STORYTELLING IN PROJECTS: TRANSFORMING PROJECT PLANS INTO STORIES

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ABSTRACT

Plans and stories are two different ways of communicating about projects. Project plans are formalized descriptions, primarily supporting coordination. Project stories are accounts whose primary function is emotional appeal. Project stories influence the projects' chances of success. Therefore project managers should not only be concerned with project plans, but also with project stories. In this paper we explore some basic principles for transforming project plans into appealing stories. We discuss what may happen to stories once they are released into public space. And we illustrate how the possibilities of telling favorable stories may have repercussions on the project planning.

Keywords: Project management, storytelling, narratology, motivation, stakeholder conceptions.

I. INTRODUCTION

In theory a successful project is a project that meets the agreed requirements, economy, and schedule. For big projects that is an illusion as they always overrun [Flyvbjerg et al., 2003]. Thus other criteria apply in practice. Here the success of a project is determined by the opinion of an audience that may be quite broad. The discussion of projects is expanding beyond the directly involved parties. Previously, companies were viewed as belonging to the private sphere, and the public had no right to interfere, but nowadays corporate behavior is a shared concern and good media material [Hansen, 2004].

To achieve success a project manager should therefore not only be concerned with project control but also with influencing opinion. However, influencing opinions is outside the scope of the ordinary project management tools.

Storytelling is a trendy activity relevant in an increasing number of situations [Jensen, 1999], [Jensen, 2002], [Junge, no year], and [Hansen, 2004]. In this paper we explore how project managers may use storytelling as a means for improving their projects' chances of success.

PROJECT PLANS AND STORIES

Projects are planned and stories are told about projects. Plans and stories are two different ways of describing projects.

Projects are described in plans to facilitate coordination between the participants. These plans are made by the participants, and they are read by the persons involved in the projects. Thus the plans are aimed at a narrow, well-informed group of specialists.

Projects are also described in stories. These stories are told by the participants or by other people. The stories are aimed at the participants as well as a broader audience. The purpose of the storytelling can be mere entertainment, but more often the project participants tell stories in order to gain accept and support. In the beginning of the project, accept could be a permission to go ahead. During the project, support could be help from people outside the project. At the end of the project, accept could be the recognition of the success of the project. Also, a project may have opponents that tell stories in order to change or stop the project.

Project plans and project stories are two types of texts with different but overlapping content and audience, and a project leader should be concerned with producing both. The project management theory abound with advice on how to write plans but gives very little advice on how to tell stories about projects. Narratology gives general advice on how to tell stories but gives very little advice on how to tell stories specifically about projects.

METHODOLOGY

This paper is a pre-hypothesis exploration of the similarities between theories in the two fields of project management and narratology. The paper is mainly based on a theoretical argument, but a few selected cases from real projects are discussed to illustrate the propositions.

As we shall argue later, story production is a non-linear phenomenon, and thus not explicitly controllable. If there were rules for predicting successful stories, Hollywood would have found them and stopped producing loss-making movies, and publishers would only publish bestseller books. Since this is not the case, we can assume that story production is characterized by high uncertainty. Therefore we can not prescribe rules that completely standardize the work of the storyteller. What we try to do in this paper is to describe general rules for building and changing stories. We charter the sea but the actual sailing is up to the reader.

CONTENTS

In this paper we focus on the transformation from plan to story that a project leader must perform. We examine the similarities and the discrepancies between the semantic structures in project plans and project stories.

Section II presents the contents of project plans. Section III introduces the case we use to illustrate our hypotheses, the Apollo Lunar Mission. Section IV outlines the most important elements of a story. In section V we discuss the overall transformation between plan and story.

Section VI and section VII discuss how the project storyteller can fill the actants and the plot in the story. Section VIII discusses the complexity of real project storytelling. Some important issues are reproduction and mutation of stories, i.e. how stories spread, multiply, die, or generate new stories.

Section IX sums up our discussion.

II PROJECTS PLANS

A project plan is a document that describes the intended future course of the project [PMI, 2000], [SEI, 2002]. The intentions could belong to one person, e.g. the project manager. However, more often the plan reflects

agreements between project stakeholders, such as project participants, customers, and management.

The contents of a project plan are descriptions of resources, activities, and results. Also the organizational structuring of the people working in and around the project may be described in the plan.

The time dimension is prominent in the plan. The schedule is normally structured in phases. The phases are separated by baselines. Baselines mark major events in the project. These events include making important decisions, reaching partial results, and changing the project's working mode.

An important part of the project plan is the verification of its internal consistency. Most important is the cost estimate. It documents that the resources are sufficient to perform the activities yielding the results.

A classic textbook in software engineering, [Pressman, 1992], describes the project plan as follows:

> The *Software Project Plan* is a relatively brief document that is addressed to a diverse audience. It must (1) communicate scope and resources to software management, technical staff, and the customer; (2) define risks and suggest risk aversion techniques; (3) define cost and schedule for management review; and (4) provide an overall approach to software development for all people associated with the project.

And:

> The *Software Project Plan* need not be a lengthy, complex document: Its purpose is to help establish the viability of the software development effort. The plan concentrates on a general statement of what and a specific statement of how much and how long.

A project plan is thus a formalized, technical text that the project management communicates to the participants and the stakeholders. Whereas a

plan is used for coordinating and controlling a project, a story is used for interpreting it. In the following we shall look at the structure of stories, but first we introduce our running example, one of the most famous, ambitious, and successful projects in the history, namely the Apollo Lunar Mission [Koman, 1994].

III THE APOLLO LUNAR MISSION

This project is interesting for many reasons. It is one of the largest projects in history. The goal was reached on schedule even though there were many technical uncertainties when the project was started. From a research perspective the project is interesting because it is well documented.

In this paper we focus on the beginning of the project. As we shall see, some remarkable decisions concerning the goal of the project were made in the beginning of the project. We will argue that these decisions made it easier to tell a sympathetic story of the project.

The beginning of the project, and the storytelling, is clearly marked by President John F. Kennedy's *Special Message to the Congress on Urgent National Needs* [Kennedy, 1961]. Clearly a lot effort was put into this message. Therefore we find it worthwhile to examine the speech in details.

The context of the speech is the cold war. The immediate motivation was the failure of the invasion of Cuba in the Bay of Pigs April 17 and the first manned space voyage April 12, 1961 where the USSR put Yuri Gagarin in orbit around the earth. Both events were defeats for USA and the situation clearly called for action.

The obvious response would have been a project of armament. And indeed a project focusing on missile technology was proposed. However, the story of the project was not to be a story of weapons and war. Instead it was presented partially as a story of space travel, partially as a story about moral rearmament.

The way the project was presented made it possible for Kennedy to tell a story that appealed to more people than a continuation of the story of the cold war would have.

IV STORIES

To be understandable and arouse interest a story should contain some key elements: A conflict, some actors, and a plot. There are many other elements in stories, notably the background or context, but without these three major elements a story will not function. In this section we briefly discuss each of these three elements. We draw on the following literature: theoretically, [Berthelsen et al., 1974], [Propp, 1975], [Greimas, 1966], [Greimas, 1970], and [Ryan, 1991] are the main sources. Application to corporate storytelling is treated in [Jensen, 1999], [Jensen, 2002], [Junge, no year], and [Hansen, 2004]. The three key elements are drawn from a textbook on corporate storytelling [Fog et al., 2002]. They add *a message* as a fourth element. This is necessary in modern advertising, because of the need to connect an entertaining, but possibly irrelevant, story to the product. In project storytelling the message normally is closely related to the plot.

The authors cited above all belong to a structuralistic school, and the reader should be aware that there are other approaches to narratology (e.g. Paul Ricoeur). Another warning concerns the empirical basis of particularly Greimas' theories: it is to a large degree based on the detailed analysis of Russian fairytales in [Propp, 1975], and it is not clear how much these data can be generalized. In our opinion, the theory has retained traits of the feudal society in which the fairytales grew but which may not be valid in capitalist societies.

THE CONFLICT

The first ingredient is a conflict. According to [Ryan, 1991], conflicts consists of contradictions between the four modalities of obligations, knowledge, intentions, desires (to which abilities should be added), and their relation to the actual world. A conflict can exist in the individual mind or between one or more actors. The individual protagonist desires something but is forbidden or unable to fulfill the desire, or two actors desire to possess the same Object.

In Kennedy's speech, USA and the developing countries desire freedom, whereas the communist countries oppose it. Also, there is a conflict of knowledge and deception since the communist countries pretend to be on the side of freedom to the developing countries, which they are not, according to Kennedy.

From a practical point of view, it would be very interesting to know what makes a sequence of events tellable; [Ryan, 1991] offers the following answer: an event is *tellable* if, in a system of reality (the four modal worlds plus the actual world), *there is a discrepancy between the actual world and a possible world or internally between possible worlds.* The former includes

unsuccessful action, broken promises, violated interdictions, mistaken interpretation, and double, as well as single deception. [Ryan, 1991]

The latter subsumes such widespread themes as conflicts between desire and obligation, between the intentions of the protagonist and antagonist (competition), between the desires of two agents (jealousy), or between an actor's ambitions and impotence.

In addition to these structural requirements, there are also substantial ones. Some themes, like religion, sex, aristocracy, and mystery have an inherent appeal (so that the following story ought to sell: "My god, said the Duchess, I am pregnant. Who done it?", [Ryan, 1991])

ACTANTS AND STEREOTYPES

The second ingredient is the actants. An actant defines a sphere of actions in the sense that an actant is able to perform a delimited set of actions. The central actant is the *Subject* that desires and strives for an *Object*. The Object is a positive entity whose absence is experienced as a lack by the Subject and the *Receiver*, a third actant. Both Receiver and Subject lack the Object, but only the Subject strives for it. The *Giver* is the fourth actant; he possesses the Object and has a sovereign right to do so. The relationship between the Subject and Object is called the *project axis* and that between Giver, Object and Receiver is called the *communication axis*: the Giver trans-

fers the Object to the Receiver. There is one more axis, the *axis of conflict* consisting of the Subject, a *Helper* and an *Antagonist*. The latter two are defined by their relation to the project of the Subject: the Helper confers knowledge and ability to the project whereas the Antagonist destroys knowledge and ability.

In Kennedy's story the *Object* is freedom:

> These are extraordinary times. And we face an extraordinary challenge. Our strength as well as our convictions have imposed upon this nation *the role of leader in freedom's cause*… No role in history could be more difficult or more important. *We stand for freedom.*

USA is the leading *Subject* in achieving this goal. However, there are other Subjects too:

> The great battleground for the defense and expansion of *freedom* today is the whole southern half of the globe--Asia, Latin America, Africa and the Middle East--the lands of the rising peoples…*They seek an end to injustice, tyranny, and exploitation.*

In the latter struggle, Kennedy places the USA as a *Helper*, and emphasizes that the main effort must lie with the local defense. The developing countries are thus Subjects in their own story.

> The main burden of local defense against local attack, subversion, insurrection or guerrilla warfare must of necessity *rest with local forces.* Where these forces have the necessary will and capacity to cope with such threats, our intervention is rarely necessary or helpful. Where the will is present and only capacity is lacking, our *Military Assistance Program can be of help.*

Besides acting as a Helper, USA is also a Giver that transfers military hardware to the developing countries. The last role we can see in these quotations is the role of *Antagonist*: there are "adversaries of freedom" that carry out "attack, subversion, insurrection, or guerrilla warfare". Section IV in the speech gives them a name: "the Soviets", "Red Chinese", and "Havana". These Subjects have a competing project whose Object is destruction of freedom, and in this project, USA plays the role as Antagonist.

> With these formidable weapons, the adversaries of freedom plan to consolidate their territory--to exploit, to control, and finally to *destroy the hopes of the world's newest nations*…We stand, as we have always stood from our earliest beginnings, for the independence and equality of all nations. … And we do *not intend to leave an open road for despotism*

The axis of conflict thus consists of the developing countries (Subject), the communist countries (Antagonists) and USA (Subject and Helper). Figure 1 shows the basic project and figure 2 focuses on the story of the developing countries.

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GIVER         ──────▶   OBJECT      ──────▶   RECEIVER
                        Freedom

                           ▲
                           │

HELPER        ──────▶   SUBJECT     ◀──────   ANTAGONIST
USA                     USA, Dev.             Communist
                        Countries             Countries
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GIVER         ──────▶   OBJECT      ──────▶   RECEIVER
USA                     Self-                 Dev.
                        defence               Countries

                           ▲
                           │

HELPER        ──────▶   SUBJECT     ◀──────   ANTAGONIST
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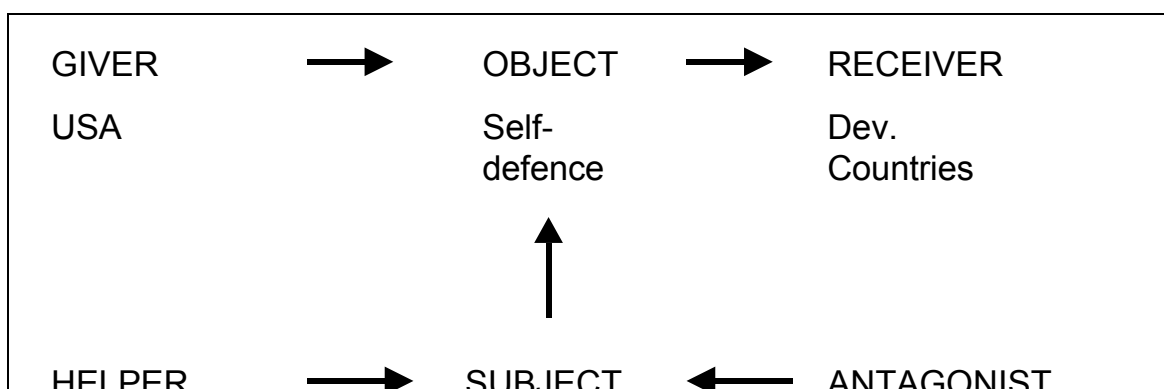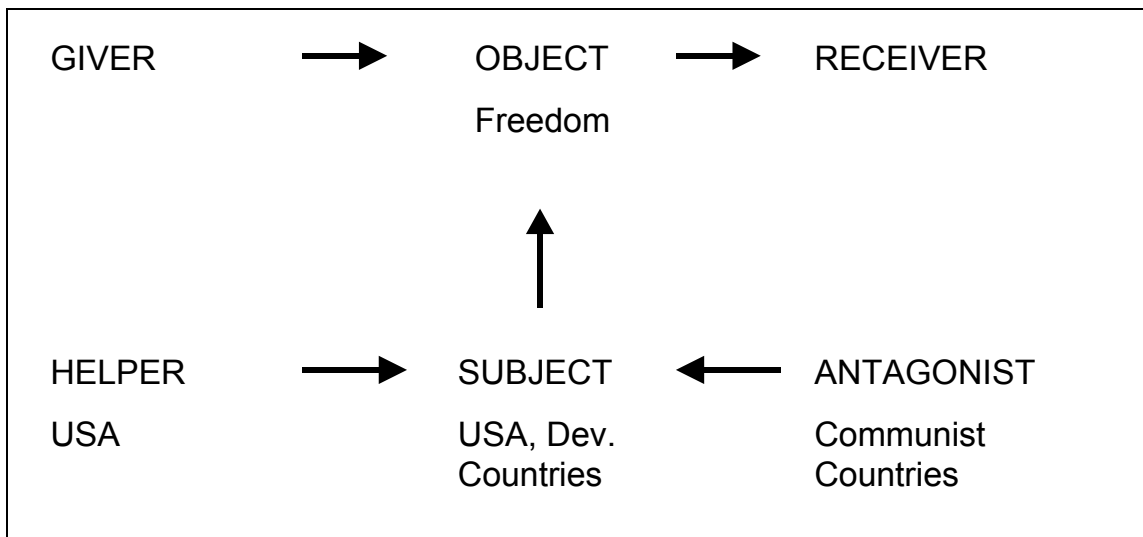
Figure 1. The basic project

Figure 2. The assistance project

An actant is not the same as a personal *actor*. Rather, the same actor can embody more than one actant role – for example, USA is a Subject in its own struggle, and a Helper and Giver in the struggle of the developing countries. Conversely, an actant can be distributed over several actors: the Soviets, the red Chinese, and Havana are all antagonists in the grand quest for freedom.

These actants are the classical ones defined by Greimas. However, in the modern stories we shall discuss later, a seventh actant appears important, namely the role of *Observer*[1]. The Observer is central in Kennedy's story. Since at the moment, the communists are at an advantage and may seem attractive, the status of USA must be enhanced by impressing the world by "the impact of this adventure on the minds of men everywhere, who are attempting to make a determination of which road they should take". Therefore "…this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the moon and returning him safely to the earth", since

No single space project in this period *will be more impressive to mankind*, or more important for the long-range exploration of space; and none will be so difficult or expensive to accomplish.

The moon project is planned as an event with Observers, and the intention is to make an impression of these Observers. The developing countries are to be first enrolled as Observers and having thus participated, they will hopefully enroll themselves as Subjects of the struggle for liberty.

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[1] One could be tempted to identify the Observer with the Receiver on the axis of communication. However, this would imply a model of communication that is different from the one implied in Section V.

We take an additional risk by making it *in full view of the world,* but as shown by the feat of astronaut Shepard, this very risk enhances our stature when we are successful.

Normally the Observer cannot observe the real project but must be satisfied with various *representations* of it. In the moon landing case, lots of video footage and pictures were provided. The essence of corporate storytelling is in fact to get the public enrolled as an Observer of representations of the company's story, and, as a consequence of this, enroll it as a Helper in the company's quest or as a Receiver of the goods produced by the company. This is the most common use of storytelling: making people move from the Observer role to the Receiver, the Helper or the Subject role.

The exact role assignment matters, as illustrated by the following case [Junge, no year] of a deliberate role-change, where a company had first assumed the Subject role as a competent provider of plastic devices for hospitals. It represented itself in advertisements by depicting its products in a detailed manner. However, the hospitals did not want their provider of safety critical instruments to act as a Subject. It was too risky. Consequently, the advertisements were changed so that the emphasis was on the services provided to the customers and the slogan was changed to 'Your purpose. Your plastics'. The role of the company was turned into a Helper role, with the hospital now in the Subject role.

In other cases, customers are moved into the Helper-role. This is the case in the many user-groups where supporters of a particular brand can meet on the net. In some instances, the help is real, namely where user groups test beta-versions of software.

In order for the role-change to succeed, there must be a vacant actant role the Observer will want to occupy. In Kennedy's speech, the American people are enrolled in the attractive position of helping the astronauts to land on the moon:

Finally, our greatest asset in this struggle is the American people--their willingness to pay the price for these programs--to understand and accept a long struggle--to share their resources with other

less fortunate people--to meet the tax levels and close the tax loop-holes I have requested--to exercise self-restraint instead of pushing up wages or prices, or over-producing certain crops.

Being the Subject of tax paying is more palpable if one is simultane-ously the Helper of astronauts!

Whether Observers will move to a role or identify with a role depends not only on the actant role, but also on the *stereotype* associated to the role. A stereotype is a person whose basic behavior and motivation everybody can understand and recognize. If the Subject of the moon travel had been 'the mad scientist', the project would not invite identification; however, if it is an astronaut-adventurer, the project is suddenly much more attractive.

If the project manager wants to create story-representations with inter-ested Observers, he faces the problem that the Object of his story – the IT-system – cannot be observed directly [Johnson, 1994]. Software is difficult to film or photograph, and not very exiting. Software developers are worse off than astronauts who can show stones and dust from the moon. In section VIII we deal with this problem.

PLOT

The plot introduces temporal, causal, and intentional relations into the story. This is what makes stories engaging: persons, whose intentions we can understand, move around in a world we can imagine and recognize.

Classical stories have a very simple plot: *home-abroad-home*. More generally, according to Greimas, plots are built upon two contrary terms, such as life-death, culture-nature, truth-lie, etc. The hero starts in one of the terms and moves to the contrary term via the negation of the first one. Each move-ment is marked by a specific test: moving out of the first term is only possible if the hero passes the *qualifying* test that proves him worthy as a true Subject; once arrived in the contrary term, he must pass the *essential* test, i.e. acquire the desired Object; and the last test, the *glorifying* test, takes place when the hero returns to his point of departure, and is recognized as the true hero.

Apart from the story of the space adventure and the military armament story, Kennedy also told a story about moral rearmament, the former being subordinate to the latter.

The space adventure is a very concrete story where the astronauts are the Subject, Home = Earth, Abroad = the Moon, Qualifying test = training and test of the astronauts, Essential test = the landing on the moon, Glorifying test = returning to Earth with scientific proofs, like rocks and moon dust.

The Subject of the moral rearmament story is the American people and it is built on the contrary terms *selfishness* and *dedication*. The initial situation is one of lack of "dedication, organization and discipline" where "we have never made the national decisions or marshaled the national resources required for such leadership". The moon project is a method for changing this situation into one where "our country is united in its commitment to freedom and is ready to do its duty", including exercising "self-restraint instead of pushing up wages or prices".

Kennedy's speech in fact presents the qualifying test to the American nation: are you prepared to sacrifices? The outcome of the qualifying test is the Americans' response to the speech – will they accept the hardships required? Yes, they did pass the qualifying test, Kennedy did get his funding.

The essential test is whether USA will actually re-assert its leadership in the world, both with respect to military power and scientific adventures (figure 3).

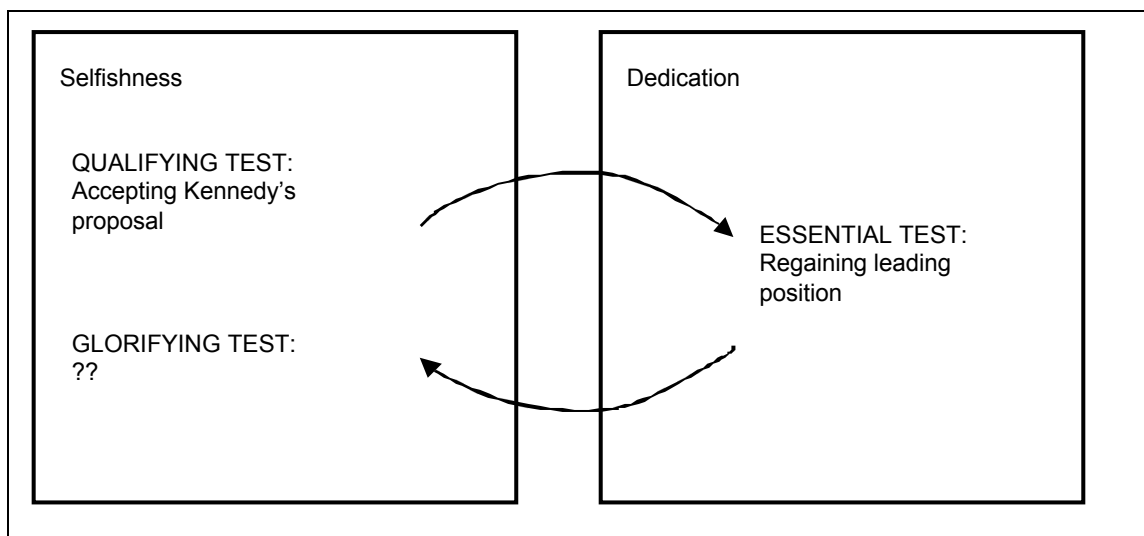| Selfishness	Dedication
QUALIFYING TEST: Accepting Kennedy's proposal	ESSENTIAL TEST: Regaining leading position
GLORIFYING TEST: ??	

Figure 3. The moral rearmament story

But what is the glorifying test? When has the moral story ended with success? Kennedy had not thought of that! As also told in the movie *Apollo 13* from 1995, the story simply petered out! The military armament project had a clear purpose, namely to further America's position in the weapons race, and the same is true of the space adventure: however the moral rearmament story was more unclear: when have we proven that our society is better than theirs? What kind of evidence can we "bring home" that lets us pass the glorifying test?

Since the super-ordinate moral project had been defined as restoring discipline and dedication to the American nation, only a glorifying test of this goal could bring closure to the story. The arms race goal had been achieved (and proved ineffective in the Vietnam War) and the scientific goals had been achieved – what is the point of bringing the 7th bag of moon gravel home when we already have 6? But how can we know when the nation has been morally restored?

As illustrated in *Apollo 13*, the news media did not even care to broadcast the video made by the astronauts, before an accident again made it interesting news. The last voyage was Apollo 17 and the remaining two missions were cancelled. The generals and politicians returned the theme of space travel with thanks to science fiction literature. In terms of actants: the Observer actant had defected, the audience of the story had gone home!

This outcome shows that it had a cost to mould a project into a tellable format. The superordinate story was a moral story about re-energizing America. The arms race story and the space travel story were presented as representations that symbolized the main moral story. But then it could only be the moral story that provided the glorifying test that would bring closure to the subordinate ones. They could not do it by themselves. Since the moral story had not been planned with a closure, the subordinate stories had no legitimate closures either. They had to go on and on beyond their own purpose.

The distinction between sub- and superordinate stories is a useful one. Most stories are embedded in other stories, like the ones Kennedy told. We shall call the Objects of the subordinate stories for *objectives*, whereas those of the superordinate stories are *purposes*. A development project is a subordinate project with the system as its objective; the system itself plays the role of Helper in the superordinate project of the customer. The customer is the Receiver of the development project, but the Subject of the superordinate project. The development project is ultimately justified by the customer project, so a good way of presenting the product is to present it as a help for the customer, as in the example with the plastic company. Defending inevitable budget overruns in a Computer-Based Patient Record system is a lost cause; a better strategy is to point to the improved procedures in the hospital and the many extra patients that got their operation.

V THE BASIC TRANSFORMATIONS

This paper is about how to tell stories about projects. However, people (luckily) do not believe stories according to our wishes. Stories live a life of their own, partially outside our control.

In the following we make the following assumptions: there are two social systems, the technical system and the mass media system. They are governed by different laws, refer to different roles and are evaluated by different criteria. But the two systems cannot (and should not) be kept apart; therefore the problem of translation between the two domains is important.

One problem is that we have two different criteria of success, the technical domain where success is judged against the contracts signed by the parties, and the mass media domain where success is determined by the narrative most favored by the public. However, project plans cannot be converted into an arbitrary narrative, since project plans and narratives can be compared and lies and contradictions can be detected. In some sense, the stories must be true.

In the following we use the model in figure 4 as our point of departure. It involves six assumptions about transformations between projects and narratives:

1. Project plans are manufactured from models plus old successful plans that are adapted to the current requirement and constraints.

2. Project plans are modified as the project progresses. Plans are never perfect.

3. Projects need good publicity. Project plans therefore need to be converted into narratives that can live and multiply in the mass media as well as in the canteen. Technical roles must be converted into narrative roles and baselines into one of the three narrative tests, while still keeping to the truth as far as possible. There will always be several baselines, and therefore many essential tests.

4. Narratives may cause changes to the project plan, or desired narratives may influence the project plan from the very beginning (design the project so that is can appear in TV!).

5. Narratives are re-told influenced by existing popular narratives. A re-combination of the present story plus already existing model stories can produce a *predator* story that devours the original story. For example, a story about a gift plus information about exploitation of tax-rules can turn a generous gift into a story about the Giver's desire for gratis self-glorification (this happened when a Giver donated an opera house to the Danish state and deducted parts of the gift in his tax).

6. Narratives need to be retold in order to keep alive. The reason is that stories live in the human mind, so they compete for human attention to survive. If you want to kill a story, announce it during a period where many fit stories compete for attention. A famous example is the spin-doctor Jo Moore who thought that September 11th was "a good day to bury bad news", so she sent the idea round in a memo on within minutes of hearing the news from New York on September 11th. The incident shows clearly that professionals plan on the idea of the "war of stories".
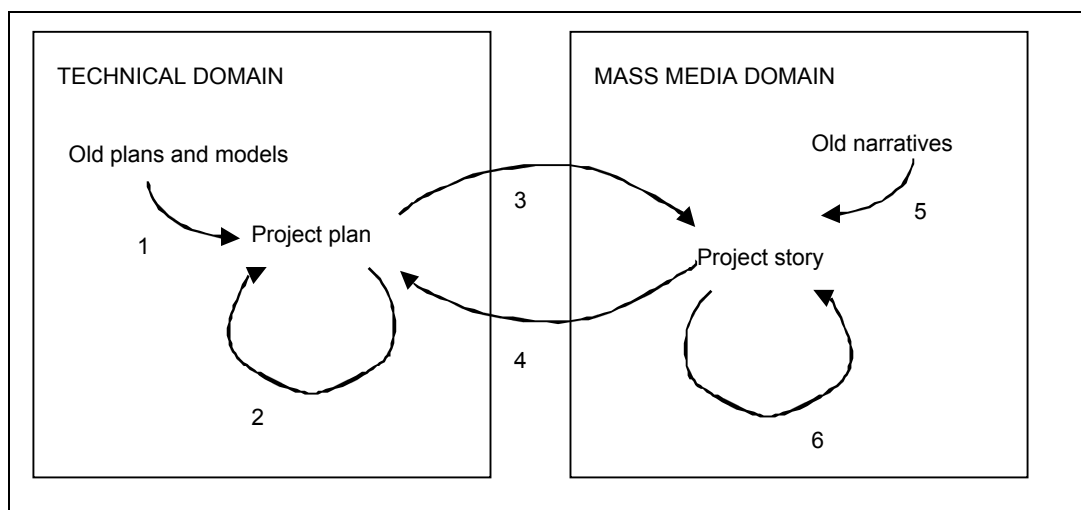
Figure 4. Production and recombination of stories

Figure 4 depicts the formation and transformation of texts as a recursive process where new texts are produced out of old ones. In the technical domain this means that project plans are revised; in the mass media domain it means that journalists and readers read stories and produced new changed versions of the stories:

> Danish journalists borrow and steal, pinch and embellish each other's stories. But most often, the traces are hidden, so that the public does not understand the pecking order in the journalistic food chain. [Lund, 2005]

The new versions are not fortuitous but subject to local regularities. For example, behind each story with Subject, Antagonist, and Object there is another story where Subject → Antagonist, Antagonist → Subject, and Object → negation of Object. Thus, behind Kennedy's story of USA striving for freedom opposed by the communist countries, there is a story of the communists striving for dictatorship opposed by USA. These stories are created by changing the roles of the actors. We have already encountered many of these role shifts: the plastic company chose to change from Subject to Helper, and

many advertisements (plus Kennedy's speech) aim at enforcing the role shifts Observer → Helper or Observer → Subject. Role-shifts are thus a basic mechanism in the transformation of stories (see also [Bødker and Andersen, 2005] for another application of the notion of role-shifts).

Some stories are *unstable* in the sense that they are nearly automatically transformed. If a story has the powerful *ruler* stereotype in the Subject role and a small *ordinary guy* in the Antagonist role, then a new story where Subject and Antagonist have changed place is bound to emerge, as the examples in Section 7 illustrate. Some tabloids in fact specialize in constructing stories where the Subject is a victim of unjust rulers.

VI CASTING THE ACTANTS AND CHOOSING THE CONFLICT

To create a well-formed story of the project the storyteller, which often is the project manager, must provide the basic ingredients of a story: A conflict, some actants, and a plot. These ingredients are connected. The actants are related to each other. The plot is the dynamics of the actants as unfolded in the dimension of time. The conflict is embodied by the actants on the conflict axis.

In this section we discuss how a storyteller can fill the actant model and what the conflict in the project may be. In the next section we discuss how the events in the plot can be identified.

THE SUBJECT - OBJECT AXIS IS DOMINANT IN A TRADITIONAL PROJECT PLAN

The Object that is attained in the project is the objective that is a key element in the project plan. Another important element is the resources, in particular the people working in the project. In the plan they are related to the objective through a schedule of activities where the developers are assigned to goals or partial goals. A direct transformation will turn the developers - or in the extreme case the project manager - into the Subject of a project story.

However, having the developers as Subjects in the story may create a problem once the project runs into difficulties. If the developers are presented as experts the public may have difficulties identifying with them, and if the

public only relates to experts, the storytelling is disrupted when the project runs into serious trouble. The basic message is transformed from "the Subject works towards the Object" to "the Subject is failing to reach the Object". In this situation the public may consider to choose another Subject to achieve the Object.

A solution to this problem is to cast the developers as heroes or as ordinary persons, both stereotypes that the public may identify with. In case of difficulties in the project the story need not be transformed, it may even be reinforced: "The Subject is having difficulties reaching the Object. Now we must show our support".

Case: The Danish television produced a series titled "The Bridge Builders" about the people constructing the Great Belt Bridge. The main characters were ordinary workers. They were portrayed working on the bridge and relaxing in their campers. If these guys ever encountered trouble they would have a lot of public sympathy.

Another solution to this problem is to tell the project story with the user as Subject and the developers as helpers (cf. Section IV).

Case: One of us once heard a software executive tell how he normally arranged to have one the users act as project manager in a software project. This improved user commitment. Asked how this user could handle the more technical part of the project management the software executive explained: "I always assign one of my most experienced developers to assist the project manager."

THE GIVER - OBJECT - RECEIVER AXIS APPEARS WHEN THE RESULT IS DELIVERED

The donation event clearly takes place at the end of the project when the developers have completed the result. The result is then handed over to some other people. This part of the story is not always straightforward to tell.

In some project plans the hand-over is only vaguely described. Before a coherent story of donation can be told several questions must be considered.

What is donated? A technical artifact or a solution to a problem? In many projects there is a gap between the result that developers are capable of delivering and what the users really need. For instance the developers may produce a software system and the users may want a more efficient operation. To achieve that, the software must be implemented effectively. If this task is not performed two different stories may arise. A success story told by the developers: "We delivered the result." And a failure story told by the users: "Our problem was not solved."

Case: A classic example is an IT-project where the resulting system meets the functional requirements. However, some important non-functional requirements, e.g. response time, have never been specified. If the system in reality is too slow we may experience two conflicting stories.

Who is the Receiver? The direct users, their clients, or the organization where the users work? They are all involved. But who will voice satisfaction or dissatisfaction?

Who is the Giver? The developers hand over the result. But they receive money for it, so are they really givers in Greimas' sense? The alternative casting of the giver actant is the sponsor, whoever pays for the project. Here we see that the project stories deviate from Greimas' pattern. The exchange of goods, services, and money in modern projects does not fit into the feudal context of the fairytale data underlying the theory.

A direct transformation from the project plan is often difficult because the hand-over, the actual implementation, in some projects lies outside the project scope. As a consequence the donation story may become unclear as nobody feels ownership of the project result.

THE CONFLICT AXIS IS OFTEN REDUCED IN THE PROJECT PLAN

To interest the audience a story must contain a conflict. However, a story about a conflict might frighten the stakeholders who could decide to cancel the project. Rather than risk a cancellation of the project, many project managers will prefer to tell a dull story about the project. For this reason the element of conflict is often underplayed in project stories.

The part of the project plan where conflict candidates can be found is the risk analysis. However, the risk analysis is also subject to conflict censorship. Important risks are often political and they are not suited for public discourse.

A less political conflict is "man against nature". This conflict is acceptable to some degree, as there must be some difficulties in order to justify the huge expenses of the project.

Case: Before constructing the Great Belt Tunnel there was much talk about the risk of the tunnel boring machines encountering big rocks. The consequences in terms of delay and increased cost were discussed. In fact big rocks in the underground did not turn out to be a problem. The real problem was that the underground was too soft to the boring machines. But with a slight change the story could be continued. It was still a story of obstacles that were overcome with great ingenuity.

A conflict that may arise at a late stage in the project is when the users reject the result, as we saw in a previous case. For the project this leads to a disastrous story. What happens to the Subject when the Receiver becomes the Antagonist? The theme may change to a story of a failing hero who could not pass the glorifying test. This theme is extremely rare in popular fairytales. But is possible within the theory.

VII THE PLOT: FROM BASELINES TO TEST EVENTS

The plot is the dynamics of a story. It connects the events and episodes to a causal, temporal, and intentional pattern. An important aspect of a classic story is that it has a beginning and an ending. A story is closed like a wheel [Jensen, 2002]. The closure of a story makes it easier to understand and recount.

One problem in corporate storytelling is the absence of an ending. Most often a company keeps producing the same products with only small variations. So marketing is at pains to invent new episodes in the continuing corporate story. The project storyteller does not have this problem. A key feature of a project is the delimitation of the project task that entails the delimitation of the project's time span [Munk-Madsen, 2005]. Furthermore, the project has the same temporal structure as a classic story.

The project storyteller normally does not have to invent a story to add interest to the project. The course of the project will contain events that fairly easily can be transformed into Greimas' classic tests. The storyteller's job is not to invent stories, but to reinterpret the project plan in narrative terms by identifying and highlighting these events. Hopefully, these events will add up to a plot that will carry the intended message and that will have robustness against mutations.

TYPICAL PROJECT BASELINES

The classic project model, popularly known as the waterfall model [Boehm, 1981], prescribes a sequential progression where reiterations are seen as exceptions. This model structures the project course into phases separated by baselines. Two baselines are prominent in every project: The decision to go ahead with the main project and the delivery of the result.

The decision to go ahead with the main project is linked to other important decisions. The task is delimited, often in the form of a requirement specification. A supplier or main contractor is chosen. The project organization is created.

The delivery of the result is not just an action on the part of the developers. It is linked to the customer's decision to accept the result. This decision can be based on a formalized acceptance test of the project.

While the delivery of the result marks the end of the project, the decision to go ahead is not the beginning of the project. The main project is preceded by one or more pre-projects. Their task is to create a proposal for the main project based on an analysis of the problem.

Other project baselines are specific for the project technology such as the launch in shipbuilding and completing the roof in house building.

Modern iterative, agile project models[Beck et al., 2001] prescribes a series of deliveries. Each delivery constitutes a baseline. In addition the other technology specific baselines will occur in each iteration.

TRANSFORMING BASELINES TO STORY EVENTS

Telling a project story where Greimas' classic tests are prominent has the consequence that the Observer easily associates the project to well-known classic stories. It is obviously beneficial to the project if the Observer associates to a story with an ending the Observer finds positive.

The glorifying test, the proof that the Object is obtained, corresponds to the completion of the acceptance test. The acceptance test is prominent in many project models. Still, some projects do have a happy ending. In some cases they do not end even though the project tries to deliver the result. The problem could be that the acceptance test is unreasonably hard. If the product of the project is very complex, details will remain that do not comply with the requirement specification. In that case the Observer may conclude that the Subject failed the Glorifying Test and that the project story has an unhappy ending. The manager may prevent this situation by introducing a threshold in the acceptance test specification so the result can be accepted with minor defects or omissions.

The qualifying test, the proof that the Subject is worthy, corresponds directly to the prequalification found in procurement procedures. Of course the mere appointment of a project manager and a project group is an important event. When communicating this event to the stakeholders and the Ob-

servers the project manager should take care to add arguments for the qualifications.

Associated to the appointment of the project group is the decision to go ahead with the project. In many projects, this event is more important to the Observers than the decision of who should perform the project. This is a difference from a classic story. In the fairytale the problem, e.g. the dragon, is out there and it must be dealt with. In a feudal society this is the indisputable decision of the sovereign. In a democratic society there is always a discussion whether the problem should be solved or not, whether the project costs exceed the benefits of the solution. As the present costs are psychologically closer than the future benefits, this discussion can drain the project of energy and support from the start. One storytelling heuristic is to shift the attention away from the cost-benefit balance and focus on the goal. Kennedy did that in his speech. The goal is clearly defined while costs are not specified.

An event before the qualifying test is the *call* [Jensen, 2002]. In the fairytale this is the moment where the Subject is informed of the task. In some projects a corresponding event may found. It is the triggering event, but not necessarily the real reason for undertaking the project. However, recounting the call is a convenient way to tell the Observers about the purpose of the project.

The essential test occurs when the real problem in the adventure, and in the project, is solved. i.e. when the Subject obtains the Object. In practical projects this test is often distributed on several events as parts of the problem are solved. A continuing stream of stories of partial results can be used by the project storyteller for communicating the overall message that the project is moving ahead.

The real problem associated with the partial results is that the results may be invisible to the Observer. For example, what does software really look like? A sequence of bits! How can you show to an Observer that a software project is progressing? In classic storytelling this situation corresponds to omitting the essential test. The pragmatic solution to the problem of the invisi-

ble result is to tell about another result, e.g. by mutating the story of the developing project into a story of using the result, as we shall see in section VIII.

VIII THE LIFE AND DEATH OF STORIES

Once stories are released into public space they assume a life of their own. Viable stories will be retold many times and amplify the impact of the original story. Other stories are prone to mutate. This may twist the original message. Sometimes a counter-story carrying the opposite message may appear to the dismay of the original storyteller.

Here we will give a few simple rules for *possible* transformations of stories; however, which transformations will actually occur is not predictable, since the mass media system is probably a non-linear complex system. The fate of a story – survival, reproduction, or death – depends upon its interaction with the other stories that are currently alive in the public and upon possible catalysts. These constitute the context of the receivers of the story, and it is this context that determines the actual interpretation of the story. Therefore, it pays to see how the land lies before actually constructing a suitable story. The story of Microsoft may begin with some ordinary guys creating a successful operating system for personal computers, but the story is vulnerable to the David-Goliath virus described below, so Microsoft will always have problems with their stories.

COUNTER-STORIES

Stories must compete for human attention in the public space, and defend themselves against counter-stories. Counter-stories work by changing the original story, often catalyzed by already existing popular stories or myths. We shall call the counter-stories for *predators* because they are able to kill other stories, despite their truth or legality.

An example of a forceful catalyst is the Biblical story about David and Goliath that features a small and powerless Subject that conquers a mighty Antagonist.

Consider for example stories about the Danish giant dairy *Arla*. Arla is the Subject in a story where the desired Object is growth. The economic justi-

fication for this is that growth is necessary in order to survive in a global economy. Arla therefore systematically buys up smaller dairies, merges with larger dairies, and tries to prevent the remaining independent dairies from selling their products to supermarkets. Its Antagonists are of course the small dairies. But this story is not stable: a powerful Subject – a Goliath – is thwarted by a powerless Antagonist – a David. Who can sympathize with that kind of hero? Therefore a new counter-story is created where Subject and antagonists have changed places: the small dairies become the Subject and Arla is relegated to the Antagonist actant with subsequent looses of market shares. There was an additional hostile catalyst in the Arla case, namely the story they told about themselves. Arla grew out of the Danish co-operative movement that started in the late 19th century. At that time the co-operative movement was opposed to the rising agricultural industry, represented by the rich landowners. The co-operative movement was the hero, locally based and democratic, whereas the landowners were centralistic, foreign, and profit-oriented. Now Arla finds itself in a position, where it acts according to the values of its previous Antagonist, whereas its story is still the co-operative one [Mordhorst, 2005].

Another giant, the Danish bacon factory, Danish Crown, had the same experience. Their story is that they had patented a method for making fat-reduced liver pate and were wronged by a small slaughterhouse, Hanegal that marketed a product violating the patent. Danish Crown consequently filed a law-suit, but no matter whether the patent was or was not violated, the biblical story placed Hanegal in the role of the Subject and Danish Crown as their Antagonist. Danish Crown had to give up their lawsuit and allow Hanegal to continue their production. Stories are sometimes stronger than law!

Kennedy's project was in fact itself subject to a forceful catalyst, namely the conspiracy stories so popular in American culture. Since Kennedy's story enrolls "the world" as an Observer of representations of the moon-project via TV-transmissions and photos, and since representations can lie, there was an opportunity for a predator story to emerge out of the original story, and to attack it [Moonhoax, no year]. The Americans had never

been on the moon, and the photos were a fake! The predator would probably not have grown, if the cultural climate was not prepared. But it was: there was a climate for cultivating conspiracies in America, and there were models that could be copied; one in fact concerned the death of Kennedy himself. Conspiracy stories parasite on stories: they take a story and tell it as a sign of something else: hidden purposes and global conspiracies.

The bottom line of all this is that story formation can not be controlled explicitly. What can be done instead is to use existing tendencies and trends in an intelligent way. As the sailor cannot control waves and wind but is able to use these natural forces to his advantage, so a storyteller cannot control the story-generating social mechanisms. But he can use them to his advantage.

THE PROBLEM OF INVISIBLE RESULTS

A storytelling project manager has the problem that some project results are invisible. This makes storytelling harder in software development than in construction engineering. However, the problem is not new. The event of reaching the North Pole was invisible to the public, and the general public is unable to discern a technically good electricity plant from a bad one.

The classic way to handle the problem of the invisible results is to tell a story of something else. We shift the attention from development to use.

IT-projects in particular suffer from the invisible product syndrome. The software produced is invisible to most people, and the struggle of the developers with removing bugs and keeping deadlines are much more abstract than the bridge-workers' struggle against the waves and the seabed. A solution is to use metaphors, but

> …the references of computer metaphors are often ghostly abstractions, not things one can point to or see or touch. [Johnson, 1994]

In addition, stories about technical progress are much less attractive to the present-day audience than it was in the fifties where technology was equal to progress. Today the public has experienced with the negative sides of technology and this has created ambivalence towards technical progress

stories. These stories have to defend themselves against the catalysts of environmental dystrophies.

A possible solution is to transform the IT-project into a story about the enhanced service the customer is now able to provide, using the simple role-shifts Object → Helper, Subject → Helper and Receiver → Subject shown in figure 5.
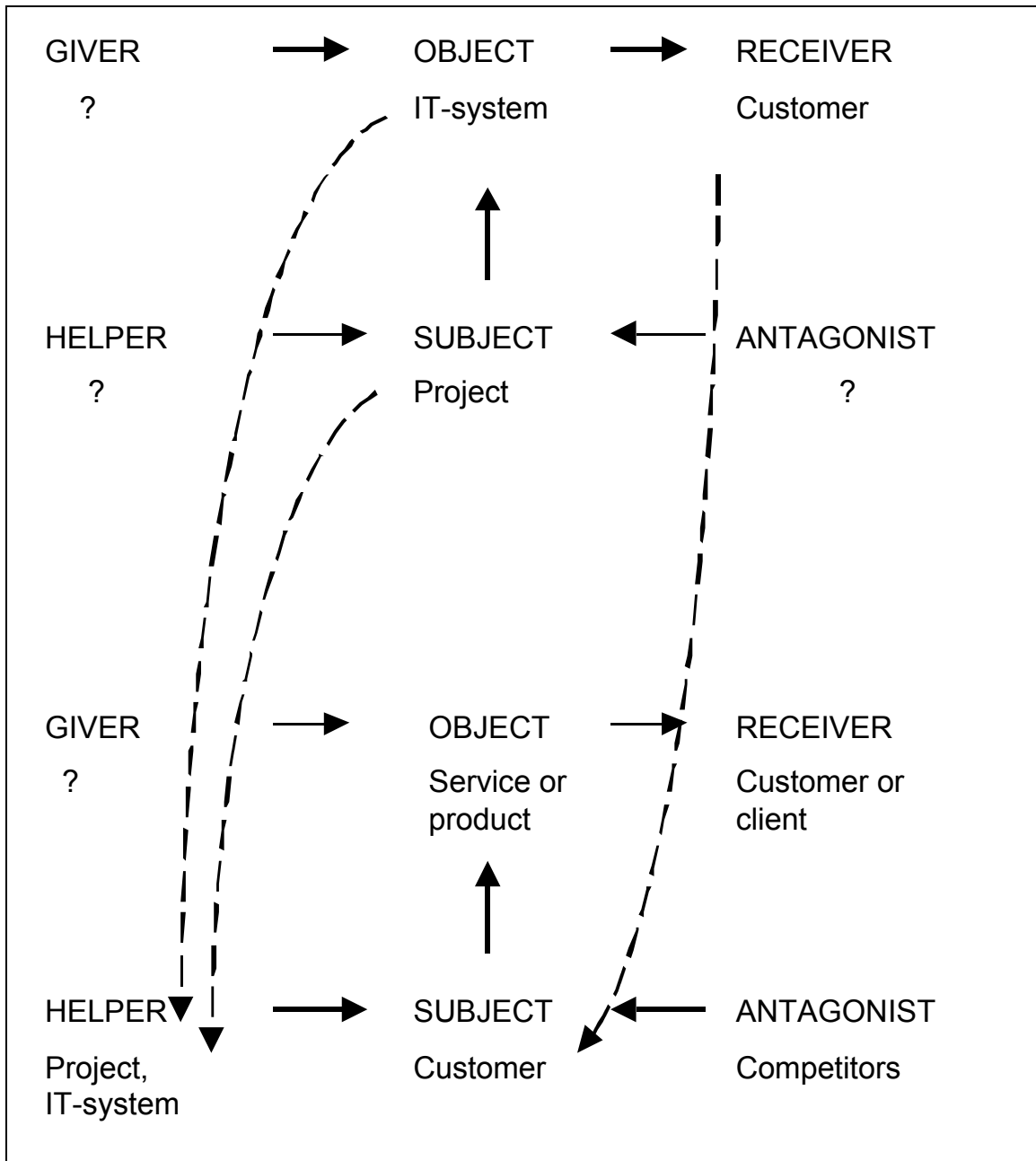

Figure 5. The project's role shifts from Subject to Helper.

This transformation also shifts the emphasis from the *objective* of the development process to the *purpose* of the super-ordinate use-process. The latter transformation is successfully used in humanitarian relief projects. Here the general purpose is emphasized – helping a group of people in distress – while the concrete objectives (so and so many tents, so and so many food packages) are toned down. The general notion of helping distressed people is catalyzed by Christian myths and parables (e.g. The Good Samaritan), but the myths do not reinforce technical discussions about the exact number and quality of the blankets.

IX CONCLUDING REMARKS

The storytelling perspective adds a very interesting dimension to project communication. Although this is an old practice, as the 45 years old Apollo Project illustrates, interpreting the project story by means of narrative theory is rather new. And the modern project manager may learn a few tricks from this exercise.

The most astonishing element in Kennedy's speech is the goal of the project. Why did he involve the Moon? From a rational consideration this goal in itself was not worth the effort. The proof of this statement is that nobody has bothered to go there in the past 35 years even though the technology has been available.

But not only did Kennedy propose a project with this goal. The project succeeded. It obtained the necessary resources, and the goal was reached on time. And it was one of the largest projects in the history.

One explanation is that the Apollo Project lent itself to superb and sympathetic storytelling. There was a fine harmony between the elements of the story. The genre was science fiction and exploration. The actants were clearly defined. In particular, the Subjects were brave astronauts. And the Receiver was mankind as illustrated by the famous words:

That's one small step for man; one giant leap for mankind.

The plot contained a series of progressing essential tests. And the message to Observers could not be mistaken; only one nation could do this and on-lookers were well advised to side with that nation. Of course there was a flaw in the project. There was no natural ending to the moral rearmament story, which stretched the science fiction story beyond its purpose.

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