

# Griffith Asia Institute

Regional Outlook

BURMA AND WEAPONS OF MASS DESTRUCTION: NOT IF, BUT WHY, HOW AND WHAT

Andrew Selth

# Griffith Asia Institute

Regional Outlook

Burma and Weapons of Mass Destruction: not if, but why, how and what

Andrew Selth

#### About the Griffith Asia Institute

The Griffith Asia Institute produces innovative, interdisciplinary research on key developments in the politics, economics, societies and cultures of Asia and the South Pacific.

By promoting knowledge of Australia's changing region and its importance to our future, the Griffith Asia Institute seeks to inform and foster academic scholarship, public awareness and considered and responsive policy making.

The Institute's work builds on a 40 year Griffith University tradition of providing cuttingedge research on issues of contemporary significance in the region.

Griffith was the first University in the country to offer Asian Studies to undergraduate students and remains a pioneer in this field. This strong history means that today's Institute can draw on the expertise of some 50 Asia-Pacific focused academics from many disciplines across the university.

The Griffith Asia Institute's 'Regional Outlook' papers publish the institute's cutting edge, policy-relevant research on Australia and its regional environment. They are intended as working papers only. The texts of published papers and the titles of upcoming publications can be found on the Institute's website: www.griffith.edu.au/business-commerce/griffith-asia-institute/

'Burma and Weapons of Mass Destruction: not if, but why, how and what', Regional Outlook Paper No. 34, 2011

#### About the Author

#### Andrew Selth

Andrew Selth is an Adjunct Research Fellow at the Griffith Asia Institute. He has been studying international security issues and Asian affairs for almost 40 years, as a diplomat, strategic intelligence analyst and research scholar. He has published four books and more than 50 other peer-reviewed works, most of them about Burma and related subjects. In 2007, he was awarded a PhD by Griffith University and a post-doctoral

fellowship by the Australian Research Council. In August 2011, he was granted a Harold White Fellowship by the National Library of Australia.

# Contents

Executive Summary	1
Author's Note	2
1. Introduction	2
2. The Why Question	
The How Question      Nuclear Weapons      Ballistic Missiles  Other Possibilities	13 14
4. The What Question	17
5. The Future	20
Notes	22

### **Executive Summary**

Since 2000, there has been a flood of blogs, news media reports and academic articles on the reported ambition of Burma's military government to acquire weapons of mass destruction (WMD). Its relationship with North Korea has also been subject to intense scrutiny. Some bold claims have been made regarding Burma's current and expected capabilities, as regards both nuclear weapons and ballistic missiles. Yet, few observers have gone past the basic issues of acquisition and detection, to ask two critical questions, the answers to which – while necessarily speculative – would help illuminate this debate and allow for more nuanced analyses.

These questions are: why might Burma's government wish to possess nuclear weapons and ballistic missiles? And, in the event that Burma was successful in producing either, how could it actually use them? A third question that has escaped serious attention is: if Burma did indeed try to acquire WMD, or has already done so, what would be the net security implications for the country itself? Would possession of WMD increase Burma's security, as is likely to be the regime's main aim, or would it in fact achieve the opposite result by attracting unwelcome international attention, possibly even military action?

All three questions relate to the mindset of Burma's military leadership and its peculiar worldview, particularly since the 1988 pro-democracy uprising. Examination of this matter leads to another key unknown, and that is whether the same vision is shared by the country's new and apparently reform-minded civilian-military government, which was inaugurated in Naypyidaw in March 2011. A key test of the new government's bona fides will be its willingness to allow international inspectors to verify its repeated claims that Burma has neither the capacity nor the inclination to make nuclear weapons.

### Author's Note

After the Burmese armed forces crushed a nation-wide pro-democracy uprising in September 1988, Burma's official name (in English) was changed from its post-1974 form, the 'Socialist Republic of the Union of Burma', back to the 'Union of Burma', which had been adopted when Burma regained its independence from the United Kingdom (UK) in January 1948. In July 1989 the new military government changed the country's name once again, this time to the 'Union of Myanmar'. At the same time, a number of other place names were changed to conform more closely to their original Burmese pronunciation. The new names were subsequently accepted by the United Nations (UN) and most other major international organisations. Some governments and opposition groups, however, have clung to the old forms as a protest against the military regime's continuing human rights abuses and its refusal to hand over power to the civilian government elected in 1990.

In this paper the better-known names, for example 'Burma' instead of 'Myanmar', 'Rangoon' instead of 'Yangon', and 'Irrawaddy' instead of 'Ayeyarwady', have been retained for ease of recognition. Quotations and references, however, have been cited as they were originally published. Also, formal titles introduced after 1989 have been cited in their current form, such as 'Myanmar Police Force' and 'Myanmar Army'.

The armed forces have ruled Burma since 1962 but, from 1974 to 1988, they exercised power through an ostensibly elected 'civilian' parliament. On taking back direct control of the country in September 1988, the armed forces abolished the old government structure and created the State Law and Order Restoration Council (SLORC), which ruled by decree. In November 1997, apparently on the advice of a United States-based public relations firm, the regime changed its name to the State Peace and Development Council (SPDC). In 2008, it held a constitutional referendum, which was followed by elections in 2010. The resulting national government, consisting of both elected officials and non-elected military officers, first met in January 2011. Power was formally transferred from the SPDC to the new government in March.

After the UK sent military forces into the royal capital of Mandalay and completed its three-stage conquest of Burma in 1885, Rangoon became the administrative capital of the country. It remains the commercial capital, but in October 2005 the regime formally designated the newly built town of Naypyidaw (or Nay Pyi Taw), 320 kilometres north of Rangoon, as the seat of Burma's government. When they appear in this paper, the terms 'Rangoon regime', or in some cases simply 'Rangoon', are used as shorthand for the central government, including the military government that was created in 1962 and re-invented in 1988. After 2005, the government is referred to as the 'Naypyidaw regime', or simply 'Naypyidaw', to reflect the administrative change that took place that year.

Another term used in this paper is *Tatmadaw* (literally 'royal force'), the vernacular name for Burma's armed forces. In recent years this term has gained wide currency in Englishlanguage publications on Burma.

### 1. Introduction

Major T.K. 'King' Kong: Now look boys, I ain't much of a hand at makin' speeches, but I got a pretty fair idea that something doggone important is goin' on back there. And I got a fair idea the kinda personal emotions that some of you fellas may be thinkin'. Heck, I reckon you wouldn't even be human bein's if you didn't have some strong personal feelin's about nuclear combat.

Dr Strangelove or: How I Learned to Stop Worrying and Love the Bomb (1964) Directed by Stanley Kubrick

Internet Movie Database, at http://www.imdb.com/title/tt0057012/quotes

Before 2000, the idea that Burma might one day try to acquire weapons of mass destruction (WMD) was considered fanciful.¹ Indeed, so unlikely was it believed to be that military colleges in both Australia and the United States (US) used such a scenario as the basis for classroom training exercises.² As a test of strategic analytical skills, these institutions asked their students – senior military officers and civilians from a wide range of countries – to consider the implications of Burma, supplied with nuclear weapons and ballistic missiles by another pariah state, precipitating an international crisis. In one case, the threat was immediate, with notional nuclear–armed missiles aimed at a neighbouring country allied with the US – presumably Thailand. In the other case the threat was less direct, and formed the basis of an attempt by Burma's military government to exercise leverage over other countries, mainly through the United Nations (UN). In both exercises, the students were asked to assess the dangers posed by Burma's actions and to consider how the international community might respond.

After 2000, these fictional scenarios seemed to be coming true. That year, the Minister for Science and Technology, U Thaung, announced that Burma planned to purchase a small nuclear reactor from Russia. When the deal appeared to break down in 2003, there were fears that Burma had turned to North Korea to acquire nuclear technology and – some claimed – even finished nuclear weapons.<sup>3</sup> These stories, which were given wide circulation in the news media, followed credible reports that the regime wished to purchase some ballistic missiles from Pyongyang. Senior Burmese officials denied that the ruling military council was seeking to acquire strategic weapon systems of any kind, but suspicions remained.<sup>4</sup> As the years went by, there were increasingly bold claims by activists, journalists and even a few academics that Burma had launched secret missile and nuclear weapons programs. These claims were supported by Burmese 'defectors' and in 2010 culminated in a report and documentary film sponsored by the opposition Democratic Voice of Burma (DVB).<sup>5</sup>

Back in 2000, military college directing staffs were aware that Burma was in no position to develop any WMD, even if it wanted to. It lacked the necessary funds, infrastructure and facilities, and there were few if any Burmese with the requisite skills. More to the point, the regime did not have access to advanced technologies of the kind necessary to produce and operate strategic weapons. Yet, that situation has now changed. For the past 10 years, Burma has been sending civil and military personnel to Russia for training in a range of subject areas, including a number relevant to WMD production.<sup>6</sup> At the same time, Burma's armed forces (or Tatmadaw) have been busy constructing an extensive network of facilities around the country – some of them underground – that could be related to secret weapons programs. These measures have been funded by the massive revenues generated by natural gas sales.<sup>7</sup> Most importantly, for more than a decade Naypyidaw has been developing a close relationship with Pyongyang, which is in a position to provide Burma with sensitive nuclear and missile technologies.

It is not possible to say definitively whether Burma has or has not launched a secret WMD program, or programs – whatever that might mean. In July 2010, the State Department made a rare statement on the subject, declaring that 'At this point in time, the United States lacks evidence to support a conclusion that Burma has violated its NPT

[Non-Proliferation Treaty] obligations or IAEA [International Atomic Energy Agency] safeguards'.<sup>8</sup> That is not the same as saying there have been no signs of suspicious activity in Burma – as regards both nuclear weapons and ballistic missiles – but at this stage there is still insufficient hard, verifiable evidence to make any firm judgements.<sup>9</sup> No government has yet publicly declared its belief that Burma has a WMD program although, as the US has noted on several occasions, there have long been concerns.<sup>10</sup> Nor are analysts in a position to state with any confidence the likely success of any Burmese WMD program, given the enormous technical and other difficulties involved, and the certainty that its exposure would immediately prompt a strong reaction from the international community.

These and related issues have been the subject of numerous studies over the past 10 years, and are not re-examined in depth here. Rather, the purpose of this paper is to try and answer two closely related questions, namely:

1. **Why** might Burma's government wish to launch – or even investigate the feasibility of launching – secret nuclear weapon and ballistic missile programs?

and:

2. In the event that the Burmese were ever successful in producing WMD – of whatever kind – **how** might they try to use the weapons thus acquired?

In all the stories and commentaries in the news media, and the claims found on activist websites, these particular questions are rarely asked, let alone answered.<sup>11</sup> Instead, there have been repeated denunciations of Burma's military government, generalisations about the dangers of WMD proliferation and dire predictions of an arms race which, it has been claimed, will destabilise the entire region.<sup>12</sup> Only the first issue is ever explored in any depth. Yet, the answers to these two questions are critical to a nuanced understanding of Burma's possible WMD ambitions.

Another question that usually escapes serious attention is whether the possession of nuclear weapons and ballistic missiles would be of net benefit to Burma, or would in fact harm both its short and long term strategic interests. In other words, by launching one or more WMD programs would the generals – and now the civilian politicians – in Naypyidaw realise their apparent goal of increasing Burma's security, or would they in fact achieve the opposite result? This issue too relates to the mindset of Burma's military leaders and the vision they may have had – and the country's new hybrid civilian–military government may still have – for indigenous WMD programs. So, with that in mind, it is worth asking a third question;

3. If it was discovered that Burma planned to launch a WMD program, or indeed had already done so, **what** would be the security implications for the country itself?

While necessarily speculative, answers to all three questions would help inform the search for signs of WMD programs in Burma, assessment of the consequences of any such programs, and the consideration of policy responses to their possible discovery.

# 2. The Why Question

President Merkin Muffley: But this is absolute madness, Ambassador! Why should you build such a thing?

Ambassador de Sadesky: There were those of us who fought against it, but in the end we could not keep up with the expense involved in the arms race, the space race, and the peace race. At the same time our people grumbled for more nylons and washing machines. Our doomsday scheme cost us just a small fraction of what we had been spending on defence in a single year. The deciding factor was when we learned that your country was working along similar lines, and we were afraid of a doomsday gap.

President Merkin Muffley: This is preposterous. I have never approved of anything like that.

Ambassador de Sadesky: Our source was the New York Times.

Dr Strangelove or: How I Learned to Stop Worrying and Love the Bomb (1964) Directed by Stanley Kubrick

Internet Movie Database, at http://www.imdb.com/title/tt0057012/quotes

Before the inauguration of Burma's 'multi-party disciplined democracy' in March 2011, activists were fond of portraying the country's military leaders as oafs in uniform, unschooled in international diplomacy and determined to cling to power by any means possible in order to safeguard their ill-gotten gains and escape retribution for past actions. <sup>13</sup> Journalists too were quick to describe the regime as 'ridiculously paranoid', and made up of 'reclusive, xenophobic generals who despise the western world'. <sup>14</sup> There may have been some grounds for such views, but these caricatures ignored the fact that the regime contained intelligent officers who were close observers of the international scene. Also, the Tatmadaw included many genuinely committed individuals who thought carefully about Burma's security interests. While outsiders – and many within Burma – saw them as misguided, even deluded, they considered themselves patriots, charged with preventing national instability and disunity, and with protecting the country from internal and external enemies.

Attempts to describe a country's political values and strategic culture are always risky, and in this regard Burma is no exception. <sup>15</sup> As far as can be determined, however, and legitimately made subject to broad generalisations, the military regime's mindset seems to have been a complex amalgam of personal, professional, historical and cultural influences. <sup>16</sup> To varying degrees, all seem to have played a role in determining the attitudes and priorities of key officers, both as individuals and as members of the ruling elite. Such factors also helped shape their worldview, and thus their responses to specific developments, both within Burma and further afield. Critical among these influences has been their perception of threats to the country, dating back at least to the 1950s. As Morten Pedersen has written, it would be a mistake to underestimate the deep sense of insecurity that has always driven the Burmese government's behaviour. <sup>17</sup> This needs to be kept in mind when considering Burma's possible quest for WMD.

When they speak about countries proliferating WMD, most pundits tend to dismiss national leaders – even at times entire governments – as either 'bad' or 'mad'. 18 Yet, when the strategic circumstances of these states are taken into account, and their

leaders' actions are measured against their peculiar frames of reference, then their decisions can seem rational – after a fashion. Most national leaders can point to specific reasons for seeking WMD that need to be taken seriously by analysts and other observers. For example, many countries have launched WMD programs out of a sense of diplomatic isolation or a heightened perception of external threats. Some have feared the loss of protection from a powerful ally. However misguided others may believe them to be, these leaders have had real – to them – security concerns. Their fears have given rise to a felt need to acquire the means not only to deter threats, but possibly even to respond to them.

If Burma is attempting to develop weapons of mass destruction, as many suspect, it would seem to fit this broad pattern. However, a range of other factors also need to be taken into account, such as the quest for international status and the bargaining power that is believed to come with it. In the final analysis, the decision could simply boil down to the personal views of the country's paramount leader. All these and other possibilities need to be considered to gain a more complete picture, and thus greater understanding.

#### **Threat Perceptions**

Even before 1988, when the armed forces crushed a nation-wide pro-democracy uprising and took back direct political power, Burma's government worried about an invasion of the country. Then, the danger was seen to emanate mainly from China, but after 1988 Burma's strategic environment changed dramatically. The US and the major European Union (EU) countries came to be viewed as Burma's greatest military threat. In the wake of the uprising, the new State Law and Order Restoration Council (SLORC) feared that the US or a coalition endorsed by the UN planned to invade Burma and return the country to democratic rule. Fears of foreign intervention were renewed after the regime's refusal to hand over power to the civilian government elected in 1990. For the next 20 years, concerns about an invasion waxed and waned, depending on the circumstances at the time, but they did not disappear. Until the advent of a new administration in 2011, the military government – by then known as the State Peace and Development Council (SPDC) – was convinced that the US and other Western states were determined to replace it with a civilian administration led by opposition leader Aung San Suu Kyi.

Perceptions of a serious external threat to the military government – and thus, in its eyes, to the Burmese state itself – were encouraged by a range of punitive measures taken by the US, the EU and some more moderate states, including Australia. The tough economic and financial sanctions levelled against Burma, for example, were seen as part of a wider effort to weaken the military government and precipitate its downfall. Strong public criticism of the regime by world leaders, and references to Burma alongside notorious 'rogue' states like Saddam Hussein's Iraq, seemed at times to presage armed intervention. Attempts in the UN Security Council (UNSC) to declare Burma a threat to regional security, open support for Aung San Suu Kyi and her party, and financial aid to exiled dissident groups – most dedicated to the destruction of the regime – were all interpreted as part of a concerted campaign to bring down the military government, either directly through an invasion or indirectly by fomenting civil unrest inside the country.

For example, when the US, Britain and France positioned warships off the Burmese coast in May 2008, after Cyclone Nargis struck Lower Burma and caused terrible devastation, the SPDC was immediately suspicious of those countries' motives. Its fears were greatly increased by statements made by some senior Western officials, strongly supported by activists and news commentators, that the international community had an overriding 'responsibility to protect' the cyclone victims.<sup>21</sup> There were public calls for 'coercive humanitarian intervention' and even an invasion of Burma to provide aid to those in need, regardless of Burma's national sovereignty and the government's strong

opposition to a foreign presence. Australian Prime Minister Kevin Rudd advocated 'bashing Burma's doors down'. <sup>22</sup> While such dramatic action was never really on the cards, the very idea – described as 'incendiary' by the more level-headed British government – hardened the military leadership's conviction that it still faced the possibility of an armed attack by the US and its allies, against which it must remain vigilant. <sup>23</sup>

To most observers, the idea that Burma might be invaded by the US or a UN-led multinational force seems bizarre. Such a step has never seriously been contemplated, nor is it ever likely to be. As long as Burma enjoys the support of China and Russia, the UNSC is never going to be able to endorse an attack against Burma, either by the US or a coalition of 'willing' countries. The likelihood of the Association of Southeast Asian Nations (ASEAN) accepting armed intervention against one of its member states is equally remote, and other authoritarian governments would see UN military action against Burma as creating a very undesirable precedent. Conceivably, the US could go it alone, but its armed forces are already over-stretched. Besides, it needs China's support in its dealings with North Korea, and Beijing's restraint is important in the Taiwan Straits. In any case, given the examples provided by Iraq and Afghanistan, few countries would wish to become embroiled in a difficult and potentially drawn-out conflict. Realistically speaking, an invasion of Burma has never been a viable option.

Viewed from the perspective of Burma's embattled military leadership, however, it is not difficult to see why the regime has been so nervous about the possibility of external intervention. As Golda Meir is said to have remarked to Henry Kissinger after the 1973 Sinai campaign, 'even paranoids have enemies', and over the past 20 years Burma has had ample evidence of hostile states – most with highly developed military capabilities – and extant security threats. From an early stage, such concerns encouraged the SLORC to strengthen Burma's conventional armed forces and guided its arms acquisition programs, the better to mount an effective territorial defence. Between 1988 and 2000, the Tatmadaw probably doubled in size. Despite all the improvements made during this period, however, defence analysts in Burma noted trends in modern warfare with growing concern. They knew that, even with a revamped command structure, fresh recruits and more modern weapon systems, Burma's armed forces were unlikely to be able to withstand a major assault by the US, or a multinational coalition led by the UN.

Thus, even if they ignored historical events and confined themselves to developments since 1988, it would not be difficult for strategic analysts in Burma's armed forces to construct a coherent, internally consistent picture of an existential threat that was supported by considerable empirical evidence. They would also be aware of US military operations against a number of other states over the past 20 years, acting both unilaterally and as part of multinational coalitions. In these circumstances a strong deterrent capability – including nuclear weapons and ballistic missiles – could have some appeal to Burma's leaders.

In this context, however, there are other possible reasons for Burma to develop WMD, including as a defensive measure against its larger neighbours, or in response to similar programs elsewhere in the Asia-Pacific region.

Burma has always been aware of its sensitive geostrategic location, and the dangers facing a small weak country surrounded by more powerful states. As Prime Minister U Nu famously remarked in 1950:

Take a glance at our geographical position – Thailand in the East, China in the North, India in the West, and stretching southward, Malaya, Singapore and so on. We are hemmed in like a tender gourd among the cactus.<sup>26</sup>

China and India are currently on good terms with Burma, but they have large arsenals of nuclear weapons, ballistic missiles and probably other exotic weapons.<sup>27</sup> Given the enormous disparities between Burma and its two largest neighbours, it could never match their armed strength or strategic weight. However, Naypyidaw may calculate that, in the event of heightened bilateral tensions, possession of even a small number of nuclear weapons would give these superpowers pause. Much as Singapore had a defence policy during the 1970s that recognised the city-state's inherent vulnerability, but still made it dangerous to attack – the so-called 'poisonous shrimp' strategy – so the possession of WMD could be seen by the Burmese leadership as the ultimate guarantor of the country's survival and continued independence in the face of overwhelming military superiority.<sup>28</sup>

The argument that Burma may be concerned about the WMD programs of its other regional neighbours is much less persuasive. Although armed with nuclear weapons and ballistic missiles, countries like Pakistan and North Korea are too far away to trouble Burma, even if the friendly bilateral relationships Naypyidaw currently enjoys with those two countries deteriorated significantly. Some Southeast Asian countries have large and well–equipped armed forces, but none are known to possess nuclear, chemical or biological weapons – or to be seeking them. Over the years, there have been a few speculative news reports about an Indonesian interest in purchasing Scud–type missiles, and possible Malaysian interest in adding tactical ballistic missiles to its order of battle.<sup>29</sup> However, only Vietnam is reported actually to have acquired short range ballistic missiles (SRBM) and, given their apparent age, questions must be raised about their operational value.<sup>30</sup>

#### Bargaining Power

As already noted, it is difficult to find hard, verifiable evidence that Burma has embarked on a full-scale nuclear weapons program – as opposed, for example, to laboratory level experiments. Even if it has done so, predictions by Burmese 'defectors' of a completed device by 2014, and a 'handful' by 2020, seem extraordinarily optimistic – or pessimistic, depending on one's point of view. Of concern to some countries, however, is the possibility that Burma's leaders may have drawn the same conclusions from Western attacks against Iraq that North Korea seems to have done, and is seeking to acquire WMD as a bargaining chip to protect itself against international pressures, and possibly even armed intervention. After 1988, for example, there were apparently a few generals who felt that, given the apparent threat to Burma, it should seriously consider the benefits of a WMD program. According to one news report, some senior Burmese officers 'admire the North Koreans for standing up to the United States and wish they could do the same.

The Burmese officials in this camp seemed to be under the impression that North Korea's possession of a nuclear capability had been the main reason why the US and its allies, and the UN, had not taken tougher action against Pyongyang, despite its hostile actions and contempt for international conventions. Iran offers a contrary example but, viewed from this perspective, the possession of WMD had given North Korea a surprising degree of immunity, and even helped it strengthen its position. For example, despite its authoritarian government, small size and economic weakness, North Korea seemed to enjoy a high diplomatic profile and a strong negotiating position in international forums. The Burmese could also point to the 1994 Agreed Framework, and North Korea's proven ability to win aid and concessions – including offers of food, fuel oil and light water nuclear reactors. In 2003, North Korea was invited to join Six Party talks with the US, China, Russia, South Korea and Japan. Both multilateral initiatives were prompted in large part by concerns about Pyongyang's nuclear weapons program.

Some of North Korea's strongest demands, such as those for full diplomatic recognition and a security guarantee from the US, have not been met. Also, the US and its allies have

managed to persuade the UNSC to pass a number of resolutions which impose tough restrictions on Pyongyang's foreign contacts, including its defence relations and arms sales. However, in international relations, perceptions usually trump the objective realities. It is likely that to some Burmese officials North Korea has repeatedly been able to get away with its provocative and illegal behaviour, and that this can be explained by Pyongyang's ability to hold the international community to ransom with its nuclear weapons. If that has been the prevailing view in Naypyidaw, then it would strengthen the argument for Burma to pursue a WMD program itself. Certainly, the relationship between Naypyidaw and Pyongyang does not seem to have been adversely affected by the measures taken against North Korea. Despite Burmese undertakings to abide by UNSC Resolution 1874, banning arms exports from North Korea, there have been several suspicious shipments to Burma since it was passed in 2009.<sup>37</sup>

In this regard, the South African case might be instructive. According to David Albright, the half dozen or so fission weapons produced by the apartheid government during the 1970s and 1980s were never intended for military use, or even integrated into the country's armed forces. Officials involved in the program reportedly believed that deployment of the weapons 'was akin to committing suicide'.<sup>38</sup> Instead, Pretoria developed a strategy that involved using the weapons solely for 'political purposes'. In the event of an attack by Soviet- or Cuban-inspired forces over its borders, South Africa planned to use its nuclear weapons capability to force Western governments to intervene on its behalf. 'The policy was a political bluff intended to blackmail the United States or other Western powers into coming to South Africa's assistance'.<sup>39</sup>

Given the difficulties of Burma actually using a nuclear weapon, discussed below, this option may have also occurred to that country's strategists, with the US playing the role of an invader and China or even ASEAN cast as Naypyidaw's saviour.

There may have also been a domestic dimension to the SPDC's thinking. According to Sai Thein Win, the 'defector' from the Burmese armed forces on whose testimony the DVB's 2010 report and documentary film were based;

The worst plan was proposed by the head of the Ministry of Science and Technology (MOST), U Thaung. He and Vice Senior General Maung Aye gave a speech to us at the National Defence College in Rangoon in 2001 saying that we need advanced technology to upgrade our arms to protect the nation. They gave the example of North Korea – with the potential threat of nuclear weapons, no outsiders dare to meddle in North Korea's domestic affairs (sic). 40

This suggests that, at the highest levels of the Burmese leadership, there were individuals who believed that possession of a nuclear weapons capability would not just protect the country from external threats and provide it with leverage in international negotiations, but would also give the regime greater latitude in the management of Burma's internal affairs. Naively, and somewhat illogically, these officials seemed to anticipate less criticism of the military government for its routine violation of human rights, its harsh policies towards ethnic minorities and its gross economic mismanagement.

Whether it followed North Korea's uncompromising military approach, or South Africa's more subtle 'political' approach, Burma would still be using WMD as a stick to guard against attack and to force concessions, such as the lifting of economic and financial sanctions, and increased international status. Yet, there is another way of achieving these ends, and that would be for Burma to use a WMD program as a carrot, and follow the Libyan model. It will be recalled that, in 2003, Muammar Gaddafi renounced his secret nuclear, chemical and biological weapons programs in return for diplomatic and commercial benefits. <sup>41</sup> He probably had other reasons for his decision, including fear of a US air strike, but the well-publicised shutdown of these programs won Libya plaudits

from world leaders and a warm welcome back into the international community.  $^{42}$  It is relevant that South Africa also made diplomatic gains when it voluntarily gave up its WMD programs in 1989.  $^{43}$ 

As discussed below, it is possible that, under its new civilian-military government, Burma will see the benefits of declaring and then surrendering its WMD programs - should they exist.

#### Status and Prestige

Nuclear and missile proliferation are usually seen as functions of technical capability, combined with certain strategic imperatives. Yet other, more intangible, factors also need to be taken into account, such as questions of status and prestige.

Some observers might discount such considerations as reasons to launch an incredibly expensive, technologically difficult and politically risky WMD program – or programs – but it is worth bearing in mind that they seem to have been major factors in the decision by India's Hindu fundamentalist–dominated government to conduct its secret nuclear weapons tests in 1998. Hurma's leadership is no less nationalistic than India's. Indeed, as far as we can judge, given the difficulty of knowing the true mindset of Burma's officer corps, the Tatmadaw leadership has always been intensely proud of Burma's historical achievements and deeply resentful of its colonisation by the British between 1826 and 1948. These feelings are encouraged in schools and military colleges, and through public propaganda campaigns. The generals have also been sensitive to accusations that, since the 1962 military coup, the armed forces have turned one of the region's richest countries into one of the world's least developed – as Burma was officially designated by the UN in 1987.

Possession of ballistic missiles and nuclear weapons, so the thinking in some military circles is reputed to go, would elevate Burma not only in the eyes of its own people, but also in the estimation of the international community. No longer could it be dismissed as a backward and insignificant Third World military dictatorship. Having WMD would make Burma the only country in Southeast Asia which was a member of the nuclear club, in that respect at least placing it alongside great powers like India and China. Particularly if it had ballistic missiles – and thus the potential ability to deliver WMD – Burma would have to be taken seriously in world councils, and accorded the respect due to a major player in the region, if not the world. By the same token, the Tatmadaw – from whence all of Burma's leaders have sprung for the past 50 years – would have to be acknowledged as a large, powerful and modern institution, able to stand comparison with the armed forces of any other country in the region. No longer could it be dismissed – as used to be the case before 1988 – as a small, under-funded and illequipped infantry force which struggled to perform even basic internal security missions.

#### Leadership Psychology

For all their analytical scaffolding, arguments about threat perceptions and questions of status and prestige ultimately trace back to the members and worldview of Burma's leadership group. For, in a country like Burma, where a small number of men have held enormous power for long periods, their personalities, core beliefs and even superstitions must have played an important role in political decisions. House their specific direction – or at least broad agreement – no WMD program could be considered, let alone undertaken. In other countries, such a decision might be influenced by a wider range of players, including scientists, bureaucrats and public figures. In Burma, however, this is much less likely to be the case. There is a risk of over-simplifying the complex relationships that have existed within leadership circles, and the power plays between

factions in the Tatmadaw, but the final word on such a weighty matter would most likely have rested with the most senior officer in the military hierarchy.

Jacques Hymans has gone further and argued that the reasons why states build nuclear weapons can be found in the psychology of individual political leaders. <sup>47</sup> Essentially, he believes that decisions regarding WMD are so fraught with uncertainty and burdened by risk, that they cannot be explained by the usual cost-benefit calculations. He has written that, when leaders hold a conception of their country's national identity that generates the combined emotions of fear and pride, it creates an 'explosive psychological cocktail' that leads them to seek a nuclear capability. In other words, 'nuclear decisions lie more in the "hearts" of leaders than in their heads'. <sup>48</sup> Hymans argues that, encouraged by intense nationalism, leaders develop an oversimplified picture of the strategic environment and an exaggerated view of the benefits of WMD. These weapons give the illusion of control over events and the ability to act autonomously. The decision to develop a nuclear capability is thus not just a means to an end but a form of national self-expression.

Given such arguments, it is worth briefly considering the personality of Senior General Than Shwe. For it would have been during his time as leader of Burma's two ruling military councils that any Burmese WMD programs would have been launched.

As might be expected, given his 18 years at the head of the world's most durable military dictatorship, biographical accounts of Than Shwe usually describe him in stark terms. <sup>49</sup> Given the lack of hard information, they also tend to dwell on the many unconfirmed rumours and apocryphal stories that he has attracted over the years. As far as can be judged, however, Than Shwe subscribes to the view that Burma was deprived of its national greatness by the British colonialists and, under the Tatmadaw's firm guidance, Burma is destined once again to become a major regional power. He anticipates that in doing so it will recover its strength and prestige and thus be able to withstand whatever international pressures are levelled against it. <sup>50</sup> It has also been claimed that Than Shwe's decisions on key policy matters have been influenced by astrologers, numerologists and soothsayers. <sup>51</sup> This does not make him a Burmese Dr Strangelove. <sup>52</sup> Nor does it automatically deny him consideration as a rational actor. Yet, the fact remains that without his support for a Burmese WMD program it could not have been launched

#### Other Possible Reasons

As pointed out by a team of researchers at Harvard University's Kennedy School of Government in May 2011, there are a number of other possible reasons why Burma might consider launching – or not launching – a nuclear weapons program. <sup>53</sup> Three are worth briefly considering here.

Firstly, there is a theory that states will forgo nuclear weapons if they feel they can rely on security guarantees – including possible nuclear weapons use – from a strong ally. <sup>54</sup> By the same token, however, the potential loss of such an ally, or a lack of trust in an existing ally to provide the necessary degree of protection, can prompt a regime to try and develop nuclear weapons of its own. An example of the latter scenario was President Park Chung-hee's secret WMD program in the 1970s, when it appeared that the Carter Administration had reduced the level of US commitment to defend South Korea from a North Korean invasion. <sup>55</sup> In Burma's case, it is possible that, despite their current close bilateral ties, Burma's deep historical distrust of China's strategic intentions has contributed to scepticism in Naypyidaw that Beijing would act sufficiently promptly or strongly to protect Burma from a foreign invasion. In these circumstances, the SPDC may have come to feel that Burma needed to develop its own nuclear deterrent.

The Harvard study also looked at the possibility that domestic political pressures, exercised for example through national elites, bureaucracies or other such interest groups, could be instrumental in the launch of a WMD program. Burma being a military dictatorship makes this very unlikely, although it could be argued that a coalition of hard line pro-nuclear advocates within the Tatmadaw – if it exists – would count as such a pressure group. The 'defector' Sai Thein Win's testimony, for example, suggests that there was strong support for WMD from figures like Vice Senior General Maung Aye. <sup>56</sup> Bureaucrats in Burma are less likely to have played a critical role, although it has been claimed that the Russian reactor sale in 2000 was driven largely by U Thaung, an ardent nationalist known to be enthusiastic about the idea of Burma becoming a nuclear state. <sup>57</sup> As noted above, however, the decision for Burma to pursue a WMD program would ultimately have had to come from the most senior member of the ruling military council, namely Senior General Than Shwe.

It has also been postulated that Naypyidaw's consideration of WMD might be influenced by the prevailing norms of international behaviour. In this regard, Burma presents a contradictory picture. Ever since Independence in 1948, and throughout successive military governments, Burma has been an enthusiastic supporter of the non-proliferation regime. It is a state party to almost all relevant international treaties. Burmese diplomatic representatives have consistently spoken out strongly against the manufacture and use of nuclear weapons, and repeatedly called for total nuclear disarmament. This practice continued after 1988, under the SLORC and SPDC. For example, Burma joined the NPT in 1992. Yet, at the same time, Burma's military regime has been prepared to act outside the norms of international behaviour whenever it suited it to do so. Its routine violation of basic human rights and, more recently, its apparent breaches of UNSC resolutions regarding defence contacts with North Korea, suggest that Burma would not feel bound by international law or other such obligations if the perceived need was strong enough.

For completeness, mention should perhaps also be made of the rather unlikely suggestion that Burma is pursuing nuclear weapon and ballistic missile programs not to satisfy its own strategic imperatives, or even at the whim of Than Shwe, but rather at the behest of a foreign power. For example, there have been claims by some observers that Burma is developing and storing WMD on behalf of North Korea, to help it evade the scrutiny of the US and international monitoring agencies like the IAEA. Also, a number of commentators – most often writing for Indian news outlets and websites – have put forward the notion that, in seeking nuclear weapons, Burma is in fact acting as a proxy for its close ally China, or even China's ally Pakistan. This is claimed to be part of an elaborate scheme to encircle India with nuclear-armed states allied to, or at least friendly with, China. None of these theories rely on hard evidence, however, and are easily dismissed. Burma has a well-deserved reputation for acting on its own and avoiding such sensitive and potentially dangerous arrangements.

### 3. The How Question

President Merkin Muffley: How is it possible for this thing to be triggered automatically and at the same time impossible to untrigger?

Dr Strangelove: Mr President, it is not only impossible, it is essential. That is the whole idea of this machine, you know. Deterrence is the art of producing in the mind of the enemy ... the FEAR to attack. And so, because of the automated and irrevocable decision-making process which rules out human meddling, the Doomsday machine is terrifying and simple to understand ... and completely credible and convincing.

Dr Strangelove or: How I Learned to Stop Worrying and Love the Bomb (1964) Directed by Stanley Kubrick

Internet Movie Database, at http://www.imdb.com/title/tt0057012/quotes

If it is assumed that Burma is intent on acquiring WMD, the question arises of how it might envisage actually using them. That depends to a large extent on what weapons are being spoken about. As already noted, for the past 10 years or so, Burma has been accused of trying to develop a nuclear weapon. For about the same period, it has probably been trying to acquire ballistic missiles. <sup>62</sup> It is worth bearing in mind too that, on several occasions over the past 30 years, journalists, activists and others have claimed that the Burmese armed forces have employed chemical weapons (CW) and possibly biological weapons (BW) against their domestic opponents – mainly insurgent groups and members of the ethnic minorities concentrated around the country's periphery. <sup>63</sup> None of the allegations regarding CW or BW use have yet been proven, but Burma does appear to have toyed with CW production in the 1980s. <sup>64</sup> So, for the sake of the argument, these weapons will be included in the following discussion.

#### **Nuclear Weapons**

To take nuclear weapons first, a test detonation would be a simple and effective way of announcing to the world that Burma had become a nuclear state and expected to be accorded the respect due to a member of the club. Even if it was able to send such a message, however – and it was received in the spirit intended – Burma's position would only be advanced so far. Naypyidaw would also have to persuade the world that it had the political will and technical means actually to use a nuclear weapon. This means that the device would have to be weaponised – no small feat in itself – and that Burma had some way of delivering it successfully to a target outside Burma – again, not an easy task. Otherwise, the threat may not be taken seriously. Burma would find itself in the position of the black sheriff in the 1974 comedy movie *Blazing Saddles*, who pulls out his revolver, puts it to his own head and threatens to shoot himself unless the angry crowd around him backs off.<sup>65</sup>

It is possible to envisage a number of nuclear attack scenarios that might be employed by a Burmese government. They include delivery by aircraft, missile and ship. The technical parameters of a possible Burmese nuclear program are hard to imagine but, in theory at least, all options would be available regardless of whether Burma developed a plutonium weapon – which is the most likely option, in the circumstances – or followed the highly enriched uranium (HEU) route. <sup>66</sup> The main factors determining the delivery method – apart from availability and reliability – would be its size and weight.

Given Burma's inexperience in this field and the level of expertise available from Pyongyang, it is possible that its first generation nuclear weapons would be reasonably large and have relatively primitive triggering mechanisms.<sup>67</sup> If that was the case, they would not be suitable for use as warheads on ballistic missiles. The most obvious delivery method for such a weapon would be for it to be dropped from the air as a 'dumb' bomb. Burma is not known to have any bombers in its inventory, but it has rear-loading transport aircraft like the Chinese SAC-Y8 which conceivably could be used for this purpose. In the event that Burma managed to develop a smaller weapon, Naypyidaw would have other options open to it. For example, its Russian MiG-29 fighter-bombers are technically capable of carrying a small nuclear bomb. The range of the older MiG-29 variants currently in the Myanmar Air Force is limited, but with external fuel tanks and by limiting the weight of the weapon – and thus its yield – the reach of such aircraft could be extended to targets well inside Thailand.

If the nuclear weapon was small, it could also be suitable for use as a warhead on a ballistic missile. While its limited reach would cause certain problems, a SRBM, armed with a single nuclear warhead would make a potent weapon. If it possessed medium (MRBM) or intermediate range ballistic missiles (IRBM), Burma would have much wider scope for a nuclear strike against Thailand – or another neighbouring country. Even so, whether an aircraft or ballistic missile was employed as a delivery vehicle, there would be problems. An aircraft would have to evade Thailand's air defences which, during times of heightened bilateral tensions, would presumably be alert to any unauthorised intrusions into Thai air space. Any missile bases near the Thai border – or even further inland – would run the risk of pre-emptive attacks.

Why Thailand? Among its five immediate neighbours, it is unlikely that Burma would want to initiate a nuclear exchange with China or India. Bangladesh and Laos would not be worth a nuclear weapon, no matter how far bilateral relations had deteriorated. Thailand, however, is a close 'non-NATO' ally of the US and traditionally Burma's 'nearest enemy'. <sup>68</sup> In the event of a US or UN-led invasion against Burma, it is likely that Thailand would serve as a launching pad for the attack, as did Kuwait in the Iraq war. This idea is not as far-fetched as it may sound. In the early 1990s, Thai king Bhumibol reportedly feared that his country might be used to assist in a major US ground and air assault against Burma. <sup>69</sup> Faced with an existential threat from that quarter, Burma's leaders might calculate that a strike against a Thai military base would make Washington think again, or at least persuade the Thai government that the costs of hosting foreign forces was too high. Similarly, a credible threat of a nuclear attack against Bangkok, a city of nearly nine million people, could well persuade the Thai government to reassess its position. <sup>70</sup>

#### **Ballistic Missiles**

Discussion of such issues inevitably leads to the vexed question of Burma's possible ballistic missile capabilities, both now and in the future.

According to the US National Air and Space Intelligence Centre, in April 2009 Burma did not possess any ballistic missiles. <sup>71</sup> Yet, according to most open sources, Burma has long been interested in purchasing and building the North Korean Hwasong-6, a modified Scud-C SRBM with a range of about 700 kilometres, carrying a 700 kilogram warhead. <sup>72</sup> There have been occasional references to Burmese interest in Chinese M-9 (DF-15) and M-11 (DF-11) SRBMs, but these have usually been in the context of possible future purchases. <sup>73</sup> From time to time, there have been reports in the news media and on activist websites suggesting that Burma may also be trying to acquire a MRBM. <sup>74</sup> This is presumably a reference to the North Korean Nodong, also known as the Scud-D but apparently called the Scud-E by the Burmese. This missile has an estimated range of 1,300 kilometres, carrying a maximum payload of about 1,200 kilograms. <sup>75</sup>

There were references to such missiles in a leaked report about a visit to North Korea by a high-level Burmese delegation in 2008.<sup>76</sup>

There have also been a few claims in the news media that Burma is acquiring 'long range missiles'. <sup>77</sup> It is not clear what is meant by this broad term but it seems to be a reference to the possible sale to Burma of North Korean 'Scud-F' ballistic missiles. Also mentioned in the leaked 2008 visit report, this weapon was reputed to have a range of some 3,000 kilometres. <sup>78</sup> While this particular variant is unknown to well-informed North Korea-watchers, the given range suggests that it is the new - and probably untested - Musudan road mobile intermediate range ballistic missile. <sup>79</sup> With such a missile in mind, a few commentators have raised the possibility of the Burmese being able to attack the US military base on the tiny atoll of Diego Garcia in the Indian Ocean, some 3,500 kilometres away. <sup>80</sup> Leaving aside the question of whether any ballistic missile has that level of accuracy, at this stage the operation of an IRBM is likely to stretch Burma's technical capabilities to breaking point.

If Burma was able to acquire or manufacture SRBMs like the Hwasong-6, it would be able to consider a number of attack options. <sup>81</sup> These missiles only have a relatively short range but, launched from sites near the Burmese border, they could still reach a large number of targets inside Thailand – if that was the aim. Interception of such missiles is very difficult. Given their generally poor accuracy, however, an area target like Greater Bangkok would be more feasible than a point target such as a Thai army base, airfield or some other military concentration. Similar considerations would apply to MRBMs. Both systems, however, have the great advantage of being road mobile. There has been no reporting in the academic literature or news media about Burma purchasing any heavy chassis transporter–erector–launchers (TEL) but they would logically precede or accompany the acquisition of missiles or missile production lines. <sup>82</sup> As demonstrated during the 1990–91 Gulf War, a key advantage of TELs is that a missile force can avoid the use of static launch pads that can be detected and attacked. <sup>83</sup> It can use presurveyed sites or employ GPS systems to assist targeting. <sup>84</sup>

There have occasionally been suggestions from activists and popular pundits that Burma is trying to acquire or manufacture SRBMs in order to defend against a sea-borne invasion. The prospect of an amphibious assault is often raised in discussions about Burma – and indeed has occasionally been mentioned by the Burmese government itself. <sup>85</sup> It is usually put forward by Burma-watchers as the main reason why the SPDC moved its seat of government in 2005 from Rangoon, which is only 30 kilometres from the coast, to Naypyidaw, which is about 320 kilometres further inland. <sup>86</sup> There have been some major advances in ballistic missile technology in recent years but claims regarding possible Burmese SRBM use against a naval force do not withstand close scrutiny. <sup>87</sup> Even if a foreign warship was large, stationery and close inshore, it would still be very difficult to hit with ballistic missiles utilising current generation inertial guidance systems. Use of Burma's albeit limited inventory of anti-ship missiles would be far more cost-effective in the circumstances. <sup>88</sup>

Should Burma acquire ballistic missiles, of any type and range, then inevitably the question of warheads arises. Given the usual considerations of size and weight, the physical effects of a conventional warhead mounted on a SRBM or MRBM are relatively limited – it is in essence a large artillery shell. However, in addition to nuclear weapons, discussed above, such missiles could also be fitted with chemical or biological warheads. As mass casualty weapons they do not need to rely on pinpoint accuracy to achieve their maximum effect, whether it be physical or psychological. Range will always be a factor with such weapons, however, as the attackers need to ensure that the target is far enough away from their own country, and their own forces, to escape the sometimes unpredictable results of CW or BW use. Because of their after-effects, such weapons are not usually used against places that the attackers intend to invest or

occupy – but that is unlikely to be an issue if Burma is only trying to deter an invasion launched from a neighbouring country.

Although ballistic missiles are usually strategic weapons, designed for power projection, some websites have spoken of them almost as if they are the same as tactical surface-to-surface missiles.<sup>89</sup> So it might be worth briefly considering another option open to Naypyidaw, namely the use of SRBMs against elements of Burma's own population, such as political dissidents, ethnic minorities, insurgent groups, or 'liberated zones' and potential breakaway territories, like Wa State in northern Burma. Ballistic missiles have long been used by governments to impress – and intimidate – domestic audiences by their size and power. For these and other reasons, Burma's leaders would no doubt like to be able to show off such hardware at annual Armed Forces Day parades in Naypyidaw.<sup>90</sup> Also, the operational use of SRBMs against the local population is not beyond the realms of possibility, as demonstrated by Gaddafi's desperate use of Scuds in the dying stages of the Libyan rebellion.<sup>91</sup> Such use in Burma, however, is quite unlikely.

North Korea has a tactical SRBM, the Toksa. Based on the 1970s-vintage Soviet SS-21, it is a solid fuel road-mobile missile with a reported range of around 120 kilometres. Essentially a battlefield weapon, it would be better suited to domestic use than the larger Scud variants. However, there have been no signs that the Toksa is on Burma's shopping list, strengthening the theory that the main reason for Naypyidaw's interest in ballistic missiles is to assist in defence against external threats. In any case, ballistic missiles are poorly suited to quelling internal unrest. Apart from important considerations of their limited availability and high cost, they are usually too inaccurate and indiscriminate. Such blunt instruments are thus unsuited to dispersing large crowds of protesters in urban centres, or attacking small, scattered guerrilla groups and rural villages in rugged terrain. If armed with CW and BW, their effects would be difficult to confine to their intended victims, particularly if employed near population centres, or international frontiers. Other options would be much easier, cheaper and more effective.

#### Other Possibilities

If Burma had a weapon of mass destruction, was confident that it was fairly robust and would only detonate when intended, then theoretically the Naypyidaw government could consider other possible delivery methods.

The easiest way of getting such a weapon into Thailand might be simply to put it in a cargo or fishing vessel and sail it into a major port like Bangkok or Laem Chabang. In that case, size and weight would not be an issue, and it would be much less likely to be detected. Naypyidaw could also consider targets further afield. For example, it could load a nuclear weapon onto a ship and take it anywhere it chose – even to the United States, if that was perceived to pose the greatest threat. Countries like China and India would be equally vulnerable. All have very busy ports and limited capacities to inspect incoming cargoes. During periods of heightened tension, it could be expected that all Burmese carriers would be carefully monitored, but Naypyidaw need not use a vessel from its own Myanma Five Star shipping line. It could choose a less conspicuous carrier flying a foreign flag. Even the faint prospect of a nuclear explosion in a major population centre like New York, Shanghai or Bombay would concentrate the minds of the authorities in those countries.

Such an event may seem a remote possibility, best left to Tom Clancy and other authors of popular fiction. However, it is the sort of scenario that makes the acquisition of a nuclear weapon by a pariah state – or non-state actor – so worrying to officials responsible for border protection and homeland security, in many countries.

### 4. The What Question

General Jack D. Ripper: Mandrake, do you recall what Clemenceau once said about war?

Group Captain Lionel Mandrake: No, I don't think I do, sir, no.

General Jack D. Ripper: He said war was too important to be left to the generals. When he said that, 50 years ago, he might have been right. But today, war is too important to be left to politicians. They have neither the time, the training, nor the inclination for strategic thought.

Dr Strangelove or: How I Learned to Stop Worrying and Love the Bomb (1964) Directed by Stanley Kubrick

Internet Movie Database, at http://www.imdb.com/title/tt0057012/quotes

While based on many assumptions, this survey suggests that, despite the conventional wisdom, there are in fact a number of ways in which Burma could conceivably employ weapons of mass destruction, of different kinds. It would not always be easy, but nor would it be impossible. Beyond their immediate physical effects, however, it would appear that WMD are rather limited as military tools. Use inside the country would literally be self-destructive. In the international context, their greatest benefits would appear to lie in their psychological impact and powers of persuasion. This may, as reportedly envisaged by some of Burma's leaders, lend them to use as bargaining chips in negotiations, as instruments of blackmail and as a deterrent against perceived external threats. However, such benefits as may accrue need to be balanced against some clear negatives associated with WMD acquisition and use. It is important, therefore, to consider the problems Burma might face in this regard, in order to arrive at a net assessment of their possible security value.

Firstly, any revelation of a Burmese WMD program, let alone an actual or implied threat to use such weapons, would place the government in Naypyidaw directly at odds with both international law and majority global opinion. Granted, countries like Israel, India and Pakistan do not seem to have suffered greatly from their secret programs to develop nuclear weapons capabilities. This is bound to have been carefully noted by Burmese advocates of an indigenous WMD program. However, notwithstanding its undoubted geostrategic importance, Burma has never been accorded the degree of political latitude enjoyed by those countries. Even if a nuclear armed Burma managed to retain the support of China and Russia – which could not be guaranteed – Burma could expect to suffer the full weight of UN, US and EU condemnation, and face the same punitive measures that have been imposed on countries like North Korea and Iran. Burma would also most likely be expelled from ASEAN which, through the 1995 Bangkok Treaty, created a Southeast Asia Nuclear Weapons Free Zone (SEANWFZ).

Secondly, the international criticisms levelled against Burma would not just be for proliferating nuclear weapons and ballistic missiles, despite its treaty obligations. <sup>96</sup> Hard evidence of WMD programs would also reveal the depth of Burma's cooperation with North Korea, despite its repeated undertakings to observe UNSC Resolutions 1718 and 1874. <sup>97</sup> Burma appears to have sought dual-use manufacturing equipment and possible components for missile and nuclear weapons programs from suppliers in Germany, Switzerland, Japan and perhaps elsewhere. These have included computer-numerically controlled machine tools and devices that reportedly can be used to develop missile

control systems and centrifuge machines for uranium enrichment. <sup>98</sup> Even so, most of the expertise, technology and hardware for any Burmese nuclear weapon or ballistic missile program would clearly have had to come from North Korea. Given Naypyidaw's close ties with Pyongyang over the past decade or more, including secretive visits by several North Korean cargo vessels, this would be hard to deny. <sup>99</sup>

Thirdly, while the most likely rationale for a WMD program would be to increase Burma's security by deterring external threats, it may in fact have the opposite effect by inviting a pre-emptive attack.

If it was available, reliable intelligence about missile production may not in itself prompt a military response, although the US has already flagged its intention to deal with any ballistic missile sales to Burma 'vigorously and rapidly'. 100 Unambiguous evidence of a nuclear weapons facility, however, may do so, as occurred in Iraq in 1981 and Syria in 2007 – albeit conducted by Israel. The 2010 *Quadrennial Defence Review* stated that the US would develop its capacities to 'contain WMD threats emanating from fragile states', and increase its ability actively to intervene in countries where 'responsible state control' of WMD materials was not guaranteed. 101 The US's position on North Korean sales was underlined by President Obama in November 2011, when he stated:

Indeed, we also reiterate our resolve to act firmly against any proliferation activities by North Korea. The transfer of nuclear materials or material by North Korea to states or non-state entities would be considered a grave threat to the United States and our allies. And we would hold North Korea fully accountable for the consequences of such action. 102

Even the proven existence of a Burmese CW or BW plant could prompt US military action, as occurred in 1998 when the Clinton Administration launched a cruise missile strike against the Al-Shifa pharmaceutical plant in Khartoum. <sup>103</sup>

If Burma has decided to pursue a nuclear weapons program or the manufacture of ballistic missiles, then presumably its strategic planners would have considered the risks – in particular Washington's consistent opposition to WMD proliferation – and taken into account the possible consequences of such programs being discovered. This may account for the secrecy surrounding all activities in Burma that could be related to WMD research and development. It may also help explain the effort that has clearly been made over the past decade to upgrade Burma's conventional military capabilities and protect its defence infrastructure. Also, the regime's intense nationalism and abiding sense of insecurity has always meant that any perceived signs of disloyalty were severely punished. These feelings are likely to be even more pronounced if it was trying to prevent revelations of secret WMD programs. This may be one reason for the regime's obvious anger over the leak of numerous documents – including photographs of underground installations and the report of the 2008 visit to North Korea – and the damaging claims made by so-called 'deserters, fugitives and exiles'. 104

That said, it is worth remembering that ever since Burma regained its independence from Britain in 1948 it has insisted on going its own way, even at some cost to itself. Burma was a founding member of the Non-Aligned Movement (NAM) in 1961 and resigned in 1979 when the NAM was hijacked by the communist bloc. During the Cold War it adopted a strictly neutral foreign policy that helped it avoid entanglement in the strategic competition between the superpowers. Burma also managed to tread a careful path between India and China, when tensions between its two largest neighbours boiled over in the early 1960s. After the 1962 military coup, General Ne Win adopted an autarkic socialist economic system and an isolationist foreign policy that took Burma further into international obscurity. On taking over in 1988, the SLORC opened up the country – to a limited degree – and allowed greater outside influence. However, as its response to Cyclone Nargis demonstrated, the military government was always

prepared to pay a very high price to command Burma's future and to remain the master of its own fate.  $^{106}$ 

If international law, global opinion, economic growth and even the welfare of the Burmese people have all been considered less important than stability, independence and national sovereignty – as the regime has defined these things – then perhaps the risks of pursuing clandestine WMD programs have been seen as acceptable by Burma's military rulers. The main questions confronting the international community now, however, are not only whether there were such programs in Burma before 2011 but, if the answer is positive, will they continue under the country's new government?

### 5. The Future

Dr Strangelove: Of course, the whole point of a Doomsday machine is lost, if you keep it a secret! Why didn't you tell the world, eh?

Ambassador de Sadesky: *It was to be announced at the Party Congress on Monday. As you know, the Premier loves surprises.* 

Dr Strangelove or: How I Learned to Stop Worrying and Love the Bomb (1964) Directed by Stanley Kubrick

Internet Movie Database, at http://www.imdb.com/title/tt0057012/quotes

Since the creation of a partially-elected administration in January this year, President Thein Sein has made several public statements and promised a number of changes that appear to herald a more open-minded and conciliatory approach to government. <sup>107</sup> Until the constitution is changed, the armed forces will remain firmly in control of Burma, but there now appears to be the possibility of greater personal freedoms, rational economic policies and a more relaxed attitude towards the development of civil society. The new government has also taken a number of steps that seem designed in large part to meet the oft-repeated concerns of the international community. For example, the president has met with Aung San Suu Kyi, released hundreds of political prisoners and relaxed the laws relating to opposition political parties and freedom of speech, all major sticking points with the former government's most vociferous foreign critics. These and a number of other steps may have also been designed to help Burma win support for its bid to become the chair of ASEAN in 2014. <sup>108</sup>

These unexpected developments have prompted widely varying reactions. A number of respected academics and commentators have taken a strategic view and, with the usual caveats, sought to highlight what they believe to be the start of a gradual process of political reconciliation and incremental reform. The International Crisis Group has gone even further and boldly announced that 'major reform is under way' in Burma. <sup>109</sup> A hard core of activists and their supporters, however, have dismissed these policy shifts as part of a massive confidence trick by an entrenched military regime. Focusing on more immediate issues, some have even called for harsher sanctions against Naypyidaw. <sup>110</sup> Given the dearth of reliable information about internal developments in Burma, and the highly politicised nature of the Burma-watching community, this divergence of views is not surprising. As more positive initiatives have been taken in Burma, however, an increasing number of observers – and governments – have concluded that something very important is happening in Naypyidaw and that Burma is at a vital tipping point. <sup>111</sup>

One critical test of the new government's readiness to embrace real change and join the mainstream international community will be Thein Sein's willingness to make a clean breast of the country's WMD-related activities. There have already been two attempts to set everyone's mind at rest. In September 2011, the Burmese ambassador in Vienna told the IAEA that Burma had neither the capacity nor the intention to develop nuclear weapons. A few days later, a similar statement was made in parliament by the new Minister for Science and Technology. Inter alia, he said:

Analysts have assessed that Myanmar has no ground for nuke weapons being a developing country with inadequacies for nuke weapons production either in term of infrastructure and technology or financial capability; so accusations that Myanmar is trying to build nuclear capacity is wrong and Myanmar has not

made even a single effort to possess nuclear weapons: Myanmar has announced to the global nations that it aspires for peace and has no intention of possessing nuclear weapons (sic). 114

In fact, this position is not new. On a number of occasions in recent years, similar assurances have been given. 115 Because of the military regime's dismal record, however, they were simply not believed. With the advent of Thein Sein's apparently reformist government such statements may now be taken more seriously.

If Naypyidaw really wished to demonstrate its responsiveness to international concerns over Burma's possible WMD programs, and its readiness to abide by the relevant treaties and UNSC resolutions, it could easily do so. In order to clear up the uncertainty that has arisen as a result of all the rumours and speculation of the past decade, the IAEA has reportedly sought access to Burma's nuclear facilities. <sup>116</sup> If it genuinely had nothing to hide, and wished to settle the international community's concerns, Naypyidaw could permit IAEA inspectors to travel around Burma and satisfy themselves that its nuclear research program was peaceful and within endorsed guidelines. At the same time, Thein Sein's government could invite ASEAN to send a delegation of SEANWFZ commissioners to Burma in order to satisfy the Association that Burma was abiding by the terms of the Bangkok Treaty. <sup>117</sup> Now that Burma has been designated the chair of the Association in 2014 it is important that there be no doubt about its nuclear status.

This presupposes, of course, that Thein Sein has the power to make such a decision, and will not be opposed by the hard-line elements which are known to exist in the parliament and armed forces. This also raises the question whether the president actually controls any clandestine WMD program. It is possible, for example, that responsibility for such issues has been passed to Burma's powerful National Defence and Security Council. It may have even been retained by senior members of the armed forces who are not subject – or responsive – to presidential direction. There is also an assumption here that Burma does not have anything to hide from the IAEA and ASEAN. Even if Burma has a nascent nuclear weapons program, as many have claimed, it may still be able to satisfy the inspectors, provided the program has not progressed far and the 2010 State Department report holds true. Not to allow inspectors into the country, however, or to do so but then deny or restrict their access to sensitive sites, would be quite counter-productive. It would add to existing suspicions and throw doubts on the new government's bona fides.

That said, regardless of the results of any IAEA or ASEAN inspections, there is still bound to be considerable concern about Burma's nuclear ambitions and its possible interest in other WMD programs. After 50 years of harsh military rule and a well-established record of contempt for international norms, there is precious little trust in the Burmese government, even if it has changed in structure and composition, and now seems to be moving in the right direction. Also, neither the IAEA nor ASEAN have any formal, legal basis on which to seek access to any facilities suspected of being related to a ballistic missile program, only those believed to be connected to a nuclear program. Yet, on the limited evidence available, a missile program is likely to be more advanced. In any event, Burma's shadowy defence relationship with North Korea will remain a serious worry until Naypyidaw and Pyongyang are prepared to accept much greater transparency – something that will go against the grain for both governments.

This being the case, it would appear that the international community will still need to monitor developments closely and discover what it can itself, through whatever means are available, so it can take whatever measures it can to prevent everyone's worst fears from becoming a reality.

### **Notes**

- 1 See, for example, Andrew Selth, *Burma and weapons of mass destruction*, Working Paper No. 334 (Australian National University, Canberra: Strategic and Defence Studies Centre, 1999).
- These were the Australian Defence Force's Centre for Defence and Strategic Studies, in Canberra, and the US Department of Defence's Asia-Pacific Centre for Security Studies, in Honolulu.
- These claims are discussed in Andrew Selth, *Burma's North Korean Gambit: a threat to regional security?*, Canberra Papers on Strategy and Defence No. 154 (Australian National University, Canberra: Strategic and Defence Studies Centre, 2004).
- 4 See, for example, *Conference Report: Nuclear Weapons Proliferation 2016*, Conference organised by the Centre for Contemporary Conflict, Naval Postgraduate School, Monterey, 28-29 July 2006, at <a href="http://www.nps.edu/Academics/SIGS/ccc/conferences/recent/NuclearWeaponsProliferation2016Jul06\_rpt.pdf">http://www.nps.edu/Academics/SIGS/ccc/conferences/recent/NuclearWeaponsProliferation2016Jul06\_rpt.pdf</a>>.
- R.E. Kelley and Ali Fowle, 'Nuclear related activities in Burma', *Democratic Voice of Burma*, May 2010, at <a href="http://www.dvb.no/burmas-nuclear-ambitions/burmas-nuclear-ambitions-nuclear/expert-analysis/9297">http://www.dvb.no/burmas-nuclear-ambitions-nuclear/expert-analysis/9297</a>>.
- Anton Khlopkov and Dmitry Konukhov, *Russia, Myanmar and Nuclear Technologies* (Centre for Energy and Security Studies, Moscow, 29 June 2011), at <a href="http://ceness-russia.org/data/doc/MyanmarENG.pdf">http://ceness-russia.org/data/doc/MyanmarENG.pdf</a>>.
- Farthrights International has estimated that between 1998 and 2009, natural gas sales earned the Burmese government US\$9 billion in revenue. See Energy Insecurity: How Total, Chevron and PTTEP Contribute to Human Rights Violations, Financial Secrecy, and Nuclear Proliferation in Burma (Myanmar), (Washington: Earthrights International, July 2010), at <a href="http://www.earthrights.org/sites/default/files/documents/energy-insecurity.pdf">http://www.earthrights.org/sites/default/files/documents/energy-insecurity.pdf</a>>. See also Christopher Shay, 'Is Burma's junta trying to join the nuclear club?', Time, 9 July 2010, at <a href="http://www.time.com/time/world/article/0,8599,2002713,00.html">http://www.time.com/time/world/article/0,8599,2002713,00.html</a>.
- 8 Adherence to and Compliance with Arms Control, Non-Proliferation and Arms Control Agreements and Commitments (Washington DC: US Department of State, July 2010), at <a href="http://www.networkmyanmar.org/images/stories/PDF4/uscr.pdf">http://www.networkmyanmar.org/images/stories/PDF4/uscr.pdf</a>.
- 9 Andrew Selth, 'Myanmar's nuclear ambitions', *Survival*, vol. 52, no. 5, pp. 5-12. See also 'Myanmar', in *Preventing Nuclear Dangers in Southeast Asia and Australasia* (London: International Institute for Strategic Studies, 2009), pp. 101-18.
- 10 'Secretary Clinton interviewed in Thailand', *Secretary Clinton Blog*, 23 July 2009, at <a href="http://secretaryclinton.wordpress.com/2009/07/23/secretary-clinton-interviewed-in-thailand/">http://secretaryclinton.wordpress.com/2009/07/23/secretary-clinton-interviewed-in-thailand/</a>>.
- 11 One exception, at least in regard to the first question, is S.W. Farmer, Christina McDonnell and Alexander Roesler, *Reducing the risk of nuclear weapons proliferation to Burma: a realistic policy prescription*, unpublished research paper, John F. Kennedy School of Government, Harvard University, 11 May 2011 (copy in the author's possession).
- See, for example, Wai Moe, 'Burma security threat to region: panel', *The Irrawaddy*, 8 August 2010, at <a href="http://www.irrawaddy.org/article.php?artid=19167">http://www.irrawaddy.org/article.php?artid=19167</a>>.
- 13 Some of the best cartoons of Burma's military leaders can be found in Harn Lay, Defiant Humour: The Best of Harn Lay's Cartoons from 'The Irrawaddy' (Chiang Mai: Irrawaddy Publishing Group, 2006).
- 14 'Why is Burma junta afraid of letting foreign aid workers?', *The Irrawaddy*, 9 May 2008, at <a href="http://www.irrawaddy.org/article.php?art\_id=11882">http://www.irrawaddy.org/article.php?art\_id=11882</a>>.

- 15 See, for example, Tin Maung Maung Than, 'Myanmar: Myanmar-ness and realism in historical perspective', in Ken Booth and Russell Trood (eds), *Strategic Cultures in the Asia-Pacific Region* (Houndmills: Macmillan, 1999), pp. 165–81. See also L.W. Pye, *Politics, Personality and Nation Building: Burma's Search for Identity* (New Haven: Yale University Press, 1962); Maung Maung Gyi, *Burmese Political Values: The Socio-Political Roots of Authoritarianism* (New York: Praeger, 1983).
- See, for example, Myanmar: the military regime's view of the world, Asia Report No. 28 (Bangkok/Brussels: International Crisis Group, 7 December 2001); Andrew Selth, 'Burma's Military Mindset', unpublished paper presented at a workshop on Burma organised by the US State Department, Washington DC, 14 March 2005; and Morten Pedersen, Promoting Human Rights in Burma: A Critique of Western Sanctions Policy, (Lanham: Rowman and Littlefield, 2008), pp. 79-124.
- 17 Pedersen, *Promoting Human Rights in Burma*, p. 84.
- This subject is explored in Hazel Smith, 'Bad, mad, sad or rational actor? Why the "securitization" paradigm makes for poor policy analysis of north Korea', *International Affairs*, vol. 76, no. 1, 2000, pp. 111–32.
- 19 Andrew Selth, *Burma and the threat of invasion: regime fantasy or strategic reality?*, Regional Outlook No. 17 (Brisbane: Griffith Asia Institute, Griffith University, 2008), at <a href="http://www.griffith.edu.au/business-commerce/griffith-asia-institute/pdf/Andrew-Selth-Regional-Outlook-17v2.pdf">http://www.griffith.edu.au/business-commerce/griffith-asia-institute/pdf/Andrew-Selth-Regional-Outlook-17v2.pdf</a>.
- 20 D.I. Steinberg, *Burma: The State of Myanmar* (Washington DC: Georgetown University Press, 2001), pp. 290–3.
- 21 See, for example, Romesh Ratnesar, 'Is it time to invade Burma?', *Time*, 10 May 2008, at <a href="http://www.time.com/time/world/article/0,8599">http://www.time.com/time/world/article/0,8599</a>, 1739053,00.html>. This issue is discussed more broadly in A.J. Bellamy and Catherine Drummond, 'The responsibility to protect in Southeast Asia: between non-interference and sovereignty as responsibility', *The Pacific Review*, vol. 24, no. 2, May 2011, pp. 179-200.
- 22 'Burma cyclone', Australian Broadcasting Corporation, *Behind the News*, 13 May 2008, at <a href="http://www.abcscience.net.au/btn/story/s2241750.htm">http://www.abcscience.net.au/btn/story/s2241750.htm</a>.
- 23 'Get tough with Burma, says Clegg', *BBC News*, 9 May 2008, at <a href="http://news.bbc.co.uk/2/hi/uk\_news/politics/7392493.stm">http://news.bbc.co.uk/2/hi/uk\_news/politics/7392493.stm</a>. See also Andrew Selth, 'Even paranoids have enemies: Cyclone Nargis and Burma's fears of invasion', *Contemporary Southeast Asia*, vol. 30, no. 3, December 2008, pp. 379-402.
- Andrew Selth, *Burma's armed forces: looking down the barrel*, Regional Outlook No. 21 (Brisbane: Griffith Asia Institute, Griffith University, 2009).
- See, for example, Andrew Selth, 'Burma in a changing world: through a glass darkly', AQ: Journal of Contemporary Analysis, vol. 75, no. 4, July-August 2003, pp. 15-21.
- U Nu, speech delivered in Parliament, 5 September 1950, in U Nu, *From Peace to Stability: Selected Speeches* (Government of Burma, Rangoon, 1951), pp. 95-105.
- 27 'Chemical and biological weapons status at a glance', *Arms Control Association*, at <a href="http://www.armscontrol.org/factsheets/cbwprolif">http://www.armscontrol.org/factsheets/cbwprolif</a>.
- Pak Shun Ng, From 'poisonous shrimp' to 'porcupine': an analysis of Singapore's defence posture change in the early 1980s, Working Paper No. 397 (Canberra: Strategic and Defence Studies Centre, Australian National University, 2005).
- 29 See, for example, 'Indonesia', Federation of American Scientists, *Intelligence Resource Program*, at <a href="http://www.fas.org/irp/threat/missile/indones.htm">http://www.fas.org/irp/threat/missile/indones.htm</a>; and 'Russia's Iskander-E missile system sees strong foreign demand', *RiaNovosti*, 1 October 2010, at <a href="http://en.rian.ru/russia/20081001/117366006.html">http://en.rian.ru/russia/20081001/117366006.html</a>.
- J.S. Bermudez, *A history of ballistic missile development in the DPRK*, Occasional Paper No. 2 (Monterey: Centre for Non-Proliferation Studies, Monterey Institute of International Studies, 1999), at <a href="http://cns.miis.edu/opapers/op2/op2.pdf">http://cns.miis.edu/opapers/op2/op2.pdf</a>>.

- 31 See, for example, Andrew Selth, 'Burma and North Korea: Smoke or fire?', *Policy Analysis*, No. 47 (Canberra: Australian Strategic Policy Institute, 24 August 2009), at <a href="http://www.aspi.org.au/publications/publicationlist.aspx?">http://www.aspi.org.au/publications/publicationlist.aspx?</a> pubtype=9>.
- 32 Hamish McDonald, 'Revealed: Burma's nuclear bombshell', *Sydney Morning Herald*, 1 August 2009, at <a href="http://www.smh.com.au/articles/2009/07/31/1248977">http://www.smh.com.au/articles/2009/07/31/1248977</a> 200181.html>; and Dan Flitton, 'Burma's nuclear secrets', *Sydney Morning Herald*, 1 August 2009, at <a href="http://www.smh.com.au/news/world/burma8217s-nuclear-secrets/2009/07/31/1248977193933.html?page=fullpage#contentSwap2>.
- 33 Interview with a senior Rangoon-based Western diplomat, Singapore, July 2006.
- Bertil Lintner, quoting a Bangkok-based Western diplomat, in 'Myanmar and North Korea share a tunnel vision', *Asia Times Online*, 19 July 2006, at <a href="http://www.atimes.com/atimes/SoutheastAsia/HG19Ae01.html">http://www.atimes.com/atimes/SoutheastAsia/HG19Ae01.html</a>.
- 35 'The US-North Korean agreed framework at a glance', *Arms Control Association*, at <a href="http://www.armscontrol.org/factsheets/agreedframework">http://www.armscontrol.org/factsheets/agreedframework</a>>.
- 36 'Background note: North Korea', US Department of State, Washington DC, 31 October 2011, at <a href="http://www.state.gov/r/pa/ei/bqn/2792.htm">http://www.state.gov/r/pa/ei/bqn/2792.htm</a>.
- 37 See, for example, D.E. Sanger, 'US said to turn back North Korea missile shipment', New York Times, 12 June 2011, at <a href="http://www.nytimes.com/2011/06/13/">http://www.nytimes.com/2011/06/13/</a> world/asia/13missile.html>; Min Lwin and Wai Moe, 'More North Korean rockets reported in Burma', The Irrawaddy, 24 June 2010, at <a href="http://www.irrawaddy.org/article.php?art\_id=18799">http://www.irrawaddy.org/article.php?art\_id=18799</a>; and Mungpi, 'North Korean vessel exposes Pyongyang-Naypyitaw axis', Mizzima News, 22 June 2009, at <a href="http://www.mizzima.com/news/regional/2340-north-korean-vessel-exposes-pyongyang-naypyitaw-axis.html">http://www.mizzima.com/news/regional/2340-north-korean-vessel-exposes-pyongyang-naypyitaw-axis.html</a>.
- 38 David Albright, 'South Africa and the affordable bomb', *Bulletin of the Atomic Scientists*, July/August 1994, pp. 37-47.
- 39 Albright, 'South Africa and the affordable bomb', p. 38.
- Sai Thein Win, 'My name is Sai Thein Win', *Democratic Voice of Burma*, 21 October 2011, at <a href="http://www.dvb.no/analysis/my-name-is-sai-thein-win/18253">http://www.dvb.no/analysis/my-name-is-sai-thein-win/18253</a>>.
- 41 It is believed that, before 2003, Libya possessed secret programs to develop nuclear, chemical and biological weapons and their delivery systems. See, for example, 'Libya profile', NTI, April 2011, at <a href="http://www.nti.org/e\_research/profiles/libya/index.html">http://www.nti.org/e\_research/profiles/libya/index.html</a>.
- During the rebellion which overthrew him, it was revealed that Gaddafi had in fact retained some Scud missiles and chemical weapons.
- The main reason for South Africa's decision to give up its nuclear weapons seems to have been the impending transfer of power to the African National Congress.
- P.R. Dettman, *India Changes Course: Golden Jubilee to Millennium* (Westport: Praeger, 2001), pp. 37-46.
- 45 D.I. Steinberg. *Burma/Myanmar: What Everyone Needs to Know* (Oxford: Oxford University Press, 2010), p. 77.
- 46 General Ne Win effectively ran Burma from 1962 to 1988, and possibly for a number of years beyond that. General Saw Maung was the country's (nominal) paramount ruler from 1988 until he was replaced by Senior General Than Shwe in 1992. Than Shwe apparently retired in early 2011, when power was formally transferred to the new hybrid civilian-military government, but he could probably still influence major decisions if he wished to.
- 47 J.E.C. Hymans, *The Psychology of Nuclear Proliferation: Identity, Emotions, and Foreign Policy* (Cambridge: Cambridge University Press, 2006), pp. 16ff.
- 48 K.A. Lieber, Review of: *The Psychology of Nuclear Proliferation*, in *The Journal of Politics*, vol. 69, no. 1, 2007, pp. 254–6.
- 49 See, for example, Diane Zahler, *Than Shwe's Burma* (Minneapolis: Twenty-First Century Books, 2010), passim; and David Wallechinsky, *Tyrants: The World's 20 Worst Living Dictators* (New York: Regan, 2006), pp. 53–74.

- 50 Benedict Rogers, *Than Shwe: Unmasking Burma's Tyrant* (Chiang Mai: Silkworm Books, 2010), pp. 142–6.
- Rogers, *Than Shwe*, pp. 166-74. See also Andrew Selth, 'Burma's "superstitious" leaders', *The Interpreter*, 22 October 2009, at <a href="http://www.lowyinterpreter.org/post/2009/10/22/Burmas-superstitious-leaders.aspx">http://www.lowyinterpreter.org/post/2009/10/22/Burmas-superstitious-leaders.aspx</a>.
- 52 'Dr Strangelove or: How I Learned to Stop Worrying and Love the Bomb' (1964), directed by Stanley Kubrick, *Internet Movie Database*, at <a href="http://www.imdb.com/title/tt0057012/">http://www.imdb.com/title/tt0057012/</a>>.
- 53 Farmer, McDonnell and Roesler, *Reducing the Risk of Nuclear Weapons Proliferation to Burma.*
- See, for example, W.C. Potter, 'The NPT and the sources of nuclear restraint', *Daedalus*, vol. 139, no. 1, Winter 2010, pp. 68-81.
- See, for example, Peter Hayes and Chung-in Moon, 'Park Chung-Hee, the CIA and the bomb', *Global Asia*, 19 September 2011, at <a href="http://www.globalasia.org/V6N3\_Fall\_2011/Peter\_Hayes&Chung-in\_Moon.html">http://www.globalasia.org/V6N3\_Fall\_2011/Peter\_Hayes&Chung-in\_Moon.html</a>.
- 56 Sai Thein Win, 'My name is Sai Thein Win'.
- 57 Bertil Lintner, 'Burma joins the nuclear club', Far Eastern Economic Review, 27 December 2001–3 January 2002, p. 26; and Aung Zaw, 'The history of Burma's nuclear ambitions', Bangkok Post, 9 August 2009, at <a href="http://www.bangkok.post.com/news/investigation/21765/the-history-of-burma-s-nuclear-ambitions">http://www.bangkok.post.com/news/investigation/21765/the-history-of-burma-s-nuclear-ambitions</a>.
- 58 Statement by HE U Wunna Maung Lwin, Ambassador/Permanent Representative of the Union of Myanmar, in the General Debate of the First Committee of the 65<sup>th</sup> Session of the United Nations General Assembly, New York, 8 October 2010, at <a href="http://www.unrcpd.org.np/uploads/country\_flags/documents/Myanmar,%20Amb\_20101021103522.pdf">http://www.unrcpd.org.np/uploads/country\_flags/documents/Myanmar,%20Amb\_20101021103522.pdf</a>.
- Andrew Selth, *Burma and nuclear proliferation: policies and perceptions*, Regional Outlook No. 12 (Brisbane: Griffith Asia Institute, Griffith University, 2007).
- 60 See, for example, Roland Watson, 'Nuclear proliferation and Burma: the hidden connection', *Dictator Watch*, at <a href="http://www.dictatorwatch.org/articles/burmanuclear.html">http://www.dictatorwatch.org/articles/burmanuclear.html</a>; and Arun Bhattacharjee, 'India frets over Yangon-Pyongyang deal', *Asia Times Online*, 4 June 2004, at <a href="http://www.atimes.com/atimes/South\_Asia/FF04Df03.html">http://www.atimes.com/atimes/South\_Asia/FF04Df03.html</a>.
- 61 See, for example, R.S.N. Singh, 'Myanmar going nuclear', *Indian Defence Review*, vol. 24, no. 4, October-December 2009, at <a href="http://www.indiandefencereview.com/geopolitics/Myanmar-going-Nuclear.html">http://www.indiandefencereview.com/geopolitics/Myanmar-going-Nuclear.html</a>; 'Neighbours' envy', *NewsInsight.net*, 27 December 2003, at <a href="http://www.indiareacts.com/fulldebate2.asp?recno=742">http://www.indiareacts.com/fulldebate2.asp?recno=742</a>; and 'N. Korea ballistic missiles for Burma likely', *NewsInsight.net*, 9 May 2007, at <a href="http://www.newsinsight.net/nati2.asp?recno=2363">http://www.newsinsight.net/nati2.asp?recno=2363</a>>.
- Andrew Selth, 'Burma: If not nukes, what about missiles?', *The Interpreter*, 11 January 2010, at <a href="http://www.lowyinterpreter.org/post/2010/01/11/Burma-lf-not-nukes-what-about-missiles.aspx">http://www.lowyinterpreter.org/post/2010/01/11/Burma-lf-not-nukes-what-about-missiles.aspx</a>>.
- 63 See, for example, 'Fears mount over chemical weapons use', *Democratic Voice of Burma*, 8 June 2011, at <a href="http://www.dvb.no/news/fears-mount-over-chemical-weapons-use/16018">http://www.dvb.no/news/fears-mount-over-chemical-weapons-use/16018</a>.
- It is believed that Burma built a pilot mustard gas plant in the early 1980s, but it appears to have been closed down a few years later, following representations from the US. There was no sign at the time that any CW had been produced, tested, weaponised or deployed. Andrew Selth, *Burma's Armed Forces: Power Without Glory* (Norwalk: EastBridge, 2002), pp. 233–52. Citing US intelligence reports, one website has claimed that Burma did not abandon its CW program until 1993. See 'Myanmar special weapons', *Global Security.org*, at <a href="http://www.globalsecurity.org/wmd/world/myanmar/index.html">http://www.globalsecurity.org/wmd/world/myanmar/index.html</a>.
- 65 'Blazing Saddles' (1974), directed by Mel Brooks, *Internet Movie Database*, at <a href="http://www.imdb.com/title/tt0071230/">http://www.imdb.com/title/tt0071230/</a>>.

- See, for example, David Albright and Paul Brannan, 'The North Korean plutonium stock, February 2007', *Institute for Science and International Security*, 20 February 2007, at <a href="http://www.isis-online.org/publications/dprk/DPRK">http://www.isis-online.org/publications/dprk/DPRK</a> plutoniumFEB.pdf>.
- According to the 2010 DVB report, which was based largely on Sai Thein Win's testimony, work on Burma's nascent nuclear program has been rather disjointed, and marked by a shortage of both resources and expertise. There are also suggestions of poor management and a lack of coordination, if not outright incompetence. See Andrew Selth, 'Does Burma have a WMD program?', *The Interpreter*, 7 June 2010, at <a href="http://www.lowyinterpreter.org/post/2010/06/07/Does-Burma-have-a-WMD-program.aspx">http://www.lowyinterpreter.org/post/2010/06/07/Does-Burma-have-a-WMD-program.aspx</a>.
- Samuel Blythe, 'Myanmar's junta fears US invasion', *Asia Times Online*, 28 April 2006, at <a href="http://www.atimes.com/atimes/Southeast\_Asia/HD28Ae03.html">http://www.atimes.com/atimes/Southeast\_Asia/HD28Ae03.html</a>.
- 69 P.M. Handley, *The King Never Smiles: A Biography of Thailand's Bhumibol Adulyadej* (New Haven: Yale University Press, 2006), p. 374.
- 70 Selth, *Burma and nuclear proliferation*, p. 16.
- 71 Ballistic and cruise missile threat (National Air and Space Intelligence Centre, Wright-Patterson Air Force Base, April 2009), at <a href="http://www.fas.org/programs/ssp/nukes/NASIC2009.pdf">http://www.fas.org/programs/ssp/nukes/NASIC2009.pdf</a>>.
- 72 Confusingly, missile designations, estimated ranges and possible payloads vary from one source to another.
- 73 Selth, *Burma's Armed Forces: Power Without Glory*, p. 246. See also Maung Aung Myoe, *Building the Tatmadaw: Myanmar's Armed Forces since 1988* (Singapore: Institute of Southeast Asian Studies, 2009), p. 110. Reports of M-11 purchases from North Korea can be disregarded. See, for example, 'Myanmar scouting for missiles, N-tech from China, Pak, N. Korea', *Policy Research Group*, 17 May 2010, at <a href="http://policyresearchgroup.com/myanmar-china/741.html">http://policyresearchgroup.com/myanmar-china/741.html</a>.
- See, for example, Aung Zaw, 'Burma's missile dream', *The Irrawaddy*, August 2009 at <a href="http://www.irrawaddy.org/article.php?art\_id=16426">http://www.irrawaddy.org/article.php?art\_id=16426</a>; and Democratic Voice of Burma, at <a href="http://www.dvb.no/burmas-nuclear-ambitions">http://www.dvb.no/burmas-nuclear-ambitions</a>>.
- 75 'Ballistic missiles of the world', *Missilethreat.com*, at <a href="http://www.missilethreat.com/missilesoftheworld/">http://www.missilethreat.com/missilesoftheworld/</a>.
- See 'Report of Shwe Mann's visit to North Korea', *Democratic Voice of Burma*, at <a href="http://www.dvb.no/burmas-nuclear-ambitions/burmas-nuclear-ambitions-military-docs/military-docs/9279">http://www.dvb.no/burmas-nuclear-ambitions/burmas-nuclear-ambitions-military-docs/military-docs/9279</a>.
- Few of the journalists and activists writing about this subject specify the kinds of missiles they are referring to, adding to the confusion often found on this issue. See Andrew Selth, 'Burma and WMD: lost in translation', *The Interpreter*, 19 May 2011, at <a href="http://www.lowyinterpreter.org/post/2011/05/19/Burma-and-WMD-Lost-in-Translation.aspx">http://www.lowyinterpreter.org/post/2011/05/19/Burma-and-WMD-Lost-in-Translation.aspx</a>.
- 78 See, for example, Aung Zaw, 'Burma, North Korea in an unholy military alliance', Bangkok Post, 29 June 2009, at <a href="http://www.bangkokpost.com/opinion/opinion/19323/burma-north-korea-in-an-unholy-military-alliance">http://www.bangkokpost.com/opinion/opinion/19323/burma-north-korea-in-an-unholy-military-alliance</a>. See also 'Report of Shwe Mann's visit to North Korea'.
- Personal communication, 27 November 2011. See also Jeffrey Lewis, 'Pyongyang pig factory', *Arms Control Wonk*, 10 February 2011, at <a href="http://lewis.armscontrolwonk.com/archive/3540/pyongyang-pig-factory">http://lewis.armscontrolwonk.com/archive/3540/pyongyang-pig-factory</a>.
- This suggestion was first made on Evan Williams' documentary film, 'Myanmar's military ambitions', posted by *Al Jazeera* on 6 June 2010 and available at <a href="http://english.aljazeera.net/programmes/general/2010/05/2010531104709">http://english.aljazeera.net/programmes/general/2010/05/2010531104709</a> 90951.html>. It can also be found in Geoffrey Forden, 'Now it can be told: inside BOB', *Arms Control Wonk*, 4 June 2010, at <a href="http://forden.arms.controlwonk.com/archive/2720/now-it-can-be-told-inside-bob">http://forden.arms.controlwonk.com/archive/2720/now-it-can-be-told-inside-bob</a>>. For another reference to Burma's interest in 'long range missiles', see Bertil Lintner, 'Myanmar, North Korea in missile nexus', *Asia Times Online*, 2 March 2011, at <a href="http://www.atimes.com/atimes/Southeast\_Asia/MC02Ae01.html">http://www.atimes.com/atimes/Southeast\_Asia/MC02Ae01.html</a>>.

- 81 The Wikipedia website states that Burma took delivery of 11 Hwasong-6 SRBMs in 2009, but the anonymous contributor of this article gives no sources for this unlikely claim. See <a href="http://en.wikipedia.org/wiki/Hwasong-6">http://en.wikipedia.org/wiki/Hwasong-6</a>.
- Burma has some self-propelled surface-to-air missile (SAM) systems, such as the SA-6 'Gainful', which are sometimes described as being mounted on transporter-erector-launchers.
- 83 Some activists have claimed that Burmese SRBMs have already been stationed near the Thai border, but it is highly unlikely that Naypyidaw has yet deployed any ballistic missiles, even if they have acquired them. See, for example, Roland Watson, 'Additional Burmese missile sites identified', *Dictator Watch*, 3 August 2007, at <a href="http://www.dictatorwatch.org/">http://www.dictatorwatch.org/</a>; and Roland Watson, 'Burma: a threat to international security and peace', *Dictator Watch*, 1 July 2007, at <a href="http://www.dictatorwatch.org/">http://www.dictatorwatch.org/</a>.
- 84 It needs to be said, however, that missiles which use highly volatile liquid fuels pose other kinds of problems.
- Tin Maung Maung Than, 'Myanmar: preoccupation with regime survival, national unity, and stability', in Muthiah Alagappa (ed.), *Asian Security Practice: Material and Ideational Influences* (Stanford: Stanford University Press, 1998), p. 730, note 27. See also Yindee Lertcharoenchok, 'Burmese leader calls Thailand a "true friend", *The Nation*, 13 April 1989.
- See, for example, Dulyapak Preecharushh, *Naypyidaw: The New Capital of Burma* (Bangkok: White Lotus, 2009), pp. 62-8; and Maung Aung Myoe, *The road to Naypyitaw: making sense of the Myanmar government's decision to move its capital*, Working Paper No. 79 (Asia Research Institute, National University o Singapore, November 2006), pp. 6-7, at >http://www.fileden.com/files/2008/1/7/1686483/The%20Road%20to%20Naypyidaw-%20Making% 20Sense%20of%20the%20Myanmar%20Government's%20Decision%20to%20 Move%20its%20Capital.pdf>.
- China has been trying to develop a ballistic missile that has the range and accuracy to hit vessels at sea. However, deployment of such a weapon seems to be some time off, and there is no evidence that Burma is seeking to or indeed could acquire such cutting edge technology. See, for example, Tony Capaccio, 'China has "workable" anti-ship missile design, Pentagon says', *Bloomberg*, 26 August 2011, at <a href="http://www.bloomberg.com/news/2011-08-25/china-has-workable-anti-ship-missile-design-pentagon-says.html">http://www.bloomberg.com/news/2011-08-25/china-has-workable-anti-ship-missile-design-pentagon-says.html</a>>.
- Burma is reported to have C-801 and possibly C-802 anti-ship missiles in its naval inventory. Selth, *Burma's Armed Forces*, p. 193. See also *Jane's Fighting Ships*, 2008-2009 (Coulsdon: Jane's Information Systems, 2009), pp. 525-31.
- 89 See, for example, Catherine Boye, Melissa Hanham and Robert Shaw, 'North Korea and Myanmar: A match for nuclear proliferation?', *Bulletin of the Atomic Scientists*, 27 September 2011, at <a href="http://www.thebulletin.org/web-edition/features/north-korea-and-myanmar-match-nuclear-proliferation">http://www.thebulletin.org/web-edition/features/north-korea-and-myanmar-match-nuclear-proliferation</a>.
- 90 Albeit at a much lower level, Burma's military leaders have employed such tactics in the past. During the 1974 U Thant disturbances, for example, the regime deployed its ageing Comet battle tanks around Rangoon in an effort to intimidate the unarmed protesters. See Andrew Selth, *Death of a Hero: the U Thant disturbances in Burma, December 1974,* Australia-Asia Paper No. 49 (Brisbane: Centre for the Study of Australia-Asia Relations, Griffith University, 1993).
- 91 'Libya conflict: Gaddafi forces "launched Scud missile", *BBC News*, 16 August 2011, at <a href="http://www.bbc.co.uk/news/world-africa-14538670">http://www.bbc.co.uk/news/world-africa-14538670</a>.
- 92 The Toksa is also known as the KN-02. See 'KN-02', *Missilethreat.com*, at <a href="http://www.missilethreat.com/missilesoftheworld/id.191/missile\_detail.asp">http://www.missilethreat.com/missilesoftheworld/id.191/missile\_detail.asp</a>.
- 93 This is the plot in Tom Clancy, *The Sum of All Fears* (London: Harper Collins, 1991).
- 94 For Iran, see for example Mark Landler, 'United States and its allies expand sanctions on Iran', *New York Times*, 21 November 2011, at <a href="http://www.nytimes.com/2011/11/22/world/middleeast/iran-stays-away-from-nuclear-talks.html?scp=3&sq=iran%20nuclear&st=cse">http://www.nytimes.com/2011/11/22/world/middleeast/iran-stays-away-from-nuclear-talks.html?scp=3&sq=iran%20nuclear&st=cse>.

- 95 'Myanmar may have to leave ASEAN if it has a nuclear plant', *MCOT.Net*, 8 August 2009, at <a href="http://enews.mcot.net/view.php?id=11215">http://enews.mcot.net/view.php?id=11215</a>.
- 96 Burma is a signatory to several international instruments opposing the proliferation of nuclear weapons, including the Non-Proliferation Treaty and the Bangkok Treaty.
- 97 'Assistant Secretary Campbell's remarks on visit to Burma', 10 May 2010, *US State Department*, at <a href="http://www.america.gov/st/texttrans-english/2010/May/20100510143632eaifas0.8452417.html">http://www.america.gov/st/texttrans-english/2010/May/20100510143632eaifas0.8452417.html</a>. See also 'Press Statement of Ministry of Foreign Affairs on Myanmar's relations with Democratic People's Republic of Korea', Naypyidaw, 11 June 2010, at <a href="http://www.networkmyanmar.org/images/stories/PDF3/mfa2.pdf">http://www.networkmyanmar.org/images/stories/PDF3/mfa2.pdf</a>.
- 98 See, for example, David Albright, Paul Brannan, Robert Kelley and Andrea Scheel Stricker, 'Burma: a nuclear wannabe: suspicious links to North Korea; high tech procurement and enigmatic facilities', *Institute for Science and International Security*, 28 January 2010, at <a href="http://isis-online.org/isis-reports/detail/burma-a-nuclear-wanabee-suspicious-links-to-north-korea-high-tech-procureme/">http://isis-online.org/isis-reports/detail/burma-a-nuclear-wanabee-suspicious-links-to-north-korea-high-tech-procureme/</a>>.
- 99 Burma and North Korea broke off diplomatic relations in 1983. They were not formally re-established until 2007 but bilateral contacts had resumed well before then. See, for example, Selth, *Burma's North Korean Gambit*, and Aung Lynn Htut, 'The Burma-North Korea axis', *New York Times*, 18 June 2010, at <a href="http://www.nytimes.com/2010/06/19/opinion/19iht-edaung.html">http://www.nytimes.com/2010/06/19/opinion/19iht-edaung.html</a>.
- 100 'Developments in Burma', Testimony of Matthew P. Daley, Deputy Assistant Secretary, Bureau of East Asian and Pacific Affairs, US Department of State, before the House International Relations Committee, Subcommittee on Asia and the Pacific, 25 March 2004, at <a href="http://www.state.gov/p/eap/rls/rm/2004/30789.htm">http://www.state.gov/p/eap/rls/rm/2004/30789.htm</a>.
- 101 Quadrenniel Defense Review: Report (Department of Defence, Washington DC, February 2010) at <a href="http://www.defense.gov/qdr/images/QDR\_as\_of\_12Feb">http://www.defense.gov/qdr/images/QDR\_as\_of\_12Feb</a> 10\_1000.pdf>. See also Andrew Selth, 'Burma, North Korea and US policy', *The Interpreter*, 18 May 2010, at <a href="http://www.lowyinterpreter.org/post/2010/05/18/Burma-North-Korea-and-US-policy.aspx">http://www.lowyinterpreter.org/post/2010/05/18/Burma-North-Korea-and-US-policy.aspx</a>.
- 102 Barak Obama, 'US President Barak Obama's speech to parliament', *The Australian*, 17 November 2011, at <a href="http://www.theaustralian.com.au/national-affairs/obama-in-australia/obamas-speech-to-parliament/story-fnb0o39u-1226197973237">http://www.theaustralian.com.au/national-affairs/obama-in-australia/obamas-speech-to-parliament/story-fnb0o39u-1226197973237</a>.
- 103 The Clinton Administration believed that Sudan was using the facility for VX nerve agent production. See Michael Barletta, 'Chemical weapons in the Sudan: allegations and evidence', *Non-Proliferation Review*, vol. 6, no. 1, Fall 1998, pp. 115–36, at <a href="http://cns.miis.edu/npr/pdfs/barlet61.pdf">http://cns.miis.edu/npr/pdfs/barlet61.pdf</a>>.
- 104 See, for example, Saw Yan Naing, 'Army officers held over publication of sensitive material', *The Irrawaddy*, 16 July 2009, at <a href="http://www.irrawaddy.org/article.php?art\_id=16341">http://www.irrawaddy.org/article.php?art\_id=16341</a>; and 'Two receive death sentences for information leak', *The Irrawaddy*, 7 January 2010, at <a href="http://www.irrawaddy.org/article.php?art\_id=17542">http://www.irrawaddy.org/article.php?art\_id=17542</a>>. See also 'Press statement of Ministry of Foreign Affairs on unfounded allegations against Myanmar regarding nuclear programme', Naypyidaw, 11 June 2010, at <a href="http://www.networkmyanmar.org/images/stories/PDF10/mfa1.pdf">http://www.networkmyanmar.org/images/stories/PDF10/mfa1.pdf</a>>.
- 105 Burma rejoined the NAM in 1992, when the SLORC was trying to strengthen its international position in the face of increased Western criticism and sanctions.
- 106 See, for example, Andrew Selth, *Civil-military relations in Burma: portents, predictions and possibilities*, Regional Outlook No. 25 (Brisbane: Griffith Asia Institute, Griffith University, 2010).
- 107 Andrew Selth, 'Thein Sein as Myanmar's Gorbachev', *Asia Times Online*, 19 October 2011, at <a href="http://www.atimes.com/atimes/Southeast">http://www.atimes.com/atimes/Southeast</a> Asia/MJ19Ae01.html>.
- 108 Andrew Selth, 'Burma and ASEAN's seat of yearning', *The Interpreter*, 14 September 2011, at <a href="http://lowyinterpreter.org/post/2011/09/14/Burma-and-ASEANs-seat-of-yearning.aspx">http://lowyinterpreter.org/post/2011/09/14/Burma-and-ASEANs-seat-of-yearning.aspx</a>.

- 109 Myanmar: major reform underway, Asia Briefing No. 127 (Brussels: International Crisis Group, 22 September 2011) at <a href="http://www.crisisgroup.org/en/regions/asia/south-east-asia/burma-myanmar/B127-myanmar-major-reform-underway.aspx">http://www.crisisgroup.org/en/regions/asia/south-east-asia/burma-myanmar/B127-myanmar-major-reform-underway.aspx</a>.
- 110 See, for example, Bertil Lintner, 'Burmese change aplenty but it's only skin deep', *The Australian*, 17 October 2011, at <a href="http://www.theaustralian.com.au/news/world/burmese-change-aplenty-but-its-only-skin-deep/story-e6frg6ux-1226167961805">http://www.theaustralian.com.au/news/world/burmese-change-aplenty-but-its-only-skin-deep/story-e6frg6ux-1226167961805</a>; and David Scott Mathieson, 'Burma's new President is no moderate', *The Irrawaddy*, 10 May 2011, at <a href="http://www.irrawaddy.org/article.php?art\_id=21262">http://www.irrawaddy.org/article.php?art\_id=21262</a>.
- 111 Office of the Press Secretary, The White House, 'Briefing on Burma by senior administration officials', Bali, 18 November 2011, at <a href="http://www.whitehouse.gov/the-press-office/2011/11/18/briefing-burma-senior-administration-officials">http://www.whitehouse.gov/the-press-office/2011/11/18/briefing-burma-senior-administration-officials</a>. See also 'We've reached a tipping point in Burma', *The Irrawaddy*, 21 November 2011, at <a href="http://www.irrawaddy.org/article.php">http://www.irrawaddy.org/article.php</a>? art id=22504>.
- 112 Manpreet Sethi, 'Burma's nuclear olive branch', *The Diplomat*, 17 October 2011, at <a href="http://the-diplomat.com/flashpoints-blog/2011/10/17/burmas-nuclear-olive-branch/">http://the-diplomat.com/flashpoints-blog/2011/10/17/burmas-nuclear-olive-branch/</a>>.
- 113 Fredrik Dahl, 'Myanmar in "no position" to build atomic arms', *Reuters*, 22 September 2011, at <a href="http://in.reuters.com/article/2011/09/21/idlNIndia-59477020110921">http://in.reuters.com/article/2011/09/21/idlNIndia-59477020110921</a>.
- 114 'Second regular session of first Pyitthu Hluttaw', *New Light of Myanmar*, 24 September 2011, at <a href="http://www.networkmyanmar.org/images/stories/PDF10/249newsn.pdf">http://www.networkmyanmar.org/images/stories/PDF10/249newsn.pdf</a>.
- 115 'Press Statement of Ministry of Foreign Affairs on unfounded allegations against Myanmar regarding nuclear programme', *New Light of Myanmar*, 12 June 2010, at <a href="http://www.networkmyanmar.org/images/stories/PDF3/126newsna.pdf">http://www.networkmyanmar.org/images/stories/PDF3/126newsna.pdf</a>. See also David Albright and Andrea Stricker, 'Myanmar says halted nuclear research program: verification critical', *Institute for Science and International Security*, Washington DC, 3 June 2011, at <a href="http://isis-online.org/isis-reports/detail/myanmar-says-halted-nuclear-research-program-verification-critical/">http://isis-online.org/isis-reports/detail/myanmar-says-halted-nuclear-research-program-verification-critical/">http://isis-online.org/isis-reports/detail/myanmar-says-halted-nuclear-research-program-verification-critical/</a>; Fredrik Dahl, 'Myanmar tells UN body it will never seek atom bombs', *Reuters*, 23 September 2010, at <a href="http://in.reuters.com/article/2010/09/23/idlNlndia-51690320100923?rpc=401&feedType=RSS&feedName=world">http://in.reuters.com/article/2010/09/23/idlNlndia-51690320100923?rpc=401&feedType=RSS&feedName=world</a> News&rpc=40>; and Ek Madra, 'Myanmar says nuclear ambitions are peaceful Japan', *The Star Online*, 3 October 2009, at <a href="http://thestar.com.my/news/story.asp?file=/2009/10/4/worldupdates/2009-10-03T201921Z\_01\_NOOTR\_RTRMDNC\_0\_-428901-1&sec=Worldupdates>"http://thestar.com.my/news/story.asp?file=/2009/10/4/worldupdates/2009-10-03T201921Z\_01\_NOOTR\_RTRMDNC\_0\_-428901-1&sec=Worldupdates>"http://in.reuters.com/article/2010/09/2010/4/worldupdates/2009-10-03T201921Z\_01\_NOOTR\_RTRMDNC\_0\_-428901-1&sec=Worldupdates>"http://thestar.com/article/2010/09/2010/4/worldupdates/2009-10-03T201921Z\_01\_NOOTR\_RTRMDNC\_0\_-428901-1&sec=Worldupdates>"http://thestar.com/article/2010/nootra-pt-1/2010/10/4/worldupdates/2009-10-03T201921Z\_01\_000TR
- 116 Ashish Kumar Ken, 'IAEA seeks permission from Myanmar for nuke inspectors to visit', *Washington Times*, 13 January 2011, at <a href="http://www.washingtontimes.com/news/2011/jan/13/iaea-seeks-permission-from-myanmar-for-nuke-inspec/">http://www.washingtontimes.com/news/2011/jan/13/iaea-seeks-permission-from-myanmar-for-nuke-inspec/</a>. See also 'IAEA seeks "facts" from Myanmar', *The News*, 16 January 2011, at <a href="http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=25972&Cat=1&dt=1/16/2011>">http://www.thenews.com.pk/TodaysPrint
- 117 Treaty on the Southeast Asia Nuclear Weapons Free Zone (Bangkok Treaty), at <a href="http://disarmament.un.org/treatystatus.nsf/44e6eeabc9436b78852568770">http://disarmament.un.org/treatystatus.nsf/44e6eeabc9436b78852568770078d9c0/3d4956d9383d92d0852568770079dda0?OpenDocument>.
- 118 Personal communication from Rangoon, April 2011.