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# THE STRATEGIC DEFENSE INITIATIVE

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EDWARD REISS

*University of Bradford*



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# CONTENTS

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<i>List of tables</i>	<i>page</i>	ix
<i>Acknowledgements</i>		x
<i>List of abbreviations</i>		xi
Introduction		1
PART 1 CONCEPTION		
1 Theory		7
2 The history of strategic defence in the USA		21
3 The 'SDI' speech		37
PART 2 CONSTRUCTION: 1983–1985		
4 Contexts		51
5 Interest groups		60
6 The politics of influence		72
PART 3 CONSOLIDATION: 1985–1988		
7 Contexts and constituencies		87
8 Interest and influence		100
9 Early deployment?		113
PART 4 CONTEXTS AND CONDITIONS		
10 Europe		125
11 Military economy		137
12 The culture of 'Star Wars'		153
13 The selling of SDI		165

CONTENTS

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PART 5 CONCLUSIONS

14	Into the 1990s	179
15	The causes of SDI	192
	<i>Notes</i>	203
	<i>Select bibliography</i>	236
	<i>Index</i>	244

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# TABLES

---

2.1	Contractors for Nike-X	<i>page</i> 25
2.2	Contractors for Safeguard and SDI: continuity and discontinuity	31
3.1	Planned BMD funds, pre-SDI	41
4.1	Previous (1984) budget structure of the SATKA programme element	53
5.1	Companies participating in the 'defense in depth' study and SDI contracts later received by them	66
5.2	The top twenty SDI contractors by the end of FY 1985	69
6.1	Composition of the Fletcher panel: private sector	74
6.2	Composition of the Fletcher panel: DoD members	76
6.3	Composition of the Hoffman panel: private sector	77
6.4	Other members of the Hoffman panel	79
7.1	SDI requests and authorisations as of 1989	92
7.2	SDI outlays	93
7.3	Contracts by sector	94
7.4	Share of SDI outlays to April 1988	95
7.5	Leading agencies sponsoring SDI contracts by authorisation to April 1987	96
7.6	Main SDI contractors: outlays to April 1988	97
7.7	Top states: SDI outlays to April 1988	98
8.1	Members of the SDI advisory committee	105
9.1	Cost estimates for a Phase 1 Strategic Defense System	117
10.1	Foreign contractors for SDI by 1991	135
11.1	Programme areas related to SDI	138
11.2	Associated research not included in SDI funding	139
11.3	Potential military spin-offs from SDI: IDA study	140
11.4	Abrahamson cites military benefits of SDI research	141
11.5	Possible civilian and commercial spin-off from SDI	149
14.1	SDI authorisations under President Bush	181
14.2	Top states: SDI contracts to January 1989	183
14.3	The top twenty SDI contractors to 1991	185

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# INTRODUCTION

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SDI was probably the most important new military programme of the 1980s. When it was announced, it was certainly one of the most controversial and unexpected. Eight years and \$22 billion later, after the disintegration of the Warsaw Pact and the Gulf War, SDI was refocussed into a new scheme which attracted renewed, bipartisan support: a Global Protection Against Limited Strikes (GPALS). The Pentagon is still pushing for increases in its SDI/GPALS budget and preparing advanced experiments which would contravene the ABM Treaty. It hopes to start full-scale development of interceptors and command and control elements in 1993 or 1994.<sup>1</sup> The debate about strategic defence is sure to rage on long after. This book analyses the history of SDI, combining multiple perspectives to show how and why it has developed.

SDI was exceptional from the day it was announced. Never before had an American president offered a 'vision' of using advanced technology to make nuclear weapons 'impotent and obsolete'. Welcomed by the 'New Right' and decried by the arms control community, the plan to develop space weapons took centre stage in the superpower summits of the 1980s. The research promised, or threatened, to generate qualitative advances in other, offensive weapons: notably battlefield lasers, anti-satellite weapons (ASATs), space weapons and Command Control Communication (C<sup>3</sup>). And so SDI became a key growth market.

Works on SDI could fill a library.<sup>2</sup> In general, the literature focusses on three main issues: (1) SDI's technological feasibility, (2) its strategic advisability, and (3) its geostrategic consequences (arms control, international repercussions).<sup>3</sup> Whilst drawing on these perspectives, this book offers something different: a history of SDI, exploring the *interaction* of factors strategic, political, economic, technological, institutional and cultural. It analyses the interest groups behind SDI and the extent and effectiveness of lobbying. It is based on interviews, congressional hearings, market analysis, business newsletters, the SDI

Office's own data base of contracts, internal Pentagon documents and data obtained under the US Freedom of Information Act.

The following three deceptively simple questions are crucial to an understanding of SDI:

- (1) What is SDI?
- (2) Why did SDI happen?
- (3) Why did SDI develop in the way it did?

Ninety-eight per cent of the US Academy of Scientists expressed disbelief in Reagan's vision.<sup>4</sup> Elder statesmen joined senior scientists in outspoken criticism of SDI. Their indictments might be summarised in former President Carter's charge that it was 'infeasible, extremely costly, misleading and an obstacle to nuclear arms control'.<sup>5</sup> Yet the budget for SDI continued to grow: and that demands some explanation.

In the following chapters SDI will be analysed in terms of the politics of influence; as an aspect of industrial technology policy; and as a symptom of the weaponisation of space, inextricably linked to controversies about anti-satellite weapons (ASATs). These issues are all related to vital questions of policy. In particular, understanding of the dynamics of the military programmes becomes ever more important at a time of 'new détente'. Why is it that, notwithstanding the collapse of the Soviet Union, the process of weapons development judders on, with 'modernisation' of short-range attack missiles, further military research and continuing funds for space weapons? With bright prospects for arms control and a lasting détente, study of the weapons procurement process and the barriers to disarmament is all the more timely.

## THE STRUCTURE OF THE BOOK

Part 1 summarises theories about the dynamics of the arms race. It outlines the main strategic, political, bureaucratic, economic and psycho-political perspectives; and identifies those with most promise as explanations of SDI. Strategic defence is later examined by applying theories of the arms race; and they in turn will be tested against strategic defence as a case study. Chapter 2 gives the prehistory of SDI: the 'ABM debate' of the 1960s and the history of Ballistic Missile Defense (BMD) from 1945 to 1983. It shows how the BMD infrastructure was established well before Reagan's announcement of SDI; and it considers the causes of the President's speech.

Part 2 studies the first two years of the SDI programme. It describes how a constituency gathered around and then shaped SDI. It sketches the international context of SDI, arms control controversies and the inconsistent strategic rationales offered for the programme. It then

analyses non-strategic factors, with a close look at the institutions which stood to gain and contracts awarded. Part 3 describes SDI from 1985 to 1988. It gives a detailed account of the constituencies of interest which advocated the programme or won funds from it; and shows how the SDI Office tried to rush the programme into early deployment.

Part 4 describes the European response to Reagan's plan and the extent of participation by the Allies. It then considers the broader contexts and conditions surrounding SDI. After describing the programme's other military spin-offs, it shows how SDI fits into broader plans for 'space control', especially through its contribution to ASAT technologies. A separate chapter reassesses the subject in terms of culture and emotion. SDI texts and congressional hearings indicate that fear, fantasy and anxiety feed into 'professional' discussion. An anaesthetic 'technostrategic' discourse – used alike by SDI's supporters and opponents – has shaped the 'experts' debate' in favour of the programme. SDI, with deep resonance in US popular culture, was effectively marketed, affecting domestic and electoral politics.

Part 5 is about the radical changes to SDI since the accession of President Bush. It describes the new plan for Global Protection Against Limited Strikes: GPALS. It then considers the future of strategic defence, under Bush and beyond. It highlights recurrent themes in the history of BMD and draws conclusions.

'Theories about the causes of the arms race illuminate the dynamics of BMD and SDI.' Some elementary definitions are in order. 'Causes' should be understood throughout in the sense used by the humanities, not in the narrower usage of the natural sciences. The 'arms race' is the generic term for hundreds of military programmes, produced in the context of antagonism between the superpowers, manifested since 1945 in ways quantitative, qualitative and doctrinal, at varying levels of intensity. Since the term 'superpower' was in the 1980s almost universally applied to the USSR, I have retained that usage. The relationship of SDI to the dissolution of the Soviet Union is addressed directly in the final chapter and, more obliquely, in Chapter 11. In the rest of the book, the main framework for analysing SDI is the arms race and the theoretical literature about its dynamics.

'Strategy' usually refers to military strategy, as opposed to political, economic or corporate strategies. A 'strategic defence' is one against long-range, strategic missiles, as opposed to tactical, 'theatre', short- or intermediate-range missiles. Strategic defence is also called Ballistic Missile Defense (BMD), or, especially in the 1960s, Anti-Ballistic Missiles (ABM). The 'BMD Infrastructure' consists of the institutions involved in BMD, those with a financial or material stake in

BMD: laboratories, research establishments, military agencies, government departments, defence corporations, colleges and universities. These comprise the overall 'constituency of interest' in the programme.

'SDI' means the set of Program Elements (PEs) included in the SDI Program (SDIP). On occasion it refers to the idea announced by Reagan and later modified. 'Star Wars' refers to both the SDI Program and other programmes, closely related to SDI, yet officially excluded from it, notably ASATs. 'SDI' is therefore a subset of 'Star Wars'.

Theories of the arms race can be categorised as 'supply' or 'demand' models.<sup>6</sup> Demand models see weapons as responses to policy needs, or instruments to pursue military strategies or foreign policy objectives, stated or covert. In the case of BMD, they would focus on the strategic case, from the 1940s to the 1960s, for supplementing air defence with BMD; the arguments at stake in the ABM debate of the 1960s; the case made in 1967 for deploying the 'Sentinel' ABM against the Chinese: and the changing strategic and international climate, which caused Nixon to modify 'Sentinel' into 'Safeguard', a defence of missile silos from the Soviets. Demand models would study the strategic implications of the ABM Treaty of 1972; the strategic furore over SDI; and how new regimes of strategic defence might be constructed.

Supply models, by contrast, link weapons production to decisions about the allocation of resources between institutions and industrial sectors. Aware of the role of interest groups, they concentrate on the allocative at the expense of the strategic, emphasising factors other than the official rationales of strategy and foreign policy. They would focus on the sizeable constituency which sustained BMD even before Reagan's SDI speech; the opportunities for corporations and bureaucracies resulting from the speech; and the interest groups promoting the programme, in Congress, in the media and in public. Since they are less familiar and thus perhaps more in need of introduction, 'supply' perspectives will be prioritised in the following chapter.