CREATING A COLORFUL MODEL OF CHANGE:
A CASE STUDY OF THEORY DEVELOPMENT

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INTRODUCTION

This article describes how, almost twenty years ago, we came up with a meta-theory of change, now referred to as the "color model," and how that theory has developed over time. The model is widely used as a common language to help understand change and to create action perspectives, and it is grounded in literature and practice. Looking back, we wonder: What made the process of developing this model so productive? How should theory be developed? What could we have done differently? To address these questions, we describe our development process, keeping in mind Runkel and Runkel's (1984: 130) admonishment to theory developers: "we plead only that they do not save theory to label their ultimate triumph, but use it as well to label their interim struggles." We take on this analysis in a context of recurring dissatisfaction with the relevance of management theories to management practice, despite repeated calls to bridge the gap between both worlds (e.g., Ghoshal, 2005). We hope our experiences as scholar-practitioners can be of value.

FRAMES TO REFLECT ON THEORY AND THEORY DEVELOPMENT

Theory is not monolithic, but rather composite, made up of different elements. Whetten (1989) suggests that any theory specifies: a) what it is about (a collection of variables, constructs, concepts), b) how these elements are related (links and patterns) and c) why this is deemed to be the case (the assumptions underlying the what and the how). Checkland and Scholes (1999) insist that any phenomenon is best understood by what it "does." This raises the question: What does a good theory contribute? We find different responses to this question in the literature: some stress originality or utility, others validity, and still others resonance (e.g., Gorley & Gioia, 2011; Bacharach, 1989). These four criteria are often at odds with one another and compromises are required: "good theory splits the difference" (DiMaggio, 1995: 392). We use this composite and multi-criteria view of theory in this article. Smith and Hitt (2005) critique much of the literature on theory development as well intentioned but having little connection to the reality of creating theory. Nobody seems to develop meaningful management theory by just following formulas like: "identify variables, state relationships, and clarify boundary conditions." They asked thirty "great minds in management" to describe how they happened to develop what are now considered established management theories. Such an inquiry was warranted, as these theories are more recognizable than the processes used to develop them. The "great minds" concurred that theory development seemed more logical in hindsight; at the time, their experience was of winding, multi-year journeys, full of barriers and serendipitous events. Smith and Hitt nevertheless discerned four common stages of theory development, though the duration

and intensity of the stages varies. The first stage is characterized by "tension," such as a contradiction between one's theory and research findings. Such tension fuels a "search" stage where one suspends beliefs and discovers a new framework that is shaped both by serendipity and context. The framework is "elaborated" in a third stage by research, incremental modeling and the integration of ideas from other theories in collaboration with others. In the last stage, "proclamation" happens through publications and by addressing critiques and misconstruction.

THE COLOR THEORY OF CHANGE: A BRIEF GESTALT

As we want to focus this article on the development process, we provide here only an impression of the color theory (for more, see de Caluwé & Vermaak, 2015a). If we liken theory development to a tree that branches out over time (Zucker & Darby, 2005), the roots correspond to a set of paradigms of change that are characterized by different underlying assumptions and that result in contrasting change behaviors. These paradigms we have labeled with colors: Blue-print thinking is based on the rational design and implementation of change. Empirical investigation is seen as the basis for defining outcomes, and planned change (e.g., project management) is responsible for delivering them. Yellow-print thinking is based on sociopolitical ideas about organizations. This type of thinking assumes that people change their standpoints only if their own interests are taken into account. Change is seen as a negotiation, and is achieved by forming coalitions. Red-print thinking focuses on motivation: stimulating people in the right way is believed to induce behavioral change. Interventions range from reward systems or strengthening team spirit to an inspiring vision of the future. Green-print thinking has its roots in action learning and organizational development: changing and learning are deemed to be inextricably linked. Change agents focus on helping others discover their limits and learn more effective ways of acting. White-print thinking views change as continuous and pervasive. In this view, while change agents cannot control change, they can catalyze it. Change agents try to understand undercurrents, support those who grasp opportunities, and help remove obstacles in their path. These five color paradigms were elaborated in terms of key traits, related literature, and guidelines for application—three elements that constitute the "trunk" of the theory. Over time the theory "branched out," as we elaborated aspects of the colors and interactions between the colors, applied the theory in certain sectors and found links to other disciplines and methods, and developed formats and examples for teaching and aids for consulting. Almost twenty years of development has made the theory expand into a multitude of manifestations, making it both quickly familiar to anyone who has encountered it, while at the same time many of its aspects remain largely unknown to most people.

A RECONSTRUCTED HISTORY – PART I: INCEPTION (1997–1999)

In hindsight we can discern three main periods in the development of our theory — "inception," "storming and norming," and "maturity"—within which we find Smith and Hitt's (2005) stages of tension, searching, elaboration, and proclamation. The inception period started with our unease about the disconnect between the prevalence of change in our firm's practice and the absence of common know-how. We reviewed the literature and asked our colleagues to share their case stories and concepts. We conceptualized change methods, phases, models, and interventions, and created a change management course. A second tension arose between the eager acceptance of our collected ideas by our colleagues and their persistent, heated discussions about concrete cases.

We noticed that the proponents of different approaches almost seemed to come from different planets, interpreting cases in their own preferred way based on their underlying beliefs. The creative leap was to map these belief systems about change. This led to a five-paradigm model, which we chose to label with colors, rather than with descriptive labels like "rational-empirical." It felt arbitrary to single out one characterization, as each paradigm encompassed multiple and overlapping traditions. Also, the vocabularies of each of the paradigms are distinct, which can easily elicit befuddled responses from outsiders. In all this we were surely influenced by our OD roots, which makes us see knowledge as subjective and useful for reflection rather than prescription.

The five paradigms were elaborated by mapping possible characteristics, including types of interventions, roles of change agents, typical outcomes, ways to safeguard progress, et cetera. We created glossaries of typical phrases and described examples of typical situations in each of the colors. We also learned by watching colleagues apply the model, for example when designing change for real-life cases, discussing the problems of a certain issue or industry, or linking the model to consultancy models already in use. We noticed that the model quickly started to take on a life of its own: colleagues did not just use it internally, but shared it with clients as well.

This motivated us to publish our theory about the colors: a year after a first article, we published a Dutch handbook for change agents, which allowed us to share the model comprehensibly (de Caluwé & Vermaak, 1999). It quickly became one of the best-selling management books in the Netherlands, where it remains to this day with over 100,000 copies sold. We decided to essentially "freeze" the model, limiting the paradigms to five, as we reasoned that it could only become a common language among change agents if it stayed the same for years. We also began sharing materials for teaching: syllabi, exercises, presentations, a color test, et cetera.

A RECONSTRUCTED HISTORY – PART II: STORMING AND NORMING (1999–2006)

As the color theory gained visibility, new tensions arose. We faced contrasting demands from the world of academia and the world of practice. Some academics critiqued the model for being too simplistic: they felt we tried to fit a complex subject into a too-neat, objectivistic model. Some practitioners called for simplification: they wanted the theory to be more concise, with clear-cut algorithms for application. Another tension stemmed from the difficulty in talking "colorlessly": whoever taught it inevitably gave their preferred paradigm a positive twist, including ourselves.

Whilst the model was social constructionist in our minds, we had not positioned it that way. The academic critique spurred us to delve into the literature on meta-language, metaphors, and the consumption of knowledge. As consultant-academic hybrids we ventured more into the world of academia, accepting a professorship and conducting large research projects. We wanted to respond to practitioners' critiques as well, but were wary of instrumentalism, believing the model derived its value not by making life easier but by helping deal with complexity. We explored the metaphor of the Russian nesting dolls as an antidote for reductionism, as we learned that the inspection of any one paradigm inevitably revealed more sophisticated layers of that color. We began to harvest practitioners' experiences to see if guidelines could be deduced that remained sophisticated, and created a "knowledge center" in our firm as an organizing platform for what was to come.

A first elaboration was to minimize the use of neat overviews of the colors in tables and to present them instead as self-referential "planets": each an endlessly rich world in and of itself. We positioned it as a meta-language rather than a model and explored complementary and incommensurable stances. A second elaboration was to point out dynamics that hinder a multi-paradigmatic way of working, like the domination of some colors over others and competency traps

that prevent the use of a more effective color perspective. We also learned to compensate for our own biases and to present all the colors meaningfully. A third elaboration involved deducing application guidelines, pitfalls, and examples for diagnosis, strategy formation, self-reflection, and communication. In this period the activities mushroomed and much was produced in collaboration with others: colleagues, clients, and academics. The sheer amount of data overwhelmed us, limiting the extent to which it could be published. In terms of methodology, most could be described as action research, though some of it was quantitative. In hindsight we recognize that we used complementary ways of modeling, shifting the emphasis from "advanced" organizers to "systems models," "algorithms," and "germ cells": a fertile way to expand any theory (Engeström, 1994).

A period of productive divergence led to about forty different coauthored publications, complemented by an unknown number of publications by others. Most of these were geared toward Dutch practitioners and students, with a few in English, including a translation of our handbook for change agents (de Caluwé & Vermaak, 2003). The publications ranged from an exploration of aspects (e.g., identity) to links with other disciplines (e.g., coaching) to applications in certain sectors (e.g., health care). In 2006 we felt a need to converge again, incorporating many of our new findings in a second edition of the Dutch handbook, which doubled in size (de Caluwé & Vermaak, 2006). By this time our firm was no longer in the "center" of the model's proclamation. To support other educators, we continued to create didactic materials, including video lectures, colored "experience rooms," games, et cetera.

A RECONSTRUCTED HISTORY – PART III: MATURITY (2006–2015)

A new tension arose when advanced practitioners saw a need to combine colors in change endeavors in order to deal with more complexity. Coincidentally, economic crises hit, leading organizations to undertake contrasting change efforts concurrently (e.g., cost cutting alongside quality improvement). We wondered how the paradigms might be combined without losing their distinctive qualities. A second tension arose from the diversity of people working with the model. A steady demand persisted for more "how-tos" and for a basic introduction for those new to the field, next to a growing interest in complexity. How to keep the theory coherent and fresh, at this scale?

We could not help but be stimulated, professionally, by the issue of complexity. We became involved in research projects and consulting on systemic change and supervised students' research on complexity. In this context, we looked at the difficulty of designing multicolored change, the types of issues that warrant it, and the factors that would allow such change to be successful. These efforts were fueled by a growing literature on paradoxes and dialogic OD, positive deviancy and small wins, textual agency and institutionalism, and the morality behind change efforts.

A first elaboration focused on combining color strategies effectively: maintaining equality between contrasting approaches; furthering the cognitive, emotional, and relational space to discern and switch between such approaches; decreasing competency traps for lesser-used approaches; and creating loose couplings between approaches so they could reinforce one another. An ongoing line of inquiry looks at the colors with a paradoxical lens, exploring how play can lead to the emergence of "moments" of color and transient possibilities of transcendence. Other elaborations described different aspects of the model and its incorporation in existing methods or other disciplines. In all these activities we cooperated but generally no longer led the work. We can track about twenty publications that further described the model, alongside texts related to complexity.

To allow the model to be used by a wider group of people, we began exploring new formats co-developed with peers, publishers, and webinar providers, which led to a range of video lectures,

an Internet version of the color test (with over 100,000 tests taken), and a simulation game. An interactive platform for a community of practice was launched, which has since produced a workbook (Boersema-Vermeer & de Groot, 2015). At the end of this period we began reviewing our findings after these twenty years of developmental sprawl. A third edition of the Dutch handbook has been published (de Caluwé & Vermaak, 2015a), along with several peer-reviewed articles about different aspects of the theory. By this time three teaching insights have become quite clear. First: there is no single way to teach the color theory effectively, as the audiences vary widely. Second: no conceptual overview brings the theory to life as much as stories and imagery. Third: people's defensiveness can be easily triggered because the colors are value based, but it can also be reduced by using humor and by playful interaction. The common thread is that no standard narrative suffices, but learning is best created on the spot to stretch those involved as much as possible.

REFLECTION AND CONCLUSION

We recognize the composite nature of the color theory as both a collection of concepts and underlying paradigms. The interrelationships between concepts are probably the component that has developed the most over the years. Looking at interrelationships within the colors, we see how the congruency between traits and aspects reinforce each other and make a type of change powerful. We regard the relationships between the colors at the heart of key applications (e.g., as diagnostic viewpoints and as a situated model for strategy choice) and of discussions about handling complexity (e.g., how to combine the colors or use the tension between them). We also recognize that we have faced "vexing choices" in dealing with contrasting criteria (DiMaggio, 1995: 392). The theory scores well on originality, utility, and resonance in the world of practice. Having our primary base of operations in consultancy explains our desire that the theory be of value to our clients and our firm first, and to our colleagues and to education programs second, effectively turning it into a common language in the Netherlands within a few years. It also sparked debate, new teaching, and testing in the Dutch academic community in the late 1990s, but it was years before we shared it in English and or made it a priority to publish it in peer-reviewed journals. By that time quite a few publications on multiple perspectives of change were emerging (e.g., Huy, 2001; Caldwell, 2005). As a result, the theory's originality and to some extent its utility have decreased in the academic arena. In contrast, the validity of the theory has increased over the years, especially though different forms of action research complemented by a firmer grounding in the literature and empirical testing. We find that the criteria remain at odds with one another. For instance, teaching becomes powerful by prioritizing narrative richness over conceptual precision. While this may increase resonance, it also allows the color theory to mean many things to many people. This may hamper the precision of the concept and as a result utility and validity may suffer too.

We have found Smith and Hitt's (2005) four-stage model very useful for describing the theory's development. The interpretative frame made us rethink the sometimes contrasting recollections we had and helped us to attain a better understanding of the development process. We wish to highlight three such insights. First, the influence of context and serendipity in the search stage is apparent: we see how societal trends, consultancy fads, and academic debates affected the development process, and how our own affiliations and backgrounds influenced both the direction we took and the resources we had. For instance, using the theory as a dialogic and didactic tool illustrates that though we might be aware of our own color preference, we have not lost it. Second, we have a deeper appreciation of the development process as causally ambiguous, taking many years of incremental development. Smith and Hitt (2005) may critique academics for having

rationalistic ideas about theory development, but this misconception may be at least as widespread amongst practitioners. We too were inclined at first to regard theory development as a linear empirical endeavor that bore little resemblance to what we were doing. While we might have discarded such a naïve view of academia over the years, we are still evaluating what makes theory development work, and are surprised to find that the choices we made seem more robust in hindsight than we believed at the time. Third, we have become acutely aware of how tensions seem to fuel different periods of development. Initially such tensions started within us, as we perceived a lack of know-how on change and a gap between different schools of thought. But soon after we were faced with tensions originating externally, from the contrasting needs of and critiques from the worlds of practice and academia (second period), and then from people who 'stretched' the color theory to address and research complex issues (third period).

Analyzing the development of the color theory also raises some points for discussion, three of which are highlighted here. First, we would like to expand Smith and Hitt's (2005) four-stage model a bit. They note that the stages may overlap or move back and forth. We, however, discerned three consecutive periods each sparked by a different type of tension, and thus resulting in different types of search, elaboration, and proclamation. We wonder if this might not be true for other theory development as well. We also notice much more emphasis on the proclamation stage in our case. In the original model, proclamation relates primarily to publishing findings and responding to critiques, which makes sense given that they looked at academics—all of the "great minds" selected—as developers. But as academic practitioners we felt a need to supplement this, for example by going on the road to get the word out, establishing a community of practice, and producing teaching and consultancy aids. To give the four-stage model wider applicability we suggest adding these types of activities to the model. Second, we notice that the call to bridge the gap between academia and practice is mostly interpreted as a need for academics to inform practice with new insights. However, if it is true that most ideas in management come from the world of practice rather than academia (Bartunek, 2008; Corley & Gioia, 2011) an argument could be made that academics would be better off researching theories that have already "made it" in practice, instead of, or at least in addition to, importing new ones. Making our way into academia as practitioners we learned the hard way how to reconcile two worlds with contrasting demands. Though we have enjoyed this journey, we would also have welcomed more academics joining forces with us. It would have accelerated the development of the model and led to more timely publication in the academic press. A last discussion concerns the downside of originality. In academia we try to push the boundaries of our knowledge: journals require authors to contribute something new. In practice, publications remain popular as long as they are fresh and digestible. In both arenas this can be at the expense of a repository of robust ideas that is valid and versatile. For instance, in the practice of OD, we still find that group dynamics and facilitation are at the heart of our profession; they are quite complex phenomena that require years to handle deftly. However, this know-how has only become less visible over the years in both arenas. Similarly, we observe the color theory is able to profoundly shift the perceptions of all those who are learning to deal with change anew as well as those experienced at directing complex change. But here too, we wonder about its longevity. We place a high premium on classics: a traditional pot roast, classic Coke, a perfect apple pie. Why not do the same with "management classics"? Just as a meal tastes delicious when crafted with know-how, concepts stay powerful when they are alive in practice, teaching, and research. We think it is worth pondering how to do that with our classics and thus give theory development more lasting relevance.

REFERENCES AVAILABLE FROM THE AUTHORS