different markets with specific needs. Because of the specificities of each case, it is better to give ample leeway to the different units so that they can operate independently. There are problems: divisions may favour competition over cooperation to such an extent that potential synergies are not realized. For example, Apple developed the iPod when Sony was best prepared to do so, as Sony already possessed the Walkman and was a powerhouse in the music content business. Internal rivalries prevented the divisions from cooperating, which enabled Apple to outcompete its Japanese rival. A common problem with traditional designs lies in the difficulty of circulating information and ideas. As Heffernan notes:

> I am likely to hoard my crucial information as a source of power. Great ideas and vital concerns, all get trapped, lost or paralysed in power struggles and turf wars. (Heffernan, 2017, p. 8)

Such "tribalism" is problematic because it leads people to the "perennial problem" (Nicholson, 1998b, p. 418) of identification with subgroups rather than with the whole organization. The case of divisions competing with divisions is classical (Table 4.1).

THE DESIGN ATTRIBUTES OF TRADITIONAL CONCEPTIONS OF MODERN ORGANIZATIONS

Traditional hierarchical organizations are the outcome of a cluster of revolutionary technological discoveries. These, combined with new management innovations, such as the factory and scientific management, became hugely influential and even though the world has changed significantly, the hierarchical, efficiency-oriented mindset is still very present.

As a mechanical engineer, Taylor had devised the organization as a machine. Planning and design were pieces of engineering (Shenhav, 1995), with an aesthetic quality associated with mechanical precision (Guillén, 1997). Organizations as well-designed pieces of machinery would be error free, a view that reality rarely exemplified. Nonetheless, the emerging modern organization was a place in which the promise of scientific management was that manual workers could be transformed into docile bodies (Clegg, Courpasson & Phillips, 2006). In its extreme form the promise was sometimes managed to the limits of overwork, a phenomenon that still causes several problems including work-related suicides and what the Japanese call *karoshi*, death by exhaustion. The phenomenon is reported regularly with cases reportedly taking place at Korea's online retailer Coupang (Jung-a, 2021a).

Coupang is a successful South Korean ecommerce group. Coupang gained a competitive edge by delivering nearly 100 per cent of its orders on the same or next day based on a network of 100 fulfilment centres across 30 cities. The pressure on workers to reach targets was tremendous and became more intense when the company inaugurated the delivery of fresh food. As a result, hamstring injuries, typical of professional athletes, became common among the workforce. According to Korea's Public Service and Transportation Workers union, eight Coupang workers died in 2020 because of overwork. Ryu Ho-Jung, a lawmaker for the Korean progressive Justice Party, observed that:

> The company's obsession with efficiency is hurting worker's health. Its innovations are the result of driving the workers to the extreme. … If the situation continues we will see more workers die. (Jung-a, 2021b, p. 8)

Deaths by overwork, in this case work-related suicides (Clegg, Cunha & Rego, 2016), and job-related health issues (Pfeffer, 2018) are not part of the

past: extreme neo-Taylorism, with its dualistic separation of design and execution and an obsession for efficiency is still very much alive.

The scientifically managed organization was based on the machine metaphor, with the organization being imagined as a mechanism aiming to produce efficiently and reliability. Such a mechanistic view favoured *planners* over *doers* (Sunstein, 2020; Thaler, 2016), privileging *mental* over *manual* labour and separating the two (Braverman, 1974), contributing to create sludge, "excessive or unjustified frictions, such as paperwork burdens" (Sunstein, 2020, p.1) that served to appease and protect the planners. This was based on some fundamental principles, namely:

- Separation of design and execution.
- Definition of tasks according to time and motion studies.

These two processes would allow organizations to identify and stabilize what they thought to be "the one best way". Once identified, best practices would be replicated, leading to high levels of efficiency and reliability, important organizational outcomes. The modern organization was thus traditionally operationalized as a piece of machine engineering. Most people performed repetitive, manual work, as popularized in Chaplin's *Modern Times* (Figure 4.4).

Note: "Chaplin in Modern Times (Wikimedia)" by paal is licensed under CC PDM 1.0.
Source: https://search.creativecommons.org/photos/800a4f87-d198-47d4-bdb0-9f9a6c3e18e9 (accessed 21 May 2022).

Figure 4.4   *Chaplin's* Modern Times

Manual Work

Work, in the modern organization of the early 20th century was, for the majority, manual labour. Work, reduced to fragmented tasks that were done repetitively, was part of a process that allowed significant levels of efficiency. Management defined the nature of the tasks according to the "one best way", identified via time and motion studies and controlled the pace of work. Employees could be rapidly replaced as "parts" or as they were later to be distinguished, as "human resources".

Organizations, especially with the adoption of innovations such as the moving production line, were now able to define the pace of the operation. Of course, the struggle between people soldiering (i.e., aligning their behaviours similarly to soldiers in parade but not necessarily according to the commander's orders) and the company's pace setting through job design and leadership pace-setting style (Goleman, 2000) is entirely predictable. For example, the current wave of automation is bringing old themes back to life. Consider Sarah O'Connor's (2021, p. 19) description of warehouse automation:

> Chuck is an autonomous robot trolley which leads a human picker through a warehouse from one shelf to the next. 6 River Systems, which sells or rents the robots to warehouse operators such as DHL, XPO Logistics and Office Depot, says the technology relieves strain on workers because they no longer have to push a trolley around. But Chuck also sets a relentless pace. "Research shows that when associates pace themselves they slow down," its website explains. A 6 Rivers System "business case" report says workers who set their own pace "travel only half as fast as when they follow Chuck [and] their speed without Chuck also fluctuates daily."

This description is as Taylorist as it could be. O'Connor's piece for the *Financial Times* continued with a note on the fact that dehumanization and the intensification of work are not inevitable. One can imagine the same being written not in 2021 but in 1921, demonstrating that employing utilitarian ideologies creating tensions between humans and machines constitutes a perennial theme. The humanist conclusions remain the same as they were in the early days of the Luddites (see Highlight 4.5): "we must make sure that the robots work for us, and not the other way around" (O'Connor, 2021, p. 19).

HIGHLIGHT 4.5 THE LUDDITES OR HISTORY REPEATS

In the second decade of the 19th century a group of English textile workers known as the Luddites protested the introduction of new technologies in the then nascent industrial revolution in the textile industry. These machines,

such as power looms and spinning frames, threatened to leave them jobless (Brynjolfsson & McAfee, 2015).

We know that while jobs have not disappeared, the noun "Luddite" was retained to designate those people that are seen as opposing technological progress. Every time a new wave of change in technology emerges, Luddites emerge. Historically, jobs have been created rather than eliminated but the fear looms with the fourth industrial revolution. Is this time going to be different?

These were important matters for several reasons. On the one hand, it allowed the above-mentioned increases in efficiency. On the other hand, the precise definition of the times and motions involved in the execution of a task generated multiple advantages. It impeded the phenomenon known as soldiering, or the mutual adjustment of slow pace between workers. The firm could now control the rhythm of work. Additionally, this resulted in the decrease of waste, a source of inefficiencies, including the waste of human effort.

The work of management in gaining the acquiesce of the workforce was to be achieved through a mixture of disciplinary coercion and a system of material gains. A notable recent case is that of Amazon where workers complained about unsafe and gruelling conditions in warehouses. As reported in the *Guardian*, "Raymond Velez worked as a packer at the Amazon JFK8 warehouse from October 2018 to November 2019. He was required to pack at a rate of 700 items per hour. He said workers are regularly fired for missing rates." "That's all they care about. They don't care about their employees", Velez added.

> They care more about the robots than they care about the employees. I've been to Amcare [the company's on-site medical unit] a couple times for not feeling well, and you'd get an aspirin and sent back to work. (https://www.theguardian .com/technology/2020/feb/05/amazon-workers-protest-unsafe-grueling-conditions- warehouse, accessed 21 May 2022)

Organizations treat employees as means to the ends the organizations are designed to achieve, means to be used at the organization's disposal, as will be discussed below.

Hard Power

Control in the modern organization was mostly an exercise in hard power (Nye, 2009). Hard organizational power refers to the combination of a hierarchy and a bureaucracy. The hierarchy defines a chain of command that designates who commands whom, who makes what type of decisions. The logic of manage-

ment by decree builds habits of compliance as a substitute for commitment (Gherardi & Jacobsson, 2000; see Highlight 4.6). Bureaucracy depersonalizes the chain of command, providing it with a measure of legitimacy.

HIGHLIGHT 4.6 TAKING COMPLIANCE TOO FAR? THE CASE OF WHISTLEBLOWERS

One of the curious facets of organizations is the extreme to which they sometimes take compliance and embed people in this logic, even to the extent that they comply with deviant behaviour. It is interesting to observe that when people engage in wrongdoing, they often do it for the benefit of their organizations rather than for their own gain, as Kenny (2019) argues. Phenomena such as groupthink and conformity are often practised because of their supposed benefits for the organization.

This identification is even stranger when people stigmatize whistleblowers: the explanations are many, including their "disloyalty" to a corrupt organization but also the fact that, psychoanalytically, these individuals confront the other organizational members with the fact that their "good selves" have been lost in the organizational process of misconduct (Stein, 2021).

Hard power can thus have very powerful effects, including on the soft organizational side – and these effects are not necessarily good. The antidote for these toxic forms of relationality imply cultures in which psychological safety and constructive disagreement prevail over compliance as blind adherence. As Rhodes and Badham (2018) point out, fostering relational integrity is critical to maintain ethical integrity, as ethics constitutes an intersubjective construction.

The traditional modern organization was devised as a chain of command and control. These organizations were designed to command armies of obedient workers (Clegg, Courpasson & Phillips, 2006). Such workforces were expected to work along the lines defined by the management. Hard power denotes the power of coercion. In this case, organizations are framed around rules and regulations that coerce people to do what the organization expects from them. This logic is founded upon principles close to McGregor's (1960) *Theory X*, founded on utilitarian assumptions and market realities. The utilitarian assumptions are that people favour pleasure and avoid that which does not give pleasure. Consequently, human beings would avoid work if they could (because it has been designed not to be pleasurable but efficient, which makes it unpleasantly intensified, routine and alienating). Therefore, people need to be coerced to operate along the lines established by the organization. People

accept this situation because of market realities: lacking capital or access to a subsistence economy, they must sell their time and effort to an employer. That employer, using utilitarian assumptions, will design work as efficiently as possible irrespective of the individual disutility that occurs, within the letter of regulation and law. Routine, repetitive work was the result; hardly pleasurable in and of itself.

The command system gains a measure of formality via a layer of bureaucracy that is superimposed over the hierarchy. The bureaucracy defines expectations regarding organizational roles. Managers command subordinates not because of caprice but because the rule defines what is expected from them. They are expected, in summary, to operate *sine ira et studio* – without anger or passion (Albrow, 1992).

Employees

The employee has been described as an expert in obedience (Jacques, 1995), a mechanical actor that "does as directed" (Mintzberg, 2021). The employee is a creation of modern management, a peasant turned industrial labourer (Burrell, 2020), expected to express loyalty (see Highlight 4.7). Given the new system of work design – standardized, fragmented, repetitive – employees were supposed to execute their work as assigned. Because efficiency prevailed over creativity, employees were fundamentally told what to do, having been prototypically treated in an exemplary account as partly idiotic in Taylor's (1911) description of an exemplar whom he called "Schmidt". They were viewed, quoting Henderson (2021, p. 106), as "essentially stupid machines". If not stupid, the assumption was that individuals would be "instrumental workers" (Goldthorpe et al., 1971), able to be hyper-rational *homo economicus* (Martin, 2021) motivated by calculative reasons, which contributed further to the dehumanization of work (Petriglieri, 2020). This was, of course, a simplification that created resentment and disappointment. The human costs of this view were as visible then as they are now in places where Taylorim is still practised in its more or less original form. The "production-line poets" of China write on the "factory as a prison" in the form of poems on homesickness, powerlessness and alienation (The Economist, 2021b, p. 43).

The instrumental worker sacrificed pleasure, or at least satisfaction, at work, for the money that could buy pleasures outside of work. What of their managers? The image of the good managerial employee corresponded to some extent to the idea of the "good soldier", a member of an officer class able to express a measure of dedication and loyalty that exceeds what is formalized and pre-established. Dedication was rewarded with a job for life and a career path that replicated the military hierarchy: ascension through the hierarchical ranks. These employees were described by Whyte (1956) as the "organizational

men", the men in grey flannel suits (Wilson, 1956) that looked alike, that did similar things in similar offices in similar organizations. These traditionally modern organizations that fully emerged in the 1950s were thus places of het-eronormative social reproduction, very distant from the contemporary interest for diversity and inclusion. Textbooks of the time were exclusively gendered; referring to the organization man as an archetypal manager was not just a lack of sensitivity, a slip of the tongue; it represented the prevailing situation.

Subsequently, the view of these rational officers of the organization changed from seeing them as striving to be wholly rational actors, making cool and calculating decisions based on data, which had become a recurrent trope in the wake of scientific management. Simon (1957), with his theory of administrative behaviour, introduced the idea that people are boundedly rational "satisficers", avoiding the caricatures of hyper-rationalized and hyper-psychologized views (Mintzberg, 2021). These new visions of human nature highlighted the importance of factors such as chance, as in the garbage can model of organizations (Cohen, March & Olsen, 1972), which stresses the fact that decisions are less than wholly rational processes, involving politics, agendas, preferences and prior learning, factors that highlight the fuzzy char-acter of organizational decisions that often deviate from rationalistic assump-tions (Eisenhardt & Zbaracki, 1992).

HIGHLIGHT 4.7   LOYALTY IN THE 21ST CENTURY

As discussed, employees have been presented as loyal, obedient executants. Yet the world changes and employees have started to play different roles, including the whistleblower. Sometimes represented as an "eccentric lon-er", the whistleblower may in fact be a different character: "whistleblowers are likely to be loyal employees, passionate about high standards, who go outside their organization as a last resort when nobody takes them seri-ously. They aren't defiant troublemakers; they're disappointed believers." Listen to Erika Cheung who in 2014 spoke up after discovering discrepan-cies which brought down Theranos and its founder Elizabeth Holmes, who claimed to have invented technology that would transform medicine and was the darling of Silicon Valley. Erika Cheung was one of the key whis-tleblowers in the Theranos scandal that stopped the company from process-ing thousands of patients' samples with faulty technology (https://www.ted .com/talks/erika_cheung_theranos_whistleblowing_and_speaking_truth _to_power, accessed 21 May 2022).

The implication of this image of the whistleblower is clear: companies should give people the room to speak up (Cunha, Simpson et al., 2019), a right when exercised that functions as an "early warning system". In this

case, employees are more than executants: they serve as a source of insight and are an organization's moral compass.

Source: Heffernan (2021, p. 17).

Supervision

Between the manager and the worker was the frontline supervisor or foreman (Dunkerley, 2013). The employee was controlled by a supervisor. As the name indicates, supervising refers to being overseen. Literally, supervisors watched over the workers in the workplace (as in Figure 4.5). They were an important

Source: https://picryl.com/media/daytona-beach-florida-a-foreman-watching-a-negro -workman-prepare-to-lay-a-sewer-439386 (accessed 21 May 2022).

Figure 4.5   *The original caption for this image reads: "Daytona Beach, Florida. A foreman watching a Negro workman prepare to lay a sewer pipeline". It is intersectionally representative; a white man sits and watches while the African Americans toil. Race intersects authority*

part in the machinery of organizational control. Supervisors were agents of control, whose job consists in monitoring and making sure that the habits of soldiering were neutralized.

Later, with the advent of the Human Relations school, supervisors gained a new responsibility: to express care for their people. This combination of work and a focus on people was crystalized in the notion of leaders as Janusian, figures with a dual orientation (Figure 4.6).

Note: Lienyuan Lee, Statue of Janus, taken on 8 May 2005, available at: http://www
.panoramio.com/photo/66538480.
Source: https://commons.wikimedia.org/wiki/File:Statue_of_Janus_%E5%82%91%E7%BA
%B3%E5%A3%AB%E5%83%8F_-_panoramio.jpg (accessed 21 May 2022).

Figure 4.6   Janus

A supervisor with too much focus on work corresponds to the notion of the instrumental, detached boss; too much emphasis on the human side may lead to insufficient effectiveness. Hence, different approaches to human resource management were taught that emphasized one or other of these two attributes (Clegg, Pitsis & Mount, 2021). Goleman (2000) explained that leadership styles are like a Swiss knife: effective leadership requires a combination of styles – setting pace as in the traditional organization but also coaching, democratic decision-making, authority-based influence, and so on. The simplifications of the past gave way to more complex views of people.

The Organization as an Orchestra

As explained by Peter Drucker (1988) and others (Hunt, Stelluto & Hooijberg, 2004), the traditional organization was expected to perform like a symphony orchestra. Netflix's Reed Hastings explained that

> during the industrial era, many of the best companies operated like symphonic orchestras, with synchronicity, precision, and perfect coordination as the goal. (Hastings & Meyer, 2020, p. 269)

Instead of a conductor and a musical score, organizational action was based on processes and policies. Orchestras have their written pieces, competent executants and autocratic conductors (and conductors need to be autocratic, argued maestro, John Eliot Gardiner; in Clark, 2010). The Vienna Philharmonic, one of the world's great orchestras, might not agree. They hire their conductors and are an employee collectively organized orchestra governing through a representative council. Strangely, this great orchestra rarely seems to be top of the managerial mind.

THE DOWNSIDE OF THE MODERN ORGANIZATION

While what became the traditional forms of modern organizations have changed the world, they proved problematic on several fronts. One of their limitations is the fact that "hierarchical human organizations are not good environments for human beings" (Leavitt, 2007, p. 254). Over time the limitations of the traditional, hierarchical, paternalistic way of organizing were exposed. In addition to the psychological costs and the alienation produced by the modern organization, its mass production and consumption, the eternal quest for cheap products caused problems of pollution and material exploitation of resources as well as human misery using cheap labour to produce products as cheaply and easily disposable as the labour that produced them.

Modern organization evolved, dropping elements of bureaucracy and hierarchy in some cases. The period witnessing the rise of less hierarchical organizations was a time of peace and prosperity, at least in the West. From the late 1960s onwards interest in "alternatives" to the traditional notion of modern organizations grew and elements of bureaucracy and hierarchy were chipped away from the structure to accommodate more team working, entrepreneurial activity and different styles of servant leadership (Clegg, Pitsis & Mount, 2021). Rear-guard actions are always feasible of course and the allure of "big men", autocratic leaders, that present simple (and wrong) organizational solutions for complex problems, should never be underestimated. Yet organizing that regresses to the historical mean is not inevitable as we will discuss next.

Later Developments: Toyota's *Kaizen*

While the notion of bureaucracy gained a bad name, the case of Toyota became the illustration par excellence of a new way of understanding organization, bureaucracy and routine. If the traditional bureaucracy constituted a complex organization for simple people, Toyota imagined a new combination: a complex organization for complex people. In contrast with the coercive bureaucracy of the past, Adler (1993) qualified Toyota as a learning bureaucracy. The famous Toyota production system embraced the logic of lean:

> customer focused, continually improved through waste reduction, and tightly integrated with upstream and downstream processes as part of a lean value chain. (Liker & Morgan, 2006, p. 6)

The Toyota Production System (TPS) is underpinned by the *kaizen* philosophy (*kai* = change, *zen* = good), one that accepts the "deep desire for continual improvement with an eye toward ultimate perfection" (Liker & Morgan, 2006, p. 17). As the quote indicates, bureaucracy can constitute an exercise in mindfulness (Weick & Sutcliffe, 2006) rather than an expression of mindlessness. The TPS indicates that generic organizational practices are not good or bad in and of themselves. The Taylorist bureaucracy may constitute a formidable organizational machine if oriented towards continuous improvement, creating valuable products for the customer.

Toyota's example serves to counter any possible teleological inclinations that this book might suggest; we do not aim to transmit the idea that agile is good and traditional design is bad. That Toyota initiated the logic of agile does not mean that all that Toyota did is good (Rigby, Sutherland & Takeuchi, 2016). A good bureaucracy can be superior to a flawed expression of agile. The case of TPS also expresses the power of applied philosophy. Designing organizations is more than merely applying technical principles but can benefit from being anchored in solid organizational thinking, in clear ideas of organization, based on some overarching philosophy of the firm. The TPS sees organization as a continuous improvement process (as in the metaphor of managing as in cultivating a garden in Highlight 3.2, Chapter 3). "Gardening" at Toyota means reducing waste:

> the famous passion to eliminate waste in the Toyota Production System also applies in product development. Waste is what costs time and money and resources but does not add value from the customer's perspective. Eliminating waste to focus on adding value to customers provides a common reference point for engineers working to improve the process. (Liker & Morgan, 2006, p. 10)

Revealingly, Toyota's bureaucracy is focused on the customer with the process and its rules intending to assist workers in the creation of value for customers (see Highlight 4.8).

HIGHLIGHT 4.8   FOR PRACTICE: BUREAUCRACY IS MORE THAN A RELIC OF THE PAST

The traditionally modern form is not a relic of the past. Some of its features, such as a layer of bureaucratic formalism, are necessary to create reliable forms of organization. A bank, an automotive factory or an airline are hard to imagine without well-defined formal processes and routines. Even the holacracy has been presented as the continuation of bureaucracy through other means (i.e., control in disguise; Monteiro & Adler, 2022).

The design challenge lies in creating rules that are enabling and that contain mechanisms to counter "sludge". In the same way that organizations have mechanisms to create rules, they should have mechanisms to remove useless or outdated rules, businesses and so forth. They may apply the decluttering logic à la Mary Kondo (Rousseau, 2021).

FINAL REMARKS

Organization has been seen for decades as the domain of hierarchy and bureaucracy, planning at the top and execution at the base. The traditional conception of the modern organization brought impressive achievements, at a cost: "people at the top had license and little restraint; those at the bottom felt powerless or afraid to get anything done through the proper channels" (Heffernan, 2017, p. 8). As time passed, environments became more fluid and competitive, which explains the qualifier "hypercompetitive" (D'Aveni, 2010). The emergence of hypercompetition gave new relevance to processes such as dynamic capabilities, improvisation and bricolage and stimulated the creation of new types of organizations, including less hierarchical organizations, which we discuss in the next chapter.

5. Less hierarchical organizations: the fall of the traditional pillars (part I: hierarchy)

The hierarchical structure was "devised for a world in which employees were required to follow a clear set of instructions ... as businesses became more sophisticated in the 20th century, organizations became much more elaborate" (The Economist, 2019, p. 50). Complex "elaborateness" created more fluidity by accepting that structures are only partially defined at the top and that some elements are kept undefined, to allow more bottom-up contributions and to accelerate response capacity and a higher pace of innovation (Miles, 2012). As work and organizations become more "liquid" (Clegg & Baumeler, 2010; Clegg & Cunha, 2019), teams of the past were replaced by cross-boundary teaming, in which members from different organizations work as teams for a period, to address complex problems, often at an interorganizational level, such as at the level of a city (de Jong et al., 2021). In a liquid world, careers, teams and organizations changed, giving way to Protean careers, teaming and project-based organizations.

As Jack Welch, former CEO of GE, celebrated as "manager of the century" (Colvin, 1999) explained, organizations could no longer provide a career for life. Good companies, Welch observed:

> can guarantee lifetime employability by training people, making them adaptable, making them mobile to go to other places to do other things. (Davis, 2015, p. 1)

A more flexible workforce reduced elements of humanism in management practices (Petriglieri, 2020); people no longer committed to organizational careers could be viewed as more easily disposable resources. Efficiency resulting from reliable, well-tested processes needed to be complemented by a capacity for fast action, resting on a dynamic view of competencies and supported by processes such as improvisation (Abrantes, Cunha & Miner, 2022) and bricolage (Baker & Nelson, 2005). In summary, less hierarchical organizing was embraced to create nimbler organizations.

In a 2017 paper, Lee and Edmondson discussed the nature of what Clegg (1990) had termed "post-modern'" less hierarchical or post-bureaucratic organizations (Josserand, Teo & Clegg, 2006). Less hierarchical, flatter organ-

izations tend to be more common when organizations engage in knowledge work. These organizations are discovering that it is possible to "get things done" without the traditional hierarchical solutions of the past (Clegg, 1990; Cunha, Rego & Clegg, 2011; Fairtlough, 2007). Designs could be embraced that were more responsive to changing circumstances.

These post-modern organizations emerged from demands to increase speed and customer focus over a strict reliance on efficiency. The machine bureaucracy of the past had difficulties responding rapidly to varied expectations from a diversity of customer segments. The efficient standardization of bureaucratic production machines was insufficient to accommodate desires for customization, speed and entrepreneurial agency on the part of employees, especially managers. In parallel, changes in manufacturing technologies afforded the adoption of new modes of mass customization, which allowed a combination of standardization and customization, supporting the emergence of new organizational designs.

Although increasing numbers of managers strove to gain MBAs (Master of Business Administration) while the name survived, administrative skills were increasingly seen as past their use-by date in a world of constant change in which new forms of accelerated managerialism were emerging (Clegg, 2014). According to Locke, managerialism is what occurs when a special group, called management, ensconces itself systematically in an organization and deprives owners and employees of their decision-making power (including the distribution of emoluments) – and justifies that takeover on the grounds of the managing group's education and exclusive possession of the codified bodies of knowledge and know-how necessary to the efficient running of the organization (Locke, 2009, p. 28). Managerial designs were expanding their territory.

DESIGN EXEMPLARS

In this section we discuss early design exemplars of less hierarchical organization, namely, the matrix and the horizontal structure, that the new experts in management, the managerialists, were to design.

Matrix

The matrix has been described as a synthesis of functional and divisional forms, given its combination of function and outcome. In the matrix the line organization coexists with project organizations (Martela, 2019). Organizational members are expected to maintain a functional base while also participating in a product or project group. As organizations assume more flexibility, many have embraced the matrix structure. The matrix (Figure 5.1) typically assumes three dominant types: functional, product or balanced matrix. The matrix can

be imagined as two structures operated simultaneously by two groups of managers. For example, managers in the functional side assign experts to projects whereas managers on the project side run the project specifics. The matrix can offer a deep integration of activities but can also introduce friction at the overlapping junctures. The promotion of cross-domain collaboration can be a great organizational asset but constitutes a delicate exercise in balance.
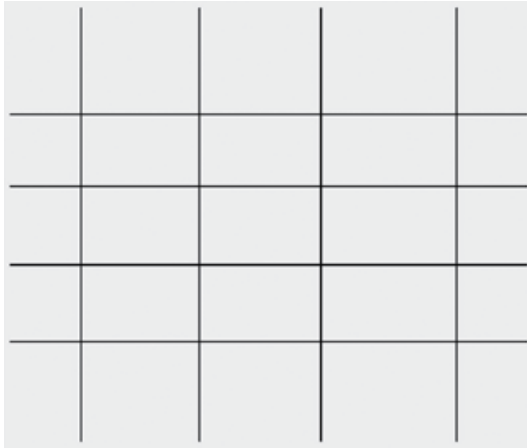
Figure 5.1   Matrix structure

The matrix organization involves two lines of coordination that challenge traditional rigidities of previous structures, such as the functional. The new design aims to instil a measure of flexibility that allows the organization to redesign itself when circumstances change, or when projects require the recomposition of the organization's resources. The matrix is especially relevant for temporally specific project organizations whose core processes are unstable and dynamic rather than predictable. Unpredictability neutralizes the adoption of more stable structures and invites the consideration of reconfigurable architectures.

The matrix structure comes with a cost: it is highly demanding in terms of its software side. As Bartlett and Ghoshal (1990) warned, more than a structure, the matrix can be considered a frame of mind. Think about the matrix as an expression of designed collaboration in which diverse projects require distinct skills and great resource variance. In the matrix, when collaboration is more expected than practised, organizational members may be confronted with contradictory requests and conflicting demands. These may turn the desired synergies into conflicts over power and resources.

Table 5.1   *Advantages and disadvantages of matrix and horizontal structures*

	Matrix	**Horizontal**
Main advantages	Extraordinary ability to pool resources to different projects.	Focus on value creation rather than in internal functions.
	Great flexibility, as the organization can be composed and recomposed project after project.	Customer focus.
	Highly adaptable for changing projects with specific workloads.	Multidisciplinary logic.
	Resources can be used in efficient ways as there is no duplication of areas of expertise.	
	Promotive of innovation as people from different areas work in shared projects.	
Main disadvantages	Potential conflict among functional and project areas.	Novel organizational design that creates implementation difficulties.
	Power struggles and politicking may deter synergies.	May harm technical expertise as people are surrounded by a multidisciplinary team.
	Lack of stability for individuals.	As with other flat organizational forms, popularity in informal cliques rather than expertise may have a disproportional impact.
	Need for ongoing negotiation between projects and functions.	

Source: Frost and Purdy (2017).

Horizontal Structures

In the 1990s, following the reengineering revolution (Hammer & Champy, 1993), several advocates defended a new structural design: the horizontal organization. The horizontal organization (Chenhall, 2008; Ostroff, 1999) is based on the idea that instead of functions, organizations should be designed according to a new basis: customer value creation processes. All the processes that failed to contribute to value creation should be removed, as well as the relational and power ambiguities of the matrix organization.

The new logic emphasized specific, customer-focused value propositions, geared towards process efficiency and improvement. The new structures would be flattened and team-based. Ideally, teams should be cross-functional, as most of the value-creating activities that take place in organizations (e.g., new product development) should be cross-functional in nature (e.g., marketing, technological, commercial dimensions are all involved in product innovation). Therefore, instead of being vertical, these structures are lateral, hence the label "horizontal" (Table 5.1).

The process or team-based horizontal organization was thus a design imagined to recentre the organization on the client. Instead of organizing work around internal functions and routines, often with no contact with customers, horizontal organizations were structured to reduce customer distance. The idea permeates the internal network organization that will be discussed apropos organizations such as Haier (see Chapter 6).

THE DESIGN ATTRIBUTES OF LESS HIERARCHICAL ORGANIZATIONS

The 20th century saw organizations becoming flatter and less hierarchical (Lee & Edmondson, 2017; Rajan & Wulf, 2006). Managers were increasingly urged to de-emphasize hierarchy (Bryant & Sharer, 2021) and to promote empowerment of their organization's knowledge creators or "talent". The change was caused by several organizational, social and technological factors. From an organizational perspective, the limits of the traditional conception of a modern organization are apparent: slowness in decision-making, repetitive work, the unwillingness to take full advantage of the competences of people employed. The emergence of a new class of a knowledge-based "cognitariat" is the successor to the proletariat toiling at the base of bureaucratic organizations. The cognitariat composes the vanguard of the new knowledge-based firm, rather than its toilers, they are its creators. Socially, the creation of more open access to higher education meant that the workforce had increasingly more knowledge, was more skilled in critical creativity than in the past. Technologically, digitization also contributed to changing many things.

Knowledge Work

Less hierarchical organizations rely on knowledge work, that is, work that is fundamentally of a cognitive nature, involving the acquisition and utilization of information and ideas, rather than following rules. Knowledge workers often require specific forms of management: what had been applied to manual work did not necessarily apply to knowledge work and new forms of knowledge work were spreading widely, as seen in agricultural developments such as precision agriculture (Cunha, Clegg, Rego & Berti, 2021b) or the creation of digital factories. Knowledge work is done by people with more education who potentially both have more motivation to participate and to make decisions autonomously as well as intellectual resources to do so. "Who wants to be in a company where you are not allowed to think?" (Tuna, 2008, p. 31) is a good question to ask. In knowledge-intensive companies, workers expect to have more power to initiate change. For example, companies such as Oticon, a Danish maker of hearing devices, created what was called a spaghetti organ-

ization (Figure 5.2), a form in which employee-initiated projects prevail (Foss, 2003).
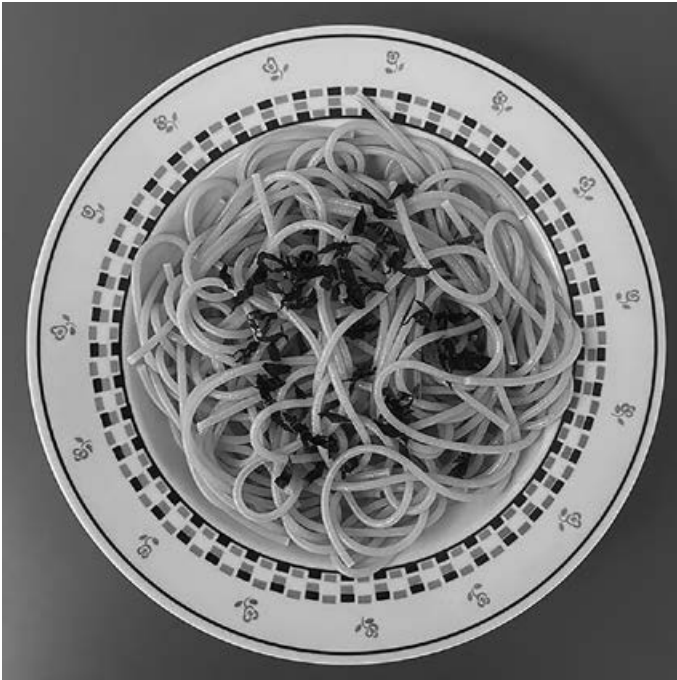
Figure 5.2   Spaghetti as a form of organized disorganization

The spaghetti organization is a project-based form in which knowledge centres are connected by a multitude of links, to allow the organization to move fast yet to maintain coherence (see Highlight 5.1). Knowledge workers find little joy in being commanded and told what to do. They expect to have autonomy and have their views and ideas listened to (Goffee & Jones, 2007). They are powered by soft means.

HIGHLIGHT 5.1   OTICON AND THE SPAGHETTI ORGANIZATION

Lars Kolind (1988–98) as CEO of Oticon is credited with the spaghetti organization design behind Oticon's transformation in the early 1990s as one

of the leading hearing-aid manufacturers in Denmark. "In his quest to be in-novative, fast and productive, in 1990 Lars Kolind abolished the company's formal structure to create what was initially called a 'chaos organization'."

The organization reflected the complex, informal and almost anarchic or-ganizing (Larsen, 2002) that is "emphatically non-hierarchical, chaotic, al-ways changing and with no organizational diagram" (Gould Morgan, 1994). The business magazine *Fast Company*, in one of its 1996 issues, wrote, "It is hard to imagine a more disorganized organization than Oticon" (see also Figure 5.2). The change in organizational design transformed Oticon and had quick and substantial performance effects (Foss, 2003), as they moved from the position of being a follower to a trendsetter. In addition, they were able to cut down their product development cycle and time to market by 50 per cent. However, the success proved unsustainable, as Oticon became a victim of its structural ambiguity and suffered losses. Profitability seemed to be a problem. In response, the company appointed Niels Jacobsen as executive vice president in 1992 to institute stability and to balance out the new creative yet overly flexible organizational design. The spaghetti organization was gradually abandoned starting in around 1996 in favour of a more traditional matrix form (Foss, 2003, p. 335). Lars Kolind conceded that "after having loosened everything up, it was difficult to tighten things up again".

Source: Gaim and Wåhlin (2016).

Soft Power

Soft power refers to the power of attraction (Nye, 2008). It emphasizes the importance of premises, such as a common purpose and shared values. As indicated by studies of soft power at the national level, pioneered by Nye, the US "has been the world's most innovative economy. That has been the basis of its global power and influence" (Wolf, 2021, p. 19). One consequence of this influence is the ability of the US to "attract the world's best and brightest" (Wolf, 2021, p. 19). In a world characterized by continuous introduction of new products and services, lacking organizational innovation capacity consti-tutes an important weakness (Garud & Turunen, 2021), for companies as well as for nations.

In less hierarchical organizations coordination is achieved via a combination of control through premises (culture, values) and performance management (goal setting, feedback, rewards): the organization defines a purpose and establishes the goals and the rules of the game; empowers individuals to control themselves and conducts performance management. The combination

of culture and performance management is especially adequate for "clever people" (Goffee & Jones, 2007), professionals with high levels of education and expectations of autonomy. In these organizations, purpose offers a compelling story that operates as a coordination scaffold rather than a fully formed chain of command or a specific goal (Clegg, Cunha et al., 2021). Professionals articulate their action via mutual adjustment (such as through the "living stories" they swap; Vaara et al., 2021) and their contribution to the mission.

In the process, leadership becomes more informal, emergent, distributed and rotating, shared instead of being invested in one single person (Hanna et al., 2021). Gonçalo Quadros, founder and CEO of Critical Software, explained that "good leadership must be distributed – a good leader helps other leaders to emerge" (Correia & Pereira, 2020, p. 14). The change is superbly captured in a passage of the French writer Saint-Exupéry that is sometimes cited by management authors (e.g., Hastings & Meyer, 2020, p. 215) to express the direction of change: to build a ship, instead of giving orders teach people to desire the sea.

The sea or some metaphorical organizational North Star constitutes an overarching objective that informs decision-making by the members of an organization. A pharmaceutical company, for example, defined its North Star as "evolving into a data-driven business in order to reimagine medicine and improve patients' lives" (Collings & McMackin, 2021, p. 56). This type of overarching goal is conceived as a substitute for the need to give orders (see Highlight 5.2).

HIGHLIGHT 5.2   SUBSTITUTES AND NEUTRALIZERS OF LEADERSHIP

As some organizations try to move away from hierarchical structures, they use context as a substitute for leadership. The notion that leaders can be substituted or neutralized by contextual features is not new. It was developed by Kerr and Jermier (1978) to explain the circumstances in which leader action is unnecessary or ineffective.

For example, highly educated professionals can be expected to lead themselves. The organization can support them by offering contextual mechanisms (rules, goals, incentives, purpose, values) to help them lead themselves. In these contexts, leadership often happens in a covert way (Mintzberg, 1998), based on premises rather than in explicit obtrusive control.

The above discussion does not mean that top-down leadership gives way to bottom-up leadership. Leadership will tend to be top down *and* bottom up, hierarchical *and* distributed (Holm & Fairhurst, 2018; Oliveira & Cunha, 2021). In this context, employees become collaborators or individual contributors, endowed with agency and are expected to be proactive (Grant & Ashford, 2008). They are sometimes qualified as owners of human capital (Gratton & Ghoshal, 2003). As people investing their human capital, employees expect their value to be appreciated and that their organizations also invest in increasing their capital. Modern employees, as workers, sell not just their time and labour power but possess different forms of capital:

- Intellectual capital, or what they know.
- Emotional capital, or their capacity to work productively with others, to build and maintain generative relationships.
- Social capital, or who they know: their capacity to turn relationships into organizational resources that may assist in solving problems.

Leaders as Coaches

Over time, the notion of the manager as a supervisor gave way to the idea of the manager as leader or as coach (Garvin, 2013; Ibarra, 2019). This idea gained progressive depth as organizations embraced agility. In these new forms, coaching and a learning context are critical to "densify talent" (Hastings & Meyer, 2020). Talent density (see below) is not only a matter of attracting good minds but also of developing them. For this reason, the war for talent is not enough (Pfeffer, 2001). Even though attracting good human capital is important, developing talent is equally relevant. Attracting talented people and not helping them flourish is problematic in new organizational regimes.

Positional power becomes less relevant than relational authority (Bourgoin, Bencherki & Faraj, 2020), understood as a form of legitimated (rather than merely formal and mandated) domination (Clegg, 2021). Because control is progressively exerted through emergent principles negotiated with peers and as the claims to power are becoming more diffuse, new ways of understanding leadership have also emerged. If, in a stable context, power positions can be sustained over time, in volatile contexts, structures are reconfigured regularly, with more unstable structures requiring more dynamic, shared, pluralistic forms of influence.

The transformation is complex. Empirical evidence shows that empowerment initiatives aiming to replace "power over" with "power to" are often met with cynicism and cause important tensions. As a result, it may be that a desired change can instead lead to the reinforcement of the existing structures. A study in the Dutch Armed Forces illustrates the nature of the chal-

lenge. The hierarchical nature of the organization actively resisted attempts at change and produced more tension than willingness to change (Van Baarle et al., 2021). The authors found that actors may struggle cognitively to effect a change that is far from obvious, regardless of how well intentioned it might have been.

Organization as Jazz

In playing jazz (Fisher, Amabile & Pillemer, 2021; Kamoche, Cunha & Cunha, 2003), the presence of a formal leader does not inhibit the dispersion of leadership among the members of the group. The jazz metaphor prizes adaptability above certainty (Dennis & Macaulay, 2007), creativity above routine. Mistakes and failed improvisational moves are the price to pay in the name of speed, with honest mistakes represented as learning opportunities rather than as a sign of carelessness – an attitude that contrasts with more traditional organization in which improvisation must be carefully hidden (Macpherson, Breslin & Akinci, 2021). Leadership becomes a process based on implicit rules (Jordan, 2017) rather than an expression of one person's formal command in highly creative jazz groups. Reed Hastings (from Netflix) noted that while a lack of rules creates a kind of anarchy, rules stifle creativity. The challenge thus lies in managing through values and a context in which everyone does what must be done, without central coordination.

One way of achieving this is by each performer being given a set of scales that encompass the parameters of their improvisation and style, consequently affording them more creative freedom with their idea work (Carlsen, Clegg & Gjersvik, 2012), much as Miles Davis (1959) did in making *Kind of Blue.* In this kind of organization there is no central orchestration but highly fluent teamwork and collectively attuned improvisation capacity. To achieve this in jazz or anything else takes highly accomplished performers.

The changing nature of work sees complex projects being put in place by "teams of teams" from different specialties, with new competencies involved such as teaming, collaboration and participation, in addition to project management. In such contexts, leadership is an exercise in context setting, development and facilitation, more than the traditional practice of control. Managers become collaborative performers, supporting the leadership of their team members. In some cases, such as virtual teams and flexible work practices, they must coordinate people who are not physically co-located, a challenge, maybe even a threat, for those for whom leadership represents arms-length control (see Highlight 5.3).

HIGHLIGHT 5.3   FOR PRACTICE: MOVING IN THE DIRECTION OF LESS HIERARCHICAL ORGANIZING

For practice, many implications result from the movement in the direction of less hierarchical organizations. When organizations rely less on hierarchy, they depend more on alternative forms of control, especially on normative premises contained in organization culture. Creating and maintaining a positive culture is thus mandatory. A positive culture is a culture of growth and respect. In this type of organization, relationships matter, with generative relationships thriving on mutual respect. Respectful and supportive managers improve the context and help workers positively to redefine the nature of the work they do, by infusing it with more meaningfulness (Soffia, Wood & Burchell 2021).

The "No brilliant jerks" policy at Netflix (Hastings & Meyer, 2020, p. 200) illustrates the point and offers important clues for action – also theorized by Sutton (2007).

FINAL REMARKS

As McAfee and Brynjolfsson (2016, p. 139) have pointed out, "the promises of science fiction are quickly becoming workaday realities". Organizations increasingly need to experiment with new ways of working. At the same time, as noted by Chamorro-Premuzic, it is often presumed that "Humans are hierarchical by nature and the office always conveyed status and hierarchy" (in Jacobs, 2021, p. 16). For this reason, in times of great change, the temptation lies in preserving the status quo, defaulting to the traditional mean. For the above reasons, change is inescapable; nonetheless, responding to it through the adoption of less hierarchical designs should be handled with care, as there are multiple obstacles to design innovation.

6.   The agile organization: the fall of the traditional pillars (part II: task design and allocation)

As highlighted in the preceding chapters, designers' assumptions about organizational members have changed radically: they are now seen as being "complex people" (Cunha & Rego, 2010). In such cases, they become seen as "intrapreneurs" as they are called by Hamel (2007), people who are expected to be innovative. Burns and Stalker (1961) described the type of organization that might support these tendencies as an organic management system, and more recent versions of the underlying idea form an archetype whose attributes are termed post-bureaucracy (Adler & Borys, 1996) or post-modern (Clegg, 1990).

Dougherty (2008) discussed two perspectives which give rise to different construction principles, one being constraint-based and the other action-based. The former emphasizes boundaries, authority and reward mechanisms, whereas the latter underlines emergence, knowledgeable action and self-fulfillment (Dougherty, 2008, p. 415). The shift from what is characterized as mechanistic to organic design, although difficult (Josserand et al., 2006), given a dynamic environment, is relevant. In today's knowledge-intensive work, mechanistic design is impractical, or undesirable because it "signal[s] distrust, motivating people to reduce efforts and leading to myopic behavior" (Dougherty, 2008, p. 417). This chapter focuses on the newer design and forms.

New organizational forms are emerging that depart from traditional design solutions, by relaxing clear specifications of task design and resource allocation. They are based on the availability of innovative technological developments and changes in organizational societies. Technologically, the so-called fourth industrial revolution or platform capitalism is propelling new forms of work and organization. The platform relies on new business models in which platform firms provide services that allow other actors to create offers that would be inaccessible in the absence of the platform. In this system, a micro-enterprise operating from the garage can instantaneously globalize. As Bodrožić and Adler (2018, p. 101) have pointed out:

> successive innovations in microelectronics, computers, the Internet, and eventually mobile telephones, provided opportunities for new industries, a new infrastructure

of digital and wireless networks, and much wider and cheaper access to information and communication pathways.

The fourth industrial revolution opens opportunities and threats. Emerging technologies afford the design of new products and different organizations: distributed, network-based forms of organization, less vertically integrated and imagined as fluid processes rather than stable entities. New technologies are making old designs obsolete and supporting new viable architectural solutions, such as organizational networks, outsourcing and internal markets. The fourth industrial revolution, "driven by AI, molecular machines, big data and other technologies" (Lewis, 2021, p. 18) is changing the way companies and countries compete. Japan, a former innovation powerhouse, for instance, is losing steam as a leader in the technology frontier.

For firms to embrace digital affordances, technology is necessary but not sufficient: selecting and implementing the right technologies amounts to the "technology fallacy" (Volberda et al., 2021). Agile organizing refers to the intertwinement of technology and structure to gain a competitive edge. Having the right technologies, per se, offers no guarantees, as illustrated by the case of Kodak, whose leadership of relevant technologies, innate to digital photography (as measured by patents), did not prevent the company from going bankrupt (Volberda et al., 2021), similarly to Nokia in mobile phones.

The above changes can be symbolized by Netflix's Reed Hastings *not having* an office (Vance, 2013), the symbolic corner office where CEOs hide in the hard times – much as the wealthy US New Yorkers might hide in the Hamptons during the pandemic, as Schneider (2020) remarked. Instead of emphasizing stability and efficient routines, Hastings describes organizations that aim to be a "continuously learning organization" (Vance, 2013 p. 58). For an organization to learn continuously and to deal resiliently with a world of change, it needs to build a human fabric that sustains agility and resilience (Lombardi, Giustiniano & Cunha, 2021; Schneider, 2020). To be up to the challenge, some organizations embraced what has been called an F-form, "an organizational form in which employees have *complete* freedom and responsibility to take actions that *they*, not their bosses, decide are best" (Getz, 2009, p. 34, italics in the original).

Of course, not every organization should follow the mantra of "move fast and break things" or follow frameworks such as Agile or Lean: what fits the software industry does not fit necessarily other sectors, such as high reliability organizations or heavy industries (oil, mining). Yet even organizations in these sectors have benefited from the adoption of agile principles in some of their operations (supply chains, logistics, R&D; see Handscomb, Heyning & Woxholth, 2019). Remote mining in Australia's vast interior uses considerable artificial intelligence (AI) with driverless trucks and trains shipping ore over

vast distances (Jang & Topal, 2020). In the same vein, preference for more agile, intuitive decision-making is correlated more highly with smaller firms (Yang et al., 2020). It seems plausible, though, to defend the proposition that as organizations grow, they are inclined to more structured and formalized decision-making processes, which suggests that adopting agile in larger firms may require greater effort.

DESIGN EXEMPLARS

Agile organizations continue the reduction of hierarchy, as discussed in the previous chapter. Terry Kelly, from W.L. Gore, described the process as follows: "we don't want to operate in a hierarchy where decisions have to make their way up to the top and then back down" (Hamel, 2010, p. 27). These new structures, such as the network and the holacracy, seem to reflect what Van Vugt (2017) qualified as popular dislike for the hierarchy.

Networks

Organizing, in practice, is accomplished through networks of organizations that specialize in different complementary activities forming value chains (Figure 6.1). Within organizations, the networked structure as an internal
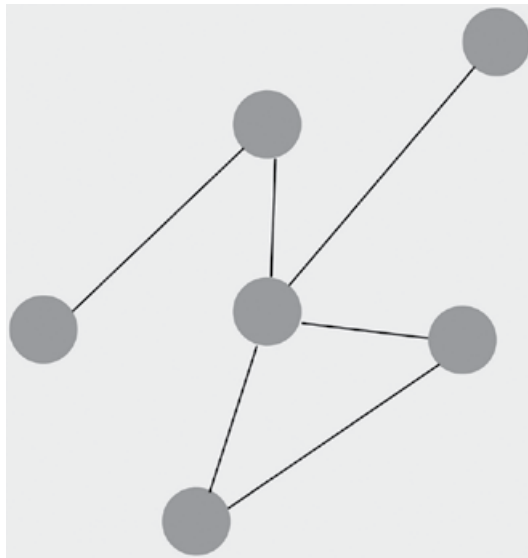
Figure 6.1   Organizational network

organizational architecture has been an object of scrutiny since the 1990s (Nohria & Eccles, 1992). Research on networks suggests that these forms can be more flexible, nimble and versatile than hierarchies, allowing organizations to create resource recombinations more complex than a vertically integrated hierarchy.

The network form replaces most vertical communication with lateral forms of coordination (Hatch, 1997). It has been defined as "any collection of actors (N ≥ 2) that pursue repeated, enduring exchange relations with one another and, at the same time, lack a legitimate organizational authority to arbitrate and resolve disputes that may arise during the exchange" (Podolny & Page, 1998, p. 59).

In the network organization assets are distributed among several partners. No single organization controls the production process in its entirety. In the network, several processes can be outsourced by one focal organization to external partners. Some companies, as in the case of sports apparel, command the strategy, brand and design, while outsourcing production to specialized manufacturers (see Highlight 6.1). In other cases, the company imagines itself to be a network which resembles a free market system. In case you can find the same service outside the organization for a better price, you are not forced to stick to the internal provider. Ideally, these organizations should be close to customers, as exemplified by Haier's zero distance philosophy (see Highlight 6.1).

HIGHLIGHT 6.1   OUTSOURCING RESPONSIBILITY

Maxine Bédat's (2021) analysis of the garment industry uncovers the other side of outsourcing. As the author explains, fashion, in the pursuit of lower prices and higher profits, became inhumane. Once, fashion brands were responsible for their products. Now they have shifted this responsibility away, by maintaining, designing, curating and selling a collection in whose manufacture they have no part other than agreeing a contract with a garment manufacturer. As a result, the fact that women in Bangladesh and Sri Lanka are coerced into sex work when there are not enough products to sew is not the responsibility of the fashion brands that are not contracting. For this reason, they outsource not only the production but also the responsibility – even if at home, they proclaim their high corporate social responsibility (CSR) credentials.

There are many important advantages associated with network structures. Consider the following analysis:

> If you think of an organization as a network, instead of a ladder or pyramid, then the critical thing is for information to flow fast, without impediment, to the place where it is most relevant. In an environment of psychological safety, where everyone feels free and is encouraged to speak up, creativity, honesty and responsibility can more easily thrive. (Heffernan, 2017, p. 8)

In the network, organizations can create mutual gains by cultivating goodwill and learning together. When problems arise it is more common to use "voice" rather than "exit" strategies (Hirschman, 1974) given the sense of mutual obligation that is created; because of the culture of trust, transaction costs are reduced (Williamson, 1981).

The network structure has several advantages but there are notorious risks. When organizations focus their core competences and outsource non-core activities, they depend on third parties to get work done. Doing this requires a great deal of cooperation and a relational rather than a transactional mentality. The logic of pitting supplier against supplier to achieve better costs becomes risky. On the contrary, a mutual gains approach becomes more important as the organization depends on co-learning with its suppliers. When networks work smoothly, they compose value chains, sometimes with global reach, that are integral to globalization. Sometimes, however, organizational networks become visible. An example was when Apple's partner Foxconn (operating in China) witnessed a wave of suicides in its plant (Clegg, Cunha & Rego, 2016).

In some cases, the operation is almost completely outsourced, which leads to what has been called the virtual organization (Hatch, 1997). It is also important to clearly identify which processes a company wants to share and those it prefers to protect, as the relation gains *coopetitive* traits, a measure of both cooperation and one of competition. In coopetitive regimes *naiveté* can have a high price – sharing secrets with companies that might use them is a dangerous idea. Something more radical than the network was yet to come: the holacracy.

Holacracies

The holacracy is a leaderless organization, a team of teams in which there is "self-managing organizational design with flat hierarchies, purpose-driven actions and high requirements for self-leadership" (Schell & Bischof, 2021, p. 1). Managing a holacracy consists in the management of the networked ecosystem keeping in mind that no team is an island (Carboni, Cross & Edmondson, 2021). Proposed by Brian Robertson (2015), the holacracy

gained popularity as a structure made of circles within circles (Bernstein et al., 2016), extending the 1980s idea of the adhocracy (Mintzberg & McHugh, 1985; Waterman, 1993), a flexible, informal type of organization, or a structure where highly trained experts work in multidisciplinary teams to produce specialized outcomes. The defining feature of the adhocratic structure is its emphasis on decisive action rather than on formal authority; in the adhocracy experimentation is the default mode (Birkinshaw & Ridderstrale, 2015), with activities coordinated around opportunities often responded to via improvisation (Abrantes et al., 2022). A circle contains a group of roles; roles are sets of responsibilities for a given process or outcome. Circles are formed and disbanded depending on needs and individuals normally assume more than one role in more than one circle (Figure 6.2).

In this design, mutually connected circles/holons (or self-managing teams) respond to an organization's purpose, the driver of holacratic action (Ackermann, Schell & Kopp, 2021). Tasks tend to be broken into small increments and to work with minimal planning and fast iterations (Bernstein et al., 2016). Individuals may play different roles in the circles and the circles are fluid. In a holacracy it is the *holos* or whole system that constitutes the organization's core: more than each group itself, the key is the dynamic relationship between the groups, and the way they are composed and recomposed over time, to respond to dynamic goals. The holacracy can thus be represented
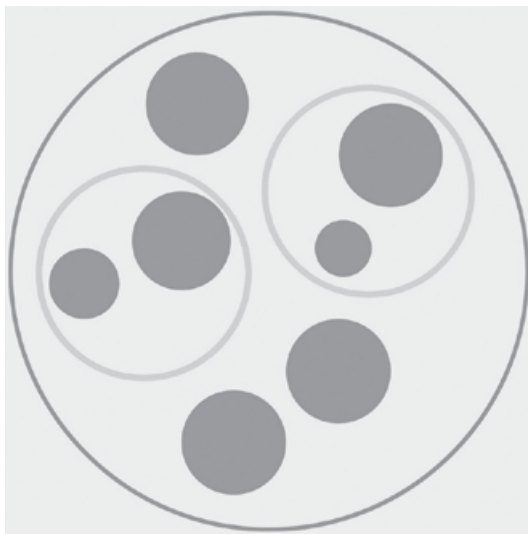
Figure 6.2   Holacracy

Table 6.1   *Networks and holacracies*

	Networks	**Holacracies**
Main advantages	High level of flexibility. Integration of very diverse skillsets. Mutual learning among the different participants in the network. Long term perspective of the collaboration. Economic benefits associated with lower transaction costs.	Decisions made by consent promote speed and autonomy eliminating boss check-ins. Reduces the relevance of "political machinations" (Frost & Purdy, 2017, p. 7). Increases speed of response to customers. Provides ample autonomy.
Main disadvantages	Mutual obligations may increase difficulties of exit. Reputation costs if important organizations in a network cause harm or confront reputational issues. Pressures for conformity from powerful network integrators.	Can create anarchy and strategic drift in the absence of a clear, shared purpose. Frontline employees may feel uncomfortable with assuming responsibility and being accountable. May be difficult to embrace in case the organization used to have a different design.

as a circle of circles that dynamically adjusts and readjusts, with people being frequently reassigned to different multidisciplinary teams.

The advantages of the holacratic system result from the extra freedom it allows; people can start change initiatives regardless of their position in a hierarchy because it has been removed and they have ample control over their work (see also Oticon's spaghetti organization in Chapter 5). Autonomy enriches work significantly (Hackman & Oldham, 1975) and imprints the organization with a measure of flexibility that is crucial for competing in fast-changing environments. As a downside, in a world used to "pyramid organizations", the holacratic mode can be confusing (Bernstein et al., 2016). People accustomed to operating in a hierarchical mode may consider that the holacracy is a form *of dis*organization with its fluidity of roles and belongings (Table 6.1).

Hamel and Zanini (2020) observe that the tendency to embrace new, "humanocratic" forms may reflect the need to instil a bigger sense of democracy in our organizations (Handy, 2002). The way contemporary organizations are designed is stifling and produces masses of unhappy employees (Gallup, 2021). New forms, even if immature and scarcely represented in the organizational landscape, constitute attempts to arrange new productive formats.

It is important not to be romantic about these new forms. When Zappos adopted the holacratic format, the employee turnover rate increased from 20 per cent to 30 per cent, implying that the form did not suit every employee. According to Lam (2016), these new structures may be disorienting. For

example, the spaghetti organization at Oticon was slowly abandoned in favour of a more traditional matrix organization (Foss, 2003, p. 335). Thus, even if people claim that they dislike hierarchies, they may secretly appreciate the order and predictability they bring because hierarchies are easy to process (Zitek & Tiedens, 2012); holacracies are not.

THE DESIGN ATTRIBUTES OF AGILE ORGANIZATIONS

We now discuss in more detail the design attributes of agile organizations. The agile or malleable organization (Hanelt et al., 2021) can be defined as a network of autonomous teams, articulated through digital technologies and united by a shared purpose. Agile organizations accept that there is a trade-off between certainty and ambiguity and that agility is an invitation to remain at the "edge of chaos" (Brown & Eisenhardt, 1997), that is, in a state with properties of order and disorder, necessary to avoid crystallization and to cultivate creativity without losing coordination. More precisely, chaos can be defined here as "a state of bounded order and predictability of pattern but not path" (Coyne & Van de Ven, 2021, p. 7). Thus, the challenge for designers of agile organization is to manage both chaos and order without one dominating the other. If one pole becomes over-dominant, too much order makes it hard to come up with creative ideas; too little order makes it difficult to coordinate creative tasks.

The self-managing units of the agile organization can be part of the same organizations, as in the case of the micro-enterprises composing Haier (Hamel & Zanini, 2020), or independent units (teams, individuals), as in the case of flash organizations, "crowds structured like organizations to achieve complex and open-ended goals" (Valentine et al., 2017). Agile is thus a short label for a diversity of design approaches that have in common the replacement of the traditional hierarchy by networks of cross-boundary teaming activities, in which temporary groups with fluid membership are formed and reformed within and between organizations (Edmondson & Harvey, 2018). These digital networks can assemble and reassemble flexibly, using an online globally distributed workforce to accomplish complex projects via workflows of well-specified simple and modular microtasks.

Agile organizations use opportunities afforded by the fourth industrial revolution to reinvent the way they solve customer needs (see Highlight 6.2). The notion of agility, coined in 2001 with the *Manifesto for agile software development* (agilemanifesto.org) but previously practised at Toyota (Takeuchi & Nonaka, 1986), spread to multiple sectors, promoting post-bureaucratic organizing (Annosi, Foss & Martini, 2020). Organizational agility is a "cultivated capability that allows the organization to make timely, effective, and

sustained change when changing circumstances require it" (Winby & Worley, 2014, p. 226). What can be automated is automated and people concentrate on what is strictly human. The goal is to create symbiotic systems (Wilson & Daugherty, 2020), based on the complementarity between human intelligence and competencies, and AI. In these systems, people bring creativity and critical skills, as well as a human touch, whereas machines bring predictability and reliability. These forms may be highly disruptive of mature markets.

HIGHLIGHT 6.2   LEMONADE: REINVENTING A MATURE SECTOR

When people think about insurance it is likely that they imagine mature, formal, conservative providers. Of course, the picture can be more varied than that and a few players are changing. One of the reasons for the change is the emergence of companies such as Lemonade.

How does Lemonade present itself? Visit the company's website (lemonade.com as we did in June 2021) and you'll notice that the first message warns you to "Forget everything you know about insurance", with the company presenting itself as insurance for the 21st century. Lemonade the company aims to reverse the traditional business model, namely, by removing bureaucracy. Employees are expected to be "creative innovators" with a passion for bots, AI and tech. For customers, the promise is of an offer consisting of "instant everything", great prices and a big heart (Lemonade is a certified B-Corp).

This box is not intended to work as an endorsement – we are not even customers, as the company does not even operate in our countries. Nor is it a prediction about the future of the company. Rather, it aims to illustrate how newcomers are trying – as is now said – to disrupt the industries in which they operate, with business models and narratives that stand in stark contrast to their mature competitors.

Source: lemonade.com.

The digital revolution diffuses new forms of work organization. Virtual work, characterized by geographical dispersion and technologically intermediated interactions constitutes the "new normal", for knowledge workers deepened by the COVID-19 pandemic (Raghuram et al., 2019) but of course not for the essential workers that cannot work from home. A dual reality rife with paradox was created during the pandemic (Cunha, Berti & Clegg, 2021). New work experiments such as six-hour workdays in Sweden and the four-day workweek were tried in companies such as Microsoft Japan or Unilever New

Zealand with the twin goals of improving wellbeing and productivity. As explained by CEO Takuya Hirano, from the Japanese company, the goal consists in working less, resting well and learning a lot (Silva, 2019).

These new organizational forms are designed around multifunctional teams composed to implement projects. Several formats are possible: agile teams (with clear goals and ample autonomy) connected to other teams with the logic of the organization as a community oriented towards results (Hamel & Zanini, 2020). The members of those teams are connected via new information technologies – which serve as an infrastructure of control that is concertative and panoptical. These forms are supported by what Farjoun and Fiss (2021) called alternative sources of order: a general sense of direction provided by the leadership while encouraging ad hoc coordination with a set of minimal rules.

Such forms of organizing might be structured horizontally, as *wierarchical networks*, rather than as vertically integrated hierarchies. The wirearchy is a circuit of power relations in which power and authority flow dynamically, in any direction, based on knowledge, trust, credibility and a focus on results, all enabled by interconnected people and technology. Business models – how firms create value or, informally, the way the organization makes money (Birkinshaw & Goddard, 2009) – are evolving in the direction of more organicism and flexibility, complemented with a clear purpose and some "big rules".

New organizations will make use of three forms of intelligence: assisted, augmented and autonomous (Mateus, 2020). *Assisted intelligence* consists in the complementarity between machine learning algorithms and humans in the execution of daily tasks, especially repetitive ones involving large amounts of data. The case of GPS is an illustration of where most organizations stand presently. *Augmented intelligence* will gain relevance in the next decade. AI will take part in decision processes. For example, GPS systems will anticipate traffic constraints to prevent them in the first place. In a third step, after 2030, machines will be designed to which their designers will strive to add emotional competences and develop the capacity for decision-making, corresponding to *autonomous intelligence*. Automobiles will be self-driving. In another domain, virtual sales teams will conduct the sales process. New technology also allows the emergence of temporary, sometimes called "flash organizations", designed for specific purposes. Mission accomplished, and the organization disbands. All those changes redefine the nature of leadership. Leadership becomes more an attitude rather than a formal position. Leading in this context consists in contributing to change the organization, adapting it to relentlessly shifting environments. Organizations such as Haier or Valve epitomize this approach (see also later Highlights 6.6 and 6.8; see also Hamel & Zanini, 2020; Zhang, 2007).

New agile organizations nurture paradoxical attributes that managers need to contemplate (Berti et al., 2021; Cunha, Clegg, Rego & Berti, 2021a).

For example, whereas in the traditional company innovation constituted an internal, well-guarded process, in the digital organization, innovation can be crowdsourced. As a result, competitors can become allies in specific projects, leading to notions such as those of the *frenemy* and to the logic of coopetition. The management of this type of paradoxical relationships demands integrative thinking (Martin, 2009b) and can be difficult to maintain.

Agile organizations, in summary, as illustrated by Cisco, promise to promote high levels of freedom with the technological tools that allow people to harmonize work with their personal lives (Larguesa, 2017). People have roles in projects rather than perform jobs, which might be rearranged as a function of the market – Nieto-Rodriguez (2021) distinguished between operations, which involve the *running* of organizations and projects that refer to the *changing* of organizations. The late C.K. Prahalad, a noted management scholar, called this type of organizational design the Velcro organization, a multifunctional form made for combination and recombination (Prahalad, 2009). The agile form, in summary, is not only characterized by its technological dimension but also by the way it structures the authority-control nexus. These organizations lean towards the *unboss* approach and to flexible forms (Dittes et al., 2019). They dilute hierarchy and give a central role to a more salient clear purpose (a North Star) as well as high levels of *accountability*.

Artificial Intelligence and Human Skills

The next wave of organizations is now being constructed. Will these organizations constitute utopian or dystopian realities? Will we all become jobless (along the lines of Luddite fears)? Possibly something in the middle. As John Thornhill wrote in the *Financial Times*:

> The promise of artificial intelligence systems is that they are faster, cheaper and more accurate than dimwitted humans. The danger is they become an unaccountable and uncontestable form of power that only reinforces existing hierarchies and biases. (Thornhill, 2021b, p. 19)

The future of work can thus have utopian or dystopian characteristics. Strictly human skills (or *soft skills* as they are sometimes called) gain more importance than they used to have in the past (Marques, 2013; O'Connor, 2021). As we have discussed, the agile revolution uses technology focused on the customer. As a result, organizations will progressively synthesize the power of machines with uniquely human attributes. For example, when someone goes to a restaurant, they are usually not only looking for food and drink but also for a measure of hospitality. It is because human interaction is central to economic transactions that humans will retain a place in the economy, albeit augmented

by machines (Brynjolfsson & McAfee, 2015). The contemporary wave of automation is completing the relentless process started with the old industrial revolutions. On the utopian side, as written by O'Connor (2021, p. 19):

> I thought a fresh wave of automation could liberate us from the monotonous or arduous work. … the sooner we invented robots to perform these robot-like jobs, I figured, the sooner humans would be free to do something less grim.

Is it possible that the future will be less rosy? That the techno-utopia is an illusion? O'Connor (2021, p. 19) gives the answer: "But now the robots have arrived, I realise I was wrong." New, fourth industrial revolution technologies are hitting the organizational shores: 3D printing, artificial intelligence, the Internet of Things, augmented reality, Blockchain, among others. These technologies are allowing organizations to expand previous waves of automation. In many sectors, as we all know, repetitive operations are being done by machines. As any visit to a state-of-the-art factory will reveal, increasing chunks of work are now done by automated systems. In some cases, factories are so vanguard that they are operated remotely with no need for human workers.

As a result, it is imaginable that one day most of the work will be done by robots, meaning that a jobless future may be on its way (Susskind, 2020). The evidence is that ever since the Luddites, technological revolutions have slashed *and* created jobs in a process far from painless, as new competencies will be needed to replace old skills; there will need to be an active labour market policy in place to ease the transition (OECD, 2021).

What is the role of managers in this future? Managers will certainly matter but for reasons that might differ from the past. At the top, managers will work as curators of purpose and strategy. They will orchestrate the organization's resources to maintain consistency and flexibility. They will be assisted by middle managers who are in contact with markets and who will identify new opportunities. Employees at the frontline will have more decision latitude to respond to customer needs. These people will operate in ecosystems where the boundaries between the organization and its partners will be more blurred and permeated by co-creative initiatives. Alignment is increasingly giving way to speed and complexity management (Volberda et al., 2021).

Concertative and Panoptical Power

Control in new agile organizations differs radically from control in traditional architectures. As is said in some of these companies (e.g., Netflix), managers should lead with context rather than control (Hastings & Meyer, 2020). People are empowered to control themselves but their emphasis on self-managed

teamwork creates a peer pressure with panoptical features. We observe self-managing in our studies of architectural firms where:

> members reflected that the structure within which they operate was not associated with a feeling of hierarchy. There is, however, a sense of order that is not imposed from the outside, but instead, is found 'within oneself.' Members 'create their wall' in order to have a sense of order in what they do. The structure, therefore, does not function in a way depicted in conventional management and organization studies. Structure, in this view, serves as an enabler based on trust, rather than a coercive tool. (Gaim, 2018 p. 512)

The emphasis on soft control, typical of less hierarchical organizations, expands and organizations pass control on to employees, while defining simple rules (through employee manuals, e.g., see Highlight 6.3) and creating transparent control mechanisms, such as cultural (Kunda, 2009) and even spiritual (Rego & Cunha, 2008; Rocha & Pinheiro, 2021) guidelines, to replace control by commitment.

These companies use a variety of designations to explain how they work. Their approaches have been described as freedom within a framework (Gulati, 2018), minimal structures (Kamoche & Cunha, 2001), simple rules (Sull & Eisenhardt, 2015), meaning that they all try to design control with coordination mechanisms, emergent (bottom-up) approaches to problems that do not stifle creativity. The logic of simple rules, "heuristics that guide and simplify action" (Moffett et al., 2021, p. 61) epitomizes this era. Being few, simple, easy to remember and follow, these rules provide guidance and coordination without jeopardizing flexible action.

HIGHLIGHT 6.3   SIMPLE RULES

Several companies are using the logic of simple rules to combine coordination with flexibility. As the IT company OutSystems puts it in *The Small Book of the Few Big Rules*, simple rules define the "core rules of behaviour we try to follow everyday" (outsystems.com). The company considers seven rules – the first being "Ask Why" and explains that, among other reasons, the rules have been created to allow a significant degree of freedom and creativity and to promote independent thinking. More companies are resorting to this type of logic with a dual goal: to promote the necessary coordination without jeopardizing creativity and bottom-up change.

Control in the new agile organization may thus take several forms (Table 6.2). There is an element of algocratic control (Malhotra, 2021), that is,

Table 6.2   *New organizations, new forms of coordination and control*

Approach	Explanation	Illustrative work
Freedom within a framework	Organizations offer a clear sense of purpose and guidelines, a simple set of principles for action, allowing people to make decisions and take initiative within the framework.	Gulati (2018)
Holacracy	Radical decentralization increases speed and agility.	Robertson (2015)
Humanocracy	Instead of structuring organizations around bureaucracy, organizations can be imagined as based on light structures, namely, self-managing teams to allow them to be as inventive and ingenious as the humans that make them – hence the label "humanocracy" .	Hamel & Zanini (2020)
Minimal structures	Incomplete structures based on minimal elements of design such as goals, roles and deadlines.	Kamoche & Cunha (2001)
Simple rules	Heuristics cultivated to simplify and guide action, providing coordination without limiting flexibility.	Furr, Eisenhardt & Bingham (2020); Sull & Eisenhardt (2015)

control based on algorithms, with the "authority embedded in software code" (Malhotra, 2021, p. 1098). This may be particularly directed at peripheral gig workers who will not be led by coaches or mentors. For the core workers, who will potentially be part of the effort to conduct "R&D as everyone's business" (Malhotra, 2021, p. 1101), different forms of monitoring will be exerted, namely, concertative forms of control.

Relational, Dispersed Leadership

Leadership in agile organizations becomes dispersed (Gordon, 2010), shared (Pearce, 2004), relational (Graen & Uhl-bien, 1995), pluralistic (Coyne & Van de Ven, 2021), rather than centralized, unitary, positional. Relational leadership refers to "a way of leading that is attentive to building high-quality relationships among colleagues and with supervisees" (Bolton et al., 2021, p. 300). Relational coordination positively predicts outcomes such as quality, efficiency, innovation and learning. One important element in this path to

agility is the creation of microprocesses supportive of agility, such as psychological safety (Bolton et al., 2021). According to W.L. Gore's Terry Kelley,

> our leaders have positions of authority because they have followers. Rather than relying on a top-down appointment process, where you often get promoted because you have seniority, or are the best friend of a senior executive, we allow the voice of the organization to determine who's really qualified to be a leader, based on the willingness of others to follow. (In Hamel, 2010, p. 27)

In the agile organization, in summary, leadership is expressed more through relationships than via hierarchy, to support creativity, flexibility and speed of response, to tackle competing demands arising from the pluralistic markets in which they act. New forms of leadership, called paradoxical (Cunha, Clegg, Rego & Berti, 2021a) or hybrid (Pache & Santos, 2021), emerge in response to these new demands, inviting leaders to influence through the contexts they create. Morning Star, the world's largest tomato processor, is a prime example, with their no boss policy.

> With no bosses, no titles and no structural hierarchy, Morning Star's prime principle is that all interactions should be voluntary. Each colleague enters the enterprise with the same set of rights as any other colleague. Not a single colleague can force another colleague to do something they don't want to do. (De Morre, 2016)

In another extreme case, organizations are reduced to a minimum of hierarchy. Produções Fictícias, a Portuguese creative agency, presents itself as a non-hierarchical organization, with only two layers of coordination: one "final cutter" per project and one "final-final cutter", the CEO, doing the same role for the portfolio of projects (Oliveira, 2009). These organizations favour consensus rather than fiat. At Valve (see later Highlight 6.8 for more detail), the organization claims to have leads, chosen by informal consensus, rather than leaders. Consensus can be an acquired taste (see Highlight 6.4). Distributed leadership implies a clear, common purpose, clearly curated and communicated by executives. In the absence of this compelling vision, organizations can become too anarchic and drift, rather than gain agility. For top managers, this implies a paradoxical combination of visionary and empowering leadership (Kearney et al., 2019).

In summary, while even non-hierarchical organizations do not free themselves from hierarchy, they limit it to the minimum necessary to keep the organization coordinated without unnecessary control or control for control's sake. It is safe to say that hierarchy has not perished but rather it is fading and being replaced by other forms of organizing to structure fluid work and unstructured workers.

HIGHLIGHT 6.4   FORCED CONSENSUS

One of us was told the story of an organization that embraced the agile logic: consensus was presumed. One day, two employees approached the company's founder with a problem: they disagreed about some decision and needed him to make the final decision or in the language of Produções Fictícias (see above), the "final cut". The boss told them to find some consensus or otherwise to come back in two days with the name of the one who would be let go from the company. The next day they returned with an agreed upon solution.

As in marriage, when the members of a couple have a disagreement, they have two obvious choices. They can negotiate and decide for themselves or they can approach an authority figure, say the mother of one of the members of the couple, with a request for help with the decision. Which choice would you favour?

In agile organizations, leadership becomes more a matter of authority than power, meaning that leadership is earned rather than mandated by the organization (Joullié et al., 2020). The common etymology of authority and authorship flags the fact that managers need to author their authority (Bourgoin, Bencherki & Faraj, 2020). Their organizations can grant them power but not authority. Dispersed leadership means dispersed decision-making, which is thus more likely in organizations with a clear purpose and goals, high talent density, and a culture of trust and transparency (Hastings & Meyer, 2020).

Dispersed or shared leadership refers to the understanding of leadership as a process involving more than one person, maybe the whole team. Co-leadership or rotating leadership illustrates this view. In shared leadership, more than one person plays the leading roles as in co-leadership, with co-CEOs, for example. In the case of rotating leadership, influence passes from person to person. When organizations are viewed as projects or autonomous teams, leadership may be exerted by every person in the team, as happens with the case of jazz groups, in which all the band's members may play leadership roles as they solo – even if the person in a position of influence – call them a final cutter if you will – will have final decision prerogatives. Thus viewed, leadership is multidirectional, a responsibility more than a position. It turns leaders into context builders, to discourage "strategic behaviour" on the part of the members of the team (Schyns, Wisse & Sanders, 2019) that might destroy alignment.

The idea that leaders are represented as "team captains" epitomizes this view. As the sports metaphor indicates, while the team captain has no formal power, their basis of influence is critically important (see Highlight 6.5). The

dispersion of leadership means that good teams and organizations have more (rather than less) leaders. In this sense, they become leaderful organizations, spaces in which everybody leads and is led. This paradoxical tension between leading and being led is also contained in new, more positional understandings of leadership, such as servant leadership (Sousa & van Dierendonck, 2017), in which the leader sees themself as playing the role of serving others.

For the above reasons, organizations may no longer represent people as followers in the traditional sense but rather as agents with the power to shape the organization, expressing a measure of agency and proactivity (Cunha et al., 2013). In this trend, leaders oscillate between leading and following without losing their authority.

HIGHLIGHT 6.5   LEADERSHIP AS PARADOX: TWO ILLUSTRATIONS

I   Oh captain, my captain!

One of us is participating in a study on the roles of team captains in sports teams, more precisely in professional football. He is interviewing team captains to make sense of how they understand their work. Some preliminary conclusions include the following:

Captains have no formal power, their influence resting upon personal authority.
They play a fundamental role in terms defining and preserving the culture of the organization.
Captains take care of the small things, such as behaviours that may counter the organization's culture.
Captains work as brokers in the organization's network, articulating relations among people in different parts of the organization.

II   When to give orders?

One of the authors attended a leadership keynote on the role of leaders by the Chief Navy Officer of his country. The admiral explained that, in contrast with expectations, hierarchy is not the organization basis from which to lead, which does not mean that leaders cannot give orders. They can, and they should, he noted.

Leaders, he said, influence by empowering people to be the owners of their respective parts of the operation and this happens by building trust. On some occasions, however, contingencies impose moments of urgency

that cannot be tackled without fast action. In these moments, one needs to give orders and expect people to follow them without questioning but this obedience results from trust rather than fiat.

Paradoxically, again, the interplay of orders and trust exists in a state of tension, with each force contributing to the other and benefiting from it.

In summary, some organizations are reimagining themselves in ways closer to complex systems with a measure of self-organization, such as ant colonies (Moffett et al., 2021). They are characterized by the fact that collective intelligence is assumed as a characteristic of the group rather than a possession of the individuals composing the group (Woolley et al., 2010). It should be noted, however, that some of these "flatlands", as Valve calls itself, are sometimes led by powerful charismatic leaders. In this sense, it would be naïve to presume that organizations are becoming softer all the way through. In fact, leadership tends to follow a dual path with both *dominance* (inflicting costs if the leader's ideas are not followed) and prestige (conferring benefits), an important combination in the management of organizations and human collectives in general (Van Vugt & Smith, 2019).

Co-designer

Instead of employees, people become "associates", co-creators or investors of human capital. They may act like co-designers of the organization. As W.L. Gore's chief executive Terry Kelly explained, "All our associates are owners and they feel an incredible degree of responsibility for business outcomes" (Hamel, 2010, p. 27). As a result, in these organizations

> Most allow employees to set their own work times and some even allow them to set their own salaries. Some have no managers. Some have no titles or ranks. Many allow employees to pick their leaders, and choose their own job descriptions, and in essence invent their own jobs. Some have no Human Resources department. Some have no budgets or even a Finance department. Most have no long-term planning processes. (Getz, 2009, p. 35)

A manager from one of these F-form organizations told Getz (2009, p. 36) that his leadership style could be described as "Management by Walking Away", that is, by liberating people from his visible presence. Similar to Oticon, when organizations such as Valve follow the rule of three (i.e., the rule that establishes that when three individuals agree on the merit of an idea, product or initiative, they have the freedom to work it out (Felin, 2014)), they are asking their managers to manage by walking away. Note that no one can work alone in a project; yet with minimal organizational support, ideas can be

pursued without submission to discouraging organizational formalism. In this way, organizations provide people with space for becoming change agents-qua leaders rather than mere executants. At the tomato processing company Morning Star, employees are invited to define a personal mission statement that contributes to the organization's mission (Hamel, 2011). In the agile organization the logic of the employee as expert in obedience does not apply. Organizations hire talented people to let them use their intelligence – not to tell them what to do.

Co-designer organizational members operate in the context of digital routines, which incorporate large amounts of real time data, allowing people to make decisions and improvise solutions. These routines articulate the company's employees with suppliers and customers in processes that create opportunities for distributed decision-making. Managers contribute by integrating these processes, gaining sensitivity to changes and making sense of the whole system – in the language of the US Navy "having the bubble" (Roberts & Rousseau, 1989), zooming in and out to apprehend the system's functioning, a critical strategic competence (Rego & Cunha, 2021) for executives.

The Organization as Festival

As the nature of strategy changes, propelled by digital technologies that allow information to be spread widely and instantaneously, organizations need to rethink their metaphors in use. As multi-year strategy plans become less adequate, strategizing relates to making sure that the organization shares a common purpose, even if this is explored in many parallel ways rather than in the form of the stage gate models of the past (Cooper, 1990). An overall direction should be shared but goals need to be constantly refashioned as the environment changes continuously.

The organization can now be imagined as a festival in which several projects/acts take place on different stages. In a festival, under one idea or philosophy, no one has full attention to the whole event because no one can follow all the events or be at all the stages. Some stages are bigger than others and while some artists are more established the overall idea of the festival is that its organization hosts a collection of loosely coupled acts. Loose coupling promotes change and adaptiveness, valued properties of the formal organization.

NEW ORGANIZATIONAL THEMES

The new flat, agile organization aims to respond to new challenges such as shorter life cycles that demand faster decisions and more responsiveness to customer needs. Yet authors mention a paradox: while firm hierarchies have flattened significantly, curiously in many cases they create more rather than

less centralization: flattened organizations often exhibit more control and decision-making from the top (Wulf, 2012). When, in flatter organizations, more managers report to the CEO, the more the potential control of the CEO increases over some activities that were less centralized in the past. Wulf (2012, p. 16) summarizes the paradox as follows:

> the perceived objective of flattening is to push decisions down. However, the evidence from our interviews suggested exactly the opposite: CEOs flatten to achieve more control, to get more involved and to become more hands on. Among the CEOs that we interviewed, flattening at the top involved more decisions at the highest level of the pyramid.

Customer-facing Organizations

An important facet of agile organizations is their focus on customers: these organizations use technology to reach their customers in more effective ways: remember that in the bureaucracy it is possible that one employee could work all their organizational life without meeting a customer. In the agile organization, the logic is different: people are supposed to have first-hand contact with their customers. In other words, they are more market oriented (Jaworski & Kohli, 1993) than the traditional bureaucracies of the past.

Market orientation refers to an organization's capacity to absorb information from its environment and to use it to develop products/services that meet customers' expectations. In other words, the market-oriented, customer-facing organization considers that proximity with customers is critical to prevent organizational ossification. There is a stark contrast with other forms, such as functional bureaucracies, in which the customer is a distant idea or even seen to be a carrier of problems to be solved via rules and regulations. The notion that agility is more about the customer than it is about technology is reinforced. Without a clear idea regarding customers and the future, digital technologies are nothing more than a commodity that offers no advantage over rivals. The case of companies such as Haier illustrates the point (Highlight 6.6).

HIGHLIGHT 6.6   HAIER

A Chinese multinational company in the appliances and consumer electronics sectors, Haier started as a traditional company. Over time it changed significantly to become an exemplar of the new post-hierarchical, agile company. It is a network of more than 4,000 micro-enterprises with typically ten people (De Smet, Steele & Zhang, 2021; Hamel & Zanini, 2020) that operate like self-managing teams with no traditional bosses. The company's philosophy is called RenDanHeYi, "Ren" referring to each employee; "Dan"

referring to users' needs, and "HeYi" meaning the connection between each employee and the needs of each user.

The company establishes that it should maintain a zero-distance from the customer, with every employee committing to create value to the customer. The image is that instead of being a walled castle, a good organization should resemble a rainforest, an evolving platform ecosystem that can sustain itself as it changes.

Source: Hamel and Zanini (2020).

Thinking in Ecosystems

As in the case of Haier, to see the organization as an ecosystem means that it must open itself up to collaborations with stakeholders, including rivals. An ecosystem, as a network or a complex system of systems (see Highlight 6.7), is open to innovations coming from different elements, which explains the emphasis recently given to processes such as open innovation (Brunswicker & Chesbrough, 2018), crowdsourcing (Afuah & Tucci, 2012) and user innovation (Oliveira & von Hippel, 2011). These new concepts consist in engaging several stakeholders to obtain advantages that cannot be accomplished in traditional organizations, namely, because they lack the diversity of perspectives present in the open ecosystem. Of course, these new sources of ideas and talent need to be explored and exploited carefully, as they involve opportunities but also threats. Some of these threats are common to networks, others are more specific, such as the insufficiency of open innovation contests as a standalone practice or the adoption of open innovation because of faddism that might see intellectual property control lost (Brunswicker & Chesbrough, 2018).

HIGHLIGHT 6.7   ZOOMING OUT OR SEEING ORGANIZATIONS AS NETWORKS OF NETWORKS

It is said – as we did in this book – that organizations are replacing or combining hierarchical structures by more networked forms. Internally, this may be an adequate representation of the change in organizational designs. If we zoom out, as Jim Collins once observed, "the dominant structure isn't organisations, but networks" (in Hill, 2017, p. 3). Looked at from a distance, organizations are part of networks of suppliers, distributors, customers, the state, competitors. In this perspective, every organization is an interorganizational process. This simple observation, by putting things in perspective,

indicates that agile organizations are perhaps best viewed as networks of networks.

Democratic Organizations

Regularly, the need to democratize organizations appears as a future trend. Yet the idea of the democratic organization is far from new. For example, the pirate organizations of the 17th or 18th centuries developed democratic constitutions and piratical systems of checks and balances. Of necessity, these organizations, operating as loose confederations of maritime bandits, relied on "articles of agreement" (Leeson, 2007, p. 1069) that resemble the post-modern passion for simple rules.

In this sense, the resurgence of themes such as democratic organizing are not novel: they regularly re-emerge, even though in different formats. The justification for their recent adoption is because talented people prefer more empowerment and freedom than being kept hidden beneath multiple hierarchical layers (Abell & Parmar, 2018). It is important that when organizations assume the idea of democracy that they really embrace it instead of simply paying lip service to it.

HIGHLIGHT 6.8　　VALVE

Valve is a global leader in the gaming software industry, one that conducts its operations without managers and job titles (Puranam & Håkonsson, 2015). It is a singular company with some unique features:

There is no formal management.
There is no hierarchy.
People are not given job descriptions.
Employees are encouraged to work on what interests them and brings value to the company.
Self-selected teams form around mutual interests.
Team size and composition are constantly in flux.
Performance is based in peer reviews.

The company "spent the last decade going out of its way to recruit the most intelligent, innovative, talented people on Earth; telling them to sit at a desk and do what they're told obliterates 99 percent of their value" (Furr & Dyer, 2014, p. 53).

Some Cautionary Notes

Organizations increasingly rely on knowledge as their fundamental resource. Yet it is important to consider some basic but deeply meaningful truths regarding the nature of work and organizations:

- First, while organizations do change, we remain animals, with our biological features and hardwired behaviours. As evolutionary psychologists would say, we have been able to take ourselves from the Stone Age but have not removed the Stone Age from within ourselves (Nicholson, 1998a).
- Second, as Pfeffer (2013) pointed out, we are still all constituted in the same way. We can change our contexts but the evolution of biological creatures, such as the human animal, is slow. The presence of enduring characteristics of human nature in part explains the formulation of organizational designs as mediators between human nature and environmental forces (Nicholson, 1998a).

As such, even the most sophisticated organizations must understand that basic emotions, such as fear, do matter. Fear kills creativity and autonomy. For this reason, processes necessary to densify talent, such as candid feedback, can be difficult to implement, given humans' resistance to receiving bad news (Hastings & Meyer, 2020). Typically, if you can't bring good news then don't bring any, summarizes how most of us feel. Creating feedback-rich cultures may, for this reason, be very challenging but also critically important, especially if the feedback is given with a positive intention, not as a political tool.

Agile organizations seek to create contexts that allow people to lead themselves, a major challenge. Contexts favourable to self-management are more likely in the case of organizations having high talent density, following the expression coined at Netflix (Hastings & Meyer, 2020). High talent density creates a context favourable to self-organizing, whereas self-management in low talent density can lead to problematic results (see Highlight 6.9). As such, organizational designers may consider the organization's preparedness to embrace agile organizing instead of adopting it as something inherently good.

HIGHLIGHT 6.9   FOR PRACTICE: PREPARING FOR AGILITY

Organizational agility has been touted as the future of organizations. To compete in fast-changing markets, organizations are told that they need to embrace agile. This is not necessarily the case. Before embracing agile, organizations need to ask themselves several questions:

Is the talent density adequate for self-management?
Is the organization's history supportive of less hierarchical approaches?
Is the management team genuinely interested in dispersing decision-making?

If the answer to the above questions is not a clear "yes", change should be embraced with care. Nokia Corporation, the once dominant power in the mobile phone business from 2007 to 2013, vigorously proclaimed the embrace of strategic agility, the capability to quickly change strategic direction using "strategic sensitivity, resource fluidity, and top management leadership unity" (Lamberg et al., 2021). It was an orientation, however, that coexisted with another cultural approach, according to insiders. Nokia's culture was deeply hierarchical, fiercely competitive, characterized by the existence of business silos and decision-making processes that were too influenced by politicking. All these features are the very opposite of what a culture of agile requires. So, at the end, the advice could be that once in charge, remove everything you disliked as a subordinate and introduce the things you've missed (Getz, 2009). Otherwise, it might be better not to start!

Ironically, the technological evolution that was happening at the time could have been tackled better by Nokia with existing and well-established technology management processes rather than with the new logic of agile. The implication is clear: adopting agile just because of fashion or institutional pressures can lead to negative outcomes. If agile is adopted because it is fashionable without realistic consideration of context and contingency, the tendency will be to revert to command-and-control formats.

FINAL REMARKS

Organizations are trying to embrace nimbler, more agile designs to become "fitter, flatter and faster" (Volberda et al., 2021, p. 14). The adoption of agile that may be natural to born digital organizations may be hard for other forms, which by default, tend to a hierarchical-bureaucratic approach, including in cases where the limits of bureaucracy are evident, as in disaster response organizations (Majchrzak, Jarvenpaa & Hollingshead, 2007). In part, this may explain why the number of organizations equipped with these new designs is still low (Alasoini, 2006). Yet, technologies once available, are best not ignored.

7. Final reflections: patterns, principles and practices

In this final chapter we make sense of possible future developments in organizational design in the "new new economy" (Anderson, 2009), in a time in which the topic witnesses the increasing importance of a new "cornucopia of constructs" (Adner, 2017, p. 39) such as platforms and platform-mediated gig work, multi-sided markets, digitization, coopetition, value networks and business models, to name a few. We consider three areas: patterns, principles and practices.

- Patterns refer to major trends or change directions.
- Principles denote the key ideas that underpin organizational designs.
- Practices indicate how these ideas might be applied.

To briefly recapitulate, we note that organizational designs are supposed to align the talents and interests of groups of people with organizational resources, goals, productive functions and environmental changes. Thus, they articulate relations among people, processes and things (such as technologies and other resources).

For organizations to sustain themselves it is important that they are "seeded with generative possibilities" (Garud, Kumaraswamy & Sambamurthy, 2006, p. 277). In other words, they should strive to achieve a dialectical synthesis of stability (e.g., routine) and flexibility (reflexivity through asking "why" or "why not"). Organizations need, in other words, routines for learning through experimentation, endogenizing external forces and embedding these experiments in their evolving routines.

PATTERNS: HOW CHANGE SEEMS TO BE UNFOLDING

Patterns refer to major trends or change directions in organizational design. In this section we discuss the reinvention of work and organizations, hybrid organizations, Sustainable Development Goals, new space and market regulation.

The Reinvention of Work and Organizations

The future of work and organizations has attracted the attention of management scholars for decades (Hamel, 2007; Malone, 2004). The perfect storm created by the convergence of new digital technologies and the COVID-19 pandemic stimulated experimentation with new ways of working, namely, working from home or anywhere (Choudhury, 2020), as well as calls to reinvent organizations, putting people and planet before profits (Roth, 2021). It is possible to consider that when the state, enterprise and society join forces, great achievements can be obtained, such as the development of a new vaccine in record time. Nonetheless, the state of dissatisfaction with the current equilibrium is palpable: there seems to be a crisis of confidence in corporations (Child, 2002), founded on the relatively unethical nature of so many of them (Jago & Pfeffer, 2019).

With the COVID-19 pandemic, the exception (remote working; see Table 7.1) became ordinary, part of the so-called New Normal. As we were writing these lines, with the pandemic still active, it is too early to predict its long-term effects in terms of its impact on life and work. Some companies, however, are already assuming several changes for the post-pandemic period. For example:

- Flexible forms of working were formalized by diverse companies, propelling a pre-existing trend (Gonsalves, 2020).
- These flexible forms impose new challenges to managers, such as the need to improve two-way communication between the centre and the dispersed home offices (Nyberg, Shaw & Zhu, 2021).
- Use of office space was reconsidered, shifting from primarily being working space to cultural spaces for mingling, meeting and sparking conversations spontaneously (Fayard, Weeks & Khan, 2021).

These changes bring new challenges, such as the need to adopt new performance management practices, new forms of sustaining culture and capital, amongst others. It is one thing to assess people that are collocated; a very different thing is to evaluate geographically dispersed teams (Choudhury, 2020). Key performance indicators must be defined with special precision and leadership practices need to be adjusted.

More radical possibilities may also be envisioned, such as opening organizational space to customers – literally speaking. For example, why not have areas for customers working from anywhere? Is there a better way to be in touch with the customer?

The COVID-19 pandemic has also accelerated the digital workspace such that working from home might be here to stay. To counter some of the challenges of remote work and bringing in the advantages of regular work, we

Table 7.1   *Remote work: pros and cons*

	Pros	Cons
Individual level	Flexibility, in general.	Lack of visibility in the workspace.
	Less time commuting.	Loss of social interactions at work.
	More proximity to family.	Less opportunities for tacit learning.
Relational level	More flexibility to integrate work and family relationships.	Less opportunities for building social networks.
	Possibilities to learn about virtual work.	More time spent in coordination processes (e.g., meetings).
Organizational level	Real estate cost advantages: less need for office space.	Less opportunities for serendipitous encounters.
	Adoption of hybrid working practices.	Difficulties with the induction of new employees.
	Access to larger talent pools.	More difficulties to create and maintain culture and its rituals.

have seen the use of virtual reality or the metaverse. For example, Facebook's virtual reality office meeting software, Horizon Workrooms, enables interaction with others remotely in a simulated 3D conference room, complete with cartoon avatars, "spatial sound" and hand motion tracking. In a press release announcement, the company said:

> Workrooms is our flagship collaboration experience that lets people come together to work in the same virtual room, regardless of physical distance.

The possible adoption of working-from-anywhere brings benefits but also challenges. Table 7.1 indicates some of the pros and cons of remote work. Some elements may get lost in the process, such as opportunities for tacit learning as well as the creative potential resulting from serendipitous encounters (Cunha & Berti, 2022; see also Highlight 7.1).

HIGHLIGHT 7.1   A NEW ROLE FOR OLDER WORKERS

In an increasingly digital world of work, more vulnerable to cyberattacks, some companies are increasingly using a secret weapon: older workers. Older workers sometimes do know how to get things done in the absence of new technologies. That is why organizations in different sectors, such as aviation and manufacturing, are training their workers to keep up operations in the absence of technologies. In the future, organizations may train their

workers, as aviation does, to know how to "fly manually", in case sophisticated positioning systems fail.

Think about the meaning of "flying manually" in your organization. How can the organization preserve its competences in the absence of technology?

Sustainable Development Goals as Business Challenges

The purpose of firms, as established by the World Economic Forum is "to produce profitable solutions to the problems of people and planet, and not to profit from producing problems for people or planet" (https://www.weforum.org/agenda/2020/01/its-time-for-a-radical-rethink-of-corporate-purpose/).
This brings challenges that, as Mintzberg, Etzion and Mantere (2018) put it, are immense. Immense grand challenges, including the domains identified by the United Nations (sdgs.un.org/goals) as Sustainable Development Goals (SDGs), require creative and large-scale collaborative efforts. Humanity will need the power of these collaborations to find solutions to many pressing problems:

• How can we live more harmoniously with nature?
• How can we solve our need for protein while avoiding animal exploitation?
• How can we tackle global problems at a global scale?

To make these challenges more salient, the United Nations summarized them in a set of 17 SDGs. The societal relevance of these challenges means that all organizations will be pressed to reinvent their practices in terms of sourcing of materials, protection of human rights and environmental protection, among others. Companies in sectors such as livestock are already under pressure to become more sustainable (Terazono, 2021), the same pressure is occurring with players in sectors such as energy, mobility and food production. All are undergoing major change. From the perspective of SDGs, managers may imagine themselves as stewards of the resources they use, including planetary resources. The logic of stewardship, common in the family business (Cunha, Rego et al., 2021), may assist managers in their new roles, beyond a "win-win" formula that tends to prioritize the bottom line (Kaplan, 2020). As one participant in the green energy industry commented, a sector that has been moving "at glacial speed for decades … is now violently on the move" (Hook & Sanderson, 2021, p. 14). These changes are representative of the challenges ahead for established organizations: significant alterations in business models and organizational designs seem to be incubating, with organizations being pressed to become regenerative businesses that thrive through and enhance the quality of their socio-ecological contexts (Hahn & Tampe, 2021).

The combination of change initiatives, such as the emergence of the "new green order" mentioned by Hook and Sanderson (2021), the digital transformation stimulated by fourth industrial revolution new technologies, as well as the massive experiment with new forms of work triggered by the COVID-19 pandemic, all conspire against established ways of organizing production. One possible path for addressing SDGs lies in thinking panarchically and embracing the potential of the New Space sector, themes that we discuss next.

Panarchical Thinking

New metaphors, such as ecosystems, aim to express organizational interdependence as well as the need to consider the natural environment as an important stakeholder (Shrivastava, 1994). The challenges associated with climate change impose the need to think in different scales and levels. Scales, namely, time scales related to environmental change, defy habitual ways of thinking. The consideration of short term and long term (Bansal, Kim & Wood, 2018) as well as sensitivity to cross-level effects stimulate new ways of thinking.

The idea of the panarchy offers important possibilities. The panarchy refers to

> a nested set of adaptive cycles operating at discrete scales … It recognizes that there are periods of time and connections across space at which systems at different scales are disjointed. These disconnects or disjuncts between scale regimes are present in complex systems. (Garmestani, Allen & Gunderson, 2009, p. 2 online)

In the panarchy, levels are not static, cycles are mutually interconnected, influencing one another. An organizational language reflective of these logics may produce important performative effects. Ideas such as the circular economy (Geissdoerfer et al., 2017) or industrial ecologies (Erkman, 1997) are indications of such relevance. For organizational designers, it means that instead of designing internal systems, it will be necessary to conceive and execute new designs that articulate entire systems, rather than individual organizations panarchically.

The New Space

The New Space refers to the ecosystem of organizations engaged in the commercial exploration of space (Paikowsky, 2017). National states were originally and still are the major players in the space sector, yet business firms are increasingly entering this new domain of commercial activity. Space technologies are already a fundamental component of our quotidian life, with recent developments and new entrants in the sector including companies such

as Blue Origin, Virgin Galactic and Space X, to name the best known, potentially revolutionizing a number of industries, due to the possibilities they open. These possibilities are promising not only in terms of exploring new business opportunities but also for tackling sustainability changes.

The New Space is about much more than billionaires and celebrities getting their kicks through a few moments of zero gravity in space. New Space means that one of the critical design elements, the external environment, is going to be expanded by including activities covering domains as distinct as space tourism, asteroid mining, precision agriculture, telecommunications, pharmaceutical R&D, ocean protection, and so on. With the emergence of the New Space sector, the meaning of the external environment is changing significantly, incorporating new challenges but also enormous opportunities, constituting a new frontier for organizational exploration (Weinzierl, 2018).

The Emergence of New Hybrid Organizations

New organizational forms, called social organizations, have emerged to respond to pressing social problems (Cunha, Martins et al., 2022). Business organizations are embracing more hybrid missions, as in the case of B-Corps or Benefit corporations. The B-Corp is a new form of legal entity which establishes that, in addition to returning a profit to stakeholders, organizations need to produce some public benefit (Hiller, 2013; Melé, 2016). All these forms refer to the idea of imagining and running corporations as a force for good (Mintzberg, Etzion & Mantere, 2018).

Hybrid forms may offer new ways of integrating logics and pursuing missions in a more integrative way, maybe mitigating the excessive focus on the profit motive to the exclusion of other considerations and engaging with a more balanced view of the organization's role in society. Accepting that all organizations are hybrids may favour the acceptance of a more nuanced view of organizations and their goals.

Governing the Market

Market competition, or the capitalist model, has functioned as the most effective mechanism against poverty. Capitalism refers to a system characterized by a combination of private ownership, coordination through markets and decentralization (Klein et al., 2021). The market economy has propelled numerous management innovations that have improved our quality of life via the products and services that amaze us every day. Think of the speed of development of multiple vaccines for the virus that caused coronavirus disease 2019 or how cataracts that could cause blindness in the not-so-distant past are now

treated by a few minutes' intervention, supported by important organizational innovations (Rangan & Thulasiraj, 2007).

The market has been subjected to important criticisms, however, based on the idea that deregulation went too far, which resulted in the neoliberal conception that markets, left to their own devices, can solve everything (Adler, 2019; Pfeffer, 2020). We adopt a different position here: we do not condemn markets but seek to help reform them. In combination with the state and civil society, markets can be powerful sources of human progress. Instead of adhering to economical liberalism's political claims of the necessity to make everything a market, business managers may instead strive to design their organizations in such a way that they create synergies with other sectors and together use their respective strengths to create better communities, adhering to more of a social democratic sensibility than one whose fundamental principle is beggar thy neighbour.

Business organizations may discover their social democratic sensibility by granting the organization an ample purpose (imagining "what could be"; see Hamel & Birkinshaw, 2021), one that connects stakeholders in the search for mutual gains. The focus on shareholders above other stakeholders has produced damaging effects and served as an excuse for excesses tarnishing the reputation of many firms. Managers may embrace new logics such as B-Corp or social engagement to express their commitments with social and ecological civility in a genuine way. Designers may thus imagine organizations that see market, state and civil society as the pillars of a balanced society and ecology.

Above all, the design of organizations may be understood as the creation of governance mechanisms that compose a system of checks and balances that mitigate some of the problems that have been discussed throughout the book, including managerial excesses, an unmitigated focus on the profit motive, a disconnection with societal interests, and so on. Governance refers to the set of legal, cultural and institutional arrangements that determine what organizations can do, who controls them and how (a definition we borrow with adaptations from Davis, 2005). Governance, not only in the case of public corporations but also family businesses, civil service organizations and state organizations, promotes conditions for good management.

Good governance creates prerequisites for better leadership to emerge by putting in place supra-individual institutional mechanisms that counter human tendencies to feel superior or to abuse power (Keltner, 2016). It can be agreed that good leadership is founded in part upon the character of the leaders (Moccia, 2012; Seijts et al., 2015) but maintaining virtuous leadership is a much more challenging endeavour (Rego, Cuhna & Clegg, 2012) than leaving leaders presumed to be virtuous to their own devices. Good governance tempers the potential imbalances of leadership.

While to create better markets, good external regulation is fundamental, designers may also incorporate internal governance mechanisms to minimize the need for organizations to be controlled by outsiders. Better than being controlled by others (the state, regulators, activists), organizations may ideally control their own negative impulses with robust rather than ceremonial governance mechanisms.

Crowd-open and Crowd-based Organizing

Organizations are relying on non-employees more and more frequently. While the phenomena of outsourcing, facility management and temporary work are not new to the field of organization design, the fact that some activities can be performed by people completely external to the organization is novel. In fact, the pervasiveness of the Internet, mobile devices and the existence of robust information technology platforms allows individuals and start-ups, otherwise independent, to participate in loosely coupled business ecosystems.

In their study of these new forms of interorganizational collaboration (IOC), Giustiniano, Griffith and Majchrzack (2019) discuss how organizations are open to interact with, engage and rely upon other actors, including potentially unknown "crowd members" or "winners" of challenges launched over the Web (Afuah & Tucci, 2012; Brunswicker & Chesbrough, 2018; Valentine et al., 2017). That allows, for example, Airbnb to be the largest accommodation provider although owing no real estate and Hyperloop Transportation Technologies, Inc. (HTT) to attempt to revolutionize development of a supersonic train with no project managers employed on a traditional basis.

Organizations engaging crowds can be classified as crowd-open or crowd-based (Giustiniano, Griffith & Majchrzack, 2019). *Crowd-open* organizations are traditional organizations (some already existing before the Internet was invented) that involve crowds in practices that are selectively decided, such as innovation challenges promoted via the Internet (e.g., Lego gathering ideas via LegoIdeas: https://ideas.lego.com). On the contrary, organizations are *crowd-based* when they rely mainly (if not exclusively) on crowds for "accessing and exploiting globally distributed extra-organizational resources (physical assets and/or human talent), on a scale and a variety that would be impossible to enclose within traditional organizational boundaries" (Giustiniano et al., 2019, p. 276).

The advent of crowd-open and crowd-based organizing poses two challenges to organization design that traditional approaches find difficult to face:

1. *Structural issues*: control over activities is difficult, if not impossible, when the organizational boundaries are selectively open (crowd-open) or structurally blurred (crowd-based), as traditional mechanisms such as

hierarchy and rigid procedures cannot be exploited. In fact, in this kind of organization the traditional top-down approach to organization design must leave space for bottom-up self-organizing, to be stimulated via the design of *facilitators*.

2. *Individual issues*: crowd contributors even when stable in their provision to the organization are considered as *external* to it, as independent agents that deliberately decide when to contribute and when not (e.g., bike riders in the food delivery sector). As a matter of fact, whether they are programmers who invest their spare time in a dream for changing the world (e.g., the reinvention of the transportation system or solutions for grand challenges) or people working full time for a business (e.g., riders, drivers for a platform-based mobility business) they are exposed to the threat of liminality. They feel the frustration of being "betwixt and between", part of an "outer" world located at the boundary of the focal organization yet not being completely alien to the organization. Being involvees instead of employees is precarious contractually (see also Jacobs, 2021).

The necessary coexistence of top-down and bottom-up organizational design logics and the necessity to govern the interplay between the organizational core and actors populating a liminal, interstitial, crowd-based space poses paradoxical challenges to organization design.

PARADOXICAL PRINCIPLES: GUIDES FOR CHANGE

We now revisit general principles of design. Principles denote the key ideas that underpin organizational designs. These have been discussed before but are summarized here.

Design as Paradox

As we have discussed throughout this book, designing an organization is a paradoxical challenge. It involves satisficing multiple and contradictory goals. As we write this book, design is taking place amid the transformations caused by the ongoing digital revolution, combined with a receding COVID-19 pandemic. These processes confront managers with strategic tensions between the current business model and a digital one.

The design challenge is complex, involves an element of ambidexterity, stimulating managers to engage with problematic choices. For example, at 3M, one organization known for its culture of innovation, ex-GE CEO James McNerney announced in the early 2000s that he was going to change the DNA by shifting from a logic of creativity to one of efficiency (Hindo, 2007). The stock market reacted with enthusiasm, yet it became clear that the "struggle

between efficiency and creativity", as *BusinessWeek* magazine put it (Hindo, 2007, p. 8), confronted the company with a problematic choice.

The company became less creative, with the short-term gains hiding future problems. As noted by Charles O'Reilly, a business academic, "If you take over a company that's been living on innovation, clearly you can squeeze costs out" (Hindo, 2007, p. 12). That is low hanging fruit. The challenge should be put differently: How can innovation and efficiency be balanced in a productive way? Hence O'Reilly's interrogation: "The question is, what's the long-term damage to the company?" (Hindo, 2007, p. 12). Art Fry, the inventor of the celebrated Post-it Notes added that the take-away refers to "how fast a culture can be torn apart" (Hindo, 2007, p. 14). The main lesson is clear: different organizations benefit from different choices:

> while process excellence demands precision, consistency, and repetition, innovation calls for variation, failure, and serendipity. (Hindo, 2007, p. 10)

Moving from one axis (say the organic axis) to another (such as the mechanistic; revisit Figure 3.2, Chapter 3) is not as complex or fruitful as engaging the two logics in a paradoxical state of both-anding, in which one approach challenges and revitalizes the other, in an ongoing basis (Smith, Lewis & Tushman, 2016).

Design as Process

Designing an organization is a process, not a single shot operation. In other words, once designed, an organization is *not* designed once and for all. Organizations are in a constant process of refashioning themselves, constantly becoming and trying to constrict them with any plan is a decision to consign them, ultimately, to the garbage can of history. Paraphrasing Weick and Quinn (1999) who said that change never starts because it never stops, or that change is the rule rather than the exception (Tsoukas, 2021), it may be noted that once an organization is designed it starts redesigning. Different people try to redesign their organizations in different ways: some do it episodically and loudly, as when top management starts a big change initiative; others do so silently and invisibly, when they redefine processes to match customer's needs or to solve problems in a "infra-ordinary" way, invisibly (Cunha & Clegg, 2019). The two processes are entangled in one another (Van de Ven, 2021).

Design as Fit

When one changes one component, the other components must be changed as well. Because design components are complementary, they need to fit together. Design is a matter of fit *and* a matter of aesthetics.

The notion of fit was particularly salient in the contingency theory of organizations. Contingency theory (Donaldson, 2001; Shenkar & Ellis, 2022) established that organizational designs need to respect and align with the characteristics of their environments. For this reason, there are no general applicable principles, as principles depend on circumstances. Highly turbulent environments are better tackled with more organic structures than stable environments that may favour more mechanistic environments given their benefits in terms of efficiency.

At the same time, there are also some universalistic design principles. Research tends to converge on the acceptance that some management practices are, in general, conducive to good results, including employee participation, appropriate training and incentives, creating a skilled workforce (Alasoini, 2006). These are the aesthetics of organization. On a purely contingent basis, in the short term, unduly exploitative work relations may maximize shareholder benefits. The short term can have long-term consequences. All over Britain questions are being asked about where traditional landed wealth celebrated in grand estates came from. The truth is frequently ugly: the slave trade and plantation economies (Jolly, 2020). The sums gained from the exploitation of stolen people sold into bondage were massive by today's standards and have funded generations of privilege to this day.

Of course, given the affordances of an organizational environment, such as supply chains reaching into impoverished countries or the ready availability of plundered black bodies for agricultural labour, these can become contingent features of organizational exploitation that aligns with the characteristics of these environments. The taken-for-granted contingencies of the past and the present may in future become seen as iniquities for which reparations are ethically due (Moffett, 2020).

PRACTICES FOR REINVENTING ORGANIZATIONS

We discussed why and how organizations are changing. As explained by organizational ecologists (Hannan & Freeman, 1977), change occurs to a great extent at a macroscopic level, through evolutionary mechanisms as the established organizations cannot cope (see Highlight 7.2). Is it possible that traditional organizations can metamorphose to become agile? Can organizations be fundamentally reinvented to solve the miserable picture painted by Gallup's

Table 7.2　　*A roadmap for organizational reinvention*

The undesired organization …	The desired organization …
Changes slowly when the bureaucracy allows.	Changes as fast as the world around.
Big leaders appoint little leaders.	Cultivates the entrepreneurial spirit of its members.
Powerful members define what others can do.	Takes every member as a talent.
Sees trade-offs as bifurcations (logic of either-or).	Transcends trade-offs (logic of both-and).
Defines narrow organizational roles.	Represents work as a source of pride and dignity.
Loves the idea of control.	Protects the idea of freedom.

Source:　　Hamel and Birkinshaw (2021), with adaptations.

(2021) survey on the state of the global workplace? The map has been drawn (Table 7.2).

Now we derive some ideas, indicating how the principles discussed above might be applied. We discuss the following general principles:

• Let everyone know (and design) the design.
• Zoom in and out.
• Embrace a paradoxical mindset.
• Beware of fetishism.

The design process is difficult because as Volberda and colleagues (2021) discuss, the transformation implies changes in cognition, business models and technologies or in hardware and software. In addition, the fact is that change cannot happen without there being a pre-existing state which is being changed, which explains the fact that most organizations will not succeed in transforming themselves. Changes are attempts to solve problems created by previous changes, meaning that earlier solutions created their own problems. Earlier change attempts do not evaporate but become inscribed in the organization's memory, becoming "sedimented" (Clegg, 1981) in practices taken-for-granted that can act as a deterrent against further changes. If change is not written over a blank page, it may be better viewed as being registered in a palimpsest that retains active vestiges of past changes (Cunha et al., 2015; see also Highlight 7.2).

HIGHLIGHT 7.2　　FOR PRACTICE: MAKING USE OF THE PALIMPSEST METAPHOR

In our executive training we often hear managers complain about the latest attempt at change management, supposedly because people resist change that management wants. There is another option to consider: people are

resisting because of a history of past changes that were inconsistent, abandoned and ultimately unsuccessful. Previous change attempts mean that sensible people resist because they "know" that change attempts come and go and that the more things change, the more they stay the same. For this reason, they use their implicit theories about the likely costs of change to defend themselves from just another round in a never-ending chain of change.

A palimpsest is a multi-layered piece of writing material in which one layer of writing is superimposed over earlier writings, with the older layers becoming invisible. For change, the metaphor indicates that older layers, even if invisible, are still inscribed in the organization's memory, not necessarily as explicit and visible "writing" but as forgotten memories whose traces persist, memories of changes past that will have an impact on future changes.

Anecdotal evidence suggests that it is not impossible for incumbents to change. Haier (see Highlight 6.6, Chapter 6) and the industrial company Semco provide evidence. Ricardo Semler, who joined the company created by his father, explained that the oppression he witnessed at work shocked him and he managed to reinvent Semco, which became a model of organizational democracy, a company that he claimed was managed without managers (Semler, 1989). The company eliminated unnecessary controls and became an "amoeba-like" organization, with self-managed teams of no more than ten members, based on a few rules only (Chaddad & Stockport, 2001). These organizations indicate change patterns that might be difficult to accommodate by the competition (Highlight 7.3)

HIGHLIGHT 7.3   WHY CHANGE FAILS EVEN WHEN EVERYBODY KNOWS THAT CHANGE IS COMING

In a social event in 2021 one of the authors sat at a table with the CEO of a large established organization in a mature sector. A speaker discussed the importance of gaining agility and abandoning established business models. In theory, all the participants got the message. An implicit shared understanding, however, was that to reinvent the organization, the present workforce would have to be made redundant. The costs of replacing the workforce were too daunting for the shareholders to accept. As a result, even if all the participants cognitively understood the message of abandoning the past, for some of them, the message was not operational.

It is predictable that the organization will introduce minor, incremental

changes, while becoming progressively vulnerable to new competitors from new business models and corresponding designs. Given the risks involved, it is secure and comfortable for a CEO to maintain business as usual, for as long as possible. One day, the recipe will become unsustainable and then the organization will become irrelevant with the hope of always being "not on my watch". That is probably what the leaders of Blockbuster, of Nokia, of Kodak, of Blackberry thought. The price of present collective rationality in a changing world is often future irrelevance.

Let Everyone Know (and Design) the Design

Designs are often the result of the work of a group of top executives assisted by consultants. When that is the case, it is normal that people do not understand their organization's way of operating as these remote characters conceive it. They probably do understand it very well but if no one asks them …?

In a holacracy, for example, if people do not understand the way the organization operates and what is expected from them, the model simply will not work. There are reports that the model did not work in Zappos shoes, for its main advocate, CEO Tony Hseih, anyway (Syed, 2021).

As Simon (1996, p. 111) has observed, "everyone designs who devises courses of action aimed at changing existing situations into preferred ones". Thus, design must become a shared process which receives inputs from the entire organization. Schneider's (1987) dictum that the people make the place becomes even more literal: the people in an organization design and redesign the organization as they try to respond to a permanently changing world, constantly changing the organization, usually slowly, sometimes imperceptibly, in the process. When people bring new ideas and these ideas are integrated in the organization's activities – as new business domains, new products, different ways of managing – they are changing the organization by using employees as designers or co-creators. An organization in which everybody is a designer may be a cornucopia of ideas but these ideas need to be integrated into a harmonious whole, in a form of organizational polyphony (Kornberger, Clegg & Carter, 2006), in which harmony is based on dissonance and diversity. That is the role of managers: to integrate voices, to interpret and orchestrate the polyphony. Managers are required but the structure of their relations, the organization design, needs to be seen as something that is always in the process of becoming rather than something to be protected and defended at all costs.

Zoom In and Out

To update organizational design, managers need to zoom in and out, combining big picture strategic thinking with careful execution (Leinwand, Mani & Sheppard, 2021). When managers are too close to the ground, they miss the big picture, namely, how markets are evolving, how technologies are changing, how new competitors are entering from the margins of their attention. As they micromanage the organization, executives will be close to details but may miss important trends. When they preferentially engage only in zooming out, the risk is that grand visions will not be implemented, with their ideas being received with cynicism.

Managers need to zoom in and out. This will equip them with a dual understanding of design as a holistic organizational framework but also as the concrete work environment in which employees make *their* sense of *their* world. This involves abductive reasoning of moving back-and-forth movements (iteration) in the value-creation process, as well as zooming in and out (contextualization) when looking at the problem at hand (Gaim & Wåhlin, 2016). These two facets are equally relevant, with some authors considering that one of the qualities of great managers is the capacity to articulate the macro and the micro (Cunha, Clegg, Rego & Berti, 2021a). When they see the organization holistically, they "have the bubble" (Roberts & Rousseau, 1989), an overall gestalt understanding of the system to which only top leaders can aspire. When they have a first-hand, top to ground level knowledge of the organization, they know the "smell of the place" (Ghoshal & Bartlett, 1994), they are emotionally in touch with the pulse of the organization. The exercise of zooming out allows managers to see strategy holistically or to embrace what Collis (2021) called the "complete strategy landscape" (p. 85). Designers need to have the bubble *and* to know the smell of their organizational place. Otherwise, they may be caught between the traps of intrusion (micromanagement) and aloofness (macro-leadership).

Embrace a Paradoxical Mindset

The challenge for organizational designers to turn design into a source of competitive advantage consists, we propose, in managing trade-offs with a paradoxical mindset (Miron-Spektor et al., 2018). For example, how to use hierarchy in post-hierarchical organizations? Hierarchy is critical to assign tasks, to hold people accountable, and to manage people "who cannot direct themselves" (Bryan & Joyce, 2007, p. 25). Nonetheless, the traditional use of hierarchy is problematic, as it so often creates dull and deadened conformity.

A paradoxical mindset is an invitation to see contradictions as normal facets of organization, not as expressions of bad management practice. This involves

embracing inconsistency by design. With paradoxical mindset, organizational actors show a "consistently inconsistent pattern" and assume that they adopt "a shifting decision-making pattern in service of sustaining strategic paradoxes" (Smith, 2014, p. 1616). In doing so, leaders embrace contradictions and complexity that characterize organizations, the organized and organizing. Representing paradox as integral to design opens possible clues to integrate paradox in design decisions such as:

- How to integrate change and stability?
- How to develop organic structures with the right rules?
- How to think short term and long term?
- How to combine poetic idealism and pragmatic realism?

These and other equivalent questions present design as an open process, rich in riddles and difficult challenges, but also in opportunities to practice applied creativity.

Beware the Fetishes

As Keidel (1994) pointed out, the field of organizational design is prone to a proliferation of fads, fashions and fetishes, these often made *du jour* by major consulting organization. Organizational differentiation through design may be a source of advantage but only if it is approached creatively, as a source of advantage that contains an element of differentiation that makes sense in the organization. Cases such as those of Haier (see Highlight 6.6, Chapter 6) and Handelsbanken (see Highlight 7.4) suggest that instead of following trends and imitating competitors, organizations may take advantage of unique solutions developed to their own problems.

HIGHLIGHT 7.4 HANDELSBANKEN

Svenska Handelsbanken began operating in 1871 with 12 employees in Stockholm, Sweden. It became an international bank with some practices that distinguish it from mainstream competitors. It adopted a structure of radical decentralization that puts important decisions in the hands of branch employees. These people are seen to be the best positioned to make decisions about customers as they are the ones who know the customers better.

The bank's employees are expected to keep contact with the customers (sending flowers for birthdays or making a spontaneous phone call). The focus is on the customer. For this philosophy to be operationalized, employees must be "involved" (Lindsay & Libby, 2007, p. 628), identified with the group, willing to accept responsibility. The overall idea is that the branch

is the bank. Any expenditures not supported by this philosophy should be avoided. The branch is in and of the community it serves.

As a result, most of the credit decisions are made at the level of the branch. Branches and regions are compared among them and with competitors. Formalized *ex ante* goal setting is non-existent and there are no bonuses. Profit sharing gains are equal for every member, including the CEO.

These practices can be compared with other banks, such as Wells Fargo's Community Bank (Witman, 2018), caught in a major scandal partly caused by an aggressive goal setting that caused problematic behaviours. Ask yourself: Why do organizations tend to be more imitative of the practices of Wells Fargo than those of Handelsbanken? Even Scandinavian banks other than Svenska Handelsbanken (Forseth, Røyrvik & Clegg, 2015) were caught up in the Nordic banking crisis during the global financial recession.

Source: Lindsay and Libby (2007).

Fetishizing faddism can offer institutional benefits, including the advantages of isomorphism (making the organization look like what other good organizations are thought to be) but looking like the others is hardly a source of advantage. It is hardly best practice to copy what others are already doing; better practice is to do what others are not already doing. In this sense, before adopting a design because others are doing the same, it is important to see what makes sense for the organization as a unique entity. Instead of following some fetish, organizations may benefit from finding optimal distinctiveness (Zhao et al., 2017). Optimally distinct organizations have similarities but also points of difference with other organizations, a difficult yet important task for organizational designers.

FINAL REMARKS

Design is the process of creating organizations that are simultaneously well coordinated/organized and flexible/adaptive. Throughout the book we have discussed the challenges posed by managing this paradoxical requirement, including the tendency of what Birkinshaw, Gudka and D'Amato (2021) qualified as a broad shift from more mechanistic to more organic organizational forms. It may not be particularly difficult to create well-organized, machine-like organizations; it may also not be especially challenging to create very flexible, organic structures. The challenge lies in creating dynamic designs able to redesign themselves as their actions create reactions that need to be accommodated in a never-ending process with the characteristics of an infinite game, that is, a game with open and changing rules, like the Red Queen's chess game in *Through the Looking Glass* (Carroll, 1960). These are

the attributes that make design a difficult and fascinating process. As Weick and Quinn (1999) have remarked, change never starts because change never stops. The same can be said of design: if change never stops design is never complete …

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