



The ‘shifting’ nature of theory in International Relations: why the future of the discipline is its Waltzian past

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Within the discipline of International Relations (IR), ‘new’ conceptions of theory, specifically those subscribing to, on the one hand, an inductivist and empiricist conception of theory, and, on the other hand, a conception of theory as a loose collection of variables, have ostensibly challenged the conception of theory as advanced by Kenneth Waltz. The latter’s conception of theory, deeply embedded within the philosophy-of-science literature, illustrates that the essential qualities of theories are wholly irreconcilable with the conception(s) of theory as advanced by current scholars within the discipline. Moreover, despite the commonplace assumption that scholars have transcended Waltz’s work, scholars continue, however, to err by misinterpreting him on the nature of theory and by failing to heed the explanatory benefits emanating from his conception of theory. Contra the current vogue in IR, then, we argue that the anti-Waltzian conception(s) of theory is neither particularly new nor does it bode well for the explanatory ideals of the discipline.

For better or worse, and mostly for the latter, the study and conduct of international politics continue to be marked by a high degree of repetition of behaviour, logic of inquiry, and the same kinds of criticisms and theoretical errors. The structural realist Kenneth Waltz (1979: 18) already pointed out in 1979 that “nothing seems to accumulate, not even criticism”. Although predating Waltz by some years, the American theologian and political commentator, Reinhold Niebuhr, raised a similar concern. Lamenting the undue emphasis by moralists and educators on the possibilities of reason in social and political life, he notes that, while the force of the winds of power may fluctuate according to season, the winds themselves endure nonetheless (Niebuhr 1960: xxxv). For both Waltz and Niebuhr, then, an inescapable continuity is part and parcel of the everyday business of international politics. It should be stated, moreover, that it is not overly difficult to find in the world of the present, as of the more recent past, comparable evidence in support of this position (see Coetzee 2013: 300). Yet, notwithstanding this, we have been led to believe that the international-political world of the present or, still broader, the international-political world post-1945 is a qualitatively different one. In this conception of international politics, certain well-entrenched continuities – most notably, the waging of war by the great powers – have ceased to exist. Although the merits of, and explanations for this statement are debatable, it is a concern that does not fall within the scope of this article. At the same time, and far more consequential to this contribution, scholars working within the discipline of International Politics (or, in still broader terms, IR) have credulously accepted the notion that, following Waltz’s landmark publication of *Theory of international politics* (1979), the discipline has undergone significant strides towards expanding both the corpus of disciplinary theories and the very conception of theory itself. It is then assumed that the proliferation of theories of international politics and the emergence of alternative conceptions of theory warrant saying that a significant break from the past has occurred. One wonders, however, how much of this is truth and how much is mere disciplinary myth? In particular, and as this contribution endeavours to illustrate, the belief that recent scholarship on theory has fostered new and differing conceptions of theory is, to a large extent, a false one. We shall also come to see that, contrary to conventional disciplinary understanding, the discipline has not in any significant measure departed from Waltz’s theory of theory. Departing from something, especially if interpreted in an academic sense, requires first and foremost understanding of the point from which one is departing. Instead, as Ole Wæver (2009: 217, 2012: 10) has illustrated, the conception of theory undergirding Waltz’s structural realist theory of international politics continues to be marred by misinterpretation. This is the case for both adherents and critics of Waltz’s work (Wæver 2012: 10). Insofar, therefore, as the discipline has ostensibly departed

from Waltz's conception of theory, it has accordingly done so on the basis of a misinterpretation of its point of departure.

The argument advanced in this contribution is underscored by two essential premises. The first of these holds that there exists a discernible continuity in the conception of theory prevalent within the discipline and that this conception stands in marked contrast to the conception of theory underpinning Waltz's theory of theory. In essence, no grand shift in the discipline's conception of theory following Waltz's publication of *Theory of International Politics* is discernible – the new is essentially a continuation of the old. The second premise takes the form of recognising that the discipline's failure, now as then, to fully understand the distinctive nature and explanatory benefits of Waltz's conception of theory has deep implications for its explanatory ideals. It is with these premises in mind that the specific aims of the article are advanced, namely to: (i) provide an explication of the nature and origins of Waltz's theory of theory and, in particular, his indebtedness to a particular (philosophy-of-science) conception of theory; (ii) illustrate the explanatory benefits to be gleaned from this conception of theory for both the discipline of IR and other germane disciplines; (iii) provide an explication and critique of the nature and state of theorising in international politics by probing the basic continuities that persist across disciplinary epochs in respect of the nature of theory and, as an extension, the anti-Waltzian conception of theory undergirding disciplinary praxis, and (iv) by drawing on the theorisation of real-world events (notably, the perceived absence of war between (liberal) democratic states, to wit, the democratic peace phenomenon), to illustrate the detrimental effects to be gleaned from the failure of scholars to heed the explanatory fruits of the Waltzian conception of theory.

1. The idea of theory in international-political studies

Scholars and practitioners of international politics seem to believe that the best theory is one that is most practical, in other words, most fully representative of, and directly applicable to reality. The move towards equating theory with application or, more concretely, the failure to discern between the distinctive features of a theory and that which falls outside of it, has been a problem that has bedevilled erstwhile and contemporary commentators of international politics. Thus, we have at times heard complaints that our theories fail to be sufficiently inclusive, that in the construction of our theories we ought to take greater care in incorporating more of the world out there (the real world). It is then suggested that the theories we advance "should be just as complex as our evidence suggests" (King, Keohane and Verba, quoted in Waltz 1997: 914, see also Waltz 2004: 2-3). Not only do such beliefs jar with the logic of some of

the most admired theories of the natural *and* social sciences, but they tend to reveal a great deal concerning disciplinary understanding, or more aptly phrased, misunderstanding of the nature of theory. Yet levelling such a blow in respect of the discipline's conception of theory runs the risk of ignoring what appears to be the rapid increase in propositions deemed to be theoretical in nature. Over the past three decades or so, accordingly, we have been witness to the wide-ranging proliferation of theories of international relations¹ and, concomitantly, the encouragement of students – almost by default – to conduct their research efforts within some theoretical framework or other. Moreover, among students of international politics, very little disagreement appears to exist concerning the necessity of theory in making intelligible the world of international politics, with some stressing that such a premise “comes close to being a consensus in the discipline” (Wæver 2010: 315). Thus, Smith (2010: 8) notes that any engagement with, and/or understanding of the world of international politics cannot otherwise but be couched in some theory or other.

The increased recognition of the need for theory in scientific inquiry, and the encouragement that disciplinary praxis should match it, have fostered the belief that international-political studies are exceedingly theoretical. The belief is, to a large extent, a false one, most especially if the term ‘theory’ is meant to denote something extending beyond mere description and, concomitantly, if theory is to be understood in philosophy-of-science terms. The latter conception of theory, deeply ingrained within the thinking of Waltz and to be elaborated on later, is mainly at odds with the conception(s) of theory permeating through the discipline of IR – and all the more so if we focus our attention less on the intentions and rhetoric of scholars and more on their actual conduct (see Wæver 2009 on this matter). This dichotomy, and the problem inherent within it, are neatly captured by considering the following two statements: on the one hand, Fox (1959: xii) argues that the “range of propositions variously described as theoretical is so broad that it would almost seem that any fairly general statement about world politics that is not palpably absurd would qualify. This is perhaps as it should be”. On the other hand, Waltz (2011) contends that “the word ‘theory’ is so loosely used that people begin to think that anything that is not directly empirical or factual must be theory, and that is certainly a misconception”. The divergent views revealed in this instance and their implications for the discipline are far more consequential than meets the eye. For now, it will suffice to say that we

1 This situation can be contrasted with the relative dearth of theories of IR in the 1950s and 1960s. Kaplan (1961: 6) notes, for instance, that the field of IR during this period was in “great demand” of theoretical accounts of the field and that the “theory of international politics may indeed be awaiting its Galilean revolution”.

can and should freely admit that different conceptions of theory abound. It is interesting to note that the situation is not unique to our discipline, neither is it particularly novel. Already in 1959, William T.R. Fox (1959: ix) noted that at least four kinds of theory, to wit, normative, empirical and/or scientific, and rational, could be said to exist. In more recent times, Smith (2010: 9) has noted that the proliferation of theories of IR has coincided with different theories using "the word 'theory' in specific ways". The important point to recognise is, therefore, that it ought not to be the intention of our discipline, or that of this contribution, to impose a rigid formalism on the meaning of the term 'theory'. There is no established procedure currently in existence, neither can there ever be, whereby one conception of theory is deemed to be *the* correct one (Abend 2008: 176, 182, 184). Indeed, in expounding his position on this, Waltz has made his point of departure rather clear:

There are all kinds of theory [...] One can't legislate. People use 'theory' in all sorts of different ways. All I claim is that I do make clear how I use that term. And my usage has a good pedigree in the natural sciences, economics, and much of the philosophy-of-science literature (quoted in Halliday et al. 1998: 384).

What are we saying then? While we cannot legislate on the meaning of theory, we need, however, to be willing to lay bare, and critically investigate, the explanatory achievements of different conceptions of theory – a practice that, save for Waltz's reflection on these matters, receives little if any attention in our discipline. Even if we accept the premise that different theories of IR hold different conceptions of 'theory', we are or ought to be nonetheless pressed to find out how good these conceptions are. In other words, we would like to know how well they compare with the conception of theory as advanced by those individuals who have spent a great deal of time reflecting on such matters. Consequently, this article claims that we need to appreciate the distinctive benefits and fruits (explanatory and otherwise) accruing from a particular conception of theory discernible in much of the philosophy-of-science literature and, by extension, how a great deal of confusion in our discipline stems from the basic failure to grasp the nature of, and Waltz's indebtedness to this philosophy-of-science conception of theory.² Indeed, in respect of the nature of theory, Wæver (2009: 217) notes

2 We should be mindful, however, of overstating the level of consensus within the philosophy of science concerning the nature of theory. Whilst consensus has remained aloof (Nagel 1979: 83, Van Evera 1997: 7), we can note that a great deal of the philosophy-of-science literature, as well as the theory and praxis of eminent (erstwhile and contemporary) natural scientists (see Weinberg 1994), lends credence to the particular conception of theory to be elaborated on in subsequent pages (see Waltz 2009: 501).

that Waltz has been “consistently misinterpreted”, while Waltz (2004: 2) stresses that “[c]onfusion begins with misunderstanding how theories are made and failure to comprehend what they can and cannot do”.³ A similar predicament has, curiously enough, also plagued other disciplines. In sociology, for instance, we are told that the word ‘theory’ is “rife with lexical ambiguities”, with the attendant result being “pseudo-disagreements, conceptual muddles, and even downright miscommunication” (Abend 2008: 184).

The failure to grasp the nature of theory stems from various sources and manifests itself in different ways. One of these sources, perhaps the most basic one, has its roots in the enduring legacy of the positivist tradition within the theory and, unwittingly, praxis of the discipline (see Wæver 2009, Waltz 1997). Accordingly, constructing theories and devising tests for them are seen to be relatively simple matters (Waltz 1997: 913). Yet this is hardly the case in other fields of inquiry. In the natural sciences and elsewhere, constructing theories are deemed exceedingly difficult and the ways whereby they emerge are left without precise instruction (Waltz 1997: 913). In addition, beyond the superficial recognition of the theory-laden nature of international politics, we tend to find that scholarly reflection on the nature of theory is generally not deemed a worthwhile endeavour. Scholars working on theory have surprisingly little to say about what a theory is, what it can and cannot do, and the procedures whereby it should be tested (Waltz 2003). It appears to be the case, however, that this latter failure derives from a still bigger one, namely the failure of scholars working on theory to meaningfully engage with, and lay bare the essentials of those theorists’ work on which they comment or against which they construct their own theoretical frameworks. Thus, we find, for instance, in what many consider a standard introductory text to IR theory, Kurki & Wight (2010: 23, 28) injudiciously placing Waltz within the parameters of the positivist tradition, while simultaneously reducing the primary aim of his theory to that of prediction. That both statements run counter to Waltz’s thought (see Waltz 1979, 1997, see also the exchange between Pond & Waltz 1994: 198) should be a source of grave concern, yet in many respects, it merely forms part of the cavalier manner in which the question of the nature of theory and, by extension, Waltz’s conception of theory are treated within the discipline. Consequently, how is the concept ‘theory’ or,

3 In this regard, Wæver (2009: 202) notes that, within the work of realist scholars, this takes the form of scholars continuing to criticise Waltz for the sparse nature of his theory, the failure of his theory to heed the complexity of the world out there, and its failure to be true. In fact, the entire literature on neoclassical realism is centred on the notion that Waltz’s theory is too sparse. In addition, scholars continue to err by conflating Waltz’s theory of international politics for a theory of foreign policy.

more concretely, the specific philosophy-of-science conception of theory to be understood, and what distinctive explanatory benefits does it yield?

2. The structure of scientific theories and Waltz's theory of theory

Where does one begin in commenting on the nature and structure of scientific theories? Perhaps a fruitful point of departure would be to say something about the perceived differences between the natural and social sciences and how these differences impact on the theoretical enterprise. It is widely accepted within the social sciences that the conception of theory advanced within the philosophy-of-science literature, and deeply constitutive of some of the most admired theories in the natural sciences, cannot be reconciled with social scientific inquiry. Accordingly, Flyvbjerg (2001: 25) forthrightly declares that "it is therefore not meaningful to speak of 'theory' in the study of social phenomena, at least not in the sense that 'theory' is used in the natural sciences". The danger is, of course, to assume that a single conception of theory exists within the natural sciences. We can, moreover, freely admit that there are fundamental differences between the subject matters of the natural and social sciences. Yet stating this does not detract from the possibilities and necessities that do exist (Waltz 1979: 68). Irrespective of the differences between the natural and social world, "a basic logical continuity in the operations of scientific intelligence" remains (Nagel 1979: ix). Concerning theory-construction, in particular, while dealing with different subject matters, certain imperatives exist. These imperatives require of theoreticians of both the natural and social worlds to bound and organise the domain of their concern, "to simplify the materials" they deal with, "to concentrate on central tendencies and to single out the strongest propelling forces" (Waltz 1979: 68). The argument is, therefore, *not* that social science theory can ever replicate the success of theory within, most notably, physics, but that imperatives in theory-construction exist across disciplines (see Kaplan 1961: 23-4).

2.2.1 (Probabilistic) laws versus theories

Those who have spent a great deal of time reflecting on the nature of theory generally depart on the basis of drawing a distinction between the concepts 'law' and 'theory' (see, especially, Nagel 1979: 79-105, Dilworth 1989). While definitions of the latter vary, the former is more easily defined. Van Evera (1997: 8) notes, in this regard, that a law can be defined as an "observed regular relationship between two phenomena". In similar vein, and by way of a more precise definition, Waltz (1979: 1) holds that laws "establish relations between variables [...] If *a*, then *b*,

where *a* stands for one or more independent variables and *b* stands for the dependent variable: In form, this is the statement of a law". Laws are further differentiated on the basis of those that are deterministic (absolute) and those that are probabilistic.⁴ Deterministic laws are found within the confines of the natural sciences and encompass an invariant relation between the variables *a* and *b* (Van Evera 1997: 8, Waltz 1979: 1), whereas probabilistic laws fall within the purview of the social sciences (Van Evera 1997: 8). They denote a highly constant, though non-invariant, relation between two or more variables and generally take the form: "If *a*, then *b*, with probability *x*" (Waltz 1979: 1). Whether deterministic or probabilistic, laws deal in repetitions. Their particular status derives not only from a relation found between two or more variables, but one that is marked by a high degree of repetition (Waltz 1979: 1).

Knowing something about the nature of laws still leaves us with the question of the nature of theories. Hence, how are theories to be defined? At least two conceptions of theory vie for attention (Reynolds 1971: 10-1, Dilworth 1989: 1, Nagel 1979: 83). One conception of theory, commonly labelled the set-of-laws conception of theory (Reynolds 1971: 10), holds that theories are to be viewed "as collections or sets of laws pertaining to a particular behaviour or phenomenon" (Waltz 1979: 2). The differences drawn between theories and laws, and the complexity of the former vis-à-vis the latter, are therefore quantitative in nature – or, as Nagel frames it, the differences are perceived to be of degree, not kind (Waltz 1972: 2, Nagel 1979: 83). This conception of theory remains an alluring prospect and has manifested itself in various ways within our discipline. Van Evera (1997: 12), notably, forthrightly declares that a theory "is nothing more than a set of connected causal laws or hypotheses". On his part, though perhaps in attenuated form, Morgenthau provides a similar rendition. He defines a theory as "a system of empirically verifiable, general truths, sought for their own sake" (Morgenthau 1959: 16). Such a conception of theory would hardly be problematic, if the essential features of theories and laws were found to be highly similar; in other words, if theories were indeed simply collections or sets of laws (Dilworth 1989: 1). Yet we know this not to be the case. Although the criterion informing the distinction between theories and laws is admittedly vague, several well-established markers do exist for distinguishing theories from laws – and the distinction drawn is, as will be evident, a fundamentally important one (Nagel 1979: 83).

4 Although it can be claimed that the very notion of 'laws' thrusts one's argument into the positivist tradition, the charge is unwarranted. Positivists, especially those at the extreme, hold that theory serves no purpose in the apprehension of reality and, consequently, that the latter can be apprehended directly (Waltz 1997: 913).

Theories and laws fulfil qualitatively different tasks and fall within the parameters of different (that is, distinct) categories of science (Dilworth 1989: 1). As against the conception of theory as collections or sets of laws, theories serve the function of providing statements that explain laws (Waltz 1979: 5, Dilworth 1989: 2). Laws provide facts of observation; theories invent explanations for them (Waltz 1979: 6). They allow us to understand "the guts" of phenomena, "to create the *capacity to invent explanations*" and, in general, to provide explanations for observed regularities (Stinchcombe 1987: v, 3, 5, emphasis in original). On account of their explanatory function, and with due regard to their distinctive position within the scientific enterprise, theories are instruments of understanding, whereas laws are instruments for providing knowledge. The latter leads us towards the discovery of a particular state of affairs; the former furnish explanations that lead to understanding as to why a particular state of affairs obtains (Dilworth 1989: 6). Although the emphasis on explanation is vitally important, there are other equally well-developed grounds for distinguishing between laws and theories. This leads to theories being viewed as a distinctive kind of explanation in science from which "highly integrated and comprehensive systems of explanation" emerge (Nagel 1979: 18, 22).

In particular, Nagel (1979: 83-90) has advanced three such grounds. First, the terms occurring in theories and their relation to the world of observation are qualitatively different from those employed in laws. Accordingly, the language of theories is distinct from that of laws. The descriptive (non-logical) terms occurring in laws, unlike those occurring in theories, are "associated with at least one overt procedure" for relating the terms to "some observationally identifiable trait" (Nagel 1979: 93). This means nothing more than to say that for each term in a law, unlike most if not all of those employed in theories, a specific methodology (procedure) exists whereby the term is related to the world of observation. The existence of such procedures has the effect of fixing a definite meaning for terms. Following from this, laws, as against theoretical statements, have "a determinate empirical content" which can be checked against direct observational evidence obtained by way of the procedures identified for the terms occurring in them (Nagel 1979: 83-4). The situation differs in fundamental respects for theories. Most if not all the terms employed in theories obtain their meanings within the context of the theory in which they are embedded (Waltz 1979: 11). No overt procedures exist whereby the terms occurring in theories are related to observationally identifiable instances of those terms (Nagel 1979: 85). Therefore, the terms and the meanings attached to them are implicitly defined. Thus, we note, for instance, the distinct meanings of the concepts 'space', 'energy', 'momentum' and 'time' in differently structured physical theories and, in international politics, how the concepts 'power', 'force', 'pole', 'structure' and others have obtained

distinct meanings in accordance with the structure of the theory in which they are embedded (Waltz 1979: 11). The consequence of this is rather important: the absence of any overt procedures whereby the terms of theories are related to the world of observation, such that no observationally identifiable instances exist for those terms, entails that theories, as opposed to laws, cannot be subjected to direct experimental/observational tests (Nagel 1979: 85, see also Waltz 1979: 13).

Secondly, the development of theories and laws proceeds along very different lines. In general, the lines diverge on the basis of “the way in which laws may be discovered and the way in which theories have to be constructed” (Waltz 1979: 7, see also Dilworth 1989: 8, Nagel 1979: 85–6). While laws emerge on the basis of induction, theories cannot, given that the basic terms employed in theories are implicitly defined so that no observationally identifiable instances for these terms exist (Nagel 1979: 85–6). The terms occurring in theories, as against those in laws, do not emerge from our data, but are instead invented. Accordingly, in Waltz’s structural realist theory, as in other fields of inquiry,⁵ the essential concepts were not discovered but invented (Waltz 2008: 69, Weinberg 1994: 150, see also Waltz 1979: 5). Indeed, as Nagel (1979: 86) reminds us, some of the most admired scientists have steadfastly upheld the notion that theories are “free creations of the mind”.

As should be evident, such claims imply that observational materials may not be suggestive of theories or that theories can exist independently of observational evidence (Nagel 1979: 86). What they do suggest, however, is that the meanings of the terms employed in theories, as against those in laws, need not be fixed by some or other experimental procedure and that theories may be shown to be “adequate and fruitful” despite the indirect nature of the evidence inferred in support thereof (Nagel 1979: 86). Indeed, the history of modern science points towards the existence of various theories⁶ whose acceptance hinged not on newly discovered experimental evidence, but solely on their ability to provide superior — clearer and more penetrating — explanations of previously established laws (Nagel 1979: 86). Thus, the Ptolemaic system was replaced by the Copernican theory of the solar system solely on the latter’s ability to provide an aesthetically more pleasing theoretical structure (Waltz 1959: 56). As far as the general theory of relativity is concerned, Sir Arthur Eddington noted that, for certain individuals, the existence of fresh experimental evidence, predicted by relativity theory and accounting for subtle deviations from Newtonian laws, accounted for their

5 Consider, for instance, the Physiocrats’ contribution to the development of economics and, generally, developments in theoretical physics.

6 See the Copernican theory of the solar system; the corpuscular theory of light, and the kinetic theory of gasses.

widespread interest in the theory. Yet, for most, the acceptance of relativity theory hinged less on fresh experimental evidence and more on its explanatory power. According to Eddington,

To those who are still hesitating and reluctant to leave the old faith, these deviations will remain the chief centre of interest; but for those who have caught the spirit of the new ideas the observational predictions form only a minor part of the subject. It is claimed for the theory that it leads to an understanding of the world of physics *clearer and more penetrating* than that previously attained (Eddington quoted in Nagel 1979: 86, emphasis added).

In more recent times, theoretical physicists have claimed that theories are invented and judged on the basis of the principle of beauty. Insofar as he has been able to capture the essence of this principle, Noble laureate Steven Weinberg (1994: 149) notes that the 'beauty' in physical theories relates to the notions of "simplicity and inevitability – the beauty of perfect structure, the beauty of everything fitting together, of nothing being changeable, of logical rigidity".

The explanation of laws by theories, such that the former become part-and-parcel of the ideas postulated by a theory, does not negate the essential requirements that laws are expected to fulfil. In general, it is expected that a law, irrespective of the explanatory worth of the theory of which it forms part, must fulfil two requirements: the law must have "a life of its own" – its meaning must be established independent from the theory of which it forms part, and it must be based on observational evidence that will allow it to survive in the case of the demise of the theory (Nagel 1979: 86–7). For our purposes, the important point to note, and one which will be further explored later, is that the intelligibility of a law needs to be established, independently of the meanings attached to it by virtue of it being embedded within, and explained by a given theory (Nagel 1979: 87). The point is of particular significance, since the failure to establish the independence of a law from the theory which purports to explain it will have the effect of yielding a "fatal circularity", in other words, a situation in which there remains nothing for the theory to explain (Nagel 1979: 87). As against what holds uniformly for laws, the meanings associated with theoretical notions can only be understood within the context of the theoretical structure in which they are embedded. Theoretical notions obtain their meanings as constitutive elements of the theoretical structure in which they are placed and, as a theory's structure changes, so do the meanings associated with the theoretical notions (Nagel 1979: 87). Consequently, adding to a theory that which one deems to have been omitted or, conversely, subtracting from a theory that which is deemed superfluous, creates a new theory which must be tested in its own right (Waltz 1997: 916, 2008: 75).

Thirdly, while a law is formulated on the basis of a single statement, a theory comprises “a system of several related statements” (Nitze 1959: 88-9). This feature of theories, coupled with the fact that the terms occurring in theories are not fixed by definite observational procedures (such that no observationally identifiable instances exist for these terms), is only indicative of a far greater benefit theories have over laws, to wit, their greater generality and, with due regard to their explanatory power, their far greater inclusivity (Nagel 1979: 89). In essence, the range of theories and, by extension, the nature of the subject matters with which they deal are far more extensive than that which falls under the scope of laws. Indeed, it is claimed for a theory that one of its core functions is the inclusion of qualitatively disparate empirical generalisations and laws under the rubric of a single explanatory system, with a secondary function being the derivation of new hypotheses from the theory which, if confirmed, will yield new laws (Waltz 1979: 6, Nagel 1979: 89-90).

2.2.2 The structure of scientific theories

Although a great deal has been said about the distinctive nature of theories, three questions remain. How are theories structured? How should we define the concept ‘theory’? What is the essential nature of Waltz’s theory of theory?

The first of these questions will be addressed here; the next two will be dealt with in the following section. Beyond the simplistic notion that theories consist of a number of abstract concepts, what do we know? In general, the basic components of a theory are threefold (see Nagel 1979: 90-7). A scientific theory consists, in the first place, of an abstract calculus (an abstract system of reasoning) which forms the “logical skeleton” of the theory and in which the basic terms of the theory are implicitly defined (Nagel 1979: 90-1). The term ‘system’ is of special importance in this instance. The fundamental assumptions of a theory form in essence a system of abstract postulates whereby the basic non-logical terms of the theory obtain their distinctive meanings owing to their placement within this system (Nagel 1979: 91). Accordingly and as variously argued earlier, the nature of the terms occurring in theories can only be ascertained by examining the postulates of a theory and the structure of interrelations of which they form part. It is important to note that these theoretical notions, implicitly defined by the postulates of a theory, carry out the core business of a theory, to wit, explanation (Nagel 1979: 92).

Secondly, in order to be scientifically useful, a theory must contain a set of rules whereby its implicitly defined terms are related to the world of observation (Nagel 1979: 90, 93). A theory should state why and how these terms are linked to events and phenomena manifest in the world of observation. To relate the terms

occurring in theories to the world of observation (in other words, to derive rules of correspondence⁷ for them) requires engaging in logical processes through which empirical statements are deduced from the implicitly defined terms occurring in theories (Stinchcombe 1987: 16). The nature of these rules of correspondence merits further attention. As a point of departure, we note that the language (terms) employed in rules of correspondence do not provide explicit definitions of the terms occurring in theories (Nagel 1979: 97-8). With 'explicit' is meant that the language employed in rules of correspondence and that employed in theories are not logically equivalent – the terms employed in each denote different things. In addition, and further entrenching the lack of correspondence between theoretical notions and experimental concepts, theoretical notions are – within the permissible operations of logic – linked to the world of observation by an infinite number of experimental concepts (Nagel 1979: 99). This incongruence between theoretical notions and experimental concepts is, however, only symptomatic of something far more consequential. It is a distinguishing mark of theories that their formulation is approached with “painstaking care” and that the articulated interrelations between the theoretical notions are done with “great precision” (Nagel 1979: 99). Indeed, theoreticians ought rather to be accused of ignorance than vagueness (Stinchcombe 1987: 6). The care taken and the precision sought after in creating theories are fundamentally important and not only for stylistic purposes. If achieved, it not only engenders a greater measure of explanatory power, but also allows a theory to be applied to qualitatively different subject matters.

We now know that theoretical notions are linked to observational materials by way of correspondence rules. The statement, however, is in need of qualification. Consequently, some of the theoretical notions employed in nearly all of the theories of the natural sciences are in no way tied to experimental ideas, with the concomitant benefit being that theories constructed accordingly are afforded a greater degree of flexibility in extending the theory to areas of inquiry originally not envisioned as part of the subject matter of the theory (Nagel 1979: 102). Indeed, as illustrated earlier, the explanation by theories of qualitatively different empirical generalisations and laws is a defining feature of theories. We should note, however, the important *caveat* that the actualisation of this latter feat is further dependent on a theory being formulated in such a way that “no reference is made in it to any set of specialized experimental concepts” (Nagel 1979: 103-4). This implies that the “statements of a theory have the form of

7 Rules of correspondence – or as they are more commonly referred to, correspondence rules – stipulate the basic connections by which the abstract terms employed in theories are related to the world of observation (Nagel, 1979: 95).

generalized conditionals, *which place no spatiotemporal restrictions on the class of phenomena that may be explained with their help*" (Nagel 1963: 212, emphasis added). Inclusion of such considerations would have the effect of restricting the application of a theory to those situations to which the concepts are said to apply (Nagel 1979: 104). Accordingly, in constructing a theory, and owing to the desirability of fostering theories of great generality, great care is taken in abstracting from the complexity of reality, in eliminating as much as possible from the subject matter (Nitze 1959: 14). Conversely, in *applying* a theory to specialised circumstances, a theory is supplemented by introducing additional assumptions as necessitated by a given occasion (Nagel 1979: 104).

Finally, a theory consists of a model (or interpretation) of the theory whereby the highly abstract and complicated nature of the postulates of the theory, and the terms occurring within them, are made more understandable in terms of relatively familiar notions (Nagel 1979: 90, 95). Although the precise meaning of the term 'model' is disputed (Godfrey-Smith 2003: 238), a model *of a theory* seeks to make more understandable the complexity of the abstract calculus of a theory by reducing it to more familiar visual expressions. This can be done by way of analogy, mathematical symbols or through organismic, mechanical or other expressions (Waltz 1979: 7). Irrespective of the ways in which this proceeds, a model of a theory will be as abstract or, conversely, as concrete as the theory it purports to model (Waltz 1979: 7). The term 'model' is often expressed in two senses: a model provides both an interpretation of the abstract calculus of a theory and a simplified picture of reality, as evidenced in, say, a model airplane (Waltz 1979: 7). In some instances, such as that of the model airplane, the notion of simplification attaches to the idea of scale, thus creating the twin requirements of reduction (*in scale*) and simulation (*of reality*). The premise is then that, in the case of the model airplane, reality should be simulated (Waltz 1979: 7). In the case of theories, the approximation or simulation of reality jars with the nature and purpose of theory. As noted earlier and as will be amplified in the following section, fostering theories of great generality and explanatory power requires of us to abstract or depart from reality, not stay close to it.

3. Waltzing towards theory: reflections on Waltz's theory of theory

The previous section attempted to provide justification for, and an exposition of a particular conception of theory as evident in the philosophy-of-science literature. In painting this picture, we have at times provided cursory reflections on the nature of Waltz's conception of theory and the ways in which it is interlaced with the conception of theory advanced in these pages. In this section, we will

more fully engage with this task. Although we have drawn a sharp distinction between laws and theories, we have yet to define the concept 'theory'. A theory is, accordingly, "a picture, mentally formed, of a bounded realm or domain of activity"; it is "a depiction of the organization of a domain and of the connections among its parts [...] The infinite materials of any realm can be organized in endlessly different ways. A theory indicates that some factors are more important than others and specifies relations among them" (Waltz 1979: 8). For our purposes, the important point to recognise is that the first task of a theory is the demarcation of an autonomous realm of inquiry. One has to find a way of setting apart one's domain of concern from everything that could possibly be included within it. In reality, such a domain cannot and does not stand on its own (Waltz 1979: 8). Thus, as Waltz (1979: 8) notes, "[t]he question, as ever with theories, is not whether the isolation of a realm is realistic, but whether it is useful". Usefulness, in this context, means nothing more than the emergence of a theory with great explanatory and predictive powers (Waltz 1979: 8). The situation is hardly a novelty. In developing the field of economics, for instance, and, by extension, in furnishing a theory that would explain what transpires within it, the concept of an economy was invented and artificially disentangled from the socio-political framework in which it was embedded (Waltz 2008: 68). This basic fact implies that theories are bound to be about something, not everything (Halliday et al. 1998: 379, 380). The demarcation of an artificially constructed realm of inquiry is, accordingly, the first and most basic requirement of a theory.

Once such a realm is envisioned, one is faced with the task of identifying the most salient causal factors at work and showing the *necessary* connections, as conceived of within the terms of the theory, among them (Waltz 1979: 8, 2003). On account of this and by the very nature of the tasks they set out to achieve, theories are systematic in character; in other words, they constitute an explanatory system. The concepts and assumptions of theories do not stand in isolation from one another, but are shown to be highly interdependent. They form, in essence, a unified conceptual framework, with the connections between them being continuous in nature (Nitze 1959: 1). The point carries more weight than we might think. Thus, we often fail to heed the warning, as is evident in Morgenthau's attempt to furnish a theory of international politics, that the provision of elements of a theory is not tantamount to a theory and that while providing explanations is the core business of theories, not every explanation is a theory (Waltz 2008: 71, Halliday et al. 1998: 386). It is instead the continuous relationship that exists between the concepts of theory coupled with the distinctive nature of the concepts themselves that serves the function of providing the understanding of the body of data our theory attempts to illumine (Nitze 1959: 1). In addition, because they are conceptually interrelated, theories gain the added advantage of

providing in a systematic manner explanations for a vast range of disparate facts (Nagel 1979: 22).

The concepts employed by theories are, however, not only systematic in character, but also few in number. In general, the presumption is that less is more. If there is one great lesson to be learned from the physical sciences, it is that theories should be conceptually sparse (Kaplan 1961: 16). The argument is, as Stinchcombe (1987: 8) reminds us, that in those cases in which a conceptual variable is constitutive of “eight or ten distinct causal components”, the connections between the variables will be “shifting and messy”. In identifying the most pertinent causal factors, in setting them apart from the infinite factors that could conceivably be made part of a theory, a process of simplification must necessarily be engaged in (Waltz 1979: 10, Nitze 1959: 1-2). Accordingly, levelling critique against a theory on the basis of its perceived omissions, or identifying those variables one believes to be the central omissions of a theory, is *ipso facto* misplaced and constitutes a misrepresentation of the theoretical enterprise (Waltz 2008: 75). Theories are, after all, about omissions (Waltz 2004: 2). Why should this be the case? Should theories or, more narrowly, theories of international politics not perhaps be as complex as our evidence suggests? One is tempted to argue in the affirmative, to follow the wave of thought that suggests that the more our theories conform to the complexity of reality, the more we allow them to become messy, the better off we would be.

From the above we know, however, that theories are, by their very nature, circumscribed and that there are sufficient theoretical grounds in defence of such a claim. In constructing a theory, it does not hold that other factors are deemed unimportant. Elegance and simplicity are, however, the hallmarks of theory, whereas complexity is the defining feature of reality (Waltz 1997: 913, 2004: 3). This is necessarily the case since the failure to simplify would thrust one back to the level of description, not explanation (Waltz 2008: 75). We will, in short, lose the benefit of figuring out what is connected with what and why such connections obtain. Alternatively phrased, theories provide the benefit of identifying the central forces at work and indicating “the necessary relations of cause and interdependence – or suggest where to look for them” (Waltz 1979: 10). Moreover, and contrary to common expectations, theory does not militate against complexity, but constitutes instead an instrument whereby we deal with complexity (Waltz 2008: 72).

Theories are not only simplifications, but also bold abstractions. They provide explanations of laws, and thus differ in kind from laws and, by implication, the empirical world (Waltz 1979: 5). To explain laws, to provide systematic and comprehensive explanations for a vast range of facts, requires of us to abstract

from reality, to move away from the reality manifest in observation. In failing to do so, one is pinned down at the level of description. Accordingly, the attempt to furnish theories of great explanatory power is dependent on their being “formulated without reference to, and in abstraction from, the individualizing qualities and relations of familiar experience” (Nagel 1979: 11). This is the reason why theories, and the theoretical notions integral to them, are not discovered, but invented (Waltz 1979: 5).

In addition, the assumptions of theory, as with theoretical notions, are the product of the creative genius of the theoretician. They are “non-factual elements of a theory” (Waltz 1979: 10). These assumptions do not in any sense capture the wondrous complexity of human life (Waltz 1979: 10, 89). They are, however, not meant to do so. Contrary to the painstaking accuracy implicated in descriptions, the task of creating theories, and the quest for theoretical knowledge (that is, the aims of explanation and systematic generality), demand that the assumptions of theories be “brazenly false” (Waltz 2008: 72).⁸ Waltz (2008: 72) notes that “men have many motives”, but unless we engage in processes of simplification and abstraction, theory becomes impossible. Accordingly, the introduction of an assumption or a set of assumptions into the structure of theories stems from their particular usefulness in the process of theory-construction and the attendant quest for the achievement of theoretical knowledge. The comparison with economic theory is, again, a particularly useful one. In the construction of micro-economic theory (see Wetzstein 2005: 8), we find that the assumptions of theories are invented and that they are freely introduced into the structure of theories, knowing full well that they do not in any sense capture the entirety of human motivations:

Unrealistically, economists think of the acting unit, the famous “economic man,” as a single-minded profit maximizer. They single out one aspect of man and leave aside the wondrous variety of human life. As any moderately sensible economist knows, “economic man” does not exist. Anyone who asks businessmen how they make their decisions will find that the assumption that men are economic maximizers grossly distorts their characters. The assumption that men behave as economic men, which is

8 The falsity or unrealistic nature of assumptions can take different forms (see Nagel 1963: 214–6). It appears to be the case, as will be evident shortly, that the sense in which the notion of an assumption of a theory is understood within Waltz’s structural realist theory is that the latter is conceived to be unrealistic if “it does not give an ‘exhaustive’ description of some object, so that it mentions only some traits actually characterizing the object but ignores an endless number of other traits also present (Nagel 1963: 214).

known to be false as a descriptive statement, turns out to be useful in the construction of theory (Waltz 1979: 89).

We should note, however, that the assumptions thus advanced are not introduced in a careless manner (Waltz 1979: 10). Instead, their sole purpose is to facilitate theory-construction (and, by implication, explanation) and to ascribe meaning to the data, with their worth evaluated on the grounds of the explanatory sufficiency of the theory of which they form part (Waltz 1979: 10, 91). In constructing his theory of international politics, Waltz (1979: 91) assumes that states wish to survive. In assuming this, he thus freely admits that the assumption is “a radical simplification made for the sake of constructing a theory” and that we should assess the validity of the assumption based not on the categories of truth and falsity, but on “whether it is the most sensible and useful one that can be made”. Usefulness, in this context at least, depends on the extent to which “a theory based on the assumption can be contrived”, a theory which allows us to gain insights into consequences that, in the light of the theory, become self-evident (Waltz 1979: 91). Seen against this backdrop, theories are then the product of creative ideas and intuitions, not observations of reality (Waltz 1979: 11).

On account of this feature of theories, and with due regard to the processes of simplification and abstraction, the application of theory is bound to fall short in attempts at understanding the real world. Vast differences emerge between theory and its application. If this was not the case, if theories did indeed mirror reality, there would be little need for theory. A theory shows how an artificially constructed domain of activity is organised, identifies the central causal factors at play and their interconnections, and illustrates how and why such connections obtain. In constructing a theory, care is taken to strip away the complexity of the concrete world of human experience with the aim of arriving at a conceptually unified yet sparse theory; in *applying* the theory, in using it as an instrument that deals with the world of practice, we move in the opposite direction: we take care to conjoin the forces illuminated by our theory with the empirical matter omitted in the process of theory-construction (Nitze 1959: 14, see also Kaplan 1961: 16). Therefore, in using a theory to understand the real world, attention is paid not only to the explanatory logic accruing from the theory, but also to that which falls outside of it (Waltz 2004: 3, see also Halliday et al. 1998: 380). This is undoubtedly what Nagel (1979: 104), as noted earlier, had in mind in arguing that the application of a theory to specialised circumstances requires that a theory be supplemented by introducing additional assumptions. The move from theory to application is and always will be a complex undertaking (Waltz 2008: 75).

4. The nature and state of theory in international politics

The previous two sections have laid bare the foundations of a particular conception of theory and the explanatory fruits emanating from it. In this section, we would like to comment on current disciplinary understanding of the concept 'theory', the discipline's anti-Waltzian conception of theory, as well as point towards the ways in which the failure to heed the conception of theory advanced in these pages induces detrimental explanatory effects. Hence, where are we as a discipline in terms of current understanding of the nature of theory? One answer to this question – undoubtedly a commonplace one – is to argue that the conception(s) of theory now prevalent within our discipline has assumed a richness both in terms of diversity and meaning, unimagined in previous disciplinary epochs. The correctness of this view, one must insist, depends on the degree to which the new conception of theory has, in fact, succeeded in transcending the old. But what exactly was the old? In commenting on this question, and with a particular focus on the American mind, Farrell & Smith (1967: v) note that “[t]he pragmatic bent of Americans, their bias against the theoretical and abstract and in favor of the practical and concrete, is a commonplace”. Citing Trilling's *The liberal imagination*, they hold that in “the American metaphysic, reality is always material reality, hard, resistant, unformed, impenetrable, and unpleasant. And that mind is alone felt to be trustworthy which most resembles this reality by most nearly reproducing the sensation it affords” (Farrell & Smith 1967: v). Although these comments tell us some things about the conception of theory (or lack thereof) within the American mind of that time, one would do well to consider Stanley Hoffmann's (1977) critique that the discipline was, in essence, an American social science, with disciplinary praxis shaped by the tools, procedures and ideas produced by US scholars. In more general terms, and as Waltz (1979: 1-13) pointed out, the conception of theory prevalent at the time was, to a large extent, inductive, grounded in the set-of-laws conception of theory and with very little if any distinction drawn between the theoretical and empirical worlds.

If we take this conception of theory as some kind of yardstick of the old, what then does the new offer? Alternatively phrased, what do we see when we probe current understandings of the concept 'theory' and the ways in which scholars conduct their inquiries? Across the board, there appears to be consensus that to say much about anything that goes on in the world of international politics requires the construction of a theory of international politics or, where such a theory already exists, its application to real-world events. Once one understands why this must be the case, why the construction and development of theory within our discipline (like in others) is *the* indispensable venture, the logic of the proposition advanced is fairly simple to grasp. Ever since Hume and Kant, the uncertainty of the empirical has been noted (Waltz 2008: 92). Within the natural

sciences, the proposition that the facts of science do not in, and of themselves yield explanations for why they obtain is one that is fairly well established and widely accepted (Waltz 1979: 4, see also Nagel 1979: 11–2). In our discipline, however, while scholars of international politics have generally paid lip service to the interdependence of theory and fact, they have been predisposed to elevate the factual content of their studies to the detriment of theoretical development and innovation (Wæver 2010: 315). Thus, as Waltz (2011: 4) has concluded, there “isn’t much theorizing going on in international politics”.

Indeed, in respect of the latter point, one cannot but note that, for many students of international politics, there is nothing distinctive about the concept ‘theory’ or the activity of theorising. No conceptual and intellectual boundaries are drawn between ‘theory’ and ‘explanation’, between that which is subsumed under the activities of theorising and philosophising, explanation and description. Waltz (1979, 1997, 2011) realised this, and his reflections, then and now, on the failure among scholars of international politics to discern these key differences are striking. In *Theory of international politics*, Waltz (1979: 1) laments that within our discipline scholars of international politics “use the term ‘theory’ freely, often to cover any work that departs from mere description and seldom to refer only to work that meets philosophy-of-science standards”. It is worth pointing out perhaps that Aron (1967: 1) made a similar observation in his quest to provide a sketch of a theory of IR. The condition, interestingly enough, seems to be characteristic of the social sciences in general (Nagel 1963: 211). In more recent times, Waltz (2011: 4) has restated his discontentment with this position by strenuously rejecting the widespread assumption that any scholarly activity reaching narrowly beyond the empirical is apt to be called theory. Patent linguistic differences aside, the terms ‘theory’, ‘philosophy’, ‘interpretation’ and ‘explanation’ are not one and the same. I mention all of them here on account of the fact that students of international politics consistently err in failing to draw clear conceptual and intellectual boundaries between them. For most, philosophy, interpretation and explanation are akin to theory. Yet key differences separate them, with these differences turning on the structure of scientific propositions. Nonetheless, at the core of all of them is the particular concern of providing an explanatory account of some phenomenon or other. This much is not disputed. The problem emerges, however, when we fail to heed the structurally distinct properties of theories and explanations and, more importantly, when we fail to understand what each can and cannot achieve. Like the other terms mentioned in this instance, theories deal in explanations. We have noted that their *raison d’être* is to provide systematic explanations of disparate events within an artificially demarcated realm. Yet we also know that, while theories explain, not all explanations can be deemed theories. As mentioned earlier, theories

provide a distinctive kind of explanation in science and, with due regard to the fruits they bear, they provide "highly integrated and comprehensive systems of explanation" (Nagel 1979: 18, 22). Accordingly, if the concept 'theory' was used indiscriminately in previous disciplinary epochs, as Waltz (1979: 1) steadfastly insists, we are unfortunately not any closer now to addressing this issue. On this score, then, the new appears to be strikingly close to the old.

In other respects, too, we are confronted with some of the remnants of the old. As a basic point of departure, Wæver (2010: 315), notably, contends that the discipline has reverted "back to a more empiricist, almost inductivist view of theory". Current disciplinary trends point towards the fact that debate on the nature of theory is weakening (Wæver 2010: 315); that scholars within the discipline are increasingly borrowing from other disciplines in attempts at explaining international politics (thus removing any notions of furnishing distinctly *political* theories of the discipline) and, importantly, that there exists "an increasing orientation towards large-N type of studies with only a rudimentary sense of theory" (Wæver 2012: 7). Theory is in decline. It has, moreover, become commonplace for contributions to leading journals to be of the theory-plus-case model, with the overriding rationale being to expose the missing variables in the theory (Wæver 2012: 4, 13). We have already cautioned against the folly of both. Further, what is of particular interest, especially given the purposes of this contribution, is the extent to which the conception of theory advanced by Waltz continues to be misinterpreted – by none more so than those deemed to be his most ardent disciples (Wæver 2012: 10). Within the mainstream, in particular, the set-of-laws conception of theory endures remarkably well, as does the proposition that theories are tested by pitting them against the hard facts of empirical reality (Wæver 2012: 11). Beyond the mainstream/American conception of theory, we do find, however, a European alternative premised on a conception of theory as a loose conceptual system (Wæver 2012: 12). The former conception of theory suffers the fate of ignoring the abstract and intuitive nature of some of the most impressive explanations of the natural *and* social sciences; the latter, the inability to provide clarity and precision, coupled with unrelenting "confusion over explanation, causation and constitution, and – less noticed – a tendency to reinforce a role of theory as world views" (Wæver 2012: 12). Both approaches jar, at any rate, with the conception of theory advanced by Waltz and are merely indicative of the extent to which the Waltzian conception of theory, properly understood, has been marginalised within disciplinary praxis. There exists, therefore, an essential paradox in respect of Waltz's position in the discipline: on the one hand, Waltz is hailed as the "king of thought" (Mearsheimer 2006: 109); yet, on the other, scholars continually err by misinterpreting him on the question of theory (Wæver 2009: 217).

Although we have said a number of things concerning the nature and state of theory within the discipline, we would like to conclude this section by pointing towards some expected outcomes to be gleaned from the intersection (or lack thereof) between the conception of theory advanced here and that underpinning the explanatory frameworks of scholars – grounding their frameworks in the political tradition of liberal thought – of the notion of a democratic peace. In particular, our concerns fall on probing the extent to which the frameworks advanced by liberal scholars of democratic peace do indeed provide explanations and, if so, whether such explanations are deserving of the label ‘theory’, as well as scrutinising the qualitatively different outcomes resulting from differing conceptions of theory. In providing answers, we must first reflect on the arguments put forth by liberal scholars of democratic peace. Two proponents of democratic peace theory, notably John Owen and Michael Doyle, are noteworthy in this regard. We mention these two only, not because others are of lesser moment, but because they more than any other have attempted to theoretically account for the democratic peace. Both scholars have argued that an explanation proper of the democratic peace is wholly dependent on the intersection between normative and institutional (structural) frameworks. By way of the former, institutional constraints (namely, the existence of checks and balances and the possibility of electoral punishment) suffice to explain the absence of war between (liberal) democratic states. The latter framework postulates the explanatory merit of liberal values and norms and their externalisation in cases of war-threatening crises.

While stressing the interplay between normative and institutional arguments, Owen (1996, 1997) further stipulates that an explanation proper of the absence of war between liberal states requires recognition of the role of perceptions in curtailing state behaviour. Accordingly, a “liberal democracy will only avoid war with a state that *it believes to be liberal*” (Owen 1996: 121, emphasis in original). More specifically, Owen’s conception of democratic peace holds that liberal ideas engender two intervening variables, notably liberal ideology and democratic institutions. The former functions to prohibit war with fellow liberal democracies; the latter allows this normatively grounded framework to affect foreign policy (Owen 1996: 122). Liberal ideology, grounded in a philosophical commitment to individual freedom, thus enables liberal states to forgo war with other liberal states – once they have perceived each other as such – in that these states are considered rational and pacific due to their pursuance and protection of their citizens’ true interests (Owen 1996: 124).

Although with some differences, Owen’s (1996, 1997) position does not radically depart from Doyle’s (1996) Kantian inspired liberal theory of democratic peace. Doyle (1996: 10) highlights a threefold set of imperatives as constitutive of Kant’s conception of, and as explanation for democratic peace: a republican

constitution typified by juridical equality, some form of representation and the separation of legislative and executive power; a commitment to, and preservation of individual liberties (a basic appreciation of individuals as ethical subjects), and transnational (economic) interdependence. In thus outlining these imperatives, Doyle notes that all three combine to constitute the fundamental properties of a liberal republic and, where they do combine, help explain both the war- and peace-proneness of liberal states. Framed in more concrete terms, the first of these imperatives exacts a relationship premised on accountability between the state and the electorate. The possibility and fear of electoral punishment leads to hesitation on the part of those in power in formulating and advocating war-prone policies (Doyle 2005: 464). The second imperative, grounded as it is in a philosophical commitment to fundamental human rights, provides the foundation for mutual respect between liberal states, while the third serves to add a material incentive to the normative underpinnings of the first and second imperatives (Doyle 2005: 464).

From the arguments advanced in these pages, we know that a theory has a distinctive structure and, even more so, that it possesses a determinate content. Because it does, because a theory is constitutive of a distinctive kind of explanation, it is afforded a wealth of benefits not likely to be found with other types of explanations and attempts at understanding. With Owen's and Doyle's arguments firmly established, we can now assess their explanatory and theoretical merit. Thus, as the first part of our quest, is explanation the proper descriptive term for the intellectual activities engaged in by Owen and Doyle or, alternatively phrased, do the frameworks advanced by these authors indeed explain? In more than one respect, Owen and Doyle do provide explanations. Their accounts of democratic peace tell us something about how (liberal) democratic states function and how the functions they fulfil have an effect on inter-liberal relations. We should be careful though not to conflate the acknowledgement of a body of knowledge as explanations with the question as to whether such explanations are useful. This question can only be addressed by subjecting such explanations to critical tests. For the purposes of this contribution, we can freely admit that explanations are provided in service of vindicating the democratic peace phenomenon.

The second part of our quest, namely the question of the extent to which such explanations are deserving of the label theory, is at once more troublesome for Owen and Doyle – and more fundamental. From what was stated in these pages, we now know that the distinctions drawn between theory and explanation do not merely turn on linguistic conventions. Theories are differently structured and because of this they provide more comprehensive and systematic explanations. Their systematic character, coupled with the fact that the terms occurring in theories

are not fixed by definite observational procedures, holds that theories are able to explain qualitatively disparate empirical generalisations and laws. The resultant explanations, moreover, are deemed all the more credible if their conceptual elements can be shown to be highly interdependent. Theoretical explanation is premised on illustrating the mutual dependence of the concepts advanced in one's theory. One would do well to remember, as variously argued earlier, that it is a distinguishing mark of theories that their formulation is approached with "painstaking care" and that the articulated interrelations between the theoretical notions are done with "great precision" (Nagel 1979: 99). The care taken and the precision sought after in creating theories are fundamentally important and not only for stylistic purposes. If achieved, it not only engenders a greater measure of explanatory power, but also allows a theory to be applied to qualitatively different subject matters. It is, furthermore, the theoretical notions, implicitly defined by the postulates of a theory, that carry out the core business of a theory, to wit, explanation (Nagel 1979: 92). This lack of conceptual interdependence functions to thwart any pretensions of theory in Owen's and Doyle's explanations and serves to render the above-mentioned benefits null and void. Indeed, if we were to look critically at the explanations provided, we fail to find any convincing logic whereby the concepts advanced are shown to be both interdependent and necessary, as defined within the terms of the theory. Both Owen and Doyle provide explanations without illustrating how the concepts advanced form an ordered whole. While the explanations advanced may point towards something, they cannot go very far – we do not know how the different concepts interact and thus we cannot be sure if the conceptual whole (as both Owen and Doyle claim), or simply one of its parts, is responsible for the empirical phenomenon. To frame it differently, the lack of conceptual interdependence denotes that we cannot be sure which cause is to be attributed to the effect of peace between (liberal) democratic states. Because the authors have not illustrated the mutual dependence of their concepts, we cannot logically entertain the notion that the peace-inducing effects ascribed to the whole could conceivably obtain, neither can their frameworks be applied to qualitatively disparate subject matters.

The liberal proponent of democratic peace could retort, stating that such a high level of conceptual interdependence is unnecessary, given that Owen and Doyle merely state the conditions needed for (liberal) democratic peace. If the aim of conceptual interdependence, of showing what is related to what else and why, is not one that is deemed worthwhile in our discipline, we must be willing to live with the fact that the explanations we do advance will forever bear a much closer affinity to the category of description than that of explanation. We will then confine ourselves to providing still more variables without understanding which

cause is to be assigned to what effect, how our concepts are interrelated, and how the conceptual whole serves to explain what we observe.

How does this situation compare with the theoretical structure advanced by Waltz? The conceptual interrelationship of Waltz's structural realist theory, and the extent to which this facilitates explanation, is laudable. Recall Weinberg's (1994: 149) argument that theories are invented and judged on the basis of the principle of beauty and that this principle denotes "simplicity and inevitability – the beauty of perfect structure, the beauty of everything fitting together, of nothing being changeable, of logical rigidity". Consider in Waltz's theory, for instance, the defining features of the concept of structure and the high level of interdependence that exists between structure and its constitutive properties. Structure refers to the arrangement or ordering of the units of the system and is defined by the ordering principle of the system (that is, anarchy); the specification of functions of differentiated units (in essence, the units of the international-political system are like-units and perform similar functions and face similar tasks), and the distribution of capabilities across units (Waltz 1979: 81, 88-99). The concepts are intertwined. A change in the ordering principle of the system produces not only a change in system, but also a change in the expected behaviour of the units. An international-political world organised according to the logic of anarchy looks fundamentally different, and induces fundamentally different behaviour from its constituent parts, than if some other organising principle would take hold.

Moreover, the functions states fulfil and the ends they seek are similar on account of the organising principle of the system. In hierarchic systems, a formal division of labour takes place: each unit can freely pursue its own interests. Specialisation thus occurs, with mutual relations of dependence developing between different sectors of, and interests within society. Thus, as Waltz (1979: 104) notes, "the cobbler depends on the tailor for his pants and the tailor on the cobbler for his shoes, and each would be ill-clad without the services of the other". This kind of specialisation can thus proceed, because the realm in which these activities are conducted is formally structured. In other words, the means whereby the units must secure their identity and preserve their security are not the concerns of the units themselves (Waltz 1979: 104). Public agencies are organised for that purpose (Waltz 1979: 104). On the other hand, anarchic realms place the premium not on specialisation, but on survival. The self-help logic of anarchic systems requires of units to work in order to lessen their dependence, and to take care of themselves in as many ways as are realistically possible. This notion of self-help and the attendant problem of trust within anarchic realms imply that there are definite limits to the international division of labour (Waltz 1979: 105). Each unit is thus constrained to fulfil similar functions, and because of this, a great deal of emulation (of policies, behaviour and institutions) thus occurs.

While the units of the system face similar tasks and perform similar functions, their ability to achieve these differ widely (Waltz 1979: 96). On account of the fact that the units are functionally similar, distinctions are then drawn between them according to their “capabilities for performing similar tasks” (Waltz 1979: 97). The distribution of capabilities thus extant between the units tells us something about how the units stand in relation to one another. As the distribution of capabilities changes, so does the structure of the system and, once it does, different expectations about behaviour and outcomes emerge (Waltz 1979: 99). Although more can be said about the interdependence of these concepts, the point that emerges is simple: a change in one concept effects changes in the others. We should also note that the terms employed in the theory are generally of a highly abstract nature. Accordingly, it is because these concepts are shown to be mutually dependent, coupled with their abstract nature, that the scientific ideal of comprehensive and systematic explanations can more readily be achieved. The interdependence and abstractness of the concepts thus advanced effects a greater degree of explanatory merit and, once more, holds the promise that the theory is capable of being applied to qualitatively disparate subject matters.

This article also shows that, in the case of the explanation of laws by theories, care should be taken to ensure that the intelligibility of a law be established independently of the meanings attached to it by virtue of it being embedded within, and explained by a given theory. We have argued that a law must fulfil two requirements: it must have “a life of its own”, in other words, its meaning must be established independently from the theory of which it forms part and it must be based on observational evidence that will allow it to survive in the case of the demise of the theory (Nagel 1979: 86-7). We now know that failure to uphold this distinction will result in introducing a “fatal circularity”, in other words, a situation in which there remains nothing for the theory to explain (Nagel 1979: 87). In the case of Owen’s and Doyle’s arguments, as with much of the literature on the causes of democratic peace, we find, however, that this distinction is brazenly ignored. The very terms occurring in the perceived law or, in attenuated form, the empirical generalisation of democratic peace (to wit, the terms ‘democracy’ and/or ‘liberalism’) wholly derive their meanings on account of their being embedded within, and explained by the particular theory adopted in service of explaining the law or empirical generalisation. The terms are thus theory-dependent and have little determinable sense outside of it. A fatal circularity is inevitably introduced. In the case of Waltzian structural realism, as against this situation, we find that the basic terms occurring in the law or empirical generalisation of the continuity of international politics (more precisely, the enduring problem of war) exist outside of, or independently from the theory adopted to explain it.

We have thus far proffered two scathing critiques against the nature of theory undergirding liberal accounts of democratic peace. One more needs to be added. It is generally accepted that, in the case of the explanation by theories of qualitatively different empirical generalisations and laws, its actualisation will be entirely dependent on a theory being formulated in such a way that “no reference is made in it to any set of specialized experimental concepts” (Nagel 1979: 103–4). By failing to uphold this principle, a theory’s range of application is restricted to those situations to which the concepts are said to apply (Nagel 1979: 104). Accordingly, in constructing a theory, and owing to the desirability of fostering theories of great generality, great care is taken in abstracting from the complexity of reality, and in eliminating as much as possible from the subject matter (Nitze 1959: 14). Conversely, in *applying* a theory to specialised circumstances, it is supplemented by introducing additional assumptions as necessitated by a given occasion (Nagel 1979: 104). Noting this, what do we see when we examine Owen’s and Doyle’s explanatory frameworks? As against this cautionary principle, both scholars’ explanatory frameworks, in particular their rendition of the essential elements of liberalism and/or democracy, is formulated on the basis of, and grounded within specialised experimental concepts. Moreover, the concepts ‘democracy’ and ‘liberalism’, though abstract in nature, more nearly approximate reality than, say, ‘anarchy’ and ‘structure’ (defined within the parameters of Waltz’s structural realist theory). It is for these reasons that the ideal of fostering theories of great generality cannot be met.

What then can we deduce from this? For one thing, we are led to believe that, given the poverty of theory (understood within the conception of theory advanced in this instance), Owen’s and Doyle’s explanatory accounts are extremely limiting and have fatal consequences for attempts at explaining the phenomenon of democratic peace. Among other things, both scholars’ frameworks fail to adhere to the notion of beauty and, in general, are formulated in such a way that their application and extension to fresh lines of inquiry is bound to be limited. We have also seen that the conception of theory currently prevalent within our discipline is and remains at its core anti-Waltzian and, owing to this, that we stand to lose a great deal of the benefits encapsulated in this conception of theory.

5. Conclusion

With all said and done, what is the relevance of this contribution? A theory, it has been argued, has a distinctive structure and possesses a determinate content. Because it does, because a theory is constitutive of a distinct kind of explanation, it is afforded a wealth of benefits not likely to be found with other types of explanations and attempts at understanding. Theories provide, in essence, more

comprehensive and systematic explanations; are able to explain qualitatively disparate empirical generalisations and laws and, finally, can be applied to qualitatively different subject matters. The conception of theory undergirding Waltz's theory of international politics heeds these imperatives and because it does, it engenders a highly integrated and comprehensive system of explanation. In failing to heed these imperatives, as noted in the attempts at theorising the democratic peace phenomenon, these explanatory fruits cannot be met. In our discipline, as in others, one must insist that more thorough reflection on the nature and requirements of theory must be part and parcel of disciplinary praxis. As was argued at the outset of this article, we need to be willing to lay bare, and critically investigate the explanatory achievements of the specific conception of theory undergirding our attempts at explaining the phenomena of interest to us.

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