

complex open system whose several, even many, parts always function holistically. Technology, or military organisation, or operational ideas, cannot perform in isolation. Each acts upon and through the others, and they all act together in the currency of more (or less) military effectiveness. In its turn, that military effectiveness translates into more (or less) strategic effectiveness. Hence the relevance of Dumas *père*'s 'all for one, and one for all'. Clausewitz writes that '[i]n war more than in any other subject we must begin by looking at the nature of the whole, for here more than elsewhere the part and the whole must always be thought of together.'<sup>10</sup>

So much of this analysis is inherently contestable that it is important not to miss such a bedrock of reliable knowledge as is available to provide a solid foundation for theory. The structure and basic functioning of strategy yields just such bedrock. Vital questions need to be posed and answered concerning the relations possible among strategy's different aspects, but the identity of those aspects and the nature of their interconnections fortunately are not contentious. Alas, the truly difficult task remains. The securing of a conceptual grip upon the nature, structure, and functioning of strategy is only akin to establishing base camp for an expedition up a high mountain. This conceptual base camp literally is essential, in that if it is wrongly placed and poorly equipped and provisioned, the expedition must fail. However, this base camp of explanation of the nature and working of strategy is strictly an enabler for the serious assault on some of strategic history's elusive peaks in the chapters that follow.

## *RMA AS STRATEGIC BEHAVIOUR*

Strategy has many facets, each of which, though distinguishable, is penetrated by the practical implications of the others. Moreover, the many-faceted vehicle of strategy moves as a single entity, regardless of the complexity, even the chaotically performing complexity, of its structure and functioning. It is a minor challenge to understand the nature and working of strategy. It is a major challenge to exploit that understanding in order to explain how, why, and with what plausible consequences actual historical episodes occurred as they did. Clausewitz warns that although war has a permanent, if complex, nature, it 'is more than a true chameleon that slightly adapts its characteristics to the given case'.<sup>11</sup> Every conflict is different. War's enduring nature shows unique characteristics from historical case to case.

Of what does strategy consist? What are its facets, aspects, elements, or dimensions (these terms are synonymous)? How do the dimensions of strategy, individually and synergistically, relate to the theory and practice of RMA? Answers to these questions comprise the core of the methodology applied in

**Chapters 6–8.** The paragraphs immediately below expose the reasoning that is the basis for that methodology.

Every historical passage of strategy is unique. But every strategic episode is also the same in its structure and functioning. The medical classic, *Gray's Anatomy*, explains our common human corporeality, an explanation entirely consistent with the fact of apparently infinite human individuality. Modern research in physical anthropology reveals that even the long-popular proposition that humankind comprises several distinctive races is scientifically untenable. There is a greater range of genetic variation within so-called races than there is between them. By analogy, we should beware lest scholarly attention to the apparent distinctiveness of some kinds of wars or other forms of strategic behaviour obscure the underlying unity of all strategic phenomena.

Strategy's anatomy can be variously dissected, depending upon the purpose of the exercise. On the principle of 'horses for courses', this analysis prefers an unusually granulated approach. The case studies in the next three chapters are developed by a methodological toolkit which favours no fewer than 17 dimensions of strategy, as contrasted with Carl von Clausewitz's five, and Michael Howard's four (see below).<sup>12</sup>

The dimensions of strategy are also the dimensions of an RMA. The conduct of an RMA, pre-planned or not, is an exercise in strategy; it is strategic behaviour. It is correct to argue in company with Krepinevich and many others, that an RMA entails 'the four elements: technological change, systems development, operational innovation, and organizational adaptation'. However, it is no less true to argue that the practice of RMA involves action concerning all of strategy's dimensions. RMA has political meaning; it may use or challenge cultural preferences; it must cope with intelligent and unique adversaries; and it must occur over time—to cite only four of the dimensions.

When securely nested in a holistic and persuasive theory of strategy writ large, RMA theory is protected against the inadvertent ascription of out-of-context magical qualities. The point is that for an RMA to work, it has to, indeed can only, work as strategy. If it is unsound to tie strategic excellence to an allegedly new and master technology or wonder weapon, to a genius in high command, or to some deeply cunning tactical or operational idea—in all but isolation—so must it be unsound to harbour great expectations of RMAs propelled thus narrowly.<sup>13</sup>

Clausewitz wisely warns us against attempting 'to develop our understanding of strategy by analysing these factors [his five elements of strategy, see below] in isolation, since they are usually interconnected in each military action in manifold and intricate ways'.<sup>14</sup> That admonition is repeated most usefully by Michael I. Handel when he notes, in commentary upon Clausewitz's holism, that in war 'unlike in the natural sciences, different variables or factors cannot be isolated and studied independently'.<sup>15</sup> The truth

in that argument translates as the point that all forms and characters of military behaviour register on the scale of military effectiveness, which, in its turn, scores on the scale of strategic effectiveness (even if in a nonlinear way). Nonetheless, Clausewitz and Handel need to be read critically. Despite the fact that there is a necessary unity to strategy and war, and even though ‘the parts [of war] can only be studied in the context of the whole, as a “*gestalt*” (or synergy)’,<sup>16</sup> the ‘parts’—elements or dimensions—can and must be studied. Without affronting the holistic nature of strategy (and war), and without denying the highly dynamic synergies that operate in its complex structure, the leading edge of my analysis is precisely the approach concerning which Clausewitz was so emphatic in his warning.

Every historical RMA comprises identical categories of ingredients; these are the standard dimensions of strategy. But each RMA is keyed to novelty on one or several in particular among those dimensions. For example, the Napoleonic RMA was triggered by changes in French society, by the political meaning of those changes, and then by the military implications of such changes, when exploited by a commander with extraordinary gifts.<sup>17</sup> That RMA obliged France’s enemies to respond as best they were able with a focus on those dimensions on which they could improve, and which offered a fair prospect of strategic success. The patterns of response comprised a mixture of symmetrical and asymmetrical behaviour, both generically on the adversary dimension of strategy, and in detail on the political, geographical, economic, temporal, and so forth dimensions. Although each of strategy’s dimensions influences every other one, arguably implying a chaotic complexity overall, still it is sensible to seek relative excellence where best one can so as to structure conflict with favourable terms and conditions.

## *A MATTER OF DIMENSION*

Clausewitz recommends five broad ‘elements of strategy’: ‘moral, physical, mathematical, geographical, and statistical’.

The first type [‘moral’] covers everything that is created by intellectual and psychological qualities and influences; the second [‘physical’] consists of the size of the armed forces, their composition, armament and so forth; the third [‘mathematical’] includes the angle of lines of operation, the

convergent and divergent movements wherever geometry enters into their calculation; the fourth ['geographical'] comprises the influence of terrain, such as commanding positions, mountains, rivers, woods, and roads; and finally, the fifth [statistical] covers support and maintenance.<sup>18</sup>

It would be a gross understatement to say that Clausewitz's approach, with its five broad elements of strategy, is both insightful and useful. That granted, and for all the elegance in its apparent simplicity, in my view it is too parsimonious to be useful enough for this enquiry. That judgement holds even if one superimposes upon the five elements his 'remarkable trinity' of passion, chance, and reason, which he associated respectively primarily with 'the people', 'the commander and his army', and the 'government'.<sup>19</sup> That trinity approximates identification of social, military, and political dimensions of war.

As an editor and translator of *On War*, Michael Howard applied a variant of Clausewitz's structural analysis in his seminal 1979 article, 'The Forgotten Dimensions of Strategy'. Howard argued persuasively that strategy's logistical, operational, and social dimensions had been seriously neglected by recent strategists