

The colors of change - revisited

Situating and describing the theory and its practical applications

H. Vermaak & L. de Caluwé

Draft Manuscript. Published in: R. Shani & D. Noumair (Eds) (2018)
Research in Organizational Change and Development (vol. 26), Bingley (UK): Emerald Insight

ABSTRACT

The colors of change is an overview of change paradigms, created about two decades ago, that has been intensively used, tested, refined, shared, and elaborated by practitioners and academics alike. Here, the “color theory” is presented as it is now, and is situated within the literature. Its four main applications are described as well as rules of thumb that have been derived from reflective practice. This chapter illustrates that the color theory is clearly not one thing to all people, as it is understood in very different ways, both in terms of its theoretical foundations as well as the complexity of its applications. This probably adds to the versatility of the theory. Bringing together key insights about the color theory for academics and practitioners, this chapter strives both to give a concise overview and to explore its richness.

INTRODUCTION

As academic practitioners we have been guiding clients and teaching colleagues how to create change more effectively. More than two decades ago we set about creating a curriculum and a book on change management for practitioners. We searched the literature, reflected on practice, and summarized our best thinking. During this process we felt that a piece of the puzzle was missing: an understanding of why change actually occurs. So we started to map key assumptions behind different approaches to change. This, in time, became a meta-model of change theories, with each approach assigned a distinguishing color. The rational approach to analyze the best solution, design a solution and implement it in a structured manner was named blue-print change and that stuck as an apt shorthand label. From there, we chose to attach color labels to the other paradigms as well, such as red-print change to a warmer motivational approach to change. This “color model” served as a common language, helped people understand phenomena, suggested action perspectives, and was grounded in literature and practice. With Lewin’s (1952, p. 169) statement in the back of our minds that “there is nothing more practical than a good theory,” the versatility of the model hinted that we had stumbled upon a theory.

The model is very much a product of two intersecting worlds. On the one hand, we have shared and researched it with academics, developing it in relation to a wider literature on change and testing it in practice. On the other hand, it is a practical set of concepts and guidelines that have been co-developed with practitioners to increase their understanding of real-life problems and suggest ways to address them. As such, it reflects the dichotomy highlighted by Woodman (2016) between “change process theory” and “implementation theory.” Where the first generates insights into change phenomena, the latter sheds light on the specific activities of change agents; where the first finds its way to academic journals, the latter is found in outlets for practitioners. The emphasis in our more academic publications has indeed been on the first, not on the latter. In this chapter, we seek to correct this bifurcation by providing a comprehensive overview of the practical applications that have emerged over the last twenty years. Still, we wish to strike a balance and thus commence with positioning the model within the literature and summarizing our present understanding of the color model itself. For those interested in the process of theory development, research conducted with the model, and more extensive studies of the color theory itself, we invite readers to see our other publications (for example, Vermaak & de Caluwé, 2017; de Caluwé & Vermaak, 2003, 2006, 2016).

SITUATING THE COLOR THEORY

Overview of approaches

In the late '90s, we became convinced that the great diversity of change issues out there would never be sufficiently understood or effectively addressed using any one approach to change. We had noticed that many practitioners were versed in and attached to only a limited part of the spectrum of approaches to change, had witnessed how this could seriously impede their effectiveness as change agents. This created the impetus to create a meta-model that would depict the main strategies for change to be found in literature and practice, which could be used amongst practitioners to widen their views and repertoire. Our choice to construct this meta-model can also be regarded as part of a wider response in the literature over the last two decades against the dominance of linear and rational models of change, in which the top sets the direction, plans are devised by the experts, and the target group implements them to produce change in a way that is both controllable and predictable (e.g. Stacey, 1996). It also contrasts with literature seeking an integrative and overarching theoretical framework for change (e.g. Rajagoplan & Spreitzer, 1996) or positing that one approach to change might fit all (e.g. Kotter, 1995).

It has similarities to other meta-models in the literature that emerged around the same time or after (see table 1). They are sometimes referred to as “strategies of change,” in which change traditions are grouped based on their underlying ideas and ideals. For instance, Bennis and colleagues (1985) trace the genealogy of certain traditions and the communities of practice where people share values, methods, activities, and language, and derive identity from doing so (e.g. Wenger, 1998). Others have made distinctions in terms of “approaches to change” (e.g. Van der Zee, 1995; Higgs & Rowland, 2005) that can be read as a plea to choose a change approach that best fits the characteristics of a specific situation. Such models generally distinguish between two to four approaches of change. Graetz and Smith (2010) are amongst the few who come up with an ambitious ten-fold distinction.

Bennis, Benne & Chin (1985)	Power-coercive, rational-empirical & normative-reeducative: General strategies for effecting changes in human systems
Van de Ven & Poole (1995)	Evolution, dialectic, life cycle, teleology: Ideal-type theories of social change
van der Zee (1995)	Diffusion, direction, interaction, development: Approaches to change
Beer & Nohria (2000)	Theory E (planned change based on economic value), Theory O ('OD' based on organizational capabilities): Theories of change
Huy (2001)	Commanding, engineering, teaching, socializing: Assumptions of change intervention ideal types
Boonstra (2004)	Theory E (planned change based on economic value), Theory O ('OD' based on organizational capabilities), Theory C (continuous change based on constructing realities): Theories of change
Higgs & Rowland (2005)	Directive, master, self assembly, emergence: Approaches to change and its leadership
Caldwell (2005)	Rationalist, contextualist, dispersalist & constructionalist: Discourses on agency and change in organization
Quinn & Sonenshein (2008)	Telling, forcing, participating & transforming: General strategies for changing human systems
Graetz & Smith (2010)	Biological, rational, institutional, resource, contingency, psychological, political, cultural, systems, postmodern: Philosophies of change

Table 1. Examples of meta-models of change

Discerning underlying paradigms

In the early years, we observed time and again that proponents of different approaches could not easily switch their thinking, let alone their actions, when discussing the best way forward in concrete cases. Discussions would often become quite heated, as people would have a hard time even comprehending why a colleague could see things so differently. It appeared their perspectives were shaped by deeply held, and often implicit, assumptions and values about change. In turn these underlying beliefs played out in the characteristics of plans, designs, roles, interventions, outcomes, working mechanisms, etcetera. We set forth making these divergent belief systems as explicit as possible in our theory. This can also be seen in some of the other meta-models, for instance when Van de Ven and Poole (1995) emphasize the impact of one's intellectual roots on one's preferred theory of change. Attention to underlying paradigms is not restricted to the literature of change, but extends just as much to discussions on the nature of organizing (e.g. Morgan, 1986; Martin & Frost, 1996), learning (e.g. Sauquet, 2004; Sturdy, 2004), and research (Burrell & Morgan, 1979; Boal et al 2003). These discourses also overlap, as distinctions between change, organizing, learning, and research seem to blur more and more.

The meta-models have in common an understanding that our world is shaped by the way we think, in both an empowering and a debilitating way. The implication is that discerning and deconstructing our assumptions allows us to test them as well as explore more meaningful ones. The color model thus is a theory about thinking, situated in a body of literature discussing the impact of mindsets (e.g. Simons, 2013), mental models (Senge, 1990), espoused theory (Argyris & Schön, 1974), cause maps (Weick, 1969), belief systems (Gilbert, 1993), and metaphors (Lakoff & Johnson, 1980). Some argue that paradigms can be experienced not only as complementary but also as incommensurable, as it is difficult to view the different viewpoints from a neutral stance (Kuhn, 1962; Jackson & Carter, 1991; Scherer & Dowling, 1995). We have recognized this in how people find it hard to talk about real-life cases and the colors themselves without revealing their own inevitable biases, pointing to the difficulty of thinking "colorlessly." People's observations and preferences are intertwined. We see in this the self-referential nature of each of the colors, endlessly rich worlds in and of themselves that obscure alternatives or morph them into something more familiar. It then requires a kind of figure ground reversal to appreciate how different another world can be: to consciously shift our attention from what we habitually notice to what else is always hiding in plain sight (Van Dijk, 1989).

Dialogue and social construction

As much as "choosing" a different approach to change is limited by our belief systems, "switching" our belief systems seems limited by the contexts in which people live. It is in these contexts that we acquire paradigms through experiences, socialization, mutual adaptation, and education and training. We have noticed that most groups and organizations consistently seem to favor some change perspectives over others. They often maintain such preferences over extended periods of time, which explains why some problems become persistent, as the dominant, habitual perspective continues to be insufficient for addressing them effectively. We have noticed how such dominance is reinforced by competency traps that occur when collectives venture beyond their habits (Levitt & March, 1988). This is also recognized in some other meta-models of change, in which the authors stress how beliefs or values are defined and restricted by social allegiances, professional identities, organizational boundaries, and communities (e.g. Bennis et al., 1985; Beer & Nohria, 2000).

This situates our meta-model within the field of social constructionism, where meaning is negotiated within the relationships we have with others and is enacted in common endeavors (e.g. Gergen & Gergen, 2003). Stable social-cognitive configurations occur when the same actors (the "who") keep sharing the same ideas (the "what") in the same type of (inter)actions (the "how") (Termeer, 1993): meaning becomes fixed and any development impeded. Meaning can be renegotiated by shifting participation, introducing different frames, or altering interactions. There may also be institutional mechanisms at play here, where certain logics become legitimized, support habitual practice, and help reproduce the status quo (e.g. Greenwood et al., 2011). The color theory here becomes a model to support organizational discourse to read, interrupt, and

sway fixed or institutionalized practice (e.g. Philips et al 2004). It acts as a boundary object that helps translate and connect across multiple logics and contexts (Oswick & Robertons, 2009). This also places the model within dialogic OD (e.g., Bushe & Marshak, 2009).

Dealing with paradoxes

The more dominance is redressed and meaning renegotiated in organizations, the more the diversity of approaches to change—the full spectrum of colors—can be accessed and flourish. This seems good news: the colors stand for different perspectives and possibilities that enable organizations to deal flexibly with competing demands and increasing turbulence. However, it inevitably also leads to tensions and contradictions among the different paradigms. Over time we were able to identify dozens of recurring contradictions among the colors that play out in organizations (de Caluwe et al., 2015). Where some view such complexity as a destructive force, others appreciate its potential for making organizations more innovative (e.g. Groleau et al 2011; Jay, 2013). We recognize how both possibilities are quite real. Which way it goes depends on how willing people are to face divergent perspectives, manage the tensions they create, and do so in a skilled fashion that allows for learning and experimentation. Huy (2001, p. 616) suggests that “to effectively enact intervention types with seemingly divergent assumptions and values, agents have to be aware of and comfortable with paradoxes in thought and action, able to explain these seeming contradictions to recipients, and coordinate well among one another.”

The color theory thus relates to the surge of studies on paradoxes, in its related terms, tensions, contradictions, and dialectics (e.g. Lewis & Smith, 2014). A paradox involves contradictory yet interrelated elements (like the range of colors) that exist simultaneously and persistently. They seem logical when considered in isolation, but irrational, inconsistent, and even absurd when juxtaposed (Lewis, 2000). Paradoxical situations typically give rise to three types of responses: either-or, both-and, and more-than (Putnam et al 2016). Either-or responses are often regarded as defensive tactics that only temporarily reduce tensions and that hamper innovation. Both-and responses are seen as ways to accept and inquire into opposites, in order to develop an equilibrium or integrative solutions. More-than responses seek a new interplay between opposites that helps to transcend them and create novel outcomes (Romani et al., 2011). The more complex issues are, or the more innovation is required, the better the latter responses work out. In following Bochikhi’s (1998) recommendation to view paradigmatic conflicts as tensions that expose organizational paradoxes, the color model becomes a theory to deal with organizational complexity.

A theory of change, not a theory of colors

It may be surprising that we have not situated the colors of change within the larger literature on colors. This is not an accidental lapse. The more we noticed how different approaches to change correspond to deeply held beliefs and firmly embedded social constructions, the more we sought neutral labels to refer to them. Take the terms used by Bennis et al (1985) in their overview of change strategies (see table 1): a label like ‘normative-reeducative’ may be familiar to those who are part of that tradition and to academics who keep up with the literature, but it can and does elicit confusion and even allergic responses amongst practitioners for whom the term is unfamiliar. We toyed with labeling the approaches as ‘planets’, as proponents of different traditions sometimes seem to come from different worlds, each understanding their neighbors effortlessly but shaking their heads about the aliens. By 1998 we had settled on using colors as a shorthand, having found that color names generally did not imply a hierarchy or provoke value judgments amongst users. It is the content of a change paradigm, not its label, that adds meaning.

We acknowledge there is a vast body of literature on colors. It partly addresses the visual effects of colors and color mixing, going back to Alberti (1972) in the 15th century and Newton (1972) in the 18th century, but even more so it addresses the meanings attached to colors, going back to Goethe (1730) in the 18th century amongst others. However, neither the naming nor the meaning of colors is in any way straightforward. People perceive 2.8 million hues (Linhares et al., 2008), but what one culture names ‘blue’ another may call ‘green’ (Regier et al., 2015). And though colors capably carry meaning, such meaning ranges widely among individuals, genders, cultures, and ages (Whitfield, 1990). Red may stand for danger as much

as it may be associated with (sexual) attractiveness (Elliot, 2015). We recognize this plasticity also in the various management models that use colors, such as de Bono's (1985) thinking hats or Beck and Cowan's (1996) spiral dynamics: while the former relates the color red to feelings, the latter relates it to power. Elliot and Maier (2014) therefore conclude that the literature remains in a nascent stage of development, one that does not allow blanket statements about the meaning of specific colors. At most, what can be taken from color-based metaphors is the recognition of contrasts between colors, their intensities, and their potential complementarity. In short, we regard our model as a theory of change, not a theory of colors. The term 'blue-print' change first came to us, as an engineering approach where designs are produced and meant to be followed meticulously during realization of a building. Other paradigms of change are modeled and adapted from the notion of a blue-print.

THE COLORS OF CHANGE

The spectrum consists of seven change paradigms, depicted by five main colors and two subsidiary ones (see table 2). We will focus our description on the main colors and characterize their many facets by discussing for each respectively their assumptions, their characteristic approach, some examples and images, their ideals and dark side, and the profile and language of their change agents.

Yellow-print change

Assumptions and roots

Yellow-print thinking assumes that something only changes when key players are backing it and that little will happen if key players oppose it. In this view, enabling change requires getting the powers that be behind it, whether their power is based on formal positions (e.g. board members) or informal influence (e.g. opinion leaders). These stakeholders are uniquely positioned to legitimize change, mandate it, finance it, etcetera. Their support is achieved by taking their respective interests into account as much as possible. As interests of key people may differ, change thus becomes a negotiation exercise between each party involved: a process of give and take. Combining ideas or points of view and forming coalitions or power blocks are favored methods in this type of change. The outcome is a consensus, preferably a win-win solution. However, more often people settle on a compromise where gains and losses are distributed in a way that may be fair, but may also favor those in power. It is not about what result is perfect, but what outcome is feasible given the (im)balance of power. Aligning key stakeholders is perceived as meaningful in and of itself, regardless what comes after. Yellow-print thinking is based on socio-political concepts about organizations, in which interests, conflicts, power, and political skill play important roles (e.g. Greiner & Schein, 1988; Pfeffer, 1981; Buchanan & Badham, 2008; Ferris et al., 2005; Vigoda-Bigot & Drory, 2016).

Diagnostic and intervention approach

The change process may be called by various names—alliance building, arbitration, mediation, policy formation, agenda setting—but in essence they are all negotiations. To support and steer this process other interventions are used, such as introducing third-party facilitation or lobbying. The composition of the people involved in the negotiation can also be steered in a certain direction, by introducing other interests, protégés, changing top structures, or firing people. To figure out what is feasible, yellow-print thinkers will gain a sense of the playing field or do a force field analysis to know what power and positions people have, what relations there are, and what sensitivities, etcetera. Without such insights, one cannot guide or help the process along in the right direction. The negotiations themselves typically take place behind closed doors: it is an exclusive affair of selected key players. Communication to outside parties may happen but reveal little, allowing those most involved to have sufficient time and space to come to an agreement. Therefore communication to the outside is generally ambiguous and vague. This is not to say that yellow-print change only happens at the top. Deals made at the top can create the context for further negotiations amongst those below to iron out details. The outcome of such change is general not known beforehand. People will know the type of agreements needed, but their content becomes clear only during the negotiations

themselves. It depends on the distribution and shifts in standpoints and the influence of the most important players.

Examples

Yellow-print change is typically used in political settings, such as the forming of a new government, peace accords, or trade deals. A typical example is the election of the Pope: an exclusive affair where only the top of the hierarchy is involved (the cardinals) that takes place mostly behind the locked doors of the Sistine Chapel in the Vatican. An intricate process of rounds of discussions, voting, and lobbying unfolds, both before and during the conclave. The cardinals may not leave the room before the new Pope is elected and are thus forced to reach an agreement. The outside world knows little till the emergence of “white” (but in reality yellow) smoke from the chimney communicates that an agreement has been reached. The ballots are burned to prevent anyone from later reconstructing the process. Looking at a competitive structure in terms of establishing dominance and creating entry barriers is also a yellow perspective. Deals with the union or mergers between organizations are often achieved this way, as is also the case with conflicts between environmental groups and industry, or between civil right groups and government. Here too, it is never a straightforward affair of looking at standpoints on specific subjects and simply fighting it out. It is more about first taking a step back to understand the power base, the interests, and the values behind standpoints, and then not tackling one issue at the time but many simultaneously. The first step makes it easier for the parties to respect where the others are coming from, the second widens the opportunities for give and take during negotiations. Both de-escalate tense situations. In contrast with the election of the Pope, there is often some interaction with the outside world, such as deliberation with one’s constituents, building pressure (for instance by setting a press conference to announce the deal), tactical leaks to the press, and such.

Ideals and dark side

For those who have little love for yellow-print change, it may look like a necessary evil deployed to get sufficient political backing so that others can do something meaningful (with the other colors). Or it might even look like a perpetual game of backroom deals that only benefits the elite. But for yellow-print thinkers who understand and value the intricacies of diplomacy, there are real ideals in play here. For them it is also about a democratic society where interests are weighed carefully so that robust agreements are reached that benefit not only the few but the many. They understand that a deal on paper is only as good as the understanding, trust, and commitment between the people behind it. Negotiations are thus not about quick and superficial deals, but about working through tough differences of values and making selective sacrifices. From a yellow-print point of view, the worst thing you can do is to resort to power games and manipulations in dark backrooms where the strongest one wins at the expense of others. They know that blatant use of power inevitably creates a strong resistance, which will undermine how long the deal will last. It leads to win-lose or even lose-lose situations. In the worst case, the attention of key players may get stuck on the power balance itself, constantly aiming to strengthen their own position and harming others’ positions by guarding secrets, damaging reputations, or ridiculing proposals while denying doing so. In such situation distrust becomes the norm and those involved lose sight of what the change was all about.

Change agents and language

Yellow-print change agents understand how such a game is played. They are aware of the risk of being drawn into it and played by it, if they are not alert. They have a good sense of power structures and balances. They typically focus on positions and contexts. They can be recognized by the language they use. Words like “(hidden) agendas,” “arenas,” “coalitions,” “committees,” “mandates,” “stakeholders,” “status”: they are necessary distinctions and labels to play the game. Self-control, diplomacy, stability, and flexibility are important attributes of such change agents. In complex negotiations, these change agents may be independents. Especially then, they guard their power base carefully so as to be able to keep the parties in line and force them to play fair. This often is in everybody’s interest. Their power base is based on their experience, reputation, and connections but can be augmented by specific mandates. It may be challenging for yellow change agents to deal with ideological stances, details, and loss of face. Other typical actors are delegates, board members, thought leaders, constituents. We call this way of thinking “yellow-print

thinking”: yellow being the color of power (e.g. in symbols like the sun, fire) and the type of process (“brooding and coalition formation around a fire”).

Blue-print change

Assumptions and roots

In blue-print thinking, rationality—not power—matters most. The assumption is that change happens only when you analyze first what problem is, suggest the best possible solution, and implement it according to plan. Change is thus deemed a linear endeavor: you think first before you act. The process is expert driven: the activities are executed by those who have the necessary know-how and experience. Like yellow-print change this too is an exclusive affair: only a few people drive the change. Analysis is done by empirical research to find objective answers, design is used to define solutions, and project management to realize them. The implementation is planned in detail and takes place in a controlled way. The process and the result are deemed, more or less, independent of people. Blue-print thinking is based on a long tradition of rational design and implementation of change (e.g. Hammer & Champy, 1993). Scientific Management (Taylor, 1913) is a classic example. Project management is one of its favored approaches to implementation (e.g. Wijnen & Kor, 2005). It often underlies popular goal-oriented models of change that suggest that success is guaranteed if their specific “N-step approaches” are followed to the letter (e.g. Kotter, 1996; Kanter et al., 1992).

Diagnostic and intervention approach

The blue-print repertoire is rife with analytical methods and frames. Think of SWOT analysis or portfolio analysis as a start for strategic goal setting, audits to take stock of an organization’s functioning, accounting reports to assess its financial status. Organizations and their performance are “measured.” Benchmarks are often used to value such measurements: are we doing well or not vis a vis our competitors? Scenarios may be used to suggest ways forward and criteria to help decide objectively which one to take. Best practices are studied and copied to reduce uncertainty and provide clarity. Many such practices or methods can be spotted by way of their (often three-letter) acronyms, for example, business process redesign (BPR) or activity-based costing (ABC), or a business balanced scorecard (BBS). Blue-print change aims to find and realize the best possible solution. Of the color paradigms, it is the only one that likes to guarantee predefined results and to promise delivery within the intended timeframe. There is continuous monitoring based on pre-determined indicators to check whether the activities are leading to intended results. If not, adjustments are made to achieve them within the frameworks of time, money, quality, information, and organization.

Examples

Blue-print change inevitably focuses on organizational aspects one can measure or grasp. The “hard” aspects of organizations, like strategies, structures, systems, lend themselves best to this. Typical examples of blue changes are the restructuring of a firm, the design and roll out of an ICT system, and the building of a new hospital wing. When there are problems in cooperation, a blue-print view will be that probably tasks and responsibilities are not clearly defined. If meetings are chaotic, a blue-print view will be to come up with clearer agendas, selected attendance and agreed upon procedures. If quality erodes, working processes will need to be standardized and monitored, as in certain quality assurance systems. There is a focus on content, rather than people, and on formal aspects, rather than informal ones.

Ideals and dark side

The attractiveness of this paradigm is that it assumes that organizations can be understood and controlled. Excellence, order and efficiency are possible. The ideal: a better world can be “built,” designed and implemented by experts. And, truth be told, this paradigm has brought us much. But people who are less enamored with this view know quite well that not everything can be measured, constructed, and rolled out. Difficulties in cooperation might not be about structure but personality clashes, chaos at meetings may be due to unresolved past conflicts, and quality problems to non-confrontation. In all such cases, blue-print

approaches will do little as they easily ignore and hardly address what they regard as irrational or external factors. They favor stability and reduce complexity, and this may lead to rigid organizations and inflexible procedures. We have heard project managers bemoan: “the approach is perfect as long as people don’t get involved and their emotions and desires get in the way.” It is here where a blue paradigm can make matters much worse. When a mechanistic worldview is applied to shaping people, cultures, and relationships, it can become destructive and steamroll people and their experiences. This pitfall is not uncommon due to the attractiveness of blue orderly solutions.

Change agents and language

Change agents are the experts who know what they are talking about, both in terms of the content of the change effort and the methods to analyze, design, or implement it. They take full responsibility with their team members when mandated to do so by their principals. The only other party is the target group of the change, who undergo this as objects only. A results orientation, decisiveness, accuracy, and dedication are necessary attributes for such a change agent. Engineering jargon is frequently employed: “checklists,” “scorecards,” “cockpits,” “margins,” “milestones,” “testing,” “deadlines.” The foremost considerations for blue change agents are expertise and results. They do not tread lightly: they delve into problems to do them justice. They love concrete results, clear methods, and transparent processes and may be allergic to vagueness, ambiguity, uncertainty, and emotions. We call this way of thinking “blue-print thinking”: a blueprint is the (architectural) design or plan that is drawn up beforehand and is thought to guarantee the actual outcome.

Red-print change

Assumptions and roots

In red-print thinking the emphasis is not on power or rationality but on motivation. The key assumption is that change is not about policies and plans but about behavior, and that people change their behavior only when they are stimulated to do so. In its simplest form this comes down to barter: the organization hands out rewards and offers support in exchange for personnel taking on tasks and responsibilities and trying their best. It can also go beyond that by taking an interest in people’s wellbeing and creating an inspiring working environment. In red-print change there is an emphasis on (servant) leadership: such leaders stimulate others to perform and grow. The aim is a good “fit” between what individuals want and what the organization needs. Red-print thinking has its roots in the classic Hawthorne experiments (see Mayo, 1933; Roethlisberger, 1941) showing that many different (even contrary) interventions can have an impact purely on the basis of paying attention to employees and focusing their attention. McGregor (1960) developed the tradition further. In more recent times, human resources management and development (HRM/HRD) has been an expression of this approach (e.g. Gomez-Mejia et al., 2015; Harrison & Kessels, 2004). It also draws inspiration from regarding organizations as communities, where lateral “power with” is deemed at least as important as the hierarchical “power over,” and where a nurturing style of leadership makes all the difference (e.g. Follet, 1918; Barnard, 1968; Vangen & Huxham, 2003).

Diagnostic and intervention approach

Red change can take shape in many ways. On the more instrumental level we see personnel systems where people are rewarded (salary, promotion) for desired behavior or penalized (demotion, poor evaluation) for undesired behavior: career paths, assessments, recruitments, out-placements, work design (task enrichment and enlargement), and employee wellness programs are all relevant interventions. On a more relational level management may get up on soap boxes, giving speeches and seducing people to embark on a change. In this approach, a lot of emphasis is put on communication about change: to get people on board, to manage expectations, to reduce resistance. Not all red-print thinking is necessarily top down. The more relational it becomes, the more horizontally it plays out. Motivation can be derived from social cohesion or a sense of community: people helping each other out. This is where interventions like social activities and team building can contribute. All the interventions are aimed at seeing how to make the

most of people's talents by arranging better working conditions and developing their competencies. The outcome of the change can be thought out beforehand, but it cannot be fully guaranteed as—with all relations—it will still depend on the responses of those involved and how the interactions play out.

Examples

Examples of red print change are all around us and easy to spot: more than any other color it often happens very publicly. A leadership-driven example is “management by walking around,” a concept that makes very little sense from a blue point of view. Why would any organization pay their managers handsomely to not execute some concrete work, but instead wander around the premises? From a red point of view, however, it makes perfect sense. The best way to know what is going on with your personnel is by stepping out of one's office and talking to them at their work, to inquire into what drives them and what problems they run into. Not only does this give a manager direct information to act on (e.g. by changing working conditions or providing training where needed) but more importantly the everyday coaching by managers is an intervention in and of itself. Employees are seen and heard, they feel taken seriously, they talk through issues they face. The many social settings and activities that cement and mend relationships are another good, more horizontal example. Think of office environments with bright colors, green vegetation, cappuccino machines, and speedy internet but also of social activities such as company fitness, outward bound, Friday afternoon drinks, recognizing ten years with the firm. From a red point of view good relationships are the glue that keeps organizations together, and happy workers are productive workers.

Ideals and dark side

Red ideals are about community and care, about living in harmony and creating a sense of belonging. It is potentially the nicest and warmest color of the whole spectrum as it is so people oriented. However, there are quite a few catches. Too much red-print thinking may create a pleasant environment, but not necessarily a productive one. And a close-knit community can also become closed-minded. When rewards are handed out to favorites rather than by fair appraisal, it can demotivate. And when appraisal is a technocratic procedure people might not really feel seen at all. Inspirational speeches by management about a merger that will make the best of two cultures (1+1=3) can backfire when they are all gloss and no substance. It will then even contribute that reality plays out very differently. Attention given by wandering managers that feels fake can be experienced as manipulative and intrusive. This means that red interventions are effective as long as they are done with care, they are fair, and the interest shown is real and credible. Red-print change is relational, after all. In proper red-print change the process counts at least as much as the outcome: what matters to people has to be addressed, not only when it is positive, but also when there are conflicts, mistakes, or loss. Circumventing all that out of fear of “resistance” or a bad atmosphere is the worst thing one can do in a red change.

Change agents and language

Change agents need to be people-persons first and foremost. To care for people, you also have to care about people. This is not something one can construct or fake. It has to be real and include an unforced interest in people's idiosyncrasies and irrationalities. Credibility comes with making the effort, not from it being flawless. Having said that, it helps to know about personnel systems, communication, and working with groups. Typically, red change agents are found amongst HRM and communication experts and in all management levels. Reliability and loyalty are relevant attributes of the change agent. Language can be procedural (words like “outplacement,” “settlement,” “sanctions,” “incentive,” “job profile,” “ethical guidelines”) but may also be quite warm and positive (words like “human potential,” “incentives,” “safety,” “respect,” “cohesion,” “trust,” “team spirit”). They can be allergic to problematizing, carelessness, and aggressiveness. The foremost consideration of change agent is paying attention to the “human factor” in the belief that “what you give attention to grows.” The color chosen here can be associated with the color of our blood and the human heart.

Green-print change

Assumptions and roots

In green-print thinking everything is about learning. Changing and learning are deemed inextricably linked: they are thought to mean almost the same. As in red-print thinking it is believed that organizational change is all about behavioral change. From a green point of view, however, motivational (red) strategies only work when people are already sufficiently aware and capable to do something differently. This is not always the case in organizations. The only way forward from a green point of view is then to dig deeper: to discover one's limits and expand and deepen the way we see and act in the world. The process is characterized by setting up learning situations, preferably collective ones as these allow people to give and receive feedback as well as to experiment with more effective ways of acting. The outcome is twofold: increased capabilities and increased performance. In the area of change management, green-print thinking has its roots in theories about action learning (e.g. Revans, 1998; Kolb, Rubbin, & Osland, 1991; Argyris & Schön, 1978). It however also draws inspiration from theories that address workplace learning (Marsick & Watkins, 1990; Billet, 2001; Illeris, 2011). It has been given a boost by the idea of "communities of practice" (Lave & Wenger, 1991) and the concept of "learning organizations" (e.g. Senge, 1990).

Diagnostic and intervention approach

Green-print change pays attention to both people's thoughts and their actions. When it comes to our thinking, learning is all about creating awareness: reducing our blind spots and exploring new perspectives. The Johari window is a popular concept used to emphasize how we make the most serious mistakes unknowingly and we need others to help us see that. Giving and receiving feedback plays an important role here: other people hold up a "mirror" for us. New perspectives are brought in by introducing new theories or recounting success stories. Typical interventions to raise awareness are teaching, coaching, feedback, role models, and open systems planning. When it comes to our actions, learning is all about experimentation. The idea is that people learn new capabilities by getting their feet wet, either by exercises in a safe environment, or—even better—by doing it on the job in the real world. This allows us to assess what works and what does not; the impact of our actions is our feedback and we learn step by step. Learning is thus regarded as an incremental process. Typical interventions to strengthen abilities are: gaming, clinics, team development, communities of practice, quality circles, and action learning. A green change takes time and results may shift along the way due to new insights. The idea is that learning can't be forced. For that reason, monitoring is not meant to safeguard predetermined outcomes, but to reflect with those involved on the most meaningful way to proceed.

Examples

A typical green-print change scenario would be a group of reflective practitioners who develop their cooperation and craft on the job. It is the story of many a documentary about craftsmanship. You see people having a passion for their work and undergoing a fluctuating process of learning and unlearning, trial and error. A green process thus has learning curves with ups and downs. In the "downs" people become aware of their limits and mistakes, and in the "ups" they gain confidence and achieve results. This is an ongoing, layered process. The more we learn, the more we find out there is still to know. Learning thus is never ending: life is learning. Thinking and doing are regarded as tightly coupled, not sequential (as in blue-print thinking): all involved are frequently reflecting on their actions and can only get better incrementally. This also allows them not to be overwhelmed: only with each new insight, can new initiatives follow. Learning is thus interwoven in our professional life and it may take a lifetime to learn something (like a trade) really well.

Ideals and dark side

The ideal of green-print thinkers is the "learning organization" where change is co-created with everybody, about everything, all the time. If people learn collectively, the organization learns, and as a result different organizational behavior results, and change happens. It seems to do away with many dilemmas of top-down change, such as having to "get people on board." Here, change is seen as intrinsically motivated. However, there is a down side. You can't control what people are intrinsically motivated for: there will be

ample topics that fall outside of the sweet spot. Also not everybody is always capable to learn everything. Green-print change has its limits here. For people who are less enamored with this paradigm, green-print thinking is often thought of in terms of teaching: school-type settings (professional training, corporate curricula, or management development) where students are consumers. However, this is almost the opposite of a green perspective. Learning gains depth by active participation. The more people put in, the more they get out. In consumerist settings, learning becomes superficial. It remains focused on thinking rather than actions and doing so away from our work without our immediate colleagues: this does not allow for experimentation and testing. As a result, learning hardly transfers to our practice.

Change agents and language

Green-print change agents play a facilitating role, not a controlling one. They design learning situations, give feedback, support experimenting with new behavior, structure communication, and are learning themselves in the process. Though it can be organized for participants, change is preferably shaped with or even by people themselves. Green-print thinking is concerned with allowing and supporting people to thus take ownership of their learning. The more this happens, the more participants also become coaches, role models, champions themselves. A green vocabulary consists of words like “growth,” “development,” “skills,” “curiosity,” “didactic,” “pilots,” “reflection.” Empathy, creativity and openness are important attributes of change agents, who are focused on setting and communication: they allow learning to take place. They may, however, be blind to politics and allergic to pigheadedness. The color green is chosen as it also can be associated with growth, as in nature, and in giving people “the green light” to develop what they are (most) interested in.

White-print change

Assumptions and roots

White-print thinking can be regarded as a reaction to the previous colors, in the sense that these still tend to view change as a planned affair, albeit to a different extent. In contrast, white-print change agents view change as constant and taking place of its own accord. This can easily be misread by others (especially from a blue or red point of view) as apathy or passivity. The key assumption is that people can make the most difference when they understand and catalyze a change that is about to happen. In white-print thinking, change agents do not create evolution, but they do support transitions or stand in their way. They embrace complexity as an enriching view of the world that allows one to see what the time is ripe for. They see self-organizing and dialogical processes as an effective way to deal with that complexity and they take an active part in their emergence. The outcome of such change is unpredictable, but there can be a clear sense of what is at stake and what needs to happen here and now. This approach to change is nourished by chaos thinking, network theory, and complexity theory, all of which are based on living and complex systems with limited predictability (e.g. Prigogine & Stengers, 1986; Weick & Sutcliffe, 2007; Stacey, 2010). It is also influenced by process theories that look at organizational life more as a process of emergence, potentiality, wholeness, and openness. It argues that organizational processes are more powerful than organizational artifacts, even though the former are also much harder to control and define (Tsoukas & Chia, 2002; Hernes, 2014).

Diagnostic and intervention approach

To know that the time is ripe and what it is ripe for: this requires an understanding of the underlying dynamics in organizations. In that sense white-print thinkers are less interested in inspirational visions of the future and more interested in understanding an organization’s history. They also tend to believe that what drives an organization cannot be easily discerned from its formal attributes but is rather found in the informal messy realities: the passion and frustrations that people share, the relationships and stories they have, the tensions and contradictions that can be felt. Most can be learned from what is hidden under the surface (the metaphor of “organizational iceberg”). This means that inquiry is always part of white-print change: it leads to an understanding of evolutionary patterns and obstacles, discerning where the opportunities for innovation are already present and what is persistently standing in their way. Sense making

is key. Interventions can be to introduce appreciative inquiry or to rediscover an organization's history and (re)write it.

Based on such understanding, two types of catalytic actions take place: to support and to unblock. A supportive action creates space for and backs "hotspots" of innovation, underwriting tempered radicals already leading the change (e.g. Meyerson & Scully, 1995). White change agents thus help nurture existing seeds of renewal and vitality. This may include interventions such as open space meetings, search conferences, or self-steering teams. It may also lead to reframing certain tensions or contradictions as meaningful in order to explore their innovative potential in dialogue. Thus it is not only about sense making but also about sense giving within the political arena: to legitimize a different perspective by presenting it with authority derived from a deeper understanding. This requires thought leaders, some of whom gain visible prominence. Think of leaders in social movements or entrepreneurs showing how we may live in a new (digital, sustainable, etcetera) age.

Examples

This kind of sense giving may be especially necessary when persistent obstacles need to be removed: the second type of action. A change that is about to happen often runs into habitual practices, ranging from dominant views of organizing to guarding vested interests. It requires some force to problematize and overcome these, to slaughter "sacred cows." Here interventions may not seem very white-print on the surface, especially when obstacles are persistent. An example is the "de-layering of organizations," which seems at first sight a blue-print approach to structure. However, there are many examples where de-layering was not about the best structure for an organization, but about restoring vitality to it. Think of a bureaucratic institution with young people at the bottom full of ideas and enlightened leaders at the top, but a conservative middle management layer of old white men in between who have been promoted till they reached their level of incompetence: the Peter principle (Peter & Raymond, 1969). De-layering can be a way to restore interaction between the innovators at the bottom and their sponsors at the top and say goodbye in a careful way to the people that stand in the way of change.

Ideals and dark side

The beauty of white-print thinking is in seeing the world as a wondrous universe rich with multiple realities. It potentially de-centers change to many "activists" who make sense of their context, learn how to make a difference, and inspire others to do the same. It allows many people to think globally and act locally, thus bridging two different worlds. However, it only works in as far as change agents really do understand undercurrents, become credible sense givers, and catalyze others. As soon as people lack sufficient insight into underlying dynamics, their words and actions will not catalyze much. We have noticed how some mistake white-print thinking for laissez faire, for letting "a thousand flowers bloom" or New Age notions that things will happen spontaneously. These are signs of making no distinction at all. We have also seen instrumental use of white-print interventions, which takes all the power out of them. Appreciative inquiry devolves into saying positive things and covering up everything else, which is a form of anti-inquiry. Similarly self-steering teams can turn into management inaction and punishment of teams for non-performance.

Change agents and language

Change agents must thus be capable of making sense out of complexity, almost as organizational philosophers, and of speaking in a spirited way about it. Their interventions, whether to empower others, start new initiatives, or challenge the status quo, cannot be technical only. They need to have sufficient depth to open up new possibilities and create movement. Change agents must focus on underlying patterns and innovative players to achieve focus. The language they use is often about complexity and a bit philosophical: words like "adaptiveness," "crisis," "dynamics," "energy," "interconnectedness," "networks," "paradox," "postmodernity," "self-determination," "serendipity," "systemic," "transformation." They can be allergic to boredom, mediocrity, rules, paternalism, group conformity. Honesty, authenticity, and self-confidence are relevant attributes of such change agents. The color white reflects all colors. But more important, white can denote openness: it allows room for self-organization and evolution. The outcome remains somewhat of a surprise.

	Yellow-print negotiation	Blue-print rational and planned	Red-print motivation and attention	Green-print learning and development	White-print dialogue and self-organizing	Steel-print coercive power	Silver-print providence
Something changes when you ...	bring common interests together	think first and then act according to plan	stimulate people in the right way	create settings for collective learning	create space for spontaneous evolution	enforce that something happens	live every moment well (carpe diem)
in a/an ...	power game	rational process	process of exchange	learning process	energizing process	oppressive situation	path that presents itself
and create ...	a feasible solution, a win-win situation.	the best solution, a brave new world.	a motivating solution, the best 'fit'.	a solution that people develop themselves.	a solution that catalyzes initiatives.	a solution that everybody has to conform to.	an emergent solution.
Interventions such as ...	forming coalitions, changing top structures	project management, strategic analysis	assessment and reward, social gatherings	gaming and coaching, open systems planning	open space meetings, self-steering teams	threats, sanctions, fostering dependency, isolation	sensing, meditating, good deeds, service
are led by ...	facilitators who use their own power base	experts in the field, project managers	HRM experts, managers who coach	facilitators who support people	sense makers who engage themselves personally	dominant people with a strong power base	a spiritual sense of something greater than ourselves
and target ...	positions and context.	knowledge and results.	procedures, inspiration, and atmosphere.	setting and communication.	patterns and meanings.	control and command.	doing the right thing, grace.
The outcome is...	unknown and shifting	defined and guaranteed	outlined but not guaranteed	envisioned but not guaranteed	unpredictable but not aimless	dictated and concrete	open and accepted
and ensured by ...	policy documents, power balances, loyalties.	benchmarking and monitoring.	personnel systems and healthy relationships.	a learning organization.	self-organization and dialogue.	authority and exclusion.	living in wonder, trust.
The pitfalls lie in ...	daydreaming and lose-lose outcomes.	ignoring external and irrational aspects.	smothering and conflict avoidance.	excluding no one and lack of action.	superficial understanding , laissez faire attitude.	arbitrariness, escalation, shirking.	superstition, isolationism.

Table 2. The five colors a at glance

Two subsidiary colors

Next to the five main colors there have been two other change approaches distinguished from the start (included in table 2 in gray font). We regarded them as present in our organizations, but at the same time we considered them of less importance for change agents.

The first is steel-print change, which refers to a power-coercive approach. Here power plays a key role, as in yellow, but not to form stable coalitions between several actors but through its exercise by a dominant central authority (figure) that rules by fear. The assumption is that the one with the most power can dictate terms and enforce solutions, at least when it comes to concrete outcomes. Power is wielded by way of aggression, threats, sanctions, exclusion, and so on. The dependency of many is actively maintained and reinforced.

The second subsidiary approach is silver-print change. Here evolution play a role, as in white print, but more viewed from a spiritual point of view. There is a sense of something greater than humankind and a future that is “written in the stars.” Change agents take a big step away from planned change and instead meditate or contemplate each day how they can be of service. They follow that lead and do good deeds, trying to live each moment well while trusting that a path to a better future thus unfolds.

You may wonder why we deemed these two paradigms of lesser importance. In the case of steel-print thinking, we did not regard this as a paradigm we should be suggesting to our clients. We deemed it an undesirable and—in the end—always counterproductive road for fellow change agents to take. In the case of silver-print thinking we felt that too little was known in practice and research about it to fully include it in our earlier writings. In hindsight, the decision makes sense when we look at steel-print change and silver-print change only as change strategies one may wish to select, rather than also as viewpoints to better understand organizational life. However, over time we also considered the colors also as paradigms, socially constructed, and paradoxical. From that perspective, the exclusion of steel-print and silver-print can rightly be questioned. In any case, the development of the color theory over 25 years with many practitioners and academics focused on the five main colors. We now discuss its applications with that in mind.

APPLICATIONS

Over two decades, different practical applications of the color model were developed in collaboration with practitioners and academics. Here we distinguish four types of applications:

- Diagnosis (how to better understand issues and organizations)
- Strategy (how to bring about change in the most effective way)
- Change agent (how to know our (in)abilities and develop ourselves)
- Communication (how to enable a collective competence for change)

For each application, we summarize how the color model can be used. For all of the applications there are basic as well as more complex ways of doing this: diagnosing, strategizing, self-reflecting and communicating can be seen as basic competences that can be taught but also as an advanced ability that takes years to master. We will share different rules of thumb that emerged over time. In real life, the four applications mesh and overlap, as thinking about and acting toward change can be distinguished from one another, but not separated, especially in more complex endeavors where change is an iterative process. Similarly, individual and collective agency can be distinguished but not separated when change efforts are co-produced with others.

Diagnosis

Using multiple viewpoints to understand issues

To understand a situation or issue better, it helps to triangulate: to look at it from different angles. For instance, when failed cooperation is blamed on unclear tasks and responsibilities (blue), but clarifying them makes little difference, there is something else at play. Triangulation is a way to find missing pieces of the puzzle, to gain a more complete picture (e.g. Denzin, 1978). The colors are used as a means to gain

multiple viewpoints: to consciously increase understanding in such a case by also inquiring into the politics (yellow) or the sense of community (red), the learning abilities (green) or undercurrents (white). This has proven quite helpful when the usual perspectives of a team or person make them overlook key factors.

Of course, asking questions from an unfamiliar perspective is not straightforward. Where a yellow-print thinker can't help but see politics in everything, knows what to look for, and discerns subtle power moves, this will not come naturally to others. The color model can be used to suggest questions and diagnostic models for each of the colors, as a "toolkit" to diagnose situations. To those who overlook politics, doing so suggests conducting a stakeholder analysis, mapping interests, figuring out who knows who, understanding power configurations, and seeing how decisions are made. For others, it will stretch their viewpoints in different ways. Much impact is made just by having change agents map their favorite diagnostic questions and models, label them with colors, spot color preferences, and supplement their repertoire with contrasting questions and models inspired by colleagues, literature or our previous publications (e.g. de Caluwé & Vermaak, 2003).

There is another way to enable a multicolored understanding of change, which is not by increasing the cognitive diversity of one's brain but by increasing the social diversity of the group inquiring into a specific issue together. This seems straightforward, but we noticed over and over again how people are inclined to seek cooperation with like-minded others, for instance within the same discipline, department, etcetera. In consultancy, for instance, HR people work more with other HR people than with the ICT experts or boardroom consultants. The more multifaceted or persistent an issue is, the worse that reflex turns out to be. We advocate in such cases that people work with others who have contrasting backgrounds or views: because they won't see eye to eye immediately, they may add to each other's insight.

Similarly, it can help to combine internal change agents with external ones: the emic perspective of those who are immersed in a context complements the etic perspective of those who look with the fresh eyes of an outsider (Pike, 1954). The first group more easily senses the prevailing logics of their organization: they implicitly grasp the unwritten rules of the game. They may however be so much part of the system that they have difficulty noticing what their context lacks. External change agents will pick that up more easily. A bureaucratic government agency, where policies and procedures take precedence over everything else (yellow and blue), may thus benefit by inviting OD-practitioners and chaos-thinkers (green and white). This does not come about by itself, but requires a conscious choice to do so.

Ascertaining an organization's health

In organizational cultures, some colors will often seem omnipresent and other colors struggle to take the stage. Here we shift our diagnostic focus from looking at one specific issue to looking at the broader context of an organization, community, or network. Color dominance is rarely a matter of coincidence. It refers to a pattern of shared assumptions and behaviors with which people have learned to deal with challenges of external adaptation and internal integration, and which has worked well enough to be considered valid and to be taught to new members (e.g. Schein, 1992). Understanding such patterns may not only assist people (especially outsiders) to maneuver within the logic of such an environment but also help people (especially insiders) to uncover why certain problems persist despite repeated efforts, and what they may require beyond the organization's usual repertoire.

This suggests that organizations are most healthy and robust when the whole spectrum of colors is employed: using politics when values and interests need to be weighed against each other (yellow), rational analysis and planning when new structures or systems are put in place (blue), creating a sense of community and care (red), learning from each other and from experience (green), and making sense of new developments and catalyzing new initiatives (white). If an organization uses these different approaches often and deep enough—fitting issues at hand—there is little beyond its reach. This idea is underscored by, for instance, De Geus (1997) in his writing on "living companies": the few companies that have survived more than a hundred years have in common that they are able to combine very contrasting qualities, like conservative financial policies (blue) with tolerance for new ideas and initiatives that are counter to the company's policies and core competences (white) and a deep sense of history, cohesion, and identity treasured by homegrown leadership (red). Looking at organizations from this point of view also suggests that the most transformative change for any organization will often be to appreciate, understand, and use colors

with which they have the least experience. It will be the hardest thing for them to do, given both the lack of legitimacy and their lack of experience with such colors: it makes those colors “hard to sell” and creates a risk of shallow execution, which can contribute to disappointing results, thus increasing future resistance to such ventures into the unknown.

The idea of a healthy, robust organization may sound like a peaceful one, but on closer inspection this is anything but the case. As described before, the different colors not only refer to contrasting ways of interpreting and acting in the world, they also stand for deeply held assumptions and values. This creates all kinds of contradictions. For instance, a yellow process will give the floor to people in power, whereas the blue one will put experts in the lead. A blue standardized procedure may further uniformity and efficiency, but be at odds with the quality and learning that green improvisation with clients allows (e.g. de Caluwé, 2015). This reminds us of Weick and Westley (1996) labeling “learning organizations” as an oxymoron, as organizations stand for (yellow-blue) stability and learning stands for (green-white) destabilizing. Their argument is that it is exactly such a marriage of opposites that makes the concept of a learning organization appealing: it is a plea for the dynamic stability of a surfer or biker over that of static stability of a rock or corpse. Such contradictions will inevitably be a source of tension in organizations and that is exactly the idea. Some may respond with defensive behavior, trying to choose one logic over another or denying recurring tensions (“either-or” response). This will, in effect, limit the organization’s responsiveness and thwart innovation. However, when organizations accept such tensions, it can spur development and growth (e.g. Engeström, 2004). It may allow them to make use of different perspectives, to connect and integrate them, finding a balance (“both-and” response). Or it may allow them to seek creative interplay, finding ways that opposites reinforce each other and transcend the status quo (“more than” response). Our lens here shifts from diagnosing the prevalence of certain colors to diagnosing the willingness to live with contradictions, and then to diagnosing the competence in dealing with paradoxes.

Finding and framing the crux of the issue

A good diagnostic process brings up a wealth of insights, though that may also be experienced as a chaotic complexity. As described above, the color model aids this by viewing organizational life from multiple perspectives: the differently colored aspects of a specific issue, the color imbalance of an organization, and the collective (in)ability to handle paradoxes. Not all these insights are as relevant: some explain a phenomenon much better than others. More importantly, these may be interrelated factors that together explain an underlying dynamic. Take, for example, a department within an organization that has persistently high workplace absenteeism. The diagnosis may show many problems that seem related to it, for instance an unclear strategy, inefficient meetings, lack of leadership, eroded professionalism, unresolved sentiments from a previous merger, aging workforce, etcetera. If the department has been stuck for a while, the list might go on.

This raises the question of what systemic mechanisms are keeping the problem in place (Vermaak, 2016). Understanding the interrelationships between the many factors may help differentiate the many symptoms from a few underlying causes. It may be that at the heart of it all is an unresolved merger history, which somehow taught those involved to leave each other alone to prevent further conflict. This hinders collaboration, which in turn hampers professional development. In such a cold conflict, old hands may assert their dominance and others choose to call in sick. The leadership may be laissez faire out of fear to disturb the peace. A good diagnosis will show many colored symptoms, but making sense of the underlying change dynamic will enable one to discern what color is at the heart of it. In this example, it is neither rational (blue) nor political (yellow). It seems related to the unresolved merger history which implies the need for people to be heard, to recognize mistakes made, to mend old wounds, and for lessons to be learned: the crux of the issue is either red (focus on recognition) or green (focus on learning).

Making sense of the underlying dynamic of a complex change is rarely straightforward. The mechanisms may be hidden from sight, causes may be subtle, or there may be a delayed impact. Different people may come to different conclusions as to what is the heart of the matter. In this sense, diagnosis is open to interpretation. There are however three clues to determine how robust one’s conclusion is: a) the extent in which one’s diagnosis explains the many symptoms and their persistence, b) the impact of actions that focus on the chosen crux of the issue, c) and the resonance one’s conclusions get from different factions

within an organization during a real dialogue. This last clue is, however, sometimes beyond one's reach when such a dialogue is not (yet) an option for those involved. The colors are used both to find the diagnostic pieces of the puzzle as well as to label the underlying dynamic.

The different types of diagnosis discussed here also imply a choice in terms of change ambitions. One may frame the problem as a single issue (workplace absenteeism) and choose to resolve that. Alternatively, one may choose to frame it as a larger problem of organizational imbalance and choose to strengthen the organization's health by introducing lesser used green and red processes, enable those involved to gain competence and demonstrate this by fixing worker absenteeism. Lastly, one may frame it as an even more encompassing organizational inability to use contradictions for continuous innovation: in that case one chooses to shed light on how the organization maintains a certain color dominance and furthers the acceptance, integration, and interplay between the colors (with increased green/red processes and less absenteeism as "byproducts").

Strategy

Situational choice of a change strategy

To bring about change in the most powerful way, it helps to think in terms of leverage: how to achieve as much as possible with as little energy as possible? In this phrasing, we are inclined to put effectiveness first and efficiency second, but both count. Isolated attempts to bring about permanent change are doomed without such leverage, as the stabilizing resistance of dominant routines easily neutralizes such efforts. Integral change approaches do not fare much better, as they tend to target too wide an array of aspects, spreading the change efforts too thin; the associated interventions compete for time and money, and often may even contradict each other (in terms of colors). We regard choosing a change strategy as a reasoned deliberation on what type of working principle gives an intervention plan focus and makes it viable (de Caluwé & Vermaak, 2003). The colors serve to characterize working principles: do we think a political strategy will work best here (yellow) or rather a motivational one (red)? The color model is often used to weigh the different options and their pros and cons in a structured way. Of course, the crux of the issue that emerges from the diagnosis weighs heavily: it makes a lot of sense to focus efforts on underlying causes. It is however, not the only factor weighing in. We have found that five criteria are helpful for practitioners to reason their way to a change strategy (see figure 1):

- Outcome: what do we want to achieve? What type of impact do we seek to achieve? How ambitious do we choose to be? (For instance: an interpersonal issue will rarely imply an engineering approach.)
- Context: where does the change take place? How large or small is the group of people involved? What characterizes their abilities? (If people feel awkward about a given approach, its chances to succeed decrease.)
- Change agents: who is going to make the change happen? Who puts in the work to understand, design, and realize the change? What is their experience and credibility? (An approach works better if the key players are well versed in it.)
- Crux of the issue: what is the underlying cause behind a problem or success? (Addressing a persistent problem with "more of the same" solutions is unlikely to result in success.)
- Embeddedness: what type of change "sells" here? What approaches are controversial in this context? What (de)motivates those involved? (A change that the top does not prefer or the workforce has bad experiences with is harder to pull off.)

Each of the criteria suggests which color may work. Imagine an engineering firm that wants to improve the quality of its services, because they see standards slipping and clients moving away. Quality improvement as a change outcome is often achieved by a blue (standardizing processes and standards in handbooks and systems) or green endeavor (action learning or following a 'lean' philosophy). Both may work—in principle. Within this context the dominant logic is that of the blue engineering mindset. It fits the organization's culture and is what people expect. However, such a blue approach may not fit the crux of the issue. If the firm has a long history of handbooks, but they seem to have lost their impact on quality, then such an approach might not go deep enough. It may be that it worked in the past when professional discussions accompanied the drafting of procedures and standards and applying them was not yet routine.

To bring it to life again, one would have to revive such discussions. In any case, more of the present blue routine is not likely to suffice.

In this example, we touched on three of the five criteria: the outcome (that allows for blue and green), the context (where blue prevails), and the crux (which implies that blue is not a great choice). The three criteria thus do not point in the same direction, which is even more so if the remaining two (change agent and embeddedness) are taken into account as well. This is quite often the case: deciding on a viable strategy thus becomes a process of weighing pros and cons. Which criterion matters most? What risks can one compensate for? In this case the change agents chose a green change strategy. Though they could picture that a deep blue strategy with all the bells and whistles (research, benchmarks, roll outs) might also break through the present routines and do the job, they felt a green strategy would fit the outcome and crux even better. They also felt it served a larger ambition of boosting the firm's learning competencies that were as yet not so well developed. This made it worth going the extra mile, embedding the change and facilitating the ups and downs of going down a route less traveled.

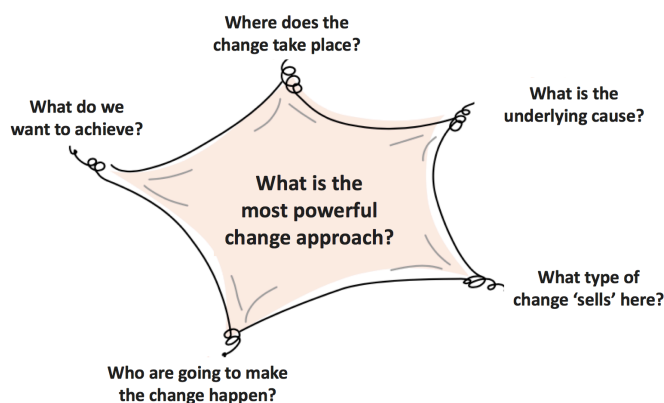


Figure 1. Deliberating a change strategy with the aid of five questions

Bringing a change strategy to life—even with organizations that lack experience

A well-chosen change strategy is one thing, bringing it to life is quite another. Congruency is key, starting with intervention planning: translating a strategy into concrete activities is often an ongoing process. Just as models are part of change agents' toolkits during diagnosis, interventions are part of their toolkits during intervention planning. The more interventions one is aware of, the better one is able to translate a colored strategy into actions. Take, for instance, a green strategy to realize team-based collaboration within an insurance firm. The change agents may have thought of teaching ideas about teamwork and providing some coaching for team leaders. This is a modest start, but the change will only gain depth by complementing it with other interventions that nudge the process in additional green ways, enabling powerful learning loops and creating a snowballing effect. Think of adding a simulation to practice teamwork, periodic evaluations to collect lessons learned, consultation between team leaders to share experiences, and visits to organizations that are further along. The color model can be used to build one's knowledge of what interventions are available, aided by literature and (more experienced) colleagues. Congruency also matters for other design choices, such as what roles to distinguish, how to monitor progress, and how to communicate about change. We hope table 2 suffices here to imply how different this best takes shape for each of the colors. Next comes the challenge to act the part. Though we will discuss this also in the next application, we want to emphasize here that the power of any intervention plan is not felt by reading it on paper, but by experiencing it in the way it is put into practice.

Such congruency can be especially challenging when the change strategy chosen is one that an organization is not so familiar with, one that is not "more of the same." As discussed earlier, there can be ample reasons to do so: issues may persist because the colors needed to address them are undervalued and the associated competencies underdeveloped. Also, increasing practice with less familiar colors potentially increases the organization's health. It thus stands for a higher order change, where energy is not only invested in tackling an issue, but also changing ideas and repertoire. With that comes the risk of realizing

such a strategy in such a superficial way that it lacks impact. Even worse, such experience may lower people's opinion of the unfamiliar repertoire and raise resistance to venture there again: a self-fulfilling prophecy.

A case in point is a young financial institution that had grown exponentially, driven by its analytically minded, bright, and youngish staff. As the organization matured, the work grew more complex and the outside world more critical. It required their professionals to collaborate increasingly and take feedback seriously. That was not an easy thing to do for most, and their sense of superiority became a defense mechanism against outsiders and their sense of autonomy a defense mechanism against peers and management. The leadership shared proudly with us how they practiced daily feedback, though it seemed to have little impact on their professionals' behavior. When we inquired how such feedback took place, they shared an example in which one of their professionals had done substandard work, and managers had reacted by telling him off, taking his assignment away from him, and doing it themselves over the weekend. This is the opposite of what feedback needs to be from a green point of view. It is not about blaming people, but about learning what works and what doesn't. It is also meant to be relational: if the work is substandard, it points not only at a lack of competence but also at failed supervision. Lastly feedback is not about relieving people from their tasks, but about requiring them to get better at it. In this example, the managers' feedback was a blue travesty of a green intervention, doing little good in either blue or green respect. There was no malicious intent behind any of this and management truly believed they had mastered feedback. However, its subtleties were little understood, its assumptions were alien, the required competencies were blind spots, and experience was lacking. March (1988) talks about the "technology of foolishness," meaning that successful innovation by definition stems from a repertoire that seems foolish when viewed from the dominant paradigm. What works might well be foolish, but not all foolishness works: there is technology behind it that may well escape those involved. Such blind spots thus requires special attention: one needs to shed light on color technologies whenever unfamiliar strategies are chosen. It also makes sense in such cases to prioritize depth of change over size of change. This allows those involved to figure out something experimentally without reducing its complexity, to achieve many small (but deep) wins (Reay et al 2006).

Combining different colored approaches at different intensities

So far, we discussed the situational choice of a change approach for a specific issue. However, sticking to any single-colored approach indefinitely makes little sense. Neither does indiscriminately mixing different colored approaches together as this can undermine each of them. An example of this might be if you mixed a political process (geared towards commitment) with a learning process (geared towards development). In a learning process, participants fare better when they are willing to show their weaknesses, ask for help, experiment with things they are not yet good at, and so forth. In essence, people "put their cards on their table." In a political process such behavior is generally dysfunctional and dangerous, undermining people's negotiating positions, and making them vulnerable to attack. In such a context "keeping your cards close to your chest" makes more sense. Such contrasts are abundant between change strategies. The more you honor and use such differences, the better each of the approaches works. This brings us to the need to switch collectively and consciously among the colored processes rather than just mixing them all up. The color model is used to discuss which combinations are both desirable and feasible given specific situations.

The simplest way to combine colored processes is to separate them in time and space. You may work sequentially: first redesigning work procedures (blue) then facilitating people learning to work with them (green). You may also switch colors between spaces: you may have a red teambuilding process in department X and a restructuring in department Y at the same time. An example of this type of combined change that results is the transition of Youth Care in the Netherlands between 2012 and 2015 when it was decentralized, shifting responsibility for programs from the national to the municipal level. Youth Care includes a range of services for both children and their supportive environments (parents, schools, neighborhood) aimed at helping children to grow up well and find their way in society. We assisted this change in the Amsterdam region, in a mega-operation involving thousands of people and many organizations, which made it unwise to come up with too complex an approach as it would be more than such a network of actors could pull off successfully. In this case, using different types of change sequentially was not an option: many changes needed to happen at the same time. Separating them in space thus

became the way forward. We reduced the complexity by distinguishing primary processes (where youth workers add value for and with the outside world) from secondary processes (where resources and support are set up for youth workers: facilities, finances, ICT) and tertiary processes (where governance creates a course to match the new organizational set up to the shifting context outside). We used the colors to raise awareness amongst those involved that each of those processes required a different colored strategy to do them justice: different actors addressing different issues in a different way (see table 3). And we helped them design and realize the transition as a whole accordingly: three parallel changes each with their own colored logic (Vermaak, 2017).

Type of change	Tertiary process (Governance)	Secondary process (Support)	Primary process (Execution)
Actors	Board & top management	Staff & middle management	Professionals & clients
Process	Negotiation funnel	Design & implementation	Learning & co-creation
Criteria	Consensus & direction	Organizational efficiency	Reflection in action
Duration	Limited (half year)	Decisive & linear (one year)	Ongoing & cyclical
Complexity	Political restraint	Simplifying rules & systems	Valuing complexity
Energy	Suspense	Hygiene	Vitality
Communication	Minimal & legitimizing	Reassurance & information	Involvement & richness

Table 3. A transition process viewed as three concurrent, contrasting changes

At least as important as the awareness and design of a combined change is to have sufficient skills to manage a multi-colored approach successfully. Inevitably certain pitfalls emerge. A) Tertiary and secondary processes tend to displace primary processes: political negotiations and new systems take precedence over the skillful delivery of concrete services. The challenge thus is to strive for equivalence and to use the lived experience of youth care as the “measuring stick” as to how well this is achieved. B) Another pitfall is that the three processes get mixed up or become diluted. We saw, for instance, action learning being proposed in the governance arena and restructuring proposed to further innovation of care: two mismatches. We could hear people making statements such as “implementing empowerment” or “ordaining good parenting”: both dysfunctional hybrids in terms of the colors. The challenge thus is to keep distinguishing the different colored strategies and deepening each one by staying true to its principles. C) Lastly we see the pitfall of disconnected arenas. Dominance from the governance arena may well lead to professionals withdrawing to their own arenas. The challenge here is to loosely couple the contrasting changes, allowing them to both respect but also reinforce each other. We notice time and again how combined change such as this requires continued vigilance and learning to correct such systemic pitfalls.

This challenge increases when one seeks out even greater combinations of colors than by separation in time and space. The next step up is to boost a change process in one color with supportive interventions from other colors. Think of gaming as a green change process aimed at learning: a good game requires a bit of design and engineering—blue supportive interventions. These interventions are helpful as long as they remain calibrated to learning. When this is not so, the game runs the risk of becoming too regimented and losing its playful nature. In line with the discussions earlier about learning organizations and living companies, the most impactful combination is also the most intense one: to separate, switch, combine the colors organically and collectively all the time. It allows a group to deal with multifaceted issues elegantly and it boosts learning. It can often be observed in high performing teams who make good use of the diversity of

their team members: they are able to do so due to strong combination skills. Again, we see that size matters: such complex change behavior is more feasible on a limited scale. A rule of thumb seems to be that change approaches require a compromise between the potential of intense combinations and the combination skills of those involved (see figure 2). You push this boundary only when the complexity of issues warrants it.

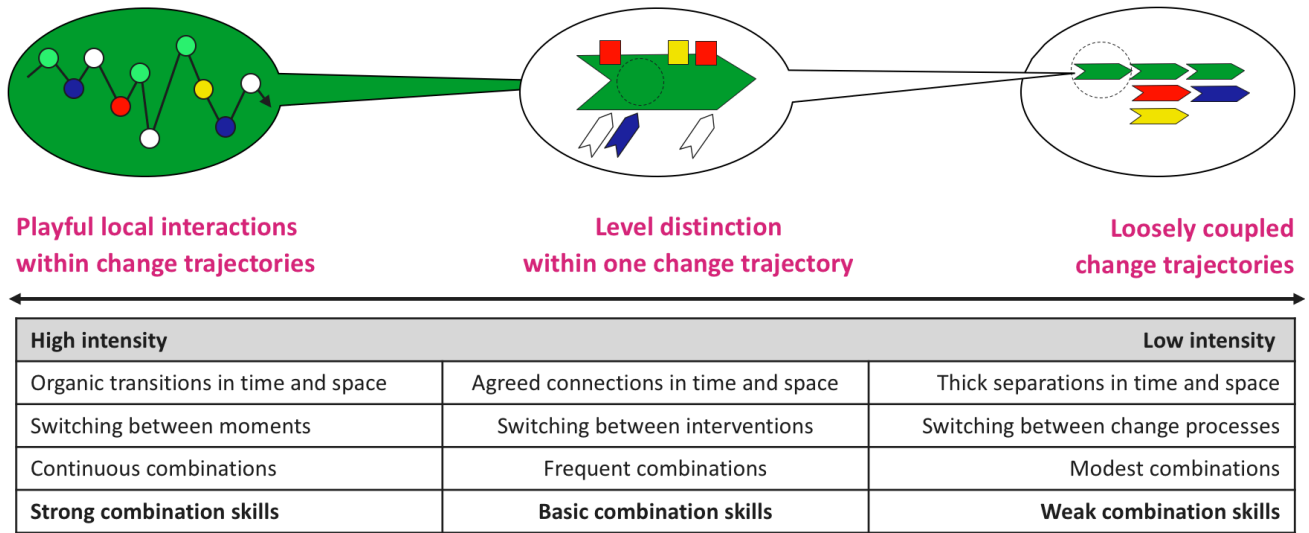


Figure 2. Combining colored approaches at different intensities

Change agents

Awareness of one's abilities, limitations, and development

In order to know our (present) possibilities and limitations as change agents we need to have a good sense of our profile: our strengths and weaknesses, our preferences and credibility. One could regard this as a basic requirement to prevent one from taking on changes that are beyond one's abilities, and also to prevent one from playing safer than need be. The color model enables change agents to assess this and stretch and develop themselves at a pace that makes sense. For many, a validated test instrument has been a blue way to discern their profile and compare it to other populations (de Caluwé & Vermaak, 2016). Of course, the reliability of such a questionnaire always depends on how well people know themselves and how tempted they are to give socially desirable answers. A case in point is that the average score for white-print change is twice as high as the score on yellow, with the other colors hovering in between. This might be explained by white being more fashionable than yellow in people's imagination. It seems that many like to embrace ideals of self-direction, innovation, and entrepreneurialism (white) more than the commonly disparaged domain of power games and politics (Yellow). This is partly due to persuasive language in which the upside of the white-print thinking world is exaggerated and beautified whereas its downside—the hard work that goes into it, its limits in terms of predictability—can easily escape attention especially when one has had little experience with it. This combination allows white-print thinking to stay more popular in our thoughts than in our actions.

We therefore regard the test as an aid for reflection, but surely not a replacement for it. Observing someone's behavior, the kind of roles they take, the interventions they know, the way they interpret the world, the values they seem to care about, the kind of language they use: they are all telltale signs of a person's color profile. Seeking feedback on such behavioral patterns remains in our view the most trusted way to know oneself and a way to inquire further with others. This often leads to discussions about the value of having a broad profile versus a narrow profile, in which one or two colors are much more present than others. The pros and cons seem straightforward. A broad profile allows for the flexibility of a generalist, switching to different viewpoints and approaches where and when needed. A narrow profile allows for the depth of a specialist, who digs into the richness of insights and repertoire of a limited part of the spectrum.

On further examination, however, there is more to it. When one is faced with change issues, it is not always evident what color it will be all about. We therefore argued earlier for using multiple perspectives, to prevent pigeon holing (Perrow, 1970). Only once it is clearer what the crux of an issue is can one know which color is best suited to address it. This implies that change agents better be generalists when it comes to diagnosis, so they can assess if it fits their specialist ability to address the issue. If not, they now know what type of specialists to invite in: it makes little sense to embark on a yellow endeavor with a blue analytical expert. The color model is thus used to find a good fit between issues and change agents. Luckily, it is quite doable for most people to learn to look at issues from the different colored perspectives. It is much harder to act confidently within all of the colored approaches. This contrast seems to have consequences in terms of career development and professional standards. When people start their careers, a narrow profile may pose a risk: it may suggest blind spots, possibly heightened by one's specific education. At this stage, the challenge is to appreciate the whole range of colors and acquire basic competency in each. Once this is attained mid-career, deliberate specialization no longer poses such a risk as one knows one owns limits. Specialization may even be inspired by a better understanding of the color spectrum. One's job or organizational position does come into play here too and put demands on one's profile. Thus, generalism remains useful for those in middle-management positions, where different types of issues arise, none of which can be ignored or easily delegated. In contrast, external consultants can be more selective about the types or clients of issues they engage, which allows for a specialized profile.

Discerning and addressing dissonance

The color model is also used to raise awareness of dissonance: a lack of congruence between thoughts, attitudes, opinions, and behavior (Festinger, 1962). Such dissonance is not only uncomfortable but also restricts one's efficacy as change agent. Awareness of dissonance makes people inclined to seek ways to diminish it. There is quite often a contrast between how people like to think about change and how they are inclined to act towards it. Such dissonance may exist for several reasons. A) Some people have a hard time translating their beliefs into action because they lack the capability to do so. In this case, the contrast illuminates learning goals for one's own development. B) It may also be that people find it hard to act according to their belief system because the type of work they do does not call for the kind of approach they prefer. The contrast then points to desirable career shifts, if they want their work to fit their change preferences. In both of these situations, the gap may be uncomfortable but not dysfunctional; people can still act within their competencies and in ways that fit the issues before them. C) A third explanation is more problematic. When a person's "espoused theory" contrasts from their "theory in use," it may be that they are unaware of how they act, let alone the consequences of their actions (Argyris & Schön, 1974). An example would be the (still) popular notion that management should embrace a leadership style that is more facilitative. Surveys that ask managers how well they do quite often show high scores. However, when surveys also check the employees' perception of managers, those scores are much lower. Who is right? The short answer: the employees. Their experience of their boss is more accurate than how managers see themselves: the former exposes their theory in use, the latter the contrasting theory that managers espouse. Such a gap can only be bridged by acknowledging that actions show true beliefs more accurately than speech. Through taking other people's feedback seriously, this veil can be lifted, demonstrating the value of interpreting one's profile with the help of colleagues.

An example of another dissonance may be between one's credibility and one's competence. When a consultant steps in to mediate an escalated conflict and uses their own position of authority to force a breakthrough, this can be helpful in a yellow way but may well make him less credible in a later phase when green development is on the agenda. Regardless of his eagerness to play a role or his talent to do so, those involved might not regard him as such and not give him sufficient credit to act in a green way. Awareness of such incongruences helps people to deal with them.

As dissonance diminishes between actions and thoughts, credibility and competence, challenges and experience, the more deeply one will be able to bring a color to life. There is something quite powerful about breathing and living a certain color in a way that seems and feels natural. It is easy enough to choose coaching as a green intervention, but the art of listening, the belief in people's ability to heal and develop, the carefulness of the process, the depth of empathy, the originality of one's reframing, and so on: these all

allow the coaching process to work wonders. They determine how much impact a chosen color may have and to stretch our imagination of it. Such finesse can take a lifetime to master within each of the colors. This is good news as complexity within one's profession is exactly what motivates us. It makes our work more interesting. It enables us to feel more a part of a tradition and community and make it part of our professional identity. The colors then stand not only for perspectives that someone selects but also for who we choose to be in the world. It is not only about what we do, but also about who we perceive ourselves to be.

Learning to appreciate and live within multiple realities

This brings us to the inability of anyone (including us) to really stand above the colors. When people identify strongly with one color over others, it also comes with a tendency to value that color over others. We see this exemplified in table 4, where we contrast how color qualities are labeled positive in terms of self-image but gain a critical shade in the eyes of others with another color preference. Ofman (1992) described how the core qualities we most value often come with their own pitfalls (when we overdo it) and allergies (too much of a contrasting value), and the challenge to circumvent both. We recognize this dynamic in the colors: overdoing one color can trigger allergic response in a contrasting color. For instance, the overcautiousness of a red-print thinker can seriously annoy white-print thinkers as it contradicts their provocative nature. They find it all too boring and lacking in philosophical edginess. The color model helps spot and navigate such sensitivities: to mature past the pitfalls of one's own color as well as appreciate the qualities behind others' quirkiness. The sensitivities seem to stay, but we manage them rather than let them manage us. It allows for a certain mildness.

Next to such sensitivities, there are also power relations to be aware of. The colors may be equivalent, but when this is not recognized fully, their protagonists may try to establish dominance. The outcome of such battles is not random. When the colors fight, yellow or blue generally prevail, regardless the issue at stake. This is because yellow has the power behind them and blue has the best pitch, a planned approach with clear-cut goals that guarantees results. Red, green, and white cannot compete with that: they will always sound weaker. Even when people are aware of this dynamic, yellow and blue agents may still suggest green and white agents should be more pragmatic and businesslike to be of value. In turn, green and red agents may suggest that yellow and blue agents are obstructing real care and learning in their organizations. What these remarks have in common is that they put the responsibility for a balanced discussion squarely on the shoulders of the other color. In our view, this implies a meta-capability for each of the parties involved. Yellow and blue agents would do well to recognize that no color can stand up to them in a fight for power, so to achieve balance it is up to them to practice self-restraint. In contrast, green/red agents would do well to recognize that self-protection is part of their own job, not something to be outsourced. This may mean to be selective about fights, to not always make change visible, to organize support, to problematize power imbalances, and so forth.

While the above points to emotional and political homework for change agents, there is some cognitive homework to be done, as well, by all. The inability to take a neutral stance between the implies that one can't help but interpret other traditions through the tinted glasses of one's own. We regularly see this play out in heated debates amongst people when they discuss the best way forward in concrete cases. As we mentioned before, it can seem like the proponents of different colors come from different planets. In fact, it was this recurring experience that sparked the creation of the color model in the first place. The challenge here is to abandon all hope of one integrated view of the spectrum, and instead to make it a daily practice to deconstruct perspectives and construct contrasting ones, thus really switching between different realities and wondering what makes sense in each of them. This is less about a search for the right answer, and more about a willingness to play; it is less about a longing for accuracy and more about a sense of humor. Playfulness and humor are exactly the kind of repertoire that helps deal with tensions and contradictions rather than trying to eradicate them. Lewis and Smith (2014) talk here about being consistently inconsistent. Looking at ourselves as change agents thus shifts focus from assessing one's profile and one's development, to awareness of dissonance and decreasing it, to our ability to deal with paradoxes. Acquiring these last abilities on an individual level prepares one to guide and assist others around us to do it collectively, which brings us to the next application.

	Self-image	Image that others (with other color preferences) may have of you
Yellow-print	Flexible, attuned	Unreliable, opportunistic
Blue-print	Straight, clear	Rigid, dorky
Red-print	Empathic, social	Soft-hearted, overcautious
Green-print	Reflective, open	Pedantic, oversharing
White-print	Philosophical, provocative	Quixotic, pig headed

Table 4. Valuation of color qualities by self and others

Communication

Establishing a common language for change

Change in organizations is a collective effort, which inevitably leads to involving people who may well have different perspectives on organizational life. It also brings with it the need to compensate for how one or more perspectives are less ingrained in the organization’s culture. Both this diversity and absence may go unnoticed in change efforts and when this is the case, it inevitably frustrates all three applications discussed so far: diagnosing to understand change, strategizing to bring about change, and reflecting on our in(abilities) as change agents. Instead of narrowing participation to reach easy consensus on such matters, the inclusion of multiple perspectives not only does justice to the complexities of the social systems but also allows a broader sense of ownership that is needed to address such complexities together. When problems are simple, single-minded viewpoints might suffice (e.g., using a blue paradigm to build a shed). But for ambiguous problems, understanding and intervening in organizations requires involving the perspectives and contributions of many people and taking the emerging tensions into account. This however requires a meta-language that makes people aware of contrasting perspectives and helps them explore them as potentially meaningful. The color model is introduced for that reason both by faculty in educating change agents and by these change agents in the organizations where they do their work. As the vocabulary of each paradigm is distinct and can easily elicit befuddled responses from people unfamiliar with it, it helps to have labels such as the colors that do not suggest any hierarchy or imply any preference. However, in some organizations the colors are already associated with other phenomena (e.g. with regard to personality traits), which can lead to confusion. As our theory is about change and not about colors, it is possible in such instances to switch to content-related labels as suggested in table 2 (e.g. “yellow-print” becomes “change by negotiation” or “change by politics”).

Three educational insights have become quite clear. First: there is no single way to teach the color theory effectively, as the audiences vary widely in their change experience, in their familiarity with the model, in the complexity of their change work, and in their appreciation of pluralism. For instance, introducing the color theory to the full Dutch radiologist community, a group unfamiliar with change theory, was done by presenting a simple overview and a straightforward exercise in applying the model. In contrast, applying the color theory to the transition of the whole system of Youth Care from a national level to a municipal level required a collective understanding of combining the colors and the pitfalls inherent in doing so, a much more complex story (Vermaak, 2017). A second insight is that no conceptual overview brings the theory to life as much as a collection of stories and imagery. Such materials allow people to get a better feel for the dynamics behind the colors and the typical interactions between them. We find that once people gain such an understanding they can often surmise many traits of the colors on their own, even if these have not been discussed. A third insight is that people’s defensiveness can be easily triggered because the colors are value based. Such defensiveness can be reduced by taking an “observer stance” in describing the colors, by using humor and irony, and by playful and impromptu interaction with their responses. Taking an observer stance means talking about the colors as five different planets, with different inhabitants and cultures, that we explore and are surprised about together. In the process, each of the planets is appreciated and criticized equally. Humor and irony is all about making subversive statements within a safe space: to create credible distortions of established ideas in the room, to make sexy what is deemed ugly, to reveal what is hidden, and to confuse sense with non-sense. It allows the audience to explore a pluralistic universe without it

necessarily having any consequence in real life; like tasting a forbidden fruit, it can be pleasurable and confrontational at the same time. Responding to questions or criticism in a playful way allows for demonstrating that reactions are often based on people's treasured (and colored) view of the world. It offers a microcosm for pointing out change dynamics. To quote Weick (1969, p. 51): "people find propositions non-interesting that affirm their assumption ground (that's obvious), that do not speak to their assumption ground (that's irrelevant), or that deny their assumption ground (that's absurd)." The only way to enable this balancing act is to abandon a standard narrative and to tailor learning situations that stretch those involved as much as possible.

Collectively revealing and exploring the colors in practice

The idea that the color model offers language can be taken quite literally. Each of the colors comes with its own jargon that allows people to make distinctions and to stress principles that matter in that colored context. When one does not possess the right color vocabulary, it is hard to maneuver in that specific environment or be taken seriously there by others. Over the years vocabularies emerged for each of the colors. For instance, when someone uses words like "committee," "alliance," "coalition," "agenda," "governance," "policy," "scapegoat," then you already know which game is being played, no matter what the subject or the organization might be: a yellow game is clearly afoot. Words create worlds. When you spot someone (or yourself) not mastering the language of the game that is being played, you notice how out of place that person is. And so does everyone else. Because of this, having an eye for language is an easy way to discern people's preconceptions and assumptions. A simple but insightful exercise is to let change agents write a one-page summary of one of their cases: where it takes place, what the intended outcome is, who is involved, what has been tried before, what the person involved finds challenging, and what is a typical example of what makes it hard. Then, after the introduction of the color model, let people do a close reading of each other's cases and mark words, expressions, and ideas on the page with the colors they correspond to. It reveals instantly how someone frames the issue, how embedded that is in their organization or profession, and—more often than not—how they were unaware of their normative stance. Quite often it is exactly that one-sided framing that puts the issue beyond their grasp. The colors are thus used to uncover a belief system that is hidden and only in doing so may this perspective become subject to discussion.

While the color model is used here to reveal what is implicit, it can also be used to explore what is as yet unfamiliar. The rules of the game are quite different in each colored world. When organizations embark on a new change, the model is often used to manage expectations of how the game is to be played this time. This helps people to understand and play their part. Say, an organization embarks on a risky yellow change, where it makes sense for leaders to negotiate behind closed doors to reach a consensus and finally bridge a divide. Many within the organization may want to know what happens behind the doors: the outcome will have an impact on them, and they may be anxious to know if their representatives are faring well. While this sentiment makes sense, wanting access to the negotiations or putting one's representative on a leash does not. Understanding the logic of a yellow process helps here to stomach that it may be out of one's comfort zone, to know what to expect, to play along when it goes as it should, and to sense when something is going wrong. The idea of unpacking a rationality that is unfamiliar is key, because the colors are worlds in and of themselves. Knowing about the colors can be easily taught by many to many, but an appreciation of the many layers and unwritten rules within each world has to be earned by recurring inquiry on the job.

Strengthening the collective ability to handle tensions among the colors

Appreciating different paradigms is one thing; handling the tensions between them is another. Such tensions are frequent and quite often predictable. Take for instance a yellow political arena. As a way to support one's position someone might ask consultants to do research that will substantiate their claims at the negotiation table. The independency of the blue research effort is often stressed in this situation as this enhances the legitimacy and thus the power of the consultants' report in the political arena. However, more often than not the principal who contracts the consultants will be inclined to also put pressure on the consultants to rewrite the draft report so it serves their interests better and to repress reports that do not. As soon as the blue consultants give in to this and turn into hired guns, they lose all their added value from a blue point of view: blue-print's reason for being is derived from being rational, data driven, transparent,

independent, etcetera. When the consultants let go of that, blue has nothing of worth to bring to the table. Instead of making the best of a combination of two colors (yellow and blue), only a dirty type of yellow may remain where manipulated reports are used to influence negotiations. This only damages the sustainability of any deal struck. To prevent this the blue consultants need to grow a backbone and resist the pressure from the political arena, and the yellow arena has to learn to restrain their inclination to dominate. Both need to recognize and accept the tension between them as meaningful and find a way to handle it together. That is in both their interests. Such tensions and corresponding challenges are everywhere all the time.

Another example would be how (yellow-blue) executives of an organization may ask a (red) PR or HR department to help communicate about an upcoming change. A pitfall would be for them to hype the change: to exaggerate what is good about it and to leave out what is not. A merger might be presented as $1+1=3$, downsizing as a move to become “smaller, but better,” restructuring as a step forward in cooperation. All of that is rarely the case. More often a merger turns out as $1+1=1$ when the dominant culture pushes out the smaller contrasting one, downsizing is often more about getting smaller than better, and restructuring rarely increases cooperation because it is generally less about structures than it is about relationships and competencies. In such cases, many people will sense the communication is unfair. While the hyping happened in the hope of lowering resistance, it actually makes management and also PR and HR lose their credibility and thereby heighten resistance. This corresponds to the worst fears from a red point of view: credibility and care is at the core what that color has to offer and losing it is thus a capital mistake. PR and HR officers thus will have to resist temptations to hype the communication, no matter how uncomfortable this may be for management. And management better require them to do so. It highlights again how successful efforts depend on legitimizing contrasting rationalities and handling tensions together.

Experienced change agents can assist those involved by teaching the color model, uncovering hidden dynamics, guiding the exploration of new approaches, and translating between different worlds when tensions arise. Though this may be quite helpful, it also has its limits as hidden dynamics and tensions arise frequently in everyday change practice among those involved where such support is not always present. We regard it therefore more as a stepping stone for those involved to distribute those roles amongst themselves and gain confidence to educate, uncover, guide, translate. It requires the ability to pay attention not only to what needs to happen, but also to what gets in the way, and to do so as a normal part of everyday organizing, not as a problem to be fixed. It is about creating sufficient cognitive, emotional, and relational space to cope with difference and incompatibility. Such a zone of discomfort (in contrast to a place of order) may be legitimized by an understanding that task-related conflicts are helpful for dealing with complexity (Wierdsma, 2004). In such situations, to insist “someone is right” obscures that multiple viewpoints and interests may be needed to shed light on an issue; to insist that “someone is to blame” obscures that multiple contributions and mixed results are responsible for both success and failure; and to insist that “someone is not ok” obscures that behind any behavior may be mixed intentions and feelings and partial competence (Stone et al., 2000). All this discomfort of course needs to be worth the trouble. This is where the notion of “swift trust” makes sense: people step up when the issue matters enough (it is worth the risk), when the road ahead can't be predicted anyhow (better to test than to talk), when contributions from others are indispensable (you need a “deal”), when group composition is temporary (it is not forever), and when there is time pressure (it is now or never) (Meyerson et al., 1996). They commit provisionally, use obstacles to reflect on the way, and adjust as they go. Wierdsma (2004) refers to this as “temporary workable agreements.”

		Type of application			
		Diagnosis	Strategy	Change agent	Communication
		<i>How to better understand issues and organizations</i>	<i>How to bring about change in the most effective way</i>	<i>How to know our (in)abilities and develop ourselves</i>	<i>How to enable a collective competence for change</i>
Complexity of application ↑ ↓ Advanced ability	Basic competence	Using multiple viewpoints to understand issues	Situational choice of a change strategy	Awareness of one’s abilities, limitations, and development	Establishing a common language for change
		Ascertaining an organization’s health	Bringing a change strategy to life—even with organizations that lack experience	Discerning and addressing dissonance	Collectively revealing and exploring the colors in practice
		Finding and framing the crux of the issue	Combining different colored approaches at different intensities	Learning to appreciate and live within multiple realities	Strengthening the collective ability to handle tensions among the colors

Table 5. Different levels of complexity for each of the four applications

CONCLUDING REMARKS

Looking back over the last twenty years we notice a shift in popularity amongst the colors of change. In that sense, the sequence in which we present them is no coincidence: the last ones (green-print and white-print approaches) seem on the rise. This corresponds with a growing belief in the fluidity of change, accompanied by trends toward decentered agency, the combination of high tech and high touch, and the use of sense making in gauging change progress (Todd & Sturtevant, 2017). Though the shift in paradigm popularity seems warranted to deal with a ‘VUCA’ world—one that is characterized by increased volatility, uncertainty, complexity, and ambiguity (Pearse, 2017)—we discern a pitfall here too. A plea for a new and transformative type of ‘change management 2.0’ can be (mis)read as a call to move to a new dominant paradigm to replace the old one(s). We tend to think instead that transformation resides more in the equivalence and interplay between multiple paradigms than in any single new paradigm. Take, for example, a commitment to decentered agency and participative processes. Firstly, not every change issue requires this approach or even benefits from it; in restructuring organizations, for instance, decentered decision making may well slow down the process, demotivate people and produce lame structures. The use of some ‘older’ paradigms—a blue-print designed by experts and decided upon by the top, with a red process to communicate it well and carefully manage the transition—might do the job better. Secondly, decentered agency and participative processes may be trending, but they have old roots and earlier manifestations. For example, approaches dedicated to both empowerment (Bartunek & Spreitzer, 2006) and action research (Bradbury, 2015) have long emphasized participation. If transformation was lacking, it may be not from the absence of such a view but the legitimacy, craft, and congruence of its application. Viewed through a paradoxical lens, the call to move to a single paradigm, be it ‘transformative’ or ‘integrated’, can be seen as a defensive response to complexity (Lewis & Smith, 2014). Embracing such a single paradigm can be reassuring, as it is the easiest way to conceal and suppress clashes between multiple paradigms. However, it is just a matter of time before proponents of the different paradigms will make clashes recur, due to the built-in friction between their ideas, methods and styles. It requires something extra to go beyond concealing or clashing, to turn the friction into something constructive. This is where the four applications summarized in table 5 come in: to use multiple paradigms methodically in diagnosis, strategizing, reflection and

communication. The four applications stand for that bit of extra effort and ability that change agents (no matter who they might be) bring to the table. We have harvested the tacit insights of these practitioners over time as rules of thumb for what seems to work.

In hindsight, we recognize within each of the applications the distinction made by Lewis and Grimes (1999) between a multi-paradigm review and research versus meta-paradigm theory building. In a multi-paradigm view, contrasting approaches are “bracketed” to describe and contrast them. It is used to critique provincialism and partiality, encouraging us to reflect on the underlying assumptions and blinders of any of the lenses. It regards each paradigm as equally viable, looks at gray areas between them, and suggests complementing one approach by using others in parallel or sequentially. It corresponds with the first two ways we situate the color theory: as an overview of approaches to change and as underlying paradigms that deserve to be understood. It also corresponds with the rules of thumb listed first within each of the applications: using multiple viewpoints in diagnosis, making a situational choice for a change strategy, increasing one’s awareness of one’s profile as change agent, and establishing a common language for communication. It is how the color theory was predominantly regarded by its most avid users in the first years after its creation, and how it still perceived by people whose familiarity with the theory is limited. In a meta-paradigm view the focus is not on contrasting the paradigms in an integrated model, but rather on regarding them as contradictory yet interwoven facets of complex phenomena. The emphasis is not only on their differences but also on their similarities, and especially on their interrelationships. Viewing the paradigms as paradoxes of organizational life that invoke a creative tension, fostering interplay leads to novel understandings and undertakings. It corresponds with the last two ways we situate the color theory: as a way to discern how reality is socially constructed and as a way to deal with paradoxes. It also corresponds with the rules of thumb listed later within each of the applications, like making sense of an organization’s health in diagnosis, combining different colors within a change strategy, learning to live within multiple realities as a change agent, and strengthening the collective’s ability to handle tensions. It is how the color theory is most often regarded by its most frequent users during the last decade, especially when issues are being addressed that are complex. However, it is also a view less familiar to the majority of users of the color model.

We notice in discussions about the color theory that people are tempted to value a meta-paradigm view over a multi-paradigm one. The former is often perceived as somehow better than the latter. We see this as a pitfall and prefer to regard the two as equally useful. In situations where people are unable to comprehend contrasting realities or fail to recognize their own bias, we see a multi-paradigm view as preferential. In situations where the issues are multi-faceted and people have a collective willingness and ability to deal with complexity, we see a meta-paradigm view as beneficial. A multi-paradigm view is more complex, but not better per se, and if it demands too much from those involved, we are inclined to regard it as the worse option. A case in point is how people propose to deal with color differences. In some situations, we see how people unwittingly use their own color preference to deal with differences. A blue proponent may suggest a ‘rainbow’-algorithm to choose the best color for each situation; a red proponent will advocate mutual understanding and a willingness to get along; a green proponent will insist on dialogue. When this is done unwittingly, it cloaks subtle fights for dominance of one view over others. In such situations, we delight in uncovering both the one-sidedness of the views and the unrecognized power struggles among those involved. This corresponds with a multi-paradigm view, fitting the limited competence of those involved to deal with contrasting perspectives. There are, however, other situations where people do have the competence to embrace both the similarities and tensions among paradigms. In such circumstances, the differences among the colors may somehow be transcended in a way that does full justice to their respective paradigms. An example is when good friends tell you the truth: moments when the red paradigm of empathy and support may go hand in hand with the green paradigm of confrontation and critique. At first sight empathy and critique look at odds with one another. But there are moments when it is exactly the confrontation that makes you feel seen, when closeness and learning reinforce each other; these moments are deep red and deep green at the same time. At such times, we embrace the meta-paradigm view already at work to encourage further synergetic interplay.

The example underscores something else: how different both situations feel and play out. In the first, it is about seeking a model or choosing a method to deal with differences, preferable for a whole

situation and an extended period of time. In the latter, it is not about some design that is chosen, but about chances that are taken. It is not about a cordoned-off place or amount of time, but about emerging moments. It is not something that a few people do to many, but about a collective engaged in co-producing something novel, something none of the participants could do by themselves. Playful improvisation allows a finesse that cannot be planned, protocolled, or predicted. We think these emergent moments are not that uncommon. We all come across them in our everyday lives. However, they tend to move out of sight when we try to “organize” and “manage” change. To take full advantage of the color model, we suggest looking at both the big picture and how small moments of change play out in our lives. They matter both and can reinforce each other.

The development of the ‘colors of change’ over a period of twenty years has shown that it can be used in many different ways. We like to regard its development as ongoing, in both familiar and new avenues. This brings us to three implications for research. Firstly, there continue to be opportunities to do research with and on the color theory itself, building on previous efforts (Vermaak & de Caluwé, 2017). Research with the model is possible by using it as an analytical frame to help gather (e.g. by using the validated test for change agents) or interpret data. Research on the model can help further elaborate key traits (such as diagnostic models, interventions, language) or help relate it to other methods, disciplines, aspects, or types of cases. Secondly, we regard further research on the meta-paradigm view as desirable in light of the persistent and subtle fights for dominance of single perspectives that can so easily go unnoticed or – once revealed – are being defended. These fights for dominance seem embedded in historical, cultural, and institutional contexts that easily cloak their presence and create powerful obstructions to deal with complexity. This limits people and it limits organizations. We have observed this dynamic over and over, in ourselves, in our practices, and in our research. We think it deserves further scrutiny how this dynamic plays out, how it can be interrupted, and how a collective ability to live in multiple realities can be strengthened. Lastly, we deem the micro-level of change agents’ craft deserving of more attention. The color theory comes to life in its four applications: knowing the color model is easy compared to the finesse it takes to, for instance, diagnose organizational health, combine different colored approaches where participants lack such experience, address one’s own dissonance, or establish a common language. We suggest this is true for change endeavors in general, not only related to the color theory. Though we, like many academics, love grand ideas, we find they come to life by acting with finesse in daily life on a small scale: a process of creating deep change through a series of small wins. In that sense, the size of change, where such subtlety gets lost, often can be at odds with the depth of change (Vermaak, 2013). We think that these small, subtle, everyday aspects of craft are where powerful practice resides and spreads to transform institutions. Research can help to better capture our implicit understanding of it.

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