

WORK IN PROGRESS!

Future Perfect Strategy: The Role of Imagination and the Risk of Empty Horizons

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... 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 (Schutz, 1973:69)

Abstract

Can 'future-perfect-thinking' be turned into a management strategy? Can trivial, everyday projects, like getting a letter to a friend, serve as model for huge, complex construction projects? These questions were made current when Clegg et al (2003) created a bridge between Alfred Schutz and project management theory. In this paper we revisit this bridge to determine if it takes us the right places.

The bridge is founded on the idea that human action is devised from an anticipation of a future state of affairs affected by the action. Thinking in the future perfect tense, the actor projects such effects into the future, and imagining them already accomplished the actor may reconstruct in mind the necessary steps in getting there as a guide to current action. Turning future perfect thinking into a project management strategy implies a constant revisiting and reinforcement of the projections. It builds of the presumption that success is more likely if participants in the project agree and are clear about the future affairs they are striving to accomplish.

Our analysis of two case studies suggests that future perfect thinking may not be an uncomplicated strategy in large, complex infrastructure projects. From the analysis of the Sydney Waste Water Project, studied by Clegg and his colleagues, we conclude that clear projections will not necessarily provide clear guidance to current action. From the analysis of the Channel Fixed Link, studied by Winch and others, we conclude that projections may be better understood as ways of rallying political and financial support than ways of providing sound and realistic foundations for implementing projects.

We conclude that the Schutz'ian project is not easily translated into an adequate image of large, complex projects. Most importantly, the intrinsic uncertainty of all projecting (as Schutz refers to in the vignette above) comes to dominate action when we venture into highly unique and unfamiliar projects. There is a case to be made for an alternative strategy to the future perfect strategy.

The completed work, when constructed in accordance with my designs, will not only be the greatest bridge in existence, but will be the greatest engineering work of the continent, and of the age. Its most conspicuous features, the great towers, will serve as landmarks to the adjoining cities, and they will be ranked as national monuments. As a great work of art, and a successful specimen of advanced bridge engineering, this structure will forever testify to the energy and enterprise and wealth of the community which shall secure its erection (John Roebling, the acknowledged champion of the Brooklyn Bridge; cited in Shapira and Berndt 1997: 339).

1 INTRODUCTION

To phenomenologists projects are the very essence of human action. According to Schutz (1973: 19) action means “human conduct devised by the actor in advance, that is, conduct based upon a preconceived project.” Without a project there would be no action, only behaviour. The project is a visualization of “the state of affairs to be brought about by my future action ...” (1973:68). When actors decide to implement such projects they become equipped with ‘in-order-to-motives’, i.e. action is designed and taken in order to realize the projected future state of affairs.

Considering the fact that Schutz talks explicitly about projects in the context of human and social action it is perhaps less surprising that eventually someone would imagine a bridge between phenomenology and project management. Earlier, the work of Schutz had inspired organizational theorists (e.g. Weick 1979), but Clegg and his colleagues¹ were first in making Schutz relevant to project management (Clegg et al. 2006; Pitsis et al. 2003). The concept of ‘future-perfect-thinking’ became the bridge between the two domains, being translated into project management as a ‘future-perfect-strategy’.

Translations are never innocent (Latour 1992; Czarniawska & Sevón 1996). They imply change in meaning and implications. It would be hard to argue that the mundane projects that Schutz talked about (e.g. mailing a letter) had much resemblance with the organizationally and technologically complex projects discussed in relation to project management. Rather than disowning the relevance of Schutz to the management of modern infrastructure projects we will make a virtue of the differences. In fact, we will

¹ Hereafter referred to as the SWW researcher, SWW standing for the Sydney Waste Water Project which they studied.

understand some current managerial tasks and challenges as a reflection of these differences – and as attempts to move the projects closer to the ideals of the Schutz’ian project. Of special interest to our discussion is the notion of thinking in terms of future *acts* rather than action: or in terms of achievements rather than tasks. This is central to the notion of ‘future-perfect–thinking’, but it is not immediately clear that it is possible and advisable to take the tasks, the resources and the procedures for granted when managing in the context of modern, complex projects. Because of this radical shift in context, we will show that the practice of ‘future-perfect-strategy’, as developed by the SWW researchers, contains very little ‘future-perfect–thinking’, as developed by Schutz and others.

Schutz also reminds us that translating projects into reality is never a trivial thing to do. Projects are intrinsically uncertainty even when they are promoted in good faith, rather than strategically misrepresented (Flyvbjerg et al 2003). They provide motivations for action, but do not necessarily predict accurately the context for acting. What needs to be done, and which consequences that follow, will only transpire in the subsequent process of implementation. Imaginations may prove to be accurate or inaccurate in terms of the anticipated results, but they will probably always be incomplete in relation to the full range of consequences. Unanticipated consequences may add to the value of the project, but most attention is given to such unfortunate consequences that, had they been known in advance, people would have rejected the projects. Roebling’s fate illustrates the point. Had he known the full consequences, he might not have promoted the Brooklyn Bridge in quite the same way. He was killed in an accident while surveying the site and therefore was saved the experience of the budget overrun of over 120%. But imaginations may also be less than honest, and the experience of unfortunate consequences may reflect more than the intrinsic uncertainty of projects. Indeed, when imagination and projection become means for convincing others and for rallying support, they may also become tools for manipulating others. Projects may be keyed and framed in a Goffman’ian sense (Goffman 1974) to produce the impression that everybody is motivated by the same projections while in fact multiple “private” projects are hidden in the disguise of the common one. It is a much debated issue in the literature whether unforeseen consequences (in terms of e.g. budget overruns, delays, and lower utilization) reflect the intrinsic uncertainty of projecting or collusion and foul

play (Flyvbjerg 2007; Winch 2007). We will not prolong that debate, but give it a different analytical angle by analyzing and illustrating the intrinsic ambiguity of organized projects. The aim of creating the project, while facing the challenge that multiple, competing projects may exist or develop must shape and challenge project management in practice.

1.1 Problem definition

Can ‘future-perfect-thinking’ be turned into a management strategy? This is the fundamental question we ask in this paper. The answer hinges on the existence of solutions to the following challenges: A. How to take guidance for current action from the imagined perfect future when the situation is complex and the causalities are vague. B. How to ensure that projections are realistic and not merely fantasies.

1.2 Plan of the paper

First we give a short introduction to the writing by Schutz on human action and projection. We do not pretend that it is anything but a narrow reading, but our justification for this is pragmatic. We want to understand how Schutz related projection to action, i.e. not only the ‘future-perfect-thinking’, but also the implementation.

Next we briefly state the differences between projects in Schutz’ian terms and in project management terms. Going from individual human action to collective action does imply creating agreement on the imagined future state of affairs that can guide and inform current action. Going from mundane tasks within familiar frames and contexts to technologically and organizationally complex projects (in the paper infrastructure projects) makes it likely that the imagined future can guide and inform current action as well as misguide and fool current action, depending on the proper understanding of the parameters of the situation and the causal mechanisms at work.

With these distinctions at hand, we next re-interpret the findings of two already published studies of infrastructure projects that have already been analysed from the notion of ‘future-perfect-thinking’, i.e. Clegg et al (2006) and Winch (2007).

Finally, we sum up our contributions by defining a number of issues in project management that need to be studied empirically in the future.

2 SCHUTZ ON FUTURE-PERFECT-THINKING

... I have to place myself in my phantasy at a future time, when this action will already have been accomplished. Only then may I reconstruct in phantasy the single steps which will have brought forth this future act. ... it is not the future action but the future act that is anticipated in the project, and it is anticipated in the Future Perfect Tense, modo future exacti. (Schutz 1973:20).

Schutz (1967), in his extended essay criticising Max Weber's analysis of meaning in social science first published in 1932, draws heavily on the German phenomenological philosophy associated with the work of Heidegger and, in particular, Husserl. 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 organisational theorists. Schutz (1967) argues that all purposive action, as opposed to reactive behaviour, has the nature of a "protention" or a completed future state which gives meaning to that subsequent action which will bring forth the 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 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 tense².

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. However, this is distinguished from action because of the absence of protention giving meaning to the activity. As Schutz argues in clarifying the differences between himself and Weber

All 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).

² This is formulated as "will have been" in English. French, German and probably all languages have analogous tenses.

He further emphasises in critique of Weber that in this perspective, the ‘act’ is distinguished from the ‘action’ which is motivated by the perception of the 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 (Schutz 1973: 67).

In developing this perspective, Schutz (1973) emphasises the motivational aspect of future-perfect thinking, showing how it provides the future-orientated “in-order-to” motive for an action, 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 practicality 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 (1973: 73).³

For Schutz, action is not necessarily unitary and indivisible, even though its meaning as a whole is derived from the projected act. Protention of intermediate acts forms part of the assessment of the practicality of the principal act, and actions can be meaningfully phased. Indeed, Schutz’ (1967: 61) definition of rational action is one that has specified intermediate goals. The hierarchical character of the acts (Simon 1962) and the experience of a working work-break-down structure (PMI 2006) are elements implied in the ‘future-perfect-thinking’ of actors.

As Schutz began to engage (1973) with the American pragmatist school of philosophy upon his arrival there in 1939, he drew from Dewey the role of the imagination in future-perfect thinking as well as insights into its deliberative nature. He also drew from Thomas the power of beliefs as elements of shared social reality. However, one thing he did not appear to draw from Dewey was the role of impulse in action (Dewey 2002).

³ Collins and Kusch (1998:7) define ‘action’ as “those things one can intentionally do in a society, that get their sense from taking place in that society”. In the present context, protentions must be both realistic and legitimate to serve as foundation for action.

According to him acts vary in their motivational power as a function of their perceived value to the actor. In this sense, Schutz shares with the Carnegie school a “coolly cognitive” (Adler and Obstfeld 2007) approach to action and leaves open the question as to what makes the stimuli of projects and future-perfect thinking strong or weak.⁴

2.1 Our take-away from Schutz on Future-Perfect-Thinking

In preparing for our analysis of complex construction projects, we will highlight a few premises which we claim stem from Schutz’ notion of human action.

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 (Ryle 2000). 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 realistic. 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. Imaginations can!

Because there is a strong sense of familiarity and realism about the projected future we can postpone concerns about the necessary steps in implementing the project to be resolved in real time, i.e. when the need to take action arises.⁵

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 results. But action is conducted in real time and in contexts that are not necessarily anticipated. Therefore, projects are fragile and action is possibly disrupted by external events. Such external events may bring routine ends and means out of reach of the actor and stall any progress towards accomplishing the projected act. External events may

⁴ Schutz (1973: 83-84) does discuss the implementation of projects as a matter of commitment and choices as subject to competing preferences.

⁵ Note that Schutz predominantly use examples from ordinary daily life, petty projects like mailing a letter. The need to consciously plan all the steps in reaching the mail box is very low, and even if locale conditions may influence e.g. the choice of footwear it is irrelevant for the commitment to the act.

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.

Projecting and filling in empty horizons are fundamentally different processes and phenomena that should not be confused with each other. There is no way in which actual consequences and outcomes can be explained by the projection. It always implies specific contexts and situational adaptation. Obviously, there is no direct causal link between people's cognitive efforts and eventual state of affairs. The link is predominantly motivational.

In our perspective, projects as model for human action 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 protentions is essential for actors to let future-perfect-thinking guide human 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.

2.2 Projects and the Art of Convincing Others

Projects of all sorts build on imaginations about the future. As we saw above, human action is constituted in the anticipation of future results that subsequently guide and give sense to conduct. Formal projects are designed with explicit and negotiated goals and purposes.

The 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, is supposed to be the foundation for acting in the present.

The trust in imaginations and projections being realistic and not merely flights of fantasy may need work to establish and justify, not least in view of the track record of prior infrastructure projects not achievable within stated parameters, e.g. the Brooklyn Bridge. In such complex projects, it is not sufficient to convince oneself of the feasibility of the project. You need to agree within the project team which protention will be the shared foundation for the implementation and convince each other that it is achievable. And in the process of coming to agree on a protention, the team needs to convince external stakeholders about the realism of the project.

Convincing oneself. The actor's willingness to let present acting be guided and determined by protentions depends on his or her acceptance of the projected future as realistic and relevant. Actors have to convince themselves about the achievability of the act. If not convinced, it would be foolish to base current acting on such an imagined, fantasized future. The need to distance oneself from pure fantasy, i.e. to convince oneself of the achievability of the act, puts, according to Schutz, narrow limits on the kinds of acts that can be projected. .

Convincing each other. 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 manager) 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. We discuss this complication below by analyzing the project management strategies of Sydney Waste Water project (Clegg et al 2006). 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 guide and direct by the official protention. When that is the case, the team disintegrates.

Convincing others. But 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. Now, it is no longer sufficient to convince oneself or the other members of the project team. It is also necessary to convince external stakeholders. Since such external

stakeholders are not held responsible for achieving the projected act, their criteria for accepting protentions may be highly individual and egoistic. The analysis of the Channel Fixed Link project (Winch 2007) suggests that the projection of one shared and integrated project may be an illusion that hides the proliferation of small, individual projects that are not designed to add up to a common effort.

In the pages below the Schutz'ian project, meant to reflect the foundation of human action, travels into the realities of complex, formally organized ventures. The issues of management take on a different character in the process. Surprisingly, pure fantasy that is seen as detrimental to human action because it fails to convince the actor about the achievability of the projected act, regains its role in convincing internal and external stakeholders who may not be held responsible for the implementation of the project and therefore care less about the realism than about the symbolism of the protention.

3 THE SYDNEY WASTE WATER (SWW) PROJECT: PROTENTIONS TO CONVINCING EACH OTHER

We turn now to a review of the contributions of the research by the SWW researchers which identifies the potential value of understanding project organising in terms of a future-perfect-strategy. Prior to this work, in the management literature FPT was largely identified as a process to facilitate sensemaking (Weick 1979; 1995) rather than an explicit managerial strategy.

The case is one of the projects associated with the Sydney Olympics. Therefore it had an immovable deadline with a relatively flexible budget – the inverse of normal public sector procurement practice (Winch 2002). The project mission was to clean-up of the water in Sydney Harbour as part of the NSW Government Waterways Project. This was to be achieved by building a storm drain to relieve the main sewage system which tended to back up during heavy tropical storms. The scope consisted of approximately 20km of tunnels in sandstone and associated treatment plants and other installations. It was delivered on time and slightly over the target budget. The project was organised as an ambitious project alliance on an open book basis between three contractors and the client.

Project performance was measured by five Key Performance Indicators (KPIs):

- Schedule – immovable at 31st July 2000 due to the Olympics;
- Budget – negotiated around AU\$380m;
- Community relations – particularly the affluent stakeholders who would be affected by the installations above ground;
- Occupational health and safety;
- Ecology, particularly the marine life of Sydney Harbour.

A formal statement of project culture was developed by the project management team, and Business as Usual (BAU) levels of performance were identified to provide the baseline against which the KPIs could be measured. Performance rewards were available against all the KPIs, which could not be traded off against each other. Benchmarks for non-financial KPIs were developed by the project team and externally audited. The project organisation was self-consciously innovative in procurement terms, striving for excellence in rejection of the BAU mentality. The collaborative environment facilitated high levels of innovation and value engineering in order to meet the KPIs. The project was managed by a Project Alliance Leadership Team (PALT) and collaborative working was supported by team-building consultants

What does it mean to manage projects through a future perfect strategy? Three specific management practices were deployed in the SSW case:

“Strange Conversations”

Building on Weick and Garfinkel the SSW researchers analysed how meetings were conducted on unclear agendas, without shared purposes and with little expectations about the outcomes. Yet, these strange conversations help clarify things, and often led to surprisingly creative solutions. “Often, in the initial meetings, it was unclear what it was that was being discussed, as talk ranged so widely ... In fact, it was often the case that the eventual outcome informed what it was that the conversations had been about” (Pitsis et al. 2003:583).

“End Games”

The practice of endgaming comprised management reminding everybody of what needed to be accomplished, when. This included challenging people’s predictions of how much they could accomplish: “... I’d like not to have a stretched target. ... What are the numbers you would want to be associated with? ... Don’t set a stretched target and miss it. If you cannot meet it, change it now” (Pitsis et al. 2003:583).

“Projecting Feelings, Concerns, and Issues”

This was an agenda item at each meeting, allowing people to share whatever difficulties they had in believing in the project. It introduced a recurrent “reality check”: “If an issue had been constructed in regard to any aspect of the project that was causing concern, then it was reiterated monthly, until it was no longer a matter for concern. While some of these feelings, concerns, and issues were quite technical – about scheduling and the like, others concerned more complex community relations (Pitsis et al. 2003:584).

There is little doubt that the SWW project was managed in an innovative way. For instance, instead of being based on very detailed contractual documents,

The project grew from just 28 pages, with no design and no clauses (other than an injunction to think in the future perfect and create a much cleaner Sydney Harbour) to a project that delivered what it set out to do ... (Pitsis et al. 2003:588)

To create and maintain a shared imagination the SWW project management created a “designer culture” (Clegg *et al* 2002) that deliberately placed stress on cultural artefacts. Thus the co-located project team offices were open-plan and displayed large banners articulating the nine alliance principles. Trend lines for the KPIs were clearly displayed, and a large, strategically placed fish-tank symbolised the project mission – clean water in the Harbour – and emphasised the importance of the fifth KPI clearly articulating the purpose that by the time the Olympics start, the purity of the water in Sydney Harbour would be protected by the completion of the storm drain.

3.1 Our Interpretation of the SWW Future-Perfect-Strategy.

A complex project, without much prior planning and elaborate contracts, and which succeed convincingly to do what it set out to do: a wonderfully deviant case (possibly a Black Swan in project management (Taleb 2007)). According to received wisdom, thorough planning and complete contracting is a *sine qua non* for success in complex infrastructure projects. We know now that this is not true.

Partly, it is not true because no stipulation or projection, in imagination or on paper, will clean the water in Sydney Harbour. The fish-tank may symbolize clean water, but not do the cleaning. To explain the success, somehow we have to understand why the fragility of projects did not become manifest in the present case, even if the circumstances of the SWW project were so more uncertain and ambiguous than projects in the Schutz'ian sense. By which mechanisms and circumstances did project managers succeed in cleaning the water and make stakeholders happy by just talking about clean water and happy stakeholders?

First of all, we have little indication of a conscious managerial effort to make the SWW project more realistic. On the contrary, it seems as if its unusual character is underscored. The mission is ambitious, the deadline challenging, and the organizing is unconventional, to say the least. The lack of information about most work parameters, including ground conditions, would make most contractors speculate what unfavourable fate awaited them. Many of the KPIs were highly unusual, and the collaborative culture deviated from what everybody describes as normal practice in construction. In a literal and symbolic sense, the SWW project travelled uncharted territories. As such, as far as Schutz is concerned, it is not likely a project in the sense that we honestly believe it can be done and rest assured that we can rely on well-proven "technology" to achieve it. We are rather in a fantasy-land of things we fancy to do but have little idea how to do.

In ordinary projects, perhaps prior planning and design become meaningful as ways of bringing us back from such fantasy-lands. Planning and design could be interpreted as the repeated break-down of acts into smaller and smaller intermediate acts. Most projects start out unique, and in principle outside anybody's zone of prior experience. But by decomposing the project into multiple layers of intermediate acts, the projected

acts of each individual actor may nonetheless ensure a sense of familiarity. The project is unique, but the individual steps of implementing it are not. However, in the case of SWW no detailed design and project plan seemed to exist at the time of contract agreement, giving the project management even less credibility in arguing the realism of the venture to the contractors and to the public.

Because the project is unusual and the KPIs are unconventional the determination of efficient steps of implementation must have been especially complicated. We may imagine that, e.g. in dealing with community groups the project team and management must have encountered situations when they had no notion of what to do and how to predict the consequences. They were facing ‘open possibilities’ (Schutz 1973:81) which do not enable meaningful choice. We imagine that by discussion and debate in the project team they transformed open possibilities into ‘problematic or questionable possibilities’, i.e. alternatives “for which something speaks”. The deliberations of the team reflect the discovery of (and possibly agreement on) the things that speak for each individual alternative action.

We find it most probable that the SWW project team has been fully preoccupied with finding adequate and available means. This may not be reflected in the data reported, but the reason may be that data are predominantly collected at PALT meetings, rather than other meetings such as those associated with the design process. We have little knowledge about the link between such meetings and the activities in between meetings – and we have no knowledge whether meetings were guided by events on site or the other way around. All we want to suggest is the point that if we were looking for explanations of the success of the project, probably we would not search for them during meetings, but in phases in between meetings.

Secondly, if project management makes little effort to render the SWW project more familiar and believable, the key may be the motivational aspect of projecting acts into the future. Probably everybody could understand the importance of cleaning the water and ensure success of the Olympics Games in Sydney. The participants in the SWW project probably had a clear picture of the projected accomplishments and were strongly committed to the course. However, it is very unlikely that such understanding of purpose and such honest commitment would help the participants to design the right

steps of implementation. It is likely that they would all be motivated to be constantly searching for such right steps, something which increases the likelihood of finding solutions if they exists, but which says nothing about the likelihood that such solutions exist to be found. Likewise, the intentions of making staff and community excited about the project are easily understandable, yet inadequate explanations of the success. Take e.g. the following observations:

By focusing on the uniqueness of the process, staff and community could work together to solve any problems. Rather than focusing on inevitable construction problems as sources of profitable variation for their firm, members of the project would work in ways that would deliver whatever was best for project (Pitsis 2003:579-81).

We have no doubt that this is an accurate observation, but we question that it would necessarily have been so. It seems to us that it is within imagination that participants would have managed the contexts in more opportunistic manners. It also seems with imagination that lack of knowledge might make it very difficult indeed to determine what action would be best for project. With less luck participants might unwillingly have made things turn out less promising along the way. In turn, this might have motivated participants and community to acts of self-protection.

Now we come to realize that possibly the strange conversations, the endgaming, the airing of concerns at meetings, and the installation of fish-tanks and other expressions of the designer culture are all reflections, not of a future-perfect-thinking, but of the difficulties of maintaining and negotiating such future-perfect-thinking. They are compensatory managerial strategies for the likely orientation to the immediate task and the current circumstances which are necessary in all novel situations. The project management must remind the participants about the purpose – about the act they are supposed to accomplish – because it will easily escape them in the turmoil of filling in the empty horizons. They have to discuss them in the open to ensure an alignment of the highly individual projects that an elaborate division of labour induces. They have to keep up the “reality” of the act in order for the participants to maintain committed and motivated to search for solutions to the problem of cleaning the water of Sydney Harbour. They may claim that they are staging a recurrent “reality check”. But more likely, it could be described as a reality-creation.

In our interpretation, the SWW project team is busily searching for ways of rationally filling in the empty horizons created by the commitment to clean the Sydney Harbour. We must remind ourselves that rational choice also builds on future consequences imagined. When the Clegg and his colleagues interpret all references to temporality as a reflection of future-perfect-thinking we have to warn against a possible conflation of projecting and rational choice of action. Choice of action relies on the projecting of consequences in the future for each alternative, but the focus is on alternative action, not on alternative acts. Most of the data (as they can be evaluated from the published material) have to do with the difficult choices of appropriate or rational action in view of the highly complex and uncertain reality of the project. Projecting consequences are difficult as long as the task is not approached from an imagined future where consequences will already have materialized.

The task prior to projecting and future-perfect-thinking was to design reliable acts – a combination of projected accomplishments with reliable means to accomplish them. Once such acts exist (and are agreed upon) action could be taken, motivated and made meaningful by the imagined act. However, it remains to be shown how acts were designed in the SWW case to allow social action to be taken – action being defined as human conduct based upon a preconceived project (as quoted above). The practice of endgaming could be interpreted to mean that the management insisted that the necessary causal mechanisms were devised and negotiated. Without such agreement on causal mechanisms, agreement could not be expected on the projection of acts. In itself the loftiness of the project of cleaning the water of the Sydney Harbour does not allow an easy designation of conduct in specific situations. More narrow acts must have been specified in order to create and maintain trust in the projections of even small and intermediate accomplishments. We suspect that such narrowly defined acts that added up in the end to produce a success in terms of achievements on KPIs would not always add up in this way. We need to know how and when success can be achieved by adding local and intermediate successes.

3.2 Conclusion

We have discussed the impact of taken projects out of the zones of prior experience and honest trust in the achievability of the act. We have shown that ordinary strategies of

making projects more familiar by repeated break-down of act into smaller and smaller intermediate acts were not followed in the case of the SWW project, possibly because of the pressing deadline. We interpreted the future-perfect-strategy as not a reflection of future-perfect-thinking, but as a reflection of the difficulties of maintaining such thinking. The challenges of finding proper means and to take adequate action in light of current problems and circumstances would probably give incentives for narrower perspectives and shorter time-horizons. The fish-tank should remind participants of the wider perspective and longer horizons. They should not, nor could they, replace the narrow, technical and situational constraints on the choice of means and the strategies for finding practical solutions. They represented additional concerns that the management needed to lend voice. They did not monopolize the attention, nor did it symbolize future-perfect-thinking.

4 THE CHANNEL FIXED LINK STORY – HOW TO CONVINCE OTHERS

Once more we take our discussion of project management and future-perfect-thinking into a different empirical realm. The Channel Fixed Link project is, similarly to the Sydney Waste Water project, a highly ambitious infrastructure project, but it failed to achieve the level of achievement and success that characterized the Australian project. Nobody has ever claimed that Sydney would have been better off without the SWW project in spite the fact that no tropical storm happened in connection with the Olympic Games. But it has been claimed that the British economy would have been better off without the CFL project, in spite the fact that 10m passengers are travelling on the crossing trains each year.

Let us begin with the CFL story.⁶ An Intergovernmental Commission (IGC) established by the Treaty of Canterbury between France and the UK in February 1986 awarded a concession to operate the Channel Fixed Link to Eurotunnel in April 1986. Prospective concessionaires had been invited to bid in April 1985, and the Anglo-French consortium of 5 banks and 10 construction companies dubbed Eurotunnel provided the most attractive offer to the two governments. The same 10 construction companies then formed the Transmanche-Link (TML) consortium and were duly awarded the

⁶ This section is an update of Winch (1996); the research was sponsored by The Leverhulme Trust and Plan Construction et Architecture, an agency of the Ministère d'Équipement.

construction contract by Eurotunnel in August 1986. Thus Eurotunnel was the promoter/client for the project as concessionaire, and TML was the contractor. TML chose to undertake the tunnelling work itself, while it let subcontracts for the supply of services related to fitting out the tunnels and the terminals. It also acted as an agent for Eurotunnel for the procurement of the locomotives and rolling stock to provide the car (now branded as Le Shuttle) and heavy goods (HGV) shuttles from the loose Euroshuttle consortium. Eurostar is a separate operation established by a consortium of Belgian, British and French railways to provide through passenger services and purchases an agreed proportion of the CFL capacity, as do rail freight operators. See a simplified organigramme in figure 1.

Funding for the project was obtained from a number of sources and in a number of tranches. The fundamental premise of the funding was specified in the Treaty of Canterbury: article 1 specified that the construction and operation of the scheme "shall be financed without recourse to government funds or government guarantees of a financial or commercial nature". This left private equity and loan capital, both of which were pursued. The original capital of Eurotunnel was provided by the promoters - the five founding banks, and the original 10 construction corporations with the latter in the majority. In September 1986 Eurotunnel was refinanced with £46m of equity from the founding banks - known as Equity 1 - and the members of TML became minority shareholders. Equity 2 went ahead in October 1986 with a private placing with financial institutions which, after some arm twisting by the Bank of England, raised £212m.

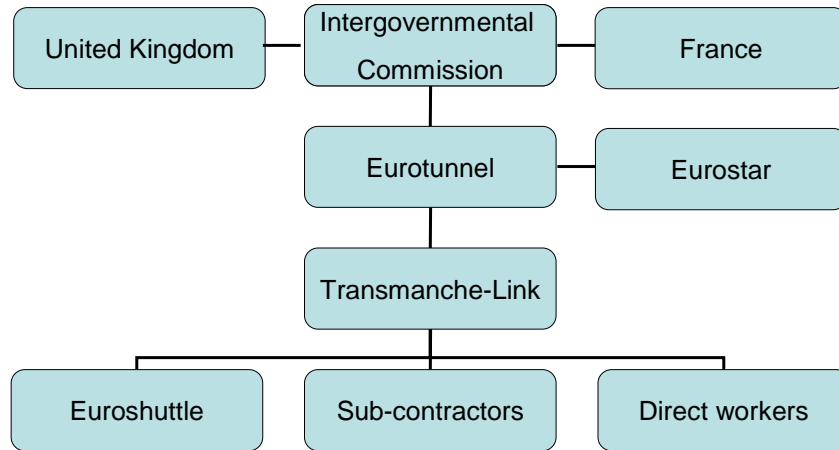


Figure 1 Simplified Organigramme of the Channel Fixed Link Project

Eurotunnel now turned its attention to obtaining loan capital. Four of the founding banks acted as the lead banks in this task. In August 1987, 50 international banks agreed to underwrite the loan and proceeded to syndicate it worldwide and November 1987, a credit agreement was signed with over 200 banks for £5000m. Later that month, Equity 3 was launched for public subscription which raised the required £770m. By early 1990 Eurotunnel was running out of the funds raised in 1986 and turned its attention to raising the additional funds required in two ways. First, it returned to the original bank syndicate for further loans. This was not entirely successful, as more than a third of them refused to provide further funds, and the lead banks were obliged to increase their own exposure (Financial Times 09/10/90). Overall, this exercise raised approximately £1800m. On this basis, a rights issue was launched to shareholders which was “surprisingly” successful (Financial Times 06/12/90) in raising £577m.

The construction contract specified that the completed facility would be handed over by TML to Eurotunnel in December 1992 for commissioning and an opening in May 1993. Although the tunnelling works were completed on schedule, there were significant delays in the fitting them out with the fixed equipment. The project was finally handed

over on the 10th December 1993, some 12 months late, a schedule escalation of 14.2%. The official opening by the respective Heads of State finally took place 12 months later than the original date in May 1994, but this was more dignified than efficient in that the full range of services (rail freight; HGV shuttle; Eurostar; tourist shuttle) was not available until December 1994. However, the official opening allowed a new round of fundraising and £693m from the core banks, and a further £50m from a separate syndicate, was agreed. On this basis, a second rights issue of equity was underwritten for £816m.

The budgeted value of the contract, in 1985 prices, was £2710m. Table 1 gives the construction budget in constant 1985 prices broken down by the main categories of work. As can be seen the budget escalated steadily. The overall budget escalation in constant prices is 69%, the largest proportional increase being the Euroshuttle rolling stock. The benchmarks provided by the RAND Corporation survey (Merrow 1988) of megaprojects (>\$500m @ 1984 prices), demonstrate that this was not an egregious case of escalation because the megaprojects average is 88% compared to the 69% witnessed here

	1986 Budget	1990 Forecast	1994 Outturn	%Increase
Tunnels	1329	2009	2110	59
Terminals	448	491	553	23
Fixed Equipment	688	814	1200	43
Rolling Stock	245	583	705	188
TOTAL	2710	3897	4568	69

NOTES

All figures in millions of pounds sterling at 1985 prices.
 Source: Eurotunnel Rights Issue Documentation 1990 and 1994

Table 1 Channel Fixed Link Budget Data

Once the revenue-earning services were launched they failed to meet the revenue projections and further losses accumulated. Shuttle freight is the only market sector where out-turn performance has exceeded predictions (Anguera 2006: table 9), although the Eurostar traffic forecast of 10m passengers a year will probably be met in 2008 following the opening of the Channel Tunnel Rail Link from the coast to London. Since it opened, Eurotunnel has been profitable at the operational level, but has not been able

to generate enough profit to make significant progress in paying back its loans and it was not until 2008 after substantial financial restructuring that Eurotunnel posted a profit.

A recent hindsight review of the performance of the channel fixed link project concluded “the cost benefit appraisal of the Channel Tunnel reveals that overall the British economy would have been better off if the Tunnel had never been constructed, as the total resource cost has been greater [than] the benefits generated” (Anguera 2009: 314) with a negative net present value of £10006m in 2004 prices. Arguably, this is a rather restricted view of the situation for it does not take into account any positive externalities such as spending by the additional passenger traffic generated or any regeneration effects in northern France. Nor does it recognize that the vast bulk of the capital came from outside north-western Europe and so was a net stimulus to the local economy even if a net loss to the global economy.

4.1 Future-Perfect-Thinking on the CFL Project

Internalization of the objectives of the project was achieved in a number of ways. At one level, the professional culture of civil engineering enabled much of the internalization – this was the most exciting project imaginable for a whole generation of civil engineers. In an important sense, it was the scale of the engineering challenge that bounded the organization together:

L'achèvement du Projet tient du miracle compte tenu des différences culturelles linguistiques, morales et sociales. La réussite résulte probablement dans l'adhésion d'une majorité à un objectif commun. Le degré d'incompréhension est parfois tel qu'il demande une dépense d'énergie incomparable pour aboutir (source: response to UCL questionnaire, October 1993).

However, within this, competition between the two side of the Channel was actively encouraged by management, with arguably detrimental effects on performance overall.

La notion de rivalité entre les équipes des deux pays fut très poussée, voire encouragée, surtout par les anglais dont la méfiance vis-à-vis leur partenaire était beaucoup plus grande. Nous avons vu deux chantiers lutter l'un contre l'autre au lieu de collaborer dans un but commun. On aurait pu, dès le début du chantier, créer de biens de tous types - professionnels, faire des échanges, etc., à tous les niveaux.

Au lieu de les encourager, je dirais que les deux directions décourageaient tout rencontre de ce genre (source: response to UCL questionnaire, October 1993).

Pierre Matheron, the director of TML's French operations, describes how rivalry between the tunnelling teams to cross each other's frontiers (Les Echos 10/12/90) was fostered. A French informant saw the project as dominated by the British (interview 06/01/93), while his British opposite number saw it as dominated by the French (interview 09/07/93). What differed was the basis of the domination - the British dominated through their expertise in financial matters, while the French dominated through their expertise in technical matters. However, the same informant explained that, "where it mattered it wasn't a problem - professionals get on because they respect each other's competence" (interview 05/09/95).

In spite of the mutual respect, the fostering of competition as management strategy (whether deliberately adopted or not) would seem to encourage the emergence of conflicting sub-projects and sub-cultures within the project team. In so far as these sub-projects were clearly delineated and aligned (e.g. through efficient contracting), efficiency at the level of the project as a whole would be severely hampered by competing projects and cultures. But it might be suggested that the project management was not concerned with the internal collaboration of the project team and concerned instead with the external stakeholders of the project. Even the strategies that resembled the project management in the SWW case were aimed at radically different objectives.

Take as an example the deployment of artefact that were part of a designer culture in the case of the SWW project, but which was used here to communicate to the external stakeholders. An enormous number of graphical artefacts were created to communicate the design intent of the CFL concept by the promoters – the creation of such “artist’s impressions” is standard practice on projects of all sizes, if only for the purposes of communicating to stakeholders. However, the importance of physical artefacts is well illustrated by the CFL case. Freud (2006: 97) reports an early conversation:

Nick said..... “We’ll need a model railway.”

What?” said Bob and I, aghast.

“A big one. Showing how the tunnel will operate. Trains and shuttles whizzing round. People love that kind of thing. We’ll put it in an office in the middle of the City and invite the [financial] institutions for meetings and dinners. They’ll all come to see a model railway”

Similarly, endgaming had less to do with ensuring project performance to be based on realistic premises, as was the case in the SWW project. In the CFL project the issue was not about realistic and convincing ends, but about acceptable and legitimate projections. The stated handover and opening dates for the CFL of December 1992 and May 1993 figured in all discussions between Eurotunnel and TML. The importance of the end date lay not in its physical immovability, but in the delays to the revenue stream required to offset the interest payments on the capital borrowed which commenced with completion and to start repaying the principal. Failure to do this would mean the capitalisation of the interest payments, and, therefore, mounting debt.

Project scheduling was performed on a mainframe using Artemis 9000 software operated by a Central Planning Department with a structured hierarchy of schedules (Anderson 1992). The underlying principle of project scheduling based on critical path analysis (CPA) where the critical path is the longest path through the network without slack means that it can be used as an endgaming tool. The “backward pass” through the network starts from the final completion date and works back to the current date, while the “forward pass” works from the current date to the completion date; it is the relationship between the two that identifies the extent of slack or buffer in the project schedule.

CPA is endgaming at its most rationalistic, but such rationalism became unviable within the context of the CFL because of the escalation of the project schedule and budget. This led to intense and public disputes between TML and Eurotunnel and endgaming took on the form of a power-play between the negotiators rather than a rationalistic analysis. In the end, the issues were resolved by the two principal parties sitting down and thrashing out the issues round the table, but it was only after the middle of 1993 that real progress was being made along these lines. In the meantime, the uncertainties involved compounded the project management problem. For instance, it was clear from May 1991 that the June 1993 deadline could not be met due to delays on the procurement items and the M&E works, yet agreement on its revision took another two

years. In the meantime, TML managers were obliged to work to deadlines which they knew to be unrealisable (Anderson 1992). Future-perfect-thinking giving meaning to action is here supplanted by pure mere behaviour. This had dramatic consequences for the subsequent project performance.

4.2 Projections and Dissimulations

We now wish to show how protentions played a different function in the case of CFL, as compared to Schutz' discussion. We can easily dispel any lingering suspicion on the part of the reader that expected utility theory is anything more than a rhetorical device in investment appraisal on major projects. David Freud (2006: 356), reflecting on his 20 year career in the City of London and his part in raising over £50bn in equity for major infrastructure projects argues that the City

was dominated by powerful characters accustomed to taking tough decisions under the immediate pressure of a gossip-fuelled marketplace. The currency was not cash but chaos. Transactions invariably took place at the edge of feasibility, conducted against a competitive background under great time pressure. I found few committees of experts considering all the available evidence in wise conclave. Much more typical were decisions taken on the fly, by whoever happened to be available, based on a fraction of the full information.

We wish to argue that projecting a perfect future (rather than future-perfect thinking proper) is a vital strategy in rallying support in such a chaotic world. We will do this by citing a variety of examples of fantasized outcomes shaping the processes of decision-making. The first concerns the estimation of the budget for the work. A senior executive of Taylor Woodrow, one of the TML member firms, argued that

The project price was put together to convince the governments, it was a viable price, a promoter's price. What it was not was a contract price. We should never have undertaken to do the work for anything like the sums that were in the submission to the governments (cited Byrd 1994: 27).

In other words, the member firms of TML did not believe that the project could be built for the initial estimates – essentially those contained in the White Paper. The estimates were simply to ensure that the investment appraisal calculation stacked up – a classic case of what Flyvbjerg and his colleagues (2003) call “strategic misrepresentation”. The

members of TML all had a profound interest in the project going forward because they would share the lucrative construction works between themselves. The work was expected to generate strong cash flow because it was forward funded (TML was paid for the work planned to be executed the following month, not the work executed the previous month as is normal Winch 2002), and even in the outturn no member of TML is reported to have lost money on the project.

At the same time, the revenue estimates were being consciously inflated in the shape of the passenger usage estimates for Eurostar in another act of strategic misrepresentation. The Chair of the Eurostar group, who worked at the head office of SNCF (French railways) in 1986, took the opportunity of the opening of the first phase of the Channel Tunnel Rail Link in September 2003, to reveal that SNCF never believed the forecasts it gave for the number of travellers using Eurostar of 17 passengers a year at the time of project appraisal during the 1980s but made them so as to ensure that the business case was viable without public support (Financial Times 29/09/03). Rail operators want to run trains and the CFL presented an exciting new opportunity for doing just that.

The third is the apparent manipulation of the cover ratio calculations. As one banker explained to Fetherston (1997: 257):

A cover ratio is a present-value relationship between a flow of income and a flow of costs. If the flow of income is greater than the flow of cost, you have a positive cover ratio.....The revenue forecasts were reported on and updated every six months or so months and [so were] the costs.. So every six months, effectively you got a new series of project economics. You fed them into the computer and you came out with a different number and you kept your fingers crossed.

If the cover ratio fell below 1.2 Eurotunnel could not draw down its loans; if it fell below parity Eurotunnel would default on its loans. In the face of the rising costs presented in table 1, default would have been inevitable unless revenues also rose. So as costs rose, predicted revenues mysteriously rose as well “without any clear evidence or justification” (Anguera 2006: 303), conveniently sustaining the cover ratio.

A reading of any of the histories of the project suggests that, fundamentally, the CFL project was an act of faith – not necessarily good faith. The history of the CFL has been characterised by a few true believers who put as much of their own money as they could

afford and as much of other peoples money as they could obtain into the project. For instance, d'Erlanger, a leading banker and businessman long involved in the CFL, told Fetherston (1997:53) that "I was brought up in a home where the Channel tunnel was a religion". Henderson (1987: 15), the first chair of the UK promoter company, argued that

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.

Such blind trust and faith were easily exploited by others who embarked on projects of their own. Our argument is that an artefact that had been continuously imagined and re-imagined for nearly 200 years was used to motivate over 200 banks around the world together with thousands of small investors in part with over £10bn for the ultimate benefit of the travelling public of the Brussels/ London/ Paris triangle in a small corner of north-western Europe.

Where the seductiveness of the vision was an inadequate motivation for investors more covert political levers were pulled. For instance, the Bank of England (the UK central bank) intervened with the sale of equity 2 in mid 1986 to financial institutions. As Freud (2006: 88) reported:

It was horrific. We were told to go to the war-room and wait by the phone. We weren't required to join the Bank team in contacting the institutions. In fact, we never found out who from the Bank was doing the rounds. Some-one clearly was, because every fifteen minutes or so the telephone would ring and one of the institutions, which had point-blank refused to invest up till then would say through gritted teeth, 'Put me down for £1m' then, and slam down the phone.

A second indication of the level of political support was the decision by the UK Prime Minister to face down political opposition to the project within her own leadership team (Henderson 1987). Also, the Japanese banks, reeling from their own stock market crash and constrained by new banking regulations were reluctant (Financial Times 17/08/90) to invest further as the project ran out of money in 1990, and were only persuaded by a direct appeal by the UK Prime Minister (known colloquially as a hand-bagging) to the Japanese Prime Minister, who in turn cajoled these banks the (Financial Times 06/05/94).

Thus one key to the successful promotion of the CFL in the mid 1980s was the relatively warm relationship between the UK Prime Minister Margaret Thatcher and the French Président, François Mitterand. While Mitterand's motivations would appear to be based in the "fait du prince" or the idea that one function of the head of state is to build "grands projets" (Chaslin 1985), it is less clear what Thatcher's were given her notorious antipathy towards both trains (Fetherston 1997) and continental Europe. One plausible assertion was that her aims were contrary of Mitterand's; that is to say she wished to show what the private sector as opposed to the state could do.

4.3 Conclusion

The CFL project illustrates an important aspect about human action. Thinking about a perfect future, and imagining that it has already materialized, allows us to guide and give meaning to current efforts as being expended in-order-to fulfil the act. The guiding and motivating of action is important to Schutz, but only within the boundaries of what is honestly believed by the actor to be achievable and practicable. While in retrospect an act of faith or fantasy, at the time of committing to the project either the actors believed it practicable, or alternatively felt compelled to take part in a losing battle. It appears that a fair amount of arm-twisting took place, suggesting that actors could take part without being convinced of the project being practicable in economic, contractual and technical respects. Social, political and communal pressures may have turned participation into an obligation, putting the burdens of proof on the shoulders of the defector. It may be equally difficult to prove that a project like the CFL is feasible as to prove it is not. Thus, participation may not necessarily be interpreted to indicate that the actors were convinced that they could succeed in the endeavour. It may simply indicate that defection was illegitimate because of a lack of proof of the infeasibility of the project. Imagination (in the Schutz'ian sense of realistic protentions) and fantasy (in the sense of unrealistic protentions – realism in both cases as judged subjectively by the actor) may be hard to distinguish from each other empirically.

5 CONCLUSIONS: FROM FUTURE-PERFECT THINKING TO STRATEGY

With the concept of a ‘future perfect strategy’ the Clegg and colleagues have spotted important new mechanisms in the management of projects. However, while using Weick’s concept of enactment as a stepping stone, they seem to us to jump a little too fast from Schutz’ ‘future perfect thinking’ to ‘future perfect strategy’. The leap inspires, but by revisiting Schutz and pointing out the difficulties of translating between the two concepts we think we have pointed out further managerial and theoretical challenges in view of the realities of big infrastructure projects.

5.1 Ends and Means within Reach

The first complication to be noted is the fact that projects are used quite differently in the two domains. The projects in the sense developed by Schutz are nothing but small, daily acts. He thinks of projects like mailing a letter, not of digging 150 km of tunnels. This is more than pedantry. It reserves the future perfect thinking to projects that are believed to be practicable, a belief which is dependent on “... the actor’s experiences and his opinions, beliefs, assumptions, referring to the world, the physical and the social one, which he takes for granted beyond question at the moment of his projecting” (Schutz 1973: 74). In the researchers’ own account, the SWW project was highly uncertain and risky, as was the CFL. All the managerial strategies were reflections of this simple fact, because otherwise they would presumably have designed and planned the project task and organisation in more a conventional way. The necessary actions to be taken to accomplish the act are not at all clear and taken for granted in the CFL and thus the luxury of thinking in terms of acts rather than action is not an easily justified option.

When we attempt to bridge over such a disparity in types of projects, we come to recognize that much of what can be taken for granted in future perfect thinking needs to be explicitly constructed and maintained in the case of future perfect strategy. It is no little achievement to convince the participants that on the CFL that this was not an impossible mission – after all it had been stopped during construction by the UK government twice before. Participants may have been selected on their naivety or felt obligations, but still the history of the project as retention must have posed as a constant

reminder of the immanent risk of failure. For each perfect future to think about in the future perfect tense there must have been an awareness of a very imperfect future that might lead to individual projects of a radically different nature, i.e. the protection of local interests. While aiming at tying together the loosely coupled project team it seems to us that the future perfect strategy might also have induced anxiety, disagreement, and conflict. Rationales and intentions are often poor predictors of subsequent effects, and we need to understand better the context and specific practice that seemed to facilitate the fulfilment of the strategic rationale.

Furthermore, in what ways, and to which extent, did the SWW project management team succeed in creating a shared trust in the practicability of the project “beyond question”. Since actors had no prior experience with this form of project management, and since they were dealing with a physical and social reality yet to be discovered and created, it would not be surprising if they committed and trusted to the projected future less than 100%. If there were just a grain of doubt we need to understand when and why the future projected in the implicit future perfect strategy was consonant with the official one. We suggest that there is an implicit choice between alternative futures to be projected. How such choices are handled might be important to know and would provide insights into the actual management processes. We suspect that an important part of the effort to build trust in the official future for future perfect strategizing is to specify the future achievements in very positive, but abstract terms. It is harder not to believe in the joining of the UK to continental Europe for the first time in millennia than it is not believe in making the link within very specific constraints on time, budget etc. We also suspect that it is easier to believe in future achievements if the risks of being proven wrong are carried by somebody else as in the CFL case by the 200 syndicate banks worldwide. In both cases, however, explicit reflections and negotiations are implied. And that constitutes the second complication in translating between future perfect thinking and future perfect strategy.

5.2 The Shareability Constraint

When we move from the individual actor acting in physical and social context being taken for granted to collective actors acting in physical and social contexts of high

complexity and uncertainty we need to communicate and coordinate their multiple imaginations of the future. This is no innocent process. As Weick (2006: 450) claims,

Compounded abstraction describes what happens when perceptions are reworked in the interest of coordination and control. ... The naming that transforms ordinary seeing into consensual seeing introduces order into social life. ... Once people start working with names and concepts for the things that they see, they develop knowledge by description rather than knowledge by acquaintance, their cognitive processing is now schema-driven rather than stimulus-driven, ... [We] label the shift as a 'shareability constraint' ... Informally, this constraint means that if people want to share their cognitive structures, those structures have to take on a particular form. More formally, as social complexity increases, people shift from perceptually based knowing to categorically based knowing in the interest of coordination. Thus, people who are preoccupied with coordination tend to remember the name of the thing seen rather than the qualities that were observed and felt. If significant details occur that lie outside the reach of these names, then coordinated people will be the last to see those details.

The relevance of Weick's reflections to the CFL project can be made immediately clear. The 200 year old vision of fixed link between the UK and France is translated into a set of project objectives in terms of schedule, budget and specification. Reality is seen, negotiated and managed in terms of this classic "golden triangle" of project management as three dimensions of a reality which presumably are infinitely more complex. The SWW projects were measured on five specific KPIs. Should contingencies arise that do not relate to these aspects, the project management team would be the last ones to know. In spite of the apparent success of the project we need to discuss the validity of a strategy that forces the participants to work on a highly simplified rendering of reality. The SWW research celebrates the tying together of the loose coupling of the collaboration in the SWW, but it is not clear that this is a wise strategy under the conditions of high complexity and uncertainty. The need to share futures amongst the project participants opens up a whole new range of issues which has yet to be addressed.

But there is another complication that flows from the need to communicate and coordinate across the project participants. In the analysis of the SWW project the future is treated as given, at least in the form of the KPIs and the BAU baselines. We are not

told in detail how that future was established. We imagine that it was the outcome of a social process of negotiation, sense making etc. The fact that imagination needs to be communicated and shared in the process of agreeing on the projected future does put restrictions on the futures imaginable. Issues of accountability arise, probably most of the time with the result of reducing the imaginativeness of the projected futures. Any imagination can be hard to justify, but justification is a requirement if you are going to convince others. In moving from individual mundane projects in Schutz's discussion to the huge and uncertain ridden projects of construction, the projected futures may actually be severely limited by the lack of imagination and limits to justifications. The role of imagination has been discussed, for instance, by Kreiner & Augier (1999); March (1999); and Weick (2006). Even so, many infrastructure projects end up in retrospect to have been based on pure fantasy, which may be a testimony to the fact that the intrinsic uncertainty of such projects is exceedingly high.

5.3 The Guidance of Action

The third complication we want to point out is the translation back from the imagined future to the current action. In the simple case, it is not difficult to see walking towards the mailbox as a constructive action in view of the act of mailing a letter. But we contend that it is very different in the case of the SWW or CFL project. It is not at all clear what the best-for-the-project principle means when the technology is unclear. Is it better to formulate stretch goals to speed up things, or is it better not to do so because that would minimize the risk of not finishing when promised? Nor is it clear what would be in the best interest of the project in dealing with the somewhat rich and influential stakeholders i.e., what is best for the project will only be known retrospectively. The practice of workshopping (Clegg et al. 2003: 583) does indicate the substantial amount of interpretation needed in order to come to an agreement on what action would comply with the principle. But agreement is not necessarily best for the project, and one might suspect that occasionally workshopping would lead to group think.

The notion of guidance from a projected future is problematic when we leave the simple, mundane projects. Clegg and his colleagues are fully aware of this and state in another paper:

... as Kafka (...) once put it, '[t]here is a goal, but no way; what we call the way is only wavering'. This statement expresses the immanence of all events that unfold: there is no transcendent goal that could possibly inform and direct actions. Everything that happens occurs now, as a result of the momentous interplay of active forces, there is not storage of forces, not later, no Aufschub. On this plane of immanence one finds oneself always in between different forces, in the middle of existing power relations (Kornberger and Clegg, 2003: 83)

This is an interesting contrast to the belief in the future perfect strategy. It is probably also closer to Schutz' notion of empty horizons yet to be filled in. Surprisingly, it is also close to where the SWW researchers conclude their analysis:

... we think that researchers should spend less time looking at strategic planning and more time researching everyday organisational life because, as the PALT realized, it is rather more in the detail that action unfolds, and outcomes are produced – not so much in their a priori documentation and codification, which they couldn't have anyway. The project grew from just 28 pages, with no design and no clauses, other than an injunction to think in the future perfect and create a much cleaner Sydney Harbour, to a project that delivered what it set out to do: on time, only slightly over budget, it made Sydney Harbour sufficiently clean ...” (Clegg et al. 2003: 583).

In this conclusion it seems to have been forgotten that the future perfect strategy requires a prior commitment to a communicated future situation (if not flexed over time and with probably less documentation and codification). Advising us to spend more time on the unfolding of action also to a certain extent betrays the projecting of acts (as opposed to action) in the future perfect thinking. But nonetheless, we agree also with this conclusion in the sense that the details of the unfolding of action, i.e. the filling in of empty horizons, are a supplementary and also independent theme. If we want to understand projects and especially project success we need to know how acts are projected into the future *as well as* how action is unfolding in real time.

5.4 Conclusion: The issue of causality

The logic of the SWW argument is simple and convincing. By collectively imagining a perfect future the participants were able to coordinate and streamline their action on the basis of the principle of what was best for the project. By doing this, they managed to achieve what was promised from the outset. However, this cannot be the whole story. Remember that “projecting ... carries along its empty horizons which will be filled in

merely by the materialization of the anticipated event” (Schutz 1973). Even if we set out to mail a letter, we may end up gossiping with a neighbour or do shopping. The anticipated act does in no way force upon us a certain future. The project future becomes an element, and far from the only element, in the current situation in which people take action. Dewey makes our point eloquently:

“Control of the future is indeed precious in exact proportion to its difficulty, its moderate degree of attainment But there is a difference between future improvement as a result and as a direct aim. To make it an aim is to throw away the surest means of attaining it, namely attention to the full use of present resources in the present situation. Forecast of future conditions, scientific study of past and present in order that the forecast may be intelligent, are indeed necessities. Concentration of intellectual concern upon the future, solicitude for scope and precision of estimate characteristic of any well conducted affair, naturally give the impression that their animating purpose is control of the future. But thought about future happenings is the only way we can judge the present; it is the only way to appraise its significance. Without such projection, these can be no projects, not plans for administering present energies, overcoming present obstacles. Deliberately to subordinate the present to the future is to subject the comparatively secure to the precarious, exchange resources for liabilities, surrender what is under control to what is, relatively incapable of control” (Dewey 2002: 267)

It goes without saying that the relative success of the SWW project was not simply a result of the adoption of a future perfect strategy. It was also a product of the kinds of situations the project confronted during the process. We cannot assume that no matter what, the experienced achievements would have been achieved. Other similar projects managed in the same way would certainly end up unsuccessful, as the CFL case demonstrates. We argue that the work on future-perfect strategies by Clegg and colleagues has the potential to stimulate a rich vein of enquiry both within the project management field and more broadly which we have attempted to take further with our hindsight case study of the CFL. Hindsight is important because it would allow us to distinguish apparent success due to proximate factors such as the relatively unlimited access to financial resources, and the absence of tropical rainstorms before and during the Olympic Games⁷ from more sustained success over decades. The CFL took 15 years to provide a positive return to its investors, and many lost a lot of money in the

⁷ See Pitsis et al. 2002, endnote 9.

meantime, but for the travelling public of north-western Europe it was a success from the day it opened. Another Australian project driven by remarkable future-perfect thinking – the Sydney Opera House (Murray 2004; Watson 2006)– has shifted from being regarded as a “great planning disaster” (Hall 1982) to listing as a World Heritage Site in 2007.

Our argument has raised – at least for us – a number of further lines of enquiry which include:

- What are the processes of *impulse* that lead to future-perfect thinking generating extraordinary levels of commitment to imagined future states?
- How is the future perfect thinking used to mobilise – typically vast – resources of financial and human capital in pursuit of imaginable futures?
- What management strategies will ensure that the present is not subjected to the future within a framework future perfect thinking and strategizing?
- How is the projected act defended against those – be they environmentalists, local communities or those who want to deploy the resources mobilised towards their own imagined futures – who see the imagined future as highly imperfect?

We close with a coda to complement our epigraph of a retention rather than protention on a major project from a poem written by Joseph Strauss, Chief Engineer, Golden Gate Bridge (1933-37) upon completion of act of future-perfect thinking:

*Launched 'midst a thousand hopes and fears,
Damned by a thousand hostile seers,
Yet ne'er its course was stayed;
But ask of those who met the foe,
Who stood alone when faith was low.
Ask them the price they paid.*
(cited from Shapira and Berndt 1997: 318)

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