

STRATEGIC SET UP AND TACTICAL MANAGEMENT OF LONG TERM IT-CONTRACTS

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ABSTRACT

Practice shows that in a lot of cases it is the contracting authority who is depending on the contractor. No matter how strong the contract in guarantees and sanctions, executing its provisions by the contracting authority could mean (more) damage in the project or service he depends on.

The first point this paper makes is, that an understanding of the legal landscape can prevent unwanted shifts in positions and create strong governance for the contracting authority by making choices that fit the organization. The second point is about designing proper precaution measures in a contract. They should give the project the tools to their tactical management. These tools, as measures and provisions, require creativity, because in the strategic analysis there is an important role for relational aspects and moving factors.

INTRODUCTION

More and more, public corporate bodies will be concerned with contracting the development and maintenance of mission critical systems which concern societies as a whole. Also these systems grow bigger, as well as their projects and duration of their contracts. Herein the government has to guarantee beyond any doubt the integrity and safety of these systems to the societies they represent. Legally, there seems to be little problem in stipulating guarantees et cetera, but there's a point where provisions can have a choking effect and start to work counterproductive. Even if you have legally regulated everything, being in the right and winning one's case are two different things.

Happy families are all alike, every unhappy family is unhappy in its own way

Information technology brings new challenges by placing concepts of

the 'normal' world into a virtual world. There is much literature on questions like: "What is 'ownership' and 'possession' really in a virtual environment? How should we interpret and value 'things' that can't exist without the material, but are themselves immaterial?" It is even more complicated when a desired outcome can be obtained through buying, leasing, downloading, borrowing or have someone develop/build for you, or having it delivered as a service. Metaphorically speaking, the ingredients of the sauce are always the same: software, hardware, people and services. It's their balance and the way they are committed that differ and it is sometimes hard to determine the sauce, because they all seem come in the same kind of bowl.

It is the legal context that sets the boundaries of what's what, who's who and in what role, as well as how certain conduct has its effects. Though it provides 'fields of conduct', it is not primarily the reason for people to behave in a certain way, let alone the desired way. There are other factors, norms if you will, that determine how people act and all participants bring their culture and identity to the table. Some scholars therefore point out the weight of relational aspects in contracts and others even put them up frontⁱⁱ. With long term contracts this can be challenging, because relations do not grow and flourish on the threat of a break up.

I will place the relational aspect in the reality of dependency in IT, which is traditionally taken as: a stronger contracting authority and a weaker contractor. However, in more than one case it's actually the contracting authority who is dependent on the contractor. This dependency near always involves an automated system that supports critical business processes of the contract authority, so they cannot take big risks by casting dirt into the well that gives them water.

Context

When one wants to bring the added value of procurement, the biggest impact can be made early in the process when plans are being made and choices still have to be made. That is why this paper concentrates on the stage before any real purchasing takes place.

I will broadly touch on a strategic view on the landscape of IT projects and some of the legal instruments commonly found in contracts with some possible additions, that might be useful to prevent derailing or sidetracking. My scope is the development of an IT system and keeping it working for a couple of years.

This paper is based on my personal insights and experience of some 14 years active in the field of public procurement and providing legal assistance to construction projects and IT projects. I have many

contributors to my experience and most valuable teachers in literature, colleagues and people I have done business with. For the readers convenience I have collected a some useful literature for more background on the focus of this paper.

Where I write “he” it is meant as “he or she”.

LANDSCAPE

A deal is based on agreement and only a genuine agreement is sustainable. This is the basis of a contractual relation. Especially with long term contracts, since there will be unforeseen contingencies and developments in the future. This goes for both the contracting authority and the contractor, since the value of a contract lies in their joint gain. Both have to understand the nature and structure of a contract. This can help reducing the chance of not only the bad, but also the ignorant plowman quarreling with the ox. But beware: there is no one ‘right way’ of doing things. The only right thing to do is make wise choices in your set up that fit your organization and in its strength.

Like on a map you should be able to see where you are, where you want to be at some time and depending on that, the possible roads to a destination. In the process of thought, some inevitable ingredients always come to mind. Together they form a chain that, on a certain level, always has the same shackles of which none can be left outⁱⁱⁱ. They are all *conditio sine qua non* and therewith mandatory subjects to cover in a strategic view.

The inevitable ingredients in a ICT project are: Software, Hardware, Services & People. See Table 1 for these ingredients in the legal landscape.

	<i>ways of ‘having’ for the client in terms of:</i>		
	<i>own</i>	<i>use</i>	<i>functionality</i>
<i>Software</i>	<i>copyright</i>	<i>license</i>	<i>service</i>
<i>Hardware</i>	<i>ownership (+ license)</i>	<i>hire, lease (+ license)</i>	
<i>Services</i>	-		
<i>People</i>	<i>employee</i>	<i>hired personnel</i>	-

Table 1

Software

If you own software, you own the copyright. If not, you can be granted permission by the maker or copyright owner to use it under the conditions given with the permission. You can 'hire' or 'buy' permission in the form of a license. The difference between the two is mainly a restriction in time and control by the copyright owner over changing the conditions after the transaction. It is important to understand that the terms 'hire' and 'buy' are more used to give the construct a quotidian flavor. Be aware that it remains a permission, not a lending or transferring of goods. This difference comes to table when, for instance, one organization wants to give or sell its license to another organization or other parts of their own organization. A lot of licenses prohibit this. So it is crucial that the requirements for usage are fully worked out in advance to assess possibilities and risks in licenses and how they fit your organization, project or infrastructure. Especially with critical systems and long term investments these can be more decisive than other things.

Hardware

Ownership of corporeal objects is what we are used to in the 'normal' world: you can use it, break it, dispose of it, lend it to someone, give it away, sell it, et cetera. If you hire or lease corporeal objects, it resembles the license with software: you might possess and use, but do not own. Point of attention is, that most hardware is a corporal object with accompanying software (aka firmware). The license under which firmware is given permits full use of the hardware, so it would generally be of little concern. Nevertheless in respect of compatibility, technology refresh and such, firmware and their licenses can be decisive in the possible use of the hardware or intrinsically prescribe other software (-platforms). Also take note to the fact that hardware design can be steered by choices of software(-makers). So with hardware you can own, lease or hire the corporal object, but accompanying firmware is delivered under a license. So the software aspect of hardware might be relevant.

Services

If one desires nothing more than the functionality of a system or human activities, contracts will not have to concentrate on ownership and licensing. You can have the functionality delivered as a service. Services though, can't be owned or used in spite of what daily speech might suggest. Services have to be carried out, over and over again. Legally their quality is more of an order. Actions and their results in this respect are commonly spoken of as being 'delivered'. Where the object is a result, this seems logical. If the object is an action, then

'delivered' means nothing more than the fact (as a result) that the action has taken place, regardless the outcome of that particular action. With services therefore one has to be keen on the desired quality and how to incorporate it in a contract. But: services too can be a mixture of the before named ingredients. Also with services it is possible that software licenses are directly granted to the user/client, as well as different ownership of hardware etc. In the same way the quality of a service can be depending on the contracts your service provider has with others (licenses, infrastructure, strategic partnerships, longtime business relations, certifications et cetera). Though not of your direct concern in a contract, they can be quite relevant in a strategic analysis, for the chain is as strong as the weakest link.

People

You can have people working for you as your employees on an employment contract with benefit schemes or hire them on a commercial contract based on an hourly rate. The choice has much to do with the anticipation on the duration and nature of the working relationship, the type of desired activities and/or results, long/short term benefits/goals and last but never least: the difference in costs. If you want to avoid these deliberations, you can also ask for human activities functionally. Then it becomes a service, thus another category... All depends on what model of governance is chosen in a certain context. Do you want to steer activities or await the result? A mix of both? Do you need loyal people in certain roles or independent advisors in another? Do you need to be flexible or should you secure certain positions for a longer time? What must one do or deliver and what set of provisions in a contract make sure I can claim this with my contract partner? At first glance there seems ultimate freedom in choice, but this is rarely so. If you want to make the right agreements for the given context, in most cases there will be just one form providing the needed fit. Legally it is the difference between contracting the actions of people or the results that come out of them.

Static Ingredients 'in phase'

I call the above: Static Ingredients. In Figure 1, they are placed in context with the basic stages in the development of a system. My 'proto long term IT relation' has the following stages:

- 1 getting a software system ready for use(development);
- 2 implementing the software system when it's ready for use (implementation);

- 3 keeping the software system available for use for a period of time (maintenance);
- 4 alongside 3: technology refresh in the software system.

All stages have the Static Ingredients and choices made in the first stage create conditions and the starting points in the following stages, including technology refresh. It is important one understands this as being a whole. Especially with regard to procurement and management.

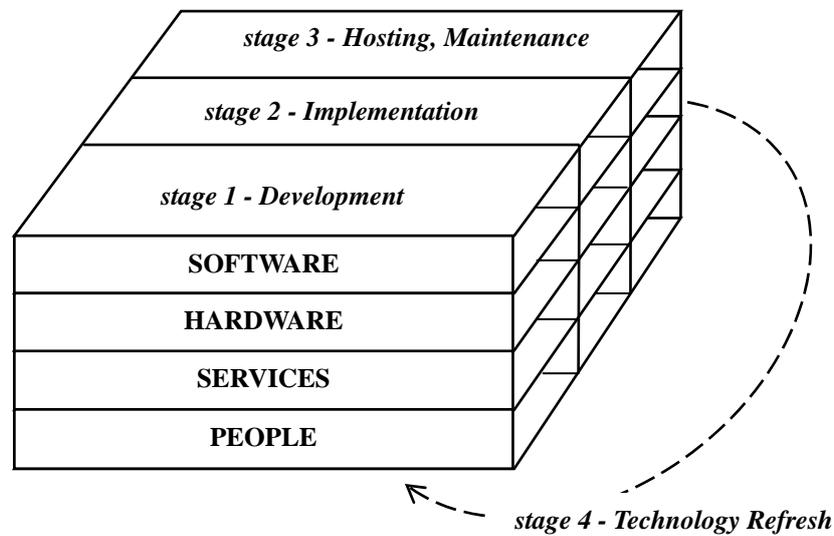


Fig.1

Behind each of the Static Ingredients different business models are possible, but once chosen they are not easily interchangeable when choices in the mix of these static ingredients change. The choices made determine or strongly influence the room for choice in the other ingredients and next phases. Business models are plenty, so I simplify them to their bare essence, from a contracting authority point of view: what, how and by who? These elements are linked with one another by the what I call the “Consistency Chain” (see Fig.2).

It all starts with a given situation or context and the setting of a goal. This could be for instance the solving of a problem. Obviously one needs something to reach that goal. This is the WHAT. And for every WHAT one can choose HOW the WHAT is being delivered. Out of both the profile of the needed WHO to deliver the WHAT is derived. Although in this chain there is a main line of thought from left to right, the interaction goes both ways. So it is possible that the

available WHO prescribes or limits HOW the WHAT can be obtained. It might even lead to reassessing the GOAL!

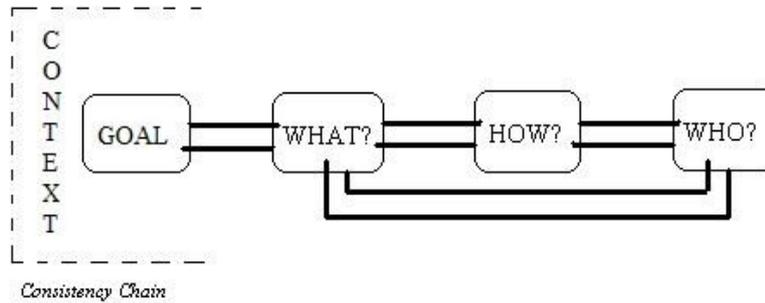


Fig. 2

An example: if the ingredient Software is chosen as an off-the-shelf product made by a company under a commercial ‘closed source’ license, the consequences in Hardware, Services and People will be determined by it and will be very different if the choice would have been for an ‘open source’ product. The business models behind open source and closed source products are worlds apart. In an overly simplified picture:

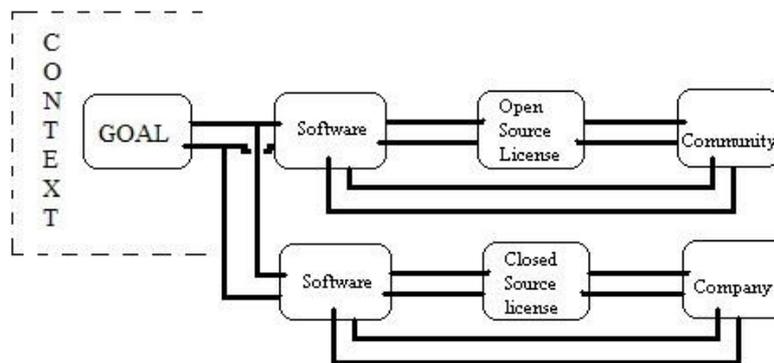


Fig. 3

Both alternatives deliver Software. But a company on its own initiative regularly releases new versions of the software and updates to increase performance, keeping up with other systems and applications (compatibility) and patches for safety and continuity. Their business model is based on secrecy about the code, so they remain in charge of who can maintain the software. Their main selling point is their quality and what their trademark stands for. Because there’s secrecy about the code, this is called ‘closed source’.

With ‘open source’ there’s no secrecy about the code. Potentially

everybody can read and rewrite (parts of) the code. That is why around open source code individuals and companies usually gather in more or less organized communities (also called 'project'). So to make it commercially worthwhile the effort, one needs a business model not based on unique abilities by secrecy. Entrepreneurs in this field concentrate on services. There are even those who release open source software under their name as a trademark for quality, as well as an object they can control for their services. This does not change the fact that other non-involved parties can equally so decide to deliver the same maintenance services, since they can also read the code. This creates entire different market dynamics than with closed source products. It is essential that one understands the differences, for it has a huge strategic effect in a project and contract design.

This is just one aspect. Like this there are more elements or factors that can turn out crucial and deserve thorough analysis. There is somewhat of an order to look at things, but there is no one way rule of succession. Therefore it can't be stressed enough that the whole and principle of the Consistency Chain needs to be looked at. All Static Ingredients and the effect on each other need careful attention beforehand to avoid (under pressure of time, money or other reasons) the risk of the project trying to find Suknyung from the well.

LONG TERM CONTRACUAL RELATIONSHIP

Moving factors

Parties bound by contract don't share the same interest in a contract. The contractor has to make profit and protect himself against negative financial results. The contracting authority on the other hand has a focus on achieving a certain result on an arranged date. For the contracting authority a project is about the content and objective with finance as a management issue. For the contractor, as a commercial entity, it's the other way around. Though in most cases the contractor also aims to contribute to the objectives of the contracting authority, it does so for a different reason, being: reputation. This is to some extent a self enforcing power in the contract, because reneging could damage a good reputation and with that: chances on future deals.

For a contractor the bandwidth in which profit can be made is paramount. Within this bandwidth the quality of service is balanced against its expected revenues: high expected profit facilitates higher service. But this is not linear and there are more equations in this to take into account. For instance, delivering a high level of service is often a result of the equation between the increase in revenue with delivering a lower level of service and the possible calculated

damage of reputation which can lead to loss of profit if the contract is terminated and missing out on future business^{iv} .

When there are many boatmen, the boat goes to the mountain

Contractors have more than one face, for instance: the account manager and the sales manager both have financial targets to meet, the technicians that are more drawn to the beauty of technique over practical or economic significance, the project manager who is working from milestones to deadlines. Even if each of them is bestowed with just the right amount of altruism, it remains challenging management of priorities for the contractor^v . This becomes even more difficult when the contracting authority also has different faces and all different faces have their own contact levels pushing their priorities. So both parties have to put in great effort to organize their own and then channel the lines of communication with their counterpart and not deviate or being too 'pragmatic' during the course of things. Above all: make sure everyone needed is heard, but only one captain on the ship. Mandates and tasks should be clear and known by all parties involved.

Sometimes in procedures and quality checks one seems to run the risk of making the bellybutton larger than the belly. Though a real risk, the Treasury Taskforce rightly depict contract management as an activity^{vi} . Both parties have their interest in organizing their contract management and the party that does this the most effective starts with a superior position when friction is dawning. It is about not doing too much, but never too little.

LEGAL INSTRUMENTS

A contract in the end has only one function: get help from a bigger authority than yourself, namely the state or the institution you are controlled by. That is the essence of "legally binding". Nobody needs a contract for clarity or trust.

The law will help, based on two principles:

-a deal is a deal - Everybody can be held fully responsible for the situation they voluntarily step into or circumstances they create. If there are excuses, the law will have given them ex ante.

-damage must be undone or compensated by the one(s) who caused it - The law can be called upon by someone who is

experiencing damage, which is not to be confused with disappointment. There is a strong correlation between the two, but no causal relationship. Feeling hurt is not the same as suffering damage. This is very important to understand, because a great deal of legal cases start emotionally triggered, albeit legal action will not always lead to satisfaction. Law^{vii} reaches for an artificial balance by cutting the Gordian knot if necessary, so everybody can move on with their lives and practice.

The law holds liable the one or ones who caused damage or are in any other way accountable for it. Those who suffer damage are not excluded from this. Their part in causing or preventing the damage in question is brought in the overall balance as well.

Termination

I will start with the ultimum remedium, the last resort. One question I always ask in job interviews for a legal function: “If somebody comes up to you and says: my system has to go ‘live’ in one month as agreed in the contract, but my contractor won’t deliver in time. What can I do?” Most applicants answer: “Terminate the contract, look for another to finish the system, pay this third party with the money you would have owed the contractor and claim damages if there are any.” Legally a rightful answer, but in the real world this could mean: “get rid of this contractor as soon as possible and be sure you won’t have a thing up and running in a month.” So what seems correct might be catching at the shadow and losing the substance. It is one of the underlying risks why in general parties don’t seem eager to take legal action against their contract partners^{viii}. The same goes for public corporate bodies. It is rarely a real solution and never an instrument to manage a contract or relationship.

Penalty

A penalty is not an incentive but a corrective measure and thus a negative motivator. This means it adds punishment. Although sometimes needed, it is not the solution to a problem. Also it is not about damage. You can’t be too clear about that in a contract. Because nothing is compensated with its execution, no balance is restored. A penalty is designed to create imbalance, so always a scratch in a contractual relationship. In long term contracts one should be aware how many scratches can be brought in the balance. There needs to be a good reason for penalties to work effectively. With cautious use it can have a positive influence on performance.

Like with any punishment: if it is used too often or too fierce, it will only create indifference. Even then it is important to stay within the bandwidth of balanced effort and revenue. Exceeding this bandwidth with penalties takes all incentive out of the performance and relationship, because nobody wants to be tied to a contract that brings no gain or even losses. If loss is inevitable, there is no incentive to deliver any level of quality or service or even keeping up a good relationship. You might then see a contractor behaving in a way to steer the contracting authority towards wanting to terminate the contract. If the contracting authority bites, he will try to claim some of his loss back as a settlement with early termination.

MEASURES AND PROVISIONS

As said above, there's a correlation but no causal relation between damage and disappointment. On the other hand, satisfaction and disappointment are the factors for success or failure. But there is no legal right to be satisfied or disappointed. So, how do you arrange legally, what is legally not directly of great importance? Here are some measures and provisions in very broad terms. For actual arrangement they need to be customized and when you incorporate them in your project or you are thinking of it, remember to carve the peg by looking at the hole.

ITYM clause

The ITYM clause has the objective to get closure on the positions taken in a matter. It is an escalation scheme, where a contracting authority can formally and directly reach the highest decision-making unit within the organization of the contractor (Board of Directors). This can be arranged by a right to step in their regular meeting and state your case there. The ITYM clause can also provide for the option to call for a special meeting with this decision-making unit as well. This is a clause that can have a big influence on behavior of the contractor, depending on its size and company culture.

One might think that companies can't allow third parties to tell them what to decide or do. That is true and this scheme is not meant to enforce a decision of the contracting authority. Nevertheless, in negotiations potential contractors will try to get the ITYM clause form the table with reference to legislation and rulings. If this happens, riposte that this scheme is only to claim what is already agreed to in a contract and your contract is with the company, not with a specific director or manager. If this scheme is deemed not possible for reasons of law, than the whole contract might not be enforceable by law and therefore probably unlawful.

Transition scheme

Like implementation, the exit needs a plan too. Not only at the end, but also at an early ending due to circumstances. In a procurement process it is advised to either ask for a transition plan within a determined period, or ask for the quickest possible and weight the period in comparing with other offers. It can be relevant in a decision to terminate the contract if the contractor gives full corporation and it is known beforehand that the transition will take two weeks or months. The more you know about the transition, the better you can use it to create independency from your contractor, especially during the contract because the contractor knows you have already arranged your exit in case things go beyond borders. This also brings the consciousness that occurring problems of a contractor should not become problems for the contracting authority. It pushes the initiative of the contractor to find a solution instead of asking what it is you want.

Monitoring Performance

A monitoring system of some kind has to be in the project or else you would never know the quality of what you are paying for. Legally relevant is whether this monitoring system is agreed to by both parties. Then judgments can be automated and objectified so the execution of sanctions can be sort of 'mechanized'. This helps to avoid too personal choices while people don't like to have their relations or reputations influenced by unpopular measures. In difficult situations they might choose to cover the sky with the palm of their hand. Tough decisions can be made easier if they are predominantly based on facts that speak for themselves.

Credits

To keep the will to perform adequately intact, a system of credits can be used to get granted a claim on extra services. For contractors this is easier to bring into a settlement than money. A system of credit can nevertheless also be used as a financial sanction, but contrary to a penalty, the contractor has chance to win back the credit by performing adequately in the next two periods of time (i.e. months). It also works in projects with milestones when a contractor makes up for lost time or other performances in a upcoming milestone/phase. This way the contractor can 'repair' his performance and gets something back for it. All this at no extra cost for the contracting authority. Another charm of this, above an incentive like a bonus, is that the contractor has no 'incentified' performances to focus on and so neglect other services and deliveries.

Terms of payment,

With likeness to the credits scheme, but not to be confused with it, there is a sanction in delaying payments. It might seem to little effect at first, but when for instance a financial year ends, someone within the organization of the contractor will feel it and will try his best to act upon it. This scheme has to be designed around the applicable accounting rules about turnover in a specific year and the uncertainties around it. This works even stronger if it is in combination with a credit scheme. Since it is about money and rules of accounting, determine them in detail up front.

Account manager

Make the account manager and his performance part of the contract and monitoring system. He is the most important point of contact with the contractor. Prescribe the role he has to play and issues he has to cover. In this way the desired partnership or role is made more SMART and accountable. In the procurement account management is part of the offer to be assessed. The ITYM-clause can be offered as part of this.

Other

The above mentioned are of course not the only measures or provisions available. There's the promise of a follow-up contract, but in public procurement this is a tough promise, if you can promise this at all. Also there is the target savings in one year on costs, the provisional sum and many others. They can be very useful to achieve certain goals, but they are outside the scope of this paper.

WRAPPING UP

Study the legal landscape of IT and choose your best suited strategic plan. On the basis of this plan the roles, project governance, contracts and a procurement plan can be designed. The needed capacity can be estimated and tasks can be assigned. Important: make relevant information timely available and visible at all times, because not all players are always aware of the decisions, grounds for choice or contractual agreements.

Some only cross even a stone bridge after they have tested it. Although there are situations where this can be a wise thing to do, have a more faith in regular circumstances. Entrepreneurship takes courage, but this also applies to professional commissioning practice. Take the effort to know your counterpart so he becomes enough predictable to trust. To go with that: act as you say you'll act... or else...

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NOTES

- i Tolstoy, L. (1828 – 1910). “Anna Karenina” (Chapter 1, first line)
- ii Also see Macneil, Baker et al.
- iii An example: with transport of persons (let’s say 10 km distance, 4 persons) you need a car or a bus. With needing a car or a bus you will need someone to drive it. With the concept of a driving car or bus you will need a road to drive upon. For people to step in your car or bus, they need to know about it and be able to contact you about it. Take one ingredient out and the whole transportation in this example falls apart. However, with these ingredients you can make up different transportation scenarios for car-pooling colleagues who alternately ride together in their own cars, individuals who share the use of one car, call for a taxi, hop on a bus or take a train. You can buy or hire a car. You can also only ask for the service of a car, we call a taxi. No matter how you arrange transportation, the ingredients stay the same and all there.
- iv See Levin 2003
- v See Pitkänen
- vi See Treasury Taskforce
- vii The Gordian Knot is a legend of Phrygian Gordium associated with Alexander the Great. It is often used as a metaphor for an intractable problem, solved by a bold stroke. In 333 BC, while wintering at Gordium, Alexander the Great attempted to untie the knot. When he could find no end to the knot, to unbind it, he sliced it in half with a stroke of his sword, producing the required ends (the so-called "Alexandrian solution"). [Online] http://en.wikipedia.org/wiki/Gordian_Knot [Retrieved March 1, 2010]
- viii Also see Macaulay 2003