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ATTITUDES TO NUCLEAR DEFENCE

an investigation of processes
of change in elite and non-elite
belief systems

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PREFACE

The recent developments in negotiations to reduce nuclear weapons in Europe mark a watershed in attitudes towards nuclear deterrence and security. On the one side lie all the old beliefs and assumptions about nuclear defence and security that have been common parlance for the last forty years and more. On the other side lies a unique opportunity to develop a new relationship of increased mutual trust between East and West that could ultimately lead to substantial reductions in the world's nuclear arsenal.

The object of this thesis is to establish how much information already exists about attitudes towards nuclear deterrence and the processes of attitude change. From there, to extend these boundaries of knowledge in the belief that if we are able to understand more exactly what people think about nuclear deterrence, why they hold these attitudes and how attitudes change then we will be in a better position to ease the transitional stage between one set of attitudes and another. The first three chapters examine the extent of existing knowledge about attitudes towards nuclear defence and theoretical work on attitude change at the individual, psychological and social level. Chapter One analyses the opinion polls over the last forty years in order to place the present findings into some

sort of perspective and determine whether the present attitudes towards arms reduction are part of a growing trend or a minor aberration. Chapters Two and Three examine attitude change at the social level in terms of broad patterns of change, and in more detail at an individual level in order to understand the possible processes taking place. A wide variety of theories are reviewed and these are considered in terms of examples of actual attitude change that has taken place amongst individuals outside the confines of laboratory experimentation.

A series of interviews with a sample of US elites who have undergone varying degrees of attitude change towards nuclear defence provide the empirical basis for a model of attitude change that is developed in Chapter Four.

In the fifth chapter the content of pro- and anti-nuclear belief systems are defined in terms of sets of arguments that are currently used to express these two opposing views. These help to assess the use of structural models and mathematical equations in understanding these belief systems, in Chapter Six.

Some examples of attitude change amongst British non-elites are examined in Chapter Seven and the processes of change taking place here are compared with the American sample. From this comparison modifications are made to

the model of attitude change and distinctions are drawn between elites and non-elites.

Once again the opinion polls are used, in the second half of this chapter, but this time using specific questions on attitude change which are subject to detailed analysis using crosstabulations. Used in conjunction with the qualitative research in the previous chapters a deeper understanding of the development of attitudes and the processes of attitude change emerges.

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For you, Chris, with thanks

CHAPTER ONE

OPINION POLLS

1.1 INTRODUCTION

Recently, and with increasing frequency, we have witnessed the direct expression of public feeling in the form of protests, sit-ins, marches and many other actions both non-violent and violent against what are seen to be an increasing number of legislative injustices. As an expression of public opinion these protests provide tangible evidence of the awareness, involvement and strength of feeling that exists as regards many current and controversial issues. But as a means of quantifying this opinion in a systematic way public opinion polls are still the main tool in the hands of the policy makers. There is no doubt that the production of figures and percentages provide a certain authority and credibility which can give credence to arguments and policies across the whole political spectrum - but just how justified is this legitimacy? What do the polls really tell us about the nature of public opinion on the nuclear weapons issue? And what do these opinion polls mean in terms of public acquiescence to government policy? These are some of the questions that will be considered in this opening chapter.

1.2 WHAT IS AN OPINION POLL?

Polling procedure

Public opinion is largely an unknown amorphous entity that is sampled from time to time by agencies interested in eliciting the public's opinion on chosen issues. This sample is taken to be representative of the total population and from these results percentages of Yes, No and Don't Know's are calculated for the population as a whole.

Although public opinion polls are said to represent the opinions of the general public as a whole they do in fact constitute the opinions of a very small percentage of that public. The actual number may vary but is generally between 1,000 and 2000. This number balances the cost of carrying out the poll against the level of accuracy required to make the whole operation worthwhile. A well-chosen sample of 2,000 for example, would provide accuracy within 2% in 95 out of a 100 cases; this would mean that if a poll indicated 46% of those polled were against the siting of cruise missiles, one can be 95% sure that the actual percentage lies somewhere between 44% and 48%. In order to interview a representative cross-section of the population the sampling method has become fairly standardised among polling agencies. There are two accepted methods of sampling in this country - Random and Quota.

Random sampling

To be a true random sample the names of every single adult in the country would have to be put into a hat and the required number picked out at random. Of course this is out of the question, therefore the accepted random probability sample is usually based on electoral registers and entails, if the sample required is 1,000 for example, dividing the 40 million or so names on the registers by 1,000 and taking out every 4,000th name (starting of course with a randomly selected starting point). This gives a good approximation of a random sample although it is unlikely that all those selected will be either available or willing at the time of interview to participate. It must also be remembered that the electoral register is biased against non-English speaking residents, against illiterate people, against the sick and against those who do not have a fixed address.¹ It is therefore not a 100% accurate representation of people living in Britain nor even of those entitled to vote.

Quota sampling

This method of sampling is based on the broad demographic characteristics of the British population, i.e., how many of each age, sex, social class, working or non-working, etc. Each interviewer is given a "quota" of respondents to find in each category; so many women aged between 18 and 30 in a given occupation, so many men aged between 25 and 40 in a given social class and so on. When the quota of respondents is achieved in each required category, this will then be a demographically representative cross-section of the population. However, this method is not perfect either as the people selected for interview are at the discretion of the interviewer and it is possible that unconscious biases (e.g. appearance, colour) may preclude some members of the public from inclusion in the sample.

Although random probability samples are accepted by pollsters, market researchers and academics as the best means of sampling, quota sampling is the predominant mode used because it is both less expensive and simpler to administer.

We have dealt here with the validity of the sampling process as regards representation of the public. We must next ask 'Are the polls representative of public opinion?' This can by no means be assumed by accepting the validity of the former and depends very much on one's definition of public opinion. We shall consider briefly the debate; for more detailed reading see H. Childs², D. Katz³, S. Oskamp⁴, J. Bryce⁵, W. Albig⁶, H. Spier⁷, J. Hodder-Williams⁸.

1.3 VALIDITY OF POLLING METHOD

Whether public opinion polls are considered to be truly representative of public opinion or not depends largely on whether one is willing to consider everyone's

opinion as equally valid. Consider: If an individual who pays no attention to world affairs or East-West relations is accosted in the street and asked if they approve or disapprove of the role the USA/USSR are playing in world affairs, how valid would this unconsidered, off-the-cuff opinion be compared to someone who follows world and current affairs and is actually informed about each nation's role in world affairs? The former respondent may merely be answering to please the interviewer or reluctant to show his ignorance or lack of interest, whereas the latter may strongly disapprove of one country's role and could put up a good argument to support his attitude. It is perhaps an inherent paradox of the scientific method that we change a phenomenon by measuring it - an interviewer acts as a catalyst. "The confrontation of an interviewer with a respondent forces the crystallisation and expression of opinions where they were no more than chaotic swirls of thought."⁹

It is this vast difference in degrees of opinion that raises fundamental doubts in some quarters as to the ultimate comparability of opinions held by individuals of "varying intelligence, interest and influence" (sic).¹⁰ To sample the electorate in this random fashion is to give equal weight to all opinions even if someone has no opinion on the issue. To those commentators who consider this as unrepresentative, all opinions are not of equal weight:¹¹ "Public opinion polls by ascribing positive views of equal weight to many who are in fact uncommitted, distort the true balance of opinion and may therefore affect the acceptable consensus which conflicting pressure groups attempt to ensure."¹²

But what do these critics of the polls advocate - the ultimate disenfranchisement of probably what would be 70% of the electorate at the next general election on the grounds that they were not members of a political party?! The fact remains, however, that opinions, as stated in polls, cannot be

tested by actions in the way that political polls can be. These may ask voting intentions before an election and then be verified by actual voting behaviour. Opinion polls require no special commitment - if at all it is likely to be trivialised by many "to the level of performance for a brand of pears or sun-tan lotion".¹³ Can you imagine a pollster bothering to pursue a questionnaire on the possible merits/effectiveness of a sun-tan lotion if the person being questioned had not heard of the product and never used sun-tan lotions anyway? The question of what people think about public issues¹⁴ L. Bogart suggests, is really secondary to the question of whether they think about them at all.

To only direct opinion polls towards the elite, the informed - even ignoring the implication of such dark overtones - would not fulfil the desire to elicit a "true" informed opinion because as one pollster points out:

any researcher who has conducted surveys amongst elites knows that, outside their speciality, elites are normally neither better informed, nor more knowledgeable than randomly selected members of the public.¹⁵

Surely the object of public opinion polls, he continues, is:

to represent the view of the total public (or large and carefully defined sections of that public) on issues that affect them. The individual respondent does not need to have a detailed knowledge of the subject or to have considered it carefully. In the search for consensus view it is important that polls are deliberately not restricted to quasi-experts.

Obviously though it would be better if the respondents were informed on the subject.

For the purpose of this chapter public opinion will be defined as "the opinions of all members of a defined universe, such as the electorate, as measured by means of standard questions presented to an appropriate sample"¹⁶ - be they informed or not. It may comfort those who object to this sort of consensus that

when it actually comes down to policy-making it is in fact the elite, the informed public, to whom policy makers attend - and this I feel must include to some extent pressure groups - whom many of these critics consider to represent the true consensus of public opinion. The relevance of this will be discussed at a later stage.

Once we come to accept the authenticity of the polls as regards the public and public opinion, two further details of procedure remain. First, how can we be sure that those polled have expressed their true opinion and secondly, we must come to grips with the final analysis and reporting of the polls because on both counts we encounter valid criticism.

Validity of findings

Besides the possibility of interviewer bias acting as a filter on those who are approached for interview (this of course will only occur in the quota sampling method) further procedural difficulties arise when we consider the questionnaire itself. Although we may derive some comfort from a leading pollster's reassurance that "most media-commissioned polls are properly designed, well-conducted surveys carried out by reputable research companies"¹⁷, there is no doubt that respondents may still be influenced either intentionally or through incompetence by leading questions that encourage a particular response, or by the order of the questions (previous questions setting the order of response for subsequent questions). Besides these possibilities there is the whole question of whether the respondent has even understood the question - ". . . it is a basic methodological problem - asking one question but getting the answer to another - it is endemic".¹⁸ In one study of a Gallup survey question presented according to a standard format it was found that only 60% of the respondents interpreted the question as it was apparently intended.¹⁹

Under normal circumstances this sort of information does not come to light. It is only through deeper probing of the respondent that this ambiguity becomes evident. To what extent this happens today remains a matter for conjecture until further studies are carried out. It is in fact in the polling agencies' interests to provide a reliable service to their clients, although Hodder-Williams (op. cit.) suggests that pollsters may indeed falsify a questionnaire or two and that polling agencies themselves may search for statistics that will gladden their clients' hearts. It may also be all too possible to cast doubt on the authenticity of a poll when its findings are contrary to a critic's dogma. This may be a slightly unfair criticism, but to give an example, E. Noelle-Newmann²⁰ makes it obvious where her allegiance lies in her paper "The Art of Putting Ambivalent Questions", although it cannot be denied some of her criticisms are justified.

Dick Crossman was obviously being ruthlessly honest when he admitted: "I am only completely convinced by the findings of the Gallup poll when they confirm my impression of what the public is thinking."²¹

This leads us to the final aspect of the polling procedure - the final analysis and reporting of the results.

1.4 ANALYSIS AND REPORTING

Roiser²² points out that newspaper and television companies who commission most polls want simple results from which headlines can easily be written. This becomes abundantly obvious when we pause to digest the headlines. Through selective emphasis poll results can be entirely distorted. A headline, for example, that says 8 out of 10 want to bring back hanging is rather different from a headline that says "80% support the death penalty for terrorist murder"

- although it may not be entirely dishonest, it is certainly misleading. Although a more subtle means of manipulating poll findings, it is probably more widespread in Britain than the more obvious forms of poll fiddling that have occurred elsewhere.

One particular case that achieved notoriety was reported in Le Canard²³ and later in The Economist.²⁴ This involved the French equivalent of Gallup - IFOP (Institut Francais d'Opinion Publique) - which, it was reported, admitted to doctoring the number who were favourable to government plans to encourage a reduction in the number of immigrant workers from 77% to 57% because they felt the poll "was not plausible". The whole affair was a miserable catalogue of incompetence and an attempt to cover up procedural short-cuts rather than deliberate chicanery for the benefit of their client, the French government. Press coverage of the event however, which accused the agency of deliberately cooking the books, no doubt acted as a salutary warning to pollsters to keep their house in order.

No such totally unethical practice has ever come to light as regards British polling agencies - which may be partly due to a code of conduct drawn up by pollsters some years ago to which, it would seem, they adhere.

When all is asked, recorded, analysed and reported it must be always born in mind that despite frequent assertion by polling agencies and media headlines: "The people have not spoken, their thoughts have merely been sampled".²⁵

1.5 WHAT DO THE POLLS TELL US?

Once the procedural and analytical difficulties of the polling process are appreciated the next question is : 'What exactly do the polls tell us about public

opinion on the defence debate?' To answer this question with any degree of thoroughness it is essential to see them in some sort of perspective. A single poll can be seen as the equivalent of a single frame of a film, it has no continuity or context and is entirely static. Public opinion in reality is liquid, multi-faceted and may reflect the influence of many different pressures both explicit and implicit.

However, when we come to a comparative, longitudinal study of the polls further difficulties are encountered.

Primarily it must be appreciated that much of the data is fragmentary; certain questions, for example, may have been asked back in 1947 which were no longer asked in later years. Other questions may have been put to respondents continuously over a number of years, then there may be an hiatus for ten years after which the questions may re-occur. These breaks in continuity leave great gaps in our knowledge of public opinion that cannot be filled. In yet other cases the wording of a question may change over the years until it becomes no longer comparable with the original question. There are questions that only occur at a certain period because they were only relevant at that time - questions on the Vietnam War or the Cruise Missile debate. Some questions may be asked only at long intervals and then they may occur more frequently for a period, like a nervous rash.

Of course the very questions themselves and when they were asked may provide hints as to the state of the political climate at the time. Even changes of question on the same subject can suggest nuances of changing policy. Take for example the questions relating to the Soviet Union. During the 1930s and 1940s questions relating to the Soviet Union were along the lines: "Would you like to

see Great Britain and Soviet Russia being more friendly to each other?" (Gallup, March 1937), "Would you like to see Great Britain and Russia continuing to work together after the war?" (Gallup, January 1942), "Are your feelings towards Russia more friendly or less friendly than they were a year ago?" (Gallup, September 1945). In April 1948 however the tone changed dramatically and Gallup were asking "Do you think government policy towards Russia is too firm, not firm enough, or about right?", and come February 1968: "Do you think Russia does or does not pose a threat to Britain and other European countries in the political/economic/scientific/military field?"

The questions themselves may be just as important as the responses. It becomes apparent however that questions on particular issues are only asked at particular times, i.e. when the subject is deemed to be of sufficient public concern, such as: the subject of nuclear weapons during the late '50s/early '60s and again during the 1980s. Does the fact that the public was questioned on the issue at these times reflect the inconsistency of public concern or does it merely focus on a continuing public concern at that specific time? Are we to assume that the public were unconcerned during periods when they were not being asked about the particular issue? These questions could only satisfactorily be answered if the same questions were asked at regular intervals irrespective of media focus.

1.6 SOURCES

A vast record of British public opinion exists, notably in the form of Gallup International opinion polls (1937-1975) and the Gallup political index (1975-present date). These, in conjunction with MORI (Market and Opinion Research International), Marplan and NOP (National Opinion Polls) provide the basis for the following survey, with additional material coming from occasional polls

carried out on behalf of private organisations and other sporadic sources which are fully annotated in the text.

In the past, little effort has been made to draw upon this mass of data save for a study carried out for an M.Sc. dissertation by G. Ganley²⁵ and a brief summary by D. Capitanchick.²⁶ This must in part be due to the difficulties already stated and partly to the nature of opinion polls - they tend to be of transitory interest, discarded once they have outlived their usefulness in highlighting some topical issue or scoring some political point or other.

If we start with public opinion on government defence spending, we can attempt to unravel the tangled threads that the polls provide us with. But defence spending, we soon find, is very much tied up with the perception of threat from outside which is illustrated by the "danger of war" polls. If we follow up these threads we encounter the concept of "deterrence", the possibilities of surviving (nuclear) war and the whole question of disarmament, then more specific issues such as Cruise and Trident, which lead us in turn to attitudes towards the US and the USSR, until, in the final stages of this study, the public's perception of Britain's role in the world.

1.7 DEFENCE SPENDING

Opinion on defence spending can be best broken down into four phases:

Phase I	1948-1952)	12 polls in 20 years
Phase II	1956-1961)	
Phase III	1966-1968)	12 polls in 9 years
Phase IV	1975-1985)	

The first phase is characterised by majority public opinion in favour of increased defence expenditure which reached a peak - 78% in favour of increases in August 1950, declining to 47% in September 1952 (cut defence

spending 36%). Majority public opinion during the second and third phase was easily in favour of defence cuts, although the introduction of an "hold at present level" option met with a corresponding decrease in both "cut" and "increase" responses. The initial part of the fourth phase (1975-1985) was one, in broad terms, during which the public once more supported increased defence spending, with the exception of December 1979 when the position was briefly reversed. This may have been the result of the agreement in principle between the USA and USSR on the SALT treaty, causing a temporary bout of optimism about East-West relations. The last three polls of this phase however, are marked by a majority in favour of defence cuts. This follows the brief flush of chauvinism generated by the Falklands debate - in July 1982 support for increased defence spending rose to 40% (previous poll July 1980, increases equals 24%) but by the following poll carried out in February 1983 the electorate was restored to a more sober frame of mind - 14% in favour of increased defence spending and 49% in favour of cuts. We can see here how an issue such as the Falklands war momentarily influences public opinion. But how do we account for the other fluctuations of opinion during this period? First, the recent trend towards defence cuts that was apparent before the Falklands crisis must probably be linked with the rise of the anti-nuclear lobby in response to the Cruise missile programme and to a lesser degree Trident. There can be little doubt that the high percentage of the population against Cruise (see page 28) affected attitudes towards defence spending per se and the increasing cost of the proposed Trident system was not lost on the public either.

A measure of saliency can be seen in the "most urgent problem" polls. Respondents are asked "What do you think is the most urgent problem facing the Government?" or a slight variation of this wording. In November 1980 "defence" reappeared amongst the list of most urgent problems and remained,

although intermittently up to May 1987. Unemployment during this period has always been considered by the public to be the most urgent problem (between 70% and 89% of respondents rated it so). It is significant also that when asked about the next most urgent problem "defence" has similarly been included on this list reaching as high as 34% of the respondents choice (December 1983). This reflects an enhanced public awareness of the nuclear issue that has not been apparent since the late 50's/early 60's. However, it is clear that defence is not generally considered as an important issue by the majority of the population - issues applying more personally to an individual's life always tend to dominate. A superficial interpretation of the polls during that first phase (1948-1952) could easily lead to the conclusion that the overwhelming support for increased defence spending (78% in favour, August 1950) during this phase was a direct result of the outbreak of war in Korea because at the same time there was also a peak in "much danger of war" responses - 58% in January 1951. However, cross-referencing with parallel polls suggests this was not the case. Four months after the outbreak of war, in October 1950, only 14% believed the fighting in Korea would lead to a third world war. Polls in June 1950 and January 1951 make it clear that it was Russia that was seen as the source of this threat. When asked of the 49% who thought there was danger of war 37% responded "Russia" in 1950, and 58% in 1951 when the whole sample was asked.

FIGURE: 1.1

*Should a war come do you think it is likely to arise through America, or Russia or some other way?

	Russia	America	Both	Other	D.K.
June 1950	76	10	6	4	4
Should a war come do you think it is likely to arise through America, Russia, or some other way?					
January 1951	58	21	6	6	9

Gallup

*Asked of the 49% who thought there was danger of war

In August 1950 when asked "In your opinion are there any nations which want to dominate the world?" 78% responded with "yes" and of these 63% thought Russia wanted to do so. Seen in this context, although war in Korea was the main focus of international unrest during this period, it was more probably the Soviet Union that was seen as the source of threat that encouraged public support for increased expenditure on defence. This basic post-war insecurity was compounded by the Communist reorganisation that took place in Czechoslovakia in February 1948, the blockade of Berlin in April the same year and perhaps the Fuchs spy incident of 1950 also. Following August 1950, public opinion moved decidedly in favour of defence spending cuts, from 14% in 1950 in favour of cuts, 36% in September 1952, 54% in March 1960, and in March 1962 57% responded to a poll that asked "Do you think that the party that gets your vote should support or oppose proposals to:- cut down on defence expenditure?" with "support".

This steady increase in support for cuts in defence spending was accompanied - up to 1960 - by a decline in the percentage of respondents believing there to be "much threat of war". This seems perfectly logical:

perception of much danger of war = support for increased defence spending

not much danger of war = support for cuts in defence spending.

However, during the Cuban missile crisis when "much danger of war" was above 40% for the whole of the period between August 1960 and December 1961, reaching 53% in April 1961, there was no corresponding support for increased defence spending. This is an interesting phenomenon and tends to belie the logic of our earlier premise. This apparent reversal of public support for defence spending during times of crisis can be interpreted in two ways - although the ambiguity of interpretation may be part and parcel of the whole nuclear deterrent debate which begins to impinge on the defence issues; this we shall be investigating next.

As it is, this phenomenon may be explained in terms of the nature of the crisis which leads the public to perceive "much danger of war". The post-war threat perceived by the public may have reflected a general feeling of threat/insecurity in which the nation itself felt threatened, whereas the Cuban missile crisis of the early 'sixties was one in which Britain was not directly involved although there was the potential for a widespread war involving Britain. Increased defence spending in the former case is understandable but in the latter it would have made no difference to the external situation between the USA and USSR, which was not essentially a British defence issue.

Secondly, this decrease in support for defence spending during these times of crisis may indicate a growing lack of confidence in developing defence policy -

the significant development being the reliance on nuclear weapons as a deterrent.

1.8 NUCLEAR DETERRENCE

The extent of optimism for world peace that was engendered by the invention of nuclear weapons back in 1945 seems incredible and so naive to cynics of today. In August of that year 52% of the respondents asked believed that the A-bomb made wars less likely. The atomic bomb was seen as the great saviour that would make war obsolete. Optimism was such that it was even suggested that every country should abolish its armed forces in favour of an international force - and 51% of the represented public agreed. To be specific it was actually the West's possession of the atomic bomb that led to this new confidence. With the Soviet deployment of a nuclear capability, the matter was seen in an entirely different light. 35% of the population thought Soviet possession of the bomb made war more likely:

FIGURE: 1.2

August 1945

"Do you think the A-Bomb makes wars more or less likely?"

more likely	less likely	no difference	don't know
12	52	21	15

October 1949

"Do you think that Russia having the A-Bomb makes wars more or less likely?"

more likely	less likely	no difference	don't know
35	22	25	18

Gallup

Henceforth the nuclear weapons of both sides had to be included in the equation, and it becomes clear that the general public were becoming less convinced of their ability to deter war. By April 1954, although a large majority (52%) still believed the bomb made war less likely, 26% now believed the contrary. In March 1964 respondents were asked: "Sir Alec Douglas-Hume says that having the H-bomb rules out any likelihood of world war. Do you agree or disagree with this statement?" 35% presumed to disagree. This increased uncertainty is further illustrated by the public's increased belief in the likelihood of nuclear war.

In April 1963 59% believed it was not likely that there was ever going to be a nuclear war (16% believed it was likely). When this question was next asked during the early 'eighties - when public awareness of the nuclear issue was once more aroused - there was quite a different picture altogether:

FIGURE: 1.3

"Do you think it is likely or not there is ever going to be a nuclear war?"

	likely	not likely	don't know
April 1963	16	59	25
September 1980	39	45	10
November 1982	38	44	18
February 1983	49	36	15
July 1986	30	53	16
December 1986	44	40	16

Gallup

July 1986 saw a brief drop in the percentage believing nuclear war was likely, but what had happened to the earlier confidence engendered by nuclear weapons when the majority thought they made war less likely? From a study of the polls

it becomes apparent that the general public are becoming more worried about the possibility of nuclear war:

FIGURE: 1.4

"How worried are you about the chances of a world-wide war breaking out in which A-bombs*/nuclear bombs will be used?"

	very worried	fairly	not at all	don't know
March 1964*	12	28	52	8
November 1964*	9	31	55	5
February 1983	28	33	38	1
April 1983	25	31	42	2
May 1983	23	30	46	1

Gallup

Again 1986 (December) showed a single alteration to the pattern with 52% saying they were not at all worried about the chance of war in which nuclear weapons would be used - once again we can see how a particular event can influence public opinion in quite a dramatic way - in this case the historic meeting between Reagan and Gorbachev at Reykjavik produced a peak in optimism. But the increased belief in the likelihood of nuclear war, and the growth in anxiety over the chance of this happening does not convert the early confidence in these weapons to a rejection of them. A majority of the public still believe they are "best for Britain's security". In November 1979 when asked "What do you think is best for Britain's security, that we do or do not have nuclear weapons here?" - 65% replied that it was best that we do have nuclear weapons. By February 1983, although 25% now thought it would be best for Britain's security if we do not have them, there was still 66% who felt more secure with Britain having these weapons. And yet at the same time Britain

having nuclear weapons is seen by quite a large percentage of the population to increase the risk of nuclear attack on this country:

FIGURE: 1.5

Do you think that Britain itself having nuclear weapons increases or decreases the risk of nuclear attack on this country?"

	increases	decreases	no effect	don't know
September 1980	26	37	27	10
November 1982	31	36	23	10
February 1983	28	41	24	7
April 1983	35	41	17	7
July 1986	33	39	21	6
December 1986	29	44	20	7

Gallup

This apparent paradox accentuates the confusion over the whole question of nuclear weapons - do they make us more or less safe? The general public may believe it is best for Britain's security if we have them but at the same time they bring with them an increased threat of war, a possibility of attack on this country and increased anxiety into the bargain. But perhaps we can be more specific about these weapons. Is it perhaps the nuclear weapons belonging to other countries that the public are worried about? Not just those of the Soviet Union (which are the assumed reason why we must have our own) but those of the United States as well - and to be more accurate, American weapons on British soil. There is no doubt that the great objection to Cruise missiles lies in their American origin and power of control. A survey by British Social Attitudes in 1984 indicated that the majority of the population with an opinion - 48% - felt that the siting of American missiles in Britain made it a less safe place to live. (Safer = 38%, the majority of these being Conservative

supporters.) Footnote 1 When asked about our independent nuclear missiles a large majority reported feeling safer:

FIGURE: 1.6

"Do you think that having our own independent nuclear missiles makes Britain a safer or less safe place to live?"

safer	less safe
60	28

Gallup

And yet again this is not without paradox. Although there may have been overwhelming public opinion in support of building up a nuclear capability in 1957 (52% supported this measure) with only 8% preferring conventional development, then Footnote 2 - (this is not to argue that majority support is not still behind nuclear weapons). In September 1964 this movement was already being felt, 24% agreed with a proposal by Wilson to switch from nuclear weapons-spending to building up the navy (46% disagreed). In December 1981 an NOP poll indicated that 31% were now in favour of spending more on non-nuclear forces (38% - maintain present balance; 17% - more on nuclear forces.) And a more recent (May 1983) poll which asked "Would you prefer a defence policy that did not rely on nuclear weapons?" registered 62% public support for a non-nuclear defence policy. This latter question, however, raises some doubts as to whether it was merely suggesting an ideal state of affairs or a commitment to unilateral disarmament, or for that matter, multilateralism. In the light of this ambiguity it shows a not surprisingly high percentage in favour.

This confusion is further compounded by a question asked in May 1984:

FIGURE: 1.7

Would you support or oppose a British defence policy which depends on the possible use of nuclear weapons?

Support	Oppose	Don't know
39	50	11

Fifty per cent say they would oppose such a policy - how many people, we must ask, are aware that this is in fact British defence policy?

1.9 DISARMAMENT

There is no doubt that the general public, in an ideal world, would rather not have nuclear weapons at all. Even though 52% of the population in April 1954 believed the bomb made war less likely, deep down they would rather live in a world where it did not exist. In March 1954 74% of the population thought an agreement to ban the bomb was desirable. It was not only the British population who were in favour of banning the atom bomb but France, West Germany and Italy also:

FIGURE: 1.8

Would you approve or disapprove of an East-West agreement prohibiting the manufacture of all atomic weapons?"

February 1955	France	W. Germany	Italy	Britain	
approve	87	85	80	71	66*
disapprove	6	6	6	11	15
qualified answer	1	1	NA	6	4
don't know	6	8	14	12	15

*May 1957

It is clear, reflecting on the polls, that people were generally more optimistic about disarmament during the 1950's and were thinking in terms of verification and inspection and were at least grappling with the means by which total disarmament could be achieved. During the 'fifties the type of question being asked was:

Would you approve or disapprove of an East-West agreement prohibiting the manufacture of Atomic weapons?

Do you think that agreement to ban the A-bomb is likely or unlikely in the next two years?

Although at the time there was underlying unease on the question of inspection the mood was cautiously optimistic. By 1961 the changing mood is discernible in a series of questions in a single poll:

Mr. Krushchev has said that he will agree to a ban on the testing of the H-bomb if that ban is part of a programme for total disarmament. Do you think the West should or should not agree to negotiate for total disarmament?

Mr. Krushchev has said that he will agree to a ban on the testing of the H-bomb if that is part of a programme for total disarmament. Do you think he sincerely wants to totally disarm?

If we should happen to get into an all-out nuclear war what do you think your chances would be of living through it?

This poignantly illustrates the increasing pessimism about the chances of disarmament; the questions change from optimism to doubts about Soviet intentions and finally the effects of a nuclear war - assuming almost that the negotiations would fail.

One of the main reasons for this increasing pessimism was the apparent failure of negotiations to reach any agreement and lack of faith in them ever reaching an agreement. This is illustrated in the following poll carried out in February 1955:

FIGURE: 1.9

"Do you think there is likely to be an agreement about atomic disarmament within approximately the next five or six years, or do you not think so?"

February 1955	France	W. Germany	Italy	Britain
likely	31	26	20	31
not likely	28	42	24	31
don't know	41	32	56	35

Merrit Puchala²⁹

Majority opinion just did not know, or thought agreement was not likely. One of the main reasons why there had been no agreement reached between the Soviet Union and US was the American insistence on the necessity for checking by international inspectors on each other's soil - and the Soviet opposition to this on the grounds that it would lead to spying. Although initial support was easily on America's side on this issue it was by no means unequivocal. Polls carried out in 1956 and 1961³⁰ indicated that both France and Italy were in favour of banning nuclear weapons without inspection being a necessary prerequisite; a small majority in West Germany preferred an inspection agreement to precede the ban but Britain, more than any other of her European allies, supported the American line and was against a ban before an agreement on inspection was reached.

Public loss of faith in the likelihood of negotiations to make positive progress towards disarmament is reflected in the formation of the CND. This rejection of nuclear weapons by a small but vociferous section of the general public introduced the whole question of Britain unilaterally giving up nuclear weapons.

The polls acknowledged this new development by introducing unilateralist versus multilateralist questions from 1958.

Events since the General Summit in November 1985 between the US and Soviet heads of state have suddenly turned the tide in favour of an arms agreement between East and West. In these negotiations the Soviet Union are increasingly looking like the more credible party in the eyes of the general public. The Soviet moratorium on arms testing that lasted for eighteen months was unreciprocated by the US; the British public were unequivocal about how they felt the US should respond.

FIGURE: 1.10

The Soviet Union has not tested any nuclear weapons for eighteen months - but has announced that it will resume testing unless the US follows suit. Do you agree or disagree that the US should agree to stop testing now?

January 1987	Agree	Disagree	Don't know
	72	16	12

Gallup

And on the question of the remaining medium range nuclear weapons from Western Europe which have been the focus of negotiations since Reykjavik, again there was agreement at first:

FIGURE: 1.11

Do you agree or disagree that the US and the Soviet Union should both remove all their medium range nuclear weapons from Europe, without making the conditions or agreements about other weapons systems?

January 1987	Agree	Disagree	Don't know
	64	22	15

Gallup

1.10 UNILATERAL OR MULTILATERAL DISARMAMENT?

Majority public opinion has always been against any unilateralist action by Britain towards disarmament. This is not in dispute, but it is the ripples of dissent beneath this apparent concord that makes interesting study because these represent pressure groups that are more vociferous and perhaps more important than the mute percentages catalogued by pollsters.

Polls concerned with the disarmament issue were carried out between February 1958 and February 1963 after which the issue ceased to excite public interest (or the interest of the pollsters). The proposed introduction of the new Cruise missile system and Trident at the beginning of the 'eighties once again brought the question of disarmament to the forefront of media attention.

In February 1958 22% of the population, represented by the polls, approved of the suggestion that Britain should give up her atomic weapons as a way of persuading other countries to stop making them. By March 1959 30% said they would approve if Britain gave up her hydrogen bombs, even if other countries did not do so. (See Table: 1).

The most remarkable change has taken place in the last two years 1986 and 1987-the most recent poll has indicated that 34% of the population agree that Britain should get rid of its nuclear weapons whatever other countries do. This marks the new surge in attitudes resulting from the ongoing negotiations to remove nuclear weapons in Europe.

TABLE: 1

Would you approve if Britain gave up her hydrogen bombs, even if other countries did not do so?

	give up	not give up	don't know
February 1958	22	58	20
April 1958	25	61	14
September 1958	30	47	13
March 1959	30	50	20
May 1960	33	51	16
October 1961	21	62	17
December 1961	31	55	14
May/June 1962	22	64	14
January/February 1963	29	54	17
September 1980	21	67	12
November 1982	29	61	10
February 1983	28(17)	65(78)	6(6)
April 1983	27	66	7
May 1983	20(16)	73(77)	10(6)
November 1983	23	67	10
December 1986	29	63	6
January 1987	34	55	11

Figures in brackets indicate comparable NOP polls

Gallup

Throughout the early sixties support for unilateral disarmament fluctuated between 21% (October 1961) and 31%, ending, in the last poll of January/February 1963 at 29%. The nature of those supporting the "not give up" anti-unilateralist stand can be better understood in the light of a parallel poll. We find that the support for not giving up our own weapons is due not so much to a deep commitment to NATO and the US Alliance as to the long-

standing commitment by the public to an independent nuclear force. When asked about the nuclear weapons policy Britain should follow and given the options "Continue to make our own", "Give up nuclear weapons entirely", "Pool all nuclear weapons with other NATO countries and rely mainly on American production" or "Don't know", a slight majority, with few exceptions, has always favoured the independent line (See Table: 2).

TABLE: 2

"What policy should Britain follow about nuclear weapons?"

	make our own	give up	pool Nato rely - US	don't know
April 1960	31	26	19	24
May 1960	24	33	27	16
July 1960	28	27	34	11
September 1960	36	31	21	12
October 1960	37	21	32	10
April 1961	36	19	26	19
June 1961	35	20	30	15
September 1962	37	23	25	15

Gallup

When the question of an European nuclear force was suggested as an option, as opposed to relying on the US (no NATO option this time), "Continue to make our own" was easily the most popular choice, although the suggested European force was in itself considered preferable to a dependence on the US:

FIGURE: 1.12

"What policy should Britain follow about nuclear weapons?"

	December 1962	May 1963
continue to make our own	33	39
set up European nuclear force	16	15
rely on the US	8	12
give up nuclear weapons	25	23
don't know	18	11

Gallup

Giving up Britain's nuclear weapons was considered by up to a quarter of the respondents to be preferable to either the US or the European option. That a suggested dependence on the US, for our nuclear weaponry, was anathema to the British public is further illustrated by a question asked in June 1967: "A prominent American official has said in this country that we should give up our Atom bomb and rely on the USA for our defence. Would you approve or disapprove if we gave up our Atom bomb?" A resounding 69% disapproved of this suggestion.

Despite the belief in some sort of "special relationship" with the US, the British public were unwilling to become totally dependent on America for nuclear defence. At the governmental level the rationale for this was expressed by Macmillan in 1955:

Politically it surrenders our power to influence American policy and then, strategically and tactically it equally deprives us of any influence over the selection of targets and the use of our vital striking forces. The one therefore weakens our prestige and our influence in the world and the other might imperil our safety.³¹

At a more mundane level the general public saw the nature of this special relationship already as very unequal:

FIGURE: 1.13

"Do you think Britain is treated as an equal partner by the US in affairs that concern them both, or don't you think so?"

	equal partners	not equal	don't know
December 1962	22	59	19

Gallup

In the same year 65% believed it was true or at least partly true that Britain's foreign policy depended too much on the US.

In a world where other countries possessed nuclear weapons Britain was not to be left out, or left in a position of poor relation to the United States. The high level of resistance to unilateral disarmament reflects these attitudes and indicates the public's commitment to the notion of an independent deterrent, which:

had become something of a fixation - both among policy-makers and the mass public. It can be seen as a status symbol in a world situation where Britain's status was declining.³²

1.11 SPECIAL RELATIONSHIP

This question of a "special relationship" between the US and Britain needs to be looked at more closely; an implicit belief in such a relationship may help explain some contradictions that exist in public opinion on the question of defence policy.

But what precisely is the nature of this perceived special relationship? It is clear that the British people have always considered themselves closer to the USA than their fellow Europeans. This is quite likely a deep-seated attitude

relating to Britain's shared ethnic and cultural ancestry with the US. But does this really have much relevance today? In real terms it may not, but as far as the British public is concerned it may form the basis of deep-seated opinions upon which perceived Anglo-US relations are based. And yet a study of the polls suggests a curious contradiction. The USA has always featured top of the popularity polls as far as "Britain's best friend" is concerned:

FIGURE: 1.14

"Which country do you regard as Britain's best friend?"

	USA	FRG	Australia	Canada	France	Other	Don't Know
November 1956*	42	NA	NA	NA	23	18	17
December 1967	45	3	14	6	1	12	23
March 1984	36	9	5	4	1	6	37

* question prefixed "Apart from the Commonwealth countries..."

Gallup

When specifically asked about this close relationship a high percentage of respondents - 47% - thought Britain did have a close relationship with America, although it must be noted that 44% thought the relationship was much the same as that with other leading European countries.

Despite this feeling of great fraternity with the US, at the same time there has been a long-standing belief that Britain is not treated as an equal partner in this relationship. In November 1962 60% thought that Britain was not treated as an equal partner by the US in affairs that concerned them both. In January/February of the following year this figure was 70%. In January 1964 59% perceived this inequality, and at the same time "don't know" rose to 20%.

By April 1984 77% of the public thought Britain was an unequal partner in this relationship. A majority, according to these polls, have always perceived the inequality of Britain's partnership with the US but this majority is increasing. Similarly a majority of those polled hold the belief that Britain's foreign policy is also unduly influenced by the US. In April 1954 56% agreed that "we are giving too much to the United States in our foreign policy". And more recently a similar response was elicited:

FIGURE: 1.15

"It is sometimes said that the foreign policy of Britain depends too much on the US. Do you think this is true or untrue?"

	true	partly true	untrue	don't know
April 1974	35	10	30	25
April 1982	55	6	29	11
June 1984	58	15	19	8

Gallup

Is the British public satisfied with this situation or is it considered too high a price to pay for a special relationship with the US? Just because the public perceives America dominating this relationship, that doesn't mean to say it disapproves. Although when the public were asked what advantages they could see in a suggested economic and political union with the United States in December 1960, 49% could think of none, whereas 29% felt that "playing second fiddle to America" or "America would dominate", would be the main disadvantage. In the same poll 81% thought Britain should aim for greater independence from America. In more recent polls a greater increase is shown for distancing ourselves from US political and military policies than for working more closely:

FIGURE: 1.16

Do you think Britain should work more closely or less closely with the US in its political and military policies?

	more closely	less closely	no change	don't know
May 1965	31	31	20	18
April 1984	34	43	16	7

Gallup

It would appear that the general public still hold dear the idea of a close special relationship with the US and are more inclined to look across the Atlantic than the North Sea when it comes to international friendship, but they are not happy to give up their independence as a nation for the sake of it. The general attitude and movement of opinion can be summed-up in the following polls:

FIGURE: 1.17

"Which of these statements do you agree with most on relations between America and ourselves?"

	Jan 1951	March 1952	Dec 1960	Dec 1962	April 1984
We are natural allies and should stick together	22	23	24	20	18
We should act together on most things but Britain should remain independent	29	53	29	27	35
We can act together where our policy is the same but otherwise Britain should remain independent.	23	NA	29	20	30
Our relationship should be on the same footing as with other countries	21	15	12	9	13
Don't know	5	9	6	24	4

Gallup

"Acting together on most things while retaining independence" has always received greatest support. British independence is paramount and agreement with the US is only permissible in the public's eyes if this independence is not jeopardised. All in all, however, the polls indicate increasing dissatisfaction with the nature of this "special relationship" with the US. Does it seem as though British independence is being questioned? Or is it possible that British public opinion regarding policy matters is divergent from that of the US? A single poll is certainly no proof of a general trend, but a question asked in March 1984 suggests that it may be the nature of US foreign policy that is the cause of the divergence:

FIGURE: 1.18

"Some people say that the US is antagonising allies by her foreign policy. Others don't agree. Do you think that the US foreign policy is or is not losing her friendship among Western countries?"

	is	is not	don't know
October 1958	48	22	30
May 1984	66	18	16

Gallup

This poll shows a 22% increase in the percentage of respondents believing that US policy is antagonising important allies compared with when the question was last asked in 1958. Although it is clear that these opinions did not affect overall attitudes towards the US in the 1950's (in 1956 42% saw America as Britain's best friend) - it may be a wider and deeper disaffection that is being felt at present and one that can also be related to levels of confidence in the US to deal wisely with world problems.

1.12 CONFIDENCE IN U.S.

A standard question determining degrees of confidence in US ability to deal wisely with world problems has been asked regularly since October 1970. These catalogue substantial shifts in confidence over the years, reaching a low level of confidence during the eighties. (See Table 3.)

TABLE: 3

"How much confidence do you have in the ability of the United States to deal wisely with present world problems?"

	very great	consid- erable	little	very little	none	don't know
October 1970	7	22(29)	28	26	(54)	17
March 1972	5	22(27)	22	21	12(65)	18
May 1972	6	24(30)	24	22	9(55)	15
June 1972	8	24(32)	25	24	10(59)	9
January 1973	4	22(26)	27	23	9(59)	15
February 1973	5	27(32)	27	16	12(55)	12
May 1973	6	22(28)	23	21	13(57)	15
August 1973	3	23(26)	23	24	11(58)	15
1973	4	25(29)	26	24	9(59)	12
April 1974	6	30(36)	26	20	6(52)	12
June 1974	9	28(37)	22	23	9(54)	10
July 1974	7	29(36)	23	23	9(55)	9
August 1974	7	24(31)	24	22	13(59)	10
September 1974	8	31(39)	22	15	9(46)	15
November 1974	5	20(25)	26	23	11(60)	15
February 1975	4	22(26)	25	25	10(60)	15
April 1975	5	22(27)	26	24	10(60)	13
May 1975	8	33(41)	26	17	7(50)	9
July 1975	5	26(31)	28	19	8(55)	13
December 1975	4	23(27)	23	22	10(55)	19
December 1976	4	29(33)	27	19	7(53)	12
June 1977	13	41(54)	20	13	5(38)	8
September 1977	6	36(42)	23	17	8(48)	11
January 1978	5	28(33)	22	20	9(51)	15
October 1978	8	31(39)	24	19	7(50)	11
January 1979	5	29(34)	26	19	8(53)	14
June 1979	7	24(31)	22	26	14(52)	7
July 1979	5	19(24)	26	28	10(64)	12
October 1979	4	18(22)	24	27	12(63)	16
January 1980	9	31(40)	25	22	5(52)	8
May 1980	6	28(34)	27	24	9(60)	6
November 1980	4	15(19)	26	27	12(65)	7
March 1981	8	25(33)	23	23	12(58)	8
August 1981	6	25(31)	24	26	11(61)	8
March 1982	4	17(21)	27	29	18(74)	6
June 1982	6	26(32)	27	25	13(65)	4
November 1982	3	22(25)	31	25	13(69)	7
February 1983	3	21(24)	29	29	12(70)	6
June 1983	5	18(23)	27	27	16(70)	7
August 1983	3	20(23)	23	27	19(69)	8
November 1983	4	15(19)	22	31(52)	26(79)	7
December 1983	5	21(26)	27	26(53)	18(71)	3

	very great	considerable	little	very little	none	don't know
February 1984	5	22(27)	20	27(47)	23(70)	5
April 1984	0	16(16)	26	32(56)	16(74)	7
June 1984	4	18(22)	26	29	18(69)	6
April 1985	3	17(20)	26	31	16(73)	7
October 1985	6	22(28)	27	23	15(65)	7
March 1986	5	25(30)	26	27	12(65)	5
March/ April 19761	4	17(21)	25	28	19(72)	7
15/16 April	8	21(29)	23	27	27(77)	15
17/21 April	6	21(27)	21	29	29(69)	4
24/28 April	8	21(29)	22	27	18(67)	4
June	4	16(20)	26	31	18(75)	6
October	6	22(26)	28	26	14(68)	4

Figures in brackets are summations of the preceding relevant columns.

April 1984 witnessed "little"/"very little" and "none" at 74% of the electorate.^{Footnote 3} These low levels of confidence in the US to deal with world problems characterises the whole era since Carter became President in 1977. His inauguration was accompanied by a rise in confidence - 52% expressed very great/considerable confidence but was followed by ever-decreasing levels of confidence. The Reagan era has witnessed more increasing uncertainties in the British public as regards the US administration's ability to deal with the many problems facing the world. Those saying they have no confidence at all have steadily increased during Reagan's years in power. Shortly after Reagan's inauguration a poll indicated that the British electorate, from the very beginning, did not view his election with much relish, compared with a similar poll when Carter was elected:

FIGURE: 1.19

"As you may know, Ronald Reagan (Jimmy Carter) has been elected President of the United States. Do you think this will be a good thing or a bad thing for:

November 1980/1976

	Good		Bad		Don't know	
	Reagan	Carter	Reagan	Carter	Reagan	Carter
1. America?	30	42	40	19	31	39
2. America's relationship	46	44	22	16	32	39
3. America's standing	32	40	35	18	34	42

Gallup

Compared with other European countries the British public, according to a 1982 poll, has the least confidence (60% at "not very much"/"none at all") in the US after Switzerland (at 63%). Britain actually expressed greatest "no confidence at all" - 21% compared with other countries:

FIGURE: 1.20

"In general, how much confidence do you have in the US to deal wisely with world problems?"

March 1982	GB	France	Germany	Belgium	Switzerland	Denmark
a great deal	6	4	16	7	4	5
a fair amount	29	36	41	38	29	33
not very much	39	35	33	20	51	30
none at all	21	12	7	10	12	18
don't know	5	13	2	25	4	14

Gallup

1.13 CRUISE AND TRIDENT

The Cruise missile issue (and to a lesser extent Trident) has attracted an unparalleled number of opinion polls over a very short period of time - in 1983 alone twelve opinion polls asked questions on the subject. It was not really until Greenham Common and Molesworth Air Force bases had been announced as future Cruise missile sites that the whole issue hit the headlines, and the women's peace camp (more recently events at Molesworth too) has ensured extraordinary media and public attention. When Gallup first asked respondents if they had heard about the Cruise missile, 59% replied that they had and all but 18% were able to give reasons why it was special - compared with other weapons. At the same time, September 1980, Marplan asked their respondents if they thought the British government was right or wrong to allow American nuclear-armed Cruise missiles to be based in this country. 49% thought they were right and 43% that they were wrong, this was almost the only time that a small majority favoured these weapons. From then on majority opinion - with the exception of two polls in June 1983 and September 1983 - has been against the stationing of these weapons. What are the reasons for the public rejecting or even accepting these weapons? We can only guess this from looking at parallel polls, because no polls actually ask who is for or against and follow up the reasons with deeper questioning. A poll, carried out on behalf of the television programme "Panorama" in September 1980 asked "In your opinion will Cruise missiles, based in Britain, make it more or less likely that we will be attacked in a future nuclear war?" 54% believed they would make attack more likely. It is not nuclear weapons per se that make the public feel more vulnerable -a poll commissioned at the same time by New Society and carried out by Gallup, posed the following question and came up with these results:

FIGURE: 1.21

"Do you think the fact that Britain itself has nuclear weapons, increases or decreases the risk of nuclear attack on this country?"

	increases	decreases	no effect	don't know
September 1980	26	37	27	10

Gallup

The answer as to why the general public find Cruise specifically threatening may be not so much in their new strategic capacity but in the question of control over the launching of these weapons. In February 1983 an overwhelming 89% said they would prefer the key to fire the missiles to be held jointly by the USA and Britain, as opposed to the USA alone.³³ If it were held jointly, a follow-up question found that a further 37% would be more likely to accept the Cruise missiles. But even if the dual-key arrangement had been a deciding factor the British public did not trust their powerful ally to honour this arrangement:

FIGURE: 1.22

"Would you trust or not trust the American government to ask the British government before launching American nuclear weapons from British soil?"

	would trust	would not	don't know
April 1984	26	65	9
May 1984	26	66	8

Gallup

Earlier I acknowledged that majority British public opinion has always been in favour of an independent nuclear deterrent. There can be little doubt that the

question over the control of these weapons raises fears for this continued independence. If they were indeed British weapons under complete British control it could well be a very different matter. It is this question of independence that perhaps helps to explain comparable lack of coverage of the new Trident missile system that is being built. It has neither been so well publicised nor has there been such a public outcry against Trident. Despite this the five polls between September 1980 and January 1983 showed a majority opposed to Trident. But from this last date up to September 1983 public opinion has switched to support for Trident - in all three polls pro-Trident opinion was between 4% and 7% more than the percentage opposing Trident:

FIGURE: 1.23

The British Government intends to acquire an American Trident nuclear weapons system. Do you approve or disapprove of this?*

	pro- Trident	anti- Trident	don't know	
September 1980	44	47	9	
November 1980	37	53	10	
April 1981	32	53	15	
October 1982	32	56	12	
January 1983	25	56	19	
May 1983	44	40	16	(NOP)
June 1983	37	31	32	
September 1983	47	40	13	(NOP)

*Question formation varied

Gallup

Up to January 1983 opinion towards Trident paralleled public opinion towards Cruise missiles, but whereas Cruise opposition picked up again in September 1983 no similar increase in Trident opposition was evident.

Although public opinion may be opposed to the siting of American Cruise missiles on British soil this does not mean to say that they are against the presence of American bases in Britain, but, as with Cruise, they are more favourably disposed towards them if the missiles based here are under British control. In December 1957 when the question of American bases for atomic bombs was first raised, 55% of the population were opposed to the idea. If it was a question of these sites being under American control opposition was 63% against US bases, but if they were under British control 41% approved of them. When the Cruise missile issue was first raised in 1982 public objection to these American missiles was also expressed towards US bases as a whole, 46% said Britain should allow existing US bases to remain here, 44% that we should not. But since then the general public have seen Cruise missile bases and US bases per se as separate issues - whilst opposing the former there has been general tolerance towards the latter. Although by April 1984 polls indicated that opinions may have been moving towards a less favourable stance towards US bases as a whole:

FIGURE: 1.24

"Do you think Britain should/should not allow existing American nuclear bases in Britain to remain here?"

	should	should not	don't know	
October 1982	46	44	10	
February 1983	55	36	9	
May 1983	57	33	10	(MORI)
June 1983	50	39	10	(NOP)
November 1983	58	34	8	
April 1984	49	43	8	

Gallup

Ambiguity in public opinion, as expressed by the polls, must partly be due to the nature of the polls which ask isolated questions on an issue like Cruise but fail

to probe the wider ramifications of that issue. Comparing polls asked at different times accentuates this ambiguity. To illustrate this we may note that in September 1980 respondents for a Panorama poll were asked "In your opinion will Cruise missiles, based in Britain, make it more or less likely that we will be attacked in a future war?" 54% answered "more likely", 36% "less likely". Considering this and the fact that majority opinion is against Cruise, the following question, asked in November 1981, makes public opinion on the matter very ambiguous:

FIGURE: 1.25

In your opinion, which represents the greater threat to the security of Britain?"

The presence of Soviet missiles in Eastern Europe	43%
The proposed installation of American missiles in Western Europe	29%
Don't know	28%

Gallup

The spectre of the Soviet Union appears to have had an effect, and US weapons were almost welcomed in this poll when compared to the threat of Soviet weaponry.

1.14 ATTITUDES TOWARDS THE SOVIET UNION

Up to the end of the Second World War attitudes towards the Soviet Union were very friendly. In March 1939 a Gallup poll showed that 84% of the public said they would like to see Britain and Soviet Russia being more friendly towards each other. A year before the end of the war optimism was still quite high regarding the possibility of co-operation after the war, 51% thought that Great Britain, Russia and the US would work together

after the war, 23% replied this was not possible. The comparatively high percentage of "don't know" - (26%) indicated a fair element of uncertainty. This circumspection was explained in a poll two years later, September 1946, in which 61% said that the friendship between the US, Britain and Russia that had existed during the war had disappeared. The main reasons for this, respondents believed, were mistrust, Russian unwillingness to co-operate, and the fact that the nations involved had very little in common. Attitudes towards the Soviet Union were changing, the spirit of friendship and co-operation was fading fast. Soviet foreign policy was seen to be not so much orientated towards its own security but "imperialist expansion/aggression". This can be seen in early polls such as:

FIGURE: 1:26

"Some people say that Russian foreign policy is concerned with making certain of their own security, others say it is imperialist expansion/aggression."*

	security	aggression	don't know
April 1946	42	26	32
January 1951*	21	50	29
May 1952*	22	48	30

Gallup

Public opinion towards the Soviet Union throughout the 1950's can be expressed as "hopeful but suspicious". During the 1960's public opinion was optimistic about reaching "a peaceful settlement with Russia"; December 1961 and 1962 showed 57% believing in this possibility, in April 1965 62% were of this opinion. And majority opinion believed that it was possible for Britain and the Soviet Union to "co-operate closely". By October 1963 67% of respondents thought they could.

Despite overwhelming public support for top-level talks with the Soviet Union during the 1960's optimism for a successful outcome of these talks began to wane, and during the 1970's and into the 1980's the public were expressing growing suspicion towards the Soviet Union's friendly advances.

Perhaps this growing suspicion in British attitudes towards Soviet intentions was because they felt too distant from the Soviets to understand and evaluate the nature of their friendly advances. In January 1964 an overwhelming 76% were in favour of seeking a closer relationship with Russia and between 1977 and 1981 there has been a gradual increase in the percentage of the public believing that Britain's relationship with Russia is "not close enough":

FIGURE: 1:27

"Do you think Britain's relationship with Russia is - ?"

	too close	not close enough	about right	don't know
March 1967	8	37	41	14
June 1977	13	25	40	22
July 1978	15	26	41	19
January 1979	12	27	43	18
July 1979	9	34	45	13
1981	14	34	38	13

Gallup

The highest percentage of "not close enough" occurred in March 1967, following the visit of the Soviet Prime Minister, Mr. Kosygin, to London and the establishment of a "hot-line" between the Kremlin and 10 Downing Street. The effect of this fleeting contact between the two countries soon subsided. By June the following year polls indicated a 12% decrease in this response to the

question. Percentages rose slightly between 1977 and 1981, suggesting a general trend towards support for closer relations.

The polls that we have just surveyed suggest that the British public favours contact and negotiations with the Soviet Union but displays growing suspicion about Soviet intentions. Even if respondents had been asked why they felt suspicious we cannot be sure they would have been able to articulate the reason for this suspicion. In the absence of such probing, we are even less sure about the nature of this suspicion, although it may be linked to the information they are given about the Soviets' arms build-up and their supposed superiority in the field of nuclear weaponry.

1.1 5 WARSAW PACT VS NATO

Polls over the last few years suggest that a growing anxiety has developed in public opinion about the threat from the Soviet Union in the political, scientific and military fields. Respondents were asked "Do you think that Russia does or does not pose a threat to Britain and other European countries in the: political, economic, scientific, military field?" The percentage perceiving a threat in the political field has risen over this period from 40% in February 1968 to 73% in January 1980. The percentage perceiving a threat in the economic and scientific fields has also risen but greatest of all has been the perceived rise in the military threat from 49% in 1968 to 85% by January 1980. These anxieties extend to the public's perception of the Warsaw Pact's superiority, in both the conventional military and nuclear weapons field, over the NATO ^{Footnote 4} alliance:

FIGURE: 1.28

"Which side - NATO or Russia and the Warsaw Pact - has the strongest military force?"

	November 1979	January 1980	February 1983	December 1986
NATO	12	13	17	
Warsaw Pact	64	59	55	
both equal	3	6	7	
don't know	21	22	20	

"And which side is strongest in nuclear weapons - NATO or Russia and the Warsaw Pact?"

NATO	15	15	15	23
Warsaw Pact	54	50	54	42
both equal	6	8	9	10
don't know	25	26	21	25

Gallup

We are left with the impression that the British public are willing to have their government develop closer ties with the Soviet Union, but at the same time they are anxious about what they perceive as an increasing military threat from Russia and the Warsaw Pact. It must be pointed out however that when respondents were questioned on the matter in January 1980, 35% believed that the US posed a military threat to Britain and Europe. This is a high percentage bearing in mind the public's perception of a special relationship with the US and the close military ties that the two countries have had since the 1950's. The Soviet Union were considered a military threat by 85%. But military threat aside, when respondents were asked who do they see as the greatest threat, most likely to start a nuclear attack in Europe, the Americans came off rather less favourably in recent polls, compared with 1951 when a poll stated:

FIGURE: 1.29

Should a war come do you think it is likely to arise through America, Russia or some other way?

Russia	America	Both	Other	Don't know
58	21	6	6	9

Gallup

In 1985 the response was rather different:

FIGURE: 1.30

Which superpower do you believe poses the greater threat to peace in Europe - The United States or the Soviet Union?

	U.S.	Soviet Union	Both Equally	Don't know
October/November 1985	32	33	28	7

Gallup

But the situation was to get even worse. In 1986 the US were seen to be a greater threat to world peace!:

FIGURE: 1.31

In your view what country is the greater threat to world peace, America or Russia?

	America	Russia	Both Equally	Neither	Don't know
November 1986	37	33	22	4	4

Gallup

And on the question of starting a nuclear attack in Europe, similarly the U.S. are increasingly being seen as the more threatening:

FIGURE: 1.32

Which is more likely to start a nuclear attack in Europe, the U.S. or Russia?

	America	Russia	Don't know
January 1983	28	48	24
March 1987	45	24	31

Gallup

This may be symptomatic of the public's changing concept of Britain's role in the World and reappraisal of longstanding alignment with the US. We have seen that there is growing doubt about America's ability to deal wisely with world problems and more recently their apparent dragging of feet in response to Soviet test bans and arms proposals. This is coupled with the general feeling that rather than try to be a leading world power, Britain should become more like Sweden and Switzerland.

FIGURE: 1.33

"Which do you consider to be of the most importance: the British to be on good terms with the Americans, to be on good terms with the Russians, or to be neutral between both sides?"

	Americans	Russians	neutral	Don't know
November 1961	34	10	48	8
April 1984	24	5	65	6

Gallup

1.16 CONCLUSION

In this chapter I have considered many different aspects of public opinion related to foreign policy and the defence debate. But this plethora of information actually tells us very little about the public psyche. It is as if parts of different films have been spliced together - we can make sense of sections but as a whole we are left bewildered and confused by the contradictions and juxtapositions of these fragments. One factor however tends to recur, that is the apparent role of the Soviet Union in influencing public opinion. Despite isolated events such as the war in Vietnam, the Cuban missile crisis and the Falklands conflict, the polls suggest that the underlying fear that generates public support for nuclear weapons and entirely dominates the defence issue is directed at the Soviet Union. It is assumed by pollsters that the public perceives the Soviets as a threat and questions are orientated in this direction. But developments since Reykjavik have shown the Soviet Union in a better light and Reagan has been cast more in the role of a prevaricator slow to respond to the wide-ranging Gorbachchev proposals and intent on continuing the arms race into space with his 'Star Wars' project; the recent polls which suggest people believe the US is the greater threat to world peace are a strong indicator of how public opinion may be changing. Part of the problem with opinion polls is that they only indicate the most superficial of public opinions -and as we have seen these can fluctuate with surprising rapidity, swayed one minute by the visit of a Soviet official and at another by an event such as the K.A.L. airline tragedy. They do not even attempt to delve beneath the surface to find the underlying attitudes on which longer-term opinions are anchored. They are not necessarily intended to give us a cohesive picture of the public's opinions over time and can be compared more to short cartoon strips than a full length film, where characters become caricatures - exaggerated and distorted for the sake of simplicity.

But it becomes clear from this material that both long and short-wave patterns of opinion change are discernible. The short-wave fluctuations are a surface feature of the longer waves of opinion change and may be precipitated by such things as external events. The longer-term patterns of change reflect basic attitudes and change slowly over a much longer period of time. This long-wave pattern of change can be seen in the overall movement away from complete faith (bordering on the messianic) in nuclear weapons in 1956 to a more critical approach in the 1980's. A short-wave example is the sudden, but short-lived, surge of support for increased defence spending during the Falklands campaign.

More critical attitudes towards the US and a readiness to believe that Soviet arms proposals are genuine seem to be part of a growing trend rather than an isolated aberration, fuelled by public anxiety for national security together with a desire to reduce the fear associated with the threat of nuclear war.

Although future research will be concerned with deeper probing of opinions, examining the relationship between deeper-lying attitudes and the fluctuation of opinion for example, does the deadweight of opinions eventually bring about a shift in underlying attitudes or must a change in basic attitudes precede longer-term changes in public opinion. - The following chapter is an intermediate stage in which we examine how far existing research has progressed towards explaining opinion change.

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FOOTNOTES:

1. WYBROW R.J., (1984) of the Gallup polling agency presented a paper at the 39th Annual Conference AAPOR/WAPOR, Wisconsin, USA on 'British attitudes towards American World Role': May 1984. Since writing this chapter other studies have also been undertaken.
2. For an interesting analysis of European anxiety regarding US deployment in Europe coupled with a complementary anxiety of abandonment by the US See: J. SHARP, (1985) "Reshaping NATO Nuclear Policy". Bulletin of Atomic Scientists April . p.38-44.
3. B. RUSSETT and D. DELUCA reach a similar conclusion in their report 'Theater Nuclear Forces: Public Opinion in Western Europe'. Political Science Quarterly 98:2 : 179-196. They draw attention to: "... a new loss of confidence in the current political leadership of the US combined with a longstanding popular reluctance to rely as confidently as do their governments on nuclear deterrence."
4. For a brief cross-national summary of perceptions of Soviet superiority and related matters see C. DeBOER (1981) 'The Polls: Our Commitment to World War III'. Public Opinion Quarterly, 49, 126-134.

CHAPTER TWO

OPINION CHANGE

2.1 INTRODUCTION

We have now considered many of the pros and cons involved in eliciting the public's opinion; we have looked at the nature of this opinion over the last forty years or so and observed that it is not static but subject to both large and small-scale fluctuations. The objective of this second chapter is to look at a number of hypotheses that attempt to explain such metamorphoses of opinion, the factors which influence the large-scale movements of public opinion from one position to another over a period of years, and of equal importance, what causes the individuals that make up this composite to change their minds - or hold a particular opinion in the first place. Much of the research to be reviewed originated in the United States, since practically no research in this area has been carried out in Britain. However, this does not necessarily invalidate the relevance of these hypotheses.

We shall first consider a number of theories on opinion change, then we shall look at some models for the formation of opinion, touching upon the psychological aspects and mechanisms that are allegedly involved.

There are a number of theories that attempt to explain the large-scale changes in public opinion that occur over a number of years. Foremost amongst these are those that attribute changes to the transition of generations. Others more specifically see changes relating to political periods or as much wider fluctuations that occur in cyclical periods as an inherent process of any functioning system. None of these theories are mutually exclusive but rather

focus on different aspects of the same phenomena, and most agree that the net effect will be alternating periods of social change, for example, internationalism and isolationism or introversion and extroversion.

2.2 POLITICAL GENERATIONS

The analysis of belief systems in terms of political generations has provided a useful framework for analysis since the 1930's when Mannheim, Herberle and Newmann first brought it to the forefront of researchers' attention. They suggested that the prevailing political climate at the time of an individual's political socialization has a lasting influence on his/her subsequent values and actions.

One of the most interesting applications of this type of analysis was carried out in the early 'seventies by V. Jeffries¹ on a sample of American adults. The fact that Jeffries used this perspective to analyse attitudes towards the use of nuclear weapons in war makes this study of particular interest to us (other papers under review refer more broadly to war generally, foreign policy attitudes as a whole or military spending in particular). Jeffries defines three particular generations:

1. DISSENT - born between 1943 - 1949
2. COLD WAR - born between 1927 - 1942
3. WORLD WAR II - born before 1927.

He defines a political generation as individuals of approximately the same age who have experienced the same "politically relevant" events. From these events, Jeffries maintains, certain political attitudes and world views are developed which are particular to that generation. Experiences during the formative years when political consciousness is developing (generally considered

to be between puberty and age 30) are central in the development of social and political attitudes, providing a frame of reference within which later events are interpreted. Each political generation, in Jeffries' analysis, is based on the general climates of opinion, major social issues and historical events pertaining to war.

Jeffries' research supported his original hypothesis that the "dissent" generation would reject the use of nuclear weapons to a greater extent than the other generations - due to the climate of dissent and social protest prevalent during the 'sixties when this generation was reaching political maturity. This was a time of anti-war protests aimed at the unpopular war in Vietnam and it was a generation that had grown up with the prospect of nuclear war as a possibility. The World War II generation, on the other hand, had developed attitudes towards war before nuclear weapons appeared on the scene, before the prospect of mass annihilation had become a possibility. They had experienced the Second World War as adults, their attitude towards war "was one of total dedication to victory and bringing the war to as speedy a conclusion as possible". This generation proved in Jeffries' research to be the most accepting of nuclear war. The third group, the "Cold War" generation, as predicted, proved to lie between the "dissent" and "World War II" generations in their attitude towards nuclear weapons. Respondents in this group were aged between 28 and 43 at the time of the study. They had, for the most part, grown up during a period of extreme tension between the U.S. and the Soviet Union after 1945. They were loyal to their country and vigilant against communism and they found nuclear weapons more acceptable than did those of the "dissent" generation, but to a lesser degree than did those who were politicized during the Second World War. It must be noted that this data was drawn from a small sample (477) in a predominantly white area of Los Angeles and may not as a

result be representative of the U.S. as a whole.^{Footnote 1} However, an additional perspective was added to these findings. Union status and other variables were introduced into the analysis. Blue-collar workers, it was discovered, were more accepting of nuclear weapons than white-collar workers in all three generational groups but above all in the "dissent" generation. Within all groups 'fear of communism' and 'patriotism' produced changes in the levels of acceptance or rejection of nuclear war. The results of these additional variables underline the necessity of taking other groups with which individuals are associated - in addition to their generational group - into account. These and other perspectives are discussed below.

A further complication to the generational analysis is introduced when we consider the relationship between attitudes changing as a result of generational experience and as a result of the ageing process. Jeffries acknowledges this problem in his paper but points to an increasing trend of less warlike attitudes in youth: the 'Dissent' cohort he expects will be "more likely than are the members of the generation of World War II to reject war when they reach the present age of this older generation", due to "three distinct periods in which war has been socially defined in an increasingly negative manner". This suggests, as Lipset and Ladd³ point out, that the two are not mutually exclusive:

There could be both persistence of a distinctive generational orientation and a moderation of views with ageing, for one has to take into account the historical shift of political climate in a society.

Lipset and Ladd, concentrating on college generations between 1930 and 1960, were in fact interpreting a similar period of time to that studied by Jeffries. The radicalism and activist politics of the late sixties (Jeffries' 'dissent' generation), they predicted, would not be an enduring characteristic of that particular generation of students. Writing, you must remember, in 1971, they stated that:

it is likely that as a cohort those who experienced the radical activist campus policies of the late 1960's will not continue in the distinctive frame of mind which they now show.

Lipset and Ladd were drawing historical parallels with the college generation of the 1930's to make this prediction, acknowledging at the same time that, for both social and psychological reasons, as individuals grow older they tend to move from political extremes to a more "moderate" centrist position. Despite this maturational drift towards conformity they emphasise that this is a relative shift. Although each college generation may go through such a process, the authors of this study maintain that successive generations will in fact start off at a more liberal position than the previous one. The "historical slope" is a linear, age-related progression towards a more liberal ("less-warlike" in Jeffries' terms) standpoint.Footnote 2

Further research, by N. Cutler,⁴ attempts to come to grips with this relationship between generational and ageing processes. This is a longitudinal approach which allows for the study of generational trends apart from the influence of the ageing process by means of a cohort analysis. It tests out hypotheses of Almond⁵ and agrees that the historically most recent cohorts are "not only more aware of discrete crisis, but attribute greater salience to problems of foreign policy in general, than do historically prior cohorts". In accord with the earlier papers we reviewed, Cutler's research suggests also that persons socialized during the wars were more likely to advocate war than the more recent cohorts, further emphasising the role of early socialization in the formation of attitudes. It concludes that this does not mean to imply that once formed attitudes never change but:

the early imprinting of psychological and attitudinal patterns can have a profound effect upon the initial frame of reference of the attitudes, and thus upon the scope of maturational change.⁶

TABLE 1

PARADIGMS IN COMPARISON

	Continental 1870s, 1880s	Imperial 1890s-1910s	Versailles 1920s, 1930s	Pearl Harbour 1940s-1960s	Vietnam 1970s-?
General view of foreign areas	"Don't matter"	"Matters"	"Don't matter"	"Matters"	"Don't matter"
View of Europe	Indifference (Anglophobia)	Imitation (Anglophilia)	Irritation	Salvation	Irritation
Losers		Anti-imperialists	Wilsonian inter- nationalists	Isolationists	Globalists
Troops overseas	Almost none	Caribbean, China, Phillipines, Russia, West Europe, Mexico	Few in Caribbean, Phillipines	Europe, Asia, Latin America, Africa	Decreasing
Congress	Obstructive	Cooperative	Obstructive	Cooperative	Obstructive
Funds for overseas	None	War loans	Begrudging of war debts, anticancellat- ionists, Johnson Act	Marshall Plan, Point Four, AID, arms-sales credits	Begrudging of aid, balance of payments force cutback
Commitments	None	Open Door, Caribbean protectorates, Associated Power in World War I, Phillipine defense	Continued Open Door, reduction of Caribbean protectorates	UN, NATO, SEATO, (CENTO), Congressional resolutions on Formosa, Middle East, Cuba, Berlin, Vietnam	Senate res. 85, War Bill, attempt to repeal resolutions

From: Roskin, M, "Changes in Public Support for US Military Spending" (1974)

2.3 SHIFTING GENERATIONAL PARADIGMS

Roskin's⁷ interpretation of this generational analysis is slightly different. He suggests that successive generations continually react against the "catastrophe" brought about by the previous generation's attitude towards foreign policy. He defines two generational paradigms, one is interventionist (the "Pearl Harbour" paradigm), the other non-interventionist which, in recent history, was brought about by the excesses of the interventionist generation in Vietnam. This he terms the "Vietnam Paradigm". These shifts in attitude Roskin sees occurring at approximately generational intervals because:

- .it takes that long for the bearers of one orientation, formed by the dramatic experiences of their young adulthood, to come to power and eventually misapply the lessons of their youth.

This continual action and reaction between the two defence policy paradigms can be traced further back than the "Pearl Harbour" period. This in itself, Roskin maintains, was a reaction to the deficiencies of inter-war isolationism that preceded it. Table 1 outlines alternating periods of interventionism and non-interventionism and their accompanying foreign policy approaches.

This use of the term "paradigm," taken from Kuhn⁸, provides us with an excellent dynamic model with which to interpret cycles of attitude change. The mechanics of "paradigm shift"- an integral part of Kuhn's thesis provides Roskin with an ideal model for interpreting the dynamics of his generation shifts. An existing paradigm comes into question when its basic assumptions and accepted laws are no longer adequate to explain and encompass present events. The boundaries of the old paradigm are stretched until eventually a new paradigm emerges. The new paradigm succeeds because it "can solve the problems that have led the old one to a crisis".⁹ In Roskin's analysis a generation centres upon either an interventionist or non-interventionist paradigm after some foreign

policy catastrophe brought about by the application of the opposite paradigm. At the point of changeover, according to Kuhn, a "paradigm clash" is encountered, eventually:

The new paradigm wins because it gains more younger advocates, while the advocates of the old paradigm retire and die off. The new paradigm triumphs not so much on an intellectual basis as on an actuarial one.

2.4 THE "PRINCIPLE OF IMMINENT CHANGE"

This analysis of alternating attitudes to foreign policy using the dynamics of Kuhn's "paradigms" is similar to a model suggested by Klingberg¹⁰ some twenty years earlier. He did not have the benefit of Kuhn's perspicuity but drew instead upon Sorokin's¹¹ "principle of imminent change". Klingberg introduces the terms "introversion" and "extroversion" to describe what he sees as the two alternating moods in American foreign policy. Periods of extroversion are, he argues, characterised by a nation's:¹²

willingness to bring its influence to bear upon other nations, to exert positive pressure (economic, diplomatic, or military) outside its borders.

Periods of "introversion" were marked by America's unwillingness to exert much positive pressure upon other nations. We can see here obvious parallels with Roskin's "interventionist" and "non-interventionist", but Klingberg maintains that these alterations in "mood" are discernible throughout America's history and have occurred at particularly regular intervals since 1770. A recognition of cyclical fluctuations is not new, G. Almond in his celebrated study of American public opinion in 1950 had recognised the "instability of mass moods, the cyclical fluctuations which stand in the way of political stability."¹³ What we are concerned with here are the reasons behind these patterns of change. Drawing upon Sorokin's analysis of changing social systems Klingberg attributes this historical alteration of attitudes to foreign policy to change "as an inherent

process of a functioning system". In a field where there are two major possibilities (introversion/extroversion, interventionism/non-interventionism) opposition will arise between the two opposing standpoints:

As one group continues in power, more and more of the independents will turn from it, so that at a certain time a new majority is brought into being, and the policy shifts.¹⁴

Klingberg, however, does not rule out external factors influencing this process of change but emphasises their major function may merely be to accelerate or retard an attitude or trend, and provide the opportunity in which a new mood can be displayed or "actually to precipitate in action a pent-up desire for change". Periods of transition, analogous to Kuhn's "paradigm clash" between one system and the next, are termed periods of transition in Sorokin's analysis of changing systems. This stage of transition or "paradigm clash" becomes a useful framework in which to interpret what Rosenau and Holsti¹⁵ see as a breakdown of consensus and the emergence of conflicting belief systems.

2.5 CONFLICTING BELIEF SYSTEMS

Rosenau and Holsti's research indicates that profound changes in attitudes have taken place both within and towards US policy in recent years. They refer to

breakdowns [that] have occurred in the underlying value consensus on which unity had rested¹⁶

and state that:

the leadership consensus on which American political culture has long rested is conceived to have broken down and to have been replaced by several, largely mutually exclusive and internally consistent belief systems.¹⁷

They appear to be describing classic symptoms of Sorokin's period of social transition from one system, or paradigm, to another in which multiple crises reign where once consensus prevailed. These multiple crises, Rosenau and Holsti suggest may require the American people to:

have a broad and solidly based consensus that, in effect, is founded on a new social contract, redefined priorities, a new life-based ethic and/or other dynamic value changes,

or in Kuhn's terms a new paradigm that, as we have already observed, can solve the problems that have led the old one to a crisis.

What is more, Rosenau and Holsti outline three distinct belief systems that are almost directly analogous to Sorokin's three stages of "ideational", "ideological" and "sensate" eras, which they term "Cold War Internationalist", "Post-Cold War Internationalists" and "Neo-isolationists". Research on some 2,282 respondents in their leadership sample led the researchers to conclude that some "implicit and complex connections" existed between these foreign policy belief systems and a further set of three belief systems that they had defined to encompass domestic, as opposed to foreign policy, belief systems. In comparing these two belief systems -indeed in actually differentiating between the two -Rosenau and Holsti draw attention to the fact that complex and stratified belief systems are at work here. This is a point that two further analysts, Maggiotto and Wittkopf pursue¹⁸ in order to characterise the new attitudinal structure which, it is generally agreed, has emerged in the US since the Vietnam era.

2.6 THE SEARCH FOR "STRUCTURAL CONSISTENCY"

Although we concluded at the end of the first chapter that public opinion has a tendency to be erratic and often contradictory, we have to consider whether this is due to lack of a coherent belief system or to the inherent nature of a particular issue itself and the fragmentary way in which the public is approached as regards related foreign policy issues. "Belief system" is defined as "a configuration of ideas and attitudes in which elements are bound together by some form of constraint or functional interdependence".¹⁹ Does any sort of consistency exist in the structure of public attitudes towards foreign policy

which allows an analyst to predict attitudes on one issue from knowledge of attitudes to another? This is an important question if we are to come to grips with understanding public opinion. Converse's²⁰ pioneering work emphasised a unidimensional Liberal-Conservative continuum analogous to the internationalist-isolationist axis we have already become acquainted with.^{Footnote 3} However, it is generally believed among American analysts that this unidimensional model is inadequate to describe attitude structures that have developed within the American public since Vietnam. Although analysts agree that:

public attitudes towards international affairs cannot be described as responses grounded in several dimensions rather than linked to a single internationalism continuum²¹.

Debate revolves around just how many dimensions are necessary to analyse these attitude structures. Maggiotto and Wittkopf²² attempt to reconcile the various models suggested by, for example, Hughes,²³ who adheres to the internationalist-isolationist framework, but distinguishes between military and non-military^{Footnote 4} policy, and Bardes and Oldendick (op. cit.) also outline five separate factors including the militarist dimension. Maggiotto and Wittkopf distinguish between "hard" and "easy" issues. Easy issues are those that elicit "gut responses" rather than "reasoned analysis", tending to be symbolic rather than technical, dealing with ends rather than means and which have been long familiar in political thinking. Hard issues "are often new and complexly related to long-standing concerns". Their research was carried out on a national sample of 1813 respondents with 200 questions specifically designed to elicit responses to the underlying dimensions of foreign policy attitudes. Maggiotto and Wittkopf's research helps us to understand what would otherwise be contradictory responses.

Easy issues we can interpret as forming the basis of traditional, long-standing, and probably implicit attitudes, while hard issues represent new aspects expressed in opinions that are not yet fully incorporated into the individual's belief system. Using this easy-hard analysis two main dimensions become evident in this research:

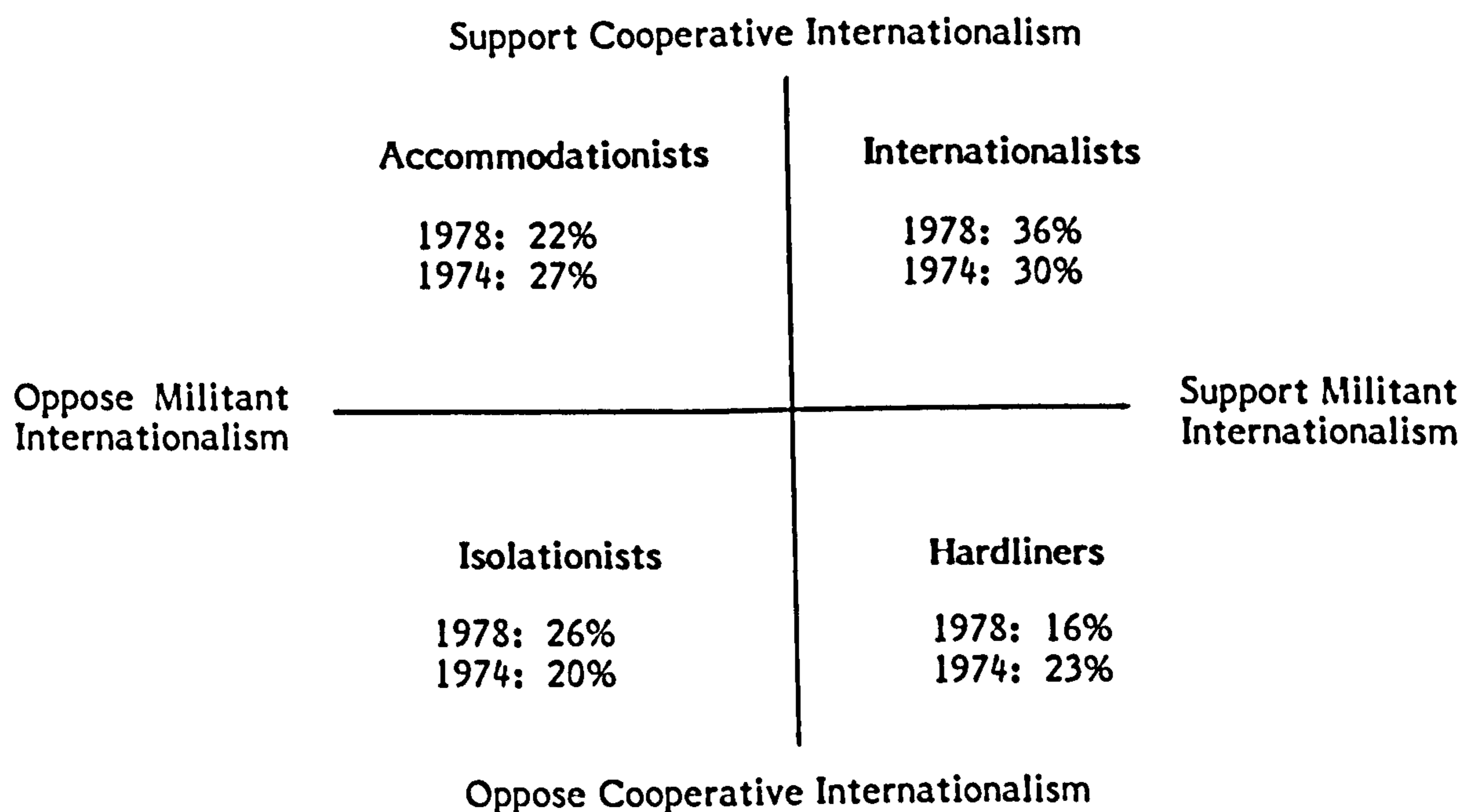
1. cooperative internationalism
2. militant internationalism.

Four additional dimensions reflect attitudes regarding

3. satisfaction with U.S. policymaking institutions
4. the importance of U.S. relations with other nations
5. foreign aid as an instrument of policy and
6. a need to resuscitate U.S. policy and policy-making institutions.

From this analysis Maggiotto and Wittkopf define four attitude-types represented in Figure 2.1.

FIGURE 2.1



Percentages refer to the results of two separate surveys, as dated.
From: Maggiotto and Wittkopf (1984).

These distinct types of opinion holders are outlined as holding the following beliefs:

Internationalists - support the broad involvement characteristic of the pre-Vietnam consensus, including cooperative as well as more strident American approaches to the external world.

Isolationists - are at the other end of the continuum, recoiling from any kind of involvement.

Accommodationists - embrace a strategy of selective internationalism that emphasises cooperation among nations and opposition to military involvement and other forms of interventionism.

Hardliners - move in the opposite direction. They share a sense of America's global responsibility, and they are internationalist on military matters. But perhaps because of their fear of communism they are sceptical of cooperating with the perceived "enemy". This group favours the "go it alone" posture, a position distinct from the isolationists as well as the internationalists and accommodationists.

In conclusion, these two researchers believe that structural consistency does exist across a "reasonably broad" spectrum of policy issues within the American public.

A caveat to this type of research must be added in the form of a study carried out by Marcus, Tabb and Sullivan²⁵, who state that:

without knowing the general principles an individual uses in forming his opinions, we cannot classify any one individual on the basis of his response to specific political issues as demonstrating high or low levels of structure -much less aggregate across individuals.²⁶

Although most political elites in the U.S. may use a recognisable "liberal-conservative" dimension to order their beliefs and behaviour these researchers felt that there was no evidence to suggest that the mass public used such an ideological framework. Moreover they point out that different specific issues may evoke different ideological frameworks from the same individual. Marcus et.al. employ a model that distinguishes content, i.e. the cognitive and normative framework an individual uses to structure political experience, and structure, which focuses on the organisation of belief systems, in a way that allows the respondent rather than the researcher to structure the test material by means of pair comparisons. Fifteen concepts were randomly paired (i.e. 105 pairs altogether). These ranged from economic opportunity, law, violence, to voting, innocent until proven guilty. It is difficult to do justice to the researcher's innovative research here and in any case this technique is not suitable for large-scale samples on account of time and expense further, criticisms have been made as regards its appropriateness to depth analysis.²⁷ However this paper emphasises the necessity for observing that the criteria by which a person makes a decision, or forms an opinion, may vary from individual to individual and even within an individual between different policies. This question of structuring of

belief systems in relation to the consistency of an individual's beliefs is further exemplified by Barton and Parsons²⁸ and applied to a comparison of elite and mass samples.

2.7 CONSISTENCY OF BELIEF SYSTEMS: "MASS" AND "ELITE"

Researchers in the area of public attitudes and opinions have observed a distinction between the responses of 'elites', i.e. policy-makers, decision-makers and specialists, and the rest of the public.²⁹ Elites are considered to have beliefs and policy attitudes which are more closely related to one another, forming a consistent framework of ideas and theories about the world in general. The general public are seen to have a less structured belief system because "they have not had the time, training, or intellectual ability to examine the interrelations between their beliefs and resolve inconsistencies". Converse, introduced the term "constraint" to describe the ideological framework in which an individual's ideas and attitudes are arranged, and this enables us to extrapolate from one area of opinion to another. For example it is assumed that if an individual is against increases in social security, he/she is probably conservative (with a small 'c') and also opposed to the nationalization of private industry. As far as this idea of constraint affects the dynamics of attitude change, Converse³⁰ notes that:

a change in the perceived status (truth, desirability, and so forth) of one idea-element would psychologically require, from the point of view of the actor, some compensating change(s) in the status of idea-elements elsewhere in the configuration.

Converse is practically outlining Festinger's³¹ theory of "cognitive dissonance" and indeed this would be a useful framework to understand the psychological processes involved when, for example, an individual discovers that a certain "idea-element" is no longer consistent with his/her belief system. Two choices

are open: either he/she must change their attitude to the idea-element so that it is no longer dissonant with the belief system or change the belief system so that it encompasses the new element.³² Barton and Parsons (op. cit.) are more explicit and say that:

once a large number of people accept new combinations of beliefs, the factor structure will change, and what had been a single dimension may break into two dimensions. Combinations previously defined as "inconsistent" will no longer be so by the standards of the society, because they will be defined as belonging to separate dimensions which do not have to be related.

Barton and Parsons, however, take a slightly different approach. They look at the question of constraint on two levels: first they focus on the individual as a unit that is characterized as consistent or inconsistent (in the structure of their belief system) and secondly on the level of consensus between individuals who make up a group. Using this dual approach they supported Converse's original findings that elite belief systems are considerably more structured than non-elites both as individuals and as a group. This, Barton and Parsons agree with Converse, is explained by greater exposure to and participation in the issues involved. Particularly important, Converse feels, are the levels of information available to the elite. As one moves from the elite sources of belief systems downwards:

constraint declines across the universe of idea-elements, and the range of relevant belief systems becomes narrower and narrower.

Ideological constraints in belief systems thus decline with decreasing political information. They may be present among the elites at the higher levels of information and the sublevels but disappear rapidly as one moves downwards. As a result strata of classification emerges: 1, the unpoliticized, 2, the party-liner, 3, the sophisticate (Barton & Parsons) or in Converse's definition the "ideologue by proxy", the "near-ideologue" and "ideologue".Footnote 5

The unpoliticized or marginally politicized represents the bulk of the electorate, they may respond in a quasi-random fashion to many questions in a survey leading to "high inconsistency" and changing responses over time.

The party-liner however "knows all the 'proper' responses as defined by his political group" but shows no evidence of having developed his own personal, developed belief system. A high degree of attitude structure may be suggested by the consistency of the individual's responses but this is due to social or political group conformity rather than a developed belief system. These people

Converse defines as having:

a clear image of politics as an arena of group interests and provided that they have been properly advised on where their group interests lie, they are relatively likely to follow that advice. Unless an issue directly concerns this grouping in an obviously rewarding or punishing way, however, they lack the contextual grasp of the system to recognise how they should respond to it without being told by elites who hold their confidence. Furthermore, their interest is not sufficiently strong that they pay much attention to such communications. If a communication gets through and they absorb it, they are most willing to behave "ideologically" in ways that will follow the interests of their group. If they fail to receive such communication, which is most unusual, knowledge of their group membership may be of little help in predicting their responses.³³

The sophisticate, on the other hand "follows political events, thinks about politics, and relates ideas to each other in a highly developed belief system".³⁴

The sophisticate's belief system is based on an independently constructed value system against which political objects and their shifting policy significance are judged over time; they are not dictated to by the blind necessity for party conformity. It is this group that is likely to introduce new "idea-elements" and bring about shifts in group consensus.Footnote 6

2.8 KNOWLEDGE AND MEDIA INFLUENCE

There can be little doubt that elite and mass opinions do differ; for recent evidence for this differentiation see, for example, Schneider³⁵ and Reilly.³⁶ But there is an interesting dimension to the claim that it is increased knowledge due to higher levels of information and involvement that characterizes elite opinion formation. Gamson and Modigliani's³⁷ research suggests that increased knowledge leads to a greater attachment to mainstream ideology. The politically educated, they claim, are not better analysts of complex situations, but are simply more aware of what official policy is. Increased education and knowledge, they feel, has a twofold effect:

there is a strain towards attitudinal consistency that increases with knowledge; this produces a higher relationship between belief system and policy among the more knowledgeable... At the same time, there is greater attachment to society and susceptibility to social influence a force that produces support for official government policies.³⁸

Pilot studies by Putney and Middleton³⁹ during the 'sixties suggested more precisely that it is not the levels of information per se but the type of information that is available that influences attitudes and forms opinion. The students that they studied were found to be more accepting of war the more interested and knowledgeable they were. This acceptance or rejection of war, they felt, is influenced not by information (in an abstract sense) but by the specific data and viewpoints which the interested find readily available:

information gathered from mass media seems to contribute to acceptance of war, but when the subjects are presented with data and viewpoints neglected by the mass media, increased information may have the opposite effect.⁴⁰

Research by Hamilton⁴¹ further emphasises this relationship; tough policy options, he found, were more frequent among: "the highly educated, high status occupations, those with high incomes, young persons and those paying much attention to newspapers and magazines". Although it is evident the media play an

important role in processing and disseminating information it is by no means clearly established what extent and duration of influence the media has on public opinions and attitudes. Footnote 7 Erbring⁴² et.al. see the media's role as shaping our notion of the world beyond that which we can directly experience and the world of politics is almost entirely beyond the reach of our direct experience. Further research has drawn attention to the close relationship between the treatment of events on national network television news and the public's opinion on military spending (Russett and Deluca).⁴³ Erbring et al (op. cit.) however claim that secondary diffusion of news items through "networks of informal social communication" (i.e. chatting with friends, neighbours etc.) naturally override the effect of earlier media influence.

2.9 SOCIAL POSITION

Those sections of the public most likely to attend to media coverage of foreign affairs, international events and defence issues generally, are professional people, those of high income and education, thus reinforcing the link between media influence and mainstream ideology. Russett and Deluca (op. cit.) emphasise this relationship between socio-economic status and defence attitudes. At the peak of anti-military feeling during the Vietnam War, they note, anti-military attitudes were concentrated "disproportionately" among just these sections of the public. During the '50's and '60's when military spending was popular, those favouring cuts were drawn mostly from low-income, low-status groups those less attentive to the media. Galtung's⁴⁴ model of social position offers a useful explanation for the dynamics of public opinion moving from the periphery of society to the centre and decision-making nucleus. Information emanates from the centre "since the centre possesses access to the media of communication ... and besides has something to communicate". At the periphery interest in, and information on, policy issues is minimal; this section of society takes no part in policy-making and due to the lack

of ideological basis and "constraint" in its belief-system is liable to rapid shifts of opinion. In a corresponding fashion:

attitudes will be more stable in content at the centre than at the periphery, for in the former they will be protected by the anchoring influence of ideologies, and the pressure from organisations built around ideologies.⁴⁵

There has been some criticism of this model and its applicability to societies other than that represented by Norwegian public opinion in Galtung's study (see Simon⁴⁶). Further studies on American publics, however, agree at least on its partial applicability to a wider public.⁴⁷

2.10 AUTHORITARIANISM AND ATTITUDE STRUCTURES

We have noted in the preceding pages strong evidence indicating that a differentiation in attitudes exists between the 'elite' and the 'masses'. But can this differentiation be characterized more specifically? Lipset⁴⁸ would have us believe that low status and low education individuals such as we may find at Galtung's "periphery" have a tendency to favour extremist and intolerant forms of political behaviour with a predisposition towards authoritarianism. This, he claims, is a result of the lower-class person's social situation, characterized by: "low education, low participation in political organizations or in voluntary organizations of any type, little reading, isolated occupations, economic insecurity and authoritarian family patterns". Hamilton⁴⁹, taking Lipset's findings point by point found little to support these claims. Contrary to Lipset's implications, Hamilton found, for example, that higher levels of education did not appear to create tolerant attitudes but rather people who are tolerant are more likely to seek education. What is more, Hamilton, as we have already noted, suggests that the more educated, higher-status individuals are more likely to take a belligerent stand on foreign policy; his study attests:

to the presence of something which at least with respect to this kind of foreign affairs concern, we might label as 'upper middle class authoritarianism'.⁵⁰

The assumption, in both cases here, is that political ideology is only partly a result of indoctrination or group conformity and that the attachment to various views on political, foreign policy matters are, as Dicks⁵¹ puts it: "part of a Gestalt in which their personality structure is more or less deeply involved".

Since Adorno et al⁵² laid down the basis for interpreting ideology on an authoritarian-democratic continuum a great deal of research has focused on this interpretation. (Greenstein⁵³ states that a selective review of the topic contained 260 biographical references.) What we need to know is: can types of individuals be distinguished whose personal make-up disposes them to act in a "democratic" or "authoritarian" manner? Greenstein draws our attention to a number of traits that are variously conceptualized as authoritarian which have particular relevance to attitudes in the political arena. These can be briefly summarized: domination of subordinates; deference to superiors; sensitivity to power relationships; need to perceive the world in a highly structured fashion; excessive use of stereotypes; and adherence to whatever values are conventional in one's setting. Greenstein further outlines personality traits attributable to the authoritarian personality at a somewhat deeper level. The authoritarian is described as being superstitious; preoccupied with virility, "tending towards exaggerated assertion of strength and toughness"; views human nature pessimistically and is cynical about the motives of others; lacks to some extent the capacity for introspection and the ability to acknowledge one's own feelings and fantasies. Research by Eckhardt and Newcombe⁵⁴, which incorporated a review of literature related to militarism^{Footnote 8} and other social attitudes, found a close correlation between militarism and authoritarianism and conservatism. We enter even further into the

psychological domain with their claim that authoritarianism and its attendant dogmatism have been associated with "arbitrarily and unduly restrictive childhood training experiences".^{Footnote 9} Further:

Because of the close relation between authoritarianism, dogmatism, and militarism, it would be hypothesized that restrictive childhood training also contributes to the origin and development of militaristic attitudes.⁵⁵

But, insofar as childhood training is only part of a total culture, they generalise that militarism, and by association authoritarianism, are at least partly a function of a "hypocritically restrictive culture". This borders upon the vast and well-documented body of literature related to childhood socialization⁵⁶ which we are not directly concerned with here. Levinson,⁵⁷ however, further emphasises this link between autocratic child-rearing and authoritarianism and stresses the necessity of creating the polar opposite of this complex, associated with positive mental health which constitutes a more rational, realistic, self-actualizing and socially constructive guide to human behaviour where: "our underlying equalitarian potentials can become ideologically and institutionally kinetic".

Sommers⁵⁸ goes further and suggests that the climate of distrust and suspicion existing between East and West engenders fear and insecurity in those who grew up in a society that is fearful and insecure. It has also been suggested that international attitudes reflect more basic personality dispositions.^{59,60} International and foreign policy issues constitute only a peripheral concern for most people and because of the attendant lack of information and interest they also lack an ideological framework with which to judge international relations. As a result their attitudes at an international level are likely:

to represent generalizations to a relatively little known domain of ideologies found serviceable in more familiar realms. Thus, there may be widespread tendencies to personalize nations and believe that they ought to relate to one another in the same way that people are supposed to.⁶¹

Can we extrapolate, therefore, and suppose that an individual's own psychological disposition (be it authoritarian, democratic or whatever) is going to influence to a great extent attitudes to much wider-ranging issues than his/her own area of immediate interest and concern? More research at a deeper level than expressed opinion needs to be carried out before this connection can be firmly established.^{Footnote 10} However it is clear that many psychological factors do exist which render more difficult the peaceful solution to international problems in our nuclear age.

2.11 PSYCHOLOGICAL ASPECTS

The increasing involvement of psychologists and psychiatrists and their professional bodies^{Footnote 11} in the study of international affairs bears witness to the importance of understanding the psychological mechanisms employed in both attitude formation and decision-making.

Although by now we may appreciate many of the difficulties involved in eliciting the public's opinion (whether for example we can even be sure that the alleged opinion is indeed the true expression of that individual's feelings on the matter), when we come to consider the many psychological mechanisms that actually protect that individual from facing up to what may be the disturbing subject matter of the questions we may doubt even more the authenticity of response.

Nuclear weapons represent the ultimate image of absolute destructiveness; they threaten our civilization, our species and ourselves as individuals. Surveys have shown that the thought of nuclear war evokes:

prospects of being burned alive, of dying slowly, of being crippled without medical and social support, of mourning those we love, of starvation and misery, and, what is worst of all, of having to face mankind gone absurd and the collapse of everything one has worked for.⁶³

The anxiety aroused by these dreadful images may be unbearable so, for the individual to survive as a functioning organism, all kinds of psychic defence mechanisms are activated as protective reactions. These defences, Richards⁶⁴ points out, are not against any external threat but are defences against "threats stirring within the individual's internal world of unconscious phantasy and feeling".

Their purpose is to defend the individual from deep-down impulses and images of self-destruction and the attendant anxiety that may destabilize the individual's overall functioning.

Such defences include denial, one of the most basic human psychological reactions to danger. This applies to various degrees of non-perception, non-recognition, non-understanding, or non-acceptance of certain realities in order to cope with otherwise unacceptable intrapsychic conflict, feeling, or memories.⁶⁵ Thus, some individuals may disclaim any awareness of the destructive capacity of nuclear weapons, in spite of detailed media information on the subject. Others, while they may acknowledge the existence of the weapons do not admit to their enormous destructive capacity. At a third level individuals may be well aware of these weapons' destructive potential but fail to respond in a way appropriate to this awareness. "Here one may speak of the effect as being denied and, because of its separation from the associated thought contact, consider it an example of the psychological mechanism of isolation".⁶⁶ Related to denial are the processes of "psychic numbing" so well documented by Lifton in his study of Hiroshima survivors, and habituation which allow individuals to live in the shadow (or aftermath) of nuclear annihilation. Habituation results from the continual exposure to a repeated stimulus whereby it no longer becomes an element of consciousness.^{Footnote 12} Nuclear weapons have been with us a long time and it would be impossible to expect high levels of saliency to be maintained over the

decades: "most of the time", Frank⁶⁸ points out "they simply sink into the background. They are part of the ground rather than the figure, as psychologists say, and that makes it very difficult to keep them in mind". Projection assigns one's own aggressiveness to the opponent. Holms⁶⁹ draws upon a case study of an individual patient to illustrate this process both on an individual level and a national level. Projection, he says:

is intrinsic to the arms race, too. We have defensive deterrent, peace-keeping nuclear weapons, while they have aggressive, expansionist, first-strike bombs. By locating all the aggression in the enemy we avoid looking at the threat we pose to them.

Similarly each superpower sees in its opponent a projection of its own ambition, expansionism and desire for absolute superiority.

This terrifying vision of the enemy then fuels the race for more fearsome deterrents on each side. In this atmosphere of mutual projection it is impossible for each side to realistically assess the threat which the other poses.

Thus we become aware of stereotyping, both of one's self and of the adversary as a result of these perceptual distortions. White⁷⁰ sees this as a result of cognitive limitations; most people, he feels, appear to conceive political and military realities in very misty terms, therefore stereotyping is: "of importance for reducing the world to a sufficient level of simplicity that actions can be determined in response to relatively complex circumstances". However, he adds: that "the dangers of such cognitive limitations in a highly complex world are only too evident".⁷¹

Many of these psychological mechanisms are adaptive responses, activated when a particular danger is seen as unavoidable, to protect the individual from crippling anxiety. However, there is a danger that they become maladaptive when they contribute to "failure to face and cope with preventable threats such as that of a nuclear holocaust".⁷² The individual becomes immobilized, either through sheer

terror or through the immobilizing strategies of the psyche, and feels powerless to prevent what is then seen as inevitable disaster. Perhaps this sense of powerlessness lies in what White (op. cit.) sees as a projection of responsibility: too many people are too ready to relinquish responsibility for the course of affairs "and see the government or military personnel as being the only proper and capable decision-making agents in our society". People may criticize these representatives but continue to abdicate from responsibility themselves.

2.12 THE ARMAGEDDON COMPLEX

If people feel helpless, powerless to influence the course of events, it is likely that they will succumb to despair and accept the inevitability of that which they fear. Farber⁷³ suggests that in the minds of many men lurks the secret wish for war, a motivation that: "may be more deeply buried in the prediction that war is inevitable, with the true dynamics evident only in the curious jest of the prophet." He calls this the "Armageddon Complex", in which the unbearable tension and anxiety of a prolonged crisis leads to a "let's-get-it-over-with-now" attitude. Farber links this type of attitude with levels of frustration in one's personal life (see section above), but whatever the origin of these impulses (and it would be too limiting to restrict an analysis to Freudian dynamics) there is no doubt that they are evident today. Farber was writing in 1951, but the Falklands conflict in 1982 surely provides us with an example of this mentality. Hamilton (op. cit.) sees this as the orientation of "an anti-intellectual vigilante mentality, one tired of or suspicious of talk, an orientation which prefers direct action against the enemy." Putney and Middleton (op. cit.) further encountered this syndrome among students of the 'sixties. Some of the students, they observed, did not appear to be too concerned about avoiding war and believed that, as one student expressed it, "the only way to reduce the threat of war is to have a war!" And the Group for the Advancement of Psychiatry (GAP) report also acknowledged this mentality; when

under extreme stress almost any course of action seems better than none at all, hence the desire to "get it over with".

But these self-fulfilling prophecies of doom are not inevitable. Humphrey⁷⁴, in his memorable and much cited Bronowski lecture, emphasises the self-fulfilling capacity of hope. Our control, he says, lies as it always has done whenever it's been tried in the force of public argument and public anger.

2.13 CONCLUSION

This chapter sought to analyse public opinion, not at a mere statistical level, but at a cognitive and attitudinal level drawing upon deeper levels of research into attitude formation. We became aware of the many factors influencing an individual's attitudes and opinions and the underlying structure of belief systems which is the cohesive factor binding the various components together. These may indicate high or low levels of "constraint", depending, it seems, on the quantity and quality of information available to, and assimilated by, the individual. It is perhapsⁱⁿ the nature of opinion polls that questions, on any particular issue, are presented in a fragmentary disconnected fashion that does not allow the individual to think about the issue in a structured, co-ordinated fashion - or at the very least does not allow respondents to answer in a way that explains their response in terms of their particular belief system. An individual belief system can be likened to a film, it is a continuous imprint of attitudes and opinions that have been created over time from events and other influencing factors. To take a still, or even a sequence of frames out of the context of the total system is to reduce it to the level of the banal. Nevertheless not all films, or belief systems, are well structured, coherent and bear detailed analysis.

Whilst public opinion polls may provide a quantitatively acceptable sample of public opinion on any given issue, they are not in sufficient depth to be of any real value. And yet, while qualitative surveys may expose a depth of opinion (ie. a structured belief system) that is qualitatively of greater value to the researcher and/or policy maker, we have to ask how representative of the general public as a whole are these detailed opinions of a small sample of people? Especially given the many influencing factors that shape an individual's belief system.

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FOOTNOTES

1. Work by other researchers² indicates a wide regional differentiation of opinion towards foreign policy in the US along a North-South axis.
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 4. Compare with Modigliani A. "Hawks and Doves and Political Distrust".²⁴
 5. Converse actually outlines 5 levels of classification, the fourth he terms "Nature of the times", the fifth "No issue content" which perhaps more than "ideologue by proxy" is analogous to Barton & Parson's "unpoliticized". These comparisons can only of course be approximations.
 6. Procedural difficulties tend to arise when attempting to use this analysis to interpret data. Subjective values tend to impinge when it comes to categorizing "sophisticate" and party-line. See following chapter for elaboration of party-liner.
 7. SEE: PAARLBERG R. "Forgetting About the Unthinkable". Foreign Policy 10 : 132-140 (1973) for a comparison of periodical literature on nuclear issues with public awareness and attitudes to nuclear-related issues.
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- GOLDMAN D. Greenberg W, (1982) (Physicians for Social Responsibility) state: "It is time for the mental health profession to treat the escalatory nuclear arms race as our society's most urgent mental health problem". Preparing for Nuclear War: The Psychological Effects. American Journal of Orthopsychiatry 52:4, p 581.

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CHAPTER THREE

ATTITUDE CHANGE

3.1 INTRODUCTION

Up to now we have considered attitudes as if they were a phenomena of some mass mind, some 'general public' - the opinion polls indicate attitude change at a 'molar' level but what are the processes at the individual 'molecular level'?

It is important to understand attitudes at a more individual level because, as Allport says, as a rule:

science regards the individual as a mere bothersome accident. Psychology, too, ordinarily treats him as something to be brushed aside so the main business of accounting for the uniformity of events can get under way.

As a result we are presented with statistics about the 'general public'. Allport continues:

Though serving well a certain purpose, this portrait is not altogether satisfying to those who compare it with the living individual models from which it is drawn. It is unreal and esoteric, devoid of locus, self-consciousness and organic utility -all essential characteristics of the minds we know.

The concern of this chapter, then, is to investigate attitudes at the more fundamental, individual level. The 'general public' are not just sets of numbers and percentages but made up of living, feeling and reasoning sentient people with beliefs, opinions and attitudes influencing each and every behaviour. What function do attitudes fulfill at this fundamental level?

3.2 ATTITUDE ACQUISITION

One review of relevant literature in 1939¹ revealed twenty-three varying definitions of attitude - the last forty-five years can only have added to this diversity, but it is generally argued that attitudes are a:

more or less permanently enduring state of readiness of mental organisation which predisposes an individual to react in ^{2a} characteristic way to any object or situation with which it is related.

or similarly:

an inner mental organisation takes place which predisposes the person ³ to a certain type of activity towards objects, persons and situations.

They therefore serve the purpose of organising and categorising the vast amount of input we receive from the outside world. Rhine⁴ utilizes the concept-formation approach to attitude acquisition to explain this process. Attitudes, he argues, are concepts with an evaluative dimension thus justifying his use of this approach. A concept he states is "a mental principle through which an individual can classify a number of objects in his stimulus world." So, poodle, Irish wolfhound and chihuahua are all domesticated animals, and dog is the name given to this principle. We, therefore, have a concept of 'dog' but as yet no attitude towards 'dog' because there is no evaluative dimension. If we have had personal experience of a vicious dog or been given adverse information about dogs, then we may evaluate 'dog' as bad, thus acquiring an attitude towards it. Once these means of categorisation have been set in place then our reaction becomes a simple stimulus-response sequence, according to Rhine. Henceforth, whenever we see a dog we evaluate it as bad, whether it is the vicious alsatian we first encountered or the neighbour's labrador. Mediating processes perform the function of uniting different objects under the same mental principle; thus

poodle, labrador and alsatian, Rhine would categorise as first order mediators which are accompanied by the response of categorising all of these as dog. This helps to explain the process of attitude learning to some extent. At least we can see how similar objects become categorised under an overall heading. Osgood⁵ suggests that the more mature or intelligent (we could substitute knowledgeable, informed) an individual the finer the discriminations that can be made and "the less gross its representing processes." Therefore a dogbreeder or someone interested in dogs can not only distinguish different breeds but is aware of the characteristics that determine a good pedigree. Similarly those who are informed about the nuclear issue can identify nuclear weapons as being qualitatively and militarily different from conventional weapons.

Rhine's model is very much in the behaviourist mould and implies no conscious intervention by the individual. For this reason it is inadequate if we are to assume that people process information in a critical manner - but the fact remains that if we did not use these mechanisms we would become completely swamped by the barrage of endless stimuli emanating from our environment. It is quite clearly a process used by all of us some of the time, but it is when this process seems inappropriate or maladaptive that we become aware of it. The nuclear debate is one area where this mechanism can be observed. Not only can we see fairly unknowledgeable people merely mouthing the prescribed arguments in support of nuclear weapons - many of which are entirely inappropriate to nuclear weaponry - but these are often activated in response to any suggestion of nuclear disarmament. Of course, this also applies to supporters of nuclear disarmament when given the appropriate stimulus from their pro-nuclear counterparts. This may also help to explain the sort of impasse reached at lower levels of nuclear debate where an endless chain-reaction of arguments and counter-arguments following the stimulus-response pattern is set in motion.

This sort of mechanism then, when applied to attitude acquisition, allows a person, as Petty and Cacioppo⁶ put it:

to evaluate a communication or decide what attitudinal position to adopt without engaging in any exhaustive cognitive work relevant to the issue under consideration.

This has very interesting overtones when we come to consider processes of attitude change later on in this chapter.

3.3 FUNCTION OF ATTITUDES

What is the function of attitudes? Why do some people hold to them come what may? Take, for example, a harbinger of doom who says the world will end tomorrow. When tomorrow comes and the world does not end, the harbinger may say "Ah, God relented". He does not change his attitude towards his original proclamation but merely accommodates new events into his original belief. Why doesn't he change his attitude towards his original belief despite incontrovertible proof that he was wrong? What processes are at work that enable people to stick to attitudinal responses that, by all objective definitions, are no longer appropriate? Sarnoff⁹ draws upon psychoanalytic theory to explain this process. This approach allows us to consider:

the mechanisms of ego defence which serve to protect the individual against external and internal threat. Many attitudes are acquired and maintained in the services of such mechanisms. Where people cannot escape from threatening forces from without, they will often incorporate the hostile forces and identify with the aggressor ... Or people will maintain the old attitudes by denying and distorting the reality of existing dangers.

[my emphasis]

By investigating the function that attitudes serve, we attempt to understand why people hold the attitudes they do. Unless we know the psychological need that is met by holding an attitude, Katz⁷ points out, we are in a poor position to predict when and how it will change. Katz D.; Katz D and McClintock C.⁸; Sarnoff I.⁹; and Sarnoff I. and Katz D.¹⁰ use this functional approach to attitude formation and in doing so avoid the error of oversimplification - of attributing a simple cause to a given attitude and so acknowledging the likelihood that the same attitude can have a different motivational basis in different people. The basic assumption of this group is that:

both attitude formulation and attitude change must be understood in terms of the needs they serve and that, as the motivational processes differ, so too will the conditions and techniques for attitude change.¹¹

Four functions which attitudes perform for the individual are outlined:⁷

1. The instrumental, adjustive, or utilitarian function.

Attitudes acquired for the purpose of fulfilling this function tend to be oriented towards maximising the rewards in the external environment and minimising the penalties. Generally, Katz maintains, these attitudes are dependent on present or past perceptions of the utility of the attitudinal object to the individual. The closer these objects are to actual need satisfaction, the greater is the likelihood of a positive attitude being formed.

2. The value expressive function.

These attitudes have the functions of giving positive expression to the individual's central values and to the type of person he/she is conceived to be. If someone considers themselves to be a conservative or an internationalist they will hold attitudes which are the appropriate indication of these central values. Attitudes that are congruous with this self-conception are rewarding in the sense

that they are establishing self-identity and confirming the individual's notion of the sort of person she/he wants to be. The outline of the individual's self-concept, Katz points out, is a result of socialisation processes during the formative years:

Parents constantly hold up before the child the model of a good character they want him to be . . . the candy and the stick are less in evidence in training the child than the constant appeal to his notion of his own character.

The values of the group with which the individual identifies are also strong motivational forces of attitude formation if the group situation allow for his ego-involvement, i.e. allows him/her to contribute to the group effort.

3. The knowledge function.

This is analogous with Rhine's concept-formation approach in that it suggests people need frames of reference for understanding the world and attitudes provide definitiveness, consistency and stability of meaning in what would otherwise be a vague and confusing world. The need to know, Katz observes, does not imply that people are driven by a thirst for universal knowledge:

People are not avid seekers after knowledge as judged by what the educator or social reformer would desire. But they do want to understand the events that impinge directly on their own lives.

Existing attitudinal structures will provide a basis for interpreting new information and may actively impede the assimilation of new information. It follows then - and this is important when we come to consider motivations for attitude change - "that new information will not modify old attitudes unless there is some inadequacy or incompleteness or inconsistency in the existing attitudinal structure [my emphasis] as it relates to the perceptions of new situations." We shall be considering these motivating forces below.

4. The ego-defensive function

Ego defences are mechanisms that protect the ego from threatening forces from within and from without. Footnote 1. They include "devices by which the individual avoids facing either the inner reality of the kind of person he is or the outer reality of the dangers the world holds for him."¹⁶ ⁶

Attitudes acquired for the purpose of defending the ego serve the purpose of minimising the incapacitating effect fear has upon the ego's functioning. The only way to reduce fear is separation of the individual from the feared object. But as Sarnoff⁹ points out, the child - in whom these defenses have their genesis - owing to its relative helplessness, is often unable to separate itself from the threatening object and is thus unable to respond to the threatening object in a way which will reduce the fear and anxiety:

under these conditions, the perceptual functioning of the ego may fail if the stimuli of the fear motive becomes too intense for conscious containment. . . To preclude such a catastrophic state of helplessness, the individual attempts to defend his ego.¹⁸

We briefly touched upon these defence mechanisms in the previous chapter, but now they become crucial in understanding the individual basis of attitudes. Many of our attitudes have the function of defending our self-image. Although all ego-defences serve to eliminate the threatening forces from within and without, only denial and identification with the aggressor, according to Sarnoff (op. cit.), fulfil this purpose by distorting the perception of objects in the outside world by obliterating those aspects of the individual's environment which give rise to fear and anxiety.

Thus by not perceiving or by failing fully to acknowledge threatening aspects of his world, the individual can prevent those aspects from exerting the fear-arousing effects they would otherwise have.

Further, ego-defences aim directly at eliminating the internal source of threat. Repression is one of the most fundamental of these kinds of defence. Although Sarnoff, in accordance with classic psychoanalytic theory, concentrates his examples of repression as linked to sexual drives, we can also see repression in terms of repressed bad-object relationships in real life - the driving force being towards good-object relations rather than sexual gratification. By repressing the bad-object (we could see the bad-object in terms of nuclear weapons, perhaps) from conscious perception the individual is able to continue life in a fairly harmonious state both with the inner world and the outer. Projection of the attributes of the bad object onto others can also help to deal with aspects of the bad object when it intrudes into consciousness. (Fear of nuclear weapons which is suppressed may, when this fear looks like surfacing, be projected onto the Soviet Union - it is the Soviet Union that is wicked, immoral, dangerous and threatening our very existence, not nuclear weapons).

Everybody may employ defence mechanisms but, Katz⁷ says:

they differ with respect to the extent that they use them and some of their attitudes may be more defensive than others.

Furthermore, individual attitudes towards any given object may differ from person to person depending on the most successful means of reducing tensions towards that object. Conversely, Sarnoff¹⁹ adds:

identical attitudes may mediate the reduction of quite different motives, just as the same overt response of smiling may be used to reduce the tension generated by the motives of love, anxiety, or even hatred.

Attitudes which are formed to serve the purpose of denial can be inferred, according to Sarnoff, from the individual's failure to

recognise or acknowledge a stimulus which is present in his environment which is "presumed to have threatening implications for him." If the threat is acknowledged then it may be severely underestimated and the individual's response to it could be desperately inadequate compared to the extent of the actual threat. This type of attitude is apparent with regard to the nuclear issue. Individuals completely deny that nuclear war is possible, that it could happen or that they need be concerned about it. Others may fail to acknowledge the magnitude of the threat and suggest absurdly inadequate civil defence measures. While it may be difficult to believe that anybody could fail to feel some anxiety about the nuclear arms race and where it may be leading us, it is also difficult to prove that the person who claims to have no fears about nuclear war is using the ego-defence of denial to separate him/herself from the object of fear. The fact is that people are not aware of the defensive activities of their ego, especially at the time they are in operation and those objects that have been eliminated from consciousness by an ego-defence are virtually inaccessible to recall. It may be only at a later stage that they become aware of their use of defences:

The most we can do is to reconstruct them in retrospect: we can never really witness them in operation. This statement applies, for instance, to successful repression. The ego knows nothing of it; we are aware of it only subsequently when it becomes apparent something is missing.²⁰

Attitudes that facilitate the ego defence of identification with the aggressor are inferred when an individual adopts the behaviour and attitudes of a person who threatens to arouse his/her fears. By doing this the individual becomes more like the feared person who

consequently becomes less threatening. Repression is a factor in the development of an attitude when the individual eradicates from his/her conscious mind a motive, sensation or cognition of which he/she was once aware. Linked with this defensive measure is projection whereby the individual attributes his own hostility to others and displacement which means the individual reroutes his own aggressive impulses onto someone weaker. Footnote 2 Repression has been linked²¹ with authoritarianism and this is a linkage we shall be pursuing later.

Projection could be viewed as a strong motivational force for the development of attitudes relating to the nuclear issue. Take this statement by Sarnoff:²²

By attributing his own consciously unacceptable motives to others, the individual is able to avoid perceiving them as belonging to him. Thus, projection permits the individual to be preoccupied with the perception of other people's motives rather than his own.

Consider its applicability to US-Soviet relations. Is Reagan really talking about American motives when he says the Soviet Union are bent on world domination? Is he really talking about his own motives when he says the Soviets are intent on nuclear superiority and is he projecting US military motives onto the Soviet military when he says the Soviets cannot be trusted to keep treaties and that they are always looking for ways round them? It is clear that the US themselves, according to an ex Polaris submarine commander now working at CDI, have just these motives:

what the military's goal is, in reference to treaties, is to look for the loopholes and exploit them.²³ But if you had a treaty that's fine - but how can we get around it?

The reasoning behind this sort of behaviour is that the Soviets would be doing the same, "They'd be trying to figure out ways around the treaty and they'd be exploiting holes and flaws in the treaty and we should do the same."²⁴; A projection of US motives into a mirror which is reflected back at them. Footnote 3

Attitudes which serve the purpose of defending the ego by means of reaction formation may be recognised when the individual behaves in a way which is directly contrary to that required to reduce the tensions caused by "consciously unacceptable motives" (such as aggression). Footnote 4 We can get into very murky water if we try to apply this to the nuclear issue: fear of nuclear war/weapons activates reaction formation so that nuclear weapons actively become the means of preventing nuclear war - and those who support nuclear weapons paradoxically become "the true peace keepers"! By behaving in this way the individual ". . . maintains a perception of himself as being responsible to motives which are as dissimilar as possible to those which he does, in fact, possess."

Sarnoff cites the rationalisation of behaviour as another ego-defence which can be facilitated by the formation of attitudes - especially in our society where so much emphasis is put on logic and reason. The clearest instance of rationalisation occurs, he says, when an individual interprets his patently destructive behaviour in the light of an altruistic rather than an aggressive motive. This sounds very much like post ad hoc attribution of motive rather than a precursor of an attitude and it is something we shall be investigating in greater depth in the second half of this chapter.

3.4 ATTITUDE CHANGE

An enormous amount of research has been devoted to attitude change but for reasons of space it is not possible to cover the whole area thoroughly, so particular attention has been paid to processes that are most relevant to this research.

There are basically two ways of approaching the subject of attitude change which have traditionally depended on two fundamental ways of looking at people. One is the irrational model which suggests that people:

have very limited powers of reason and reflection, weak capacity to discriminate²⁵, only the most primitive self-insight, and very short memories.

This model suggests that people's powers of discrimination are easily overpowered by emotional forces and appeals to self-interest and vanity. Furthermore, early experiments showed that - much in the same way as Pavlov's dogs - people could be induced to express preconditioned attitude merely at the flashing of a coloured light.

The second approach suggests a more rational model for people which assumes:

that the human being has a cerebral cortex, that he seeks understanding, that he consistently attempts to make sense of the world about him, that he possesses discriminating and reasoning powers which will assert themselves over-time, and that he is capable of self-criticism and insight.²⁶

These two models give rise to two distinct routes to attitude change laid out by Petty and Caccioppo.²⁷ First there is the central route

which puts emphasis on the information that a person has about the attitude object or issue under consideration. And secondly the peripheral route to attitude change which is brought about by concerns which are not directly related to the issue under consideration. Attitude change via the peripheral route may result from factors inherent in the persuasion situation such as rewards or punishments or association with other positive objects. Such persuasive clues facilitate a very superficial evaluation of a communication and adoption of attitude without the necessity of any critical evaluation of the issue under consideration. We shall be studying various routes such as message learning, motivational approaches, concerned with consistency, balance and congruity and various means of bringing about attitude change which will include the learning principle, perceptual-judgmental approach and various information processing models.

But to begin with let us take a look at Sarnoff and Katz's models of attitude acquisition and see to what extent these are relevant to attitude change, because all the other approaches, and indeed whether the individual is going to be susceptible to the central or peripheral approaches, may depend on the underlying attachment to the original attitude.

3.5 UTILITARIAN ATTITUDE CHANGE

Changes of utilitarian attitudes, i.e. those that seek to optimise social rewards and minimise punishment, depend, according to Katz on one of two conditions: 1. the attitude and activities relating to it

no longer provide the satisfaction they once did; 2. the individual's level of aspiration has changed. Attitudes towards political parties and voting behaviour may be difficult to change if there is no great dissatisfaction with the preferred party's handling of issues that are considered by the individual to be of greatest importance. Changes in utilitarian attitudes Katz says, occur "more readily when people perceive that they can accomplish their objectives through revising existing attitudes." We can cite the Conservative party policy to sell council houses to tenants (primarily Labour supporters) prior to the last General Election which led to Conservative support for purely utilitarian purposes. Although the use of such 'rewards' may be effective in changing attitudes the use of 'punishments' may be more problematical - and this is something that must be of concern, with regard to the nuclear debate, to those who wish to encourage attitudes opposed to nuclear weapons. The use of 'punishment' and arousal of fear depend for their effectiveness:

upon the presence of well-defined paths for avoiding the punishment, i.e. negative sanctions are successful in redirecting rather than suppressing behaviour. When there is no clearly perceptible relation between punishment and the desired behaviour, people may continue to behave as they did before, only now they have negative attitudes towards ²⁸the person and objects associated with the negative sanctions.

Clearly this is where the anti-nuclear lobby is at a disadvantage compared with the pro-nuclear movement. The former can only offer a picture of the horrors of nuclear war, but often with very little suggestion of what can be done by the individual to avoid it. The latter, however, can offer, albeit superficial and unprovable, a picture of past security with nuclear weapons stretching out into the distant future. Furthermore if the 'punishment' is severe (and of

course the one we offer here is the ultimate) the subject may develop defensive avoidance of the whole situation. The subject's objective then becomes not one of solving the problem but of escaping from it, even if such escape is at the expense of increased 'punishment'. Therefore, it is very easy when attempting to change attitudes to traumatise the individual into changing from a utilitarian attitude e.g. nuclear weapons increase security, to an ego-defensive position. Otherwise the individual would be incapable of functioning through extreme fear.

3.6 EGO-DEFENSIVE ATTITUDE CHANGE

As far as ego-defensive attitudes are concerned Katz outlines three possibilities. First is the obvious factor - removing the source of threat that has given rise to the ego-defense. But of course this is not always possible, this is why the defence was developed in the first place. Second, catharsis - the discharge of pent-up feelings, fears and impulses-can be effective, perhaps in a tirade against the powers that be or some such target. There is always the danger here that this may reinforce the negative attitudes we are trying to change. Third, and this is probably the most realistic as far as this paper is concerned, ego-defensive attitudes can change as the individual acquires insight into his/her own ego-defensive activities. It is clear that many people may be already aware that they are avoiding an issue or denying it exists - "I don't want to think about it", they admit. More often this process will not be recognised at the time. Seminal work by Janis and Feshbach²⁹ on fear arousing communications suggested that:

When fear is strongly aroused but is not fully relieved by the reassurances contained in a mass communication, the audience will become motivated to ignore or to minimise the importance of the threat.

Self insight, according to Katz, is only really effective amongst those who are low to moderately defensive. Research by Goldstein³⁰ suggests that there is no uniform reaction to heightened fear-arousal and that people can be divided into 'copers' and 'avoiders'. Minimal fear appeal, he says, receives greater acceptance from those who deal with tension-producing information by avoidance; strong fear appeal was more effective among those he classed as 'copers', i.e. those who were able to cope with the tension-producing material and had no problem recalling it. A later replication of the original Janis and Feshbach experiment by Janis and Terwilliger³¹, however casts some doubt on Goldstein's findings - attributing them to procedural modifications of the original experiment. These modifications may have been what were necessary to reveal these finer distinctions in response. However, it is clear that where ego-defences are concerned, our prime aim must be to establish why people hold the attitudes they do - only when we do this will campaigns of attitude change be effective. Footnote 5 There are times when confronting the public with facts about dangerous situations may be more effective than a reassuring approach (consider, for example, instances when the Government assure us that there is "no danger to the public" after a nuclear leak or similar incident - this often increases fear and suspicion rather than allaying it). On other occasions it is possible that the "full facts" approach may just increase avoidance measures.

3.7 VALUE-EXPRESSIVE ATTITUDE CHANGE

Whereas utilitarian attitudes can induce someone to vote for a particular party in anticipation of a 'reward', voting behaviour can also be a symbolic expression of being a Tory or a Labour supporter, i.e. it is value-expressive. To change such attitudes, Katz suggests, there are two prerequisites. First, the individual must be dissatisfied with his/her self-concept, and this can result from:

failures or from the inadequacies of one's values in preserving a favourable image of oneself in a changing world . . . Once there is a crack in the individual's central belief systems, it can be exploited by appropriately directed influences.³²

Secondly, dissatisfaction with old attitudes which now seem inappropriate to one's values can also help bring about attitude change. This may stem from new experiences or from information from others, but refers to the appropriateness of one attitude over another with reference to an individual's self-concept and central values.

3.8 KNOWLEDGE FUNCTION ATTITUDE CHANGE

Factors associated with attitude change in this category occur when old attitudes conflict with new information and new experiences, thus bringing about modification of beliefs. In other cases the beliefs may have been adequate to the situation, but the world has changed. Any ambiguous situation is likely to precipitate attitude change because the individual strives towards cognitive consistency - which is a theory we shall be considering in greater depth below - but first,

one final observation on motivation to change. It is clear then, that efforts to change attitudes must be orientated towards the relevant motivational basis of the attitude. In an earlier paper Katz and Sarnoff^{3 3} emphasise the importance of this approach when attempting to change attitudes with different motivational bases. Someone whose attitude was based on poor information may respond to the presentation of scientific facts; one whose motivation to conform and whose attitudes are utilitarian in nature would respond favourably to a situation where he/she was rewarded for changing his/her attitude. A third individual would act very differently if his attitudes were ego-defensive, regardless of rewards or information. In fact, the two previous approaches may even serve to reinforce his/her attitude. These approaches are formed on the assumption that the individual is interested in a more accurate picture and complete knowledge of the world or is orientated towards fulfilling recognised needs.

However, people do behave as if they have been decorticated at times, and one thing that the Katz model does is to be more specific about the conditions under which people act as the theory predicts - unlike some of the models we consider next which depend heavily on laboratory experiments where the subjects are put under severe choice limitations in absurd situations and given little opportunity for critical thought - under these conditions the subjects are hard pressed to make sense of a nonsense situation.

3.9 CONDITIONING APPROACHES TO ATTITUDE CHANGE

Some of the earliest research on attitude change used classical conditioning techniques to bring about the desired change. One of the earliest users of this approach was Doob who suggested that attitudes were:

non-observable responses that were learned and changed through the application of rewards and punishments, just like all other responses.³⁴

Various experiments were used to suggest that the principles of classical and instrumental conditioning could be applied to attitude change. Basically, the idea is this: the subject is given a neutral stimulus (the Conditioned Stimulus CS) in association with another stimulus (Unconditioned Stimulus UCS) that is connected to some response (Unconditioned Response UCR) and the whole procedure works like Pavlov's dogs, i.e. the dog is given meat (UCS) at the sound of a bell (CS); the dog salivates (UCR). Eventually the dog will salivate at the sound of the bell alone (Conditioned Response). A number of experiments were carried out along these lines using, for example, electric shocks as the CS (Zanna et. al.)³⁶, or free meals (Razran).³⁷

Operant conditioning is another learning process where experiments have shown that subjects can be induced to respond in the desired manner simply by making encouraging noises ("mmmm" or "good") when the desired response is made.³⁸ It has been suggested that another factor is involved in this process - that of approval by another person which helps reinforce the desired response to a

greater extent. If the subject is aware of the interviewer's encouraging noises and hence his/her approval of the responses and by implication the subject, then there is even greater incentive to carry out the rewarding response.

Observational learning is another possible way of conditioning attitudes. This is an indirect process depending not on the subject's direct experience but on observations or modelling of someone else's behaviour, by implying that if the subject does the same then the rewards will accrue to him also. Take, for example, an advertisement for pipe tobacco showing a man walking along smoking his pipe followed by a horde of women attracted by the smell - this all sound very simplistic and yet it is the basis on which many products are advertised in an effort to influence the viewer's attitude. Bandura³⁹ points out however, that two conditions must be met for this type of conditioning to be effective; first, the observer must believe that the rewards will also be his/hers if the required behaviour is carried out; second, that the reward is actually worth the effort involved.

To set up an experiment that proves that people behave like mindless mechanisms Footnote 6 is a self-fulfilling prophecy - of course we can all be induced to behave in this fashion under conditions of high ambiguity or great pressure. Unless our concern is crisis management these sorts of experiments have little relationship to attitude change in the real world. If we are really interested in how attitudes change then we must also see human beings as highly complex and intelligent organisms and study them in real situations rather than as laboratory

animals within a laboratory setting. When this method has been effective, as Petty and Caccicpo⁴⁰ recognise, it has more often been in the case of unfamiliar and/or neutral stimuli and this is certainly not the nature of the material under study here.

3.10 PERCEPTUAL-JUDGEMENTAL APPROACHES

These approaches assume that attitudes are based on latitude of acceptance (i.e. the range of positions that an individual accepts) and latitude of rejection (the range of positions rejected). Basically it is suggested that if a message is judged to be within the latitude of acceptance then attitude change will occur in the direction of the message; if the message is judged to be within the latitude of rejection then little or no change occurs or perhaps attitudes may even move away from the advocated position. Sherif et.al.⁴¹ suggested a third latitude of noncommitment, i.e. the range of a position to which the individual is indifferent. Eagly⁴² draws the conclusion:

persons who differ in the widths of latitude of acceptance and rejection on a particular issue should differ in attitude change. Thus, persons with a relatively wide latitude of acceptance and a narrow latitude of rejection are more likely to change toward a message than persons with a narrow latitude of acceptance and a wide latitude of rejection.

Further research by Eagly and Telaak⁴³ indicated that this was due to the fact that wide latitudes may be associated with low certainty and confidence (we might add knowledge and involvement too) and narrow latitudes may be associated with high certainty and confidence. This position appears to be consonant with that

suggested by Osgood (op.cit.) at the beginning of this chapter, i.e. the more 'mature' (confident, knowledgeable) an individual, the finer the discriminations that can be made, the "less gross its representing process" and the less likely the individual is to change his/her attitude. Petty and Cacciopo (op.cit. 1981) however, find this approach unsatisfactory and it does appear to be of greater value as a theory of human judgement than as a theory of attitude change. Footnote 7. Ego involvement has been considered an additional important factor in the perceptual-judgemental approach, i.e. the extent to which an individual is attached to an attitude. Alternatively this could be interpreted in terms of 'centrality'; how the issue in question relates to the individual's value-system which is closely related to the individual's self-concept. The greater the ego involvement - or if it is central to a person's value system then the greater the latitude of rejection and the likelihood of attitude change is decreased.

3.11 MESSAGE LEARNING APPROACH

This approach is actually quite basic to the problem of attitude change - after all if the message is not actually getting through to the recipient then there is no opportunity for the individual to review her/his attitude. The approach was developed by Carl Hovland et. al. ⁴⁴ who suggested that first a person's attention must be caught by the message; the message must be understood; the person must mentally rehearse the arguments and conclusion contained within the message. In this process, it is presumed, a memory trace is established which is a precursor to remembering the

message. In this process there are obviously a number of factors to be considered at each stage: first there is the origin of the message - is it a credible source?; secondly there is the message itself - is it communicated in a way in which it can be comprehended without too much effort?; thirdly there is the person or people at whom the message is aimed - are they intelligent and informed? Finally there is the means by which the message is conveyed - is it via the mass media or through personal communication? Each of these factors has an important role to play in the process of attitude change.

3.12 SOURCE CREDIBILITY

Much research has been carried out in these areas and early findings suggested that source credibility has an important effect on attitudes towards the message.⁴⁵ Later research by Hovland and Weiss⁴⁶ proved more ambiguous - suggesting that while a more credible source may be initially more persuasive, over a period of time it was found that the power of the less credible source was increased. They explained this phenomenon, termed the sleeper effect, in this way:

by assuming equal learning of the content, whether presented by a trustworthy or an untrustworthy source, but an initial resistance to the acceptance of the material presented by an untrustworthy source. If this resistance to acceptance diminishes with time while the content which itself provides the basis for the opinion is forgotten more slowly, there will be an increase after the communication in the extent of agreement with an untrustworthy source.⁴⁷ [my emphasis]

This is a totally incredible and as yet unproven hypothesis. Many research grants, it would seem, have been squandered on this area of

research (see for example: Fine⁴⁸, Weiss and Fine⁴⁹, Weiss⁵⁰, with no great addition to our knowledge of the matter. Once again this research concentrated on fairly irrelevant messages, therefore, one cannot assume that the actual communication was of great interest. Petty and Cacciopo⁵¹ suggest that the communicator is an important factor when the issue:

is not personally relevant or significant to the recipient so there is little reason to devote much attention to the message.

Source credibility may actually be of more importance in reinforcing existing attitudes. Take for example the situation where a Labour Member of Parliament is giving a lecture on defence policy. His/her very appearance will reinforce anti-Labour defence policy amongst Tory listeners and reinforce pro-Labour defence policies amongst the Labour listeners; therefore we can consider this factor as linked with the value expressive function (see above).

3.13 THE MESSAGE ITSELF

Research on this aspect of message learning suggests that while more arguments may increase the effectiveness of a message⁵² the inclusion of too many acts as a turn-off.⁵³ Further research deals with the effectiveness of one-sided and two-sided arguments.⁵⁴ and concludes that, regardless of initial position, attitude change was likely to go in the direction of that advocated by a one-sided message but could be swayed back by persuasive presentation of a counter-message. When, however, a two-sided argument was presented,

subjects were less likely to be influenced by a subsequent counter - argument. This was attributed to the fact that the subject:

has been given an advance basis for ignoring or discounting the opposing communication and, thus "innoculated", he will tend to retain the positive conclusion.⁵⁵

Or we could attribute higher mental functioning to the recipients and conclude that they find the two-sided message more credible because it did not ignore counter-arguments levelled at it and was, therefore, not trying to pull the wool over the eyes of the recipients but treating them as people capable of their own critical reasoning. Careful work carried out by some researchers⁵⁶ looked at the order of presentation of messages - is it more effective for a speaker to put his/her message across before or after his/her opponent in a debate? It seems that timing is of the essence here both in terms of how long the interval between speakers and how soon after the speakers attitudes are tested. Petty and Cacioppo succinctly sum up the pros and cons:

When speaking back to back the candidate would do best by speaking first,

unless attitude tests were taken immediately after the speakers:

in which case it would not matter whether he spoke first or second. Perhaps more importantly, these results suggest that a last-minute media blitz may be highly effective, especially when some time has elapsed since the opposing candidate has presented his or her views.

3.14 RECIPIENT FACTORS

Petty and Cacioppo reviewed research on how factors relating to the recipient of the message affected the likelihood of the message being accepted. High intelligence and self-esteem was likely to make individuals receptive to a persuasive message but unlikely to change their attitude, whereas low intelligence and self-esteem indicated high susceptibility to the message but less likelihood of actually grasping the message - all very confusing for the hopeful agent of attitude change.

3.15 MEANS OF CONVEYING A MESSAGE

Although past research in this area has suggested that face-to-face communications are more effective than media communications,⁵⁷ clearly television is now the most universal source of information, and was overwhelmingly cited as the most important source of information on problems of "rearmament and disarmament" by respondents in eighteen out of twenty-three countries in a recent survey.⁵⁸ But as far as attitude change as a result of televisual information is concerned, this has not been established. Petty and Cacioppo emphasise the importance of the message being tailored to suit the channel through which it is being broadcast - this is fairly obvious but no research has come to light on the comparative effectiveness of any one channel over another as far as attitude change is concerned.

3.16 MOTIVATIONAL APPROACHES TO ATTITUDE CHANGE

One area of research on attitude change which has probably attracted more attention than any other is that concerned with the individual's desire to maintain balance, congruity and cognitive consistency. One of the great pioneers of the motivational approach was Heider⁵⁹ who developed the idea of balance between three elements: the person who is explaining or perceiving the situation, some other perceived person, and a perceived event, idea or thing. Balance then, as defined by Heider is:

a harmonious state in which the entities comprising the situation and the feelings about them fit together without stress.⁶⁰

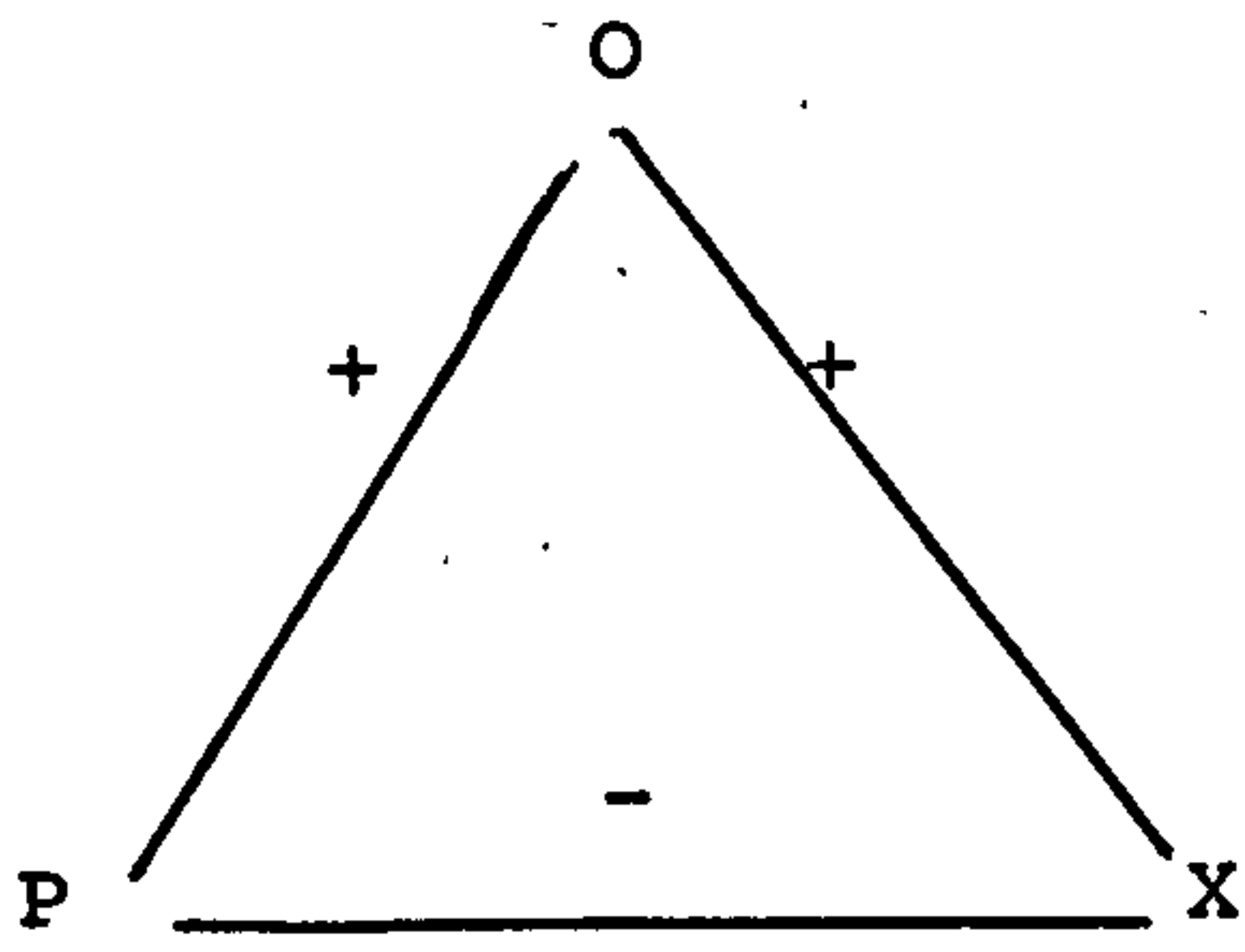
The relationships between the three elements are represented in diagrammatic form with p representing the person, o representing the other person and x as the perceived event, idea or thing. Between any pair of elements two relationships are possible; Heider refers to these as (i) sentiment relations which is an attitude - an affective or feeling relation implying like or dislike, approving or disapproving, etc., (ii) unit relations which are elements "perceived as belonging together in a specially close way" - but the elements may also be two separate entities which are:

related through similarity, causality, ownership or other unit-forming characteristics.⁶¹

Although some ambiguities have been pointed out in Heider's concept of unit relations⁶² the basic principle that the tendency is towards balance between the cognitive elements still holds. For example if p

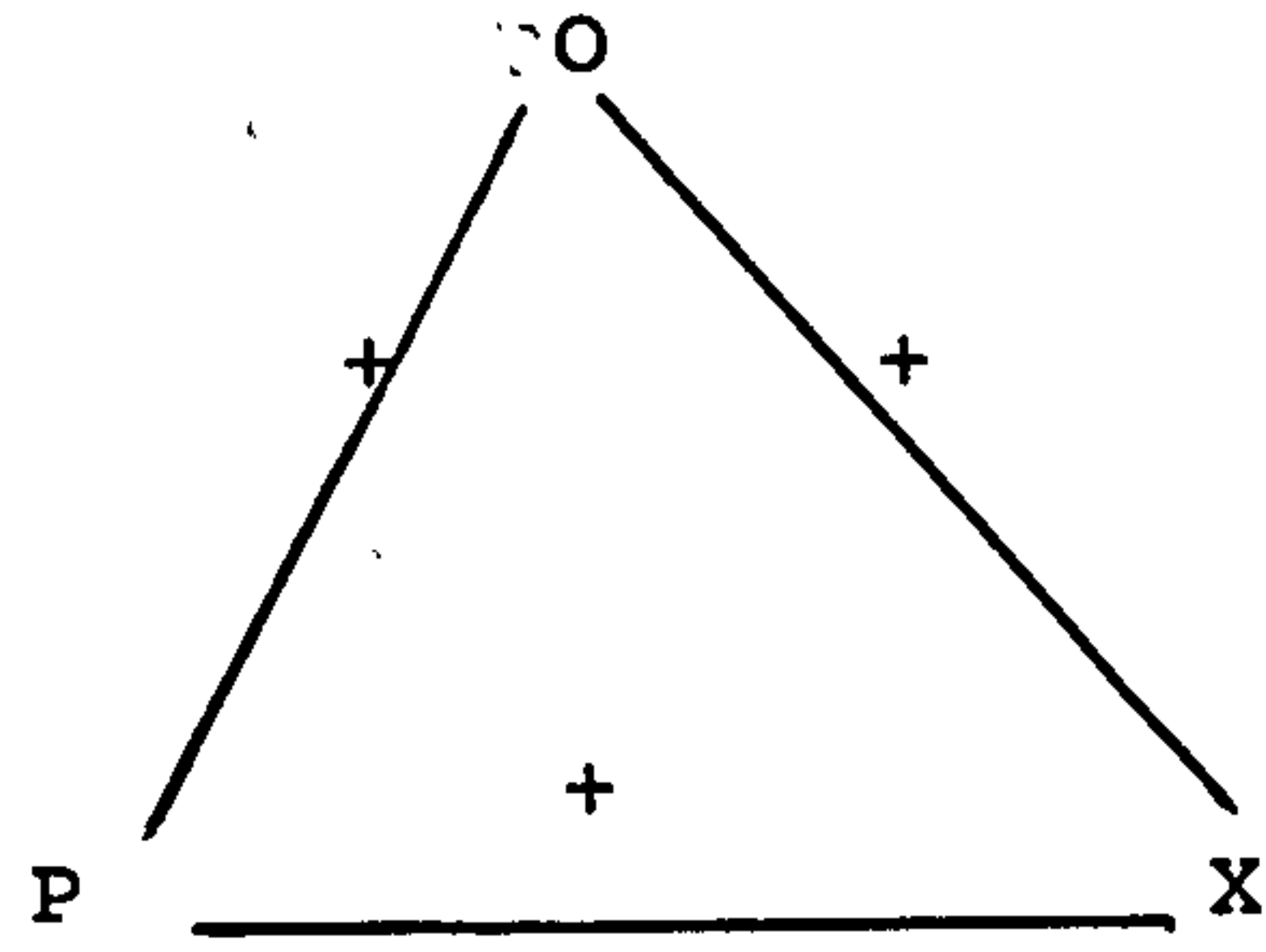
likes x, x is opposed to nuclear weapons and p is also opposed to nuclear weapons, then we have a state of balance. If, however, p was in favour of nuclear weapons then a state of imbalance is actuated which, according to Heider, causes an unpleasant state of tension and motivation to cause a restoration of balance. This can be achieved in one of several ways. p can decide that perhaps nuclear weapons are not so bad after all (see Figure 3.1b.); p can change his/her attitude towards o and decide o is not quite so likeable (c in Figure 3.1); p can decide that perhaps o does not feel so strongly about nuclear weapons or maybe given more information o would change his/her attitude to them; p could begin to feel that o is not after all responsible for nuclear weapons thus creating the situation at d in Figure 3.1; or finally, p could accept that o's attitude differs from his/her own and while he/she cannot quite agree with o on the matter, o is still a likeable sort of person (e in Figure 3.1).

Figure 3.1



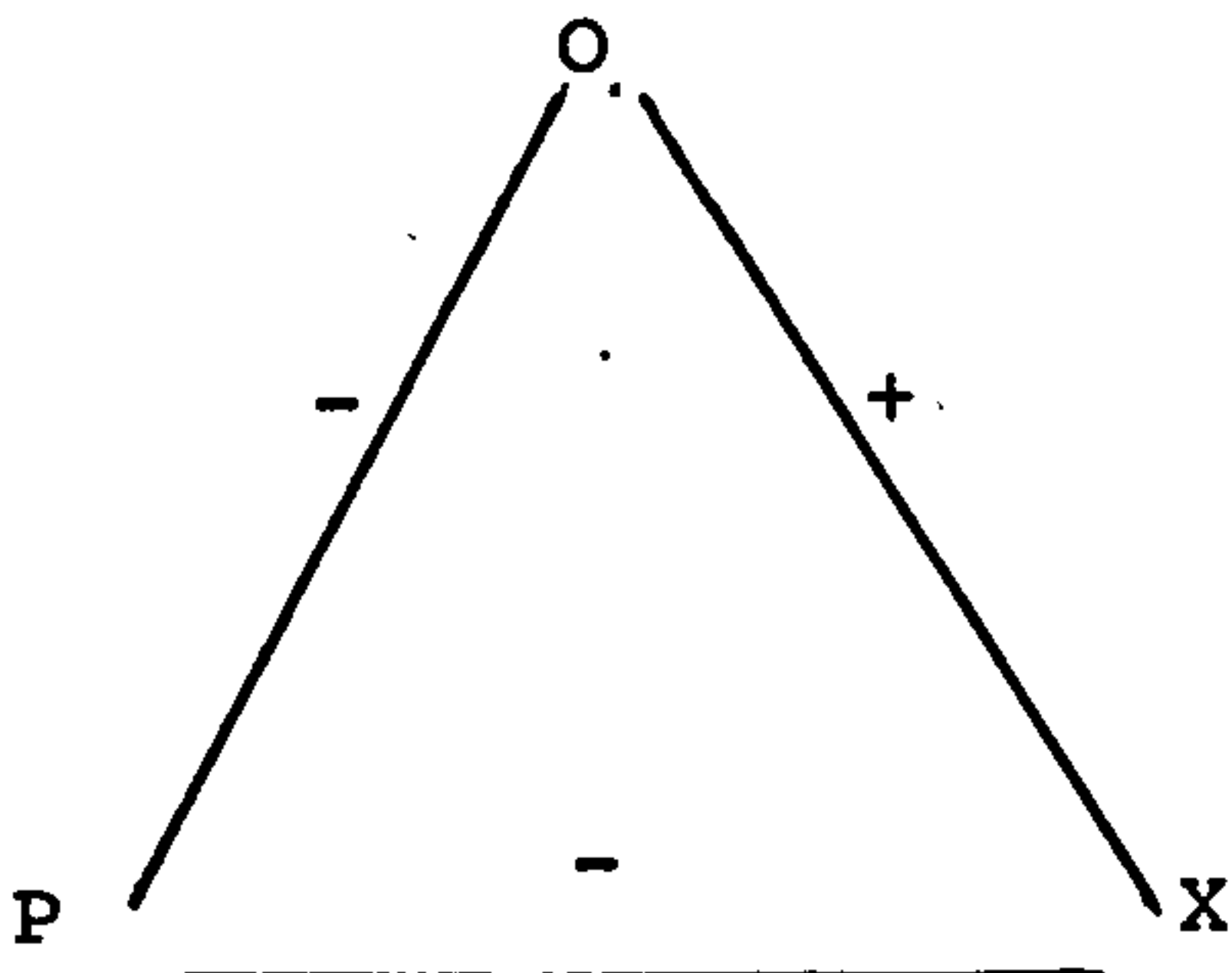
(a)

unbalanced relationship



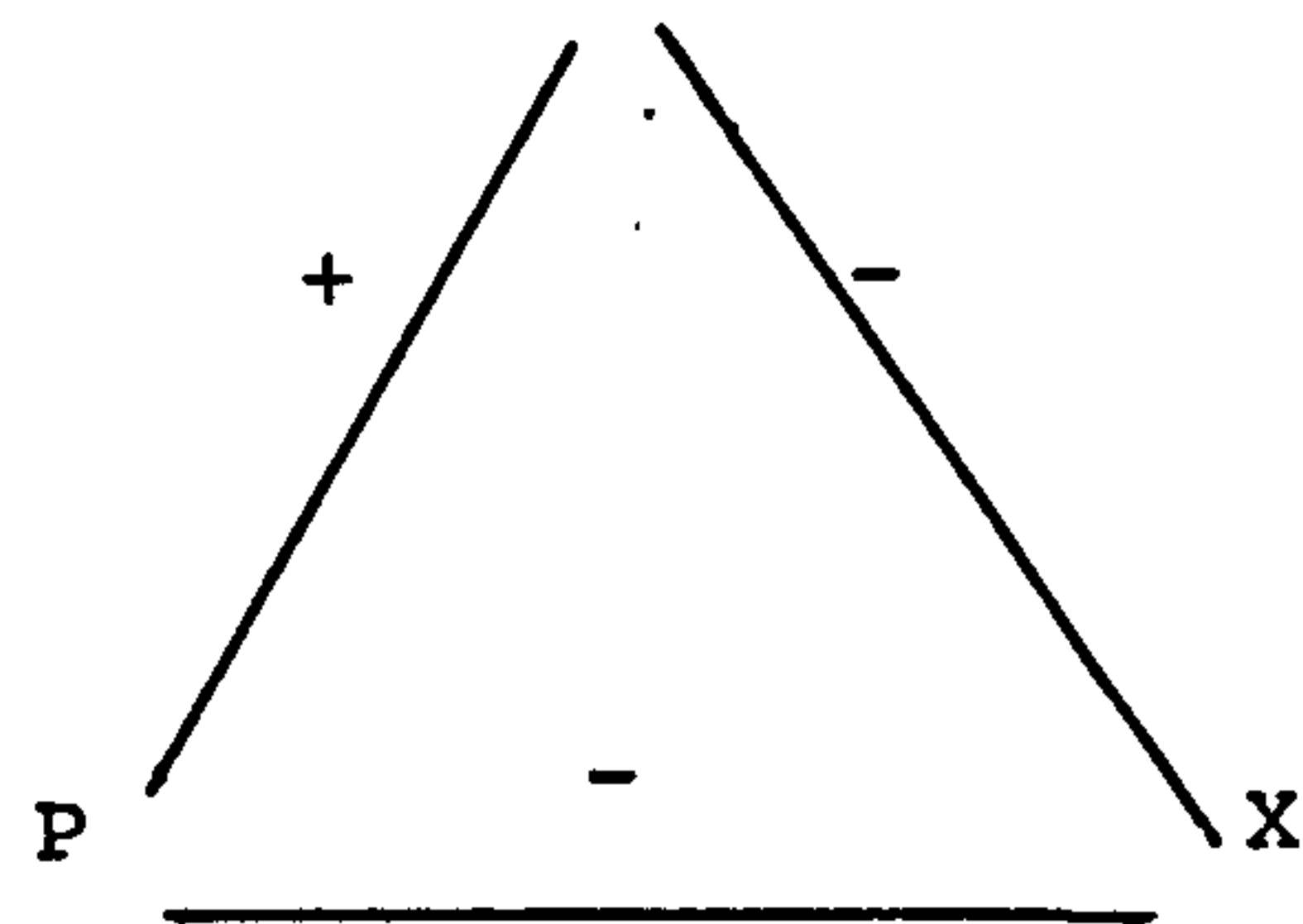
(b)

balance due to change in attitude towards nuclear weapons



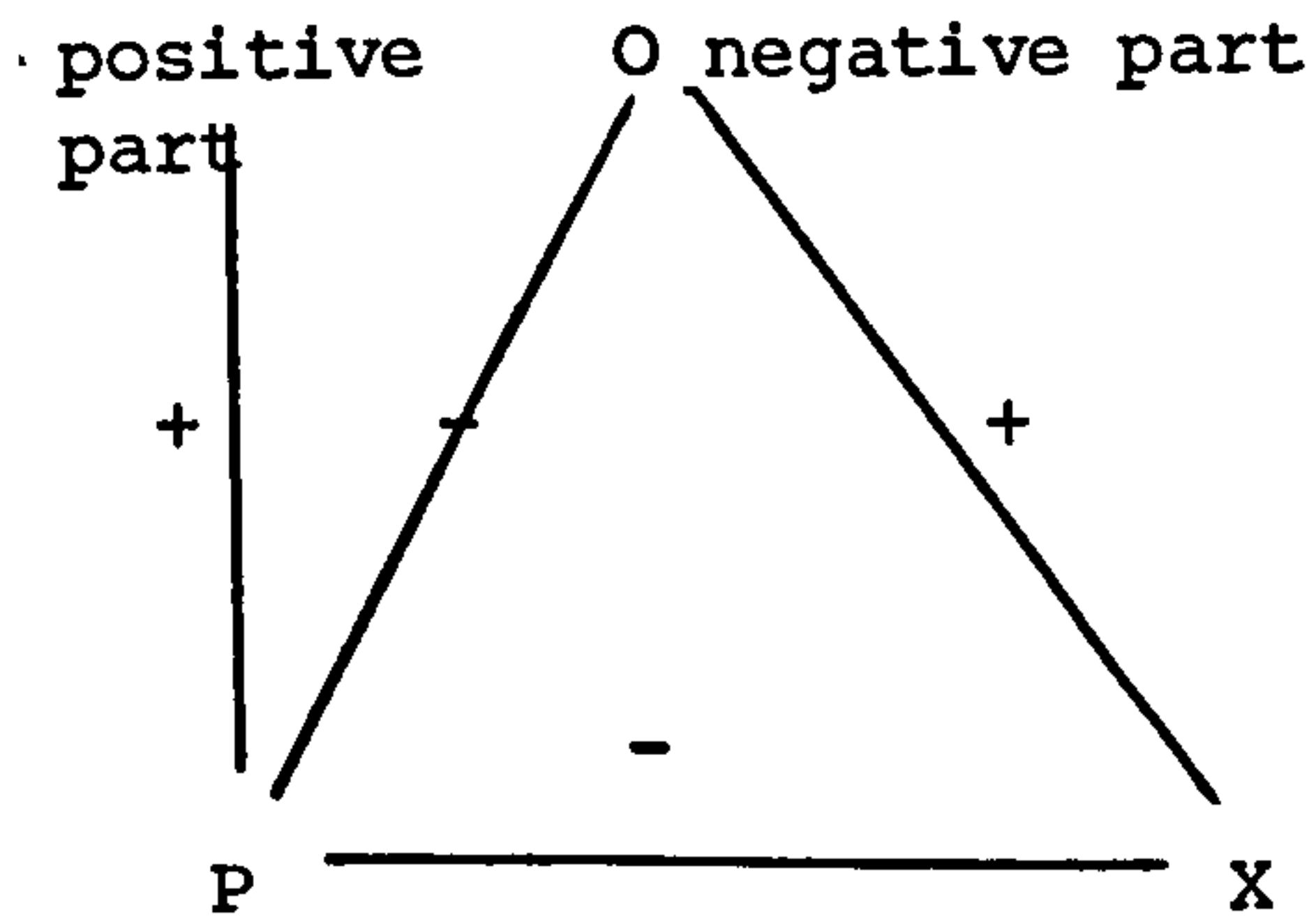
(c)

balance due to change in attitude towards O



(d)

balance due to reappraisal of O's attitude towards nuclear weapons, (unit relation)



(e)

balance due to acceptance of elements of O (unit relation)

Change towards balance within existing unbalanced sentiment and unit relation.

Adapted from Heider (op.cit. p.208)

A particularly interesting aspect of Heider's theory, and one which Insko⁶³ considers as least developed, has to do with assumptions p has towards him/herself. Insko points out that balance theory only really applies to people with high self-esteem; the implication, he says, is that the balance rules work in an opposite direction for people with genuinely low esteem. Low self-esteem may then, we suggest, induce the individual to change his/her attitude towards the perceived object/idea rather than the other possibilities outlined above and in Figure 3.1. This assumption supports Katz's prerequisite for attitude change, i.e. dissatisfaction with self-concept and Petty and Cacioppo's conclusion that low self-esteem indicated increased susceptibility to a persuasive message. Heider's diagrammatic representation of this relationship clarifies this position.

Developments of Heider's balance theory, or theories that seem to have derived much of their theoretical background from Heider's ground work, include a 'probabilogical' approach, a theory of reasoned action and an information integration approach. Although some of these approaches impinge on the concern of the following chapter in which we shall be looking more closely at structure, we will briefly consider what some of them have to offer here - it is impossible after all to divorce structure from function.

3.17 COGNITIVE THEORY

One of the major shortcomings of Heider's balance theory is that there is no allowance for strength of feeling between elements - to what extent does p like o and does this ultimately effect the way a

dissonant unit relation between o and x is accommodated? Osgood and Tannenbaum⁶⁴ allowed for gradations of liking which permits quantitative predictions about the effects of imbalance. Rosenberg, although he started out using gradations of liking⁶⁵ similar to Osgood and Tannenbaum, was more concerned with the structural relationship between a person's attitude and values.⁶⁶ Rosenberg maintained that an attitude consists of a cognitive as well as an affective component and that when stable feelings and beliefs refer to the same object then they are in a state of congruence. The affective component he defines as:

the pattern of feeling regularly aroused by the psychological presence of the attitude object.

An example would be fear, anger and perhaps helplessness felt by someone when he or she reads, hears or thinks about nuclear weapons.

Rosenberg defines the cognitive component as:

the sets of beliefs (held by the person) about the value-attaining and value-blocking powers of the attitude object viewed as an instrumental agency.

For example, the person in the example given above may explain their negative affect by saying what a danger to the survival of the planet nuclear weapons are and how much money is squandered on them. If someone had positive affect toward nuclear weapons then the cognitive component could be demonstrated by contending they maintained the peace, deterred the Soviets, etc. When the components are inconsistent "to a degree which exceeds the individual's 'tolerance limit' for such inconsistency", the attitude is

unstable. In such a state, he argues, the attitude will have to go through one of three processes, synonymous with Heider's formulation, in order to admit congruity. First, rejection of the communication may occur (d, in Figure 3.1). Secondly, fragmentation of the attitude "through the isolation of each other of the mutually inconsistent cognitive and affective components" (e, in Figure 3.1), or thirdly attitude change through the accommodation of incongruent components (b, c in Figure 3.1). Rosenberg carried out an experiment to test this hypothesis, Footnote 8. Using hypnosis he was able to induce subjects to change affect towards two attitude objects on which they had been previously tested. The main findings of this experiment, he felt:

confirmed the original hypothesis that the production of a significant change in the affective component of a social attitude will eventuate in an accommodating reorganisation of the subjects cognitions about the object of that attitude.⁶⁹

Attitude change, as suggested by Rosenberg, and supported by Carlson,⁷⁰ can be seen as the result of a process that begins with the production of inconsistency between the cognitive and affective components of an attitude. Rosenberg points out though that if the strengths and rigidities of the competing components are such that return to consistency is not possible then:

another type of outcome may occur: processes of selective inattention may be used to avoid any further encounter with the inconsistency.⁷¹

While Rosenberg suggests that attitudes are made up of cognitive and affective components and attitude change is brought about when these are discrepant, Zajonc Footnote 9 puts forward the idea that

cognition and affect represent two separate information processing systems and that the affective system "may be fairly independent of and precede in time" the cognitive system. This primacy of the affective system may be due to its mode of processing information which is "effortless, inescapable, irrevocable, holistic, more difficult to verbalise, yet easy to communicate and to understand."⁷³

Ittelson describes this processing :

The direct emotional impact of the situation, perhaps largely a global response to the ambiance, very generally governs the directions taken by subsequent relations with the environment. It sets the motivational line and delimits the kinds of experiences one expects to seek.

The cognitive process is described as more sequential. Affective reactions, according to Zajonc are then often the very first reactions of the organism and are seldom subjectively wrong - once a cognitive judgement had been made, Zajonc claims, it is possible to accept the fact that we may be wrong. Footnote 10 But with affect we are never wrong about what we like or dislike and it would be very difficult, for example, to persuade a child on the basis of convincing arguments that she really liked spinach when in fact she did not. Footnote 11 This helps to explain the fact that attitudes are virtually impervious to change by communication, which according to Zajonc, attests to the "robust strength and permanence of affect." Rosenberg demonstrated that attitudes could be changed by manipulating affective responses under hypnosis - by suggesting the subjects felt differently about a particular attitude object, post-hypnotically their cognitions about the attitude object changed to produce an overall modification of attitude. I expect that had he suggested to subjects they had no strong feeling about the object,

attitudes likewise could have been modified, post-hypnotically i.e. without strong affect accompanying a cognitive evaluation attitudes are susceptible to change. The child with no strong feeling about spinach could be persuaded it was nice or tasty or whatever and induced to eat it on the grounds that it made her grow taller or healthier. Attitudes derived from cognitive judgements and accompanied by affect are stable attitudes in Rosenberg's definition . He also demonstrated by changing affect that cognitions would be modified to maintain a stable attitude, but now we have to consider what the consequences are for attitude research and attitude change when the individual deliberately suppresses affect. It is clear that individuals will do this when strong feelings would interfere with the functioning of the organism. Take, for example, a nurse or a doctor presented with a horribly injured patient. He/she necessarily suppresses affect in order to function as a life saver. Not only are these emotions held in, held back, but also repressed, i.e. banished from consciousness. It is also likely, indeed probable, on the same grounds, that processing leading to fear, anxiety and hopelessness towards nuclear weapons will likewise be repressed. What, then, are the implications for the individual? Obviously for the nurse/doctor it means that he/she is able to carry out tasks which he/she would otherwise be incapacitated to do - it could be said that they become cold, analytical, business-like about the operation before them, in the best interests of the patient. It may also mean that an individual - if he/she cannot avoid the issue entirely - is able to accept, for example, nuclear weapons/deterrence now they have been stripped of all emotional affect - to such an extent that he/she can come to accept a policy that attempts to prevent what he/she most fears

(nuclear annihilation) with that of which they are most afraid (nuclear weapons), clearly a very precarious, unbalanced act.

Footnote 12 They may concentrate on the 'numbers game' and order and structure their world so narrowly as to avoid any emotional dangers associated with these weapons. By ordering, regulating or 'freezing' his/her world it becomes predictable, controllable:

he tends to live 'by numbers' by the rule book and to rely on external rather than internal ⁷⁵eyes, on logic and fact rather than impulse, intuition and emotion.

Furthermore, research by neurologists and neuropsychologists on laterality and hemispheric specialisation has indicated beyond reasonable doubt Footnote 13 that different modes of processing information - such as we have suggested here - can be attributed to the functioning of the two separate hemispheres of the brain. This has been demonstrated both in the damaged brain,^{77, 78} and 'split-brain'⁷⁹ and in the normal-functioning brain.⁸⁰ Of particular interest to us here are experiments carried out by Terzian,⁸¹ Gazzaniga and Le Doux⁸² and others which reported that when the right hemisphere is anaesthetised (by injection of sodium amytal into the left carotid artery) patients became 'euphoric maniacal'. Characteristically the patient is:

optimistic⁸³ about his future, makes jokes and often breaks into laughter.

Injection and anaesthetisation of the left hemisphere causes the patient to exhibit 'depressive catastrophic' reactions:

the patient ⁸⁴cries and says he will never recover, that his family will got to ruin.

Similar states were also found in patients with unilateral left or right brain damage by Gainotti⁸⁵ What then, may the case be in the normal brain? Is it possible that, when an individual represses the functioning of the affective system that we can expect a similar process to take place? If an individual represses affective information originating in the right hemisphere then he/she may, on the one hand, feel less affect (fear, horror or anxiety for example, as we saw in the case of the nurse/doctor above) but on the other hand it may be possible that the individual will as a consequence feel extra-positive (i.e. euphoric) towards the idea object. This may help to explain the incidence of a black humour in states of extreme anxiety or stress. This, we suggest, may also explain how some people can manifest extreme support for nuclear weapons; i.e. first they repress any feeling of fear, etc., that they feel towards them which suppresses affective processing, leading to feelings of 'euphoria' or at least well-being Footnote 14 towards nuclear weapons. Footnote 15 One further proposition that commissurotomy research offers us, is that when affect is repressed (i.e. 'functional commissurotomy') it is easier to attribute affect to the wrong causal stimulus, therefore making the whole process of denying fear of the original object easier when it can be transferred to another idea object. Consider, for example, the residents who live in close proximity to Greenham Common who direct all their negative feeling - often with great vehemence -against the peace-campers. Their attitudes are often out of all proportion to their objections which are often on the grounds that the peace protesters are dirty, unsightly and leave litter around!

Speculation aside, however, what we are primarily suggesting here is that genuine attitudes are charged with affect and may be termed 'central' Footnote 16 to an individual's belief-system, and as such are not readily amenable to change. When an attitude is not charged with affect, i.e. a 'pseudo-attitude', at the periphery of a belief-system, then attitude change is more likely to be a possible outcome because the attitude is unstable. 'Pseudo-attitudes' are likely to occur under social pressure to conform. When an individual has implicit beliefs or sets of arguments imposed on him/her and any affective evaluations incongruent with these cognitive packages are repressed or otherwise avoided, release of affect may be triggered, for example, by watching ^{the T. V. programmes} 'The day after' or 'Threads' or other stimuli that cause a sudden release of affect. Alternatively the process may be slow, affect may be suppressed for a long period of time if external circumstances encourage this, but the individual may begin to feel uncomfortable or uneasy as these affective judgements begin to surface. Even in Rosenberg's experiment with hypnosis, some subjects developed 'vague and uncertain suspicions' that their feelings had been manipulated. Footnote 17

We now have a psychological and structural understanding of the process of denial whereby the individual is able to maintain both cognitive consistency and emotional well-being by means of rejecting threatening information. Whether attitude-change or attitude restoration is the outcome may depend on the potency of the original communication in relation to the strength of the original attitude components or upon the factors such as personality of the subject, communication credibility, etc., covered above.

Before moving on to further advances on Heider's theory it is worth emphasising this relationship between attitudes and values because the centrality of an attitude, as Katz stated, depends on its role as part of a value system which is closely related to the individual's self concept. The centrality or importance of an attitude for an individual is a result of experience in which the individual, according to Woodruff and Di Vesta⁸⁶ comes to value positively certain objects and conditions which have served to contribute to his/her well-being. Therefore the strength of feeling towards an object, person or situation is related to the individual's 'meaningful' experiences with the object and:

One's attitude toward a specific object or condition in specific situation seems to be a function of the way one conceives that object from the standpoint of its effect on one's most cherished values.⁸⁷

This is an important relationship when we come to consider the question of central and 'peripheral' attitude change.

Osgood⁸⁸ applies the theories of cognitive consistency to real-life situations using the example of Khrushchev and disarmament talks - theories which we can also apply to the situation today. Extrapolating from Osgood then, we can draw attention to the (largely) American press which presents editorials about the deceptive nature of Soviet arms reduction proposals; Gorbachev's proposals - rather than sincere overtures towards peaceful solutions - are seen as carefully planned moves in the Cold War. It is cognitively inconsistent, Osgood says:

for us to think of people we dislike and distrust making honest conciliatory moves, behaving as human beings ought to behave, and assuming noble postures.

The effort to maintain internal consistency among our beliefs and attitudes is often pursued at the price of distorting reality. In all the cognitive consistency theories of attitude change which we have reviewed - and have still to review - it is important to emphasise once again that if cognitive elements are to interact then they must be brought into contact with one another. This has very often been the problem with laboratory experiments in this area - they all deliberately create dissonant, inconsistent elements and force the subjects to see them in relation to each other. In real life it will be far easier for people to keep these discordant elements apart - they simply do not have to think about them, or as Heider points out, some people just seem to be able to live with dissonance-arousing material. Osgood considers this ability to tolerate ambiguity to increase with intelligence and education, but this is an assumption we shall be questioning later. Nevertheless, it seems likely that an increasing proportion of the population is likely to experience pressures towards congruity when these elements are forced into juxtaposition as a result of media attention.

3.18 PROBABIOLOGICAL APPROACH TO ATTITUDE CHANGE

This approach tackles the question raised by Osgood, from a structural point of view, and sees attitudes and belief-systems as a system of interconnected syllogistic networks containing vertical and horizontal structures. A belief syllogism, Petty and Cacioppo (op.cit.) elucidate, is a set of three statements, two of which serve as

premises that lead psycho-logically to a conclusion. Psycho-logic is the process whereby the individual reaches his/her conclusion from the premises in his/her own mind - and does not necessarily follow the rules of formal logic to do so. For example, if we are good, trustworthy and honest, and they are the enemy, according to Osgood, psycho-logic dictates that they must be bad, untrustworthy and dishonest.

3.1 THEORY OF REASONED ACTION

This theory is based on the assumption that "humans are rational animals that systematically utilise or process information available to them."⁸⁹ Although this theory is orientated towards behaviour and changing behaviour, it is also concerned with attitude change as precursors of behaviour, and is useful as far as we are concerned here because, generally speaking, "a person who believes that performing a given behaviour will lead to mostly positive outcomes will hold favourable attitudes toward the behaviour." We will be more concerned with attitudes and behaviour later in this chapter but the main aspect of Fishbein and Ajzen's theory that interests us here is the suggestion that the individual's subjective norm is an important factor of behavioural intention, i.e. his or her belief that "most important others" think the individual should or should not perform a behaviour - or of course - hold a certain belief or attitude. This suggests a third dimension to Rosenberg's cognitive, affective components of an attitude, and also introduces the pressure to conform to others' expectations and group conformity. Hardy⁹⁰ suggests that attitudes may change as a result of changes in

"perceived social reality" or from influences which are thought to reflect objective reality dependably - such as "most important others" this is because:

The importance of "social reality" defined in terms of the shared consensus of (significant) people in the environment, is now widely acknowledged as a determinant of social attitudes.⁹¹

In support of Fishbein and Ajzens emphasis on the subjective norm, research by Stotland et. al.⁹² and Maccoby et. al.⁹³ also emphasises the pressure of the group on attitude acquisition and change. Stotland et. al. also relate these effects to levels of self-esteem.

3.20 INFORMATION INTEGRATION THEORY

Anderson's⁹⁴ information integration theory is similar to Fishbein and Ajzen's in that he suggests that attitude judgements are determined by a number of beliefs. Each piece of information is represented by: 1) scale value, i.e. how favourable or unfavourable the person is to the information and, 2) the weight, which indicates how important the information is to the person. Petty and Cacioppo (op.cit.)⁹⁵ maintain that this accounts for the effects of issue involvement on persuasion:

by contending that more involved persons give their own initial attitudes greater weight than less involved persons and thus are harder to persuade.

3.21 COGNITIVE DISSONANCE THEORY

Perhaps one of the most renowned of the cognitive consistency theories, and the one that has provoked the largest systematic body of data, is the theory of cognitive dissonance published by Festinger in 1957.⁹⁶ The basic premise, as with all consistency theories, is that elements are either consistent with each other, inconsistent, or irrelevant and that where inconsistency arises - or as Festinger prefers, dissonance - the person will be motivated to reduce the dissonance and achieve consonance. Two elements of knowledge, according to Festinger are dissonant when:

considering these two alone, the obverse of one element would follow from the other.⁹⁷

Thus, for example, if someone supported nuclear weapons and also thought they increased the likelihood of nuclear war, there would be a dissonant relation between these two cognitive elements. Much of the work carried out^{to} test this hypothesis, by Festinger and Carlsmith⁹⁸, took the form of forced compliance situations whereby subjects were induced to behave in a manner that is inconsistent with their private beliefs. An individual will then be motivated to change his/her private attitude in order to make it consistent with his/her behaviour. According to dissonance theory a person should experience a high degree of cognitive dissonance if a counter-attitudinal act is carried out for a small incentive rather than a large incentive because the more reason a person has for performing counter-attitudinal behaviour (i.e. given \$20 rather than \$1 as in the Festinger and Carlsmith experiment), the less dissonance is

experienced and therefore less motivation for attitude change. A number of further experiments were carried out to replicate these findings, by other researchers on, for example, schoolchildren who were induced to eat vegetables they disliked,⁹⁹ on members of the US forces who were induced to eat grasshoppers,¹⁰⁰ on students persuaded to write counter-attitudinal essays,¹⁰¹ and many more besides. Another aspect of dissonance theory that was revealed was the relationship between dissonance and exposure to information. In particular, Zajonc (op. cit.) concludes that the assumption that dissonance is a psychologically uncomfortable state leads to:

the prediction that individuals will seek out information reducing dissonance and avoid information increasing it.¹⁰²

Generally these results supported the applicability of dissonance theory. When dissonance is induced after an individual has taken a public stand different from his/her personal beliefs, the resulting psychological tensions motivate the individual to change his/her own private beliefs to make them consistent with the view expressed. While cognitive dissonance theory may be useful in explaining the attitudinal effect of dissonant behaviour, a number of problems and limitations arise. One problem that Cohen¹⁰³ emphasises is the way that dissonance theory appears to depend on the subject taking a pro or anti position on the subject to begin with:

While dissonance theory may work well where there are such clear-cut alternatives, it may not be so helpful where compromise positions may be taken. It seems reasonable that dissonance reduction via attitude change is dependent upon the individual's decision to commit himself to a discrepant position.¹⁰⁴

This further emphasises the importance of choice in cognitive dissonance. Cohen et. al.¹⁰⁵ hypothesise that under greater degrees of choice - but not lesser - increased dissonance, and consequently attitude change, would result from increasing the discrepancy between a person's original opinion and that advocated. Furthermore - and more important to this thesis -it may be assumed that chance exposure to discrepant information is unlikely to produce dissonance. It is only when a person chooses to be exposed to it that dissonance, and consequently attitude change, are likely to occur. As we stated earlier, the individual in the real world is likely to avoid information that is likely to give rise to the psychologically uncomfortable state of dissonance. Research by Cooper and MacKie¹⁰⁶ further complicates the issue by suggesting the important influence of the intergroup situation, i.e. if the individual has the support of a group in respect of his/her original attitude, then attitude change is unlikely to take place in the compliance situation. Divorcing dissonance from the social context in which it occurs, they felt, allows predictions of attitude change to be made, but within the social context of a group:

the very same dissonance that is aroused by induced compliance may have effects that are very different from, and even contradictory to, the consequences of dissonance in a setting devoid of social context.
^{107.}

Scott¹⁰⁸ also considers the social context; an important and often neglected aspect in dissonance theory. Attitudes, he believes, need not be cognitively consistent unless the requirements of external reality impose such consistency on them. Scott goes further and

maintains that:

Ambivalent attitudes may be normal, stable components of many people's cognitive structures. They may even be cognitively consistent. Moreover, cognitive consistency itself is not even a requisite for a quasi-stable states of the total cognitive structure. Only when pressures for such consistency arise from within the person himself or from his environment do the demands for adaptation require a more consistent attitude structure. It is quite possible for one not confronted with the need to adjust to a consistently ordered environment, or with a need to defend his opinions against opponents who demand to know¹⁰⁹ their rational basis, to maintain quite inconsistent attitudes.

Now this is a crucial point that has been too easily ignored by the many researchers who have attempted to test the minutiae of cognitive dissonance theory: they have almost entirely ignored the question of relevance and applicability to the world occurring outside the laboratory. As we recognised earlier, the individual can too easily isolate the dissonant element from the rest of his cognitive system -or even, as Scott maintains, just simply fail to impose on him/herself any requirements for rationality in that particular area. Consonance follows no laws of logic but depends upon how the individual balances elements of an attitude with other cognitive elements such as values, expectancies, self-esteem and group consensus which increase its resistance to change. Festinger himself admitted that there is a variation in "tolerance of dissonance":

For some people dissonance is an extremely painful and intolerable thing, whilst there are others who seem to be able to tolerate a large amount of dissonance.¹¹⁰

Reiss and Schlenker¹¹¹ suggest two ways in which an individual may respond to his discrepant behaviour: firstly, he/she may try to excuse the behaviour by denying responsibility for the consequences. Of course, this means of escape is deliberately blocked in the

experimental situation. Secondly, the subject may attempt to justify his/her behaviour - leading to attitude change. The point is that, outside the limits of the experimental situation, the use of excuses as a means of coping with such dilemmas is going to be far more likely than justification.

So where precisely does this get us with cognitive dissonance theory? Zajonc, rather perceptively, compares the concept of consistency to the concept of a vacuum: for centuries the principle that nature abhors a vacuum served to account for various phenomena, until too many exceptions were found and the previous concept had to be changed. Human nature, we were led to believe, abhors inconsistency but now this principle needs to accommodate too many exceptions to be entirely satisfactory. Joule¹¹² would seem to be in concordance with Scott on this issue, even if he is writing some twenty-seven years later. Echoing Scott, he says:

reduction in dissonance is not presented as a process that always orients cognitive activity towards greater consistency, but as a rationalisation of conduct which may adapt to an increase in certain inconsistencies, and even generate them.

Joule interprets Festinger's theory as one of "rationalisation of conduct" rather than the elimination or reduction of cognitive dissonance. The process of dissonance reduction, therefore:

is not governed by a principle of cognitive optionality, but is rather a post-behavioural process that can perfectly well accommodate a certain imbalance between cognitions. . .¹¹³

Although Joule maintains he is offering merely "yet another version of cognitive dissonance theory", he is in actual fact suggesting, as near as damn it, an attributional approach to attitude change.

3.2.2 ATTRIBUTIONAL APPROACHES TO ATTITUDE CHANGE

In 1965 Bem¹¹⁴ offered a completely new interpretation of cognitive dissonance theory using what is generally accepted to be an attributional analysis. According to this theory the effects that had previously been attributed to the psychological tension of cognitive dissonance can be explained in terms of self-attribution. It is suggested by Bem¹¹⁵ that:

the attitude statements which comprise the major dependent variables in dissonance experiments may be regarded as interpersonal judgements in which the observers and the observed happen to be the same individual and that it is unnecessary to postulate an aversive motivational drive towards consistency to account for the attitude phenomena observed.

This alternative interpretation rejects the 'hypothetical internal processes' posited by cognitive dissonance theory, and instead sees the relationship between the stimulus (counter attitudinal behaviour) and response (dissonance) in terms of the individual's past "training history". Although initial objections to this interpretation may be on the grounds that it reduces a human being to a simple mechanism of stimulus and response we have to consider it as a possible alternative to dissonance theory. Drawing from examples suggested by Skinner,¹¹⁶ Bem explains that an individual's ability to respond to his/her own behaviour is a product of social interaction. He suggests that children are taught to make statements about internal events to which only they have direct access. A child can easily learn to describe "butterflies in the tummy" without exhaustive training but in training a child to describe pain, Bem gives as an example, it is necessary at some point to teach the child "the correct response at the critical time when the appropriate private stimuli are impinging

upon him." Experiments by Schachter and Singer which manipulated the external cues of a situation suggested, furthermore, that subjects used internal stimuli to determine an emotional state, but the more subtle discrimination of which emotion was determined by external cues. Bem suggests then, that:

the many subtle discriminations which individuals do make when describing their attitudes are based, rather, on the kinds of cues potentially available to an outside observer. In particular it is suggested that self-descriptive attitude statements can be based on the individual's observations of his own overt behaviour and the external stimulus conditions under which it occurs.¹¹⁷

What had previously been attributed to cognitive dissonance in the experimental situation is now, in Bem's analysis, attributed to the individual's own perception of his/her behaviour, i.e. the individual, after behaving in a particular way analyses the stimulus conditions which gave rise to the behaviour and deduces what his or her attitude must have been.¹¹⁸ Rather than feeling tension due to inconsistency, the individual is said merely to analyse his or her behaviour and the stimulus configuration that preceded it in order to deduce his or her private attitude. Bem replicated the Festinger and Carlsmith experiment (op. cit.) and as a result indicated that an outside observer would attribute the same attitudes as a result of the designated contra-attitudinal behaviour as the individual himself would. Other work by Ross and Schulman¹¹⁹ compared the efficacy of each interpretation and, while they acknowledged that some of their findings replicated Bem and McConnell's¹²⁰ findings, concluded that:

the results in the present experiment suggested that self-perception theory may not fulfil its original purpose. It is probably not a viable alternative to dissonance theory.¹²¹

This illustrates the difficulties of evaluating one theory over the other: each theory, as Bem and McConnell point out, is capable of claiming territory not claimed by the other, and:

one's choice of theory in areas that overlap is diminishing to a matter of loyalty or aesthetics.¹²²

But the criticisms that can be levelled at dissonance theory can be applied with equal justification to Bem's alternative. Consider the absurdity of the following scenario: outside a night club one night a scuffle breaks out and one man (A) punches another (B) on the nose. Now (A) says to himself, "Oh. I must have been very angry with him because I punched him on the nose." It seems rather more plausible that he would say, "He made me very angry so I punched him on the nose." Neither is it likely that (A) could mistake his state of arousal prior to the punch-up for anything other than anger. The immensely elaborate experiment set up by Ross and Schulman, mentioned earlier, illustrates the problem of going to enormous lengths setting up an experiment that bears no relationship to circumstances in the real world.

3.23 CONCLUSION

When we are talking about attitude change - or the potential for attitude change - we are basically talking about the presentation of new cognitive components and their effective concomitants, and the effect this has on an individual's belief system. If the new components are inconsistent with the existing belief system - fall outside the individual's latitude of acceptance - then the individual

will undergo a mental balancing act in order to find a state of equilibrium which will result in her/his reformulation of belief system to incorporate the new components (attitude change), or rejection of the new component and restoration of the old belief system. Obviously there is a degree of latitude, and vacillation is possible between logically contradictory belief systems. It is essential, however, to appreciate the important of the subjective norm (see above) in this process - we are not isolated individuals but supremely social creatures for whom social contact and acceptance is essential. The individual's social group or 'reference group' plays an important part. Not only does the individual seek consistency within his/her inner world, but the members of his/her social group also demand that a relatively consistent picture is presented to the world. Again, within the group, a certain degree of discrepancy is permitted, but if certain tolerance limits are exceeded then the individual in question runs the risk of being rejected by that group. Group pressure to conform has been demonstrated in experiments where individuals modify their opinions to conform to that of the group. The basis for this can be found in the profound human desire to be accepted, which has its basis in the long period in which the individual is utterly dependent for his/her pleasures and for life itself upon those about him. Allport¹²³ observed:

During the first two or three years every event of importance to his well being occurs through the administration of other persons. . . . It is obvious, therefore, that . . . these social stimuli must acquire an early and universal significance.

One of the most devastating means of punishment in the hands of a human community is, as Berger¹²⁴ points out, "to subject one of its

members to systematic opprobrium and ostracism." The belief system or ideology of the individual's reference group, be it the Navy, the Conservative Party or the scientific community, therefore, helps to prevent vacillation between belief systems and various explicit and implicit means are employed to prevent questioning which might threaten the individual's allegiance to the group. In this way we can see that the social control of the group, both with regard to attitudes and behaviour, effectively limits the range of the individual's possible actions and thoughts in a particular situation and as Gehlen¹²⁵ says, such a group or institution acts as:

a regulating agency, channeling human actions in much the same way as instincts channel animal behaviour. In other words, institutions provide procedures through which human conduct is patterned, compelled to go, in grooves deemed desirable by society. And the trick is performed by making these grooves appear to the individual as the only possible ones.

So the social group or institution protects the individual from quandary and, according to Berger, shuts out all other options in favour of the one that his/her society has predefined for him/her. It even bars these other options from his/her consciousness so that he/she works within unperceived boundaries unquestioningly accepted at both the physical and mental levels. The ideology or belief system of the social group comes to justify what is done by the group whose vested interests are served, and it interprets social reality in such a way that the justification is made possible. In being a member of a group/society we are presented with a world view that tells us the world is such and such and these implicit tenets form the basis of our opinions, beliefs and actions. In the same way, and we turn once again to Berger:

society supplies our values, our logic and the store of information (or, for that matter misinformation) that constitutes our 'knowledge'. Very few people, and even they only in regard to fragments of this world view, are in a position to re-evaluate what has thus been imposed on them. They actually feel no need for reappraisal because the world view into which they have been socialised appears self-evident to them. Since it is also so regarded by almost everyone they are likely to deal with in their own society, the world view is self-validating. Its 'proof' lies in the reiterated experience of other men who take it for granted also.

No truer can this be than with the nuclear defence issue today where we can see this whole process at work. The belief in the utility of nuclear weapons for national security was laid down more than forty years ago (when military thinking was firmly rooted in conventional warfare with non-nuclear weapons), and with each passing decade gains credence and reverence until we have come to believe that the course of action predefined by such a belief system is the only one we can possibly take, the only one we are capable of.

We can see how this implicit world view provides us with off-the-peg assumptions, beliefs and arguments about how the world is, with which to clothe our ignorance. We accept it like a second skin and in so doing our cognitive processes can be applied to more 'important' issues like unemployment, the cost of living or next week's dinner party.

We can appreciate, therefore, the difficulties encountered by an individual and by a whole society when new information emerges which threatens this system. We become fearful, uncomfortable, upset about the unimaginable power of destruction we have at our disposal, and it can be understood how many choose to retreat into an old belief system where they can find refuge in the reiteration of

their old tenets of belief. For those who accept new information, who question these implicit beliefs, it can be a long, painful process to a new belief system. Any reappraisal of the old system of belief will require the existence of another group which will help to bring about this metamorphosis and provide reference points for the individual's emerging belief system. In the following chapter we shall see to what extent this is true when we look at processes of change that have taken place for individuals in the 'real world' - outside the constraints of a laboratory.

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FOOTNOTES

1. Psychoanalytic theory defines the threatening forces emanating from within as being the individual's own unacceptable impulses deriving their energy from the id which centers "... around the basic needs of man and their striving for gratification. These needs are rooted in instinctual drives and their vicissitudes ..." ¹⁵. A far more satisfactory interpretation is put forward by Fairbairn ¹⁷ in his object relations theory. Nevertheless ego-defences still apply but in terms of protecting the ego from internalised bad objects.
2. See. FORNARI F., (1976) The Psychoanalysis of War, Penguin.
3. See BRONFENBRENNER U., (1961) 'The mirror image in Soviet-American Relations : a Social Psychologist's Report'. Journal of Sociology, 17, 45-56, for an account of 'Mirror Imaging'.
4. It is worth noting, with reference to Footnote 1 that whereas Freudian psychoanalysis sees aggression as a primary drive along with pleasure, Fairbairn and other non-hedonists see aggression as "the accompaniment of the fulfillment of all drive-aims" and not a libidinal drive per se.
5. Interesting information came to light recently, in this respect. Micro Live, B.B.C. Television, 28th February 1987 revealed that in the U.S.A. politicians have access to information on members of the public which enables them to gauge their mail-shots more appropriately to the receivers attitudes. This has far-reaching political overtones when possible supporters/opposers of particular political measures can be identified and contacted with specifically tailored information. The Conservative party follow a similar path, according to this programme.
6. An experiment was carried out to prove that people could be taught to salivate at the sound of completely neutral words - this surely must be scientific research gone berserk - research for its own sake.
7. A great deal of research has gone into examining the minutia of this and similar approaches - as indeed there has in many aspects of attitude change research almost to the extent of utter absurdity. ³⁵
8. Although this may seem just like another example of experimentation outside the bounds of real-life, Rosenberg maintains that hypnotic suggestion "was employed as an experimental analogue of a broad class of non-hypnotic experiences which seem to produce affect modifications in everyday settings". As an example he says that an individual's inner needs and conflicts are attained through experience and "growth", and that while "old affects may come to heighten

frustration and tension ... the expression of new affects may operate to reduce needs and resolve conflicts."

9. Zajonc came in for some criticism after publishing this paper, see: LEVENTHAL H. The Integration of Emotion and Cognition, in Affect and Cognition ed. Clark M. Fiskes, Lawrence Erlbaum Associates, New Jersey, and himself retreated defensively in a later paper.
10. I suggest this is only the case when the cognitive judgement is not accompanied by strong affect - this will become an important point later.
11. This refers obliquely to experiments by Brehm (see section later on Cognitive Dissonance) testing the cognitive dissonance hypothesis in which schoolchildren were induced to eat a disliked vegetable. No attempt was made in this experiment to use convincing arguments to change attitudes but depended on a counter-attitudinal behaviour - which met with some success.
12. Colin Gray is quoted as saying in the Washington Post 16th April, 1982, "The United States must possess the ability to wage nuclear war rationally and that means keeping our policy free from the influence of 'guilty' scientists and 'religious, political-theoretically and frankly emotional premises" - A good example of this type of behaviour.
13. Where inconsistencies and contradictions arise, it has been suggested by Tanguay, ⁷⁶ these can be attributed to faulty methodology rather than faulty conceptualisation.
14. Of course, this analysis can equally apply on the other side of the debate. Those who are vehemently opposed to nuclear weapons are often called 'emotional', 'irrational', 'illogical', , i.e. they repress analytical, logical functioning leading to 'depressive, catastrophic' reactions and extra negative attitudes towards nuclear weapons.
15. Perhaps we have here a neurophysiological explication of 'identifying with the enemy'! In fact much of the 'split-brain' research has discovered parallels with psychoanalytic theory. See Gazzanga and LeDoux (1978) Op. Cit. Page HOPPE K. (1976) Split-brains and psychoanalysis, Psychological Quarterly, 46, 220-224. See also Bolton-King L., (1983) Beyond Ego: M. A. Dissertation. University of Bradford, Unpublished.
16. See Petty R, Caccioppo J., (1981) Op. Cit. p. 255-256 for use of central and peripheral routes to attitude change which is rather a different matter, but nonetheless related to this analysis.
17. We can turn once again to commensuratory research to see parallels here. In Gazzanga's experiments when information of

a 'terrifying' nature was shown to a subject's right hemisphere, although the cognitive verbal hemisphere was not privy to this information, the subject reported feeling "Kind of scared ... jumpy ... nervous". In the same way for the person with 'functional commisuratory' feelings of worry may be felt as cognitive and affective incongruities increase.

Each individual was interviewed for between half an hour and two hours. Although a schedule was drawn up of what needed to be covered the interviewees were allowed a fairly loose rein so that their expression of attitudes could be free-ranging. I shall consider each on an individual basis before analysing overall patterns and differences. So that all useful quotes could be used without causing embarrassment to the interviewees, these people will remain anonymous.

4.2 RO, POLITICIAN

RO was a prominent politician during the 'sixties, holding high government office. He describes himself as someone who, over a period of a quarter of a century, has "thought about the use of nuclear weapons and the strategic objectives towards which that use was pointed, and the likelihood of achieving those objectives by their use. . ." He considered any suggestion that he had changed his attitudes as "absurd":

I think there's a consistent stream in my thinking - maybe consistently wrong - but it's consistent.

We can perhaps see him as a man very much lodged in a belief system prevalent at the time, but who was not entirely trapped by it. He was able to evaluate and question the prevailing world view to some extent and even, when he held office, instigate a degree of change. But the difficulties he encountered in doing this serve to illustrate the deadweight of a prevailing belief system and the pressures on an individual to conform. Perhaps we can see RO as a man who, as long ago as the 'sixties, was making that long painful process to a new system of belief, and is still in that process.

RO makes a particularly interesting subject for study because we can appreciate that the pressures on a public figure to conform are even greater than those on a private individual, and consequently attitudes and behaviours during office may be discrepant with a belief system out of office. So we can expect to see RO attempting to reconcile these incongruities with his existing self-image.^{Footnote}

¹The prevailing defence strategy within NATO when RO took office was one of massive retaliation, i.e. if the Soviet Union made the "smallest attack" on NATO forces in Western Europe, then NATO would launch a massive nuclear force against them. This RO, said:

. . . seemed, as one studied it, it seemed an inconcievable response contrary to the interests of NATO.

He believed it was inconceivable that nuclear weapons could be used with benefit to the initiator and this is something he still believes today:

. . . there wasn't a single piece of paper that showed how NATO could initiate use of nuclear weapons with benefit to itself. There wasn't then and by the way I don't think there is today. After more than twenty years of trying to develop plans for beneficially initiating use of nuclear weapons, NATO has been unable to do so.

We can surmise that it was events during the Berlin crisis in 1961 which brought this home to him. In a BBC interview,² paralleling an account in a book⁴ he outlined the events and says how he asked a senior allied officer what the Soviets would do and how NATO would counter. A series of moves and counter-moves were outlined for him which ended in resorting to the use of nuclear weapons:

And that experience of being forced to think how we'd respond militarily to Soviet pressure - being forced to hear from Senior Allied officials that we use nuclear weapons certainly required me to sit down and meditate whether such initiation of their use would be to our advantage. And I considered then and I haven't changed my mind one bit since then, that under no circumstances could NATO initiate the use of nuclear weapons with benefit to NATO. It would lead to its destruction.
[his emphasis]

As a result, RO, as part of the Kennedy administration, helped develop and put forward what was known as the policy of 'flexible response', which was calculated to raise the nuclear threshold. Furthermore it was proposed, first to Kennedy and then to Johnson, that they never initiate first use of nuclear weapons. Five years later, flexible response was eventually accepted by NATO but in a very modified form which RO claims ". . . didn't go nearly as far as my private thinking went". After this, and especially after he ceased being head of an International organisation, RO's thinking moved further:

. . . it's moved towards negotiating, in so far as one can, to a non-nuclear world.

This solution, he says is, "stimulated in part" by the administration's SDI programme which, as outlined will:

. . . stand in the way of any further offensive arms limitations.

He sees SDI as having a destabilising effect on arms control which would impede moves towards a non-nuclear world. This development in his thinking, which was surely ahead of its time, was evolving during his seven years in Government office and during the five years

he headed an International organisation. Throughout this time he was prevented by his office from engaging in the debate, but he participated more when he had left the Organisation.

Although RO was critical of nuclear policy during his term in the Defence department this didn't prevent him from being involved in one of the biggest nuclear weapons build ups in American history. Looking back on the period he explains this in terms of the problem of "proceeding on imperfect knowledge of the other side's plans" which necessarily lead to worst case estimates. This was something RO saw as not unreasonable:

. . . if the worst case is defined as a sufficiently possible case to justify concern, if it is, then one has to have a potential response to that sufficiently possible case to justify that concern.

Which seems a peculiarly circular argument. Initially the problem was caused by a defence department estimate that said there was a missile gap in favour of the Soviet Union, which was leaked to Congress, while a second report that said there was no missile gap received no publicity.^{Footnote 2} this occurred during the 1960 Presidential elections and when Kennedy came in, with RO in an important governmental position:

. . . it was very clear there wasn't a gap, or if there was it was in our favour in total offensive strength.

The subsequent build-up in weapons was, according to RO, due to the need to project forces five to seven years in advance:

So we had to estimate what their force levels would be in '66 to '68 and we had very, very imperfect knowledge. We had to assume that they would intend to use whatever they were capable of producing by the time '66 or '68 came around we had forces substantially larger than theirs.

[his emphasis]

He makes it sound almost accidental but if we turn to the Secretary of Defence's reflections in office written in 1968:

. . . we have acquired a considerably improved balance in our total military posture. That was the mandate I received from Presidents Kennedy and Johnson we were able to create a strengthened force structure . . . with a massive superiority in nuclear retaliatory power over any combination of potential adversaries.

Earlier he had written:

. . . the United States currently possesses a superiority over the Soviet Union of at least three or four to one. Furthermore, we will maintain superiority by these same realistic criteria for as far ahead as we can realistically plan.

Which suggests that the build-up was a deliberate instrument of policy. However, at the same time RO emphasised then and reiterated in the interview that superiority was of limited significance; it didn't make the US less vulnerable to Soviet counter attack: "We didn't think we had superiority in any usable form,

never, never." There is evidently a recurring incongruity. On the one hand is the drive for superiority (numerical superiority,^{Footnote 3} RO is anxious to emphasise, not superiority per se), and on the other, that this (numerical) superiority, he recognises, does not actually enhance security.^{Footnote 4} This incongruity is, I suggest, indicative of an individual vacillating between two contradictory belief systems. This is further emphasised in the interview where RO is trying to make sense of his past behaviour in the light of his present belief. Retrospectively he is therefore inclined to attribute a more favourable interpretation on the events. Later in the interview he introduces the concept of parity to explain this mental balancing act:

. . . the width of the band of parity is very great. It didn't make any difference to us in October '62 whether we had an advantage of 17 or 15 to 1, or 2 to 1, or if they had an advantage of 2 to 1. It would have made no strategic difference at all. So in those terms superiority meant nothing - in terms of numerical superiority we had it, but numerical superiority doesn't mean anything.

With regard to the Soviet Union's stationing of SS 20's in Europe and the US response with Cruise and Pershing missiles, RO almost confronts these contradictory approaches head-on. The Soviets, he said, had no reason to introduce SS20's in Europe, at least no military reason because their forces were already sufficient to deter NATO's use of nuclear weapons. Once they were stationed, he adds, there was no military purpose served by NATO deploying Cruise and Pershing:

. . . if there's no military reason then there's a political reason otherwise they wouldn't have put them there whatever the political reason was would have been indicated if the other side had properly explained to its constituents that there was no military purpose served by the action; because there would be a political objective served only if the other side understood the action to have no military implication. If the West believes that the Soviets are strengthening themselves militarily by putting SS20's in - even though the Soviets know they weren't - they activated their political objective by increasing the West's fear of the Soviet military. But, if I said, and I convinced all the people in the West, that the Soviet military strength had not been increased by the SS20's and all they'd done was waste money that they badly need for their domestic economy, we'd all clap with glee and say "How great! they screwed it up!" But the West didn't say that they said "Oh my God they've put those SS20's in there, we're at risk, we're in much worse shape militarily today than we were last year and we've got to respond militarily." And that's absurd.
[his emphasis]

He outlines an 'Alice through the looking glass' world of bluff and counter bluff which leaves us not quite sure of which is the real image and which the projected image. But he is clear enough about his position on these missiles, because no military objective was fulfilled by them and because they actually add to crisis instability, he sees their removal as "highly desirable . . . I think they should be removed. Absolutely".

The fact that the (leaders of) European members of NATO are not so keen on the idea is, he feels, not due (as I suggested) to the European fears of the 'Soviet threat' that are enhanced by negative evaluations of the Soviet Union projected from the US (which was a suggestion he refused to countenance), but because:

European thinking is way behind the US . . . in understanding the realities of the nuclear age. Way behind. . . the politicians are behind the Chiefs in understanding the reality of the nuclear age.

He is, it seems, accusing European politicians such as Thatcher and Kohl of subscribing to an outdated belief system that he himself has long since outgrown and abandoned. RO illustrated this point -indeed the whole contradictory position of an individual in belief-system transit - by referring to a television interview in which Robert McNamara took part along with Holst, the Norwegian defence minister, Joffe, editor of a Munich paper and professor of security affairs, and a moderator. McNamara was arguing that ultimately "we would not need the nuclear deterrent, we could command conventional forces to deter Soviet conventional force aggression", Joffe disagreed, and the programme ended with McNamara suggesting that they could surely agree that the use of nuclear weapons would not benefit the initiator, that it would end in the destruction of the initiator:

"Yes", says Joffe, "But", he says, "don't tell the Soviets that." Now, I submit to you that that is an absurd position. This is the position of the security experts - majority of security experts - in Europe.

RO suggests that American thinking on nuclear defence has evolved beyond that of her European allies (except perhaps for people like Weinberger and Perle), and this of course includes his own thinking on the issue. But his thinking, it seems, has not evolved so far as to encompass the suggested removal of American nuclear bases in Britain. Although Britain giving up her own nuclear force is "for them [Britain] to decide" the American nuclear bases are seen as an entirely different matter. He emphasises strongly that they "are not US Nuclear bases - they're NATO nuclear bases" and for Britain to

ask the US to remove the bases would be:

. . . absurd. It's just absolutely absurd - and you talk about the incorrect behaviour of the US at Reykjavik. Well it would certainly be incorrect of a member of the alliance to unilaterally disarm. . . . it's not for Britain to unilaterally decide they'll be pushed out now, [i.e. the US bases]. I think that would be a serious error if that were done. It would have adverse effects on the unity which . . . is essential for the strength of the alliance.

Perhaps the thinking of some of us Europeans has evolved further than that of some Americans. . . .

4.3 PA, POLITICIAN

PA is a senior US statesman who, as seems to be the rule with most of those interviewed, was not sure that his attitudes towards nuclear weapons had developed much, and when asked to outline his attitudes during the 'sixties he said he was a faithful disciple of Robert McNamara. As a member of the Nuclear Planning Group during this period, he was dealing with "questions of possible use of tactical battlefield nuclear weapons." PA saw that the problem, in this respect, was:

. . . trying to wean the Europeans away from the idea that nuclear weapons were somehow functionable with conventional weapons and that you could use nuclear weapons to remedy conventional defects.

This suggests that conflicting belief systems were already emerging, consonant with RO's statement that Europe was way behind America

in its conception of the nuclear age. PA goes further, however, and recognises that this dichotomy - conflict of belief systems-existed among American policy makers:

We talk about nuclear weapons in deterrent terms but nonetheless if you look at actual declaratory policy and if you look at NATO doctrine - If you look at things like Presidential decision 59 - a lot of other things - they're really couched in nuclear war fighting terms. And that's why it's been difficult to make sense out of strategic policy because you have these totally divergent mutually exclusive themes.

This, in PA's view, is not just a problem between the administration, civil policy makers and the military, but a divergence of views that exists within the military itself:

. . . you've got a lot of statements by very capable, intelligent military leaders like Davy Jones, like a number of others - Maxwell Taylor - about the fact that they, as battlefield commanders, wouldn't know how to use a single nuclear weapon. But nonetheless you have the SIOP and you probably have something like 10-11,000 targets and the idea that you have to have a number of warheads to hit that number of targets is consistent only with thinking about a protracted nuclear war. So, as I say, there has always been this difference of view . . .

What the Nuclear Planning Group did, PA thought, was to reveal the contradictions in NATO policy which were highlighted by the Reykjavik proposals which the European policy-makers found threatening. He thought that they don't want anybody to say nuclear weapons are no good. "They want the declaratory policy to be that when the first Soviet tank rolls into West Germany, we hit Moscow."

This policy, which suggested a scenario starting with conventional war, escalating to tactical, battlefield nuclear weapons, then a strategic exchange, PA found unbelievable:

I didn't believe it and I didn't believe the Europeans in fact would want it, but what they want is the Russians to think that this would occur and it would occur automatically.

PA believes that nuclear weapons "have a very, very limited utility" - to deter the other side using their nuclear weapons - but he is against any increase in nuclear technology because that assumes flexible response is possible:

. . . that there is such a thing as flexible response - I just don't believe that.

He holds firmly to the idea that a nuclear deterrent is necessary. In this respect his attitude diverges somewhat from that of McNamara, and perhaps it could be said that his attitudes have not developed towards the new way of thinking about nuclear weapons to such an extent as McNamara:

The world runs on deterrents. That's the basis of the criminal code - you can rely on most people perhaps not to murder, steal, rape, but would you throw away criminal punishment?

Nuclear weapons, for PA then, fit into a wider belief system than nuclear deterrence and this comment gives us an illuminating insight into his world-view. Footnote 5 Nevertheless, PA stated that the

system of thought. When this incongruity was pointed out to him he brought up the dangers of first strike:

. . . as long as each side is afraid that the other side has an offensive potential, then in a time of crisis there's always the problem of somebody moving first. I mean you're afraid the other side is going to conduct a surprise attack, so you pre-empt, and then all of a sudden you've got the war going - how do you stop it? And wars are very hard to stop.

To reduce to the danger of this, PA draws up what he sees as a likely scenario involving Yugoslavia and the "domino effect". He suggests a nuclear free corridor in Central Europe:

. . . just pull the forces apart and then you know people could begin to think rationally about very substantial reductions in nuclear forces beyond the strategic level. I think that's what ought to be done.

Substantial cutbacks in offensive nuclear forces and restraints on SDI would further reduce the dangers, he thinks. But the problems encountered during PA's time as Under Secretary of Defence for International Security underlines the difficulties to be encountered.

He saw the SALT talks as a lost opportunity:

I'd say that was the real tragedy. If we'd been able to get SALT talks started in the fall of 1968 we could have caught MIRV's. Because that was prior to advance testing and deployment . . .

Then the Soviets invaded Czechoslovakia:

That slowed up the beginning of the SALT talks and by the time that could have started Mr. Nixon had been elected

and he would not authorize Johnson to go ahead and begin the SALT talks. . . . And then it stalled too long and by that time MIRV's had been deployed. But that's one of the difficulties is that the discontinuity in policy has been a big handicap to arms control.

The development of US MIRVs lead of course to Soviet MIRV-ing too, and another upward spiral of the arms race. PA can see the same dynamics developing with SDI:

I can remember David Packard, who was Deputy Secretary of Defence, testifying that going ahead with MIRVs was giving us great bargaining power - and all it gave us was Soviet MIRVs. And we push with SDI and naturally we'll get a Soviet SDI and then we'll have a combination of a defensive arms race and an offensive arms race. So I say this situation is exactly the same as it was back in 1968.

Development of SDI will not lead to Soviet capitulation in the arms race - a position of strength that will get them to the negotiating table - but to Soviet counter measures, including an increase in MIRV-ing which, PA points out, "was exactly our response to the Soviet ABM." If Carter had been re-elected instead of Reagan PA stated:

. . . there's no question in my mind that SALT [II] would have been ratified and we would have gotten into talks prior to the expiration of the protocol. But as it was when . . . Reagan took office, the Reagan administration had no interest in arms control - I mean not at all . . . not at all, I mean they all said so. . . Jean Ross . . . at the Arms Control Agency said he couldn't find anybody in the administration who knew anything they wanted to negotiate about. . . and nobody ever accused Al Haig of being seriously interested in arms control. He testified against the SALT II Treaty - even though he hadn't read it.

When asked at what stage he thought the US was going to start negotiating sincerely, he replied "1989", with a new President. Footnote 6

there is no way you can get an arms control agreement with the present people in the administration.

Reagan's commitment to SDI discarded the possibility of using it as a 'bargaining chip' in any sort of negotiation - as was on the table at Reykjavik. Reagan, according to PA,

really thinks that his contribution - that his place in history - is going to be assured by getting away from the threat of nuclear war by providing a defence - and that's what he believes.

The situation is even bleaker in PA's eyes:

. . . I think he [Reagan] doesn't know anything. I mean you have to start off with that. I'm not saying that he's stupid. I've never known a stupid President, but in this field he's ignorant. He doesn't know anything about it - and he will never learn.

There is no question in PA's mind that it is possible to negotiate successfully with the Soviet Union. The stumbling block has been the US administration's belief in negotiating from a position of strength. The fallacy of the argument of building more weapons so you can negotiate from strength, in PA's view, is that the other side is unable to negotiate:

If you're in a position of greater relative strength, to any meaningful extent, then the other side is foreclosed from negotiating. They've got to build up - and I think that's what people who talk about negotiating from strength don't understand - they don't put themselves in the Soviet position.

It is, PA points out, the Soviet Union who have made all the concessions, right from the beginning. But he feels that it is "easier for them to make the concessions than it is for a democracy".

Nevertheless he admits:

I used to think sometimes that if they treated me the same way I treated them I'd take up my bags and go home.

The proposals put forward at Reykjavic, PA suggested, may cause the European members of the NATO alliance to resist the elimination of the Euromissiles because of the way in which the proposals were put forward without consultation with the allies - raising fears of de-camping and abandonment. On the question of Britain unilaterally nuclear disarming he could see no problem:

. . . it seems to me it would be awfully hard for anybody to articulate a policy under which you could criticise Britain for wanting to get out of the nuclear arms business itself, and it's certainly a decision you can make and if done in the right, I see no problem with it.

But PA was not quite so magnanimous on the question of removing American nuclear weapons (and there is no pretence here that they are NATO weapons, as with PO). That, he felt, was "a very different thing", although he admits that "I thought logically that the Pershings and ground launched missiles made no sense". As far as he is concerned it makes no difference where the weapons are launched from:

If the men's room in the Kremlin goes up in a mushroom cloud, the Soviet Union are going to say: "I've been attacked by the United States" and that's the only thing they're going to think about.

Despite feeling that nobody could fault the idea that someone wants to get out of the "nuclear business", the question of American bases is an entirely different question and appears, to PA, to be a unilateral

act that has nothing to do with European or NATO security, but is "strictly to do with the British getting out from under the nuclear threat". What he thinks Britain should be doing is pushing to eliminate the SS20's and Cruise Footnote 7 but then he added, rather insensitively:

. . . and the F111's - why worry about that? If the Russians don't.

But he admitted that if he was the British Prime minister he'd make sure that there was a binding agreement under which no nuclear weapons could be fired from Britain without his permission, and also conceded that this was "probably not" what the US themselves would want. If the original Labour party policy were to be implemented, PA agreed that "pressure would be applied" to Britain but, he said:

. . . you're grown-ups, you're going to resist illegitimate pressure and you ought to be responsive to legitimate pressure.
[his emphasis]

Furthermore there is the feeling in the US, according to PA, that: "The UK ought to recognise that we aren't going to do anything that's contrary to their interests". Of course, he said, Britain can't rely on this, but there is that feeling in the US because of the (so-called) "special sort of relationship". PA also subscribed to the popular idea that if Britain did go ahead with Labour's plans then it could lead to the withdrawal of US troops in Europe - something which was both desirable to the peace-minded groups and "very conservative groups" also. This is precisely where Gorbachov's appeal lies:

. . . he feels that if he continues to look like the good guy its going to encourage more of that sentiment. If you stop being afraid of the Russians then a lot of the configuration of forces is going to change quite dramatically - I mean, after all, NATO is a response to fear of the Russians.

PA suggested that Gorbachov could "make a real mess of things" by reducing nuclear forces.^{Footnote 8} In doing so he would be eliminating the fear that is "the only thing that's holding NATO together". The way Gorbachov can do this is to demonstrate that the Soviets have no intention of attacking Western Europe, and what made PA optimistic that Gorbachov may initiate some such move was the fact that they had not tested any nuclear weapons for the last year and a half. He added:

. . . no President of the United States could do that - there's no way any President of the United States could stop testing nuclear weapons for a year and a half while the Soviets went ahead.

PA's scenario for reductions involved the Soviet Union making unilateral cuts in nuclear weapons, then calling on the World community and NATO leaders to instigate reciprocal responses. "That", he said, "would be a real sneaky thing for him to do . . . that would be an awful evil thing for an Evil Empire to do and it would cause consternation in the United States! . . . those sneaky Russians, they're throwing away nuclear weapons!"

Events since this interview took place have shown PA's scenario to be quite prophetic, and his understanding, indeed empathy, towards the Soviet Union to be quite substantial. He said in the interview that if Gorbachov was genuinely sophisticated what he could say to himself is:

. . . I'd like to see NATO break up. Now I'd like to stop having this potential threat of some move that's going to try and prise loose Eastern Europe from my control and turn it over to the West. And not only that, if I could break up NATO I could even relax a bit as far as Eastern Europe is concerned and then not have all the problems that I have had with it. The way to break up NATO is to demonstrate that my intentions are peaceful and that the sole reason that I have nuclear weapons is to protect myself . . .

It would seem that PA's hopes for disarmament lie with the Soviet Union rather than with his own country.

4.4 CAPTAIN B.

Background information

Captain B is an ex-Polaris Submarine commander who spent all his working life in the US Navy or, when he retired from the Navy, in defence-related industry. By his own admission he "got in the Navy quite by accident . . . because of the war" and stayed in because he "liked it and got an education". At the end of the war he saw Hiroshima and Nagasaki and spoke to a survivor. This experience, he told Wesleyan Undergraduates , made him appreciate the qualitative difference between conventional and nuclear weapons. Although the effect was the same as the fire-bombing of Tokyo, everything at Hiroshima and Nagasaki had "gone in a flash". Between 1964 and 1967 he was commander of a Polaris submarine and following this he worked at the Naval War College until he retired from the Navy. He has been an active member of the Freeze movement for the last six years.

Process of change

The process of change in Captain B's thinking follows a distinct pattern which can be divided into four stages:

1. uncritical stage
2. growing awareness, critical thinking
3. impetus to action
4. active opposition

Uncritical stage. During this period, including whilst Captain B was commander of a Polaris submarine, it can hardly be said that he was an ardent follower of nuclear defence policy - in fact he had minimal knowledge:

I didn't know anything about arms control negotiations, deterrence, all that sort of thing. We never thought about it, never talked about [it] it was just not part of our concern

He felt that what he was doing was "the best anybody could be doing at that time to guarantee that we didn't have nuclear war." He had seen the effect of two small nuclear bombs on Hiroshima and Nagasaki; on board his submarine he had sixteen - each of them a hundred times more powerful than those used on Japan. When asked if he ever thought about using these weapons he replied: "No. I really didn't. No." He was sure that while they were there this would guarantee they wouldn't have to use them. It is likely that he used the ego-defence of denial in order to carry out his job: he denied that they could ever be used, he didn't allow himself to think about the awful consequences:

We didn't - I didn't and I don't think anybody else did - allow themselves to deal with the moral contradiction of retaliating with those things, we just didn't allow ourselves to think about that.

and as a consequence:

I didn't think it was immoral to do what I was doing. I refused to think beyond that. That's really what happened.

So he was able to feel "comfortable" with what he was doing, "proud" of what he was doing, without bringing up images of the appalling destruction he had seen at the end of the war and without having to entertain the notion that he was the sort of man who could inflict

this sort of damage himself. It can be argued that he was both avoiding facing the inner reality of the kind of person he was and the outer reality of the dangers the world held for him . In so doing he was able to maintain a state of congruence between the cognitive (he was doing the best anybody could be doing to prevent war) and affective (proud, comfortable) components of his attitude. This state of congruence was further maintained by his identity within the Navy. This helped him to both focus on the positive aspect of his job ("on the front line of deterrence") and ensure that positive attitudes were sustained through the consensus of his community which was characterised by certain approved attitudes where the individual's attitude becomes a function of the way in which he relates himself to the total membership group . Furthermore, Naval routine and the structure of command ensured that he was preoccupied with the day to day running of his ship which he acknowledged enabled him to focus on his immediate logistical problems rather than the wider, moral ramifications:

Oh sure. Yeah. Sure has to be. Sure. Yeah it has to be. And what are the limits of that is the real question. It's real clear to me that if I'd been ordered to shoot, the questions that I would be dealing with was: is this a valid message? And how do I know it? And I check off the reasons I do. Is my ship ready? Are the missiles ready? Is the navigation up? So, so, so. Those are the questions I would be answering and solving down the line and finally shoot. I wouldn't even be dealing with the question is this moral? Should I do it? Is it right?

Captain B was, then, further able to divorce his actions and cognitions from his feelings and avoid the psychological state of dissonance because the demands of his job ensured that everyday

problems dominated his cognitive processing. The sense of being "cut off from the world" added to the atmosphere of unreality, of unconnectedness with the real world or with his feelings. A potentially dissonant situation simply did not arise because he was able to deny, repress and avoid discrepant feelings and cognitions aided by a system that programmed its components to carry out orders like well-oiled and tested machinery, completely unquestioningly. It was not until Captain B began to gain more knowledge of Naval policy and planning that he started to think about the issue and begin, not so much to change his attitudes, but to formulate an attitude whereas before he had merely been carried along by the ideology of his reference group.

Growing awareness , critical thinking stage. Doubts began to arise for Captain B when he worked on a study group for Electronic Long Range Missile Systems (ELRMS), in 1965, which eventually led to the Trident programme. No longer could he ignore the implications of nuclear defence when they were now talking about more accurate missiles, bigger warheads and with the capability of attacking Soviet land based missiles. This development, Captain B " firmly believed was nonsense, we shouldn't do that." He thought it was "absolutely insane." This was the first time he began to think through and become involved with Naval policy and he began to question the motivational basis for such decisions. He saw no reason for wanting to attack the Soviet missiles:

You clearly don't attack them in retaliation . . . and to pre-empt them I think is insane because they always will have the ability to retaliate with unacceptable damage, always.

In fact he became "so upset, so unhappy about what we were doing" that he decided to retire - he could no longer involve himself with such a policy. This can be seen as the first stage of attitude change. Suddenly he could no longer justify these bigger, more powerful submarines on the basis of more deterrence - they were actually threatening to do to the Soviet Union what they had done to Japan but with weapons that were vastly more powerful. He could no longer deny that these weapons could and would be used, and we can hypothesise that memories of what he saw at Hiroshima and Nagasaki could no longer be repressed either - giving rise to such acute psychological discomfort that he just wanted to get out of the Navy. This was not the first time that he had considered retiring -he almost did so before he took command of the Polaris Submarine, when he was seriously thinking of going into a Seminary and becoming a priest in the Episcopal Church. Despite his apparent pride and feeling of being comfortable with his role in the Navy we must suppose that he had some doubts and uncertainties at this time. Captain B also said that at the time, had he looked back on his life - had his life to live over and was a young person starting up - he would have been highly motivated to join the Church. Is this regret? It is difficult to say but clearly when he wanted to retire on account of Trident this was not the first time he had grave doubts about his role in the Navy.

Instead of retiring, Captain B was offered a job at the Naval War College, which he accepted, and it was here that his knowledge developed and his emerging attitudes were accentuated:

there in an academic atmosphere [I] began to really study these issues - I'd never really studied them before in an academic sense that I did there.

While he says it was these things that changed his thinking, it didn't really become a personal issue for him until he had retired and went to work in defence-related industry where he became "more and more troubled by what was going on in International politics". But what really "triggered" him to get active was an event some time later.

Impetus to action. In November 1981 Captain B and his wife attended the commissioning ceremony for one of the first Trident Submarines, The Florida. This was the most crucial event in the process of his developing attitudes; he described it thus:

it was the first time I'd seen a Trident submarine since I'd been in the programme - of course they were just an idea then - now this was the real thing and there was a speech by Senator Hawkins, the lady senator from Florida, and she talked about what a marvellous thing this weapons system was and it was sitting there along the pier and it was an impressive . . . thing. And how it was really safer today because we're commissioning this ship - much safer today. And I thought, you know that's not true, that just isn't true. And then, we visited the ship. Pauline and I walked through it, talked with the sailors on there and some of the officers and I realised this was the best American technology could do, it really was. It was just incredible, far more than it had to be in my judgement, but nevertheless, o.k. there was a billion three [\$] worth of ship and these were the best men our country had and they were trained up, they were smart, they were eager, they were really good people, believed in what they were doing - but the truth is the world would have been better off if they'd all just stayed in bed.

As a result of his visit to the commissioning he wrote a letter to his local paper expressing his feelings:

and just said that I, that I really felt uncomfortable going to that commissioning and seeing this marvellous machine and those people and feeling deep in my heart that they were dead wrong, we weren't adding to our security. And that's all I said but that article received a fair amount of response.

Being faced with the reality of the Trident Submarine - which previously he had felt upset and unhappy about when it was still at the planning stage - triggered him into making a public statement of his feelings and state of discomfort. His actions suddenly began to fall into line with how he perceived the situation to be and how he felt about it. He had take the enormous step outside his previous reference group, which gave rise to the final stage of Active Opposition. As a result of his letter he was invited to join the Freeze movement which provided him with a new reference group that shared his own beliefs - and he became an active member to the extent that "it's almost a full-time job!" We can interpret the development of Captain B's attitude as fulfilment of the 'value-expressive' function (see above) in that he became dissatisfied with old attitudes which now seemed inappropriate to his values and which no longer provided a satisfying image of himself in a changing world. Indeed the 'knowledge function' (see above) also seems appropriate; i.e. Captain B's old attitudes conflicted with new information on the role and purpose of the Trident submarine and by inference Naval policy per se. His beliefs may originally have been adequate until the whole emphasis of Naval policy appeared to change. Although Captain B's attitude is pragmatic in that he believes nuclear deterrence is something "we're stuck with, " he also believes that:

We can't just walk away from it but we'd better . . . get out of it as quickly as we can through negotiations and political settlements that change the climate. And I think that the real danger, I believe the worst serious danger in what we are doing now, is that our focus on the nuclear business has caused us to fail to really understand the reality of modern warfare anyway. And the reality of modern warfare is that it's . . . irrational for modern

industrialised nations to engage in war . . . its intolerable to think about. Even if we didn't have nuclear weapons the destructive power of the conventional weapons we have is, incredible. Most don't even know that, don't even realise that we've quadrupled the capability of killing each other with conventional weapons since World War Two - and that was bad enough compared to World War One, and World War One was bad enough. You know, the progression from the Civil War to World War One and World War Two . . . for industrialised nations is just enormous. So I think that we really need to understand that is not an acceptable instrument of policy for modern industrialised nations.

Previously he didn't allow himself to think about the morality of nuclear deterrence and, therefore, didn't think it was immoral. But since joining the freeze his attitude is that it is "fundamentally immoral to attack civilians", immoral to hold them hostage and to retaliate with nuclear weapons. And finally he agrees with the Methodist Bishops that it is also immoral to threaten retaliation. Originally Captain B was able to ignore all these issues, they were "just not part of our concern". Now they are of deep concern to him and he considers a Freeze only as a first step:

And then from there . . . over the possibility of negotiating other reductions, and from there over the possibility of recognising we can negotiate with each other - we can rely on agreements that each perceives to be in its own interests.

With regard to the possibility of limiting nuclear war, Captain B sees this as "absolutely not" possible and has no illusions about the outcome of a nuclear exchange:

The end of civilisation on this planet, clearly. Absolutely, if not life. I think we can't even calculate or begin to understand the magnitude of what would happen to this planet. The nuclear winter concept is I think the first serious inkling we have and it's just the beginning of thinking about it. There are other things we just haven't even begun to think about it. But certainly civilisation as we know it would end. I believe it.

At first glance Captain B appeared to have undergone a radical change of attitude: from Polaris Submarine commander to active member of the Freeze movement. After close analysis we can appreciate that this was not the case: his attitude developed from an unthinking acceptance of mainstream ideology at a superficial level, when he avoided any issues, thoughts or feelings that threatened his identity within his chosen group. Although many of the theories outlined in the previous chapter seem appropriate to understanding the processes at work, it would appear that incongruent elements of thoughts, behaviours, and feelings play an important part and that while these elements can be kept in isolation by many internal and external strategies, there is no necessity for attitude change or development. However, as human beings we are ever struggling to make sense of our world, both internally as far as our innermost feelings are concerned and externally as far as the cognitive world is concerned. Our attitudes, I suggest, are a juggling act between the two, seeking a state of balance, harmony. That this is a difficult act, often only finding a temporary, perhaps unsteady equilibrium, is further illustrated by Captain B who, while his attitude may be firmly against the immorality of nuclear deterrence, still feels in a dilemma when he considers his former comrades:

My problem with that is that I'd hate to say to my former comrades who are doing the job on those ships today that what they're doing is immoral. I'd have to say that. In fact I don't think I could say it, so I'm really in a dilemma.

This suggests how pervasive is the power of his former reference groups, a fact that was further indicated during an informal chat over lunch when Captain B with obvious pride talked about his son in the

Air Force. He explained how he didn't want to influence his son's decision but said, nevertheless, how his son would be swayed his way when on leave and would go back to his squadron saying how he'd try to influence his friends. But Captain B knew full well that once his son was back amongst them he would swing back to their way of thinking.

4.5 CAPTAIN J

Captain J was in the Navy for 26 years, retiring in 1978. The last three years he spent in command of a Polaris Missile Submarine. He now works for a Defence Information Group. Like Captain B, Captain J didn't join the Navy from any ideological commitment: ". . . it was a sort of accident. I enlisted in the Navy as with so many other people, to get away from home." He expanded on this: "I mean almost everybody goes in the Navy - wants to see the world and usually has problems at home. I discovered that in the twenty-six years I was in." Although Captain J maintained that his attitude didn't change, it is possible from the interview to determine a certain change of position which he expresses in terms of:

what I was doing then was trying to prevent nuclear war.
What I'm doing now is trying to prevent nuclear war from
a different point of view.

The development of this "different point of view" falls into three just discernible stages:

1. uncritical stage
2. re-evaluation
3. emerging point of view, flux.

Although these stages are by no means as clear-cut as those outlined in the previous interview, a number of parallels with Captain B are discernible.

1. Uncritical stage. We are really only concerned with the period after 1960 when the submarines were nuclear armed. Once again it was the technical and logistical problems of having nuclear weapons on board which were the primary focus of attention:

Well, I think what nuclear weapons represented wasn't anything we thought that much about. It was - there were some technical aspects of bringing the nuclear weapons on board that provided us with new challenges. Primarily the requirements were for very accurate navigation. And that was what we were more or less extremely involved with, very accurate navigation and constant communication.

There was, he said, no ideology involved, it was just the technical interest: "but nobody really thought about it - the weapons." He knew nothing of deterrence policy:

Not at all. Not at all. As a matter of fact there never was any - I mean - just passing knowledge that our major purpose was to prevent war.

Captain J was "reasonably happy" with this state of affairs - his main concern was getting ahead:

. . . I wanted to be Executive Officer and I wanted to be Captain . . . Commodore . . . I wanted to make Admiral.

And there was very little discussion of any "Soviet threat". Their primary role, Captain J saw, was to make sure the number of times they went down equalled the number of times they came up. As far as the possibility of having to use the nuclear weapons was concerned he didn't really think about it. Again as with Captain B, Captain J

could be said to have become anaesthetised by the routine aboard ship and in Captain J's case habituated to the drill:

I mean maybe the first time, the first time I went on patrol and we used to have these tests, weapons systems and radar tests in which we got a message and depending on which ship you were on, they might or they might not tell you that it was a drill. And the first time you see them getting ready to launch these missiles is a pretty awesome thing to see. But eventually you got around to the point where it meant nothing. I mean you first of all, you got tremendously involved in the ship itself.

Once again the possibility of using the weapons can be easily denied and we can appreciate again to what a large extent the routine of Naval life conspires to preoccupy cognitive processes. Captain J thought that even if he had thought about having to use the weapons, it would have made no difference to how he felt about his position because "undoubtedly we would have been subjected to indoctrination" and "there would have been all sorts of efforts to excuse what we were doing." People just took it for granted, he said. There is no spontaneous reference to how he felt about his role. His saying he was "reasonably happy" about the situation was in response to the question: "And you were happy with what you were doing?"

2. Re-evaluation. Captain J was, however, "upset" during the formulating of the SALT I Treaty:

That is one time my attitudes got a bit difficult . . .

His attitudes got a bit difficult - as long as he was able to avoid the implication of policy he could feel "reasonably happy" until he began to question the received wisdom of the direction in which he perceived planning to be going. The problem for Captain J was that he:

didn't like the idea that we were trying to get the MIRV weapons out before the SALT I Treaty was concluded.

The realisation that the military were not a hundred percent in favour of limitations had, Captain J said, a lasting effect:

It became a little bit clearer to me that, you couldn't depend on the military to - let me put it this way: what the military's goal is in reference to treaties is to look for the loopholes and exploit them. And I thought, I don't like that.

Originally Captain J considered the best way to prevent nuclear war was with nuclear weapons, but gradually his point of view changed - his objective was still to prevent nuclear war, but he felt it could best be achieved through arms control. Although Captain J couldn't say when this changeover came, we can surmise that his realisation that the military couldn't be depended upon to take treaties seriously - their main objective was to find a way around them - was a crucial moment.

3. Emerging point of view, flux. Captain J began to realise that there were far more nuclear weapons than were needed to deter war and that the only way to limit them was through negotiation. He also

realised that if it was possible to negotiate limits then " obviously you could maybe negotiate them away." Clearly this was not the path being taken by the military at the time and Captain J believed that the way the U.S. was building up the numbers of weapons not covered by treaties (the 'Euro-missiles' and sea-launched Cruise missiles) was:

bad in all respects. I think that it's a violation of the Treaty really - unilateral violation of the Treaty . . .

Of particular concern to Captain J is the way the Navy refuses to acknowledge the presence of nuclear weapons on board ship when entering foreign ports - this is an area in which he has become particularly active and it is something he sees as "totally anti-democratic" and against "all the principles the United States, in theory, stands for". Captain J's attitudes have not turned against nuclear weapons in any clear-cut way and we can see here the difficulties faced by an individual who takes the step from one reference group to another, from one way of thinking to another. This is a very similar problem to that faced by Captain B. Captain J still believes that:

there probably is a certain amount of logic in the fact that nuclear weapons have prevented a major war.

But he adds:

There have been a lot of little wars

FIGURE 4:1

ICBMs	Projected force levels		With current U.S. arms control proposal		Proposed U.S. sublimits:
	SNDVs	warheads	SNDVs	warheads	
Minuteman II	450	450	400	400	[3,000 ICBM warheads]
Minuteman III	500	1500	150	450	
MX	50	500	50	500	
	1000	2450	600	1350	
SLEMs					
Poseidon C-3	160 (10 subs)	1600			[4,500 ballistic missile warheads]
Trident C-4	240 (13 subs)	1920			
Trident D-5	288 (12 subs)	2880	312 (13 subs)	3120	
	688	6400	312	3120	
Bombers					
B-52G	98	1176			[1,500 ALCMs]
B-52H	96	1920			
B-1B	100	1400	100	1400	
	294	4496	100	1400	

Assumptions: Projections are based on currently authorized programs and expected retirements. Poseidon submarines are retired at a rate of 3 per year beginning in 1993 (2 subs with C-3 missiles and 1 with C-4s). One Trident sub is backfitted with the D-5 missile each year, beginning in 1992. Average number of warheads per ICBM: 1 for the Minuteman II; 3 for the Minuteman III; and 10 for the MX. Average number of warheads per SLEB: 10 for the C-3; 8 for the C-4; and 10 for the D-5. Average bomber loadings: 12 for the B-52G; 20 for the B-52H; and 14 for the B-1B.

Despite this somewhat ambivalent position he sees the proliferation of nuclear weapons and the likelihood of accidental nuclear war as greater threats than that posed by the Soviet Union. We can appreciate that this is a man still juggling for a state of consistency between opposing belief systems - a point that becomes clearer when he talks of Reykjavik:

Let me just say that I'm coming to this point of view - its not one I've always had - I'm coming around to this point of view in the last few months that we really don't know what the Soviets would do if we did say yes . . . I think it could be a bluff.

Captain J is in favour of negotiating limits on nuclear weapons but at the same time we can see him vacillating again when he talks of cutting back on nuclear weapons. The reduction proposed in table 4.1, he believes does not look like a "reasonable strategic force" because it increases the possibility of one side feeling it can launch a first-strike and not suffer "unacceptable damage" from retaliation. The basic change in his position, Captain J sees, is that he now appreciates the poverty of deterrence as an international system and that:

we're stuck with nuclear weapons until we can understand that war is not a way of dealing between nations. Not so much nuclear war, but war itself.

4.6 REAR ADMIRAL EU

Rear Admiral EU had a long career in the US Navy before retiring in 1980. He became Rear Admiral in 1972 and served in a major theatre as director of military operations of all US forces. His final post was in the Pentagon where he was engaged in US naval planning for conventional and nuclear war. Since retirement he has become Deputy Director of a Defence Information Group in Washington. He had doubts about the utility of nuclear weapons early on in his career but, like many of the other people interviewed, the Navy dominated his thinking and it wasn't until he left the service that he took part in active opposition.

Rear Admiral EU, looking back at his early career in the US Navy, said he "probably had accepted at face value the fact that we dropped two nuclear bombs to end the war, to save American lives and so on", and that he had very little awareness of the new situation that existed since the splitting of the atom. During 1955 and 1956 he was trained with these weapons and took part in planning the destruction of actual targets. "Practical and pragmatic concerns" enabled him to ignore any moral implications which he also avoided "on the grounds that I'll never have to do it". Again, Naval routine enabled him to avoid thinking about using the weapons and at the same time he was able to deny the possibility that he would ever have to use them. But right from this period Rear Admiral EU says it became absolutely clear that there wasn't any way one could fight with nuclear weapons:

I had one target that, had I destroyed it, that would have had relatively little effect on military relationships - it was a target that the Navy had on its target list to justify having the weapons, to justify the budget, to justify the numbers - and destroying this supply depot, which unfortunately was located in an urban area would have resulted in an estimated 600,000 casualties - and you can't fight that way. There is no military objective that warrants the use of nuclear weapons. So in 1958 when I was a student in the Naval War College and really had time to go thought this in detail and think about it . . . I wrote a thesis that the Navy ought to get out of the [nuclear] war-fighting business - should get rid of our nuclear weapons, our nuclear missiles and design and train a Navy that would actually defend the United States of America . . .
[his emphasis]

Whilst America was adding to its ability to destroy the Soviet Union, the Soviets were adding to their ability to destroy the US and Rear Admiral EU saw at the time that this was no defence. This is the same concept of defence that exists today. Nevertheless, Rear Admiral EU said that at the time it was easy to justify more and more weapons because "I think I was more inclined, in those days, to accept at face value those horrible estimates [of Soviet capabilities]." The reason he was able to do this, and here we can detect that vacillation between belief systems that he must have been going through, was, he felt:

Well, it was my training, it was my mind-set. I was supposed to defend the United States of America and according to Intelligence tables and reports and so on, here's what the Soviet capability was!

Although Rear Admiral EU believed back in 1956 that nuclear weapons could not be fought with and that they did not increase U.S. security, he was still very much trapped in the "mind-set" or belief-

system that prevailed in the Navy. He spent "more time at sea in the operating forces than 99% of my contemporaries" which enabled him to avoid thinking about the implications of nuclear defence policy, and it meant, as he put it, that: "I simply didn't get charged with any of the responsibilities in this political process." He not only ignored it, but also he didn't have any way to be part of it and being commanding officer of a ship meant:

You are just really engaged making sure your unit's ready and it's safe, that the people are well cared for and so on. When you're on the staff directing operations you work eighteen hours a day, just doing it. You just don't have time or any authority to intervene in the process.
[his emphasis]

Another factor of being in the Navy that Rear Admiral EU recognised as a factor that helped to maintain a certain way of thinking was the "legal/ethical sort of thing" - that of a professional with a job to do and orders to obey. That level of responsibility and also "personal stimuli" were important factors:

. . . ambition, earning a living, caring for your family, mortgages to pay and one thing and another. So that, as you work in the institution, you simply learn that it is very unwise to be a stormy petrel or the hair shirt always saying "This won't work, this won't work". You find you can raise objections, you can write a thoughtful appraisal and so on and have it dismissed - as my proposition was dismissed - by a very senior naval officer who said: "Young man, if we did what you recommend the Airforce would get every dollar on the budget and we wouldn't even have a Navy." He didn't deal with the logic of the arguments, he just dealt with the outcome as he saw it, which was: the Navy would be giving up the nuclear mission.

It wasn't until 1970, as a Flag Officer, that he "started questioning the whole idea of the nuclear relationship", as soon as he started finding out exactly what nuclear weapons were and how they would be used in a conflict. He began to question Soviet capabilities at the time when he was Naval Task Force Commander in the Mediterranean and had "more access to responsibility for considering how to deal with them." Later, when he had to deal with Soviet forces, plans and capabilities, American forces, plans and capabilities, and the security and readiness of 6000 US nuclear missiles:

Once again I found we could destroy Europe with those weapons over and over and over again. We certainly couldn't defend anything with them, nor could the Soviets defend or gain anything with theirs. But then you took a look at the military balance of conventional forces and it was clear that our nuclear preparations were handicapping us in building and maintaining an effective conventional posture/capability. We kept putting all this reliance on nuclear weapons, at tremendous cost by the way, and inhibiting the capability to be fully prepared conventionally. And furthermore I began to have these questions. You know, why would they want to attack?

He saw "an awful lot" of decisions being made for political reasons - like the deployment of INF:

The Pershing II missile was funded in the army budget in 1974 . . . so we had plans from that day on really to have this weapon, but there wasn't any clear mission for it. The reason we had withdrawn our Intermediate Range Missiles 12, 15 years before, was because there wasn't really any requirement for them; we'd covered all the targets by other, more reliable and more secure means, but now we're talking about sending them in so it must be for some other purpose than military. We didn't even know what kind of warheads to put on!

In 1979 Rear Admiral EU was assigned to Plans for Policy Operations at the Pentagon where he was supposed to "develop plans to support Navy policy," but he retired within five months. He saw no chance of changing things there:

Most of the decisions are made for political reasons related to budget process and inter-service rivalry and all of the determinations are made way over Rear Admirals' heads. All you ever are doing really is developing the paperwork that provides a facade, the sophistry to support the decisions, and you finally wake up one morning and decide you don't want to go to work because you know that what you're going to do is just going to be futile. You finally say: "Well, I don't have to go anymore, I'll retire.
[his emphasis]

It is very much his opinion that inter-service rivalry provides the impetus for new nuclear weapons deployment. While at the Policy Operations it became obvious to him that there was no "thoughtful or logical appraisal of what the real needs of the Department of Defence were in support of national strategy". Each service competed with its rival for a maximum portion of the defence budget. Even US foreign policy, he felt, is "terribly out of balance" with US real defence needs in that it gives primary emphasis, to military measures to support foreign policy:

When we put military elements into our foreign policy, to a degree I've never seen before and to a degree which is clearly detrimental to our long-term interests, all we are really doing is perpetuating conflict and violence. . .

Because so much new money has been put into the nuclear systems, Admiral EU sees the conventional capability being starved. All the

forces, he believes, have urgent conventional requirements. But, he says:

. . . they are putting all the money, all the new money, into these creatures; things like stealth bombers and Trident D5 missiles, SDI. So that the natural competition amongst the services for an element of conventional defence capabilities is accentuated by the fact that they are competing against the strategic demands which don't really benefit the structure of the services near as much.
[his emphasis]

Despite this competitive spirit among the services for nuclear weapons Rear Admiral EU stated that: "I don't know of a single professional officer who thinks you can fight with nuclear weapons. I don't know of any professional officer either in the US or in the Soviet Union." The main body of the Soviets' public position is, he believes, that you can't fight with nuclear weapons, that it's illogical. But, still, inter-service competition exists for more nuclear weapons because:

That's where the budget is. If you give up the nuclear mission, then the money goes over to somebody else who says we can do it.

Rear Admiral EU suggests that America uses somewhat the same tactics within the NATO Alliance as the Soviet Union uses to maintain their alliance:

The US makes the decisions - defines the threat - that's the thing! We're the ones who keep saying the Soviets are out to take over the world - they're going to kill us unless we maintain our strategies.

He says that this now is "absolutely wrong" and that there is no chance of reaching any arms control agreement with the Reagan administration because their goal is military superiority:

They can deny it all they want, but up until 1983 they were foolish and candid enough to explain their concepts and since 1983 they've simply gone underground . . . the programmes are still the same . . . Arms control is totally incompatible with military superiority . . . So you can either have and pursue military superiority or you can pursue equal security based on arms control procedures. You can't do both.

America's failure to negotiate seriously, Rear Admiral EU feels, could lead to Gorbachev being "forced out":

. . . it's frightening to think that a time has come in the relationship of the two sides, that there is willingness over there to accommodate and to reduce the dangers, and we are rejecting it in hopes of creating a superior relationship.

If his recommendations, including a long series of steps, confidence-building measures, negotiating agreements, and movements were carried out, he believes that by the year 2000 both NATO and the Warsaw Pact could be dissolved:

. . . that should be our objective . . . to permit the restoration of the normal international relationship between sovereign states.

US tyranny is illustrated, in Rear Admiral EU's view, by America's attempt to use muscle to force the New Zealand government "into going along with our decisions about their security." It is the type of

tyranny that could only be possible should Britain draw away from American policy but, EU divulges:

. . . it's been happening with respect to all the NATO allies for a good many years, although a little more subtly.

The basic problem, however, as regards attitudes about nuclear weapons, he believes, is that everything has changed "except that we simply don't admit it and [continue to] pursue this dual goal of superiority."

The whole establishment, Congress, the manufacturers, everybody who constitutes the power structure, are still thinking about relationships in the world as the basis of "if you've got enough military power you are safe and you can make the other people do what you want them to do"

Although Admiral EU is unwaveringly in favour of reaching a stage where there are no nuclear weapons at all, he confesses that he sees no way of getting there except by a long continuous process which:

move[s] away from nuclear policy by time, move[s] along into the era of no nuclear weapons and no forces which threaten the survival of the human race.

4.7 ADMIRAL NE

Background

Admiral NE spent forty-one years in the U.S. Navy and during this long career his positions included Carrier Fighter Pilot, Assistant Chief of Naval Operations, Deputy Director of the Joint Target Planning Staff and latterly Commander in Chief of all U.S. forces in a major theatre - a position he held until his retirement in 1976. He

currently works with his wife on a Committee concerned with East-West relations, described as an organisation of " very credible and experienced US/Soviet experts who work to improve various aspects of US Soviet relations . . . from trade, to diplomacy, to labour " for the most part made up of government officials.

Attitudes

Admiral NE maintains his attitudes towards nuclear weapons: "haven't really changed that much", that he has never thought nuclear weapons had any useful military purpose. When nuclear weapons were first introduced at the end of the war he believed then that it was:

an extraordinary military, political mistake. Thought so at the time.

At the time he was Air Operations Officer for the Second Carrier Task Force operating in Japanese waters at the end of the War. He thought the bombing of Hiroshima was not a necessity:

Japan was completely defeated, there was no necessity to drop those bombs.

From the start, when the forces were being armed with nuclear weapons, Admiral NE was against them on the grounds that they had "no sensible military use," although this did not stop him serving two years at the Joint Strategic Planning Centre in Nebraska, whose function is ". . . to target nuclear weapons for the United States." He "made a distinction" here because the weapons were being targetted

in order to provide a credible deterrent against attack by nuclear weapons. Whilst he was still in the Navy, Admiral NE made no secret of his attitude towards these weapons however:

I have spoken quite a lot while I was in, but not publicly . .
. I made my views quite unequivocally known while I was in uniform. Incidentally, it was not that dangerous, I was promoted a couple of times afterwards.

When asked how he could account for this his answer was:

I think that a good many people agreed. I remember making a speech at the Naval War College, while I was a two-star Officer, not very different from the views I publicly espouse now - and I was promoted twice after that.

The key factor here is probably that he did not speak out publicly. As long as disagreement was kept within Naval circles - i.e. a consistent picture is presented to the outside world - a degree of nonconformity or discrepancy is permissible. But it is clear that he was aware just how far he could safely go without jeopardising his chances of promotion. Although he was not told he must not speak out publicly, he acknowledged that:

. . . I thought I'd been prompted, the chain of command existed. . .

He did not exceed the limits of tolerance permitted by the chain of command, even though these were only implicit, and in so doing the Navy were able to keep a man they wanted and he was able to keep a good conscience! Furthermore, it is likely that only those in positions of some power could be safely allowed to speak out against nuclear weapons - they are, after all, part of the system.

The incongruity of Admiral NE's career in the Navy, with his long-standing rejection of nuclear weapons may be difficult for us to reconcile. But it must be borne in mind that he first became a Naval Officer in 1935, so he had been part of the Navy for more than twenty years by the time nuclear weapons were introduced into the service. It seems possible that Admiral NE reconciled this incongruity by denying the fact that nuclear weapons have anything to do with Naval Policy - an assertion he made no less than nine times during the first quarter of an hour of the interview. He actually became quite agitated when pressed on this point, suggesting that it was causing some psychological discomfort to have his ego defense probed in this way. This denial basically took three forms:

1. nuclear weapons play no part in naval operation
2. nuclear weapons have no sensible military use
3. the Navy does not rely on nuclear weapons.

What he is really doing is confusing his own attitude towards nuclear weapons with that of the Navy per se. He appeared unable to distinguish between the two, which caused some confusion during the interview. These merged attitudes are exemplified in his fourth denial:

Let me say again, nuclear ballistic submarines have no sensible military use, form no part of Naval capability either in Great Britain or here or elsewhere in the Alliance.

To begin with he asserts his personal belief which then becomes

confused with Naval policy. It is patently obvious that nuclear weapons and plans for their use are important aspects of Naval policy - it has even been suggested that it is sea-based nuclear weapons that will be used first in an exchange with the Soviet Union - a fact that Admiral NE is unable to accept. This confusion, however, is made all the easier, for example, by the ill-defined, ambiguous nature of the new Maritime Strategy:

. . . the often vague descriptions of the strategy offered by the Navy lends the Maritime Strategy an ambiguous or elastic quality.

This 'elasticity' allows people like Admiral NE, who are opposed to nuclear weapons, to accommodate themselves in the Navy without being constrained by nuclear policy, and the ambiguity permits him to turn a blind eye to aspects with which he does not agree. According to Admiral NE's testimony, there are many Naval people opposed to nuclear weapons:

I don't think you'll find many people in uniform that are so nuts [about nuclear weapons] like these civilians in the Defence Department.

If, as Admiral NE suggests, there are many more Naval officers opposed to nuclear weapons then there must be many more engaged in this difficult balancing act between incongruities of belief. How, then, is nuclear policy perpetuated amongst these unwilling custodians? The Admiral's reply was:

Because in this country, in our democratic principles we have civilian control over the military and if civilians appointed are zealots from the right wing - unless we want to do like the Argentines or something - this is what we do: we take our orders.

The US Navy, Admiral NE maintains, does not depend on nuclear weapons; its purpose is (and he quotes the Maritime Strategy) to keep the seas open and maintain linkages with the Alliance and to "project and sustain" power. The US in Admiral NE's opinion has a special responsibility for this because:

There are strong countries, there are free countries, and we're the only one that's both; we've got a special responsibility for freedom around the world. We have to be able to project and sustain power and we have to be able to defend this country and our allies. In all these nuclear weapons play no part.

Although Admiral NE maintains a degree of autonomy from Naval ideology - viz nuclear weapons - he is nevertheless imbued with Naval dogma: the belief system still has quite a strong hold on him.

The NATO doctrine of responding to a conventional attack with nuclear weapons is, he believes, "absolute lunacy" and, he adds:

. . . totally without foundations because no American President with all his marbles is going to unleash nuclear war, devastate Europe, in order to save it - devastate the whole of the United States - the devastation of Russia would be small recompense for that. The notion that it could be limited to some so-called tactical nuclear use is, I think, absolutely fallacious. No commander, whether he's Russian or Allied could have the enormous explosions going off and say "Oh, this is only limited and I'll reply in only a limited way" . . . It just flies in the face of common sense.

What Admiral NE thinks the Europeans can rely on the US to do is to fight with the conventional forces:

. . . when we have tens of thousands of troops over there - that's a certainty. And that's what you can count on. And so the situation is quite the reverse of what people seem to think. It's not the nuclear guarantee its the fact that we've got our troops over there and those commitments.

That some Europeans should feel "alarm and indignation" at the Reykjavik proposal to reduce European weapons filled Admiral NE with scorn, and the antipathy felt towards Europe's apparent addiction to US nuclear weapons - which was strongly expressed by RO, also and is felt by many American military - was clearly expressed:

I'll tell you how they [the Europeans] are going to defend themselves - pull up their socks! This is all elaborate camouflage for not taking care of their own defence. For the German General tell him there's one thing he can do right quick and that is to start digging trenches and tank traps along his border.

Again we find the same frustration that we encountered with RO, where two contradictory belief systems came into conflict: the emerging belief system among some Americans that nuclear weapons serve no military purpose and must be reduced and the belief system still prevalent among many European elites that Europe must have these weapons for 'defence'.^{Footnote 9} This frustration surfaced with some vehemence when the Admiral suddenly burst out saying: "Tell the Europeans to get off his [i.e. Reagan's] back."

Although Admiral NE's objection to nuclear weapons are at a cognitive level, i.e. they serve no military purpose and they are "a cancer on the navy", it is possible that the genesis of his attitude was at an affective level:

. . . there'd really be very few people left around who've seen these things go off - have any real visceral feelings of what they are. I have and I want to tell you it makes an impression. Once you've experienced it there's nothing in motion pictures, there's nothing in description, there's nothing other than seeing, feeling the damned thing go off. What we now call a small to moderate weapon, twenty miles away is just like the end of the earth.

As a result of his strong antipathy to nuclear weapons Admiral NE has outlined an eight point programme for reducing nuclear weapons and the threat of nuclear war.^{Footnote 10} This programme includes: a political perspective to improve relations between the US and the Soviet Union and reduce the "insulting rhetoric" being bandied back and forth; abandonment of the nuclear war fighting doctrine; reduce the hair-trigger effect of the shorter-range weapons; measures to prevent proliferation, and a process of arms reduction based on the counting of warheads.

4.8 CONCLUSION

In this sample of American elites we can determine patterns of attitude change common to them all and from this develop a rudimentary framework of the process taking place. Of all these interviews Captain B's exhibits the most complete process in his development from an uncritical position where he was carried along by mainstream ideology and "just accepted" it, through to a position where he is now actively involved in opposing possession of nuclear weapons. We can see this process taking place in a number of stages which begin with:

1) Uncritical stage. During this stage the individual accepts or takes for granted the prevailing ideology on the issue in question. He/she may not be conscious that they are doing this. Indeed, the individual may hold no apparent attitude towards the idea object until directly questioned on the matter, either in normal social intercourse or more specifically when encountered by an opinion pollster.

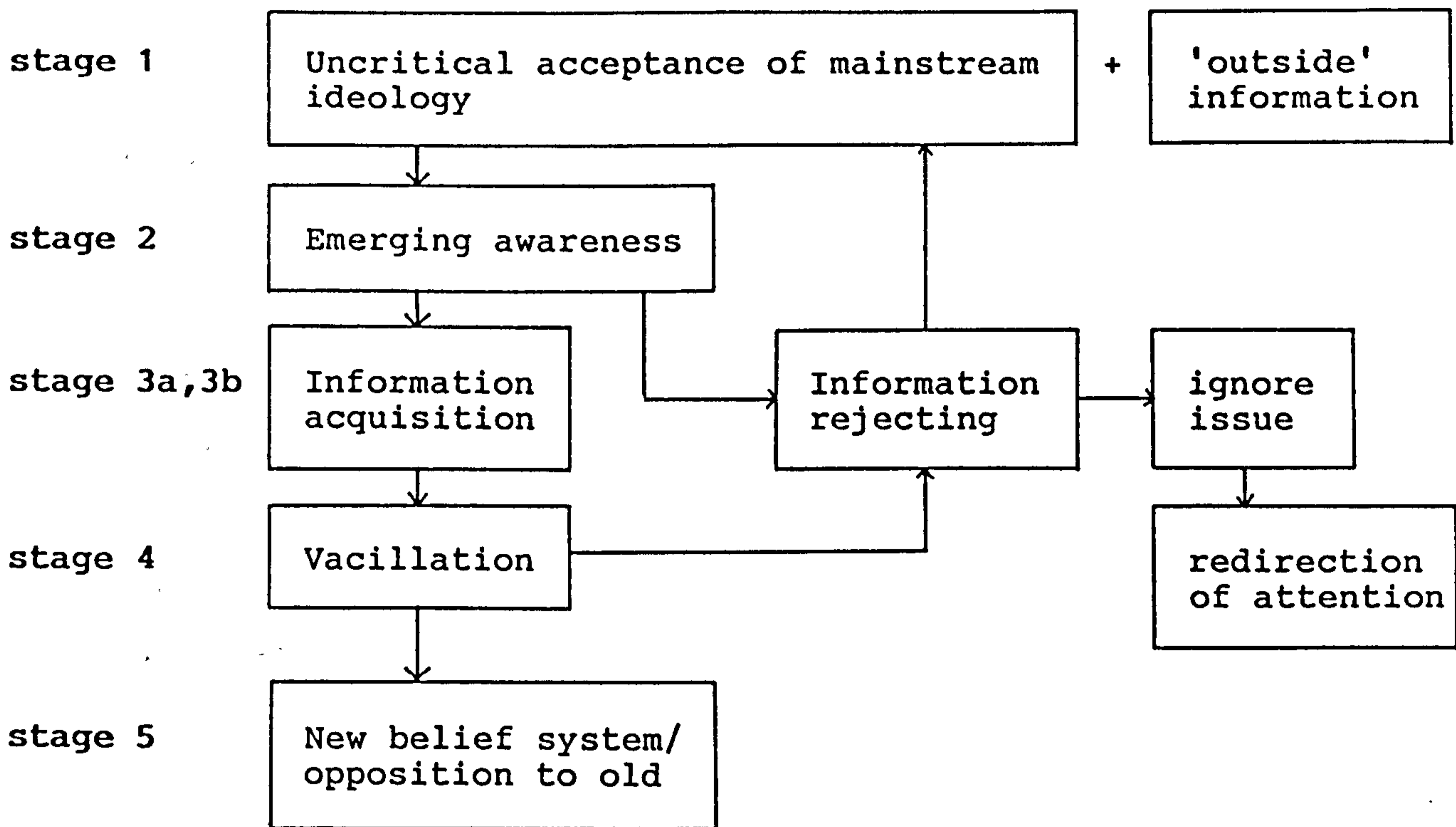
2) Emerging awareness. This stage occurs when the individual comes into contact with information or attitudes that are novel to those which he/she has already incorporated. This may cause self-awareness of the existing assumptions and lead to one of the following stages:

3a) Information rejecting. The individual may reject the new information by either repressing it, in which case he/she is likely to return to the old assumptions in stage 1, or by denying its relevance and ignoring the issue altogether and re-directing attention to more mundane concerns.

3b) Information acquisition. Alternatively, new information could encourage the individual to seek yet more information in order to reconcile the contradictory situation she/he finds him or herself to be in.

4) Vacillation. At some point the individual is going to have to weigh up the pros and cons of the old and the newly emerging belief systems. At this stage they may vacillate between the two - may even be dominated by the weight of mainstream ideology, or for pragmatic reasons allow this to dominate. There is always the

Figure 4:1 Model of attitude change.



possibility at this stage that the individual may return permanently to stage 1 or 3b.

5) New belief system, opposition to old. This is the final stage in the sequence, where the individual, under the weight of new information, rejects the old assumptions and constructs a new attitude structure. He/she may also become involved in active opposition to the old ideology.

It is also possible that this whole process will have repercussions in other areas; related attitude objects may also come in for introspection and reappraisal. Figure 4:1 shows this whole process in diagrammatic form, but it is essential to appreciate that this is a surface plan of what is externally perceptible - underneath this at a deeper level are the individual's personal, psychological needs and motivations which determine the extent to which a person is open to the process.

From the interview analysis it is clear that Captain B was the only one of those whose interview showed passage through each stage. The whole process took from the beginning of the second World war through to 1981 -some 41 years. Stage 1 lasted up to 1965 when his involvement with ELRMS increased his awareness of the nuclear issue (stage 2). During stage 2 there was an attempt to go to stage 3b, information rejecting, and on to ignoring the issue. But instead of retiring he went to the Naval War College, and it was here that his knowledge really developed, stage 3. From then until 1981 he was both acquiring information and, for pragmatic reasons (his job depended on it), allowing mainstream ideology to dominate. The final stage (5) was entered as a result of the Trident launching and his

subsequent activity in the Freeze movement. Although Captain J follows a similar path, in that his attitudes developed from stage 1 to stage 2 and 3b, as a result of his awareness of the disarmament process and the US military's lack of commitment to it. Unlike Captain B it could be said that Captain J remains at stage 4. This is because he still retains a number of basic assumptions of characteristic of mainstream ideology, although at the same time he is in favour of negotiating limits on nuclear weapons.

Both RO and PA show very similar patterns of attitude development. They both believed that their attitudes to the nuclear issue had not changed much, and from analysis of the interviews it is clear that neither of them ever did uncritically accept mainstream ideology about nuclear weapons, as far as I was able to establish. Both rejected the prevailing belief that nuclear weapons could be used to defend anybody, and yet both worked within the system where mainstream ideology prevailed. We can put this down to the pragmatism factor, because once out of office both have been outspoken and optimistic advocates of arms reduction.

Admiral NE and Rear Admiral EU similarly follow common paths to a large extent. Both enter our analysis at stage 2 and again neither of them ever believed in the utility of nuclear weapons advocated by mainstream ideology, although they too both worked within a system where this prevailed. They differ from PA and RO to the extent that they are now more actively involved in working towards their goal of arms reduction and disarmament, although for all four the duplicity over INF in Europe has provided a strong impetus to action.

Social and Psychological Influences on the Process of Attitude Change.

From the accounts of the four Naval officers I interviewed, it is obvious that pressures from reference groups play an important part, firstly in indoctrinating an individual into a set of attitudes and beliefs, and secondly in exerting pressure to conform to these beliefs. This was something each of them experienced, confirming the

hypothesis at the end of the previous chapter. Of course, this is not the only reason why they should conform. The pragmatic or instrumental function of doing so within the system would obviously maximise the rewards available, and these must be carefully calculated within the degree of latitude of acceptance of the group. Rear Admiral EU, for example, found that he could voice his objections to nuclear weapons within the Navy and not jeopardise his chances of promotion, but pragmatism prevented him from going too far:

. . . if you ran around all day saying "Gee, we've got to give up the nuclear mission" you'll certainly find yourself sent to some outpost in Siberia - close to it! - until you are due for promotion, and you won't be promoted, you'll be pushed out.

The value-expressive function outlined in Chapter 4 may also have played its part in that. Conforming to the prevailing beliefs about nuclear weapons reinforced their image of themselves as peace-keepers and defenders of the 'free world' - an image they were strongly encouraged to believe in. And at a deeper level again we cannot ignore the possibility that believing nuclear weapons enhanced security and denying the possibility of ever using them, served an ego-defensive function against the dangers of a nuclear world.

The main point to appreciate about the attitude change witnessed in these interviews is that they were all spontaneous processes, not

induced by deliberate counter-messages or communications for the purpose of changing attitudes. So in this respect the theories about message learning, source credibility, etc. outlined in the previous chapters have little relevance here. What we have to ask is "Why did attitude change occur?" We noted in the previous chapter, when we were considering cognitive dissonance as a motivational force to change, that chance exposure to discrepant information is unlikely to produce dissonance and consequently attitude change: an element of choice must be involved. If we consider the process of attitude change outlined in Figure 4:1 this element of choice occurs first at stage 2 when the individual can either reject the information (stage 3a) or accept and acquire further information, 3b. Which path the individual chooses may depend upon underlying psychological factors determining whether they are "copers" or "avoiders". Either way, the individual is likely to take the course of least resistance and avoid the stress of attitude change if at all possible. I suggest that cognitive dissonance does play a part in this process. Initially minimal least effort and anguish is required to accept mainstream ideology, and when you consider the importance of day-to-day concerns for most people it is not surprising that these overshadow wider issues that can be avoided. As with Captain B, Captain J, Admiral NE and Rear Admiral EU the everyday concerns of running a ship dominated cognitive processing, so for the ordinary person in the street everyday concerns centered on running their lives dominate attention -whether this is as deliberately orchestrated for the person in the street as it is for the person in the Navy can be debated. But once the individual becomes cognizant of 'outside' information, the possibility for attitude change is set in motion.

Insulation from the possibility of coming into contact with outside information is naturally the objective of systems/organisations which seek to keep tight control over their membership. Once contact with outside influence is encountered then the frame of reference provided by the existing belief system may be brought into question. But, true to the principle of least resistance, the new information will not modify old attitudes unless some inadequacy or incompleteness or inconsistency is perceived in the existing system, or inadequacy arises in fulfilling ego-defensive, value-expressive function or whatever motivating force gave it utility. It seems likely, furthermore, that the suppression of emotional charge related to the attitude object may facilitate the continuance of the uncritical acceptance of mainstream beliefs. When events or new information release this suppressed affect the process of attitude change becomes more likely.

These interviews give a valuable insight into the processes of attitude change, but they also suggest that when this process occurs spontaneously it may take a very long time amongst elites. So how important are these insights for attitude change over a shorter time scale? It seems that a number of factors are important. First we can learn from the first indoctrination with mainstream ideology and ensure that new information is easily accessible and constantly available and that it is gauged for its audience: are they copers or avoiders, does their existing attitude serve some ego-defensive, value-expressive function, etc? A second factor to bear in mind is the importance of reference groups, and the need to ensure that an individual developing a new belief system is given support and identity by a new reference group.

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9. Gallup (1987)

Footnotes

1. Vietnam is a case in point here. RO refuses to talk about Vietnam publicly, and in this interview mention of it created an instant shut-down, which suggests he may be repressing these events because they are too painfully incongruous with his present ego-image. Furthermore, this whole issue may be associated with pain of rejection from his family at the time due to his attitudes, further necessitating repression.¹
2. RO explained that prior to the setting up of the Defence Intelligence Agency which co-ordinated the various intelligence reports "there were three, sometimes four different intelligence agencies putting out independent defence estimates within the Defence Department. . . ." which compounded the confusion. The Administration were bound to welcome the one that was congruent with their perception of the Soviet Union.
3. We can justifiably ask whether this fine distinction might be lost on the Soviet Union. Semantics aside, they are going to feel inferior.
4. This was a tendency noted by Kull⁷ in his interviews with American policy-makers.
5. During my stay in America, talking as I did to a wide range of people, this view epitomised for me, what I saw as the 'American world view'.
6. This interview was held before the precise danger to the Presidency from the 'Irangate' fiasco had become apparent, which eventually may have given impetus to the Administration to seek some credibility in arms control. Also, Gorbachov's zero-zero option, which has suddenly changed the prospects for a Reagan

administration arms deal, had not been tabled in Geneva at this stage.

7. Since this interview Labour Party Defence Policy has in fact moved towards this position.

8. Gorbachov's proposals actually come quite close to PA's proposed scenario - and they have indeed thrown NATO into confusion.

9. This incongruity is further emphasised by a recent opinion poll⁹ that indicated 56% of the British electorate believed the US would use nuclear weapons to defend Europe from Soviet invasion. Compare this view with Admiral NE's comments on the previous page.

10. This is before Admiral NE's publisher therefore I shall only allude to it in general terms.

PAGE
NUMBERING
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CHAPTER 5

CONTENT OF BELIEF SYSTEMS

5.1 INTRODUCTION

The previous chapters have been concerned with establishing more precisely what is known about attitudes towards nuclear weapons and nuclear war, how they are measured, what these measurements represent and the whole question of attitude change and how it comes about. We have also looked at a sample of American elites and established a model for a process of attitude change.

We have considered the possibility that degrees of constraint within a belief system are dependent on levels of information and involvement. We have established the power and influence of mainstream ideology on an individual's belief system where attitudes and assumptions are implicitly accepted and are unquestioningly adhered to.

The US interviews emphasised the importance of giving an individual the opportunity to freely express their attitudes in a relatively unrestricted way. In doing this it enables us to analyse the arguments generated and upheld by the individual. In this chapter we shall be looking at the sorts of arguments used by individuals and considering the extent to which they conform to a mainstream ideology - and establish the content of this mainstream. We shall, furthermore, compare the content of 'elite' and 'non-elite' ('mass') belief systems in the light of these findings.

It becomes evident in any study or discussion of the nuclear issue that the same arguments surface again and again and that ultimately an individual can be categorised as being either in favour of the possession of nuclear weapons -

albeit however reluctantly - or against nuclear weapons. This is not really surprising when we consider that the information sources available to the public, from which they draw their knowledge, reflects this polarization.

We begin this study, therefore, by analysing some of these information sources in order to identify the basic pool of arguments that exist both for and against nuclear weapons. Upon analysis of opinions in this study, it becomes clear that individual subjects are drawing upon this already existing pool of arguments to express themselves.

5.2 PRO-NUCLEAR INFORMATION SOURCES

The sources of pro-nuclear material are almost exclusively generated by "official"^{Footnote 1} bodies. Material advocating the pro-nuclear line has always been available through official channels since the nuclear programme was first made public. Furthermore the general consensus between political parties (until recently) on the question of nuclear defence has ensured the continuous production of propaganda notwithstanding changes in government. As a result it can be expected that this material will have been well-publicised and the arguments expounded will be cohesive, well-coordinated and subject to much media attention - not merely in the realm of printed material which is the focus of this present study. It follows that these pro-nuclear arguments will be familiar to the public at large to the extent that they almost become part of the general public's ideological inheritance. For our purposes the primary sources of this material then, are:

1. The Arms Control and Disarmament Research Unit at the Foreign and Commonwealth Office (ACDRU);
2. The Ministry of Defence via its Public Relations Section (MOD);

3. The Central Office of Information (COI)

and combinations of these sources.

No systematic selection of the available material was possible. This, however, was not a real drawback because the objective was to analyse a wide selection of the material produced between 1980 and 1985 - during the revival of interest in the defence issue. The final selection consisted of:

The Statement on the Defence Estimates (1985), Vol 1.

Arms Control and Disarmament Research Unit (ACDRU) Newsletter (October-December 1984), No 22.

Defence and Disarmament Issues 1-14, (October 1983-March 1984) (ACDRU).

The Balanced View: Nuclear Weapons and Arms Control, (December 1981) (COI).

The Nuclear Debate, (September 1982) (ACDRU).

Britain and Arms Control, (February 1983) (ACDRU).

Nuclear Weapons and Preventing War (MOD).

Cruise Missiles: Ten Important Questions (MOD).

Peace and Disarmament: a short guide to the arms negotiations, (1981) (COI).

Cruise Missiles: Some important questions and answers, (April 1983) (MOD, COI).

Cruise: Your Questions Answered, (April 1983) (MOD, COI).

A Nuclear Free Europe? Why it wouldn't work (MOD).

Arms Control and Security (MOD) reprinted from Statement on the Defence Estimates (1982).

The various leaflets, pamphlets and broadsheets produced by these agencies vary in sophistication of argument and visual presentation and are aimed at reaching all levels of the public. Arguments are clearly presented often in a simple question-answer format and the material is well designed; most especially recent leaflets on cruise missiles.

These publications, which have the kudos of having come from "official" sources were supplemented for our purposes by further material at a more popular and

rather less credible level, publications produced by the Coalition for Peace Through Security (CPTS) and the Campaign for Defence and Multilateral Disarmament (CDMD). These latter productions have a tendency to be presented crudely, both visually and in content although this does not necessarily detract from the power of the message. The samples we studied were:

Preventing Nuclear War: a few simple facts (CPTS).

30 Questions and Honest Answers about CND (CPTS).

50 Tough Questions for CND (CPTS).

CND: Communists, Neutralists, Defeatists (CPTS).

Peace and the Route to Disarmament (1984) (CDMD).

How You Can Help (1984) (CDMD).

Defence and Disarmament: Points at Issue (1984) (CDMD).

5.3 METHOD OF ANALYSIS

Each publication was closely scrutinised and the arguments identified and underlined. Cross-comparisons between publications indicated that these arguments could be grouped under four main headings -each taking a slightly different perspective:

1. The Soviet Threat
2. Nuclear Deterrence
3. Multilateral Disarmament
4. NATO Alliance.

Within each category every argument that had previously been identified was categorised and coded: 1:1, 1:2 etc. Although the actual means of expression may have varied from publication to publication the essence of the arguments were almost always directly comparable and as a result it was possible to construct a list of "archetypal arguments" distilled from this homogeneity. These then, were the shortest, most concise expression of the essential arguments that we could find or create from the material. For example, the

archetypal argument 2:2, "Nuclear deterrence has kept the peace for the last 40 years", was derived from such statements as:

"Deterrence has kept the East/West peace for 37 years and shows no sign of failing." from The Nuclear Debate, September 1982 (ACDRU).

"By maintaining adequate nuclear forces, peace has been preserved." from The Balanced View, December 1981 (COI, ACDRU).

"The peace of Europe has now held for thirty-nine years. Common sense suggests that deterrence - has played a key part in securing that." Defence and Disarmament: Points at Issue, 1984 (CDMD).

5.4 THE PRO-NUCLEAR ARGUMENTS

The sequence in which these archetypal arguments are presented is not intended to suggest any order of priority, at this stage.

1. The Soviet Threat

1. The Soviet Union is an expansionist power.
2. They are a military threat.
3. They have superior forces.
4. Their forces are greater than needed for defence alone.
5. Soviet defence expenditure is growing.
6. They regard military power as a key element in policy.
7. The Soviets will invade if given a chance.
8. They do not share our abhorrence of war.
9. Their past invasions show their real intentions.

2. Nuclear Deterrence

1. Nuclear deterrence alone keeps the Soviets at bay.
2. Nuclear deterrence has kept the peace (for the last 40 years.)
3. Nuclear deterrence is needed to counter the military threat.
4. Nuclear deterrence works because it would be madness for one side to attack.
5. Nuclear deterrence ensures a clear balance of power.
6. Nuclear deterrence is cheaper than conventional deterrence.
7. Nuclear deterrence ensures security, freedom, democracy.
8. Nuclear deterrence exists only to deter.

9. Nuclear deterrence prevents blackmail.
10. Nuclear deterrence cannot be disinvented.
11. Nuclear deterrence excludes accidental nuclear war.

3. Multilateral Disarmament

1. Multilateral disarmament is the only safe way of reducing nuclear weaponry.
2. Multilateral disarmament negotiations have been/continue to be successful.
3. Unilateral disarmament would make nuclear attack more likely.
4. Unilateral disarmament would jeopardise Soviet commitment to disarmament negotiations.
5. Unilateral disarmament forfeits the opportunity to trade British weapons with Soviet weapons in a multilateral agreement.
6. British renunciation of nuclear weapons would weaken her influence on US policy.
7. Britain benefits from NATO weaponry therefore she must also share the risks of having nuclear weapons.

4. NATO Alliance

1. NATO has produced the basis for peace and freedom during the last 40 years.
2. Solidarity with our allies in NATO is essential to counter Soviet aggression.
3. NATO's policy is worked out for our common protection, not imposed by the US.
4. NATO's forces must be maintained at a level that continues to deter the Soviet Union.
5. NATO is committed to disarmament from a position of strength.

5.5 ANTI-NUCLEAR SOURCES

The sort of publications that espouse the anti-nuclear line, generally speaking, are presented at a more academic level. Until recently they could be found only in books rather than leaflets - a means of presentation that did not have the general public in mind - and were not presented in a way that made them generally accessible to the uninformed public who need to be presented with a

clear, well-argued and co-ordinated presentation such as that produced by the pro-nuclear group. What is more, the material against nuclear weapons has a tendency to originate from diverse sources such as the Peace Literature Service of the American Friends' Committee, the World Disarmament Campaign, the European Nuclear Disarmament (END), J.D. Bernal Peace Library and similar obscure sources that cannot compete with Official Government sources for credibility (and funds for presentation.) The main source of popular material, besides these unco-ordinated and individual organisations, is the Campaign for Nuclear Disarmament (CND) which has attempted to present material in a more accessible way especially more recently when they adopted the question - answer technique in their leaflets on non-nuclear defence, Trident etc. CND publications however do not convey the same illusion of neutral benevolence and impartiality that government publications have. Moreover their lack of a co-ordinated and clear set of arguments sets them at a disadvantage.

Again the objective in selecting the publications for this analysis was to cover as wide a range as possible. This comprised:

Defence Without Fears, November (1982), (Just Defence).

Towards the Final Abyss? M Pentz (J D Bernal Peace Library).

Unintended War, A Waskow, (1962) American Friends' Service Committee.

Nuclear Disarmament and Beyond, (Ecology Party Defence Policy Paper).

Politics for Life, (Ecology Party Manifesto 1983).

Defence and Security in Britain,(1984) Labour Party Statement.

Nuclear Disarmament Starts Here, (1983) (CND).

Questions and Answers about Nuclear Weapons, (CND).

Questions and Answers about Trident, (CND).

Questions and Answers about Non-Nuclear Defence, (CND).

Questions and Answers about Christians and Nuclear Disarmament, (CND).

Questions and Answers about Space Weapons, (CND).

Eleventh Hour for Europe, (1981) END publication.

Protest and Survive, (1980) (ed.) E Thompson, D Smith, Penguin.

British Nuclear Weapons: for and against, (1981) J McMahon, Junction Books.
How to Make up Your Mind about the Bomb, (1981) R Neil, Andre Deutsch.
The Choice, Nuclear Weapons Versus Security, (1984) G Prins, Chatto and Windus. The Russian Threat, (1983) J Garrison, P Shivpuri, Gateway Books.
The Soviet Union and the Arms Race, D Holloway, (1983) York University Press.
Apolcalypse Now? (1983) Lord Mountbatten, Lord Noel-Baker, Lord Zuckerman, Spokesman.

From this diffuse set of material it is possible to extract a number of categories but these are often ill-defined and it became clear that there are not such familiar "archetypal arguments" as those encountered within the pro-nuclear material. Furthermore the "moral aspect" tends to be de-emphasised in the anti-nuclear information for the sake of more concrete arguments although, as we shall discover, it is one of the most prevalent arguments used by the "general public". For this reason the "moral aspect" is not treated as a category itself but as a separate viewpoint which can be summarized by the following arguments:

- M1. It is immoral to squander millions of pounds on nuclear weapons when it could be better spent elsewhere, for example: on helping the starving millions in the Third World.
- M2. It is immoral to threaten the lives of millions of people with nuclear weapons.

5.6 METHOD OF ANALYSIS

Exactly the same procedure was employed as that used to analyse the "pro-nuclear" material: the arguments were underlined in the various publications then grouped together under the following categories, with each category containing a number of related arguments.

- 1. Nuclear Threat
- 2. Nuclear "Deterrence"

3. Unilateralism
4. Soviet "Threat"
5. NATO

Again the archetypal arguments within each category were distillations of the arguments found within the whole range of publications. Archetypal argument 1:4 "The concept of a limited nuclear war is fallacy" was derived from such statements as:

"I do not believe that a tactical nuclear war could be fought in areas like Western Europe for more than a few days, or even a few hours, without getting out of control. (In: The Choice, Nuclear Weapons versus Security, G Prins)

"That is, we will try to limit nuclear war but actually we will start sliding all the way over the nuclear cliff." (Nuclear Disarmament Starts Here, CND).

"... I cannot imagine a situation in which nuclear weapons would be used as battlefield weapons without the conflagration spreading." (Lord Mountbatten, Apocalypse Now?)

5.7 THE ANTI-NUCLEAR ARGUMENTS

1. Nuclear Threat

1. The proliferation of nuclear weapons increases the likelihood of nuclear war.
2. The concept of a limited nuclear war is a fallacy.
3. Nuclear war would destroy civilization.
4. The change of nuclear policy from defence to war fighting capability increases the likelihood of war.
5. US weapons in Britain enable the US to consider a "limited" war with the Soviets in Europe.
6. Cruise and Trident are quantitative and qualitative escalations of the arms race.

2. Nuclear "Deterrence"

1. Defence based on the willingness to commit mass suicide is no defence.
2. No situation could justify unleashing a nuclear holocaust, therefore the bluff of deterrence is meaningless.

3. Nuclear strategy is no longer a strategy of avoiding or deterring war but frightening and winning.
4. The nuclear deterrence does not prevent wars - as the Falklands war has proved.

3. Unilateral disarmament

- 3:1 A unilateral move by Britain could be the first step towards complete disarmament by all nations.
- 3:2 Britain's unilateral disarmament would remove the risk of a pre-emptive strike against nuclear weapons in Britain.
- 3:3 Britain would be in a better position to press for disarmament if there were no nuclear weapons stationed here.
- 3:4 If the bomb has kept the peace then the safest most peaceful world would be one where every single country has the bomb.
- 3:5 Multilateral negotiations for disarmament have not and are unlikely to get us anywhere in the foreseeable future.

4. The Soviet "Threat"

1. Assessment of weaponry does not take into consideration the Soviet Union's own security requirements.
2. Soviet weaknesses and NATO strengths are under-publicised.
3. The USA is equally guilty of hegemony.
4. The Soviet Union has made no attempt to invade existing non-nuclear countries in the West.

5. NATO

- 5:1 All Britain's nuclear weapons and over 90% of our military spending are devoted to NATO. Therefore membership of the alliance must be taken into account when considering disarmament.
- 5:2 NATO preoccupation with military preparations have been a major obstacle to detente and disarmament.
- 5:3 British withdrawal from NATO is not an end in itself but would be undertaken only if efforts to achieve mutual dissolution of NATO and Warsaw Pact alliances fail.
- 5:4 NATO military policies are essentially determined by the Pentagon: the present bellicosity of US leadership gives cause for acute anxiety.

- 5:5 Membership of NATO does not bring British security but inextricably involves us in the affairs of USA and USSR.
- 5:6 Britain's status as a nuclear-armed member of NATO means that it too is involved in a strategy which is now one of war fighting.

Because of the diffuse nature of the anti-nuclear arguments they lack the impact and familiarity of the pro-nuclear arguments which are readily available and well used. Furthermore although many more arguments may exist to support the anti-nuclear position they have not been reduced to simple catch phrases which the public can easily grasp and assimilate. As far as these information sources are concerned (we are talking of both the pro- and anti-nuclear material here) it is not the material per se that is important so much as the fact that it is a representation of the archetypal arguments that can be found throughout the nuclear debate as collective arguments. When we came to analyse the free-range opinion of the "elites" and the "mass" public the recognition of these pre-existing arguments allows us to evaluate the utility of categorising subjects along the "unpoliticised-sophisticate/ideologue" axis suggested by Converse and Barton and Parsons although inevitably we must question the validity of such a category as "ideologue" or "sophisticate" in terms of the present analysis, which suggests that the "ideologue" is in fact a well-informed "party-liner".

5.8 THE DATA

Mass opinion sources and method of analysis

The first set of data used to determine the range of opinions held by the mass public consisted of 848 essays written by students aged between 11 and 22 years of age. These were originally written for a Sunday Times essay competition in April 1983, under the title "The Bomb". They were already divided into three age groups:.

11-15 (633 essays)

16-18 (141 essays)

19-22 (74 essays)

These groupings were retained but further divided by sex, type of school (state or public) and finally by the student's attitude towards the bomb, according to the archetypal arguments identified above. Categorizations were as follows:

F Fiction: These were stories about events leading up to an imaginary nuclear attack and the aftermath.

O No Stated Opinion: These essays were factual accounts of nuclear weapons systems and power which included detailed accounts of the effect of a nuclear explosion. Many give historical information about the development of the bomb and its use at Hiroshima and Nagasaki. At no stage was a clear opinion expressed for or against nuclear weapons.

- Anti-nuclear: The essays in this category clearly expressed the writer's rejection of nuclear weapons, using a selection of the archetypal arguments.

+ Pro-nuclear: Although many of the essays in this section may have expressed anti-nuclear opinions, all of them, by drawing upon the archetypal pool of arguments, finally concluded that nuclear weapons were necessary for Britain's defence.

Within the 848 essays, were those that debated the pros and cons of nuclear weapons, drawing upon both the pro- and anti-nuclear arguments. When it was clear the writer positively identified with one set of arguments they were categorised accordingly and the arguments of the opposite persuasion were not recorded. On occasions when it was apparent the subject did not identify with one or other set of opinions, remaining ambivalent, they were categorised as "No stated opinion". The data gathered from these essays is summarised in Table 1 which shows the breakdown into age, sex and type of school. Within

each age group both the number and percentage of students is tabulated for each of the categories; Fiction, No Stated Opinion, Anti-nuclear, Pro-nuclear. The final section of Table 1 shows the total number and percentage of students, in each age group, that wrote essays in each of the categories.

TABLE 1 SUMMARY OF DATA: BY AGE, SEX, SCHOOL AND CATEGORY

	AGE GROUP											
	MALE						FEMALE					
	State		Public		Total		State		Public		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
F	48	14	3	9	51	14	36	14	7	64	43	16
0	67	20	5	15	72	20	51	20	0	0	51	19
-	110	33	10	30	120	33	116	46	3	27	119	45
+	111	33	15	45	126	34	50	20	1	9	51	19
Total	336		33		369		253		11		264	

	AGE GROUP											
	MALE						FEMALE					
	State		Public		Total		State		Public		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
F	5	8	2	17	7	9	9	16	3	27	12	18
0	14	22	1	8	15	20	11	20	0	0	11	17
-	26	41	4	33	30	39	23	42	3	27	26	39
+	18	29	5	42	23	30	12	22	5	45	17	26
Total	63		12		76		55		11		66	

	MALE		19-22	FEMALE	
	No	%		No	%
F	0	0		5	19
0	11	23		9	35
-	33	48		10	38
+	14	29		2	8
	<hr/>			<hr/>	
	58			26	
	<hr/>			<hr/>	

TOTALS

	11-15		16-18		19-22		Total	
	No	%	No	%	No	%	No	%
F	94	15	19	13	5	7	118	14
0	123	19	26	18	20	27	169	20
-	239	38	56	40	43	45	328	39
+	177	28	40	28	16	22	233	27
	<hr/>		<hr/>		<hr/>		<hr/>	
Total	633		141		84		848	
	<hr/>		<hr/>		<hr/>		<hr/>	

5.9 SUMMARY OF DATA

General summary

Taken as a whole the findings in this summary of the data are commensurate with those found in the Gallup and Mori opinion polls reviewed in Section 1. But when we came to analyse them in greater depth, fine distinctions became obvious and we begin to understand the complexity of discovering and interpreting public opinion.

Looking at the age groups as a whole, irrespective of sex or type of school attended, it appears that rejection of nuclear weapons increases with age; from 38% in the 11-15 age group, 40% in the 16-18 group to 45% in the 19-21 age group. This seems to give us a more detailed understanding of how attitudes develop amongst the younger age groups than the standard opinion polls encountered in Section 1. The youngest age category in opinion polls is most often aged between 18-34 or perhaps 14-24. This is perhaps too wide an age range to encompass in a single category if, as it appears from this study of data, attitudes can change appreciably between the ages of 11 and 22. Nevertheless public opinion polls in the past have indicated the youngest age category has always rejected nuclear weapons to a greater extent than the older categories.

The use of fiction was a mode of expression that tended to decrease with age; it fell from 15% in the youngest age group to 7% in the 19-22 group. However if we examine the male and female subjects separately, it is clear that this means of expression is most likely to be employed by females - reaching 19% in the 19-22 age group. In the same age group not one male student wrote a work of fiction on the bomb.

5.10 MALE-FEMALE DIFFERENCES

The slight increase in the female "fiction" category is accompanied by an increase in the "no-opinion" category as we progress through the age groups.

FIGURE 5:1

% "Fiction"/"No Opinion" amongst female subjects

<u>Female</u>	11-15 %	16-18 %	19-22 %
F	16	18	19
O	19	17	35

The predominance of "no-opinion" amongst female respondents has long been recognised as a feature of opinion polls (see Ganley op. cit.) and it is common for female "don't know" to be twice that registered for male respondents. This present study indicates that it may well be during the age of 19-22 that female respondents undergo a loss of confidence in their opinion; the younger age groups registered no more indecision on the matter than their male peers:

FIGURE 5.2

% of "No-Opinion" in male and female age groups.

	11-15 %	16-18 %	19-22 %
Male O	20	20	23
Female O	19	17	35

One further point that emphasises the error of treating this age group as one whole is that taken as a single group, female rejection of nuclear weapons is

more emphatic than male (51% female 37% male), however if we take each group individually it becomes clear that female rejection of nuclear weapons only predominates in the largest 11-15 age group. In the 16-18 group male and female are both 39% against nuclear weapons, and in the 19-22 age group a higher percentage of the male subjects reject nuclear weapons (48% male 38% female).

FIGURE 5.3

% of "anti-nuclear" in male and female age groups

	11-15	16-18	19-22
Male -	33	39	48
Female -	45	39	38

From the available data it was also possible to investigate the possibility that type of school (ie public or state) may have some bearing on attitudes towards the question of nuclear weapons. This relationship, of course, looks directly at the question of authoritarianism which we encountered in chapter 2. As one might hypothesise, if one accepts the influence of authoritarian regimes, the subjects attending public schools (which could be interpreted as being more traditionally authoritarian and restrictive) were undoubtedly more in favour of nuclear weapons than their counterparts in state schools - with the exception of female subjects in the 11-15 year old group:

FIGURE 5.4

% of "pro-" and "anti-nuclear" attitudes by age, sex and school

	MALE		FEMALE	
	% 11-15	% 16-18	% 11-15	% 16-18
State School	- 33 + 33	- 41 + 29	- 46 + 20	- 42 + 22
Public School	- 30 + 45	- 33 - 42	- 27 + 9	- 27 + 45

More research would need to be carried out to determine the precise influence type of school has upon the formation of attitudes; is it, for example, a result of public schools being more conservative in outlook with a tendency to inculcate mainstream ideology? or can the influence in fact be due to an authoritarian regime that instils a tendency to support hard-line militaristic options?

The nature of the data in the 19-22 age group made analysis of attitudes, in terms of further education, impossible.

Twenty sample essays were drawn from the total number (ten representing pro- and ten representing anti-nuclear attitudes). These typify the pattern of divergent opinions that was evident in the sample as a whole. These essays were analysed according to the procedure established above for the information sources - except that this time it was possible to code each argument as it was identified. The results of this analysis can be found in tables 2 and 7.

5.11 ELITE OPINION SOURCES

The second set of data, used to determine the range of opinions used by "elites", was drawn from a variety of sources with the objective of sampling the field. Elite opinion, of course, reflected affiliation to either the pro-nuclear or anti-nuclear cause. Pro-nuclear "elite" opinion was represented by the following:

1. A speech given by Sir Geoffrey Howe to an organisation called "Peace through NATO" in November 1984.
2. A speech given by Mr Francis Pym in November 1982 to the English-Speaking Union in Leeds, entitled: "The Alliance and Arms Control: Ten Misconceptions".
3. An information sheet "Know the facts" produced by the Campaign for Defence through Multilateral Disarmament. Footnote 2

Anti-nuclear "elite" opinion:

1. A pamphlet by Betty England entitled: "Nuclear disarmament for Britain - why we need action not words".
2. "NATO Rules Ok?" a pamphlet (CND publication) by John Cox and Dan Smith (CND spokesmen).
3. A speech by Denis Healey to the Fabian Society, 26 November 1985.

These examples of "elite" opinion are, as we would expect from an "elite" sample, closely allied to the information sources outlined above. They differ in the sense that they originate from each representative rather than the information-generating source itself.

A full analysis of findings can be found in Tables 2 and 7

TABLE 2 PRO-NUCLEAR ATTITUDES

MASS OPINION

1 2 3 4

No:	Soviet Threat									Nuclear Deterrent							Multilateralism						NATO										
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	1	2	3	4	5	6
527							*									*				*			*										
635								*				*					*			*			*										
595								*								*				*			*										
715								*				*				*			*	*			*				*						*
787								*							*				*	*			*										*
327								*				*			*			*	*	*			*				*						*
578							*					*			*			*	*	*			*				*			*			*
22							*					*			*			*	*	*			*				*						*
713							*					*			*			*	*	*			*				*			*			*
636							*					*			*			*	*	*			*				*			*			*

ELITE OPINION

Howe	*							*				*			*		*	*	*			*			*	*			*			*
CMND	*	*					*		*			*			*		*	*	*			*			*	*			*			*
Pym	*	*	*				*		*			*			*		*	*	*			*			*	*			*			*

5.12 PRO-NUCLEAR ATTITUDES

It is evident from Table 2 that a wide range of the archetypal arguments were used by the subjects in this study. As a group the sample representing "mass" public opinion used a total of 20 arguments out of the available pool of 32, the "elite" sample made use of 26. This illustrates both the high degree of constraint within the group and their familiarity with the pre-existing arguments.

Individually the 10 subjects in this "mass" sample used an average of 6 arguments drawing upon three out of the four categories. The "elite" sample, as would be expected, used a higher proportion of the prescribed arguments - averaging 16 - and all three drew upon each of the four categories, illustrating their greater awareness of the arguments. But even within the elite sample utilisation of the set arguments varied. Pym for example utilised 20 in his capacity as Secretary of State for Foreign and Commonwealth Affairs, while Sir Geoffrey Howe - a later incumbent of this position - drew upon a mere 12.

Although "elite" and "mass" samples used arguments from all four categories the elite sample were much more aware of the range of arguments within each particular category and often used a higher level of argument, for example 1:3 was expressed in the "mass" sample as: "The Warsaw Pact has lots more weapons than NATO...". In the "elite" sample the argument was more specific: "Since 1977, in addition to its superiority in missiles and the supersonic backfire strike-bomber..." etc. (See Table 3). Despite these differences both the elite and the mass sample emphasised the arguments in the "multilateralism" category (3) over and above the remaining categories. Figure 55 indicates the percentage of arguments used in each category by both groups:

FIGURE 5 .5

% of available arguments used by "mass" and "elite" groups

	1	2	3	4
	Soviet Threat	Nuclear deterrent	Multilateralism	NATO
	%	%	%	%
Mass	7	22	29	16
Elite	37	42	62	17

Tables 4-6 give further examples of the way these arguments are expressed by both groups.

5.13 ANTI-NUCLEAR ATTITUDES

The sample representing mass public opinion against nuclear weapons revealed a poor knowledge of the archetypal arguments defined on pages 216-222. This group used, on average, only 3 of the 25 available arguments and draw upon an average 2 categories. The most comprehensive range of arguments were drawn from category 3 -"Unilateralism."

Table 7 clearly shows the distribution of prescribed arguments used by the "elite" and "mass" public opinion in this study. It is clear that the elite sample used arguments across the wide range of categories and drew upon a higher proportion of archetypal arguments that were available - averaging 12 out of the 25 arguments tabulated and utilising, on average, 4 of the 5 categories.

FIGURE 5.6

% of available arguments used by "mass" and "elite" samples in each category

	1	2	3	4
	Nuclear Threat	Nuclear "Deterrence"	Unilateralism "Threat"	Soviet
	%	%	%	%
Mass	7	8	8	8
Elite	50	50	33	58

Figure 5.6 shows the percentage of the available arguments used by the elite and mass samples as a whole. It is evident that mass awareness of the archetypal arguments is poor, although, (see Appendix 1) the level of argument used by those with an awareness is high. See "no-defence" argument 2:1 for example, expressed by a mass subject: "Can it really be said that Britain has a nuclear deterrent? To be effective as a deterrent Britain must be prepared to use its nuclear weapons if we did use our nuclear weapons, retaliation would totally destroy this country and almost all its inhabitants." and the same argument, expressed by an elite subject: "The point is that Nato's deterrent threat is based on the premise that the Western world is willing to commit mass suicide as well as mass murder." (see Appendix 1). Footnote 3

5.14 MORAL ASPECT

The failure to use many of the existing arguments by the mass sample is offset to some extent by their use of the "moral aspect." Nine out of the ten subjects representing mass public opinion expressed objections to nuclear weapons on moral grounds. These were, as already noted, either on the grounds that it was immoral to squander money on these weapons when there are people starving in the world; or on the grounds that it is immoral to threaten innocent lives with these weapons of mass destruction. Examples of this aspect are given below:

"The millions of pounds spent every year in the making of bombs and research behind the complex but totally pointless projects, could be put to many many good causes. With that money we could put a total stop to the starvation and malnutrition" (637)

"Instead of spending limitless money on nuclear weapons, we should try to improve the world not destroy it." (A99)

"The bomb is the most vile manifestation of what the latter half of the twentieth century has contributed to civilisation. The nuclear arms race has produced both a criminal waste of resources and, recently, a climate in which the horrific prospect of nuclear war -has become probable." (780)

"I cannot seriously believe that the majority of sane decent people want nuclear weapons. That they want to harm and destroy a world so beautiful. Surely the grisly results during world war two were enough to put anyone off nuclear weapons." (335)

That the bomb exists is obscene. That it exists in a society which claims to be civilised is ridiculous." (779)

Two out of the three subjects representing elite public opinion also used the moral argument but these, in accordance with the information sources, were not given such prominence as they were by the mass sample. See for example Betty England's pamphlet where she is writing about the reasons for a unilateral move by Britain:

"But there are other reasons. There is the moral one, whose strength is not diminished by talking of a "gesture".

It is clear from this study that the immorality of nuclear weapons is a powerful argument against nuclear weapons amongst mass public opinion, and to a lesser extent amongst the elite but is not a prominent feature of the anti-nuclear source material used here. The moral aspect may prove to be the main motivating force amongst those rejecting nuclear weapons; it may also mark the dividing line between the pro- and anti-nuclear belief systems. The fact that this argument has been underplayed by those that generate the anti-nuclear material may be due in part to their reluctance to focus on anything remotely "emotional" preferring to take a more factual "scientific" line. In doing this it is likely they fail to strike a chord with much of the general public and furthermore fail to appreciate that the arguments that give rise to the belief in the "Soviet threat" are no less emotive.

Amongst the pro-nuclear group, although they may express no moral revulsion towards nuclear weapons per se, many consider the growth of nuclear arsenals, East and West, as unacceptable and that the vast sums of money spent on updating these nuclear arsenals cannot be easily justified when there are already sufficient weapons in existence to blow up the world "x" number of times. One further aspect of this study that bears mention is the question of the Strategic Defence Initiative (SDI). Amongst both the pro- and anti- nuclear mass opinion it was generally looked upon optimistically:

"President Reagan's plans to develop laser and particle beam weapons should meet with all possible aid. If nuclear weapons can be knocked out before reaching their targets total multilateral disarmament will have been achieved."
(85)

This desire to believe in the ultimate answer is reminiscent of the early days of nuclear weapons when they were seen as the panacea to end all wars. It is equally unlikely that SDI will fulfil this vision of security.

5.15 CONCLUSION

Analysis of the data in this study indicates that the attitudes of the mass public and the elite are influenced to a great extent by their knowledge of the arguments generated by the pro- and anti-nuclear information sources. When these sources produce clear cut, well-argued, well-presented arguments over a long period of time then they become part of the public's ideological inheritance. Because of the deadweight of these taken-for-granted arguments - which are barely subject to introspection or questions by the individual - it becomes natural for those who have little real knowledge and/or interest in the nuclear issue to express mainstream ideology. But we suggest that it is not increased knowledge of the issue, which Gamson and Modigliani suggest, or the type of knowledge they gather, as Putney and Middleton (op. cit.) posit, but a far more superficial level of understanding of the issues and arguments embodied in the archetypal arguments we have defined that leads the majority of the mass public to follow mainstream ideology.^{Footnote 4}

The repetitious nature of the original arguments used by the pro-nuclear mass public suggests that the depth of their understanding of the issue goes little beyond that of headline politics and gut reactions that do not engage deeper lines of inquiry. We can see this simple acceptance of the archetypal arguments in terms of Maggiotto & Wittkopf's (op. cit.) "Easy" issues which elicit gut responses rather than reasoned analysis. When it comes to the question of "Hard" issues the likely response of these individuals will be difficult to predict. Lacking the guidelines of group consensus as to the response expected the mass public may easily reveal their lack of contextual grasp of the system by contradicting themselves (see Converse, op. cit.). These

contradictions are most likely to come to light in a standard questionnaire or opinions poll.

The reason for the "pro-nuclear" individuals' apparent highly structured belief system, then, can be understood in terms of the high level of group consensus and the tendency for these individuals to get their ideas into line with this group consensus, (Barton Parsons) and so with one another, producing individual as well as group consistency.

The "anti-nuclear" group, lacking such levels of group consensus, similarly show at an individual level also a greater diversity of arguments to express their opinions supporting their basic attitudes. This apparent fact makes it impossible to categorise "pro-" and "anti-" nuclear individuals using Barton and Parsons' and Converse's "sophisticate" or "partyliner"/"ideologue by proxy". Although there is no question of defining the "unpoliticized" in this study - they were simply those students that were neither pro-, nor anti- nuclear weapons, - it becomes clear that "sophisticate" is not an appropriate means of categorising individuals in the nuclear defence debate: they are "party-liners" all. It may be expediant, however, to divide the "party-liners" into "implicit party-liner", and "explicit party-liner". The individuals who fish arguments more or less at random out of their particular ideological pool of arguments can be classified as an "implicit party-liner" whose responses are to a large extent automatic. The "explicit party-liner", on the other hand, uses the archetypal arguments in a constructive way, co-ordinating them into a well-constrained sequence of cause and effect that bear none of the hallmarks of contradiction that characterise the "implicit party-liner". However, owing to the lack of consensus within the "anti-nuclear" group it is difficult even then to determine the "implicit party-liner" because the likelihood is that they will have passed from the "implicit"

beliefs of mainstream ideology to a more critical view that may run counter to their previous direction.

The existence of "archetypal" arguments identified in this chapter help to explain the contradictions recognised in Chapter I. Individuals and group became confined in a way of thinking that may have no logical basis other than in implicit assumptions or belief patterns which:

are too deep-seated to be easily questioned or criticised and indeed, with any people, may be too deep-seated, to be clearly identified and described.

Perhaps with increasing dissonance between our ultimate goal (removing the threat of nuclear apocalypse) and the popular belief in the means of achieving this goal (multilateral disarmament or in Gallie's² analysis: Conflict Resolution Through Mutual Concessions) it will be possible to break out of this way of thinking that has created the present impasse. The increasing lack of confidence in US leadership perhaps indicates the possibility of increasing dissonance and the moving away from super-power allegiance and the recognition that the threat posed by nuclear weapons is greater than that of the "Soviet Threat"; that it threatens the Soviets as well as the west, when we consider the implications of a Nuclear Winter that could occur after the use of only a small portion of the existing stockpiles.

Through the recognition of the power of the archetypal arguments for nuclear weapons and the realisation that the power of the anti-nuclear arguments, properly co-ordinated and argued, could begin to shake these unexplored assumptions that often rest on nothing more than articles of faith in the nuclear deterrence -changes of attitude could be brought about which could open up a much wider range of alternative futures than that offered by supporting nuclear

weapons. If not there is only one future: we go on as we always have done until the weapons are eventually used.

I suggest, then, that the overwhelming support for nuclear defence, as evidenced in the polls, may be better explained in terms of public awareness of the arguments in favour of nuclear weapons than in their commitment to nuclear defence policy per se (the developments of which many of the subjects in this study were totally unaware of). The dominance of pro-nuclear arguments in the mass psyche is a result of their high level of saliency and duration over the years since 1945. In the absence of any interest (and defence issues have always featured low in the public's assessment of "most important issue"), and knowledge, mainstream ideology is likely to dominate attitudes on nuclear issues.

This chapter has clarified the content of 'anti-nuclear' and particularly 'pro-nuclear' belief systems and to some extent the sources of these arguments, used to express attitudes towards nuclear defence. These findings suggest, in conjunction with the theoretical work in Chapter Three, many reasons why people hold certain attitudes - despite the existence of credible reasons for opposing nuclear defence. The function served by these attitudes may range from the instrumental, i.e. maximising the rewards of society (take, for example, the career-minded naval men in Chapter Four or members of the Cabinet) to the value-expressive function which can be identified amongst members of political parties who see their support for nuclear defence as an expression of their Conservativeness. The ego-defensive function of pro-nuclear attitudes may also be a powerful reason for

rejecting information to the contrary and result in strengthening existing attitudes or avoiding the issue altogether. Perhaps, of all the functions considered in Chapter Three the knowledge function is the most important with regard to attitude change, and this is closely linked with the whole question of dissonance : when an individual receives contradictory evidence to his/her own belief system then, if he/she is not avoiding or denying the issue, he/she must assess it against old beliefs and adjust these accordingly. In doing this he/she may be compelled to seek further information in order to confirm or reject the new evidence.

This chapter, then, fills us in on the fragments of attitude that the polls provide us with and helps us to understand the ideological pressures of conformity operating within a belief system and within organisations of social systems which inhibit the process of attitude change. Further examples of attitudes developing from one system to another are studied in Chapter Seven.

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In Dangers of Deterrence, Ed. N. Bearke, K. Poh, RKP.
2. *ibid.*, p. 166.

FOOTNOTES

1. "Official", meaning governmental, or from government departments.
2. This broadsheet actually falls somewhere between an information source and an expression of what, no doubt, this group see themselves as - the "informed public". As a group contribution it differs from the previous examples but as an expression of informed "elite" opinion it is comparable.
3. Selection of these examples was not blind-checked by another reader, although a second opinion was sought on those that proved difficult to categorise.
4. Putney and Middleton suggest that increased counter information to mainstream ideology will produce changes of opinion in the opposite direction. This we suggest may not necessarily be the case* (see earlier chapter)

CHAPTER 6

STRUCTURE OF ATTITUDES - HOW RELEVANT ARE MATHEMATICAL MODELS?

6.1 INTRODUCTION

In the previous chapters we have been concentrating on the content of belief systems with their constituent attitudes, opinions and assumptions. In Chapter Three with the discussion on balance, congruity and cognitive consistency we came close to studying the structure of attitudes, which will be the concern of this chapter. Do models of attitude structure and the use of algebraic equations help us to understand the convolutions of an individual's belief system? In Chapter Two we considered the notion of 'constraint' and suggested that the 'elites', the informed public, are likely to have a more constrained, i.e. reasoned, better organised belief system than the generally uninformed public. Does the study of structure help to elucidate this hypothesis? Although previously I¹ was convinced of the utility such models I have now become more critical of the methodology - most especially when it goes so far as using differential equations to explain emotional processes! - a method used by at least one psychologist.

Heider's identification of three attitude elements and the balancing process between these provide us with the basics for understanding the structure of attitudes (Chapter Three). Developments of this method by, for example, Cartwright and Harary,² Abelson and Rosenberg³ have broadened its use and application to cognitive processes. Of particular interest to us here is the use of Cognitive Mapping developed by Axelrod and colleagues⁴ and more recently, Smaller.⁵ Although the process of cognitive mapping has its genesis in Heider's

approach it is a vastly more complex system based on the causal assertions of subjects which are mapped out as a series of points and arrows. The points represent the persons concepts and the arrows the causal link between concepts. The system was originally developed by Axelrod and his colleagues to assist in management decision-making and was based on a complex set of rules for its implementation. Smaller⁶ derived a simplified set of rules which, he maintains, in no way invalidates the procedure while making the whole process infinitely more manageable.

The procedure is as follows: All the cause and effect concepts in the document Footnote 1 being mapped are listed on a coding sheet; each concept is given a code and each linkage a value depending on whether an increase in the cause increases or decreases the effect concept. The purpose of coding is to facilitate map construction. Take for example a simple statement such as:

Nuclear weapons are necessary for deterrence without which there would be nothing to stop the threat of Soviet invasion.

Coding and mapping for this statement can be found in Figure 6.1. The utility of this system of mapping lies in the possibility of comparing cognitive systems of different people and perhaps, more importantly for this study cognitive processes before and after attitude change. The former application has been used extensively by Smaller⁷ and the latter shall be considered here after looking at the limitations of the process.

Figure: 6.1

STATEMENT: "Nuclear weapons are necessary for deterrence, without which there would be nothing to stop the threat of Soviet invasion."

CODING LIST:

<u>Concept variable</u>	<u>Code</u>
Nuclear weapons	NW
deterrence	D
threat of Soviet invasion	SI

CODING SHEET:

<u>Cause</u>	<u>Linkage</u>	<u>Effect</u>	<u>Mapping List</u>
NW	are necessary for	D	NW + D
D	stop(s)	SI	D - SI

COGNITIVE MAP



This map indicates that an increase in concept NW increases concept D which in turn decreases concept SI.

The major problems with cognitive mapping lie in procedural difficulties involved in drawing up the map : where the points are placed during the mapping are completely arbitrary which makes it difficult when it comes to comparing maps of different people. The problem is minimised in Smaller's samples because he concentrates on elite belief systems, those who have some specialist knowledge of the issue, and therefore there is a high degree of consistency within the individual belief systems and among belief systems of like-minded people. A further limitation of the mapping is its unidimensional

nature which fails to convey the complex relationship between different idea-elements, cause and effect sequences that are depicted. Perhaps a computer generated three dimensional mapping process would be more appropriate where the map could be rotated and viewed from different viewpoints and the relationship between idea-objects could be more complex. This leads us to a further point of criticism : the cognitive mapping process, at least as presently construed, fails to take into account strength of feeling or strength of attachment to each concept except in as far as the number of times an assertion is made is recorded. This is clearly important especially if we are looking at the possibilities of the belief system changing and wish to predict the likelihood of change taking place. In this respect use of direct scales for assessing attitude would be useful such as the Likert scale or Semantic differential scale.

Finally the cognitive mapping process as it has been used up to now does not allow for the mapping of inferential beliefs. For example if someone states the need for nuclear weapons to deter the Soviet Union then we can infer from this belief that this person sees the Soviet Union as a source of threat and map it accordingly. In my experiments with this process I map these inferences with a dashed line.

The possibility of using computers in mapping belief systems may improve the quality of the process. In fact quite a lot of work has been done with computers in understanding belief systems. Abelson and Carroll have attempted computer simulation of individual belief systems but it seems an enormously complex process and pretty limited in application. Perhaps more interestingly Abelson and Reich⁸ have used computers to construct implicational molecules which

are a set of beliefs bound together by psychological implication. They identify the completion tendency which operates when:

Given all sentences of a molecule except one, there is a tendency for this omitted sentence to be inferred.⁹

So, if we are told that A does X and X causes Y we are likely, Abelson and Reich suggest, to infer that A wants Y. By means of such "molecule completion" it may be possible for extra beliefs to be adduced from given beliefs - which could be a very useful addition to the cognitive mapping process. Some research has concentrated on this process (although it has been called a "syllogistic network") without the use of computers - see for example McGuire.¹⁰

McGuire and others have developed this process to take into account levels of confidence in an individual's beliefs and Petty and Cacciopo (op cit) give an example of how this can be made into an equation:

$$p(B) = p(B/A)p(A) + p(B/\bar{A})p(\bar{A})$$

which could be based on the following syllogism :

First premise:	If Thatcher is re-elected health spending will decrease	
Second premise:	Thatcher will be re-elected	(A)
Conclusion:	Health spending will decrease	(B)

The probability of the conclusion is represented by p(B) and the probability of Thatcher being re-elected p(A). The first premise will thus be p(B/A), i.e. the probability of B given A. p(\bar{A}) is the probability of not A, p(B/ \bar{A}) is the probability of health spending being decreased if Thatcher is not elected. Each of these probabilities can be given a value, say from 0 to 10, and the likelihood that health spending will be decreased can be deduced. This whole procedure, if applied to the cognitive mapping process could greatly enhance its predictive

value but it would have to rely on some sort of questionnaire being administered.

The theory of reasoned action, briefly outlined in Chapter Three may also serve some predictive purpose for understanding attitude change, it too relies on a mathematical formula and tells us something of attitude structure. The formula:

$$A = \sum_{i=1}^N b_i e_i$$

can apply to attitudes towards issues, people or ideas or objects generally, b, in this case can represent beliefs a person holds about the object and e the evaluation of these beliefs and we can determine the individual's attitude by giving each element a value - i refers to the specific belief numbers. We could determine a person's attitude towards the Conservative party by looking at a number of beliefs and their evaluation of these for example:

i Attitude towards the Conservative party

	Beliefs (b)	Evaluation (E)	(bi) (ei)
1. Strong nuclear defence	(+3)	(+1)=+3	
2. Weakened NHS	(+3)	(-1)=-3	
3. Control over Unions	(+2)	(+2)=+4	
4. High unemployment	(+3)	(-3)= <u>-9</u>	
			<u>-5</u>

$$A = \sum_{i=1}^N b_i e_i = -5$$

So we deduce that this person's rating of the Conservative party is -5. Of course we would have to have some sort of scale to convert this into, say, voting intention for it to have any real meaning. This sort of calculation is all very neat and may indicate the underlying structure of a belief system but do we really benefit from reducing a person's attitude to mere numbers? It does seem rather unnecessary but it does add a further dimension to the features of the cognitive map. All the same it would be very difficult, on any important issue, to include even a majority of idea elements necessary to evaluate a single attitude with any degree of accuracy.

6.2 APPLICATION OF COGNITIVE MAPPING

Before dismissing the cognitive mapping process entirely let's see how useful it is in mapping one of the essays that were used for the analysis in Chapter Five. A follow-up of the original essay writers some 2/3 years later also allows us to evaluate the utility of this process when attitudes change. Below is the variables list of essay subject 701(A) :

Variables List

Essay written by student, one of a sample of 800 identified as subject no. 701 (A)

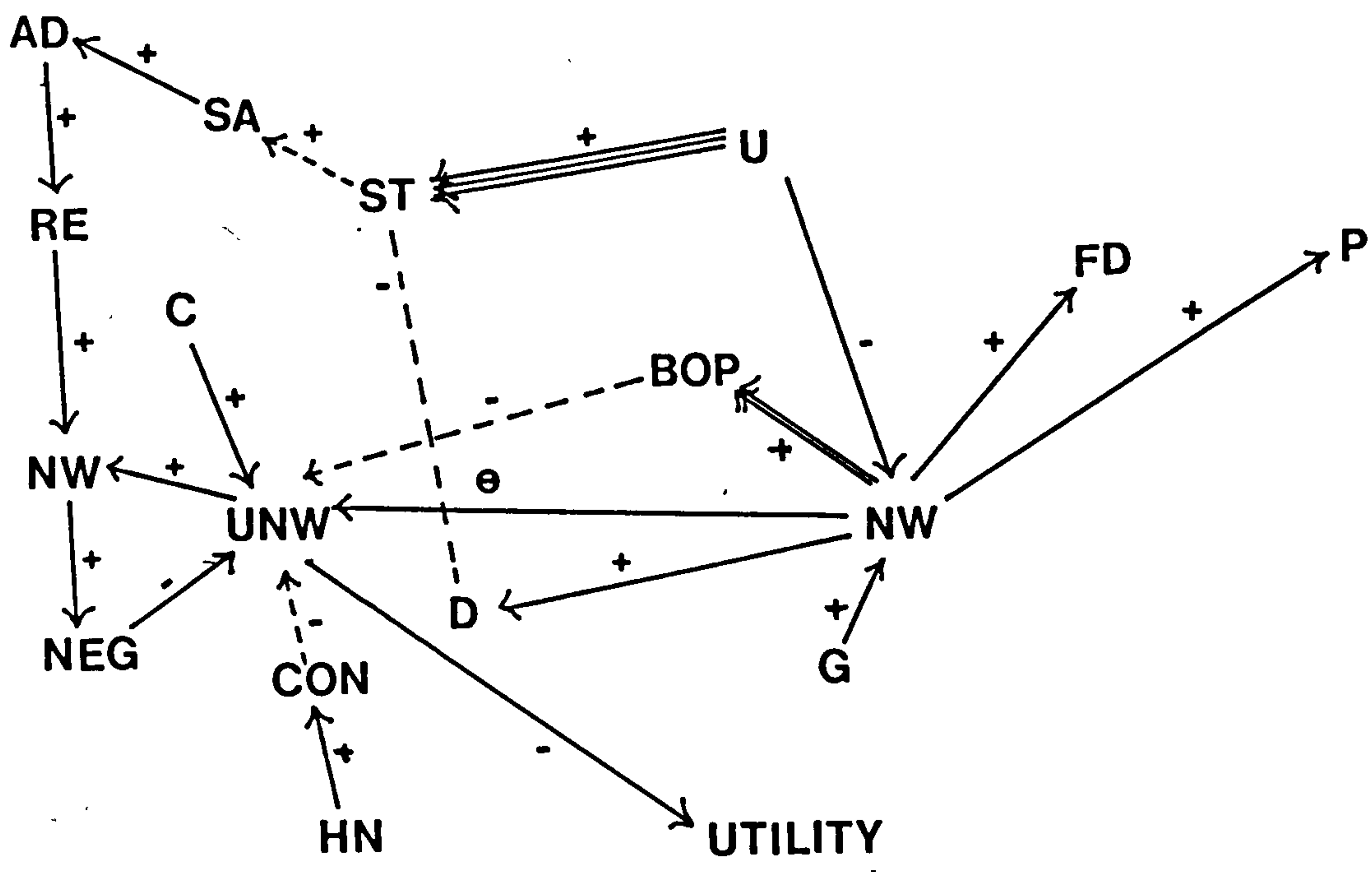
<u>Concept Variable</u>	<u>Code</u>
the atomic bomb	NW
adverse effect	-UTILITY
atomic bombs	NW
defence	D
possibility of using them (NW)	UNW
without the bomb	U
power seeking nation	ST
self-respect	SR
terrible effect caused at Hiroshima and Nagasaki	HN

consideration before use	CON
for a bomb to be used	UNW
very severe situation	C
the bomb	NW
greediness	G
sign their own death warrant	-UTILITY
allowing these bombs to go off	UNW
holocaust	NH
accurate detection of bombs	AD
USSR decide to take control of Britain	SA
Sold a couple to USSR	RET
large percentage of world in ruins	NH
rather find a solution to the problem	NEG
use the bomb	UNW
to ban the bomb	U
to be rid of the bomb	U
peace	P
the bomb	NW
equilibrium	BOT
took the bomb from Britain	U
USSR heavier, mightier	ST
Britain as an easy target	ST
the bomb	NW
equal with USSR	BOT
freedom and dignity	FD

The coding for this essay is as follows :

<u>Cause concept</u>	<u>Linkage</u>	<u>Effect concept</u>	<u>arrows List</u>
NW	with	-utility	NW -utility
NW	for	D	NW + D
NW	unlikely	UNW	NW - UNW
U	we became vulnerable	ST	U + ST
U	would loose	SR	U - SR
HN	will probably	CON	HN + CON
CON	-----	UNW	CON - UNW
C	would have to be	UNW	C + UNW
NW	result of	G	G + NW
UNW	by allowing	NH	UNW + NH
SA	would	AD	SA + AD
AD	would	RET	AD + RET
RET	would leave	NH	RET + NH
NH	rather find	NEG	NH + NEG
NEG	than	UNW	NEG - UNW
U	rid of	NW	U - NW
NW	maintains	P	NW + P
NW	acts as	BOP	NW + BOP
BOP	-----	UNW	BOP - UNW
U	became	ST	U + ST
ST	-----	SA	ST + SA
U	as an	ST	U + ST
NW	we are once again	BOT	NW + BOT
NW	necessary for	FD	NW + FD

Figure 6:2 Cognitive map of subject 720(A)



From this stage we are now ready to draw up a cognitive map. It is important to realize that the map shown was the result of much trial and error, its final configuration was determined by the necessity of clarity and therefore the lengths of arrows and positioning of points is entirely arbitrary. (see Figure 6.2.) Multiple lines indicate the number of times this assertion was made, + and - indicates positive and negative effect, and O signifies "will not promote" in accordance with Axelrod's (op. cit.) coding rules.^{Footnote 2} The dashed line, as already explained, indicates an inferred belief and is not part of the ruling laid down by Axelrod however I feel it is an essential contribution to clarity. You will note that merging has been used in the analysis of "...some possibly repetitive concepts generated in coding to eliminate unnecessary ones by merging them into their more likely counterpart concept also found in the text". So, for example "holocaust" and "percentage of the world in ruins" are both coded NH.

The coding for the same subject's follow-up essay is shown below:

Variable list, Essay 720(B)

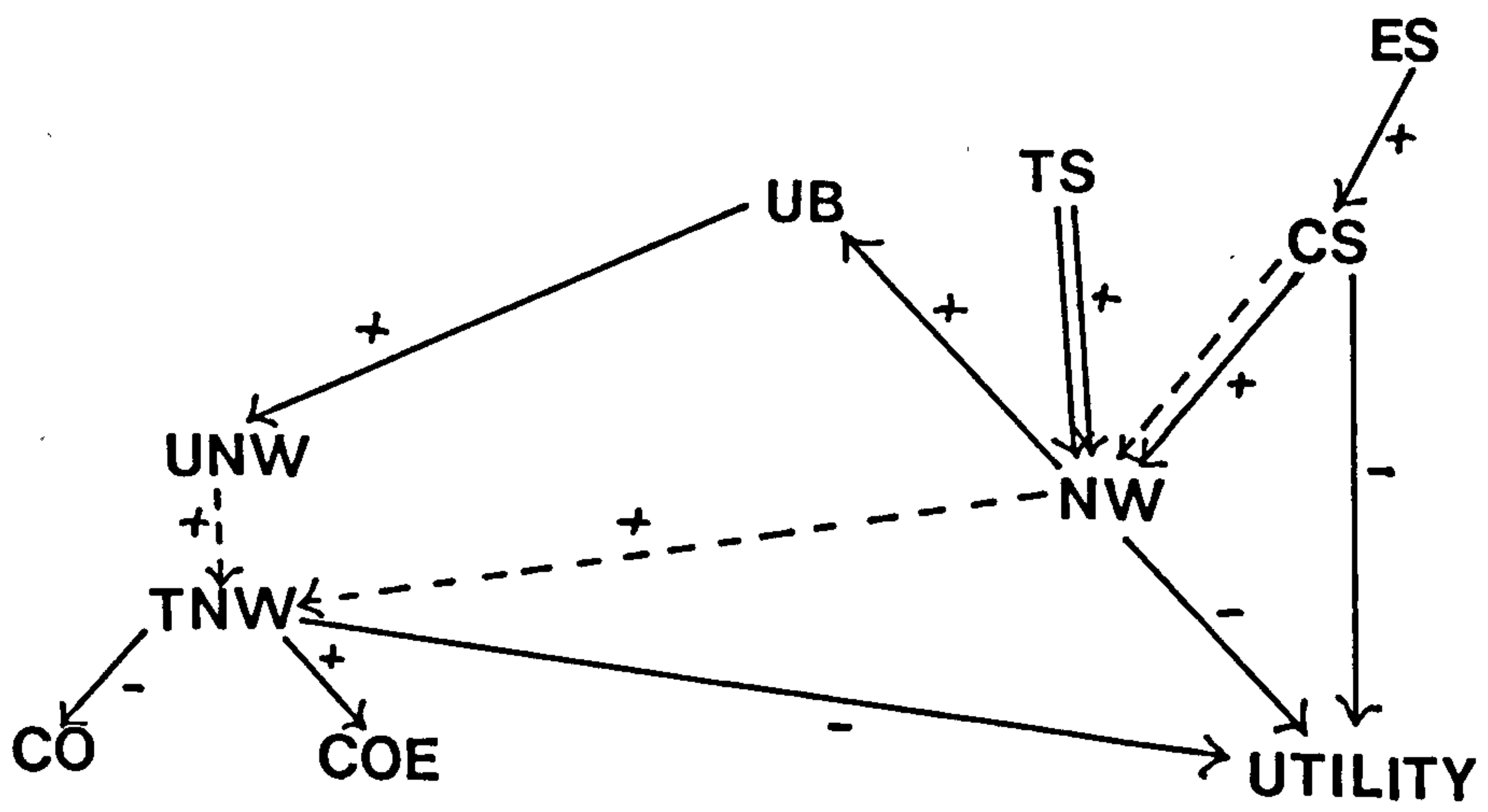
<u>Variable</u>	<u>Code</u>
nuclear weapons	NW
competitive society	CS
technological society	TS
people's lives at risk	-UTILITY
power for individuals	CS
the bomb	NW
relatively unstable countries having the bomb	UB
use of weapon	UNW
evolution of society	ES
nuclear bomb	NW

<u>Variable</u>	<u>Code</u>
those who want power	CS
technologically advanced society	TS
more powerful weapons	NW
innocent people's lives at risk	-UTILITY
threat of nuclear war	TNW
people's cooperativeness	Co
people's coerciveness	Coe
nuclear war	TNW
threat to people	-UTILITY
continuing threat of actual nuclear war	TNW

The coding for this second essay is :

<u>Cause concept</u>	<u>Linkage</u>	<u>Effect concept</u>	<u>arrows List</u>
NW	inevitable factor of	CS	CS + NW
NW	inevitable factor of	TS	TS + NW
CS	put at risk	-UTILITY	CS - UTILITY
CS	put at risk	-UTILITY	CS - UTILITY
NW	can now	UB	NW + UB
UB	who may	UNW	UB + UNW
ES	as there are	CS	ES + CS
CS	-----	NW	CS + NW
TS	because	NW	TS + NW
NW	are put at risk	-UTILITY	NW - UTILITY
TNW	do not become	Co	TNW - Co
TNW	but become	Coe	TNW + Coe
TNW	threatens people	-UTILITY	TNW - UTILITY
NW	-----	TNW	NW + TNW

Figure 6:3 Cognitive map of subject 720(B)



The map in Figure 6.3 is drawn up from this coding. The cognitive map of the subject's first essay shows a fairly complex system linking nuclear weapons to preventing the use of nuclear weapons, deterrence, balance of power and reducing the Soviet threat, inferred from nuclear deterrent. In this map nuclear weapons also increase the likelihood of peace and ensure freedom and democracy. In fact the nub of these causal relationships mirror quite closely the archetypal arguments, set out in the previous chapter, for supporting nuclear weapons. Compare this with the 'archetypal' cognitive map in figure 6:4 and we can see that there are five fundamental arguments taken from mainstream ideology upon which the others depend:

S720(A) map

NW + P

NW + D

NW + BOP

U + ST

D - ST

Archetypal map

NW + P

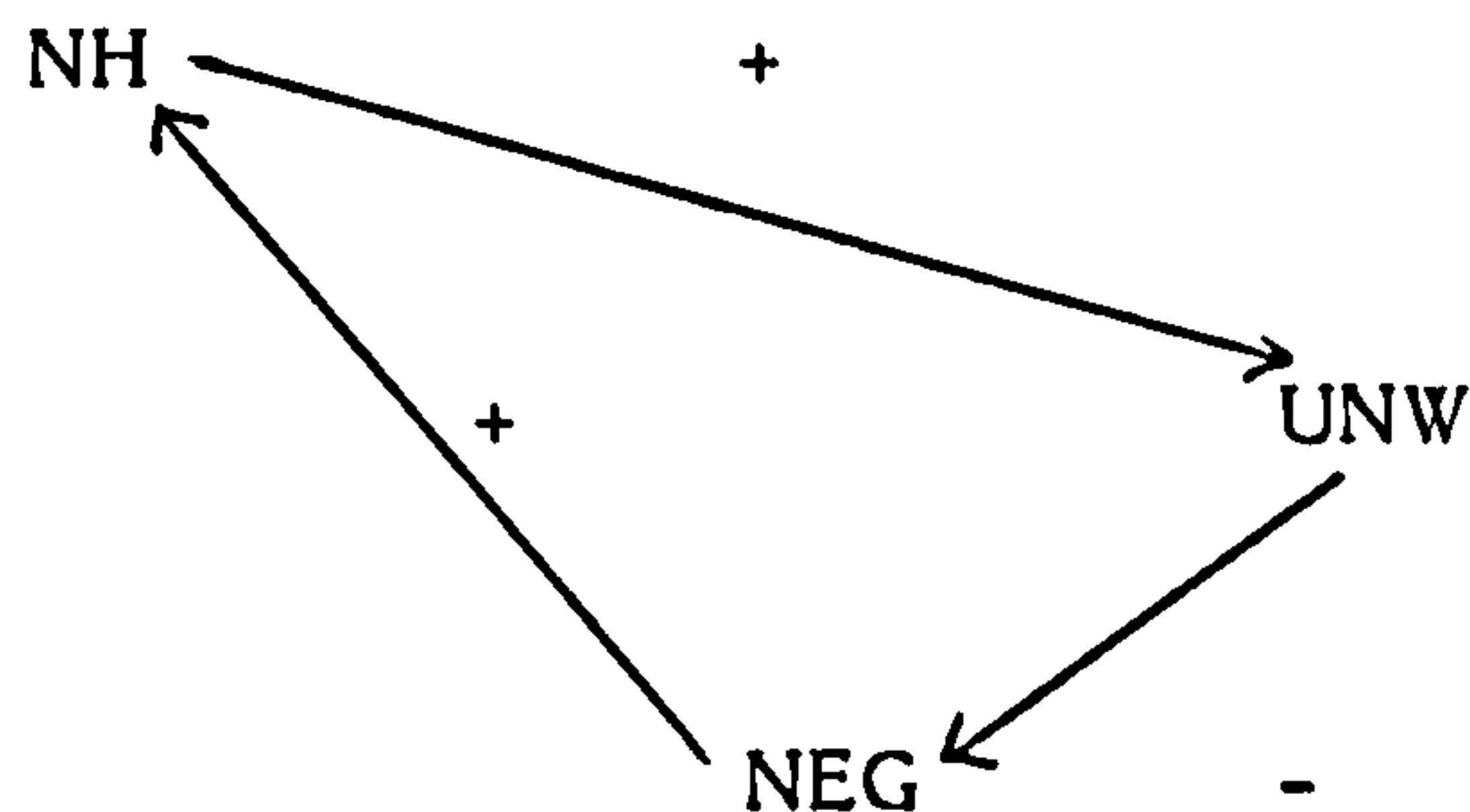
NW + D

NW + BOP

U + ST

D - ST

Note also in this map the circular argument :

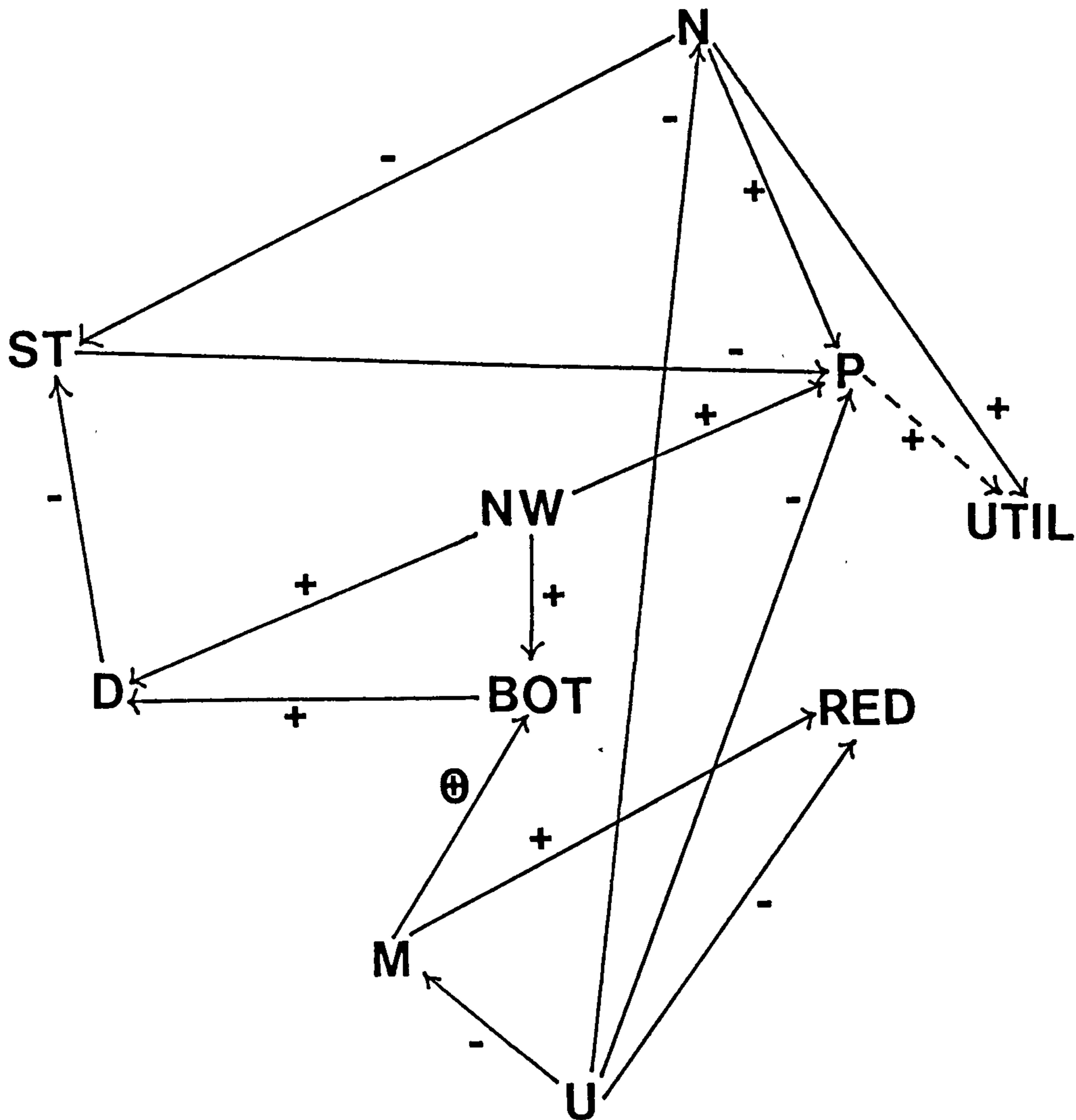


The likelihood of nuclear weapons being used increases the chance of nuclear holocaust, the threat of which increases the likelihood of negotiations, thus reducing the chance of nuclear weapons being used. The map of the causal assertions in the S's second essay is very different. Here the main argument is that nuclear weapons have negative utility, an inferred connection with the

Figure 6:4 "Archetypal" cognitive map

Coding:

N = NATO unity	RED = Safe reduction of nuclear weapons
ST = Soviet threat	P = Peace and security
D = nuclear deterrence	UTIL = UK utility
M = Multilateral disarmament	NW = Nuclear weapons
U = Unilateral disarmament	0 = Does not harm
BOT = Balance of terror	



threat of nuclear war which again has negative utility. Also the likelihood that unstable countries may acquire the bomb increased the possibility of nuclear weapons being used. The evolution of society leads, in this map, to competitive society which makes an increase in the number of nuclear weapons more likely and the technological nature of society also increases this possibility. The only suggestion in the first map that the subject may develop thinking along these lines is the link between man's greediness which increases the development of nuclear weapons.

6.3 CONCLUSION

These maps may help us to understand the structural relationship between idea-elements in a belief system in a rudimentary way but they give no indication of the degree of attachment the individual has to each attitude-object or the extent to which the individual believes each assertion. How can we equate the assertions of different subjects when one subject may be well informed about the issue and make an assertion after careful consideration, and another merely repeats, with little thought, an assertion that he/she has heard made by someone else? Cognitive mapping is all very well, but like the opinion polls, they merely scratch the surface and tell us nothing about the underlying reasons. Further development of this methodology, perhaps as suggested earlier using computer mapping, may yet prove fruitful.

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11. AXELROD op cit p322.

FOOTNOTES

1. This may include documentary material, transcript of an interview or survey questionnaire.
2. For full details of coding notes see Axelrod p.291-332

CHAPTER SEVEN

BRITISH ATTITUDE CHANGE: A CASE STUDY

7.1 INTRODUCTION

This chapter is divided into two sections, both of which focus on attitude change amongst the British public. In the first section we shall be testing out the process of attitude change hypothesised in Chapter 4, which was derived from the American sample. Does the process have a wider application or is it merely limited to the small population sampled in the US? We shall be analysing a small sample of the British public in terms of this model of attitude change. Following this we shall turn once again to the subject of Chapter 1 - the opinion polls - and using questions included in a Gallup Omnibus Survey, evaluate the qualitative study, that makes up the bulk of this thesis, in terms of quantitative data gathered from the polls.

Data for this particular study was gathered by placing an advertisement in Sanity magazine requesting readers who had recently changed their attitude towards nuclear weapons - or could remember how the process took place - to contact me. They were then sent a prepared letter giving more details about what was requested, namely 1) what their attitudes were previously, 2) what brought about the change of attitude and 3) what their attitudes are now. Six responses were forthcoming, and these form the basis of this study.

7.2 JIM RODEN

Jim Roden is similar in many ways to the two American subjects in Chapter 4, Captain B and Captain J. He joined the Royal Navy at the age of 15 and left as Chief Petty Officer after 25 years. Whilst still in the Navy he completed an Open University bachelors degree. Since leaving he gained an M.Sc. in Organisational Psychology and is now completing a Ph.D at UMIST. For Jim Roden attitude change towards nuclear weapons was part of a more general questioning of received beliefs that came about during his OU course. The pattern of change takes place in stages in accordance with the process outlined in Chapter 4.

Stage 1: Uncritical. Jim Roden sums up his old attitude to nuclear weapons in the words of Hilaire Belloc's cautionary tale about Jim who ran away from nurse and was eaten by a lion, it ends:

And always keep a hold on nurse for fear of finding
someone worse.

He thought in those days that if they got rid of nuclear weapons then "all sorts of dangers would become more immediate and threatening!"

He also believed that this country needed nuclear weapons:

I never though they were good in any moral sense but I did
think that they were needed.

He visited Hiroshima and Nagasaki as a young seaman in 1962 and the fact that the two cities had recovered and seemed to be flourishing made it:

relatively easy to rationalise the use of the atomic bomb to end the war. It seemed to me that the bomb differed only in degree from conventional weapons.

This, coupled with a belief that the British and Americans were, in some unexplained way, morally superior, formed the basis for his attitude that:

it was necessary and right for us to have the bomb as a defence against the communists who obviously wished to enslave us, and any people like the Japanese who were obviously inhuman!

This attitude, he feels now, was reinforced in many ways. He has no recollection of ever hearing or reading about a contrary view during this period:

we were superior people and it was as simple as that.

During the Cuban missile crisis he was on a Frigate in the Arctic Circle at action stations; they were preparing for war and he can remember not a word of dissent being voiced. In retrospect he sees this as a kind of "mad religiosity" :

We really believed in a manichaen world split between the forces of good and evil and we were prepared to play our part for good, whatever the cost.

Stages 2 and 3: Emerging awareness and information acquisition. It was during his OU course, where his major areas of study were moral philosophy and psychology, that he was forced to "re-examine my conceptions of myself and the world". Although nothing in the course was specifically anti-nuclear it was the emphasis on taking nothing

for granted and learning to think for himself that was crucial to his developing attitudes. Roden was in a very isolated position because his shipmates tended to equate the social sciences with "lefty sociology" which meant:

the change in my thinking was slow and painful because I had to abandon all the comfortable old group certainties, and do so alone.

Stage 4: Vacillation. At the time he also felt under pressure to keep his changing attitudes to himself in case he "came to be thought of as a security risk because I didn't accept the 'party line'." To a degree, then, he still remained dominated by the system to all outward intents and purposes, although privately his attitude had changed and did not vacillate.

Stage 5: New belief system. Once having left the navy Roden's attitudes were able to develop unrestricted. His attitude now is that defence should be just defence:

In other words, I can't see there is any advantage to be gained from having a devastating offensive capability (particularly a nuclear one) but much to be gained from making our country (or Europe) difficult to invade, relatively self-sustaining and totally ungovernable other than by consent.

This is a very radical change in attitude to his previous position while a naval officer and once again is characterised by a growing awareness, then critical appraisal of received mainstream ideology out of which develops a genuinely thought out attitude. The reasons he cannot now accept nuclear 'defence' rest on a number of points derived for the most part from his research. First, is his objection to the professed Christian beliefs of many of those who have their

finger on the button and their belief in Armageddon and the Second Coming. Secondly, are the dangers inherent in decision-making under stress. He sees a danger in the seeming drive for "self-aggrandisement" of politicians, and doubts the desirability of this in nuclear decision-makers. This, combined with enemy perception - encouraged by the press - which works to the government's advantage and equates belligerence with 'manhood' and nationhood. The impersonal nature of modern warfare also, he believes, increases the chance of these weapons being used - where aggressive actions are psychologically divorced from consequences. And finally he is concerned about the potential for accidents to happen - regardless of 'fail-safe' systems:

I have worked in engineering and I don't believe that any safe-guards are idiot-proof!

7.3 MARION ELLIS

This second subject wrote a brief account of how her attitudes changed as a result of a proposal to dump nuclear waste at Fulbeck, near her home in Lincolnshire. We have no record of her attitudes prior to this but can suppose that the whole question of nuclear power, nuclear waste and even nuclear weapons was simply not an issue for her. But with the designation of Fulbeck as a proposed site for nuclear waste disposal it became a personal issue leading to her emerging awareness, (Stage2):

I objected to that, [proposal to use Fulbeck as a dump] and joined LAND - Lincolnshire and Nottinghamshire against Nuclear Dumping.

As a result of this she states:

I then read more about nuclear power and learned from listening to speakers (Greenpeace, F.O.E., Bruce Kent of CND) about the links between nuclear power stations and nuclear weapons.

This we can see as Stage 3, Information seeking, from which she progresses to Stage 5, Opposition:

I see that one must object to it all. I am now totally anti-nuclear. . .

Although this is a very brief account it indicates clearly the progression from a state of being uncritical to emerging awareness, as a result of the issue impinging on her personal life, to active opposition, and indeed the overflow of concern and opposition to a related area - nuclear weapons.

7.4 DOROTHY WESTWOOD

Again we have to rely here on a brief account of the subject's process of attitude change but similarly the process is quite clearly laid out. To begin with (Stage 1) Dorothy Westwood says:

I was not politically aware. The working classes voted Labour and most of the rest of us voted Conservative, so I voted Conservative.

Although there is no reference here to nuclear weapons, this statement characterises a stage of accepting, at a superficial, non-critical level, the way things are and therefore a tacit acceptance of mainstream ideology. The process of change undergone by Dorothy Westwood is similar to that experienced by Jim Roden in that it was a growing awareness of taken for granted assumptions and implicit acceptances that acted as a catalyst to attitude change. In this case

it was the Suez crisis that acted as the initial spur, initiating the awareness stage (2):

Suez woke me up with moral indignation and shame that our government could so defy the United Nations and send in the troops for commercial gain.

This sense of moral indignation prompted her to start reading widely: "especially on social and political issues," i.e. Stage 3 Information acquisition. She read M.I.T.'s 'A Blueprint for Survival', and she subscribed to The Ecologist on a regular basis:

feeling that our greedy civilization was ruining the earth for all of us.

She then joined the Conservation Society, the Ecology Party and other environmental societies and then, indicating the snowball effect of this increased awareness, her local Peace Group, C.N.D. and E.N.D. (Stage 5, opposition). We can see here that the information acquisition stage (Stage 3) can lead to emerging awareness of wider issues and greater potential for attitude change in an ever increasing field. Dorothy Westwood explains finally that her rejection of nuclear weapons is a result of her concern now for all life:

My basic rejection of nuclear weapons and nuclear power derives from my concern for all life. We humans, as the most advanced form of life, have a duty to pass on our wonderful inheritance, undamaged, for future generations. The American Red Indians' attitude to the Earth is ideal. Nuclear weapons are the most widely destructive to all life, so CND must come first.

7.5 AIDEN JOLLY

Aiden Jolly makes a particularly interesting subject of study because the process of his attitude change is not quite as straightforward as that of the other individuals studied - both here and in the US. Nevertheless we shall attempt to look at this process in stages.

Stage 1: Uncritical stage. This stage is not difficult to identify. Aiden himself admits that he had no understanding of politics and describes himself at this stage as:

a definite but inchoate little Tory. . . . I know what I didn't or shouldn't like but didn't really know or care that Healey was one thing and Heath another. I was dutifully and quite uncomprehendingly scathing, if necessary, about Tony Benn.

He first "discovered nuclear war" through science fiction, particularly two thrillers on accidental holocaust 'The Bedford Incident' and 'Fail Safe'. This was at the age of 10 or 11 and so, as he concedes, "not surprisingly, the message of both books escaped me". Later reading along the same lines made an enormous impression on him:

I was sure a war would eventually happen, and was both terrified and enthralled at the prospect.

At this stage he was pro nuclear power:

because it was clean, apparently renewable (in modern jargon) and very technologically impressive. I also believed that a nuclear deterrent was the only way to prevent war (of any kind) and I was still fairly interested in the hardware of war I used to go to the Farnborough air show with my father.

Stage 2 and 3: Emerging awareness and Information acquisition. He began to start thinking realistically about nuclear war after reading a copy of 'The Wargame' at school:

having read it I began to appreciate for the first time what a nuclear war would actually mean rather than what it would do for the scenario of an exciting novel.

He also began to change his attitude to nuclear power as a result of joining his school's Alternative Discussion Group. But his retrospective interpretation of this period was that it fitted in with his 'controversial' image and because it was "topical and trendy". He sees this stage as having been superficial:

At this time, none of this went very deep - it was adolescence, plus the impact of reading, talking and so on. I adopted such attitudes without thinking and was hardly aware of the details of the issue involved. I didn't think of joining CND; I was aware of the movement only as a clever symbol and if told about it would probably have disagreed with it. I was afraid of seeming to be too 'out of line'.

From his own analysis of this period we can almost equate it with his earlier uncritical state of being carried along by (pro-nuclear) mainstream ideology. Then he seems to be go along with the trend predominating in his present social group which in this case happens to have a generally anti-nuclear flavour. Other influences, however, were effecting him too. A visit to the Alternative Technology Centre in Wales, he thinks:

made a great deal of difference to my understanding of nuclear weapons and power. Once I realised there was another way of say, heating a house, I gradually felt more able to question received wisdoms, of all kinds.

The Falklands war also brought increased awareness of political

issues. Up to this point he felt he had "learnt about various issues, but not made the connection between them". At this stage he says:

I really began to sit down and work my way through the contradictions between what politicians say and what they do, and the way this is reflected in the doctrine of deterrence. From this stage on I was, in spirit, anti-nuclear and anti-Tory. The next stage in this progression was that I very slowly came to do something about what I was coming to believe.

This whole stage of emerging awareness and information acquisition can all be interpreted in terms of the "sleeper effect". Information was coming in and being stored but not really being processed and the various bits remained unconnected. Suddenly an event like the Falklands war sets thoughts in motion. This newly emerging attitude was crystallised in his Oxbridge entrance general paper where he:

answered a question on the validity of deterrence by suggesting it was impossible to build the things without at least having the intention to use them the very existence of mass destruction weapons is essentially genocidal, as the claim that one doesn't actually intend to use them renders them useless as a deterrent.

Stage 5: New belief system and opposition to old. The real commitment to this emerging attitude came at University where he met like-minded people. He became a "fellow traveller with CND" and later joined a local CND group:

I am involved in local CND, and go Cruise watching when the opportunity arises. . . I still write anti-nuclear songs . . . my attitudes to nuclear disarmament have become part of my way of life

7.6 DALE DEMPSEY

Dale describes himself as having been "very war orientated" up until recently:

From a very early age all I can remember being interested in was the army. At one point at the age of 6 I can remember writing to Jimmy Saville asking him to 'fix it' for me to join up.

He joined the Army Cadet force and his attitude towards peace protestors was that they were "a load of hippies, high on drugs and drink."

The changing point came when he happened to see a copy of *Sanity*, the CND Journal:

fleetingly I glanced through it and some photos caught my eye. The photos were of people who had survived the Nagasaki atom bomb and were horrificly burned and scarred. Up until that point war was always glorious even when people were killed on the films and in the comics. But these photos were so horrific that I was rooted to the spot, sure I knew nuclear weapons existed but I didn't realise their terrible effect. I then sat down and read what was written.

He was so appalled by all the facts and figures about people killed and wounded that he immediately sent off for CND membership and more information. Now Dale is both a member of national and local CND and also the Peace Pledge Union (PPU). He joined the 1987 CND demonstration in London and there found out that peace protestors are not "hippies on drugs."

We can see from this account how Dale rapidly passes through the stages of attitude change outlined in the Chapter 4 . He previously subscribed to the archetypal idea of war as glorious, etc., but when he came into contact with information to the contrary he entered the stage of emerging awareness, with a rapid progression to information acquisition, and then a new belief system about war and weapons of war completely opposed to his previous attitude.

There were no reference-group constraints on this progress and therefore no stage of vacillation. Indeed, the fact his father was a member of CND and he encountered the new material when he was visiting his father suggests that already here was - if not a reference group - someone who could give support to his emerging belief system.

These examples of attitude change, while not extensive, suggest that the model of attitude change outlined in Chapter 4 is probably valid, although a number of interesting differences can be found despite the many similarities between the US 'Elite' sample and the present sample. First, it is apparent that we are talking about a much slower process of change amongst the 'elites' studied in Chapter 4. If you remember, it took Captain B 41 years to completely change his attitude and Admiral NE spent more than 40 years in the Navy while voicing covert criticisms of nuclear weapons. The reason for this, I suggest, is that the 'elite' individual is under such pressure to conform to the 'party line' espoused by the society of which he/she is a member - be it a political party, a powerful company, a closed society such as the civil service, or one of armed forces for example - and he/she is also shielded from contact with outside forces or groups espousing a different set of beliefs. This accounts for the 'vacillation' (Stage 4 in the model) amongst the elites who feel the pressure from two sources of allegiance: their present reference group and the developing attitude that is contrary to that group's beliefs.

The people studied in this chapter indicated that fewer restraints are exerted on non-elites - of course friends, family, social group etc.

Figure 7:1

IN RESPECT OF INFORMATION ABOUT NUCLEAR WEAPONS AND NUCLEAR
WAR, DO YOU...?

	18+ VOTING INTENTION						SEX				AGE				CLASS			ANY LIB/ SDP			
	TOTAL		ALLI ANCE /SDP		OTHER		DONT KNOW		MEN		WOMEN		18-34		35-44		45-64		65+		
	CONS	LAB	LIB	SDP	OTHER	KNOW	MEN	WOMEN	18-34	35-44	45-64	65+	ABC1	C2	DE						
BASE	889	329	221	63	199	18	58	418	471	308	172	240	169	352	274	263	262				
SEEK IT OUT	8	8	12	8	6	10	1	13	5	9	7	9	8	11	8	6	7				
READ/WATCH IT IF IT																					
COMES YOUR WAY	71	73	65	68	74	71	74	71	71	69	76	73	66	74	71	66	73				
AVOID IT	13	12	15	16	12	11	17	12	15	12	11	14	18	10	13	19	13				
NEVER SEEM TO COME																					
ACROSS IT	6	5	5	8	7	4	9	4	8	10	5	3	5	4	7	9	7				

will exert pressure to conform in subtle ways but these are ambient rather than specific in nature, and there are other groups within an individual's social milieu to turn to. Non-elites are also more likely to come into contact with organisations espousing different beliefs which can facilitate Stages 2 and 3. The importance of these organisations as new reference groups with which the individual can identify whilst going through attitude change is also indicated in these samples; joining the FREEZE movement, CDI, CND, Greenpeace, FOE etc. all provided a new identity and source of approval through which the new belief system can strengthen. These studies suggest two further factors involved in the process of attitude change. First, there is the apparent importance of an event in triggering action to change: the launching of the Trident submarine led Captain B to voice his dissent and join the FREEZE movement; proposals to dump nuclear waste prompted Marion Ellis to become active; the Suez crisis caused Dorothy Westwood to become informed on social and political issues, and the Falklands War made Aiden Jolly start making connections between issues. Secondly, once the process of attitude change is set in motion the driving force is towards completion of the process - (allowing for escape at Stages 2, 3 and 4).

7.7 OPINION POLLS REVISITED.

After reviewing opinion polls over the last forty years or so in Chapter 1, it was decided that qualitative studies would be of greater value in understanding what people think about nuclear weapons and how their attitudes change. This, then, was the focus of the major

Figure 7:2 Continued

WHAT DO YOU THINK ABOUT NUCLEAR WEAPONS IN THE LONG RUN?

	18+ VICTING INTENTION		SEX		AGE		CLASS			ANY LIE/ SCP							
	TOTAL	CONS	LAB	LIB	ALLI ANCE /SDP	OTHER	KNOW	DONT	MEN		WOMEN	18-34	35-44	45-64	65+	ABC1	C2
BASE	885	329	221	63	199	18	58	418	471	308	172	240	169	152	274	263	262
COUNTRIES HAVE ALWAYS USED ANY WEAPON THEY HAVE- SO THEY WILL USE NUCLEAR WEAPONS AND THERE WILL INEVITABLY BE DESTRUCTION	21	17	24	22	24	17	17	23	18	22	17	16	27	20	21	22	24
COUNTRIES POSSESS THESE WEAPONS-BUT I WILL DO MY PERSONAL BEST TO LESSEN THE DANGERS OF SUCH POSSESSION	18	14	19	25	22	22	12	21	16	18	18	19	17	23	14	16	23
COUNTRIES POSSESS THESE WEAPONS- WHATEVER I PERSONALLY DO WILL MAKE NO DIFFERENCE	42	45	33	39	49	41	38	42	42	46	42	40	37	41	42	42	47
THERE IS NO REAL DANGER FROM THESE WEAPONS BECAUSE SINCE THEY ARE SO POWERFUL-POLICES OF DETERRENCE ARE MOST LIKELY TO BE ABLE TO CONTINUE INDEFINITELY	18	23	10	19	20	26	9	23	13	19	17	17	19	22	14	17	20
IF WE CAN GET THROUGH THE PERIOD IMMEDIATELY AHEAD-COUNTRIES WILL AGREE ON MEASURES TO DISARM AND MAKE THE WORLD SAFER	29	30	27	21	34	24	17	34	24	27	28	29	32	27	32	27	31

part of this thesis. Opinion polls may be of value however when used in conjunction with qualitative analysis: qualitative studies allow us to understand in greater depth how a few people think, whereas opinion polls give us a more generalised view of how many people think. In the last part of this chapter we return once again to opinion polls to seek a quantitative^{at} affirmation of the work carried out up to now. We shall be concentrating on one particular poll that was part of a Gallup Omnibus carried out between 9th and 14th April 1987 on a sample of 891. We are concerned here with four of the questions, see Tables 7:1, 7:2, 7:3, and 7:4.

7.8 INFORMATION

Table 7:1 indicates how respondents deal with information about nuclear weapons and war. The great majority, 71%, read or watch such information if it comes their way. Only 8% actively seek such information, 13% actively avoid it and 6% never seem to come across it, which we may interpret as unconscious/unadmitted avoidance. Therefore 19% actively avoided information about nuclear weapons and war. There was no significant difference between male and female responses and little variation between age groups although the youngest (18-34) and oldest (65+) groups tend to avoid information slightly more than those aged between 35 and 64. Classes ABC1 tend to seek out or read/watch information if it comes their way more than class C2, and groups DE are the least likely to seek out or read/watch information encountered.

7.9 CHANGED ATTITUDES

41% of the sample had changed their attitude in recent times. Of these, 16% had become more unsure but still in favour of nuclear weapons, 10% more opposed to nuclear weapons, 8% more in favour,

and 7% more unsure but still opposed. Those that were unchanged divided almost equally between those favouring and those opposing British nuclear weapons. The greatest change appears to take place amongst those who are in favour of Britain keeping nuclear weapons: this category reports being more unsure than those who oppose them. Women appear to be more unsure about their pro-nuclear attitudes than men, 19% as opposed to 13%. Incidence of attitudes changing tends to decrease with age: 52% of 18-34 year olds changed 46%, of 35-44 year olds, 35% of 45-64 year olds and 33% of 65+.

7.10 REASON FOR CHANGE

Suprisingly, the most frequent reason given for attitude change was "becoming more informed about the issue generally", at 27%, although it must be appreciated that a person's differentiation between information in general and biased information may be a subjective evaluation based on an individual's attitude towards nuclear weapons policy. Receiving information in favour of or against nuclear weapons accounted for only 7% and 8% respectively. "Had a chance to think about the issue more" was the second most frequent reason for changing, at 19% followed by "other reason" 18%, and a high percentage (21%) who gave no answer.

7.11 ATTITUDES TOWARDS NUCLEAR WEAPONS

The given choice of responses for the question: "What do you think about nuclear weapons in the long run?" limits the respondents to a very constricted expression of attitude which I feel tends to force responses on the respondents. Nevertheless, respondents were given a multiple choice on this and at least we are getting more detail about attitudes than heretofore. 48% of respondents believed that "some weapons are needed for deterrence but levels of weapons

should be drastically reduced"; there was general agreement among political parties, sex, age and social class; the only anomaly was Labour voters who supported a freeze over and above other options with cuts coming second. The second most frequent answer, chosen by 42%, was "countries possess these weapons - whatever I personally do makes no difference." Once again Labour voters proved the exception, this being their third most frequent response. The next most popular response was the "no first use" option, 35%, and the freeze option, also 35%.

From this preliminary analysis, carried out by Gallup, we can draw some tentative, general conclusions. First it seems that most people will read or watch information on the nuclear issue, although nearly 20% will avoid it. The responses also suggest that attitude change takes place more amongst those who are in favour of nuclear weapons than those against: they are becoming unsure of their attitudes and slightly more had increased their opposition to Britain keeping nuclear weapons rather than increased support for this policy. The reasons for these changes seem to be access to more information per se and having more time to think about the issue. Despite the fact that more people are in favour of Britain's nuclear weapons than opposed, there is agreement overall that weapons should be drastically cut whilst still allowing some for deterrence purposes. Nearly as many people, however, feel that they personally can do nothing to change the situation. FREEZE and no first use are also strongly supported.

As with all opinion polls these results give us very fragmentary information: which direction do people who actively seek information move in? Have people who have changed their attitudes from supporting nuclear weapons to being unsure done so because they happened to come across more information, or is it because they've had time to mull over all the pro's and con's in their own time? These questions can only be answered by looking at the raw data and carrying out a far more detailed analysis than pollsters are required to do.

7.12 DETAILED ANALYSIS

I was able to carry out this set of detailed analyses when Gallup made their data available to me. My main concern was to look at the relationship between responses to each of the four questions in Tables 7:1 to 7:4. For this purpose the Chi-square test (χ^2) was used to test whether differences of response to combinations of questions were statistically significant, i.e. whether a significant difference existed between the observed number of responses in each combination and the expected number based on the null hypothesis. The null hypothesis states, for example, that there is no positive correlation between seeking out information on the nuclear issue and becoming more opposed to Britain keeping nuclear weapons.

7.13 CROSS-TABULATION OF ATTITUDE CHANGE BY INFORMATION

On the basis of the null hypothesis we would expect to find no relationship between how people respond to information on the nuclear issue and how their attitudes change. First we have to

Figure 7:5 Crosstabulation of attitude change by information.

	1 Seek it out	2 read/watch	3 avoid	4 never	row total
1 more in favour	8 5.2	40 42.9	7 8.1	5 3.9	60 6.8%
2 more opposed	16 7.9	58 65	14 12.2	3 5.9	91 10.4%
3 more unsure/ but in favour	6 12.6	115 104.3	16 19.6	9 9.5	146 16.6%
4 more unsure/ but opposed	4 5.4	50 45	6 8.5	3 4.1	63 7.2%
5 unchanged in favour	17 21.7	199 179.3	25 33.7	10 16.3	241 28.6%
6 unchanged opposed	24 18.8	142 155	36 29.1	15 14.1	217 24.7%
7 don't know	1 4.4	24 36.4	14 6.8	12 3.3	51 5.8%
column total	76 8.6%	628 71.4%	118 13.4%	57 6.5%	878 100%

establish the expected frequency between variables: this is done by multiplying the total number in each row by the total in each column - (see table 7:5). For example, the expected frequency for seeking out information and becoming more in favour of Britain keeping nuclear weapons would be

$$\frac{60 \times 76}{879} = 5.19$$

We then use chi square to measure the difference between the observed frequencies (Fo) and the expected frequencies(Fe):

$$x^2 = \frac{(Fo-Fe)^2}{Fe}$$

The larger the difference between the two frequencies χ^2 the larger the value for chi square and the more confident we can be at rejecting the null hypothesis. For this cross-tabulation, Chi square was calculated at 69.499 significant at .0001 meaning that one could expect to find x^2 this large or larger less than one time in every ten thousand. We can therefore reject the null hypothesis with a high degree of confidence: there is a relationship between how people respond to information and how their attitudes change towards nuclear weapons policy. Looking at Table 7:5, which shows these results, we can see that people who seek out information become more in favour of Britain keeping nuclear weapons: expected frequency Fe = 5.2, observed frequency Fo = 8.

However, the relationship between those who seek out this information and attitudes changing towards opposition to nuclear weapons is even more significant : Fe 7.9, Fo 16. Furthermore, we

Figure 7:3

HAS YOUR ATTITUDE TOWARDS BRITISH NUCLEAR WEAPONS POLICY CHANGED IN RECENT TIMES? WHICH STATEMENT DO YOU AGREE WITH?

	18+ VOTING INTENTION			SEX		AGE				CLASS			ANY LIB/SDP				
	TOTAL	CONSERVATIVE	LABOUR	LIBERAL	ALLIANCE	OTHER	DONT KNOW	MEN	WOMEN	18-34	35-44	45-64		65+	ABC1	C2	DE
BASE	889	329	221	63	199	18	58	418	471	308	172	240	169	352	274	263	262
BECOME MORE IN FAVOUR OF BRITAIN KEEPING NUCLEAR WEAPONS	8	11	5	7	6	5	3	10	5	8	7	7	9	8	7	8	6
BECOME MORE OPPOSED TO BRITAIN KEEPING NUCLEAR WEAPONS	10	3	16	14	16	5	7	12	9	14	10	8	8	8	12	12	15
BECOME MORE UNSURE BUT STILL IN FAVOUR OF BRITAIN KEEPING NUCLEAR WEAPONS	16	18	10	18	21	11	12	13	19	21	18	13	13	16	20	14	21
BECOME MORE UNSURE BUT STILL OPPOSED TO BRITAIN KEEPING NUCLEAR WEAPONS	7	6	9	5	10	13	3	7	8	9	11	6	3	8	6	8	9
UNCHANGED IN BEING IN FAVOUR OF BRITISH NUCLEAR WEAPONS	28	42	12	30	22	15	32	33	23	19	28	34	37	35	23	23	24
UNCHANGED IN BEING OPPOSED TO BRITISH NUCLEAR WEAPONS	24	13	41	23	23	44	26	22	27	24	21	28	23	22	26	26	23
DON'T KNOW	6	6	6	4	2	5	16	3	8	5	6	4	9	3	7	4	2

Figure 7:4

IF YOU HAVE CHANGED YOUR ATTITUDE WHAT WAS THE REASON?

	18+ VOTING INTENTION										SEX		AGE				CLASS			ANY LIE/ SDF								
	LIB		LAB		LIB		ALLI ANCE /SDP		OTHER		DONT KNOW		MEN		WOMEN		18-34		35-44		45-64		65+		ABC1	C2	CE	
	TOTAL	CONS	LAB	LIB	LIB	ALLI ANCE /SDP	OTHER	DONT KNOW	MEN	WOMEN	18-34	35-44	45-64	65+	ABC1	C2	CE											
PEOPLE WHO HAVE CHANGED THEIR ATTITUDE	424	150	104	30	110	7	24	189	236	175	89	92	69	150	140	135	139											
RECEIVED MORE INFORMATION IN FAVOUR OF NUCLEAR WEAPONS POLICY	7	9	2	5	10	0	0	6	7	6	10	6	5	6	7	7	9											
RECEIVED MORE INFORMATION AGAINST NUCLEAR WEAPONS POLICY BECAME MORE INFORMED ABOUT THE ISSUE GENERALLY	8	4	12	2	12	0	5	8	8	9	4	6	11	10	6	8	10											
HAD A CHANCE TO THINK ABOUT THE ISSUE MORE OTHER REASUN NO ANSWER	27	27	25	42	27	36	16	27	27	30	22	29	23	35	25	20	30											
	19	22	16	13	22	0	7	21	17	22	18	12	21	21	21	14	20											
	18	15	22	12	20	52	14	22	15	14	22	28	10	12	18	25	18											
	21	23	23	27	9	12	58	16	26	18	24	19	30	16	23	26	13											

Figure 7:6 Crosstabulation of attitude change by reason for attitude change.

	more info in favour	more info against	general info	chance to think	other	row total
1 more in favour	13 12.1	10 3.8	3 5.6	18 19	10 13.5	54.0% 16.5%
2 more opposed	22 18.1	0 5.7	11 8.4	27 28.5	21 20.3	81.0% 24.8%
3 more unsure/ in favour	23 28.1	10 8.9	11 13.1	45 44.3	37 31.6	126.0% 38.5%
4 more unsure/ opposed	14 12.3	3 3.9	8 5.7	22 19.3	8 13.8	55.0% 16.8%
5 unchanged/ in favour	1 1.1	0 .4	1 .5	1 1.8	2 1.3	5.0% 1.5%
7 don't know	0 1.3	0 .4	0 .6	2 2.1	4 1.5	.6 1.8%
column total	73 22.3%	23 7.0%	34 10.4%	115 35.25	82 25.15	327.0% 100%

Figure 7:7 Crosstabulation of information by no first use.

	0	6 Countries should at least reduce the dangers from nuclear weapons by moving to no first-use policy declarations and arrangements.	
1 seek it out	37 49.1	39 26.9	(row total) 76 8.6%
2 read/watch	398 406.0	231 223.0	629 71.5%
3 avoid it	87 76.2	31 41.8	110 13.4%
4 never seem to come across it	46 36.8	11 20.2	57 6.5%
column total	568.0 64.5%	312.0 35.5%	880 100%

Figure 7:8 Crosstabulation of information by Freeze.

	0	One sensible step is to freeze all nuclear weapons possession at existing levels.	
			(row total)
1 seek it out	44 49.0	32 27.0	76 8.6%
2 read/watch it	393 405.3	236 223.7	629 71.5%
3 avoid it	88 76.0	30 42.0	110 13.4%
4 never seem to come across it	42 36.7	15 20.3	57 6.5%
column total	567 64.4%	313 35.6%	880 100%

can see a higher than expected relationship between reading/watching if it comes your way and becoming unsure about opposing nuclear weapons ($F_e = 45.0$, $F_o = 50$). But there is an even greater change amongst those in favour who are becoming unsure ($F_e = 104$, $F_o = 115$). Seeking out information tends to strengthen attitudes, and especially reinforces anti-nuclear attitudes.

The trouble with the reason-for-changing response is that there is no way of knowing if the people becoming more pro or anti already felt strongly pro or anti. Avoiders are more likely than the frequency predicted to answer 'don't know'.

7.14 CROSS-TABULATION OF REASON FOR CHANGING ATTITUDE BY ATTITUDE CHANGE

Again the point of this exercise using chi square was to determine the relationship between each variable. The results were not conclusive : chi square was 34.437, significant at .0233, which means the null hypothesis - there is no relationship between reason for attitude change and the direction in which attitudes change - cannot be rejected with any great confidence. The differences between expected and observed frequencies point to the possibility of some relationship. Briefly they suggest:

- 1) Information supporting or opposing nuclear weapons policy tends, as one might expect, to strengthen existing attitudes but also leads to some uncertainty about these attitudes in other people.
- 2) Becoming generally more informed leads to some uncertainty about existing attitudes.

3) Having a chance to think about the issue leads to uncertainty amongst those in favour of Britain keeping nuclear weapons.

See Figure 7:6.

7.15 CROSS-TABULATION OF INFORMATION BY ATTITUDE.

Cross-tabulation of how people respond to information about nuclear weapons (Figure 7:1) by what they think about nuclear weapons in the long run (Figure 7:4) was carried out in nine stages; information was cross-tabulated by each of the nine responses in the attitude question separately. Only with responses 6 to 9 could the null hypothesis be rejected. Correlation with number 6: "countries should at least reduce the dangers from nuclear weapons by moving to no-first-use policy declarations and arrangements", differed most significantly from the expected frequency. Chi-square was 19.6488 at a significance of .0002. We can see from Figure 7:7 that it is only amongst the seekers out and read/watchers that the observed frequency is greater than expected; this was true of all responses between 6 and 9. Those who seek out information on the nuclear issue or who read/watch it when they come across it are more likely to support, (besides a no first use policy), a nuclear freeze (response 7), drastic cuts (response 8) and to recognise the danger from accidental use.

7:16 CONCLUSION

From these statistics we can draw a number of conclusions. Those who actively seek information about nuclear weapons and nuclear war

are more likely to change their attitudes in the direction of opposing nuclear weapons. Those who read/watch it if it comes their way are likely to become unsure about their attitudes, especially if they are pro-nuclear to begin with. This suggests, in accordance with the model for attitude change outlined in Chapter Four that those who actively seek information are testing out old beliefs through information acquisition (Stage 3a) and are therefore more likely to go on to develop a new belief system. Those who don't actively seek the information but will read/watch it can be seen as entering the 'emerging awareness' Stage 2, but of course at this stage there is a good chance of the information being rejected (Stage 3b). 199 subjects (see Figure 7:5) who read/watch information did not change their attitude from being pro-nuclear to start with (this is 19% more than the expected frequency). Out of the 631 (71%) who read/watch, more than half (341) did not change their attitude. These are perhaps people who reject any new information and won't be shaken from their existing beliefs. There is no means of knowing whether this is for ego-defensive reasons or any of the other possibilities outlined in Chapter 3. Footnote 1

It would appear then, that exposure to information on the nuclear issue tends to change attitudes in the direction of opposing British nuclear weapons: more information tends to bring into question long standing assumptions and implicit truths with which we are all inculcated. The American interviews showed how this process worked, as did the accounts of those who responded to the Sanity advertisement, and here more precise analysis of an opinion poll further supports the evidence.

Footnotes

1. Cross-tabulations with more than 2 variables proved inconclusive owing to the small size of the sample.

CHAPTER EIGHT

CONCLUSION

Before coming to any concluding comments it will be useful, in view of the wide area of research covered, to summarize each chapter in turn, pulling out the salient points.

X Chapter one established the extent of existing information about public attitudes towards nuclear defence. We learned that this information was fragmentary and often apparently, contradictory : while the great optimism for peace that was first engendered by nuclear weapons has faded and anxiety about the likelihood of nuclear war has increased there still remains a majority in favour of Britain retaining a nuclear defence. This commitment seems to be on the basis of the devil you know is better than the devil you don't know than on any real enthusiasm for nuclear weapons per se. Further contradictions lie in public acceptance of defence policy and their rejection of a defence policy that aims to use nuclear weapons first in response to a conventional attack - and yet this is the basis of current defence policy. A further development of attitudes suggested by the polls are the changing attitudes towards the Soviet Union and the United States : they appear to be becoming more critical of the latter and more sympathetic to the former -particularly over the last two years. It would seem that the world is changing but it needs a changed set of attitudes to appreciate the new situation and the problem then is that of public perceptions catching up with reality, before this process is completed we can perhaps expect contradictions and incongruities.

The second chapter sought to understand the basis of such patterns of change. Many of the theories reviewed depended on a cyclical approach, suggesting

alternating periods of interventionism and non-interventionism, each new period reacting against the policies of the previous political period. It was also suggested that the attitudes of the younger generation modify with age, becoming more in line with mainstream ideology with ageing, although Lipset and Ladd suggest that this is a relative shift and that in fact each succeeding generation starts off from a slightly more liberal position than the previous generations. The study of the polls over the last thirty years, covered in Chapter One, suggest we may be witnessing this sort of historical slope of political attitudes in Britain. The dynamics of this movement can be interpreted in terms of 'paradigm shift', a process whereby an existing set of beliefs is brought into question when their basic assumptions and implicit laws are no longer adequate to explain and encompass the present situation. The development of mainstream ideology - i.e. the existing set of beliefs held by the majority on this subject - tend to impede the process of attitude change, whereas access to new information is likely to facilitate this process. The difference in belief system between elites and non-elites was also suggested in this chapter : elites will tend to exhibit greater consistency within their belief system as a result of greater exposure to and participation in the issues involved, i.e. a greater awareness of and adherence to mainstream ideology. Non-elites tend to be less constricted by such pressures due to lower level of knowledge of mainstream thinking and ideological constraints.

While the second chapter took a generalised view of attitude change at a molar level, Chapter Three took a closer look at the molecular level, how attitude change takes place in the individual. The first concern was, why people hold particular attitudes to begin with, what function do they serve? Attitude change was then considered on the basis of these primary functions. The main prerequisite for attitude change is new information and the problem of getting

this across to the public was examined. Once this new information has been realised and incongruities are found with the existing beliefs this either results in attitude change, with the reformulation of the belief system to incorporate the conflicting information, or a rejection of the information in favour of the existing belief system. The importance of the subjective norm in this process cannot be over-emphasized. Individuals generally experience pressures to conform to the way of thinking that dominates their particular reference group; when the implicit assumptions of this group are questioned by new information the direction of pressure will be towards preserving the status quo. This emphasised the importance of new reference groups in the process of attitude change which allow the individual to find support and approval congruent with the new belief system. As far as getting new information across to a target population is concerned the first necessity is to make sure the information is readily available and secondly, bearing in mind the different functions attitudes serve, to make sure it is more easily assimilated by targetting it at specific sections of that public.

With this background in theoretical work Chapter Four provided a case study of modified attitudes amongst a group of American elites - at last we were looking at cases of attitude change in the real world, not induced in artificial circumstances under laboratory conditions. The transcribed interviews with these subjects provided invaluable insights into the processes taking place during developments in attitudes and out of the analysis of these interviews emerged a preliminary model of attitude change which incorporated the vital elements of attitude change at the theoretical level, encountered in the previous chapters.

At this stage in Chapter Five, some background work was carried out on the context of pro-and anti-nuclear belief systems. This emphasised the domination of public attitudes by a stock of long-standing arguments for nuclear weapons that was found to occur with monotonous regularity. It was also found that elites were, as predicted by material covered in Chapter Two, more cognizant of these arguments than non-elites. The predominance of mainstream ideology for the support of nuclear weapons, as the basis of these 'archetypal arguments' was explained in terms of familiarity and implicit acceptance of long-standing beliefs about nuclear weapons that originated at a time when nuclear weapons, strategy and international political affairs were somewhat different from now. The basis for the lesser support for Britain giving up her nuclear weapons was, it was suggested, due to the lack of currency in anti-nuclear arguments both historically and in terms of literature and information readily available to the public at any given time. Thus, in accordance with some of the theoretical work in Chapter Two, it was suggested that increased knowledge of the issue of nuclear defence was likely, in view of the dominance of such available information by pro-nuclear arguments to increase support for nuclear weapons/the prevailing mainstream ideology. It was suggested again that more information being made available to the public putting across pro-disarmament arguments at levels that reached different strata of ^{the} public, would be the first step towards increasing pro-disarmament support.

Chapter six was a brief excursion into the possibility of using mathematical formulae and cognitive mapping processes to understand the structure of belief systems. These were largely rejected on the basis that they contributed nothing to understanding the working of belief systems. They relied too much on a logical, sequential unrealistic form of mental operations that may suffice in theory but have no relevance to real life.

The seventh chapter returned to the question of attitude change in the real world and analysed the responses of a small sample of British non-elites in order to test out the model of attitude change set forth in Chapter Four. As a result of this it was suggested that an important difference existed between elite and non-elite attitude change. Elites, it would seem from this study, are likely to go through a long process towards attitude change due to the pressure upon them to conform to the party-line espoused by their reference group. The relatively closed society in which most elites function serves to insulate them both from attitude influences that may cause disruption to the belief system predominant and from forces within the individual that may cause her/him to doubt and question many of the implicit beliefs and laws, on which the belief system -indeed the whole group's -existence ultimately depends. Amongst non-elites the process from introduction to new material/ideas through information seeking to the new belief system is likely to be a smoother process and for non-elites new membership groups are more easily available for the necessary support and sense of identification that helps the process. At each stage in the process of change outlined in the model, it must be remembered, there is the opportunity for the individual to reject the new information and either revert back to the original belief system or embargo the issue entirely, concentrating on other areas of interest.

The final section of Chapter Seven returned, because the opportunity was made available, to opinion polls. Detailed analysis of poll questions on attitude change indicated that with the increased availabilities of pro-disarmament information in more recent years, access to information about nuclear weapons/nuclear war tends to bring into question long-standing assumptions and implicit truths with which we have all been inculcated, in accordance with the model for attitude change which has been proposed.

Einstein's much cited quote about everything having changed since the advent of nuclear weapons apart from our way of thinking emphasises the need for us to change our way of thinking about nuclear weapon. Doing this is, I believe, about becoming aware of what we think and questioning the validity of long-held assumptions and implicit truths. This work indicated that non-elites may find this process easier than elites. Future research must therefore concentrate on elites, how they function within their group, what sort of pressures they are under to conform, loyalty to the system, degrees of latitude permissible and problems of role/rule governed behaviour within a closed system. Attention also needs to focus on agents of change that have succeeded and those that have failed. Elite decision-makers need to be the target for more research because they, for the most part, are the architects of social change and if ways can be found to facilitate change amongst them then the process of social change is likely also to be enhanced.

APPENDIX 1

TABLE 3

SOVIET THREAT ARGUMENTS (I)

EXAMPLES OF MASS OPINION

- 1:1 "Make no mistake the Russians are dedicated to the spread of communism worldwide. It's their ultimate aim laid down in the communist manifesto..." (B229)
- 1:3 "The Warsaw Pact has lots more weapons than NATO..." (99)
- 1:7 "Just have a think what would happen if we had no nuclear weapons. What do you think Russia would do, their big chance to wipe us off the map and maybe wipe the whole of Europe off the map." (426)
- 1:9 "The invasion of Afghanistan reveals the real threat which Russia hangs over undefended nations." (646)

ELITE OPINION

- 1:1 "...a huge and antagonistic power which makes no secret of its hostility....This hostility is part and parcel of the Soviet Union's Marxist-Communist creed." (Pym)
- 1:2 "The threat posed by Soviet military power is not a product of the fevered imagination of military planners. It is a fact for all to see." (Pym)
- 1:3 "Since 1977, in addition to its superiority in conventional weaponry, the Soviet Union has deployed SS-20 missiles and the supersonic Backfire Strike-bomber. This has tipped what was a rough East-West balance in Europe, firmly in Russia's favour." (CDMD)
- 1:5 "The Soviet rulers have built themselves the largest most formidable military machine the world has ever seen. They are still expanding it..." (Pym)
- 1:7 "...The Soviet Union has ruthlessly exploited the weakness of its neighbours." (CDMD)
- 1:9 "As the Soviets' unprovoked attack against Afghanistan makes clear, we are all potential targets of Soviet attack." (CDMD)

TABLE 4

NUCLEAR DETERRENCE (2)

EXAMPLES OF MASS OPINION

-
- 2:1 "Personally I think nuclear weapons should remain on British soil in order to deter the Soviet Union and its hypocritical communist regime from over-running Europe, placing us under a totally corrupt and repressive regime." (314)
-
- 2:2 "The bomb has kept the peace since the last war, and will go on as long as the missiles and bombs are updated." (314)
-
- 2:4 "The bomb is in all effects the ultimate peacekeeper. One country will not risk attack for fear of severe retaliation." (578)
-
- 2:7 "The main reason that we have a free country today is probably due to the fact that we have our nuclear defences." (495)
-
- 2:8 "We have the bomb and we must remember that its purpose is to deter and not to destroy." (237)
-
- 2:10 "Nuclear weapons are here and cannot be disinvented. As long as their existence is guaranteed, the means for preventing their use must be maintained, modernised and deployed when and where needs be." (800)
-
- 2:11 "I am sure that nuclear war will not occur as long as the present condition exists. There are numerous safeguards to prevent a bomb being set off accidentally so it is virtually impossible for it happen." (744)
-

ELITE OPINION

-
- 2:1 "It is because our potential enemies know that the NATO alliance has the means and the will to defend itself that they concluded there is nothing to be achieved by the threat or the use of force." (Pym)
-
- 2:2 "The peace of Europe has now held for 39 years. Common sense suggests that deterrence has played a big part in securing that." (DMD)
-
- 2:8 "Our purpose is to prevent war None of our weapons will ever be used except in response to attack" (Howe)
-

TABLE 5

MULTILATERALISM (3)

EXAMPLES OF MASS OPINION

3:1 "I believe that multilateral disarmament would be the best that could happen to aid peace." (277)

3:2 "Steps forward have been made in the reduction of missiles." (124)

3:3 "If such (unilateral) disarmament were to take place the nuclear balance would decisively tip in favour of the Soviet Union and given such an advantage the Eastern bloc could destroy Western democracies." (787)

3:4 If Russian sees a chance of NATO's missiles being reduced due to internal pressure, then it is highly unlikely that she is going to make any real gestures of arms reductions" (578)

3:5 "Negotiation means bargaining, and means having something to bargain with. If a Labour Government was now in power pledged to unilateral disarmament the current American-Soviet talks in Geneva on theatre nuclear weapons would either never have been started, or would be proceeding disastrously with the western Alliance forced into fatal compromise." (715)

3:7 "Some campaigners would say that we could get rid of our weapons This annoys me because we would be shoving the responsibility for our main defence on America just because some people don't have the courage to fight for themselves or for their country." (713)

ELITE OPINION

3:1 "The only way to reduce nuclear or conventional weapons without putting our security in jeopardy is for East and West to act together by agreement." (PYM)

3:2 It is an approach that has worked in the past. Multilateralisation has successes to its credit." (PYM)

3:3 "But freezing or aggravating imbalances would make the danger of war greater, not less." (Howe)

2:9 "The best way of deterring an adversary from threatening to use nuclear weapons against us is to retain our own nuclear weapons" (Pym)

2:10 "Nuclear weapons cannot be disinvented. Our task must be to ensure a system for living in peace and freedom in which nuclear weapons are never used either to destroy or blackmail." (CDMD)

3:4 "Unilateral disarmament removes the other side's incentive to negotiate reductions." (Howe)

3:5 "... if we make unilateral reductions we shall reduce our security, increase the risk of war and reduce the chances of negotiating balanced arms reduction." (PYM)

TABLE 6

NATO (4)

EXAMPLES OF MASS OPINION

4:1 "NATO was formed because of Russian expansion in the 1940's and 1950's. Since then Russia has not ventured further West. This has been due to NATO " (578)

4:2 "... we must be willing if necessary, to go ahead with cruise missiles, in that the whole of NATO can express to the Soviet Union that we are united in defence." (715)

4:5 "Arms reductions can only occur if Russia faces a NATO which is strong and united." (578)

ELITE OPINION

4:1 " the overriding priority of the North Atlantic Alliance, is to keep the peace - peace with freedom. That is what NATO was set up to do some 30 years ago, and that is what it has done." (Pym)

4:2 "I see the Atlantic partnership as an arch with two pillars. Only if its supports are firm can we collectively provide the defence effort necessary to protect peace and freedom" (Howe)

4:3 "But we, and our people must be clear that American presence has not been imposed on an unwilling Europe." (Howe)

TABLE 8

THE NUCLEAR THREAT (1)

EXAMPLES OF MASS OPINION

1:1 "Nuclear weapons do not help us. The upwards spiral of the arms race puts us all in danger

(283)

1:2 "If a war began with the use of conventional weapons then it would almost inevitably accelerate onto a nuclear scale"

(779)

1:4 "The most alarming development of all, then, is this change in thinking away from a policy of deterrence towards a nuclear war fighting policy"

(796)

ELITE OPINION

1:2 "Given present military strategy it seems unlikely that war could be kept conventional ... in terms of stopping an offensive. The soldiers would be fighting with a nuclear graveyard at their backs."

(Cox-Smith)

1:4 "The strategy therefore now has nothing to do with deterrence. It is a strategy for fighting a nuclear war"

(England)

TABLE 9

NUCLEAR DEFENCE (2)

EXAMPLES OF MASS OPINION

2:1 "Can it really be said that Britain has a nuclear deterrent? to be effective as a deterrent Britain must be prepared to use its nuclear weapons.... if we did use our nuclear weapons retaliation would totally destroy this country and almost all its inhabitants." (686)

2:2 "When someone talks of "deterrence" it is easy to forget that that single word implies, the distinct possibility of a total nuclear exchange resulting in the extinction of ourselves as a species and most likely any other living thing...." (776)

ELITE OPINION

2:1 "The point is that NATO's deterrent threat is based on the premise that the Western world is willing to commit mass suicide as well as mass murder." (Cox-Smith)

2:2 "Nuclear war would destroy all social and political institutions, attackers and defenders, friends and foes, the good and the bad. No cause or ideology could survive or justify such destruction." (Cox-Smith)

2:3 "The strategy is a strategy not for deterring or avoiding war but for fighting and trying to win one" (England)

TABLE 10

UNILATERALISM (3)

EXAMPLES OF MASS OPINION

- 3:1 "World-wide multilateral disarmament must be our ultimate goal but we must recognise that someone has to begin the process" (736)
-
- 3:2 "Our best defence is not to make ourselves a military target; by removing nuclear weapons for the sake of world peace." (686)
-
- 3:4 "However much faith you place in the theory of deterrence between the superpowers, it is impossible to imagine such a theory providing any security in a world with a least 20 nuclear powers." (736)
-
- 3:5 "We can hardly be blamed for waning support of the nuclear disarmament talks we have been confronted with no agreements, no reductions, indeed the stockpiles grow steadily and now the tranquillity of outer space is threatened." (631)
-

ELITE OPINION

- 3:1 "Our central demand is British renunciation of nuclear weapons, seen as a first step to worldwide nuclear disarmament." (Cox-Smith)
-
- 3:2 "Britain is, without a doubt, in danger of Soviet attack as long as it remains a nuclear arsenal." (England)
-
- 3:3 "But as a non-nuclear-weapons state we could not only give useful support to the movements of peoples for a European nuclear-free zone we could add our strength to all those countries which have so insistently demanded unilateral nuclear and general disarmament." (England)
-
- 3:4 "This is a very short-sighted argument because it makes a case not only for Britain but for many other countries to have nuclear weapons." (England)
-
- 3:5 "People who put their faith in multilateral disarmament only can have no idea how long this is likely to take. For about ten years in the 1950s and 1960s there were serious negotiations The negotiations finally came to nothing." (England)
-

TABLE 11

THE SOVIET THREAT (4)

EXAMPLES OF MASS OPINION

4:3 "I don't think Russia is the big bad wolf people say she is, America is just as bad if not worse" (111)

4:3 "The Alliance has become obsessed with anti-Soviet feeling. They have in their own words decided to see Marxism-Leninism crushed from the face of the Earth". (88)

4:3 "Of course communism seems evil and oppressive but capitalism isn't always perfect. And both ideals are just as bad as each other when it comes to the issue of the Bomb." (453)

ELITE OPINION

4:1 "There is another, major, issue to be considered in comparison between the forces of the Soviet Union and NATO. The Soviet Union faces more than one political enemy" (Cox-Smith)

4:2 "The government also quotes the big preponderance of Soviet tanks - 2.8 to one on the central front in Europe - as proof of offensive plans. They do not say that so far as aircraft are concerned the pattern is different" (England)

4:4 "... this does not mean it has any intention of attacking the capitalist states in Western Europe." (England)
