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Printouts of the preliminary
Sensitivity Model for Terror Prediction and Prevention

This printout should give an idea of the kind of visualization and the possibilities of the cybernetic approach by a sensitivity analysis in order to understand and thus solve complex problems by efficient strategies. The predictions of this model from october 2001 proved to come to reality almost exactly in the course of the following events. At the same time it showed the fundamental errors comitted in believing that copmplex repercussions can be handled by a straigth-forward Strategy.

Table of contents

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Sensitivity Model Prof. Vester Date: Sept.26th 2001

System model: Terror prevention

'System description'

Fighting terrorism is a highly complex task.
Which is the most effective way to reduce acts of terror? Is it enough to abolish the head(s) of fanatism? Will there immediately be followers? Where are the roots? What supports it, what fertilizes it? What enhances, what reduces recruting suicide teams? Can one deprive the seed of its fertilizer? What are the side effects of punishing the wrong target?

To solve these questions a sensitivity model is developed by simulating the cybernetics of the terror-system and its "behaviour) towards different strategies.

The overall goal of this system model is to show which strategies will favour circumstances where different cultures, beliefs and confessions may cohabitate in peace. If wrong sdtrategies are persued, they may turn out to be a fertilizer for all sort of social insanities like fanatism, terrorism, oppression, war and crime.

List of key variables
(after redefinition by criteria matrix)

1 Influence of head of terror
2 Location of organisation
3 Financial support of terror
4 Recruiting manpower potential
5 Sources of hatred
6 Impact of attacks
7 Damages on civilians
8 Damages on economy
9 Antiterror-actions of USA
10 International antiterror(AT)-support
11 AT-support by islam-countries
12 Right target of AT measures
13 Control of overreaction
14 Acceptance of US-actions
15 Security measures
16 Quality of life in democracies
17 Quality of life in other cultures
18 Successful protection
19 Return to normal life
20 Learning from the shock

Variable set' and 'Variable description':

The following key indicators and their description as scalable variables of the terror system have been established Sept 26th 2001 on the basis of (at that time) available facts and statements of experts.

1 Influence of head of terror

The organizing force (e.g. Bin Laden?), his communication ability and his emotional influence (e.g. his claim to be the new prophet). But there are successors like the egyptian Aiman Al-Zawahiri in case the actual leader is dead (by what his posthume influence as new hero and martyr may even rise).

2 Location of organisation

Location of center? One or more? Groups are obviously widely spread. It seems that globalization is copied by terror organization. Sleeping groups like those of Said Bahaji and Abdujl Binalshibb in Hamburg. Possibilities of changing the country will diminish the chance of attacking or capture the head.

3 Financial support of terror acts

Sponsoring by supporters of the Gulf Region? Accounts of Ousama Bin Laden (about 250-300 Mio) who was first supported by US in his fight against URSS. He may have made further millions by speculating at the stock exchange a few day before the terror act. Accounts on foreign banks (Near and Middle East, Malaysia, Hongkong, London, USA etc.) can all be frozen by international aggreement. Financial embargo will also cut sources for "holy war". Osmana himself (who was expulsed from his familiy) is not identical with the multinational enterprise called Bin Laden of Saudi Arabia.

4 Recruting manpower potential

People having enough hatred to obey the head and its message (especially in case of holy war) to get trained, technically skilled, brain washed and prepared for suicide attacks in fulfilling the aims of illegal organizations striving for world wide power. The laws may be very different to those of normal criminality and such may be the strategy for dealing with it.

5 Sources of hatred

Are used by foundamentalist leaders for their purposes in recruiting fanatics for terror acts, giving them moral support. These source may be:

- Settlement politics of Israel, suppression of Palestiniens.
- Former collateral damages in Irak and its embargo causing hunger and death of many thousends civilians.
- Arrogance of US politics claiming American way of life and consumerism as the best way for everybody without realizing that western lifestyle is only possible by exploiting the poor
- Economic power and hegemonic attitude of USA (evoking envy).
- The peaceful cohabitation of all sorts of ethnic groups in USA, menacing the maintenance of religious fundamentalism.
- The effect of capitalism making people dependent on money.
- Bad effects of globalization on local economy in developing countries.
- Inactivity of industrialized nations against climatic change and other environmental destructions
- Support of non democratic governments in the islamic world (and else in the world, especially Africa) by USA, France etc. and their multinational companies.
- Not seeing the world through the eyes of the weak and poor.

To dry out these sources may be an effective lever to start sustainable prevention of terror acts. Ignoring these roots might lead to enhance or nourrish them.

6 Impact of attacks

Frequency of desastrous effects and magnitude of targets hit by terror measures. Worldwide impression distributed via TV reports, print media and comments disturbing the broad public and decision makers in all countries, creating fear and panic without relation to the real thread (little compared to other constant dangers).

7 Damages on civilians

Persons injured or killed. Indirect damages by poisons, water and air pollution. Psychologic traumata, anxiety, panic and depression. In relation to the damages of lost lifes and goods by hurricans (e.g. in Central America), inondations (e.g.along the Yangtse in China), hunger and local wars (e.g. 800.000 Tutsis killed in Africa) or in relation to the toll of the yearly car accidents of world-wide 750.000 killed and millions of crippled (having on the single individuum similar effects) the damages of the last terror acts in the US are just a fraction of these permanent worldwide desasters. The big difference lies in the inhumane and criminal purpose of the fanatics

to destroy not only lifes and goods but a whole civilization. Individuals which will protect themselves (by not travelling by plane, by avoiding or leaving big cities, changing job or place of work) must be aware, that all this would tremendously change their way of life.

8 Damages on economy

Direct damages are

- Direct material damages by terror actions (houses, cars, production plants, nuclear plants, machinery, cable connections and computers)
- Interruption of work, spending time and money for rescue actions, for repear of desasters and protection.
- Insurance and reinsurance costs. In relation to e.g. the yearly car accidents the material damages of Sept. 11th are only a fraction of it. The difference lies in the purpose to destroy instead of accidental events.

Indirect economic damages are

- Destroyed papers, money, treaties, accounts and other documents,
- Destroyed infrastructure (energy and water supply, telecommunication, transportation facilities)
- Paralyzation of civil air traffic
- General regression
- Investment anxiety, stress and panic

Future damages can be reduced by changing infrastructural and communicative organisation and devices.

9 Antiterror(AT)-actions of USA

- Detecting and destroying the cells of terrorism.
- Killing the heads of the organization
- Putting countries like Afghanistan under pressure to deliver terrorists.
- To achieve total isolation of the terrorists by arabic states
- Supporting enemies of the Taliban in the northern provinces (which, however, are as fundamentalistic as the Taliban priests and may finally turn out as new foes of America (as it happed with the Taliban itself or with the armement of the UCK in Kosovo
- Warfare toward sympathyzing countries (in the sense as the rogue states as enemies have taken the place of the former Soviet Union). However, warlike actions have been proven not to work against indoctrinated partisans (not in Vietnam, nor in the Iran nor in the Gulf War nor in Kosovo or - as the failure of the Russian army has already shown - in Afghanistan or in Tschechenia).

10 International AT-support

Antiterror support by EU, Russia, China and other Asian nations and by non islamic african countries. This might have a feedback on quality of life and economy in these countries too (surveillance, free hand for suppressing undesired opponents).

11 AT-support by islamic countries

Islamic governments that officially condamn fundamentalism and fanatism and are maybe scared of becoming target of Antiterror-actions if they do not offer their help. If this support is put into actions it might also change the development of Islam and its impact on daily life and customs. Support might immediately break down if "holy war" is proclaimed or religious feeling of mulims are offended by antiterrorist actions.

12 Right target of AT measures

These are

- Persons or groups to be proven as guilty of terror acts or planing them
- Technical or economic sources for these acts.
- Interfering (disturbing and decoding) the internal communication of terror groups (which has completely failed so far by CIA and NSA).

Wrong targets might be hit

- By following wrong accusations (e.g. Afghan opium fields, which, however, where long banned by the Taliban themselves and changed into crop fields)
- By error (like the chinese embassy in Belgrad)
- By measures that indirectly enhance more terror acts
- By attacking at the wrong time (e.g. during Ramadan) which would vanish the support of islamic countries.

Counter attack should be chosen so as not to evoke more damage to the free world as compared to its punishing effect. For instance, by generally condamning muslims or even bombing civilians would even those who are still friends turn into enemies supporting terror.

13 Control of overreaction

Inhibition of escalation by understanding the criminal structure of the terrorsystem and its role and possibilities within the sourrounding society. Using all means by which US citizens and politicians can be helped to overcome the general panic and feeling of revenge due to the terror acts. Concentration on clever measures that will render more use than harm to America and the free world. The time of Ramadan could be used for interruption of AT actions or war (which would 'make points' in islamic countries) in order to reflect and evaluate anew the best 'cybernetic' means for terror prevention.

14 Acceptance of US-actions

Acceptance and support by islamic countries, by other nations, by Israel and by public opinion within the United States. This will be reflected by the media in the different countries or (in case of non-acceptance) by demonstrations from Pakistan up to those in the US.

15 Security measures

- Control of air traffic on the ground and in the plane. Technical devices to decrease hijacking (example EL AL). Surveillance of suspect people or groups. Checking all hightech devices (which are generally more vulnerable than lowtech) for their withstanding against all sorts of sabotage (e.g. poisoning, microbic attacks, magnetic pulse, p.c.- viruses, misleading information) and for their resistance against bombs and airplane crashs (nuclear plants, highdams, munition depots and chemical plants (type Seveso or Toulouse).
- Creating more independent supplies, small unities instead of central functions.
- Putting secret services and CIA (that have shown their inefficiency in the past) on a higher level of intelligence. Recruting agents who speak arabic and know the oriental way of life.
- NMD is certainly no solution against terror of this kind.

16 Quality of life in democracies

Democracies of western style e.g. countries like EU, USA, Japan as there is: freedom of speech, free choice of religion, job and partnership, absence of racism and thought control. Feeling of security, of being protected by law and fellow citizens. No surveillance by state autorities (like in the McCarty era), free press, free movement.

17 Quality of life in other cultures

So called non democratic countries or reigned by dictatorship or fundamentalism like some islamic states (Saudi, Irak, Iran), China or some African and South American Nations based on other cultures and life styles than ours. There quality of life means: Living in accord with own believes, own legacy and economy, control of crime and drugs, warranty of their special way of life. Absence of hunger and war.

18 Successful protection

Successful protection and prevention of terror acts can only be optimized not maximized or it will change our democracy and freedom into an Orwell 1984 state. Complete abolishment of terror and crime therefore is a fiction. The aim can only be to minimize it and to prevent warlike damages like in Manhattan and Washington. The measures of protection must be in relation to their impact on our daily life (see variable 19). The danger is obvious that we can loose our highly estimated civil freedom. To turn into a police state would be the greatest victory the terrorists can imagine. Speading panic by exaggerated official warnings seems on one hand to better justify US-interventions (even overreactions) in the eyes of the public, on the other hand it's just what the terror groups had in mind and will register as their success.

19 Return to normal life

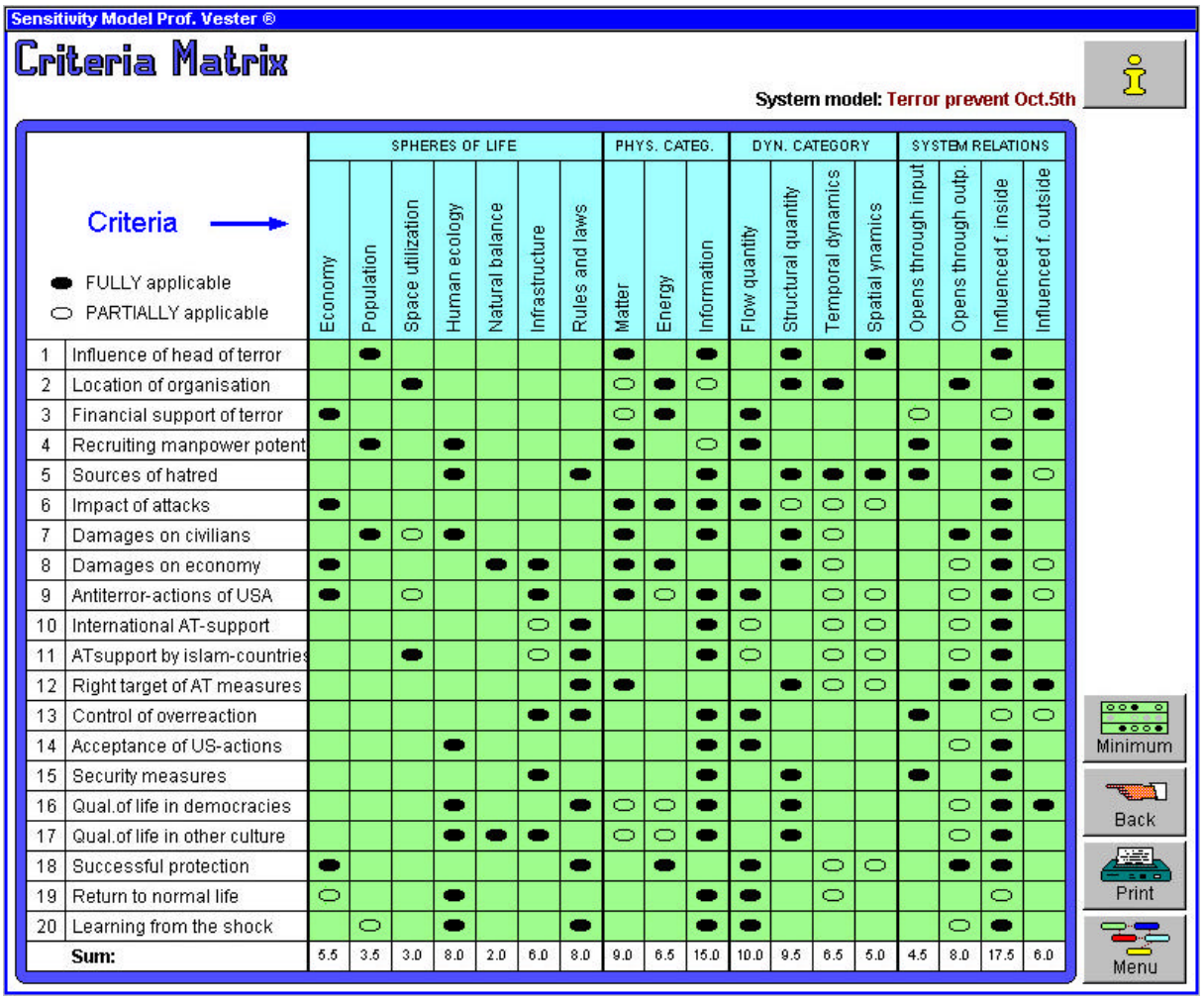
This should be the utmost aim of all decisions. However it should include all people on our planet and not be achieved at the cost of the rest of the world and the underpriviledged among us. Then it will be the best prevention of any escalation of terror. Gated communities are no solution. It leads to desertion of cities and a chisma of our society. The same is true for the majority of muslims who suffer under radical oppression of their daily life by fundamentalist rulers and their dogmatic and ineffective education excluding female contributions.

20 Learning from the shock

The shock and the losses of lives and goods will be in vain if people don't learn from it. If they don't change their way of thinking and their attitudes as far as our thoughtless behaviour and our "business as usual" concerns. By doing so we all will profit from the lesson - not only in regard to the prevention of similar or even worse acts in the future, but also in becoming more conscious of how we manage our civilization by subjecting its goals to a reeamination conscious of how we manage our civilization by subjecting its goals to a reexamination.

System model: Terror prevention

Criteria matrix (checking systemic relevance of the variable set)

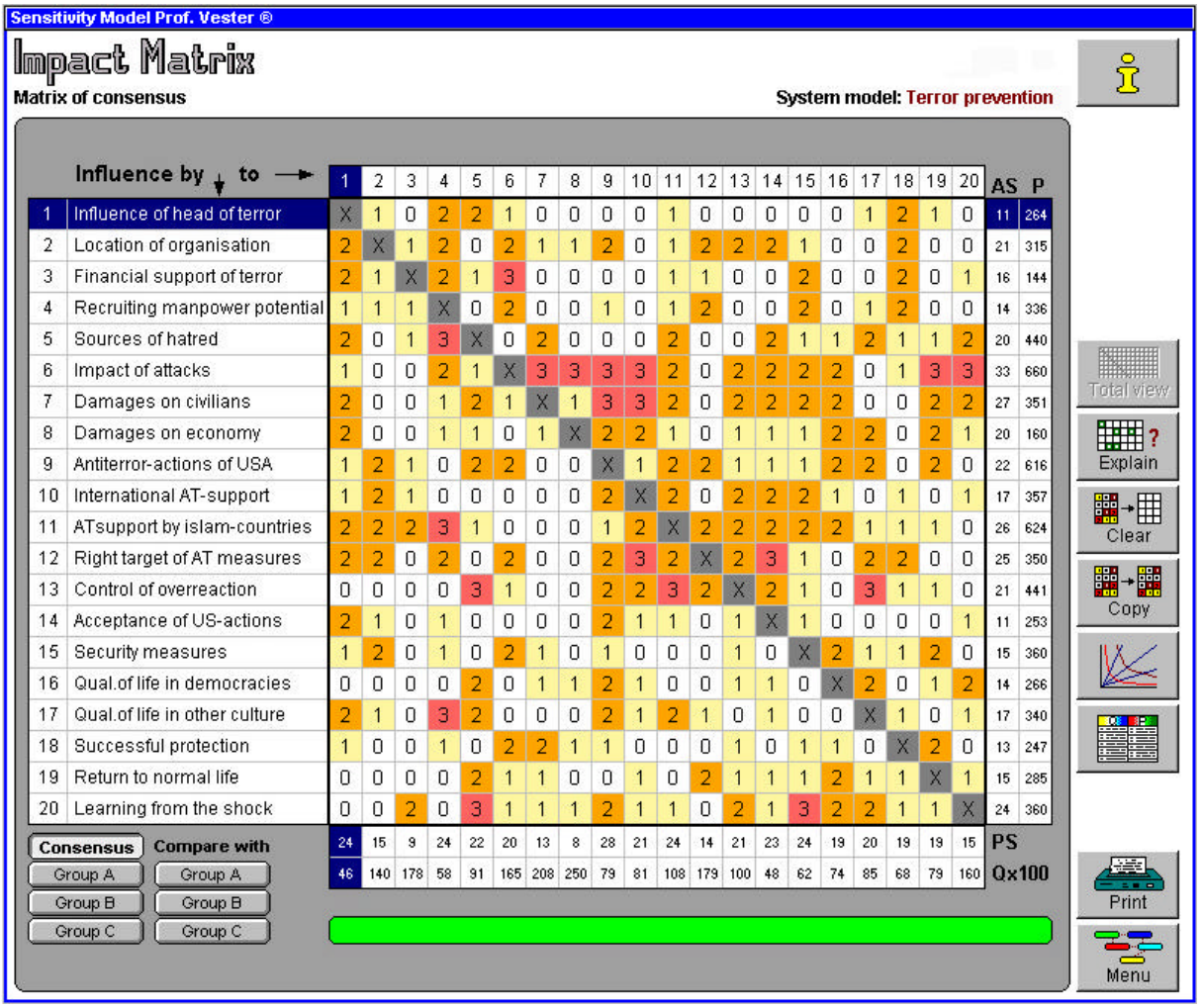


Notes to the system tool 'criteria matrix'

- All 7 'spheres of life' are duely considered, with emphasis on the levels of 'wellbeing' and 'Rules and laws'.
- In the physical category it is 'information' which, corresponding to this type of system is twice as much represented than 'matter' and 'energy'.
- In the dynamical categrory variables representing 'flow' equal the number of those representing 'structures'.
- Interesting differences are found in the category of 'systems relations': Twice as much variables are opening the system by output effects than by input.
- Also most variables are only to be influenced internally leaving only one third of the system accessible to external interferences. This characterizes the system as rather autarkical or self-sufficient and thus not easily to change from outside.

System model: Terror prevention

Cross impact matrix

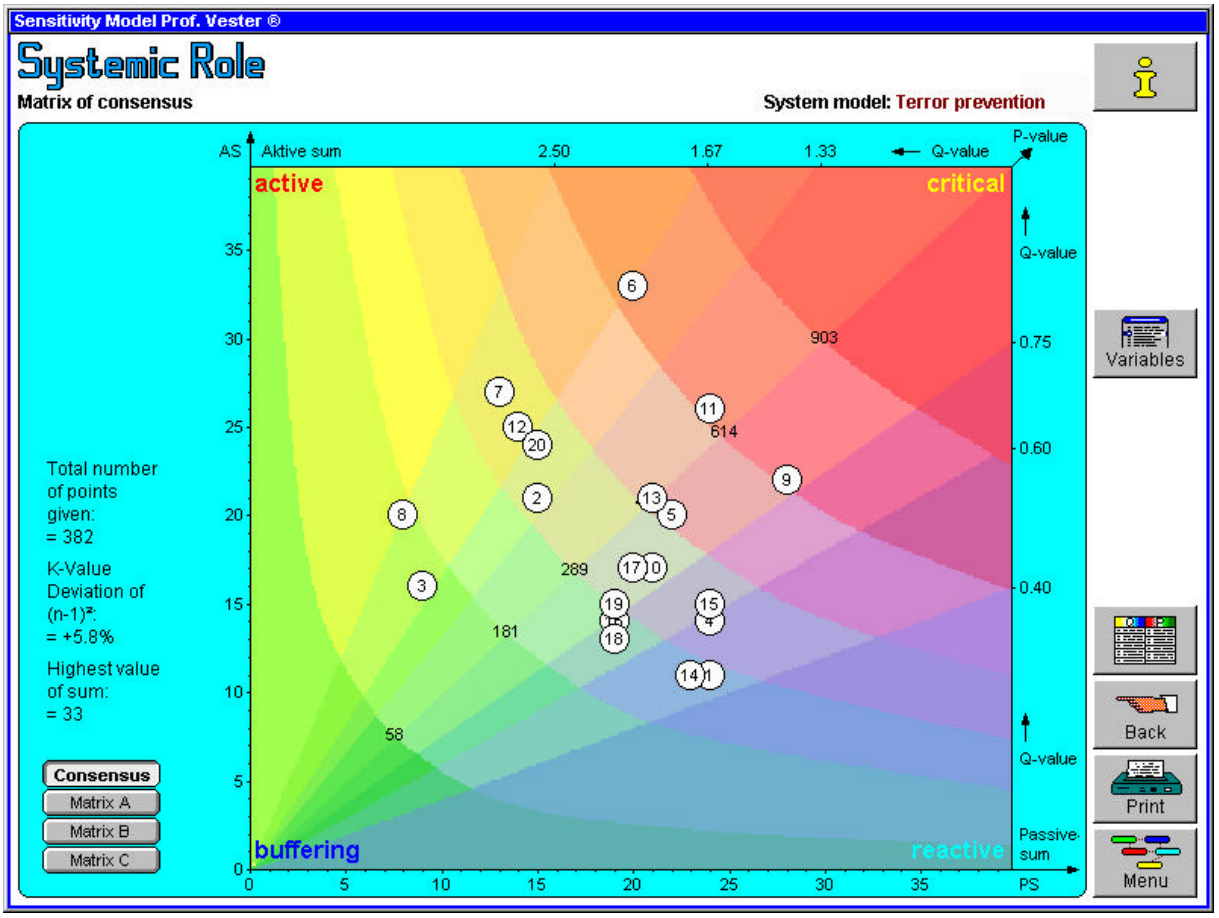


	Influence by ↓ to →	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	AS	P
1	Influence of head of terror	X	1	0	2	2	1	0	0	0	0	1	0	0	0	0	0	1	2	1	0	11	264
2	Location of organisation	2	X	1	2	0	2	1	1	2	0	1	2	2	2	1	0	0	2	0	0	21	315
3	Financial support of terror	2	1	X	2	1	3	0	0	0	0	1	1	0	0	2	0	0	2	0	1	16	144
4	Recruiting manpower potential	1	1	1	X	0	2	0	0	1	0	1	2	0	0	2	0	1	2	0	0	14	336
5	Sources of hatred	2	0	1	3	X	0	2	0	0	0	2	0	0	2	1	1	2	1	1	2	20	440
6	Impact of attacks	1	0	0	2	1	X	3	3	3	3	2	0	2	2	2	2	0	1	3	3	33	660
7	Damages on civilians	2	0	0	1	2	1	X	1	3	3	2	0	2	2	2	2	0	0	2	2	27	351
8	Damages on economy	2	0	0	1	1	0	1	X	2	2	1	0	1	1	1	2	2	0	2	1	20	160
9	Antiterror-actions of USA	1	2	1	0	2	2	0	0	X	1	2	2	1	1	1	2	2	0	2	0	22	616
10	International AT-support	1	2	1	0	0	0	0	0	2	X	2	0	2	2	2	1	0	1	0	1	17	357
11	ATsupport by islam-countries	2	2	2	3	1	0	0	0	1	2	X	2	2	2	2	2	1	1	1	0	26	624
12	Right target of AT measures	2	2	0	2	0	2	0	0	2	3	2	X	2	3	1	0	2	2	0	0	25	350
13	Control of overreaction	0	0	0	0	3	1	0	0	2	2	3	2	X	2	1	0	3	1	1	0	21	441
14	Acceptance of US-actions	2	1	0	1	0	0	0	0	2	1	1	0	1	X	1	0	0	0	0	1	11	253
15	Security measures	1	2	0	1	0	2	1	0	1	0	0	0	1	0	X	2	1	1	2	0	15	360
16	Qual.of life in democracies	0	0	0	0	2	0	1	1	2	1	0	0	1	1	0	X	2	0	1	2	14	266
17	Qual.of life in other culture	2	1	0	3	2	0	0	0	2	1	2	1	0	1	0	0	X	1	0	1	17	340
18	Successful protection	1	0	0	1	0	2	2	1	1	0	0	0	1	0	1	1	0	X	2	0	13	247
19	Return to normal life	0	0	0	0	2	1	1	0	0	1	0	2	1	1	1	2	1	1	X	1	15	285
20	Learning from the shock	0	0	2	0	3	1	1	1	2	1	1	0	2	1	3	2	2	1	1	X	24	360
		24	15	9	24	22	20	13	8	28	21	24	14	21	23	24	19	20	19	19	15	PS	
		46	140	178	58	91	165	208	250	79	81	108	179	100	48	62	74	85	68	79	160	Qx100	

Notes to the cross impact matrix

By filling out the system tool 'cross impact matrix' one moves from the level of components to the level of their mutual effects. The values 0, 1, 2 or 3 reflect the strength of an effect (by variing variable A) exerting a variation of variable B. This procedure follows some strict rules (guided by the software of the tool), e.g. that only direct influences are marked, that the value is independent of showing a negative or positive result. The procedure should be carried out by three separate groups and lead - via dicussion - to a consens matrix (if necessary by redefinition of some variables).

System Tool 'systemic role'



Notes about the tool 'Systemic Role'

The tool 'systemic role' attributes to every variable its specific position within the system between the four corners 'active','reactive', 'buffering' and 'critical' automatically calculated from the values of the cross-impact matrix. The field is divided into 50 sectors standing for 50 different cybeernetic characteristics. These are independent of the system under investigation and give general strategic hints to the role of every variable. A result that cannot be received by studying the variables themselves but is generated by the system as a whole.

The following standard texts of the 50 cybernetic characteristics are based on a 20 years experience while practicing the 'Sensitivity Model Prof. Vester®' in numerous projects of regional planning, insurance, security and risk management, technology assessment and environmental planning as described in the new Report to the Club of Rome by Frederic Vester: "The Art of Networked Thinking (Die Kunst vernetzt zu denken).

Role of Variables (consense matrix) System model 'Terror prevention'

Cybernetic Role of the 20 variables
(according to position in the tool 'Systemic Role'**:**

1 Influence of head of terror
Weakly buffering reactive component reflecting changes of the system but of little use as an indicator because it partially compensates these changes itself.

2 Location of organisation
Slightly active component suitable for small corrections and slight constellation changes without creating major repercussions.

3 Financial support of terror
Here you find only weak buffering switch levers, however, they may be aimed at other variables to get the desired effect indirectly.

4 Recruiting manpower potential
Rather mobile reactive component where interventions can easily be undertaken leading obviously to the desired result. However, the latter may soon be neutralized by repercussions from the system.

5 Sources of hatred
Interventions in components of this section often cause pendulum movements which may compensate rather soon corrections in the system. A control of this self-dynamics (which may stop a wanted development) will be better carried out from outside the system.

6 Impact of attacks
Effect and danger are both given when intervening via this variable so there is no guarantee the desired effect is reached. Therefore estimation of sideeffects is recommendable.

7 Damages on civilians
Active variable whose modification may get things going. However, to obtain a lasting influence it should be protected against the immanent compensation of the system or strengthened by concerted action with components acting in the same direction.

8 Damages on economy
Can be used as switch lever which is able to stabilize the system anew (plastic stability) in case the crucial point is found to change it.

9 Antiterror-actions of USA
Changing this critical component may cause trouble because of its equally strong activity and reaction. If not intended to give a strong initial impact it has to be bount in feedbackcycles when modified.

10 International AT-support
Neutral section between active, reactive, buffering and critical. There are little means to steer the system via the components of this area which are on the other hand well fitted for selfregulation if intergrated in feed-back cycles.

11 AT-support by islamic countries
Changing this critical component may cause trouble because of its equally strong activity and reaction. If not intended to give a strong initial impact it has to be bount in feedback cycles when modified.

12 Right target of AT measures
Active variable whose modification may get things going. However, to obtain a lasting influence it should be protected against the immanent compensation of the system or strengthened by concerted action with components acting in the same direction.

13 Control of overreaction
Interventions in components of this section often cause pendulum movements which may compensate rather soon corrections in the system. A control of this self-dynamics (which may stop a wanted development) will be better carried out from outside the system.

14 Acceptance of US-actions
Weakly buffering reactive component reflecting changes of the system but of little use as an indicator because it partially compensates these changes itself.

15 Security measures
Interventions to components of this slightly reative neutral section very often feint desired effects which, however, will be compensated quickly by self-regulation.

16 Quality of life in democracies
Slightly reactive and weakly buffering component which is contributing to the self-regulation of the system without being an indicator.

17 Quality of life in other culture
Neutral section between active, reactive, buffering and critical. There are little means to steer the system via the components of this area which are on the other hand well fitted for selfregulation if intergrated in feedback cycles.

18 Successful protection
Slightly reactive and weakly buffering component which is contributing to the self-regulation of the system without being an indicator.

19 Return to normal life
Component where interventions lead to slight movements which only pretend movability without changing much the constellation of the system. Integrated into feedback cycles, it can absorb disturbances. It is also suitable for soft corrections.

20 Learning from the shock
Slightly active component suitable for small corrections and slight constellation changes without creating major repercussions.

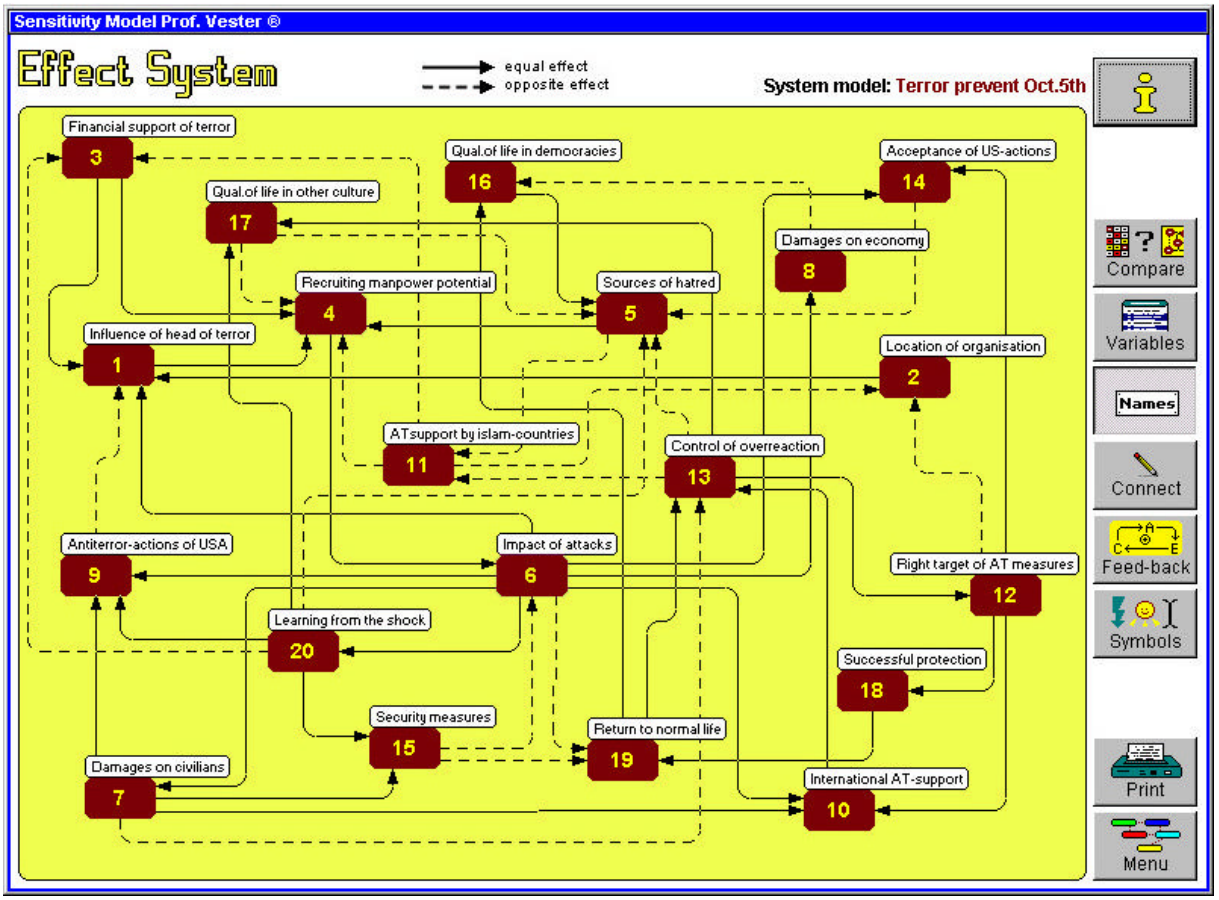
Notes to the above 'cybernetic role' of the variables

The above characteristics are an intrinsic part of the sensitivity model and independent of the system in question. They offer strategic hints by showing which variables can be used as levers or rather not, which ones are shaking the whole system by touching at them or work more indirectly by compensating the effect of others. All this cannot be found by studying the variables themselves, because it is the result of their position within the rest of the system, created by their mutual influence and interdependence.

As to the position of the terror-system as a whole, the tableau of the 'systemic role' shows that all 20 variables (due to their interdependent effects) cover a more or less neutral region in the field. That is a lack of expressive critical, active, reactive and buffering components, typical for only slowly moving or hardly evolving systems where one push is compensated by another one. No really steering wheel to change the situation, nor some dominating components which, by touching at them, would develop a chain reaction towards a dissolution of the system. In other words the terror system has a tough, viscous or even glutinous structure where prevention (i.e.dissolution) seems to afford a simultaneous treatment and tackling at several corners to get it under control. The art of doing this right depends of the understanding of the network and the side effects of any measure.

Preliminary 'Effect System' of the System model 'Terror prevention'

Tableau Effect System



Legend:

A ¾ ® B = equal effect	means:	if A goes up, B goes up too if A goes down, B goes down too
A -----> B = opposite effect	means:	if A goes up, B goes down if A goes down, B goes up

Notes to the tool 'Effect System'

The tool 'effect system' visualizes the feedback cycles of the system which is important to understand the cybernetic response following any interference. A response that may be ignored by the usual linear cause-effect thinking. The solid arrows between two variables represent parallel effects (both go up or down), the dotted arrows represent antiparallel effects (if variable A goes up, variable B goes down and vice versa). Some results of the feedback-cycle-analysis are shown in the next sheet.

Systemmodel Terror prevention

Number of feedback cycles the variables are involved:

	Variable	negative	positive	total
1	Influence of head of terror	42	37	79
2	Location of organisation	20	20	40
3	Financial support of terror	38	32	70
4	Recruiting manpower potential	96	87	183
5	Sources of hatred	70	70	140
6	Impact of attacks	98	87	185
7	Damages on civilians	37	43	80
8	Damages on economy	5	0	5
9	Antiterror-actions of USA	3	0	3
10	International AT-support	34	19	53
11	ATsupport by islam-countries	72	64	136
12	Right target of AT measures	17	36	53
13	Control of overreaction	55	88	143
14	Acceptance of US-actions	15	20	35
15	Security measures	20	34	54
16	Qual.of life in democracies	25	10	35
17	Qual.of life in other cultures	18	24	42
18	Successful protection	5	11	16
19	Return to normal life	32	62	94
20	Learning from the shock	24	17	41

Notes to the feedback cycles of the 'Effect System'

A first feedback analysis shows a striking behaviour of the system after removal of the links of the following variables (results are only preliminary, has to be reworked):

1 Head of Organization: Paralyzing the head would not change much. The relation of positive and negative feedback cycles remains the same. Just less cycles on each side.

2 Secure location of organization: Same is true with no. 2

3 Financial support: no change either .

4 Recruiting of terror teams: Big difference if excluded. The almost complete break down of cycles shows that terror system would collapse (which was not the case by removing the head (no. 1)).

5 Source of hatred: Without this strong reduction of the terror systems survival. About the same picture as before removal of no. 11, which is surprising.

6 Impact of attacks: Of course, breaks down together with variable no. 4.

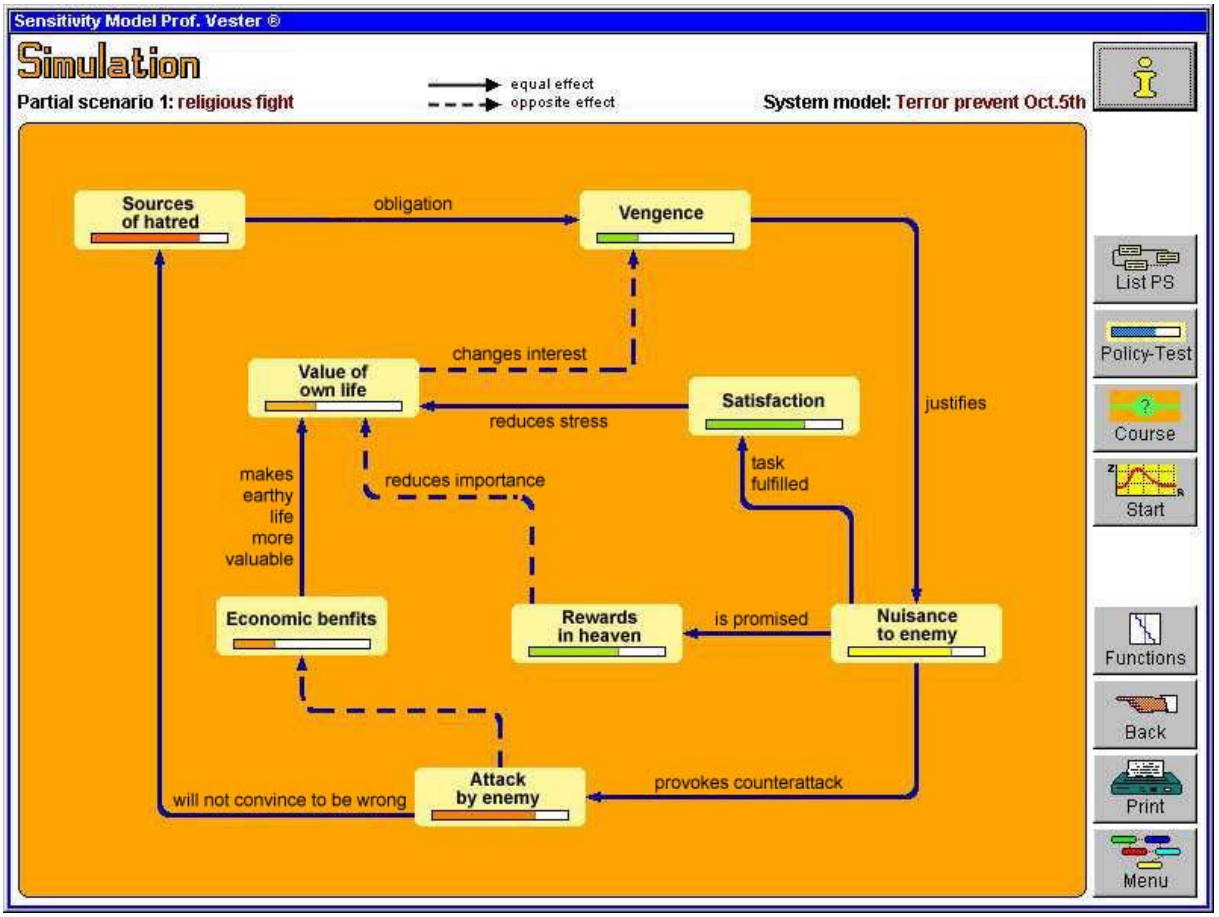
9 Antiterror actions of the US: Again surprise, because almost no change in the systems dynamics.

11 Antiterror-support of islamic countries: Without this strong reduction of the terror systems survival.

13 Control of overreaction:
most striking is, that without this control, the terror-system seems to stabilize without any hope of change (the terror-cycle 1-4-6-1 is the only remaining of the 'positive' cycles, obviously protected by the remaining 43 regulating feedback-cycles).

Removing other variables shows no special effects on the development of the system.

Partial Scenario 'Religious fight'



Notes on Partial scenario 1

Our own reaction and judgement upon a certain behaviour of people of a foreign culture follows criteria that are only valid for us. The result will be a wrong interpretation. A behaviour that promisses success within our own society might not work in an other society and vice versa. Thus we cannot count that a strategy that would work in our western civilization would work within a group of religious fanatics in a different civilization.

Partial scenario 1 tries to link the interdependencies of the parameters of a religious fight following their own evaluation to find out the mechanism - probably strange to us - that gives a clue how to solve the problem. Certainly not by the kind of rewards/menaces/arguments we would convince our own fellow rebels/killers/ mafia bosses. (The simulation of the scenario needs the specific tool of the Sensitivity Model).

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Some preliminary conclusions that could be drawn from the sensitivity model 'Terror Prevention' (date Sept. 26th 2001 - before intervention in Afghanistan):

1. Whether the capturing of the 'head of terror' (Bin Laden or anyone else) succeeds or not - this has no effect upon the intrinsic dynamics of the terror system and it's 'sustainability'. Nothing will change. Therefore, any energy, effort or costs in this direction can be saved. Conclusion: stop the search for Bin Laden.

2. The more one concentrates on this target (and the media talk about it) all the more one makes a hero or martyr out of this person (positive feedback cycle) via the recruiting of terror teams. Conclusion: Stop to increase the importance of individual persons as being the clue for terror acts.

3. The cybernetic pattern shows that the 'sustainability' of the terror system vanishes with the sources of hatred. It would be wise and clever to choose out of these sources some which can be abolished without loosing face, or which may even rise our image in the world. Conclusion: finding a consensus with islamic states (especially in the Palestinian /Israelian key question) about what could be changed to help both sides.

4. Overreaction to terrorist attacks touches the highest sensitivity of the system model concerning long lasting effects. Without control of overreaction not a single competing positive feedback cycle remains that would be able to counteract the labile cycle between terror attacks and recruiting teams. Only selfregulating feedback cycles remain and stabilize the terror cycle via constant recruiting of new suicide volonteers. Conclusion: No unproportional war-like reaction. Care for restrained measures the possible side effects of which are well analysed.

5. The 'systemic role' of antiterror actions of the US and the behaviour of the system model upon those actions show that they seem to be - surprizingly - no lever to tackle the problem. They may not change the systems dynamics at all. This might be due to the special character of religious fight (the reason why we have started to simulate a partial scenario on this point). Conclusion: energy and money and lives can be saved - except if actions are necessary for pure protection measures.

6. Recruiting of terror teams being the key variable. Without them the whole terror system would collapse. However, just this variable is interlinked in many ways with the rest of the system. Any direct interference would therefore compensate itself. Thus it can best be minimized indirectly. Conclusion: Choosing ways 'to take the wind out of the sails' of the fanatics, using their own arguments to make recruiting uninteresting.

7. Choice of the right target is as important as the control of overreation (see above). Direct links in the 'effect system' of the sensitivity model show that wrong targets will create a chain of undesirable reactions like loss of support by other nations, especially the islamic ones, rise the facility for recruiting new terror teams and other contrary effects. On the other hand it will occupy intelligence that would better concentrate on a more effective strategie. Conclusion: No bombs on civil settlements or other wrong targets.

8.In relation to the victims and damages by hurricans, inondations, hunger and local wars - not to speak of the yearly toll of car accidents (worldwide 750.000 killed and millions crippled) the damages on civilians of terror attacks including those of the 11th September are just a fraction of these permanent worldwide desasters - with the same effects in the individual case. The big difference that horrifies us lies in the inhumane and criminal purpose of the fanatics. Thus, the level of traumata, panics and degree of desired security is mainly based on a special psychological reaction, which - in relation to other permanent dangers - does not correspond to the real size of the thread. Conclusion: Politics should bear this relation in mind and instead of increasing fear take adequate and thus most efficient decisions.

9. Degradation of our democratic freedoms by surveillance and suppression as weapon against terror actions would be fully in the sense of the terrorists and fundamentalists. It would even escalate automatically via positive feedback cycles. Conclusion: No overreaction in this field either. Careful watch for free press, free discussion and the maintenance of differing opinions in the media. To save our democratic rights would remain the strongest bulwark against what the enemies of democracy dream of.

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References in English
about the Sensitivity Model and the Biocybernetic Approach:

Apart of an extensic literature on our sensitivity approach in German (and 12 other languages)
(see: http://www.frederic-vester.de/litzusme.htm)
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See also the english written parts on our Website: http://www.frederic-vester.de/sminfo_engl.htm

The new Report to the Club of Rome by Frederic Vester 'Die Kunst vernetzt zu denken - Ideen und Werkzeuge zu einem neuen Umgang mit Komplexität' dtv München 2002 (The Art of Networked Thinking - Ideas and Tools for a better Dealing with Complexity) may soon appear in an english edition.

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Munich, June 2003

