

Punishment And Purpose ~

Appendix 1~ 4

Appendix 1. Vignettes

The boldface vignettes in Table A1.1 are included in this appendix

Table A1.1

Table A1.1 Selection (boldface) of four of the sixteen vignettes.

Story	Basic vignette			
	A	B	C	D
1	A ₁	B ₁	C ₁	D ₁
2	A ₂	B₂	C ₂	D ₂
3	A ₃	B ₃	C₃	D ₃
4	A ₄	B ₄	C ₄	D₄

Basic vignette:
A. balanced
B. harsh treatment
C. rehabilitation
D. reparation

Story:
1. cash dispenser
2. taxi driver
3. cafeteria
4. clothes shop

Table A1.1 Selection (boldface) of four of the sixteen vignettes.

A1. Robbery at a cash dispenser: balanced

Late in the evening, a man is taking money from a cash dispenser in the hall of a bank when he is suddenly grabbed and punched in the face. He sees before him a man with a black nylon stocking on his head and a gun in his hand. The offender tells the victim to take NLG 1,000 from the cash dispenser for him, otherwise he will shoot. The victim panics, and starts to shout and hit out wildly. This causes the offender, Johannes Cornelis Vrugink, such consternation that he takes from the machine the NLG 150 that the victim had already requested and runs away. In all the commotion he forgets to remove the nylon stocking from his head.

One street away, two police officers on their beat stop Vrugink, who is still wearing the stocking on his head. When Vrugink tries to run away, the officers grab hold of him and then search him. In his pocket the officers find a toy gun, which has been painted black, and NLG 150. Vrugink is taken back to the station and questioned. At first Vrugink denies any wrongdoing. Soon after the arrest,

however, the victim arrives to report the offence. When Vrugink is confronted with the information provided by the victim, he finally admits to the offence. The toy gun, the nylon stocking and the NLG 150 are seized. Vrugink is kept in custody for another three days and then released.

The victim is a 40-year-old man. He is married with two children. Immediately after the offence he went to the hospital's casualty ward. His nose was found to be broken and he received treatment. His glasses, worth NLG 600, were destroyed by the punch. The victim says that being threatened by the (toy) gun has traumatised him. He was on sick leave for two months after the offence. Now he is still fearful, particularly out of doors. He has trouble sleeping and finds it very difficult to concentrate at work. The victim is not party to the action, but is present at the trial.

Nineteen-year-old Johannes Cornelis Vrugink is unmarried and at the time of the trial has been living with his girlfriend, also 19 years old, for several months. Vrugink previously lived from the age of 16 with his uncle, after running away from home because of continuing problems with his stepfather. After primary school, Vrugink attended but did not complete the LTS (junior technical school). He has had a number of jobs through an employment agency but kept leaving them because he found the work too dull, had difficulty getting up on time in the morning, and usually argued with his employers. Vrugink has trouble dealing with conflict situations. He says that out of boredom he 'smokes a lot of dope' and gambles regularly. These activities cost a great deal of money. There are no further indications of addiction to hard drugs. Vrugink committed the offence because of a chronic lack of funds and in order to have money to impress his friends. Vrugink was unemployed at the time of the offence. He receives income support and is following a professional driving course. He is in the process of setting up his own transport business, with the help of his employment agency.

Vrugink is present at the trial. When allowed a final word, he says that he wants to dedicate himself fully to making a success of his business and keeping on the straight and narrow so that he can lead a normal life with his girlfriend. He tells the victim that he deeply regrets his acts and wants to change his lifestyle.

The judicial documentation shows that when Vrugink was 18 years old he received a magistrate's fine of NLG 200 for assault. At 17 years old, Vrugink spent two months in a youth custody centre for robbery. He has also been

involved with the law in connection with vandalism and shoplifting. No sentences were passed in these cases.

B2. Robbery of a taxi driver: harsh treatment

Late in the evening, a taxi is parking in an empty taxi rank when suddenly a man wearing a balaclava on his head jumps into the car. The offender, Andreas Doncker, shows a gun and says that he will use it unless the driver hands over his wallet with the day's takings. When the victim fails to react immediately, Doncker punches him in the face and says that it would be wise to do as he is told. The by now terrified driver hands over his wallet, containing over NLG 1,000. Doncker tells the driver to stay in his taxi for the next half-hour and not to drive anywhere. Doncker then jumps out of the taxi and runs away. As soon as Doncker is out of sight, the driver reports the offence to the police on his radio's emergency channel. On the basis of the victim's description of Doncker's clothes, two officers apprehend Doncker in the street half an hour later. When Doncker tries to flee, the officers wrestle him to the ground. They search his clothes and find a loaded automatic gun, a wallet with over NLG 1,000 and a balaclava. Doncker is taken to the police station for questioning. Under questioning he admits to the offence. He says that he once bought the gun in Belgium for self-defence. The money, the balaclava and the automatic gun are seized. Doncker is held for another six days before being allowed home. The victim is a 42-year-old taxi driver. He is married with one child. The punch gave him a black eye. He was too scared to drive his taxi for three months after the offence. Now he is still fearful, especially out of doors, and he has trouble sleeping. The victim is not party to the action and is not present at the trial.

Twenty-seven-year-old Andreas Doncker is unmarried and has lived on his own since he was 17 years old. After primary education Doncker attended the MAVO (school for lower general secondary education), but left without completing his schooling there. He then attempted a number of months at the LTS (junior technical school), but gave up on that too. He has had short spells of employment with various cleaning firms, but these never lasted long. Doncker is long-term unemployed and receives income support, most of which is spent on going out and smoking marihuana.

When he goes out he 'easily' drinks 25 glasses of beer and spends the whole of the next day in bed. There is no question of hard drugs use. Doncker says that he committed the offence because of lack of money. His income support was not

sufficient to maintain his lifestyle. When allowed a final word in the trial, he says that he is sorry and that he does not know what else to say.

Doncker's judicial documentation shows that as a minor he was involved with the law on a number of occasions for various theft cases. When he was 16 he also spent four months in a youth custody centre for robbery. When he was 22 the magistrate sentenced him by default to three months in jail for aggravated theft. He served this sentence. Since then he has been involved with the law in connection with other theft and assault cases. No sentences were passed in these cases.

C3. Robbery at a cafeteria: rehabilitation

Late in the evening, when the last customer has left, the owner of a cafeteria is just about to close his shop when a young man walks in. Before the owner can say that the cafeteria is closed, the young man gives him a hard shove. This causes the owner to fall to the ground. The offender, Marius Diepenveen, warns the victim not to get up. Diepenveen quickly opens the till, takes out NLG 250 and runs out of the cafeteria.

The driver of a taxi parked nearby sees Diepenveen run out of the cafeteria and goes inside to investigate. He finds the victim, who tells him what has happened. Together they drive to the police station to report the offence. The taxi driver believes that he has recognised Diepenveen because two days earlier he had picked him up in his taxi in a drunken state and driven him home.

A patrol car is sent to Diepenveen's flat, following the taxi driver's directions. After a while Diepenveen arrives. The officers stop him and ask what he has been doing that evening. When Diepenveen tries to run away, he is arrested and taken to the police station. Diepenveen is found to be drunk. He is questioned the following morning after sleeping off the alcohol in a cell. At first Diepenveen maintains that he has done nothing wrong. He only admits to the offence when the officers propose a confrontation with the victim. Diepenveen says that he used part of the NLG 250 to pay off a debt owed to an acquaintance from the pub. He does not know the name of this acquaintance. He spent the rest of the money that evening on drinking and gambling with his friends. He had already drunk 10 glasses of beer when he committed the offence. Diepenveen is charged and then released.

The victim is the 47-year-old owner of a cafeteria. He is unmarried, and lives with his girlfriend and her child. While reporting the offence at the police station he complained of shooting pains in his lower arm. Diepenveen's shove had caused him to fall badly. After giving his statement he was taken to hospital. His wrist was found to be broken and he was allowed home that evening with his wrist in plaster. The victim is not present at the trial and is not party to the action.

Nineteen-year-old Marius Diepenveen is unmarried and lives alone. He has a steady girlfriend, whom he sees on average three times a week. He is unemployed and receives income support. At the time of the offence he was going out nearly every evening. Most of his income support is spent on drinking and gambling. Diepenveen says that he committed the offence because an 'acquaintance' from his nightlife to whom he owed money was pressurising him and because he had no money for going out.

A probation report provides the following information. Diepenveen is an only child. When he was nine years old, his mother was killed in a road accident. Until he was 17 he lived with his father, a truck driver, who was hardly ever home. When his father was at home, the two would usually argue and Diepenveen would be beaten by his father. The situation became untenable when Diepenveen turned 17, and he went to live on his own. He has had no contact with his father since. The highest educational qualification that Diepenveen attained is primary education. He spent a couple of years at the LTS (junior technical school), but often played truant and did not complete his schooling there.

Diepenveen's incomplete schooling and unhappy family situation have caused his personal development to lag significantly behind that of his peers. He is a very impulsive spender and is quick to argue with anyone who disagrees with his point of view. He gambles more from boredom than from addiction. If he keeps drinking as much, however, he will risk alcohol addiction. Diepenveen does not use hard drugs.

The probation report finally indicates that Diepenveen's unstructured and uninhibited lifestyle and his association with the wrong kind of friends are important factors in causing his behaviour to deviate. Diepenveen seems sincere when he says that he has had enough and wants to change. At the time of the offence Diepenveen had just started as a trainee plasterer with his uncle who is a building contractor. He says that he has finally found something he enjoys doing

and that he is keen to complete his plastering training. When Diepenveen's training is completed, his uncle will give him a job.

When Diepenveen is allowed a final word at the trial, he says that he is full of remorse for his act and shocked that his victim's wrist was broken. He wants to work hard to earn his money honestly and to lead a normal life. When he has succeeded in that, he wants to move in with his girlfriend. Diepenveen has been involved with the law once before. When 18 years old, he was sentenced by the magistrate to a NLG 400 fine for a series of shoplifting offences.

D4. Robbery at a clothes shop: reparation

Late on a Friday evening, after late night shopping, the owner of a clothes shop is ready to leave his shop. After closing up, he has spent a couple of hours rearranging the shop window. When walking to the counter to pick up his keys and wallet, he hears someone behind him entering the shop. Before he can even turn around to say that the shop is closed, he is grabbed by the coat and thrown to the ground. The attacker, Frans Willem Paakes, kicks the shopkeeper in the chest as he lies on the ground and shouts some abuse at him. Paakes then takes the shopkeeper's wallet, removes NLG 200 and leaves the shop. When he has recovered from the shock, the victim goes to hospital because his chest is very painful. Police officers come to the victim's house in the morning to take his statement. He says that his ex-brother-in-law, Paakes, was the offender.

The officers go to Paakes' house, following the victim's directions. Paakes is found to be home and is taken to the station for questioning. Paakes admits to the offence and says he was planning to give himself up to the police that day. He tells the officers that the victim until recently had been in a relationship with his younger sister. Paakes never liked the victim. When the victim had thrown Paakes' sister out on the street after a screaming row and had also broken some of her belongings, Paakes had been furious.

Paakes had drunk a great deal on the evening of the offence. When passing by his ex-brother-in-law's shop he had entered on impulse and committed the offence. Paakes was allowed home after being charged. The victim is Paakes' 26-year-old ex-brother-in-law. When Paakes threw him to the ground, his jacket, worth NLG 500, was irreparably torn. The kick to his chest broke one of his ribs and he had to spend six weeks at home recuperating. The victim is not party to the action, but is present at the trial.

Frans Willem Paakes is 29 years old. He is married and has a two-year-old daughter. After completing the LTS (junior technical school), Paakes was employed by an electrical contracting company. He has risen through the ranks over the years and now has a management position in the company. This gives Paakes and his family a good standard of living.

On the night of the offence, Paakes had drunk a great deal with a couple of friends. He tends to do this on Friday evenings. On the way home he passed by his ex-brother-in-law's shop. At the trial Paakes says that he does not know what possessed him but in an impulsive fit of rage he attacked his victim. Paakes considers neither his drunkenness nor the fact that he has never liked his ex-brother-in-law to excuse his actions that night. When Paakes is allowed a final word, he says that he has always been very protective towards his younger sister but that this should never have happened. This is the first time that Paakes has been involved with the law.

Appendix 2. Coding of sentences

Coding scheme for sentences
(three judges' sentences in the balanced vignette).

Description	Quantification	X	Y	Z
unsuspended prison	0 no	12	0	9
	xx quantity in months			
	88 yes, unspecified			
suspended prison	0 no	6	2	3
	xx quantity in months			
	88 yes, unspecified			
community service	0 no	0	140	0
	xx quantity in hours			
	88 yes, unspecified			
fine	0 no	0	0	0
	xx quantity in Dutch Guilders			
	88 yes, unspecified			
damage compensation	0 no	88	600	88
	xx quantity in Dutch Guilders			
	88 yes, unspecified			
mode of damage compensation	1 Terwee act	2	2	1
	2 special condition			
	88 does not apply			
probation supervision	0 no	1	0	0
	1 yes			
skills or deficiencies training	0 no	0	0	0
	1 yes (special condition)			

Examples of three judges' sentences in the balanced vignette

judge X: 18 months imprisonment of which 6 months conditional with an operational period of two years and probation supervision and damage compensation as special conditions.

judge Y: 140 hours of unpaid work instead of 3 months imprisonment. 2 months conditional imprisonment with an

operational period of 2 years. Special condition NLG 600,- damage compensation.

judge Z: 12 months imprisonment of which 3 months conditional with an operational period of 2 years and the measure of damage compensation.

Coding scheme for sentences (three judges' sentences in the balanced vignette).

Appendix 3. Rank orderings of goals of punishment

Table A3.1 Rank orderings of three most important goals: the balanced vignette, scenario study 1998 (N=79)

first	second	third	frequency	%
deterrence	deterrent	incapacitation	3	3.8
deterrence	deterrent	rehabilitation	5	6.1
deterrence	deterrent	reparation	1	1.3
deterrence	incapacitation	rehabilitation	1	1.3
deterrence	rehabilitation	deterrent	1	1.3
deterrence	rehabilitation	incapacitation	1	1.3
deterrence	rehabilitation	reparation	1	1.3
deterrence	reparation	incapacitation	1	1.3
deterrence	reparation	rehabilitation	1	1.3
incapacitation	rehabilitation	deterrence	2	2.5
incapacitation	deterrence	deterrent	2	2.5
incapacitation	deterrence	rehabilitation	1	1.3
deterrent	incapacitation	rehabilitation	5	6.1
deterrent	incapacitation	reparation	1	1.3
deterrent	incapacitation	deterrence	5	6.1
deterrent	rehabilitation	reparation	4	5.0
deterrent	rehabilitation	deterrence	5	6.1
deterrent	reparation	rehabilitation	3	3.8
deterrent	deterrence	incapacitation	2	2.5
deterrent	deterrence	rehabilitation	6	7.5
deterrent	deterrence	reparation	3	3.8
rehabilitation	deterrent	incapacitation	2	2.5
rehabilitation	deterrent	reparation	1	1.3
rehabilitation	incapacitation	deterrent	2	2.5
rehabilitation	incapacitation	deterrence	1	1.3
rehabilitation	reparation	deterrent	1	1.3
rehabilitation	reparation	incapacitation	3	3.8
rehabilitation	reparation	deterrence	1	1.3
rehabilitation	deterrence	deterrent	3	3.8
rehabilitation	deterrence	reparation	2	2.5
reparation	deterrent	rehabilitation	3	3.8
reparation	deterrent	deterrence	1	1.3
reparation	rehabilitation	deterrent	1	1.3
reparation	rehabilitation	incapacitation	2	2.5
reparation	rehabilitation	deterrence	1	1.3
reparation	deterrence	incapacitation	1	1.3
reparation	deterrence	rehabilitation	2	2.5

Table A3.1 Rank orderings of three most important goals: the balanced vignette, scenario study 1998 (N=79)

Table A3.2 Rank orderings of three most important goals: the harsh treatment vignette, scenario study 1998 (N=77)

first	second	third	frequency	%
deterrence	desert	incapacitation	5	6.5
deterrence	desert	rehabilitation	2	2.6
deterrence	incapacitation	desert	5	6.5
deterrence	incapacitation	rehabilitation	1	1.3
deterrence	rehabilitation	desert	2	2.6
deterrence	rehabilitation	reparation	1	1.3
incapacitation	desert	reparation	1	1.3
incapacitation	desert	deterrence	6	7.8
incapacitation	rehabilitation	deterrence	1	1.3
incapacitation	reparation	rehabilitation	2	2.6
incapacitation	deterrence	desert	4	5.2
incapacitation	deterrence	rehabilitation	2	2.6
desert	incapacitation	rehabilitation	3	3.9
desert	incapacitation	reparation	1	1.3
desert	incapacitation	deterrence	9	11.7
desert	rehabilitation	incapacitation	1	1.3
desert	rehabilitation	reparation	2	2.6
desert	rehabilitation	deterrence	4	5.2
desert	reparation	incapacitation	1	1.3
desert	reparation	rehabilitation	1	1.3
desert	reparation	deterrence	2	2.6
desert	deterrence	incapacitation	9	11.7
desert	deterrence	rehabilitation	4	5.2
rehabilitation	desert	incapacitation	1	1.3
rehabilitation	deterrence	desert	2	2.6
reparation	desert	rehabilitation	1	1.3
reparation	desert	deterrence	1	1.3
reparation	incapacitation	desert	2	2.6
reparation	deterrence	incapacitation	1	1.3

Table A3.2 Rank orderings of three most important goals: the harsh treatment vignette, scenario study 1998 (N=77)

Table A3.3 Rank orderings of three most important goals: the rehabilitation vignette, scenario study 1998 (N=79)

first	second	third	frequency	%
deterrence	desert	rehabilitation	1	1.3
deterrence	incapacitation	rehabilitation	2	2.5
deterrence	rehabilitation	desert	2	2.5
deterrence	rehabilitation	incapacitation	1	1.3
deterrence	rehabilitation	reparation	3	3.8
incapacitation	deterrence	desert	1	1.3
desert	incapacitation	rehabilitation	1	1.3
desert	incapacitation	deterrence	1	1.3
desert	rehabilitation	incapacitation	2	2.5
desert	rehabilitation	reparation	2	2.5
desert	rehabilitation	deterrence	7	8.9
desert	reparation	rehabilitation	1	1.3
desert	deterrence	incapacitation	1	1.3
desert	deterrence	rehabilitation	3	3.8
rehabilitation	desert	incapacitation	2	2.5
rehabilitation	desert	reparation	5	6.3
rehabilitation	desert	deterrence	4	5.1
rehabilitation	incapacitation	reparation	1	1.3
rehabilitation	reparation	desert	3	3.8
rehabilitation	reparation	deterrence	7	8.9
rehabilitation	deterrence	desert	7	8.9
rehabilitation	deterrence	incapacitation	2	2.5
rehabilitation	deterrence	reparation	5	6.3
reparation	desert	rehabilitation	1	1.3
reparation	desert	deterrence	2	2.5
reparation	rehabilitation	desert	4	5.1
reparation	rehabilitation	incapacitation	1	1.3
reparation	rehabilitation	deterrence	3	3.8
reparation	deterrence	incapacitation	1	1.3
reparation	deterrence	rehabilitation	3	3.8

Table A3.3 Rank orderings of three most important goals: the rehabilitation vignette, scenario study 1998 (N=79)

Table A3.4 Rank orderings of three most important goals: the reparation vignette, scenario study 1998 (N=78)

first	second	third	frequency	%
deterrence	desert	rehabilitation	1	1.3
deterrence	desert	reparation	2	2.6
deterrence	rehabilitation	desert	2	2.6
deterrence	rehabilitation	reparation	2	2.6
deterrence	reparation	incapacitation	1	1.3
deterrence	reparation	rehabilitation	1	1.3
incapacitation	desert	reparation	1	1.3
incapacitation	rehabilitation	desert	1	1.3
incapacitation	reparation	deterrence	1	1.3
desert	incapacitation	deterrence	1	1.3
desert	rehabilitation	reparation	2	2.6
desert	rehabilitation	deterrence	1	1.3
desert	reparation	incapacitation	1	1.3
desert	reparation	rehabilitation	2	2.6
desert	reparation	deterrence	5	6.4
desert	deterrence	rehabilitation	2	2.6
desert	deterrence	reparation	6	7.7
rehabilitation	desert	incapacitation	1	1.3
rehabilitation	desert	deterrence	1	1.3
rehabilitation	reparation	desert	2	2.6
rehabilitation	reparation	deterrence	1	1.3
reparation	desert	rehabilitation	6	7.7
reparation	desert	deterrence	11	14.1
reparation	incapacitation	rehabilitation	1	1.3
reparation	incapacitation	deterrence	1	1.3
reparation	rehabilitation	desert	4	5.1
reparation	rehabilitation	incapacitation	1	1.3
reparation	rehabilitation	deterrence	1	1.3
reparation	deterrence	desert	12	15.4
reparation	deterrence	incapacitation	1	1.3
reparation	deterrence	rehabilitation	3	3.8

Table A3.4 Rank orderings of three most important goals: the reparation vignette, scenario study 1998 (N=78)

Appendix 4. Canonical correlation analysis in the scenario study

Canonical correlation analysis creates linear composites, called canonical variates, for each set of variables in such a way that the canonical variates representing each set are optimally correlated. The correlation between two canonical variates is called the canonical correlation coefficient (r_c). The squared canonical correlation represents the overlapping variance of a pair of canonical variates. After the first pair of canonical variates has been calculated, the analysis proceeds with the calculation of the next pair of variates which are uncorrelated with the first. This procedure is continued until no more variance is left (cf. principal components analysis). As such, the canonical variates partition the association between the two sets of variables additively (Stevens, 1996). Only significant canonical correlations are interpreted (significance testing of canonical correlation coefficients is achieved through a residual test procedure resulting in the test statistic Bartlett's V which is distributed as χ^2). This is an important feature of the technique since it enables different patterns of association between different subsets from both types of variables to be analysed. While the first pair of canonical variates represents the most important (i.e., strongest) patterns of association between goals and sentence components, subsequent pairs of variates, if significant, may show meaningful complementary patterns of association between the two sets.

Canonical correlation analysis does not require the original variables in the two sets to be normally distributed, although the analysis is enhanced if they are (Tabachnick & Fidell, 1996; Thompson, 1984). For this reason, several models for each vignette are presented in which the original variables have been treated (i.e., coded) differently. Correlations between the original variables in a set and the canonical variate for that set are employed for interpretation. These are called 'structure correlations' (Tacq, 1992). The structure correlations should be greater than 0.30 to be considered for meaningful interpretation (Tabachnick & Fidell, 1996).

The analysis is symmetrical which means that the technique itself does not assume nor indicate causal relations between the variables. On theoretical grounds, however, it is not uncommon to include notions of causality in the interpretation. For this type of interpretation 'redundancy' is examined.

Redundancy is defined as the variance that a canonical variate from one set extracts from the variables in the other set. Because the interest in our scenario study lies primarily in determining whether clear and consistent patterns of association exist between goals of punishment and sentencing decisions, conditional proposition 3 implies examining redundancy in both directions: 'if preferred goals of punishment are relevant for choosing a particular sentence or if a sentence is consistently rationalised by a preferred goal or combination of goals.' The general model of canonical correlation analysis for the two sets of variables in the scenario study is shown in Figure A4.1.

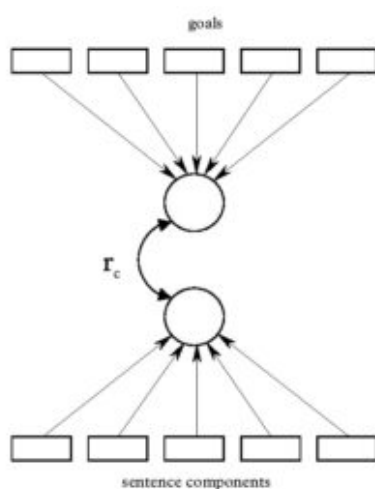
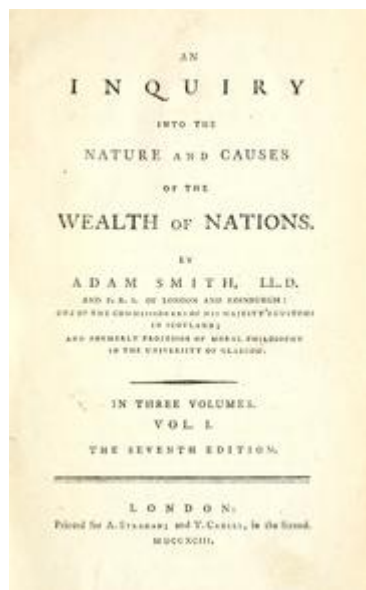


Figure A4.1 Schematic representation of canonical correlation model for goals of punishment (set 1) and sentencing decisions (set 2)

Figure A4.1 Schematic representation of canonical correlation model for goals of punishment (set 1) and sentencing decisions (set 2)

Alison Flood ~ The 20 Most

Influential Academic Books Of All Time: No Spoilers



The Guardian ~ *Open Culture*. Sometimes I'll meet someone who mentions having written a book, and who then adds, "... well, an *academic* book, anyway," as if that didn't really count. True, academic books don't tend to debut at the heights of the bestseller lists amid all the eating, praying, and loving, but sometimes lightning strikes; sometimes the subject of the author's research happens to align with what the public believes they need to know. Other times, academic books succeed at a slower burn, and it takes readers generations to come around to the insights contained in them — a less favorable royalty situation for the long-dead writer, but

at least they can take some satisfaction in the possibility.

The shortlist of these most important academic books of all time runs as follows (and you can read many of them free by following the links from our meta list of Free eBooks):

Amongst others:

Stephen Hawking ~ *A Brief History of Time*

Immanuel Kant ~ *Critique of Pure Reason*

Germaine Greer ~ *The Female Eunuch*

Niccolò Machiavelli ~ *The Prince*

Adam Smith ~ *The Wealth of Nations*

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Combating Climate Change Requires A Transition To New Economic Values: An Interview With Graciela Chichilnisky



Climate change represents the greatest threat facing humankind. Yet, not only is very little being done to combat the climate change threat, but there are still vocal climate change deniers around us, some of whom are even running for the presidency of the United States. Moreover, there seems to be confusion about the most effective ways to combat climate change. The latest effort by global leaders to address the problem of climate change, as reflected in the Paris Agreement of late 2015, falls short of implementing the necessary steps to save the planet.

But this begs the question. What are the necessary steps that need to be taken to prevent a catastrophic climate change scenario? In this exclusive interview for Rozenberg Quarterly, world renowned economist and climate change authority Graciela Chichilnisky discusses the nature of the problem of climate change, highlights what is at stake, and argues cogently what should be done to save the planet.

Professor Chichilnisky, it is widely known that climate change can be caused by both natural variations and human activity. Is the climate change being observed today due to natural variations or are its causes to be found in human activities and greenhouse gas emissions?

Scientists all over the world are in agreement that the climate variations we observe today are due to a global change in climate, and that increased greenhouse gases in the atmosphere from human activity, particularly the burning of fossil fuels since 1945, are responsible for climate change. This is not a gentle warming trend, it is the melting of the North and the South poles, and a

confirmed rising level of the oceans worldwide that will engulf large areas of the planet, and include 43 island nations states.

In the United States, virtually all leading Republican figures, including Donald Trump, who has already wrapped up the Republican nomination, argue that climate change is based in pseudo-science. What's going in here? Are Republicans so out of touch with reality, or are they simply interested in protecting vested interests in the fossil fuel economy?

The Republican party is conservative by nature and resists change, even the acknowledgment of the need for change. This is a natural human response. Denial is known to be the first psychological response to a traumatic event, and climate change is potentially catastrophic. Denial is a natural first response and can take the form of denouncing climate science as pseudo-science. However understandable the reaction may be, we cannot remain mired in the first response to a traumatic event, and need action. It is now possible to take action as there are technologies that can remove the carbon that is already in the atmosphere in an affordable way, and this is needed now to avert catastrophic climate change. But it requires moving from the stages of denial and anger to the stage of acceptance. Then we can take action and create global policy as needed.

However, there are some scientists and former astronauts who claim that NASA's studies of climate change, for example, are based in highly complex models which have proven highly inadequate in the last. Any comments on this?

Indeed, climate models are recent scientific developments and they are complex. This is true. Nobody can predict the weather exactly for example. But the scientific evidence for the overall climate change trend is now overwhelming accepted by most scientific bodies, including the IPCC which is the UN scientific body consisting of thousands of scientists from all over the world, and nobody debates that.

Can you briefly map the menace of climate change according to the most likely catastrophic scenario?

The melting of the North and the South Poles is already happening, and will raise the level of the oceans worldwide engulfing hundreds of millions of people who live in coastal zones and low areas, for example in Miami, Florida, in Shanghai, and in island states. According to the OECD this can cause trillions in economic losses. Hundreds of millions of people will migrate for survival. Mass migration will create political stress and social disorder or even wars, and major political

and economic chaos, the beginning of which is already observed even in the EU and the US. We can expect extraordinary losses of life and suffering in developing nations. Western democracy as we know it is at stake.

You have been arguing for the implementation of Carbon-Negative Technologies to halt the course of catastrophic climate change. Briefly, how do these technologies work, and how widely do they need to be utilized? For example, will a handful of plants in each country around the world be sufficient to clean the air from carbon dioxide?

Carbon Negative Technology™ has been invented and is now proven. It is starting to be used commercially for removing CO₂ from the atmosphere and selling it for economic uses, such as greenhouses, water desalination, building materials, beverages, bio-fertilizers, and plastics, as done by the award winning company Global Thermostat in Silicon Valley. (GT). Costs are now sufficiently low that removing CO₂ and selling it as just explained, is a commercially viable proposition and can immobilize enough CO₂ on earth to clean all the CO₂ that humans put in the atmosphere, which is about 30 gigaton/year. A handful of these carbon negative plants in each nation will not suffice. On average, we need to build 200 carbon negative Global Thermostat plants per nation in the world. Global Thermostat's carbon negative power plants can reduce the CO₂ in the atmosphere while producing needed energy, therefore reversing the role of power plants from the worst emitters of CO₂, to cleaners of the atmosphere. This will be a major transformation of the world economy

Is technology alone sufficient in bringing about the necessary changes in policymaking in order to combat climate change?

Technology alone does not suffice. We need policy changes implemented through the global body that is responsible for averting climate change, the UNFCCC. We had substantial successes but much more needs to be done. The UN global carbon market that I designed and wrote into the Kyoto Protocol and became international law in 2005, was a major step forward as it had mandatory emissions limits for the world's worst emitters. Trading in this UN carbon market reached \$175Bn/year in 2011 and provided sufficient funding through the Clean Development Mechanism (CDM) to developing nations to implement green technology such as photovoltaic power in China, and can do the same now for carbon negative technologies. The technology is here now and the funds are here to implement it if we persist with the appropriate UNFCCC policies. The 2015

Paris Agreement has appropriate goals but offers no implementation.

Is capitalism itself responsible for climate change?

China and Russia are some of the worst emitter nations in the world, and they are socialistic nations. At first sight therefore the response is no, capitalism is not responsible for climate change at the national level. However, the trading and the use of fossil fuels that is at the core of the climate change issue - more precisely, the international market itself - which is the same for capitalistic and socialistic nations, can be said to be a creature of international capitalism. This creature can be considered responsible for the overexploitation of petroleum and other natural resources, which are over-extracted in poor nations and overconsumed in rich nations. The expansion of international markets was fostered by the Bretton Woods institutions that were created in 1945 and were extremely successful in their task, globalizing the world economy. However, these institutions and their objectives that were fine then, have since then over-achieved, and are now at the core of the problem of overexploitation of global resources, including the atmosphere, bodies of water and biodiversity, on which human survival depends. We need to change this aspect of global capitalism. An institutional change is needed fast, and is definitely possible. It is at least as possible as was the creation of Bretton Woods themselves, and of the UN global carbon market This needs to be done right now.

Assuming you were in a position to advice the next president of the United States on policy issues around the environment and climate change, what specific recommendations would you make that could be quickly implemented in a fairly broken political system like the one that currently exists in the US?

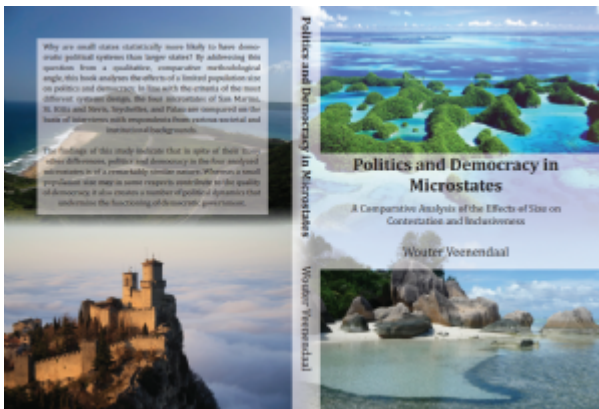
Implement the carbon market in the US, and facilitate carbon negative technologies to help achieve reduced emissions and no economic cost and clean the atmosphere. That in itself suffices to precipitate a number of other needed changes

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Wouter van Veenendaal ~ Politics And Democracy In Microstates. A Comparative Analysis Of The Effects Of Size On Contestation And Inclusiveness



What this Dissertation is About

According to several recent publications, small states or microstates are comparatively more likely to have democratic systems of government than larger states (Diamond and Tsalik 1999; Anckar 2002b; Srebrnik 2004). Based on the data of aggregate indices of democracy such as Freedom House, these large-N quantitative analyses have disclosed a statistically significant negative correlation between population size and democracy. Although a satisfactory explanation of this pattern has not yet been found, the argument that a limited population size fosters good governance, republicanism, and democracy was already formulated by the ancient Greek philosophers, and is therefore one of the most ancient debates in political science. The finding that microstates from around the globe are exceptionally likely to develop and maintain democratic systems of government therefore appears to validate centuries-old theories about the political consequences of size. In addition, not only has the average population size of countries continuously been decreasing since the late 19th century (Lake and O'Mahony 2004), but more and more states have initiated programs of

decentralization and devolution of powers and competences to smaller, sub-national units. This unmistakable trend towards smaller polities and administrations is buttressed by academic publications that emphasize the virtues and advantages of smallness (cf. Schumacher 1973; Katzenstein 1985; Weldon 2006).

Full text (PDF): <https://openaccess.leidenuniv.nl/bitstream/Veenendaal.pdf>

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