

**Policy and Society** 



ISSN: 1449-4035 (Print) 1839-3373 (Online) Journal homepage: https://www.tandfonline.com/loi/rpas20

# A small wins framework to overcome the evaluation paradox of governing wicked problems

Catrien J.A.M. Termeer & Art Dewulf

To cite this article: Catrien J.A.M. Termeer & Art Dewulf (2019) A small wins framework to overcome the evaluation paradox of governing wicked problems, Policy and Society, 38:2, 298-314, DOI: 10.1080/14494035.2018.1497933

To link to this article: https://doi.org/10.1080/14494035.2018.1497933

© 2018 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 02 Aug 2018.

ك
---

Submit your article to this journal 🗹

Article views: 7215



View related articles 🗹

View Crossmark data 🗹



Citing articles: 26 View citing articles

#### ARTICLE

OPEN ACCESS Check for updates

Routledae

Taylor & Francis Group

# A small wins framework to overcome the evaluation paradox of governing wicked problems

## Catrien J.A.M. Termeer and Art Dewulf

Public Administration and Policy Group, Wageningen University, the Netherlands

#### ABSTRACT

The evaluation of policy strategies to tackle wicked policy problems inevitably involves a paradox of trying to judge solutions for problems that have no solutions and for which additional efforts might increase the chances of finding better responses. This paper analyzes how the concept of small wins can contribute to evaluating progress in wicked problem areas in a way that energizes a variety of stakeholders instead of paralyzing them and embraces complexity instead of reverting to taming and overestimation. It presents a small wins evaluation framework that is rooted in the underlying policy perspective of making progress through accumulating small wins. It comprises three steps: 1) identifying and valuing small wins; 2) analyzing whether the right propelling mechanisms are activated so as to accumulate into transformative change; 3) organizing that results feed back into the policy process to activate new small wins. This framework will inevitably clash with unrealistic expectations of addressing wicked problems rapidly, radically and comprehensively.

#### **KEYWORDS**

Wicked problems; small wins; policy evaluation; transformative change

# Introduction

Across the world, governance scholars and practitioners are increasingly attracted to the concept of wicked problems to characterize and address current governance challenges (special issue Innes & Booher, 2016; Peters, 2017). As originally defined by Churchman (1967) and Rittel and Webber (1973), wicked problems refer to a class of social problems that are ill-defined and continuously changing; where many actors are involved with conflicting values; and where, because of the high levels of interconnectivity, today's solutions often turn out to be tomorrow's problems.

A growing body of literature suggests alternative responses to wicked problems, in which idealistic notions about solving wicked problems are replaced by the idea of tackling such problems (Duckett, Feliciano, Martin-Ortega, & Munoz-Rojas, 2016). Accordingly, a variety of 'hopeful' strategies are presented, such as frame-reflective policies, collaborative arrangements, adaptive leadership, inclusive processes and network governance (e.g. Innes & Booher, 2016; Levin, Cashore, Bernstein, & Auld, 2012; McMillan & Overall, 2016; Roberts, 2000; Weber & Khademian, 2008). Most literature

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial License (http://creative commons.org/licenses/by-nc/4.0/), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

CONTACT Catrien J.A.M. Termeer 🖾 katrien.termeer@wur.nl 🖻 Public Administration and Policy Group, Wageningen University, the Netherlands

<sup>© 2018</sup> The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

also notes that changes in governance systems themselves are required to enable these new strategies, as conventional command and control structures are ill-suited to do so (Candel, 2016; Head & Alford, 2015; Termeer, Dewulf, Karlsson-Vinkhuyzen, Vink, & Van Vliet, 2016).

However, any positive impact resulting from these strategies, even where it may exist, is extremely difficult to assess (Duckett et al., 2016). The inherent characteristics of wicked problems complicate attempts to evaluate policy responses in terms of performance, effectiveness and legitimacy. Consequently, tackling wicked problems not only challenges the design of governance systems and strategies, but also poses challenges for alternative methods of evaluation. Strikingly, many wicked problem analysts circumvent the evaluation question or are very cautious in their assessment of policies by referring to the intractability and indefinability of wicked problems (Duckett et al., 2016). This paper embraces this challenge by addressing what we call the evaluation paradox of wicked problems. On the one hand, wicked problems have no stopping rule, implying that it is not clear when the problem has been dealt with satisfactorily—one can always do more and better (Rittel & Webber, 1973). On the other hand, policy actors need to judge their strategies in order to improve them and to account for them towards a variety of audiences.

Uneasiness with, or unawareness of, this evaluation paradox may increase the risk of two unproductive responses that are very familiar for wicked problems: paralysis and overestimation. Paralysis occurs when people experience or define the wickedness as so overwhelming that it discourages them and prevents them from doing anything about it (Levin et al., 2012; Roberts, 2000; Weber & Khademian, 2008). Evaluating policy strategies for wicked problems in similar ways as for other problems can easily result in highlighting negative outcomes such as policy delays, increasing costs or policy failure. This may reinforce paralysis: 'it confirms what we already thought...there is nothing we can do about this problem anyway' is a commonly heard view. Overestimation is the belief that wicked problems can actually be solved, implying a focus on one aspect or a single standpoint (Roe, 2016). This response is tempting for policymakers, who, while dealing with high public demands or political pressure, tend to make promises that are far beyond their ability to deliver. Evaluation methods that compare policy outcomes to previously set promises, targets or budgets do not account for the uncertainty, ambiguity, and complexity characteristic of wicked problems. Sticking to these methods may reinforce overestimation: 'further simplification is needed....we will solve this problem once and for all' is a common refrain.

To advance the evaluation debate and to make it relevant for policy practices, this paper addresses the question of how to evaluate responses to wicked problem domains in a way that energizes a variety of stakeholders instead of paralyzing them and embraces complexity instead of reverting to overestimation. With stakeholders we do not only refer to public actors (policy makers and political representatives) but also to private and civil society actors who contribute to public values. All these stakeholders can be hold accountable for their policies and may aim to learn about it. Therefore, we refer to evaluators as actors who have formal or informal responsibilities for the evaluation process. More specifically, this paper analyzes how the concept of small wins could contribute to this debate. The concept of small wins, defined as 'concrete, completed, implemented outcomes of moderate importance' (Weick, 1984, p. 43), was first coined by the organizational psychology theorist Karl Weick in his seminal paper entitled 'Small wins: Redefining the scale of social problems'. An increasing number of authors refer to the concept of small wins in governance contexts (e.g. Ansell & Gash, 2007; Alford & Head, 2017; CFAR, 2012; Duckett et al., 2016; Havers, 2013; Jason, 2012; Lott & Webster, 2006; Rog, 2015; Termeer, Dewulf, & Biesbroek, 2017; Vangen & Huxham, 2003). However, the concept has not been extensively applied to the domain of wicked problems, is not deliberately related to evaluation practices, and lacks conceptual clarity in general. This paper aims to fill these gaps through a theoretical and exploratory analysis of small wins and the wicked problem literature.

This paper starts with an elaboration of the evaluation paradox. The next section briefly explains the underlying policy perspective of making progress through accumulating small wins, and its theoretical roots. The three steps of the small wins evaluation framework are presented and elaborated in the next section. After that, we critically discuss the contribution of this small wins evaluation framework to the wicked problem literature and practice. The paper concludes with a brief summary of the main results.

#### The evaluation paradox

The evaluation of wicked policy problems inevitably involves a paradox of trying to judge solutions for problems that have 'no solutions' and for which 'additional efforts might increase the chances of finding a better solution' (Rittel & Webber, 1973, p. 162). When Rittel and Webber criticized current planning systems as inappropriate for dealing with wicked problems, evaluation was an inherent part of those criticized systems. Planning systems were seen as 'cybernetic processes of governance, incorporating systematic procedures for ... monitoring and evaluation ... so that errors can be corrected' (Rittel & Webber, 1973, p. 159). The hope to perfect this system resulted in pleas for clarification of purposes, better articulation of goal-directed actions, sharper delineation of system boundaries, and smarter operationalization of desired outcomes and indicators, which are all very problematic for wicked problems (Rittel & Webber, 1973). Rittel and Webber (1973) also criticized the underlying normative principle of efficiency-designing actions that might effectively narrow the gap between what-is and what-ought-to-be, and implementing them cheaply-and qualified it as pervasive in handling wicked problems. At most, proposed solutions could be described as better or worse, or satisfying, or good enough (Rittel & Webber, 1973). However, these judgements differ widely according to people's 'group or personal interests, their special value-sets, and their ideological predilections' (Rittel & Webber, 1973, p. 163).

Since Rittel and Webber (1973), many scholars have struggled with what we have coined the evaluation paradox, mirroring many of the original arguments. Most of them recall the tensions caused by the varied meanings and values of both the problem definitions and the solutions in a pluralistic world; the concept that preferences are not given but shaped by action; and the binary rhetoric of success and failure (e.g. Guba & Lincoln, 1989; Hoppe, 2011; McConnell, 2010). Others emphasize the interconnectedness of wicked problems and the challenge to identify and appraise unanticipated side-effects and unforeseen achievements of policies (e.g. Van Twist, Kort, & Van Der Steen, 2015) or to recognize progress if dealing with any part of the situation requires somehow dealing with its other parts (Alford & Head, 2017). A specific challenge of the

feature of interconnectivity is the time lag or temporal disconnect (Ford, Berrang-Ford, Lesnikowski, Barrera, & Heymann, 2013). The climate adaptation domain, for example, clearly reflects the difficulty of 'attributing reduced impact specifically to adaptation, where success may not be apparent for decades and where impacts averted in the future are tricky to estimate' (Ford et al., 2013, p. 39). In addition, Putansu (2015, p. 25) points to complications caused by the fragmented governance context of wicked problems: 'Because a single agency does not have oversight of all interventions, individual agency performance measures do not comprehensively capture goals and objectives, and are inadequate to assess the net impact of government interventions'.

In general, linear-rational evaluation methods are qualified as not suitable to provide balanced judgements for wicked problems, because they only fit the unambiguous contexts of tamed problems (Gharehgozli, Mileski, Adams, & Von Zharen, 2016; Head & Alford, 2015; Noordegraaf & Abma, 2003; Van Twist et al., 2015). These methods do not account for typical wicked problem challenges such as examination of multiple frames, conflicting goals, changing priorities, problematic attributions, uncertain solutions, constantly evolving problems and time and scale disconnects (Ford et al., 2013; Putansu, 2015). What is more, these linear-rational methods can even make the problem worse; this shows the pervasive effect of the efficiency principle. In their analysis of child abuse programmes, for example, Devaney and Spratt (2009) found that policymakers anticipate the focus of evaluation programmes on short-term tangible outcomes and therefore pay less attention to achieving longer term outcomes that are more likely to meet children's needs.

To overcome this evaluation paradox, an alternative, small wins evaluation framework is required. Given the lack of clear causalities and the various disconnects in loosely coupled governance systems, we prefer this framework for evaluating progress in wicked problems areas above evaluating outcomes of strategies (Alford & Head, 2017; Duckett et al., 2016). In addition, it is important that this framework fits into an underlying policy perspective that does not start from linear policy processes (Breuer, Lee, De Silva, & Lund, 2016; Rog, 2015). The concept of policy perspective is related to the concept of programme-theory, defined as the underlying theory of change of a programme with the aim of guiding evaluation (Breuer et al., 2016; Donaldson, 2007; Rog, 2015). A particular programme-theory is rooted in a mixture of social science theories (e.g. social psychology, behavioural economics, political science) and consists of ingredients that constitute progress (or outcomes), types of activities that are expected to relate to progress, generative mechanisms and contextual factors (Donaldson, 2007; Rog, 2017). A policy perspective is the programme-theory for a policy field.

# Theoretical roots and conceptualization of small wins

The guiding policy perspective behind the small wins evaluation framework is the idea of making progress by accumulating small wins, in which linear policy development approaches are replaced by non-linear complex systems thinking. This policy perspective is rooted in (social) theories on sensemaking (Weick, 1995) and continuous change (Weick & Quinn, 1999) from organization science, and in incrementalism (Lindblom, 1959, 1979) from policy science.

Sensemaking refers to a socially interactive process by which actors make their world logical and meaningful through talking and acting (Weick, 1995). It comes to the fore if actors are coping with ambiguous issues (such as wicked problems) that can no longer be understood within the existing routines (Weick, 1995). This process of sensemaking is not a passive act of discovering reality but an active process in which actors enact their environment by isolating elements for closer attention, probing some activities, seeing what responses that attracts, and seeing how people react, deepening their insights and so forth (Weick, 1995). Sensemaking is also retrospective, meaning that actions are not known until they have been completed and have become lived experiences.

This ongoing process of sensemaking forms the basis for the continuous change perspective in organization theory. Whereas episodic changes start from the idea of short periods of planned fundamental changes in long periods of stability, continuous change starts from the idea that organizations are continuously adapting, learning and improvising through small steps (Weick & Quinn, 1999). Here, the fact that changes are relatively small does not mean that they are trivial in the long term (Vermaak, 2013). Indeed, they can amplify and cumulate into large-scale change, particularly in complex systems characterized by a high level of interconnectedness (Weick & Quinn, 1999). The continuous change perspective even argues that changes cannot be simultaneously in depth, large scale and quick (Termeer et al., 2017; Vermaak, 2013).

In policy science, Lindblom (1959) introduced the incremental method, defined as 'continually building out from the current situations, step by step and by small degrees' (Lindblom, 1959, p. 81). This method, also referred to as 'muddling through', was based on his analysis of the unrealistic expectations of making rational, comprehensive decisions given the cognitive limitations regarding complex problems and widespread conflicts over values. Later, Lindblom (1979, p. 520) opposed the criticism that incrementalism would not be able to cope with complex problems, by stating that 'a fast-moving sequence of small changes can more speedily accomplish a drastic alteration of the status quo than can an only infrequent major policy change'.

Weick (1984) elaborated the ideas on continuous and incremental change into his concept of small wins and applied it to the field of complex societal problems. He argues that the massive scale on which social problems are conceived often diminishes the quality of thought and precludes innovative action, because dysfunctional levels of arousal, frustration and helplessness are activated (Weick, 1984). This argument is illustrated by how the framing of hunger as a problem of producing 'more food, which requires greater use of energy for farm equipment, fertilizers, and transportation, adding to the price of energy, which raises the cost of food, putting it out of the price range of the needy' reduces the perceived ability to do something about it (Weick, 1984, p. 40). The pervasive effect of a too high level of arousal is Weick's main argument for introducing the concept of small wins. In addition, a small wins approach enables policymakers to start with fewer preconceptions (Weick, 1984). Because it is a small step only, it is not necessary to postpone measures until everything is analyzed, which is inherently impossible for wicked problems (Urpelainen, 2013). Furthermore, the modest costs of both failure and benefits of small steps lower resistance and political competition for successes: 'because someone's small win is someone else's small loss, the stakes are reduced, which encourages the losers to bear their loss without disrupting the social system' (Weick, 1984, p. 47). Lindblom (1979, p. 520) also refers to this line of reasoning when he argues that: 'Incremental steps can be made quickly because they are only incremental. They do not rock the boat, do not stir up the great antagonisms and paralyzing schisms, as do proposals for more drastic change.'

Small wins have the potential to accumulate into a series of small wins that may finally result in transformative change (Amabile & Kramer, 2011; Brown & Eisenhardt, 1997; Termeer et al., 2017; Vermaak, 2013; Weick & Quinn, 1999). Although policy-makers can go for a small wins strategy, they cannot control it, because 'small wins do not combine in a neat, linear, serial form, with each step being a demonstrable step closer to some predetermined goal' (Weick, 1984, p. 43). Consequently, a strategy of small wins cannot be conceptualized as a linear approach; rather, it is more a 'retrospective summary that imputes a consistent line of development' (Weick, 1984, p. 43).

# The small wins evaluation framework

The policy perspective of continuous change through accumulating small wins is in particular promising for making progress in complex wicked problem areas, because it allows people to embrace ambiguity, uncertainty, and interconnectedness and to welcome new understandings rather than tame wickedness. Moreover, small wins are less overwhelming, less threatening, and have the potential to accumulate into transformative change through non-linear processes. We have developed an evaluation framework that fits into this policy perspective, consisting of three steps: 1) identifying and valuing small wins; 2) analyzing whether the right propelling mechanisms are activated so as to accumulate into transformative change; 3) organizing that results feed back into the policy process where they in turn activate new small wins.

#### Identifying and valuing small wins

Many small wins may go unrecognized, may not be taken up, and may never become institutionalized (Goodman & Dean, 1982). Discarding small wins is an important risk for evaluators, who tend to observe only the processes and results, what they had thought would happen given the formal plans and activities (Weick, 2000). Therefore, the first step is to identify and value these emerging small steps. It is not easy to identify small wins, as they typically emerge under the radar of public attention and are hard to find. We have distinguished four crucial characteristics (see Table 1).

Characteristic	Indicator	Contra-indicator
Concrete outcomes	Visible results	Promises and ideas only
In-depth changes	Second- and third-order change	More of the same
	Radical new practices	Quick wins
	·	Low hanging fruit
Moderate importance	Micro or local level	Large scale
·	Intermediate	Best practice
Positive judgement	Improvement	Small loss for many actors
	Step forwards	,
	Related to shared ambition	

Table 1. Characteristics and indicators of small wins.

Firstly, small wins refer to concrete outcomes. From sensemaking theory, it stems that only when people have implemented an activity does it become a lived experience on which they can jointly reflect. Small wins thus always go beyond nicely framed promises or creative ideas only. Secondly, small wins are always examples of in-depth change and thus include a change in routines, beliefs or values. Whereas superficial or first-order change means improving current practices within the existing logic, in-depth or second-order change aims to radically change these practices by altering values, frames and logics underlying them (Argyris & Schon, 1996). Small wins differ from quick wins or low hanging fruit, which are first-order changes where people take fast and easy steps to solve simple issues and gain easy victories (Bryson, 1988; Foster-Fishman & Watson, 2012; Vermaak, 2013; Weick, 1984). Pragmatically, it is often easier for governments to cherry-pick the least wicked parts of problems or to address symptoms only, rather than tackling underlying social causes (McConnell, 2010: Sterner et al., 2006). Thirdly, the steps are of moderate importance. They are mostly located at a micro or local level because only that level allows people to effectively meet complexity and turbulence (Vermaak, 2013). In the context of complex non-linear systems, change is only small within a short time period because it can accumulate (Braybrooke & Lindblom, 1963). Many authors thus refer to small wins as intermediate outcomes (Ansell & Gash, 2007) or even as seeds for transformative change (Urpelainen, 2013; Weick, 1984). Small wins must not be confused with the term best practice, because things can always be done better (Roe, 2016).

The final characteristic is its positive judgement, as not all small steps qualify as small wins and could also constitute small losses. Furthermore, a small win for one person could be a small loss for someone else. This is the most difficult element of small wins because it depends on the values attached to them, which differ from actor to actor and change over time (Lindblom, 1959). Furthermore, small wins for certain groups can be overshadowed by damages to aims of other groups (McConnell, 2010). Most authors are not very explicit regarding this point and relate small wins to general qualifications, such as improvements (Weick, 1984) or steps forwards (Rog, 2015). Moreover, and coherent with the theory on sensemaking, Weick (1984) argues that identifying small wins is a question of interactive labelling, and that small wins can only modestly and in retrospect be related to final outcomes. Bryson (1988) takes a more outspoken positon, arguing that the concept of small wins is always informed by an overall sense of direction or a global vision. Other authors who apply the concept also relate it to a shared ambition or a big dream. For example, in his analysis of North-South climate finance initiatives, Urpelainen (2013) labels steps as small wins if they contribute to limiting the increase in global mean temperature to 2°Celsius. In our framework, we refer to small wins if particular steps make an important contribution to a more or less shared ambition. Useless to say that setting shared ambitions and labelling outcomes as contributing to this is inherently political in a context of multiple stakeholder processes.

Although the literature mentions experiments as an important example (e.g. Bulkeley & Castán Broto, 2013), small wins are not limited to pilots and experiments and display much greater variety. Weick (1984), for example, presents the example of the first administrator of the U.S. Environmental Protection Agency in the early 1970s, who on his first day in office started five lawsuits against major American cities that did not comply with obscure 80-year-old water pollution legislation. Other examples from the literature are organizing a

breakfast for homeless people (Plowman et al., 2007), activists who forced pharmaceutical companies to disseminate drug treatments against HIV (Jason, 2012), the development of joint language in a roundtable on waste management (Turcotte & Pasquero, 2001), joint fact-finding (Ansell & Gash, 2007) or food on the table for farmers who participated in South African water management fora (Warner, 2006).

# Analyzing whether the right propelling mechanisms are activated

One small win may seem and remain unimportant (Weick, 1984). In order to evaluate the contribution of small wins to progress in wicked problem areas, it is important to analyze whether small wins accumulate and scale up, broaden or deepen. If not, a small win can become a pyrrhic victory for policymakers (McConnell, 2010). Therefore, the second step in the evaluation framework is to analyze whether the right propelling mechanisms are activated. We define propelling mechanisms as chains of events that reinforce themselves through feedback loops with an amplifying effect on an initial small change so that it becomes larger and stronger, or intensifies and escalates its consequences (Garud & Kumaraswamy, 2005; Plowman et al., 2007). Replacing linear change approaches by thinking in loops helps to recognize the underlying ongoing, iterative, and cumulative cycles that propel small wins (MacKay & Chia, 2013). Whereas vicious cycles vield progressively detrimental outcomes, virtuous cycles vield increasingly favourable outcomes (Garud & Kumaraswamy, 2005). An exploration of the literature on small wins and transformative change resulted in a list of five mechanisms (energizing, learning by doing, logic of attraction, bandwagon effect and coupling) that not only propel initial small changes, but also affect how they impact one another so as to accelerate the amplification of small wins (Plowman et al., 2007). These propelling mechanisms target both the stakeholders involved in the initial small win as a broader audience.

# Energizing

The energizing mechanism is based on motivational drivers. The concrete outcomes and visible results of a single small win provide actors with the ultimate reward of positive accomplishment and the conviction that they can make a difference (Weick, 1984). The excitement that small wins are attainable will encourage them to almost immediately look ahead to the next potential small win (Reay, Golden-Biddle, & Germann, 2006). Subsequently, the appraisal of a series of small wins can propel a positive virtuous cycles of hope, faith, optimism and confidence. Conversely, when people perceive that they cannot achieve valued outcomes, or are pessimistic about potential improvement, it may result in a negative vicious circle of anxiety, fear, frustration and inactivity (Kossmann, Behagel, & Bailey, 2016).

The energizing mechanism is not limited to the technical or physical dimension of tangible outcomes—'yes, it can'—but also entails the social dimension—'yes, we can'. Ansell and Gash (2007), for example, revealed how intermediate outcomes feed back into the collaborative process, encouraging a virtuous cycle of trust building and commitment (Ansell & Gash, 2007, p. 561). In addition, Jason (2012) showed how a small win by a marginalized group of patients who unexpectedly received what they had asked for not only energized them to make more demands and form more coalitions, but also shifted the perceived power inequalities and reinforced their agency.

#### Learning by doing

The learning by doing mechanism is based on the idea that each step will result in outcomes that will inherently present and expand notions of what is possible and worth trying (Feldman, 2000). Small wins are like 'miniature experiments that test implicit theories about resistance and opportunity and uncover both resources and barriers that were invisible before the situation was stirred up' (Weick, 1984, p. 44). Each attempt to achieve a small win, whether it is successful or not, might activate learning by doing because the visible outcomes provide quick feedback on the effectiveness of strategies, offer immediate insights into system reactions, and encourage reflection on personal and other belief systems (Foster-Fishman & Watson, 2012). The associated risks of next small steps are rather modest; this allows people to be more willing to experiment with new understandings and to welcome, rather than reduce, complexity (Farjoun, Ansell, & Boin, 2015; Stirling, 2010; Weick & Westley, 1996). In particular, surprising outcomes (actions do not produce the intended outcomes) or disappointing results (undesirable outcomes or new problems) may propel iterative learning cycles (Feldman, 2000, p. 620). This mechanism is intensified if people have the capacity and feel encouraged to reflect-in-action (Garud & Kumaraswamy, 2005). Many projects that are formally labelled as pilots or experiments are very limited in scope or time and do not allow for iterative processes of experimenting (Bulkeley & Castán Broto, 2013).

#### Logic of attraction

The logic of attraction mechanism means that resources tend to flow towards winners (Ford & Ford, 1994). Because visible results of single small wins may guarantee more chances of success and more certain positive outcomes, people will work for them and mobilize new resources, so that slightly larger wins can be attempted (Weick, 1984). Urpelainen (2013), for example, showed how small, successful, technological bottom-up projects attracted private financial resources that contributed to the creation of new climate financing constituencies who supported even more ambitious mitigation efforts. Of course, a big win could also be very attractive, but 'big wins evoke big countermeasures and altered expectations, both of which make it more difficult to gain the next win' (Weick, 1984, p. 45). The logic of attraction mechanism results in an accumulation of small wins not only because small wins may attract new allies and new resources, but also because they discourage the usual opponents (Weick, 1984).

## Bandwagon effect

Besides the directly involved stakeholders, small wins may inspire others to see more concretely what an alternative way of organizing would look like, and they may imitate or adopt it (Reay et al., 2006). The bandwagon effect is a psychological phenomenon whereby people do something because other people are doing it (Behn, 2002). The visible outcomes may inspire other people to take similar actions (Feldman, 2000; Rogers, 2003). If small wins occur at the same time in different places, they may become part of a broader movement for transformative change (Weick & Westley, 1996), and there is no easy way to stop such an infectious pattern (Reay et al., 2006). This bandwagon mechanism can be activated if small wins are publicly acknowledged and celebrated.

# Coupling

Small wins may also accumulate when they combine with other events across boundaries of policy systems and scales (Reay et al., 2006). This coupling mechanism is based on the idea that, in loosely coupled systems, a seemingly insignificant event in one part of the system can set off chain reactions and generate cumulative effects in other parts (Arthur, 1990). Plowman et al. (2007), for example, analyzed how a single decision to offer breakfast to homeless people led to radical change because the coupling mechanism activated unexpected synergies between problems of a church community, care professionals and homeless people. Another example is how some very small cityfarming projects in Rotterdam (the Netherlands) accumulated through new couplings with problems in the fields of climate adaptation, health, architecture, tourism, social exclusion and real estate value (Cretella & Buenger, 2016).

#### Robustness

All of the above-described mechanisms contribute to the dispersion and accumulation of small wins. The robustness mechanism means that, when small wins become numerous, they may be more likely to result in sustained change or desired path dependencies (Levin et al., 2012). This mechanism entails several phases. Most small wins are fairly quiet initiatives that remain somewhat 'under the radar' and are less prone to premature termination (Reay et al., 2006, p. 994). They attract less media attention and are less vulnerable to attack (Weick, 1984). In due time, people may gain confidence in the positive effects, thereby contributing to widespread acceptance (Reay et al., 2006; Rogers, 2003). The moment that they become more visible for opponents, the point of no-return is reached, meaning that turning back to the initial situation is impossible because they have become too numerous or are already legitimized and institutionalized in new practices (Green, 2004). Robustness may further increase when the community benefiting from the small wins expands (Levin et al., 2012). Small wins are thus stable building blocks that are more structurally sound than a single big win (Weick, 1984).

#### Mutual connections

The various propelling mechanisms can be revealed by identifying indicators of their emergence. Table 2 provides an overview. The presence of one mechanism is sufficient

Propelling mechanisms	Indicators	
Energizing	Energy and enthusiasm	
	Empowerment	
Learning by doing	More than one experiment	
	Learning outcomes guide new experiments	
	Experimenting also continues after disappointing and unexpected outcomes	
Logic of attraction	Other communities know and value wins	
	Additional resources	
Bandwagon	Highlighting and celebrating wins	
Coupling	Connections with problems or aims from other policy domains	
	Connections across scales	
Robustness	Numerous	
	Non-stoppable	
	Internalized behavioural change	
	Examples of resisted opposition	

Table 2. Indicators for identifying propelling mechanisms.

to activate the accumulation of small wins, but the existence of more mechanisms has a stronger effect thanks to the mutually reinforcing patterns. For example, the above-described energizing mechanism may reinforce personal and political agency to expand small wins to other localities and problems and thus activate coupling mechanisms (Lott & Webster, 2006). In turn, couplings with problems and actors in other policy domains or at other scales will strengthen the robustness mechanism.

#### Organizing that results feed back into the policy process

This evaluation framework is rooted in the characterization of policy change as continuous rather than episodic (Rog, 2015; Termeer et al., 2017; Weick & Quinn, 1999). Consequently, evaluation is also a continuous process. The results of identifying and valuing small wins feed back into the policy process where they in turn enhance the further acceleration of small wins through activating the amplifying mechanisms. Conversely, if evaluators do not recognize and appreciate small wins, they run a great risk of discarding the most creative innovators and the best innovations (Weick, 2000). The crucial final step in our evaluation framework is organizing that results feed back into the policy process. On the one hand, it is about telling the actors directly involved as well as the world how important the emerging small wins and propelling mechanisms are, and making them more salient through inspiring stories (Baez & Abolafia, 2002; Termeer et al., 2017). On the other hand, it is about encouraging actors to seriously reflect on how they have achieved accumulating small wins and how they can use these insights to overcome barriers to initiating or upscaling new small wins. Feed backs are targeted to all phases of the policy process including agenda setting, policy design, implementation or developing an evaluation framework.

In this step, the role of evaluator may move to that of an interventionist who opens up deadlocked situations. In situations where policymakers are unhappy with progress, or feel overwhelmed by wicked experiences, evaluators can reanimate them by showing opportunities for small wins or small achievements at other places in the system. Most tensions arise in situations where policymakers claim to have solved a wicked problem. It is up to the evaluators to create some room for reflection in which they can critically analyze the claimed successes by using the above-described framework.

It goes without saying that continuous evaluation cannot be done by external evaluators only. It requires interactive processes whereby actors involved in different parts of the system jointly observe the wicked problem area, recognize potential small wins, judge their fruitfulness for making progress and identify propelling mechanisms. Given the interconnectedness of wicked problem areas and the fragmentation of the governance system, nobody has the overview. Above all, active involvement increases the chance of the results feeding back into the policy process, where they in turn energize people to search for new small wins or activate mechanisms to accelerate intermediate outcomes.

# Discussion

So far, we have presented a framework for evaluating progress in tackling wicked problems. In this section, we critically discuss three topics related to our evaluation

framework: 1) the criticisms of the underlying policy perspective, 2) the question of whether it is a framework for evaluation only and 3) its relevance for policy practices.

Although we have qualified the policy perspective of making progress through accumulating small wins as very promising for wicked problems, it is disputed also. Various scholars criticize the idea of pursuing small steps in the hope of contributing systematically to overall improvement, by referring to curing of symptoms, cherrypicking the less wicked elements or attacking a problem on too low a level or in too short a term (Behn, 2002; Head, 2008; Rittel & Webber, 1973). Some scholars even qualify this strategy as risky because it may result in lock-ins or path dependencies that make it more difficult to finally attack the really big problems with big solutions (Behn, 2002; Head, 2008; Rittel & Webber, 1973). This controversy is related to the underlying theory of change (Weick & Quinn, 1999). From an episodic change perspective, downscaled problem frames could be perceived as conducive to the curing of symptoms, but a continuous change perspective conceptualizes downscaled problem frames as seeds for transformative change. It is also important to emphasize that a small wins strategy differs from strategies such as picking the less wicked elements or 'breaking the problem down into smaller, more manageable parts' (Alford & Head, 2017, p. 399). What we contribute to this debate is a more explicit definition of small wins (see Table 1) that excludes superficial steps or quick wins. We also realize that a series of small steps may trigger path dependencies through the robustness mechanism, but we follow Levin et al. (2012) who distinguish between desired and undesired path dependencies and thus emphasize the possible advantages of the stickiness of policy interventions. Given the immediate feedback of small steps into iterative policy processes, we expect most propelling mechanisms to result in desired rather than undesired path dependencies.

Another point of criticism concerns the assumed de-politicization of small wins strategies, defined as the process of removing the political character of decision making and establishing some sort of buffer zone between politicians and certain policy fields (Flinders & Buller, 2006). Vink (2015, p. 183) argues that 'de-politicising allows for learning, but that learning alone does not solve wicked problems', as policymaking is not only about puzzling, but also about powering. It is necessary to bring issues into the political arena to form coalitions, allocate resources, and account for value judgements, including qualifying a small step as a small win. Furthermore, too much de-politicizing risks creating a political bystander effect (Vink, 2015), which would de-activate some of our crucial propelling mechanisms. We share this concern, but we argue that small wins, when situated at a local or micro level, do not implicate de-politicization. Indeed, it is at the small scale (at the ground) that actors try to achieve small in-depth steps amidst political struggles, where politicians do not have the luxury to postpone actions or shift the burden to a lower level. Problems arise when small wins are prematurely brought into national or international political arenas, where it is tempting for politicians to sell small wins as final solutions. In order to increase transparency and accountability, politicians in these arenas might prepare the public for the long haul (Carroll, Blatner, & Cohn, 2007).

We can also question whether our framework is actually an evaluation framework. Weick (1984) did not present his ideas of small wins as a means of evaluating progress but as an overall concept to deal better with complex societal issues. Evaluation is not an occasional separate activity limited to the evaluation phase. On the contrary, evaluation is an ongoing interactive process that is integrated in the entire process of strategizing and learning. The identification, labelling, and appreciation of small wins feed back into all phases of the policy process where they in turn activate the various propelling mechanism. We thus agree that, given the non-linear and continuous character of policy processes, it is difficult to distinguish between policy development and policy evaluation processes. However, we have explicitly developed this framework from an evaluation perspective. We would have developed different arguments and steps if the focus had been on the development of policy interventions for enhancing small wins strategies (see Termeer et al., 2017).

Finally, we address the relevance of this evaluation framework for policy practices. It will inevitably conflict with existing evaluation practices embedded in formal and informal institutions. We even expect the institutional constraints to be higher in multi-level systems where powerful stakeholders are possibly more detached than those at the local level. In particular, tensions will arise if policymakers insist that the way to deal with wicked problems is to get rid of turbulence by reducing uncertainty, simplifying complexity, and resolving conflict (Roe, 2016). The underlying ontology may also cause tensions, because the small wins evaluation framework is based more on plausibility than on causality and more focused on in-depth understanding than on performance measurement (Devaney & Spratt, 2009). Therefore, it is important that those in charge of commissioning and conducting evaluation programmes accept the explanation of the situation as a wicked problem and the consequences attached to that and appreciate thinking in terms of small wins (Ison, Collin, & Wallis, 2015). If not, this continuous evaluation process will lack a breeding ground. Rog's vision is very encouraging in this respect, as he expects a high feasibly of integrating small steps evaluation methods into practice, because they better fit the perceptions of policymakers trying to make a difference in wicked problem areas (Rog, 2015). Rather than observing big problems and concluding that they can only be attacked with big solutions, people could use this framework to help them think about the challenge of improving performances by creating some meaningful improvement through a series of small, but significant, actions (Behn, 2002).

# Conclusions

This paper addressed the question of how to evaluate progress in wicked problem domains in a way that energizes a variety of stakeholders instead of paralyzing them and embraces complexity instead of reverting to overestimation. The small wins evaluation framework meets these challenges. It takes the inherent characteristics of wicked problems seriously and deliberately addresses the unproductive responses of both overestimation and paralysis. Its main contribution to the wicked problem literature is that it goes beyond disqualifying existing evaluation methods and presents an innovative alternative. By introducing the small wins policy perspective, it also provides a new perspective on Rittel and Webber's argument that 'one should not try to cure symptoms: and therefore one should try to settle the problem on as high a level as possible' (Rittel & Webber, 1973, p. 164). Furthermore, it contributes to the operationalization of the concept of small wins. The positive connotation of small wins makes the concept very attractive for many scholars and policymakers and thus risks becoming inflated and overused. By identifying and elaborating different propelling mechanisms, it makes more tangible and traceable the rather vague idea of accumulating small wins into transformative change. The paper also contributes to the debate on time scales and timing in wicked problem areas (Peters, 2017). Rather than focusing on the time-is-running-out frame, the small wins framework is based on careful observation of small steps and targeted propelling mechanisms (Termeer et al., 2017). Small wins might end up generating radical and durable innovations in the long run, but that requires time. After all, people have to have the possibility of experimenting, of seeing how things work out, and of sharing these experiences. Therefore, the small wins evaluation approach may conflict with the need to address major social issues rapidly or to meet the requirements of external funding bodies for demonstrable output (Vangen & Huxham, 2003). The challenge is for both policy-makers and evaluators to show patience. Churchman has already warned against rushing to over hasty and over summary judgement: it could 'generate an aura of good feeling' but finally it deceives citizens and undermines attempts to 'enter into a deep, mutual understanding of the untamed aspects of the problem' (Churchman, 1967: B142).

This paper aimed to advance the evaluation debate. We have argued that the small wins evaluation framework can contribute to this debate, but it must not be seen as the panacea for overcoming all issues relating to the evaluation paradox. In this, we follow Ford et al. (2013), who emphasize that, given the messiness of wicked problems, evaluation challenges are unlikely to be fully resolved and that it is necessary to develop diverse methodologies that can provide varied perspectives on progress. This plea for a multiplicity of evaluation methods is also the reason why we hesitate to fully support Urpelainen's (2013) suggestion to install a global policy institute that develops methodologies for evaluating the technological and political transformation potential of various small wins in the domain of climate change. Although the idea is appealing, we fear that institutionalizing the small wins evaluation method may risk falling into the trap of paralysis and overestimation.

#### **Disclosure statement**

No potential conflict of interest was reported by the authors.

#### Notes on contributors

*Prof. Dr. ir. Catrien Termeer* is Chair of the Public Administration and Policy Group at Wageningen University, the Netherlands. Before she worked at the Erasmus University of Rotterdam; Technical University of Delft; the Ministry of Agriculture, Nature and Food and at Sioo, a Centre for Organizational Change and Learning. Her research addresses the governance of wicked problems in the policy domains of adaptation to climate change, food security and sustainable global value chains. She is (co-) author of many refereed publications and (edited) books and has (co) chaired many interdisciplinary research programs. She is a frequently invited speaker for conferences in academia and professional and administrative communities and member of a variety of Advisory Councils.

*Prof. Dr. Art Dewulf* is Professor of sensemaking and decision-making in policy processes, at the Public Administration and Policy Group at Wageningen University, the Netherlands. He obtained a PhD in Organisational Psychology (K.U. Leuven, 2006). He studies complex problems of natural resource governance with a focus on interactive processes of sensemaking and decision-making in water and climate governance. He is (co-)author of many refereed publications and is involved in interdisciplinary research programmes.

# ORCID

Art Dewulf ( http://orcid.org/0000-0002-4171-7644

# References

- Alford, J., & Head, B. (2017). Wicked and less wicked problems: A typology and a contingency framework. *Policy and Society*, *36*(3), 397–413.
- Amabile, T. M., & Kramer, S. J. (2011). The power of small wins. Harvard Business Review, 89(5), 70-81.
- Ansell, C., & Gash, A. (2007). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory*, 18, 543–571.
- Argyris, C., & Schon, D. A. (1996). Organizational learning II: Theory, method and practice. Reading, MA: Addison Wesley.
- Arthur, W. (1990). Positive feedbacks in the economy. Scientific American, 262(2), 92-99.
- Baez, B., & Abolafia, M. Y. (2002). Bureaucratic entrepreneurship and institutional change: A sense making approach. *Journal of Public Administration Research and Theory*, *4*, 525–552.
- Behn, R. D. (2002). The psychological barriers to performance management: Or why isn't everyone jumping on the performance-management bandwagon? *Public Performance & Management Review*, 26(1), 5–25.
- Braybrooke, D., & Lindblom, C. E. (1963). A strategy of decision. New York, NY: Free Press.
- Breuer, E., Lee, L., De Silva, M., & Lund, C. (2016). Using theory of change to design and evaluate public health interventions: A systematic review. *Journal Implementation Science*, *11*, 63.
- Brown, S. L., & Eisenhardt, K. M. (1997). The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organizations. *Administrative Science Quarterly*, 42, 1–34.
- Bryson, J. (1988). Strategic planning: Big wins and small wins. *Public Money and Management*, 8 (3), 11–15.
- Bulkeley, H., & Castán Broto, V. (2013). Government by experiment? Global cities and the governing of climate change. *Transactions of the Institute of British Geographers*, 38, 361–375.
- Candel, J. J. A. (2016). Putting food on the table. The European Union governance of the wicked problem of food security. PhD thesis. Wageningen, the Netherlands: Wageningen University and Research.
- Carroll, M. S., Blatner, K. A., & Cohn, P. J. (2007). Managing fire danger in the forests of the US inland northwest: A classic "wicked problem" in public land policy. *Journal of Forestry*, *105*(5), 239–244.
- CFAR. (2012). Briefing notes: Small wins—The steady application of a small advantage. http://www.cfar.com/sites/default/files/resources/BN\_Small\_Wins.pdf
- Churchman, C. W. (1967). Guest editorial: Wicked problems. *Management Science*, 14(4), B141–B142.
- Cretella, A., & Buenger, M. S. (2016). Food as creative city politics in the city of Rotterdam. *Cities*, 51, 1–10.
- Devaney, J., & Spratt, T. (2009). Child abuse as a complex and wicked problem: Reflecting on policy developments in the United Kingdom in working with children and families with multiple problems. *Children and Youth Services Review*, *31*, 635–641.
- Donaldson, S. I. (2007). *Program theory-driven evaluation science*. New York, NY: Lawrence Erlbaum.
- Duckett, D., Feliciano, D., Martin-Ortega, J., & Munoz-Rojas, J. (2016). Tackling wicked environmental problems: The discourse and its influence on praxis in Scotland. *Landscape and Urban Planning*, 154, 44–56.
- Farjoun, M., Ansell, C., & Boin, A. (2015). Pragmatism in organization studies: Meeting the challenges of a dynamic and complex world. *Organization Science*, *26*(6), 1787–1804.
- Feldman, M. S. (2000). Organizational routines as a source of continuous change. *Organization Science*, *11*(6), 611–629.

- Flinders, M., & Buller, J. (2006). Depoliticisation: Principles, tactics and tools. *British Politics*, *1*, 293–318.
- Ford, J. D., Berrang-Ford, L., Lesnikowski, A., Barrera, M., & Heymann, S. J. (2013). How to track adaptation to climate change: A typology of approaches for national-level application. *Ecology and Society*, *18*(3), 40.
- Ford, J. D., & Ford, L. W. (1994). Logics of identity, contradiction, and attraction in change. *Academic Management Review*, 19, 756–785.
- Foster-Fishman, P. G., & Watson, E. R. (2012). The ABLe change framework: A conceptual and methodological tool for promoting systems change. *American Journal of Community Psychology*, 49, 503–516.
- Garud, R., & Kumaraswamy, A. (2005). Vicious and virtuous circles in the management of knowledge: The case of infosys technologies. *MIS Quarterly*, 29(1), 9-33.
- Gharehgozli, A. H., Mileski, J., Adams, A., & Von Zharen, W. (2016). Evaluating a 'wicked problem': A conceptual framework on seaport resiliency in the event of weather disruptions. *Journal Technological Forecasting & Social Change*. doi:10.1016/j.techfore.2016.11.006
- Goodman, P. S., & Dean, J. W. (1982). Creating long-term organizational change. In P. S. Goodman (Ed.), *Change in organizations* (pp. 226-279). San Francisco, CA: Jossey-Bass.
- Green, S. E. (2004). Rhetorical theory of diffusion. *The Academy of Management Review*, 29(4), 653–669.
- Guba, E. G., & Lincoln, Y. S. (1989). Fourth generation evaluation. Newbury Park, CA: Sage.
- Havers, I. (2013). Small actions Big change: Delivering regeneration in an age of austerity. *Journal of Urban Regeneration and Renewal*, 6, 426–431.
- Head, B. (2008). Wicked problems in public policy. Public Policy, 3(2), 101-118.
- Head, B. W., & Alford, J. (2015). Wicked problems: Implications for public policy and management. Administration & Society, 47(6), 711-739.
- Hoppe, R. (2011). The governance of problems: Puzzling, powering, participation. Bristol, UK: Policy Press.
- Innes, J. E., & Booher, D. E. (2016). Collaborative rationality as a strategy for working with wicked problems. *Landscape and Urban Planning*, 154, 8–10.
- Ison, R. L., Collin, K. B., & Wallis, B. J. (2015). Institutionalising social learning: Towards systemic and adaptive governance. *Environmental Science and Policy*, 53, 105–117.
- Jason, L. A. (2012). Small wins matter in advocacy movements: Giving voice to patients. *American Journal of Community Psychology*, 49, 307–316.
- Kossmann, C. M., Behagel, J. H., & Bailey, M. (2016). Action and inertia in collaborative governance. *Marine Policy*, 72, 21-30.
- Levin, K., Cashore, B., Bernstein, S., & Auld, G. (2012). Overcoming the tragedy of super wicked problems: Constraining our future selves to ameliorate global climate change. *Policy Science*, 45, 123–152.
- Lindblom, C. (1959). The science of muddling through. Public Administration Review, 19(2), 79-88.
- Lindblom, C. (1979). Still muddling, not yet through. Public Administration Review, 39(6), 517-526.
- Lott, B., & Webster, K. (2006). Carry the banner where it can be seen: Small wins for social justice. *Social Justice Research*, 19(1). doi:10.1007/s11211-006-0003-y
- MacKay, B., & Chia, R. (2013). Choice, chance and unintended consequences in strategic change: A process understanding of the rise and fall of Northco Automotive. *Academy of Management Journal*, 56(1), 208–230.
- McConnell, A. (2010). Policy success, policy failure and grey areas in-between government. *Journal of Public Policy*, 30(3), 345.
- McMillan, C., & Overall, J. (2016). Wicked problems: Turning strategic management upside down. *Journal of Business Strategy*, 37(1), 34-43.
- Noordegraaf, M., & Abma, T. (2003). Management by measurement? Public management practices amidst ambiguity. *Public Administration*, *81*(4), 853–871.
- Peters, B. G. (2017). What is so wicked about wicked problems? A conceptual analysis and a research program. *Policy and Society*, *36*(3), 385–396.

- Plowman, D. A., Baker, L. T., Beck, T. E., Kulkarni, M., Solansky, S. T., & Travis, D. V. (2007). Radical change accidentally: The emergence and amplification of small change. *The Academy* of *Management Journal*, 50(3), 515–543. http://www.jstor.org/stable/20159871
- Putansu, S. R. (2015). Cross agency priority goals in the U.S. government: Can directed collaboration be a stepping stone toward politic-centered performance? *Policy and Society*, *34*, 25–35.
- Reay, T., Golden-Biddle, K., & Germann, K. (2006). Legitimizing a new role: Small wins and microprocesses of change. *Academy of Management Journal*, 49(5), 977–998.
- Rittel, H., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4 (2), 155–169.
- Roberts, N. (2000). Wicked problems and network approaches to resolution. *International Public Management Review*, *1*, 1–16.
- Roe, E. (2016). Policy messes and their management. Policy Sciences, 49(4), 351-372.
- Rog, D. J. (2015). Infusing theory into practice, practice into theory: Small wins and big gains for evaluation. *American Journal of Evaluation*, 36(2). doi:10.1177/1098214015573068
- Rogers, E. (2003). Diffusion of innovations (5th ed.). New York, NY: Free Press.
- Sterner, T., Troell, M., Vincent, J., Aniyar, S., Barrett, S., Brock, W., ... Xepapadeas, A. (2006). Quick fixes for the environment: Part of the solution or part of the problem? *Environment: Science and Policy for Sustainable Development*, 48(10), 20–27.
- Stirling, A. (2010). Keep it complex. Nature, 468, 1029–1031.
- Termeer, C. J. A. M., Dewulf, A., & Biesbroek, G. R. (2017). Transformational change: Governance interventions for climate change adaptation from a continuous change perspective. Journal of Environmental Planning and Management. doi:10.1080/09640568.2016.1168288
- Termeer, C. J. A. M., Dewulf, A., Karlsson-Vinkhuyzen, S. I., Vink, M., & Van Vliet, M. (2016). Coping with the wicked problem of climate adaptation across scales: The five R governance capabilities. *Landscape and Urban Planning*. doi:10.1016/j.landurbplan.2016.01.007
- Turcotte, M. F., & Pasquero, J. (2001). The paradox of multistakeholder collaborative round-tables. *The Journal of Applied Behavioral Science*, 37(4), 447–464.
- Urpelainen, J. (2013). A model of dynamic climate governance: Dream big, win small. *International Environmental Agreements*, 13, 107–125.
- Van Twist, M., Kort, M., & Van Der Steen, M. (2015). Assessing and appraising the effects of policy for wicked issues: Including unforeseen achievements in the evaluation of the district policy for deprived areas in the Netherlands. *International Journal of Public Administration*, 38(8), 596–605.
- Vangen, S., & Huxham, C. (2003). Nurturing collaborative relations: Building trust in interorganizational collaboration. *Journal of Applied Behavioral Science*, 39, 5–31.
- Vermaak, H. (2013). Planning deep change through a series of small wins. Paper presented at the Academy of Management Annual Conference. Orlando, FL, August 9–13.
- Vink, M. (2015). Navigating frames: A study of the interplay between meaning and power in policy deliberations over adaptation to climate change. PhD thesis. Wageningen University, the Netherlands.
- Warner, J. F. (2006). More sustainable participation? Multi-stakeholder platforms for integrated catchment management. *Water Resources Development*, 22(1), 15–35.
- Weber, E. P., & Khademian, A. M. (2008). Wicked problems, knowledge challenges, and collaborative capacity builders in network settings. *Public Administration Review*, 68(2), 334–349.
- Weick, K. E. (1984). Small wins: Redefining the scale of social problems. *American Psychologist*, 39(1), 40–49.
- Weick, K. E. (1995). Sensemaking in organizations. London, UK: Sage.
- Weick, K. E. (2000). Emergent change as a universal in organizations. In M. Beer & N. Nohria (Eds.), *Breaking the code of change* (pp. 223–243). Boston, MA: Harvard Business School.
- Weick, K. E., & Quinn, R. (1999). Organizational change and development. Annual Review of Psychology, 50, 361–386.
- Weick, K. E., & Westley, F. (1996). Organizational learning: Affirming an oxymoron. In S. R. Clegg, C. Hardy, & W. R. Nord (Eds.), *Handbook of organization studies* (pp. 190–208). London, UK: Sage.