Narratives of Temporal Structuring in Project Organizing[1]

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Temporality is at the heart of project organizing, yet it has received surprisingly little theoretical attention within the research field. Implicitly, most work in the field has taken an objective view of time which "exists independently of human action: [is] exogenous, absolute" (Orlikowski & Yates, 2002) and project organizing is "time-paced" (Brown & Eisenhardt, 1997). More recently, others have taken a subjective view of time as "socially constructed by human action; culturally relative" (ibid), and project organizing is an emergent phenomenon creating a "negotiated order" (Strauss, 1988). Drawing on their own research in project organizing, Orlikowski & Yates (1994) move beyond these binary views by drawing on practice theory in which time is "constituted by, as well as constituting, human action" through "temporal structuring" (2002).

However, practice theory is inherently synchronic (Winch, 2017) because of its reliance upon the conflation (Archer, 1993) in structuration theory (Giddens, 1979) of the distinction between the diachronic and synchronic (Saussure, 1959) dimensions of temporality. We will propose that for a full theorizing of temporal structuring in project organizing we need to separate analytically the diachronic and synchronic dimensions which we will do by drawing on the concept of "future-perfect thinking" (Schutz, 1967). This argument still leaves open the question of the practices which create this perfect future, so we will draw on narrative theory (Vaara, Sonenshein, & Boje, 2016) to explore how project narratives provide both temporal structuring in the synchronic dimension and temporal structuring in the diachronic dimension through future-perfect thinking.

Our theoretical contribution in this paper, therefore, will be to develop a perspective on temporality in project organizing which will allow us to give full weight to the multiple meanings of the word "project" as noun and verb. This will show how time-pacing in project organizing is used to create the negotiated order of the temporary project organization through narratives that embody future-perfect thinking. We will do this by developing a *narrative perspective on project organizing* which defines *project narratives* as those performative narratives which project an intended future on a project. We will demonstrate the theoretical insights that this perspective can generate with a case vignette of the Eden Project. Discussion and conclusions follow.

Temporal Structuring in Project Organizing

There is growing awareness of the importance of time and temporality in organization theory (Ancona, Okhuysen, & Perlow, 2001; Lord, Dinh, & Hoffman, 2015). Reviews of the literature tend to emphasise cross-cultural contrasts in "eastern" and "western" perceptions of time articulated in dichotomies between "Kairos" and "Chronos", process time and clock time, and subjective and

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[1] We are enormously grateful Kristian Kreiner for a number of discussions over the years on future-perfect thinking in project organizing, and, in particular, for figures 1 to 3. Early versions of the argument here can be found in Winch, G.M. and Kreiner, K. (2009) Future Perfect Strategizing on Major Projects (Presented at EURAM, Liverpool) and Winch, G.M. and Kreiner, K. (2011) Strategising an Outcome: Purposive Managerial Action in an Uncertain World (presented at British Academy of Management, Birmingham).

objective perceptions of time (Reinecke & Ansari, 2015). Orlikowski and Yates (2002: 686) criticize this dichotomization in the following terms:

> Focusing on one side or the other misses seeing how temporal structures emerge from and are embedded in the varied and ongoing social practices of people in different communities and historical periods, and how such temporal structures powerfully shaped those practice in turn.

This dichotomization pervades contemporary theorizing in project organizing. The objective perception of time is central to the paradigmatic systems perspective on project management as a strategic planning discipline (Cleland & King, 1983; Morris, 2012). At the heart of the systems perspective is the work breakdown structure (WBS) which takes the intended output of the project and breaks it down into a series of inter-related tasks which can then be assigned to appropriately skilled teams for execution (Winch, 2010). All tasks have an estimated duration (whether probabilistically estimated or not) and an implicit or explicit resource loading. Fundamental to the inter-relation between tasks is their sequential (and hence temporal) dependence in that many tasks can only be started once pre-requisite tasks have been completed. The combination of task duration and sequential dependence creates a schedule which arrays tasks through time and thereby identifies the longest sequence of tasks through the array where the earliest and latest finish times for each task are all equivalent, and there is, therefore, no slack between them. This sequence is usually known as the "critical path" for the project and identifies its shortest possible overall duration. This temporal sequence can be presented analytically using critical path analysis and associated schedule risk analysis techniques such as Monte Carlo, and graphically by using presentational tools such as Gantt charts.

Time is also central to the budgetary analysis of the project. The principal tool here is cost-benefit analysis (CBA) which takes the estimated budget for the project and "discounts" through time the cash flows for the project – both expenditure and income from utilising the output once delivered – to create a "net present value" upon which the allocation of financial resources to the project can be decided. While CBA is conducted at a high level of abstraction, the interaction between the budget for the project and the schedule analysis above provides the basis for the "performance measurement baseline" for the project against which the budget is managed through time using earned value analysis (Winch, 2010). Further refinements to the schedule analysis include constraining the schedule analysis by the resources available for task execution as in critical chain (Goldratt, 1997) or the space available for task execution as in critical space (Winch & North, 2006). These various elements can be brought together in 4D (including time) and nD planning (Ding, Zhou, Luo, & Wu, 2012) which visualises the temporal dimension of the WBS by simulating through time the assembly of the project output.

Fundamental to the systems paradigm in project organizing is a clearly specifiable output – a defined future state – against which plans can be made for its achievement (Morris, 2012). It can be captured visually as in figure 1. Although some recent developments in the systems paradigm such as agile approaches have relaxed the specifiable output criterion, they have done this by reinforcing the objective perspective on time by "timeboxing" through time-paced iterative development cycles (van Oorschot, Sengupta, & Van Wassenhove, 2018). Iterative analysis and learning from past experience (previous projects) produces a clear decision point which is supported by both CBA which

relates benefits to costs in a positive way and a clear project duration without which the discounted ratio of costs to benefits could not be calculated. This defined future state is then delivered through time by controlling against plan and deviations from that plan in terms of schedule and budget are temporally defined as "overruns". Research within the systems paradigm on project organizing is focused on improving planning and control technologies to minimise overruns such as in nD project planning, on reducing and eliminating biases in decision-making (Flyvbjerg, Garbuio, & Lovallo, 2009), or extending the range of project management competences to more general managerial skills (Morris, 2013).

The emphasis on general managerial skills and hence mainstream organization theory led to growing awareness of a distinctive aspect of project organizing – the temporary project domain (Bakker, 2010; Burke & Morley, 2016) in contrast to the permanent owner and supplier domains in project organizing (Winch, 2014). The temporary project organization is defined by its temporality by being determinate (Burke & Morley, 2016; Winch, 2014); that is to say, the project organization will cease to exist at some agreed point of time in the future, and all stakeholders are aware of this at project inception. While that date may shift as the project unfolds, its existence in principle is never in doubt. This introduces a further temporal dimension into project organizing, the life cycle (Ancona et al, 2001) through which project organizations move progressively over time (Lundin & Söderholm, 1995; Morris, 1994).
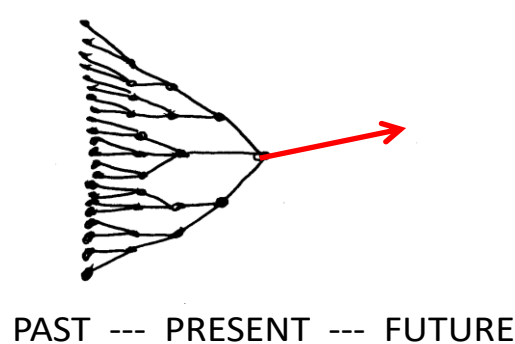

PAST --- PRESENT --- FUTURE

Figure 1 Temporality in the Systems Paradigm in Project Organizing

Over the last 20 years, there has been a growing critique of the systems paradigm in project organizing on the grounds that it frequently failed to live up to expectations, and that a different approach is required (Hodgson & Cicmil, 2006; Winter, Smith, Morris, & Cicmil, 2006). There have been many responses to this challenge (Padalkar & Gopinath, 2016; Svejvig & Andersen, 2015), but an influential one may be called the *actuality perspective* which focuses on the "lived experience" of project managing (Cicmil, Williams, Thomas, & Hodgson, 2006) and proposes a distinctively

subjective perspective on temporality in project organizing. The actuality perspective on project organizing draws heavily (Van Der Hoorn & Whitty, 2015) on a phenomenological perspective on time (Heidegger, 1962) which is both subjective (Blattner, 2005; Hoffman, 2005) – what Heidegger calls "world time" - and also has ontological dimensions. This perspective pays attention to "drift" (Kreiner, 1995; Usher & Whitty, 2017) and "flow" (van der Hoorn, 2015) in project organizing where the past, present, and future are ontologically fused (Blattner, 2005). A similar perspective which does not necessarily draw on Heidegger can be found in post-modern perspectives on organizational change and hence project organizing as "becoming" (Packendorff, Crevani, & Lindgren, 2014; Tsoukas & Chia, 2002). Perspectives derived from some aspects of complexity theory stress the importance of "emergence" in complex project organizing (Daniel & Daniel, 2018; Geraldi, Maylor, & Williams, 2011) to similar effect.

Without suggesting theoretical consensus, we would argue that all these contributions share a subjective perspective on temporality in which project organizing is achieved through an emerging negotiated order (O'Leary & Williams, 2013; Strauss, 1988) in the manner shown in figure 2. The focus of research attention is on the lived experience of managing projects in the present, and that the future end point of the project cannot be usefully determined (Kreiner, 1995) or be projected from past experience due to the inherently uncertain nature of that future. Thus figure 2 presents a subjective perspective on time where the future is emergent from the present (Tsoukas & Chia, 2002). It shows how sense made of the present and past entails enactments which evolve through time by selection and retention (Weick, 1979) as project organizations construct their futures.

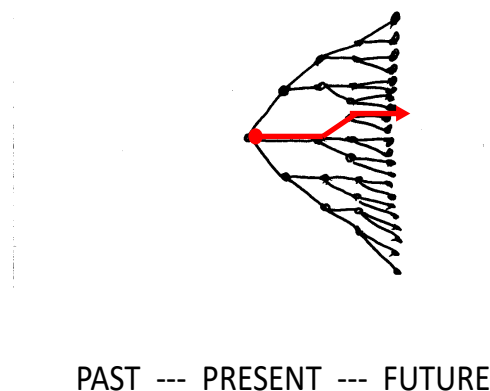
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Figure 2 Temporality in the Actuality Perspective on Project Organizing

Both the subjective and objective perspectives offer considerable insights into the challenges of project organizing. Project organizing is demonstrably goal-focused, as shown in figure 1 – if there is not an intended outcome, resources are not mobilized for a project and the temporary organization

does not exist. On the other hand, project organizing demonstrably fails to meet those intended outcomes on many occasions in multiple ways. This suggests that we need to move beyond the stark duality of competing objective and subjective perspectives on time in project organizing and draw on the concept of *temporal structuring* to do so. This draws heavily on structuration theory (Orlikowski & Yates, 2002). In structuration theory (Giddens, 1984), structure and agency are mutually constitutive of each other in the "duality of structure" mediated through practices in which humans interact reflexively. We agree with Orlikowski and Yates that we can move beyond this temporal duality towards a more sophisticated perspective on temporal structuring by drawing on structuration theory.

However, structuration theory merely achieves a "central conflation", rather than truly transcending the agency/structure dichotomy (Archer, 1982). Structuration theory cannot, therefore, address temporal "when" questions regarding under which conditions agency shapes structure and structure shapes agency. From the perspective of our concerns here for project organizing, this leads to a crucial weakness. One of the principal contributions of structuration theory is its bringing of space/time into social theory (Urry, 1991), but it does so only partially because of its rejection (Giddens, 1979) of the distinction (Saussure, 1959) between the synchronic and diachronic. Thus, structuration theory proposes a temporal conflation of the past, present, and future in the diachronic dimension to complement its central conflation of structure and agency in the synchronic dimension. The result is that its time-frame is entirely in the present, rather than the past or future (Archer, 1993), yet the future is fundamental to project organizing. In the "duality of structure", agency and structure are so tightly bonded in their mutual instantiation in space/time that the possibility of structure and agency evolving through different temporal rhythms is occluded and "temporal relations between structure and agency logically cannot be examined" (Archer, 1993: 70). In other words, one cannot look further backwards (or forwards) when investigating structure than when investigating agency, nor vice versa. This we suggest is a crucial weakness of present conceptions of temporal structuring in project organizing (Winch, 2017). We propose that the work of Schutz (1969; 1973) provides a way forward to developing a narrative perspective on project organizing that overcomes this weakness.

Future-Perfect Thinking

While Schutz' principal aim in developing his phenomenology of everyday life is methodological, showing how sociology can actually achieve Weber's aim of providing explanations adequate at the level of meaning as well as cause, he develops an ontology that offers much insight for theorists of project organizing. Schutz argues that all purposive *action*, as opposed to reactive *behaviour*, has the nature of a "protention" or a vision of a completed future state which gives present meaning to that subsequent action which will bring forth that future state. Thus while the protention is cognitive in that it exists as a perceived state, it is qualitatively different from a "retention" which is inherently a perception about the past. However, because the protention, like a retention, is perceived as completed, "the planned act has the temporal character of pastness" (1967: 61) and is therefore thought of in the future perfect tense. This is formulated as "will have been" in English; French and German have analogous tenses, although Russian does not.

The distinction between action and behaviour is crucial for Schutz. He defines behaviour not just as an instinctual, non reflective, activity, but as a conscious, social activity in a way that is similar to

"being-in-the-world" (Heidegger, 1962)(Heidegger, 1971). However, Schutz moves on from Heidegger who holds that "projecting has nothing to do with comporting oneself towards a plan that has been thought out" (Heidegger, 1962) by arguing that it is precisely this thinking out that distinguishes behaviour from action. As Schutz argues in clarifying the differences between himself and Weber:

> Any conscious experiences arising from spontaneous activity and directed towards another self are, by our definition, social behavior. If this social behavior is antecedently projected, it is social action (1967: 146).

He further emphasises that in this perspective, the 'act' is distinguished from the 'action' which is motivated by the perception of the future accomplished act:

> The term 'action' shall designate human conduct as an ongoing process which is devised by the actor in advance. The term 'act' shall designate the outcome of this ongoing process, that is, the accomplished action (1973: 67).

In developing this perspective, Schutz emphasises the motivational aspect of future-perfect thinking, showing how it provides the future-orientated "in-order-to" motive for an action in the present, rather than the past-orientated "because" motive for action. He is also careful to distinguish future-perfect-thinking from pure fantasy by the criterion of the feasibility of the act.

> The possibility of executing the project requires…. that only ends and means believed by me to be within my actual or potential reach may be taken into account by my projecting…. that all the chances and risks have been weighed in accordance with my present knowledge of possible occurrences of this kind in the real world (Schutz, 1973).

However, the act remains an "empty" protention; it is an abstraction which indicates the direction of travel, but not the journey whose steps remain to be filled in:

> "Projecting like any other anticipation carries along its empty horizons which will be filled in merely by the materialization of the anticipated event. This constitutes the intrinsic uncertainty of all forms of projecting (1973: 69).

In sum, Schutz' position is:

> "that action is (1) a lived experience that is (2) guided by a plan or project arising from the subject's spontaneous activity and (3) distinguished from all other lived experiences by a peculiar Act of attention" (1967: 215).
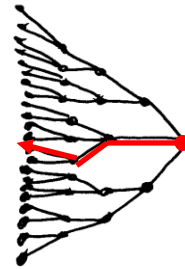
PAST --- PRESENT --- FUTURE

Figure 3 Temporality in the Narrative Perspective on Project Organizing

Figure 3 presents temporal structuring from the narrative perspective on time we are proposing here in which project organizations protend the completed act in a project mission and then orientate their managerial action to filling in the act through project organizing, choosing between multiple paths as they do so. It shows how future-perfect thinking protends a desired end state or outcome for the project that leaves the filling in, and hence the lived experience of the project, to be negotiated through time. The narrative perspective on temporal structuring in project organizing thereby allows us to draw on both the systems paradigm and the actuality perspective. We can conceive of the project-life cycle as a progressive reduction of uncertainty through time as a learning process (Winch, 2010) and the determined future state as the pivot of "endgaming" (Pitsis, Clegg, Marosszeky, & Rura-Polley, 2003) where socially constructed future deadlines are reified to shape present action through the systems paradigm tool of scheduling. The processes of filling in require the mobilisation and motivation of large resources which are ordered through the endgaming process. In a very practical sense, endgaming is what drives the arrow of action subjectively from right to left in figure 3 even though time's arrow objectively flies from left to right. It is this filling in that structures the lived experience of project organizing.

However, this is more about filling in than protending and leaves open the question of how the future-perfect is projected. Projects of all sorts build on imaginations about the future. We argue that project organizing is constituted by the anticipation of future outcomes that subsequently guide and give sense to conduct to project managers and others in involved in the project. Formal projects are designed with explicit and negotiated goals and purposes or they do not exist as temporary organizations. The protended futures in relation to projects are aspects of the present, however. They are protentions in the sense that the actor imagines the future state of affairs to have arisen already, enabling him or her look back on the present situation and the steps connecting the present with the future. The imagination of a particular future, and the imagination that it has already materialized, are the foundation for acting (as opposed to behaving) in the present and propose that

this imagination entails three complementary and intertwined processes. We further propose that project narratives constitute the performative intent that allows these imagined futures to be projected and communicated.

Narratives of the Future: Project Narratives

We define narratives as unique discursive constructions that provide essential means for maintaining or reproducing stability and/or promoting or resisting change in and around organisations (Vaara et al., 2016). Narratives are widely accepted as an integral means of organising (Currie & Brown, 2003; Weick, 1979). As such, they tend to be characterised as attempts to impose order, as they seek to bring plausibility and coherence to disparate experiences (Humphreys & Brown, 2002). Performative narratives are often repeated in organisations because repetition serves to stabilise particular meanings (Dailey & Browning, 2014). Such narratives are said to become formalised when they are reproduced on corporate websites or published in corporate literature. Narratives as talk are also built with the intent of shaping organisational actions. We define *project narratives* as those performative narratives which project an intended future (Sergeeva & Winch, submitted) that will subsequently be filled in by project organizing.

To date, there is a scarce research into narratives on projects, and not all are about project narratives in the sense we have defined them here – the research identifies both innovation narratives on projects and narratives of resistance on projects (Sergeeva & Green, 2019) as well as project narratives with performative intent (Green & Sergeeva, 2019). One contribution (Veenswijk & Berendse, 2008) focuses on narratives that provide project team members with space to make sense and contest the new managerial initiatives and value systems imposed upon them. They found that project narratives feature deterrence (a strong resistance to the change), dilution (blurring of the initial ambitions) and dissociation (confusion over the societal value of the project). They view narratives as important vehicles through which meanings are negotiated, shared and contested. More specifically, project narratives are about specific projects consisting of several micro stories through which particular project developments are being discussed, contested and recounted. A contribution closer to our definition of project narratives examines how project histories and potential futures are framed and interlinked in narratives to appeal to funders (Manning & Bejarano, 2017). This research emphasises that there is a lack of understanding of how project narratives are actually constructed to appeal to various audiences and how they reflect the project mission (i.e. the protended act). They found that projects are narrated in different styles to convey project value: as ongoing journeys or results-in-progress. The aspired or imagined future of the project was narrated in different styles: one focuses on immediate future steps; the other places emphasis on the long-term vision. The need for sense-making by different project participants and stakeholders and how the various narratives expressed by different social groupings shaped the management and progress of the project is clear: They conclude that "long-term projects also require sense to be made of future possibilities by reflecting on anticipated situations in order to influence design decisions made in the present." (Alderman, Ivory, McLoughlin, & Vaughan, 2005: 384).

Work on major projects contends that competing narratives are inevitable in major projects as a consequence of the conflicting subjective interpretations of different interest groups and that there is a need for project managers to create structures within which these competing narratives might be managed (Boddy & Paton, 2004) This places narratives at the very centre of project organising

(Havermans, Keegan, & Den Hartog, 2015), where language is constitutive of organisational reality rather than merely representative (Boje, Oswick, & Ford, 2004). Thus "narratives are defined as any spoken or written account of connected events. Project leaders' narratives will shape reactions to a problem. For example, whether a leader categorizes an event as an opportunity or a threat influences how others respond." (Havermans et al. 2015: 974).

Others investigate the role of narratives/stories play in leading an innovation project and the ways an innovation project leader uses stories in practice (Enninga & van der Lugt, 2016). They refer to narratives and stories interchangeably, and focusing on three different aspects: the stories, storytelling and storymaking. They argue that stories "entertain, explain, inspire, educate, convince, generate and sustain meaning (or undermine and destroy it), stimulate imagination, offer reassurance, justify, inform, advise, and warn" (2016: 105). Out of 15 stories elicited by the authors, four were fiction and 11 nonfiction stories using metaphors and analogies. They found ten retrospective stories about "what happened" and five stories that depicted the future and "what could be". We are generally in agreement with the definition of stories, but also clarify the differences between narratives and stories. A narrative inquiry approach using life histories published as books or in book chapters was used as the main source of data can be used to glean leadership lessons for megaproject managers (Sankaran, 2018). Some literature and publicly available data were also used to reinforce the findings from these life stories. Common strategies used by all megaproject managers were identified: selecting the right people and building their capability; building trust with stakeholders; dealing with institutional power and politics effectively; and having the courage to innovate.

Research on narratives in a project context projects has many diverse themes and strands. In this paper we will focus on future-oriented *project narratives* which are constructed by project leaders and participants in oral, written and symbolic forms. We argue that project narratives need to be clearly stated, convincing and appealing to audiences, as well as demonstrate long-term value through project outputs and outcomes. Analogously with Schutz' theory, project narratives need to envision both the longer-term project mission (the protended act) and the shorter-term waypoints or milestones on the journey to the achievement of that mission (the filling in). Project success, we will argue depends, at least partially, on the construction and reiteration of a convincing project narrative supported by storytelling. We can illustrate this point with the case of the Eden Project using a narrative enquiry approach (Sankaran, 2018).

Temporal Structuring through Project Narratives: The Eden Project

The principal source for this case is the book (Smit 2001; page references that follow are from this text) – doubtless self-serving – written by the principal project promotor, supported by the professional press and separate visits by both authors to the completed visitor attraction. We also draw on a counter-narrative published by an estranged former collaborator (Ball, 2014). The Eden Project (www.edenproject.com) in Cornwall is one of the most successful UK Millennium projects opened in March 2001 to provide an outstanding experience to double the number of visitors envisaged in the 1997. A large covered biome provides a humid tropical environment, while a smaller one provides a warm temperate environment totalling 2.1 hectares. The cool temperate environment is in the third, uncovered, outdoor biome. An education centre – The Core – opened in

2005. Constructed in a redundant south-facing china clay pit, the project presented an enormous range of challenges and provides a vivid example of the power of "telling future truths" (14).

The inspiration behind the Eden Project is Tim Smit – until recently Chief Executive of Eden – who had rescued and opened to the public the Lost Gardens of Heligan in 1992. The idea for Eden was prompted by the garden festivals of the early 1990s which attempted to regenerate run-down urban areas and distilled from a conversation over a bottle of whisky in his kitchen one night in May 1994. Funded by pump-priming money from the local authority, a mix of Smit, Ball, other local players, and horticulturalists energetically developed their idea. It moved from fantasy to possibility thanks to the launch of the Millennium Commission with a brief to fund capital projects to celebrate the new millennium. An initial bid – based on "back of fag packet" budgeting – was submitted in April 1995, but turned down. Undaunted, Smit decided to withhold this information from his growing team so as not to discourage them!

The architects, Nicholas Grimshaw and Partners worked on developing the design concept. They soon realised that their original idea (a reprise of Grimshaw's Waterloo International Terminal) would not work propped against the side of the clay pit, because the structure was too heavy for the span and the ground too uneven and continually changing due to continued working of the pit for clay. The inspiration for Grimshaw's final design was a soap bubble which can mould itself to whatever surface it alights upon; their solution a geodesic dome. So Mero – a German specialist in this kind of structure – joined the project. Together with structural engineers Anthony Hunt, the project team designed biome covers constructed from a tubular steel space-frame (tri-hex-net) to form a geodesic spherical network creating very wide span free-standing spaces for the plants up to 125m in diameter and 55m high. This steel frame was clad with lightweight hexagonal panels made from three layers of thin UV-transparent ETFE film which are sealed around their perimeter and inflated to create large thermally efficient cushions. The panels vary in size up to 11m across, with the largest at the top of the structure. The erection of the structure on the 858m long ground beam required the largest free-standing scaffold in the world, followed by installation of the cladding panels by abseilers. Civil engineering works included moving 800 000m^3 of fill and extensive drainage systems by the construction manager McAlpine JV (consisting of Sir Alfred McAlpine plc and Sir Robert McAlpine Ltd) who came together for the first time since the firm split in 1940 because it was "the ultimate construction project" (99). A visitor centre was built which opened over a year before the completion of the facility so that tourists could view the construction works, generating much needed income.

Smit managed to convince all of these firms together with some of the leading consultancies in their respective fields such as Ove Arup on services and Davis Langdon as project managers and cost consultants to work for free to develop the design while Smit and the team worked on the Millennium Commission. The Commission did not fund development work prior to bids, and so it was not obvious anything was amiss and the team struggled on private donations and small grants. By mid-1996, the lobbying achieved results and Eden was back in the competition with a submission due in December. The construction budget was £74.3m reached after aggressive value engineering through which the Eden Project lost a third biome and an oceanic feature. The news that Eden had been successful was announced in May 1997, and the McAlpine JV was notified as preferred bidder in June 1997. The relationship was reinforced by appointing a Director of Sir Robert McAlpine to the Eden Board in 1998. This relationship would be of enormous benefit later during construction when

the project nearly ran out of cash owing the JV millions and the McAlpine director steadied the boat by saying "we're still here".

Funding came from a wide variety of sources - Millennium Commission funds only provide 50% of the capital required of nearly £80m. Smit's credibility with the success of Helligan enabled seedcorn funds from the county (Cornwall), local charities and private interests. The ability of Smit to network both locally within Cornwall and nationally garnering enthusiastic commitment was impressive, mobilising the right people to solve difficult problems - particularly those associated with finding the other half of the funding for the project according to Millennium Commission rules. These skills encouraged the head of a neighbouring county, Somerset, to back publicly the Cornwall project for European Commission structural funds at his own county's loss.

With the funding announcement, the project reached a turning point:

> There comes a time in all great ventures when the talking has to stop. We'd created the constituencies, we'd talked the hind legs off donkeys, we'd been snake-oil salesmen with attitude and a dream to peddle, but turning a dream into a reality needs iron in the soul, money in the bank, and military organization (117).

 Further value engineering was required, so Grimshaw's halved the cost of the visitor centre completely redesigning it in two days and bonding with the McAlpines in the process. Finally, the clay pit was purchased in October 1998, and the ECC contract signed in January 1999 as a target cost contract with a guaranteed maximum price – the McAlpine JV had worked for nearly two years without a contract, as had most of the consultants. Intensive construction on site started in February 1999, and the complete facility opened in March 2001 before schedule and to budget. In the meantime, Mero was obliged to take over the supplier of the ETFE cushions because it was too small to deliver on a project of this scale. Alongside the construction, a second project involved the construction of greenhouses in the Eden nursery a few miles away, selection and purchase of plant specimens, growing them on and planting them in the biomes in the different types of soil manufactured by the project.

Eden is a remarkably successful project; Smit ascribes this success, fundamentally, to "The act of faith that enabled so many people to sign up to Tinker Bell Theory was a testament to the Spirit of Eden taking hold" (102).

Discussion: A Narrative Perspective on Project Organizing

So what might be the broader theoretical implications of this case narrative? A first observation is that we can see three types of narrative future-perfect thinking in the case. The first is *convincing oneself*. The project promotor's willingness to let present action be guided and determined by protentions depends on his or her acceptance of the projected future as realistic and relevant. Promotors have to convince themselves about the achievability of the act which suggests the importance of faith. Smit emphasised the importance of Tinker Bell – the fairy who only exists if you believe in her (Barrie, 1995). This is echoed on the Channel Fixed Link project:

> "If I was to sum up the overriding ethos which governed the directors …it was the unarticulated faith, difficult to define or explain, but an abiding faith that we would get there in the end". (Henderson, 1987).

The second is *convincing the team*. As soon as we change the context from individual human action to formal projects we encounter new requirements. The project team has to adopt and subscribe to the same protention if they are to coordinate their efforts and collaborate on the same project. The protention of some actor (say project sponsor) has to be believed by the other parties in the project. Thus, the project participants have to convince each other about the achievability of the projected acts constituting the project. If some participants in the project team are not convinced about the achievability of the projected act it is not likely that they will let their current action be guided and directed by the espoused protention. When that is the case, the project team disintegrates. The importance of this can be seen in the way in which Smit convinced the other members of the team from the supplier domain to work on the project for free in the early phases, and also to act as stabilisers during crisis points in delivery. The early phases of the shaping of many projects are essentially speculative, with no income stream to reimburse efforts, so such motivation is essential.

The third phase is *convincing others*. Project teams do not operate in isolation. They owe their existences and resources to important stakeholders in their context of operation. Public, political and financial support must be obtained and maintained to get any project going. It is no longer sufficient to convince oneself or the other members of the project team. It is also necessary to convince external stakeholders, particularly financiers. Crucial to the success of the Eden project was convincing the Millennium Commission that it was a viable project – and convincing oneself and the team that it was viable are crucial first steps in this process. Convincing others also included convincing many other stakeholders to provide the other half of the finance, the officials of a competing county, and, finally the visiting public. Whetting their appetite by opening the visitor centre during construction played a part here. Since such external stakeholders are not held responsible for achieving the projected act, their criteria for accepting protentions may be highly individual and egoistic.

A second observation is the importance of "project peripety" (Engwall & Westling, 2004) which we reformulate here as the transition from shaping project narratives to delivery project narratives (Sergeeva & Winch, submitted). Smit shows how projects move from peddling ideas to "iron in the soul", yet we know little about how these transformations take place. As Smit suggests, arguably the relationship is more one of transition rather than opposition, and one of the research challenges is how projects make the transition – or peripety – between these two perspectives.

A third observation is a challenge to what might be called the new rationalism in project development on optimism bias and strategic misrepresentation (Flyvbjerg, Bruzelius, & Rothengatter, 2003) which fails to take into account the inherent uncertainties of project organizing. There was some strategic misrepresentation apparent on this project when Smit deliberately withheld the lack of success of the first application to the Millennium Commission for funds and so this case suggests a more benign view of strategic misrepresentation. It also suggests that in the context of a largely unknown future, strategic misrepresentation is more about self-serving decisions than deliberate untruths. Indeed, it could be argued that it is by definition, impossible to lie about the future because lying involves a knowing untruth, and the future is ontologically unknown. There is also the argument that such strategic misrepresentation has its benefits. The words of Pope Pius II to his architect Bernardo Rossellino, on the handover of the cathedral and papal palace of Pienza which had overrun 500% in budget: 'You did well, Bernardo, in lying to us about the expense involved in the work' (Hale, 1993) suggest this aspect.

Project narratives, we propose, are about connecting the future with the present and the past in project organizing with performative intent. These are temporal in nature; project narratives are dynamic throughout project life cycle. At different stages of the project life cycle the project narrative plays different roles. Before the project begins it is important to establish a project narrative which is then presented in the form of a report or documentation and communicated to various stakeholders: to get funding from investors, to convince the project sponsor to approve the project. At earlier stages of the project life cycle project sponsors aim to establish and sustain a coherent and consistent narrative about project mission. Their responsibility is to communicate clearly and persuade project team members to understand and refer to the project narrative. This can be done by rehearsing the same project narrative over several times so that everyone understands and relates to the project narrative in their day-to-day work whereby it becomes storytelling. At later stages of project life cycle, the project narrative may need to be modified and updated, yet project leaders are expected to be consistent with the original narrative of the project mission. After the project is completed, narratives of project successes are developed (Sergeeva & Winch, submitted). At this stage, project narratives become more promotional in nature both for the supporting stakeholders and for the careers of the project team. As such, we argue that narratives play an important role in constructing project identity for internal stakeholders and project image for external stakeholders. Against these, narratives of failure or antenarratives are generated by opposing stakeholders.

Conclusions

Our narrative perspective on project organizing draws on temporal structuring, future-perfect thinking and narrative enquiry to articulate a perspective which transcends the objective and subjective perspectives on temporality. As Smit says, "no one has a monopoly on dreams, but only a rare few discover the alchemist's act of making them real" (2001: 14). Understanding how dreams become true is, we submit, central to managing projects, and faith in the future created by that project is crucial part of that alchemy. This allows one to convince oneself as the basis for convincing others. Thus convincing oneself, convincing each other in the team, and convincing others as external stakeholders are central to future-perfect thinking in project organizing, and hence temporal structuring. This conviction is, we suggest, generated through project narratives.

We now highlight briefly some premises as the basis of a narrative perspective on project organizing, which is captured graphically in figure 4:

Projects are goal-focused. Acts, i.e. accomplished action, are the focus of attention and deliberation. We conceptualize projects using achievement words more than task words. It is some desired future state of affairs that fuels projects.

Projects are realistic and familiar. Projections rest on imaginations believed in honesty to be possible. Fantasy does not suffice. Thus, only acts considered achievable on the basis of present knowledge form projects. Fantasy entertains, but cannot motivate or legitimate action. Imagination can! Because there is a strong sense of familiarity and realism about the projected future concerns about the necessary steps in implementing the project can be referred to be resolved in real time, i.e. when the need to take action arises.

Projects are fragile. All projects carry along empty horizons yet to be filled in by actual action. Action is motivated, guided and rendered meaningful by the chosen act with each anticipated result. But action is conducted in real time and in contexts that are necessarily anticipated. Therefore, projects are fragile and action is possibly disrupted by external events. Such external events may take routine ends and means out of reach of the actor and stall any progress towards accomplishing the projected act. External events may also supplement the results anticipated with a range of consequences not conceived as part of the project – and which may, on balance, render the achieved results worthless or illegitimate.
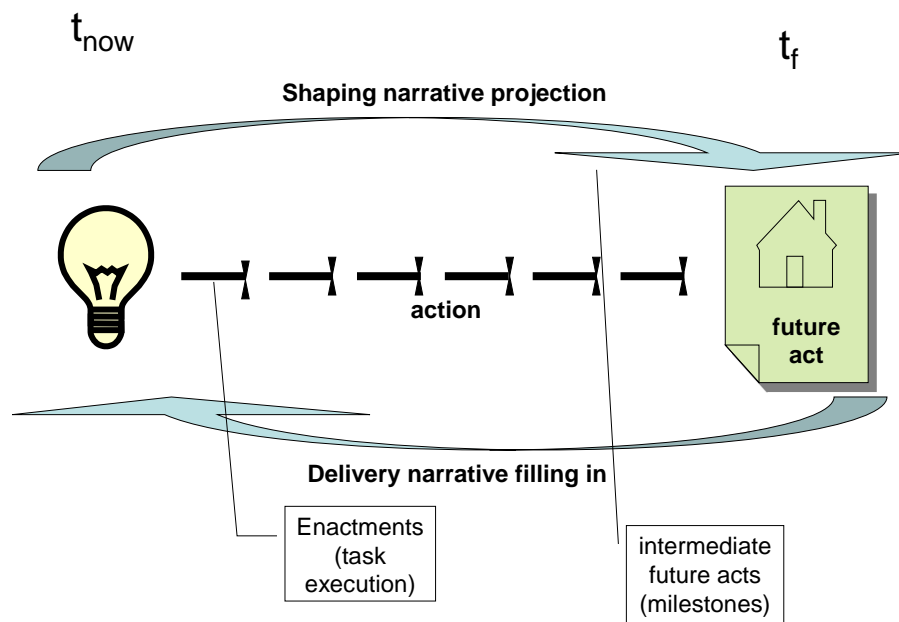

Figure 4. A Narrative Perspective on Project Organizing through Time

Projecting and filling in empty horizons are fundamentally different processes that should not be confused with each other. There is no way in which actual consequences and outcomes can be explained by the protention. It always implies specific contexts and situationally adapted action in the context of complexity and uncertainty. There is therefore no causal link between people's cognitive efforts and eventual state of affairs. The link is purely motivational.

Projects are constituted through narratives through which *shaping project narratives* mobilise the resources required for the project from stakeholders while *delivery project narratives* facilitate endgaming to coordinate execution through the life-cycle of the temporary project organization. While these narratives are principally linguistic, including story-telling, they can also include symbolic narratives such as the fish tank symbolising the project mission of the Sydney Waste Water project (Clegg as well as digital assets such as YouTube channels (e.g. www.youtube.com/user/CrossrailLtd/ accessed 18/03/19).

> *Project shaping narratives* enable the project mission to be projected into the future as a completed act. *Project delivery narratives* constitute the filling in of the project mission through endgaming around task execution and milestone achievement.

In our perspective, project narratives are important in terms of motivation, purpose, sense-making and attention-focusing. They are less important in terms of giving exact direction and operational criteria for acting. They are also less important in terms of explicit coordination of effort across projects and individuals, except in the form of management of meaning and shared cultures. Being convinced about the protention is absolutely essential for actors to let future-perfect-thinking guide managerial action. The strategy for ensuring convincing protentions is to act within areas of familiarity and prior knowledge. Knowing we can do it allows us to think in terms of the act, in terms of achieved action, and to postpone any concern about the actual implementation until some later stage.

We have shown how our research contributes to theory in project organizing by developing the concept of temporal structuring through the analytic dualism (Archer, 1995) of the synchronic and diachronic rather than their conflation in a temporal duality (Giddens, 1979). In particular we have shown how project narratives can be used to analyse both the diachronic dimension through their future orientation towards the articulated project mission as a protended act, and the synchronic dimension as purposeful action in the present, representing and advance on practice-based perspectives on temporal structuring.

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