THEORY-SYNERGETIC APPROACH IN IR

CASE-STUDY OF BTC AND SGC PIPELINES

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CONTENTS

SUMMARY

This thesis is a proposal for a theory-synergetic approach to multi-theoretical pluralism in International Relations. It represents an application of IR paradigmatic matrix upon the substantive problem-field of international oil politics – an empirical case-study used here to demonstrate how theory-synergetic analysis might be applied to attain a deeper, more holistic understanding of the given puzzle than would be possible within a single-paradigm research mode.

Theory-synergetic approach is grounded in IR disciplinary discourse and is called to respond to the challenges of the latest Great Debate – a maelstrom of competing epistemological, ontological and normative contestations, with profound foundational implications for the future of IR as social scientific project. However, it is argued here that theoretical diversity has knowledge-producing and maximising potential and pluralism does not impede academic progress. Focus on empirical convergences between theoretical accounts normally posited separately provides the broad analytical framework for activating theoretical synergy.

By bringing these insights to bear upon questions and issues in international oil politics it is shown that synergetic analysis allows for more complex, multidimensional and multi-layered understanding of the problem-field than single-paradigm research. It is shown that applying different theoretical models upon the same substantive problem-field reveals different realities of that same problem field; yet the resultant synergetic whole is greater than the sum of its constituent paradigmatic parts.

Introduction

Has International Relations[1] failed as an intellectual project? That was the question posed by Barry Buzan and Richard Little in their seminal paper in the *Millennium - Journal of International Studies* (30(1), 2001). Is IR theory at an end? What is IR? Can it still be even described as an academic discipline? Should it try to be one? These and similar questions are increasingly being repeated in the wake of the major upheavals of the Fourth Debate (Lapid, 1989, Darby, 2008; Wæver, 2013; see also the special issue of *The European Journal of International Relations* (Wight et al, 2013).

This may seem strange given that IR remains an attractive subject for an ever growing number of students and scholars, with expanding research and teaching programmes (and budgets) at universities worldwide, not just in the US and Europe. There has been a marked growth in academic literature on IR, specialist publications, and research centres devoted to its study. By some accounts International Relations has made major advances in methodology, scope of enquiry, adding new themes and dimensions to the discipline which, "[] *now straddles the globe and provides a common language with which to analyze world politics*" (Darby, 2008, p. 94).

Yet those concerned with the apparent decline and stagnation in International Relations point to the discipline's peculiar insularity from other Social Sciences. As Buzan and Little argue this insularity *"[] allows ideas from other disciplines to filter into IR, but seems to block substantial traffic in the other direction*" (Buzan and Little, 2001, p. 19). International Relations borrows heavily from other disciplines – from philosophy and economics to anthropology and psychology. Yet one would be at a great difficulty identifying any substantial intellectual impact or influence of IR upon wider social sciences.

Even on the issue of theoretical development and the endless quest for a Grand Theory International Relations is at a disadvantage. As Brown argues IR has been a consumer not a producer of Grand Theory, borrowing extensively from other social

[1] Capitalised form of IR is used to to refer to the academic discipline and the general term "international relations" to refer to the processes and practices.

science disciplines and making little by way of own contribution (2013, p.485). He goes further in identifying the effect of this uneven exchange and suggests that this disciplinary insularity had obstructed IR from having a wider impact, beyond academia (Ibid, p.484).

Whilst IR had arguably always been multi-disciplinary it appears this multi-disciplinarity simply masks "*dependency on other disciplines*" (Buzan and Little, 2001, p. 21). Meanwhile these other disciplines maintain a self-conscious distance from IR and for many International Relations is an intellectual minefield best avoided. Or as historian John Lewis Gaddis puts it in his explicit eschewal of IR – international relations theory is "*a field that has troubles enough of its own without my adding to them*" (2007, ix).

Moreover, debates and discussions within IR had not captured public imagination in the way history and economics, for example, had. IR's big names, the stars of the discipline such as Kenneth Waltz, are hardly known in the wider political science and even less in the world beyond. Some prominent IR figures, such as Zibgniev Brezinski and Henry Kissinger did gain a higher public profile, but this was due largely to political posts they held rather than their scholarship (Buzan and Little, 2001, p. 21).

Furthermore, Brezinski and Kissinger are exceptions that appear to prove the rule. In an article in *The Washington Post* Joseph Nye (2009) pointed out that the *Teaching, Research and International Policy (TRIP)* poll by the Institute for Theory and Practice in International Relations revealed that only three of the twenty five scholars rated as producing the most interesting scholarship during the preceding five years had ever held policy positions (one at the United Nations Organisation and two in the US Government) (Jordan et al, 2009).

For Nye (2009) the responsibility for this lies not with governments but with the academic community, which has neglected policy-relevant research in favour of "[] *mathematical models, new methodologies or theories expressed in jargon that is unintelligible to policymakers*". This lack of relevance to "real world" policy-making and the neglect of the practice of international relations marginalise IR and reduce its social impact. A growing concern over this gap between theory and policy and a desire to

make the discipline more relevant are the driving forces behind the recent turn towards pragmatism and pluralism in IR (see below) (Sil and Katzenstein, 2010).

If disciplinary insularity, lack of wider public impact and marginalisation from the practice of international relations are the symptoms of the apparent malaise afflicting IR, then theoretical fragmentation is often seen as its cause (Buzan and Little, 2001, p. 31). There are clear delimitations within the theoretical framework of IR that shape both ontological and epistemological foundations of all research in the field, making it in practice "*a discipline of theoretical disagreements*" (Burchill, 1996, p.3). Early dominance of positivist, state-centric approaches ensured that, for much of its history, IR paid little attention to issues such as ethics and political norms, deemed to be outside the scientific study of the material structure of world politics.

Buzan and Little (2001, pp. 22-28) identify and locate the a-historicism, even anti-historicism, of IR's tradition in what they call "*IR's Westphalian Straightjacket*" – a Euro-centric focus on the state and its role in international relations. The straightjacket did not hold for long. The reflectivist critique threw a major challenge to mainstream theoretical orthodoxy, undermining dominance of positivism and ending its '...*role as the only legitimate epistemology within the discipline'* (Langlois, 1997, p 155). The anti and the post-positivist turns are seen by many as marking a fundamental shift in meta-theoretical discourses in IR (Lapid, 1989).

The so-called "great debates", often characterised by "*frenzied emotionalism*", have collectively shaped and structured the discipline of IR, leaving it "*divided, directionless and disputatious*" (Buzan and Little, 2001, p. 32). The three "great debates" (or four, if one accepts Ole Wæver's inclusion of the inter-paradigm debate (Wæver, 1996)) have often been used as the conceptual matrix through which to view the discipline. This produced a narrative according to which scholars in IR assumed positions within sets of warring "isms" (realism, liberalism, constructivism and so on) and engaged in an ultimately fruitless battle to establish their preferred model as the dominant universal theory of International Relations, or at least, have it acknowledged as a superior one to others. Paradigm-specific research and teaching continue to dominate the discipline (Jordan, et al. 2009, p.18).

As Lake argues, IR is organised into "[] *academic "sects" that engage in self-affirming research and then wage theological debates between academic religions*" (Lake, 2011, p. 465). Whatever the stated objectives of various theoretical approaches in IR may be, the end result is to drive focus away from the substance of international politics to an endless, self-reflective insular debate about inherent superiority of this or that assumption – a sort of an ongoing game of intellectual one-upmanship. Presently, at the tail end of the most recent, fourth "great debate", IR community appears no closer to any concrete resolution, with most scholars either explicitly or implicitly accepting this ambiguous status quo.

The much heralded end of IR Theory is subject of intense debate and discussion. For example, a special issue of *European Journal of International Relations* entitled 'The End of International Relations Theory?' (Wight et al (Eds.), September 2013; 19 (3)) was complimented with a novel online symposium dedicated to the issue of the future of IR in the "post-Grand Theory" era (Nexon, 09.05.2013). Meanwhile, a quarter of the century since the publication of Yoseph Lapid's seminal paper "*The Third Debate: On the Prospects of International Theory in a Post-Positivist Era"* (1989) International Studies Quarterly also hosted an online symposium to mark the anniversary, assess the state of the discipline and examine if IR is at an end of its "great debates" (Jackson, 20.03.2014)[2].

As David Lake (2013) argues elsewhere, "[if] *grand theory was king, it was an evil tyrant"* (p.568)*.* This move away from grand-theoretical development and contestation is exemplified, especially in American IR, by a growing interest in pragmatist, multi-theoretical models and a new-found focus on mid-level theories grounded in practical, substantive discourses in International Relations. An example of this approach is the

[2] Lapid himself is quick to recognise that his approach to sequencing and defining issues and milestones in IR theoretical evolution introduced "*unnecessary confusion into the "great debates" story*" (20.03.14). There is now a clear recognition that Weaver's clarification of the issues is not only accurate but essential to understanding the current state of affairs in IR (1996). Without re-treading a familiar narrative, it is sufficient here to accept the designation of the Third Debate as the inter-paradigm debate of the 1970s and 1980s leading to a kind of rationalist synthesis between neorealism and neoliberalism. Whereas the reflectivist critique of rationalist IR - presenting as it does a foundational challenge to positivism - constitutes the Fourth Debate. Summarising Weaver's argument, Schmidt (02.02.2014) defines this fourth great debate as being "*characterized by a schism between reflectivist approaches, which includes critical theory, post-structuralism, postmodernism and specific versions of constructivism and feminism, that fall under the post-positivism label, and rationalist approaches that define the mainstream theories of neorealism and neoliberalism".*

analytical eclecticism advocated by Rudra Sil and Peter Katzenstein (Katzenstein and Sil, 2008; Sil and Katzenstein, 2010). Their pragmatist vision of the kind of knowledge that IR can and should produce has rapidly become part of mainstream discussions within the discipline, although it is now beginning to be seriously examined, assessed and critiqued (Reus-Smit, 2013, p.591).

However, it will be argued in this thesis that pessimistic readings of the state of the discipline are misplaced. First, it is not necessary to discard the heritage of the Great Debates – in fact they may be viewed as essential elements in the genealogy of the discipline (Smith, 1995, pp.1-37; Schmidt, 2013, pp. 3-28; Waever, 2011, p.98). Second, it will be argued that the Fourth Debate reconstituted International Relations as an academic discipline and recast it as a meta-social science. It massively expanded IR ontology and widened its epistemological reach far beyond the narrow confines of positivism. It opened up IR from below and from outside, inviting in voices that had not ordinarily been heard in the past. And this all has profound implications for the kind of empirical output IR research has the potential to produce.

IR today, it will be argued, is a multi-theoretical, supra-disciplinary, intellectual enterprise, animated by normative commitments. Whilst its "geography" is still dominated by a Euro-Atlantic pivot, it is far less an American science today than twenty or thirty years ago. It is an increasingly a self-reflective discipline, more aware of its history of privileging certain culturally determined social scientific approach, and its relationship to power. As historicism and recognition of the *historical* in International Relations takes centre stage there is a growing awareness of the relationship between the material and the ideational, structure and agency.

In 2001 Buzan and Little set out an ambitious vision of what IR could be – "*a kind of meta-discipline, systematically linking together the macro-sides of the social-sciences and history*": "*If IR has an obvious role in the intellectual and academic division of labour, it is precisely to build bridges and establish a common ground in ways that transcend disciplinary boundaries. Its comparative advantage lies in its potential as a holistic theoretical framework, which should be able to speak equally well to political scientists, economists, lawyers, sociologists, anthropologists, and historians*" (p. 22).

In the post-Fourth Debate IR this ambitious vision is in fact reasonable. The problem is how to systemise or at least make sense of IR theoretical pluralism. First, it is important to state outright that the task is not to discipline knowledge-production. It is doubtful that theoretical synthesis is possible and those dismissing the incommensurability dilemma outright are clearly not sufficiently mindful of important epistemological and foundational claims in IR. Mid-range theorizing and eclectic approaches, on the other hand, are limited in their pluralist applications by their restricted ontologies and metatheoretical assumptions. Meanwhile, continued theoretical disengagement is also not an option – it leads to fears of fragmentation and claims that IR theory, or even International Relations as a discipline, is at an end.

The solution might be in reconceptualising the identity of the discipline. It will be argued in this thesis, that what is needed is a common language through which to communicate across the breadth of IR spectrum and with the world beyond; a language to express theoretical pluralism and the expanded ontology of International Relations; a language that would reflect theoretical diversity through establishment of a type of scholarly culture of IR. The language needs to be expansive and its vocabulary rich enough to accommodate the sheer breadth of knowledge created over the past century.

Bracketing this knowledge is counterproductive – IR is empirical and theoretical scholarship; concerned with both the material and the ideational, with a normative mission at its heart. As the 1919 anniversary approaches 'one hundred years of solitude' and introspection could come to an end and the redemptive foundational ethos of International Relations – "... *a global vision, forged in the fires of war, aimed at repairing the shattered family of nations...*"- must be re-established[3].

IR scholarship should be relevant to the practice of world politics, providing that the normative commitments are set out throughout the intellectual endeavour. In determining the contours of theoretical pluralism issues of theory selection cannot be reduced to questions of "usefulness" or limited by arbitrary notions of "suitability". The full spectrum of IR theoretical power must be utilised, harnessed and brought to bear

[3] From the University of Aberystwyth, Department of International Politics website.

upon substantive matters in international politics. Developing an approach that would achieve the above aims requires adopting a particularly expanded notion of pluralism of IR and a specific scientific research model to accommodate it.

This is not a question of a grand-methodology – as we have seen methodological pluralism is itself a major achievement of the Fourth Debate. Rather it is a matter of *science as method*, as articulated by Karl Pearson over a century ago: "*The field of science is unlimited; its solid contents are endless, every group of natural phenomena, every phase of social life, every stage of past or present development is material for science. The unity of science consists alone in its method, not its material*" (1892, p.15).

What is required in order to harness the inherent power of IR theoretical pluralism is a common methodological culture – a language, an analytical toolkit - by means of which scholars can utilise and apply different theories to the limitless substantive field of the science of international relations. A metaphor for IR theories as lenses through which to see different aspects of the same material reality has sometimes been employed (Smith, 2014). A different metaphor would be to see the world of International Relations as a picture tapestry and each theory as a particular thread in that picture. The incommensurability problem arises only if the attempt is made to synthesise the threads or have them work within the picture together but separately. Instead it is possible to envisage them operating in *synergy*[4]*,* to constitute a picture greater than the sum of the individual threads that make it up.

The idea that stories in IR can be told simultaneously in real time and in the resulting narrative produce a whole greater than the constituent theoretical parts that make it up is the defining feature of the theory-synergetic approach or TSA. But it is an idea that is grounded in IR foundational problems and is characterised by the implications of the Fourth Debate. These issues are addressed and the state of IR, post-Fourth Debate, is assessed in Chapter I.

[4] From Greek *synergia*, from *synergos*,(συνεργός), meaning "working together".

This thesis, therefore, is driven by a primary objective is to make an argument for a synergetic approach to theoretical pluralism and to demonstrate its working on the case-studies of Baku-Tbilisi-Ceyhan and Southern Gas Corridor pipelines. The aim here is to show how using theoretical tools synergetically can be useful in understanding substantive problems around these energy projects, for example, issues of environment, or more specifically, the role of oil companies or debates around international financing of these projects.

In Chapter II a proposal for TSA is advanced in the context of a wider discussion of its place in IR foundational and theoretical debates and how it can contribute to advancing the discipline's empirical priorities. It is essential to demonstrate how synergetic theorising might work in practice when applied to concrete substantive problems in international relations. The problem field of international oil politics and the case-studies of BTC and SGC pipeline projects are then introduced as the proposed empirical testing ground for TSA. Key elements of synergetic theorising, TSA analytical tools and processes of sequencing – from theoretical modelling to identification of conceptual overlaps and thematic commonalities to construction of inter-paradigmatic pivots – are explained.

In Chapter III the empirical field of international oil politics is examined in greater detail; its properties as a substantive case-study for exploring theory-synergetic approach are characterised and investigated. Single-paradigmatic models of international oil politics are then set out in Chapters IV and V - Rationalist and Reflectivist respectively. By focusing on various events, issues, debates in the history of oil politics it will be shown how different paradigms tackle different aspects of the same substantive matter, treading the same empirical ground of Baku oil, but together comprising a whole picture of world oil (and gas) politics, which is ontologically greater than the sum of its rationalist or reflectivist parts.

This theory-synergetic approach to international oil politics is explored in Chapter VI. Building on the single-paradigm models of BTC and SGC pipeline projects set out in preceding chapters, synergetic readings of the problem-field are developed to demonstrate how harnessing IR multi-theoretical potential properly can amplify empirical accuracy of research outputs; and how excluding different strands of

knowledge or theoretical claims based on a priori assumptions or foundational commitments can have empirical costs, undermining explanatory and predictive qualities of scholarship. In Chapter VI these claims are explored by focusing on examples of thematic commonalities and convergences around common empirical material. TSA is operationalised on specific ontological overlaps identified between single-paradigm models of energy politics. It will be shown how using these analytical techniques can help produce empirical outcomes which better correspond to the reality of world energy politics than single-paradigm and eclectic approaches, amplifying both explanatory and predictive qualities of theoretical claims and scholarship on complex international phenomena such as BTC and SGC pipelines.

I

Foundational and Theoretical Debates in International Relations

Introduction

The story of the Great Debates shapes the structure and self-image of International Relations and in large part forms the core of traditional chronicling of IR history (see, for example, Smith, 1995 in Booth and Smith (eds); pp. 1-37; Schmidt, 2013 in Carlsnaes et al (eds.) pp. 3-28). Any proposal for pluralist, multi-theoretical engagement in IR requires at least an implicit acknowledgement of their integral role in development of intellectual and social structures of the discipline (Waever, 2011, p.98).

However, the contentious and unresolved nature of these theoretical debates in IR is further compounded by distinct foundational philosophical disputes, which run in parallel and overlap with the paradigmatic ones (Monteiro and Ruby, 2009, p.19). At the core of these "science" debates are questions about IR's position as an intellectual enterprise. As such, this is philosophical debate and it is essential here to recognise the role of another discipline, *Philosophy of Science* (PoS), in shaping foundational disputes in International Relations (Ibid.).

Whether or not IR is a science, what counts as science in IR and other foundational questions are ostensibly posited in order to establish criteria for validity; to serve internal disciplinary structures (academia, journals, etc.); to attain disciplinary credibility in the eyes of the practioners and policymakers (Ibid. p. 16). In practice these questions carry significant implications for theoretical debates and the state of the discipline more generally. They go to the heart of epistemological and ontological contests as well as issues of methodology and politically important matter of what counts as valid, 'acceptable' knowledge.

Perhaps it is useful, therefore, to begin with an explicit acknowledgement of the symbiotic and mutually reinforcing dynamic of foundational-philosophical and theoretical/paradigmatic debates in IR. Indeed, proposal for theory-synergetic

approach, as set out in Chapter II, is informed by problems and challenges thrown up by the latest of these debates. Questions of epistemology and ontology are central to understanding prospects for a pluralist International Relations.

This Chapter, therefore, begins with a comprehensive overview of the four theoretical Great Debates and the two Foundational debates, set out in a common chronological timeline and a single analytical framework. Implications of the latest of these debates are then examined with the aim of assessing current state of the discipline and its prospects for theoretical and scientific development. It will be argued that rather than heralding the end of International Relations theory, the latest scientific and theoretical debates have opened the discipline up to a possibility of greater intellectual pluralism and created opportunities for innovative multi-paradigmatic engagement with substantive issues in the field of global politics.

The Chapter concludes with a brief review of some of these efforts to move away from meta-theoretical concerns and grand-theory construction. Yet such efforts at inter-paradigmatic synthesis, mid-range theorising and multi-methodological research models are fraught with their own difficulties and shortcomings. The overall aim here, therefore, is to examine conditions necessary for emergence of credible multi-theoretical approaches in International Relations in the context of theoretical and foundational challenges thrown up by the latest of the Great Debates.

Epistemology, ontology and Philosophy of Science (PoS)

Epistemology is the philosophy concerned with establishing the scope and nature of knowledge, the means by which it can be acquired, and the extent to which it can be justified. It is about how and what we know. Ontology is the philosophical study of reality and existence. It deals with what the world is made of in the literal sense of being, and which entities, and categories of entities, can be determined to actually exist. Epistemological and ontological commitments (what is to be studied and how) form the basis of philosophical foundations of scientific knowledge and define its scope (Reus-Smit, 2013, p.592; Monteiro and Ruby, 2009, p.25).

Foundational knowledge is by definition *a priori* knowledge, which does not require its truth-status to be proven or upheld. Commitment to such foundational knowledge means there are no further or other commitments by which standards of knowledge might be determined or justified. What makes a foundational philosophical position foundational is that it has pretensions of infallibility, and irrefutability. If this is really true then such position cannot be complimented or made compatible with other foundational positions (Monteiro and Ruby, 2009, p.25-26).

As noted above academic discipline of International Relations has been especially prone to existential debates concerning foundational issues of epistemology and ontology, which informed much of the quest for a grand meta-theory of IR (Kurki and Wight, 2013, p. 14). Foundational debates are at the forefront of IR disciplinary divisions, with majority of scholars in the TRIP survey, for example, clearly identifying with either positivist, anti-positivist or post-positivist positions (Jordan et al, 2009, pp.10-11).

Uneasy about its philosophical foundations IR turned for reference to another academic discourse in order to reinforce its status as a social science. Contemporary *Philosophy of Science*[5] (PoS) – the branch of philosophy concerned with foundations of science – emerged as a distinct analytical field in the mid-Twentieth Century; its rise to prominence is associated with the works of Karl Popper (1959) and Thomas Kuhn (1962). PoS essentially deals with *a priori* foundational sets of questions – how science should be conducted? How science is conducted? What is the purpose of science?

In "*IR and the False Promise of Philosophical Foundations*" – their critique of PoS influence on International Relations - Monteiro and Ruby (2009) identify this first set of foundational questions as granting the PoS "[] *the status of a special discourse – a normative discourse capable of evaluating science and legislating its boundaries and practices*" (p.24). Although Kurki and Wight (2013, p.16) argue that IR has not taken PoS seriously, it is evident that at least from the behaviouralist turn in the 1960s-1970s onwards, PoS provided IR with its key foundational positions.

[5] For a recent review of the field see Rosenberg, 2012.

Further, it can be argued that as the discipline evolved and sought to ground itself ever more firmly within wider scientific enterprise, it sought (either explicitly or implicitly) ever greater validation and legitimisation through self-conscious adoption of established foundational philosophical positions within PoS (Monteiro and Ruby, 2009).

Table 1. International Relations and the PoS

International Relations Debates	**Philosophy of Science Positions**
Behaviourism versus Tradionalism (Second IR/First Foundational)	Logical Positivism
Neo-realism versus Neo-Liberalism (Third IR/Neo-Neo Synthesis)	Instrumentalism
Reflectivism versus Rationalism (Fourth IR/Second Foundational)	Social Constructivism Scientific (Critical) Realism

Monteiro and Ruby point out a continuous chronological overlap in the development of IR paradigmatic matrix and the rise and fall in prominence of various philosophical traditions in PoS (see Table 1; Ibid, pp.19-20). Their analysis does gloss over myriad philosophical differences as they tag competing paradigmatic camps in IR by their corresponding philosophical positions in the Philosophy of Science; and they acknowledge that their "*simplifications are often ruthless*" (Ibid. p.26). Yet their approach provides a useful framework through which to analyse the relationship between International Relations and PoS, and is followed here in broad terms.

The four Great and two Foundational Debates

The first Great (theoretical) Debate between Idealists and Realists in the 1930s and 1940s was the first time foundational questions about IR were posed but it was not a foundational debate in strictly PoS terms. The so-called Idealists envisioned the discipline as an academic tool for furtherance of peace, abolition of war and conflict between states, and creation of institutions of global governance and international law, such as the League of Nations. Realists consequently dismissed such liberal idealism as naïve and lacking objective, scientific criteria by which its claims could be assessed. Europe's slide to WWII gave credence to realist critique of apparent utopianism of

early IR and led E.H. Carr to herald Realism as the starting point in the scientific development of the discipline:

"*The course of events after 1931 clearly revealed the inadequacy of pure aspiration as the basis for a science of international politics, and made it possible for the first time to embark on serious critical and analytical thought about international problems*." (Carr, 2001 (1981;1939), p9).

Traditional or Classical Realists may have called for a more rigorous, analytical methodology in International Relations, yet they sought to explain world politics in terms of "*objective laws that have their roots in human nature*" (Morgenthau, 1985, p.4). Indeed, Morgenthau's "six laws" of political realism rely not so much on observable data or other verifiable evidence as on arguably untested assumptions about what constitutes power and interests. As influential as it subsequently proved to be and for all its scientific pretensions, traditional Realism was not a foundational argument, certainly not in PoS terms.

If anything, in terms of IR disciplinary development, it is the Idealists who had performed the most important, literally foundational, function – in the aftermath of the horrors of WWI they had established the discipline of International Relations (see Introduction). Although they had no clear conception what kind of science would constitute this discipline they had set its normative course towards the aim of abolition of war through pursuit of knowledge about human affairs (Kurki and White, 2013, pp.16-17).

It was the behaviouralist turn in the 1950s and 1960s – the second Great (theoretical) Debate – that marked the first time a philosophical position from PoS was explicitly adopted as a foundational discourse in IR. Behaviouralists sought to apply methodologies of natural sciences to social scientific scholarship and in the first instance adopted Logical Positivism in their attempt to provide International Relations with a firmly grounded scientific status. This marks the first time that PoS becomes "[] *central to field's self-definition as science*" (Monteiro and Ruby, 2009 p.20). Logical Positivism was the dominant philosophy of science in the early and mid-20th century and was defined by its commitment to empiricism. As a theory of knowledge Logical

Positivism holds that the truth-status of knowledge claims can only be ascertained through logical or empirical verification.

This emphasis on verifiability of scientific statements is reinforced by a rejection of mind-independent reality. According to Logical Positivism scientific method must exclude all talk of unobservable (therefore unverifiable) aspects of nature. Instead scientific enterprise is envisaged as a systematic search for natural laws through rigorous empiricism with an emphasis on mathematical and attendant logical processes; theory-production and explanation are thus subordinate to theory-testing and analysis (for a review of Logical Positivism see Friedman, 1999). It was in the Second Great Debate that issues of what constitutes science in IR were first explicitly and systematically addressed. The behaviouralist ascendancy had made Logical Positivist epistemology, ontology and methodology, the foundational orthodoxy in International Relations for a generation, with traditional historical analytical methods being abandoned in favour of hard empiricist methodology. This First Foundational Debate in IR accounts for the wider historical preponderance of positivism in the field. Importantly, it also ensured that PoS would continue to shape and influence foundational debates in IR to this day (Monteiro and Ruby, 2009, p.29).

By the time of the neo-realist/neo-liberal inter-paradigm debate in the 1970s - 1980s (the Third Great Debate), Logical Positivism had come under sustained critique in the Philosophy of Science and new positivist PoS positions, in particular Instrumentalism, emerged to challenge its dominance. Instrumentalism is an expressly non-realist philosophy of science. It shifts the focus of evaluation of knowledge claims away from ontological realism (descriptive explanation), towards analysis of the predictive qualities of a given explanation. Instrumentalism emphasises empirical epistemology over preoccupation with ontology; its empiricism is more refined and attenuated than that of classical Logical Positivism. Predictive success of a scientific endeavour to explain an observed reality is considered more important than strictly truthful, verified description.

Theories are thus evaluated on the basis of their empirical reliability in predicting observed phenomena – "*useful instruments in proving our understanding of the observable world – thus the name 'Instrumentalism'*" (Monteiro and Ruby, 2009, p.27).

Instrumentalists recognise that assumptions and causal mechanisms underpinning scientific theories ordinarily cannot be observed (e.g. in quantum physics or astronomy) and treat them ‘as if’ they are true (Ibid).

This approach has made Instrumentalism in social sciences particularly popular in economics, where scholars postulate about fictional actors and processes in an abstracted fashion, ‘as if’ they were true, and make predictions accordingly. As Milton Friedman, a key proponent of Instrumentalism in economics, argued in his essay "*The Methodology of Positive Economics*" (1966), “[ ] *the only relevant test of the validity of a hypothesis is comparison of its predictions with experience”:* “*Viewed as a body of substantive hypotheses, theory is to be judged by its predictive power for the class of phenomena which it is intended to "explain." Only factual evidence can show whether it is "right" or "wrong" or, better, tentatively "accepted" as valid or "rejected.'*” (pp.8-9).

This emphasis on instrumentality of theory is the defining feature of Instrumentalism as a philosophy of knowledge. In International Relations a quintessential example of Instrumentalism is Kenneth Waltz’s seminal 1979 classic “*Theory of International Politics*”. Waltz clearly delineates between observable reality – laws, and theories as instruments that explain these laws: *“Because a law does not say why a particular association holds, it cannot tell us whether we can exercise control and how we might go about doing so. For the latter purposes we need a theory”* (p.6).

In his pursuit of a parsimonious, structural, non-reductionist theory of international politics Waltz treats unobservable entities ‘as if’ they exist, and uses them to explain and predict observable phenomena in international politics (Monteiro and Ruby, 2009, pp.27-28). It is this instrumentalist approach (and its attendant methodology borrowed heavily from economics) that made neo-realism and its synthesis with neoliberal institutionalism possible.

In the course of the third Great Debate, Neo-Liberal Institutionalists such as Robert Keohane fully accepted rationalist scientific project and Instrumentalist positivist epistemology of the Neo-Realists (Keohane and Nye, 1977, pp.42-46). Nevertheless, they argued that structural theory overlooks and underestimates the role of transnational actors and processes and called for what Keohane called, “*something*

in- between: systemic theories that retain some of the parsimony of Structural Realism, but are able to deal better with differences between issue-areas, with institutions, and with change" (1986, p. 197).

Rationalist consensus emerged directly as the result of universal adoption of Instrumentalist philosophy of science and its dominance of IR. Regardless of whether or not the neo-realist/neoliberal inter-paradigm debate was a 'debate' at all, it was certainly not a foundational debate – the foundations of IR as science were hardly debated and a considerable degree of convergence around a positivist centre-core took place within the discipline (Kurki and Wight, 2013, p. 19). As Stein (2008) argues:

"*The use of game-theory and the demonstration that institutionalized cooperation could be explained from a starting point of the power and interest of independent actors made possible not only a rapprochement between realists and neoliberal institutionalists but even an intellectual union in a perspective some dubbed as rationalism*" (p.205).

Yet despite this high degree of foundational convergence in the mainstream rationalist IR there remained a set of problems relating to theory choice, especially that of alleged incommensurability of different paradigmatic approaches. The concept of paradigms in IR is also borrowed from the Philosophy of Science. It was introduced in the early 1960s by Thomas Kuhn who defined paradigms as problem-solving achievements "[] *that some particular scientific community acknowledges for a time as supplying the foundation for its further practice*" (1962, p. 10). In his seminal work "*The Structure of Scientific Revolutions*" Kuhn (1962) identifies scientific progress proceeding in two phases – normal science and scientific revolution.

In the first instance knowledge production progresses within a commonly accepted theoretical framework, a dominant paradigm generally accepted and adopted by a scholarly community. In the second phase theoretical innovation occurs as the dominant paradigm faces growing number of anomalies and either attempts to address them or faces a challenge from an alternative paradigm, which claims to address those anomalies; as the alterative paradigm gathers greater support and acceptance it becomes the new dominant paradigm. Different competing paradigms

just as, for example, different political ideologies or systems, are incommensurable, claim to solve different problems and employ their own distinctive properties which makes it impossible to evaluate truth claims (Ibid. p.93).

Instrumentalists embrace Kuhn's emphasis on problem-solving as key component of scientific practice as the most important determinant in theory-choice. For Waltz, for example, the search for a parsimonious structural theory of international politics was informed in part by a pressing need to avoid the pitfalls of reductionist approaches with their inherent incommensurability problems. For instrumentalists there is a need for IR to adopt a single paradigmatic model around which research could converge, and this may help explain the discipline's perennial search for a Grand Theory.

Yet it is clear from Kuhn's own analysis that empiricism on its own is not sufficient to account for the dominance of this or that paradigm at any given time and the "[] *issue of paradigm choice can never be unequivocally settled by logic and experiment alone..."* (1962, p. 93). Kuhn argues: "*As in political revolutions, so in paradigm choice—there is no standard higher than the assent of the relevant community*" (Ibid). It is a growing acceptance of a particular theoretical position within a particular policy community or scholarly circle that determines its paradigmatic dominance and Kuhn goes to great length to provide a historical overview of an ever-changing pattern of dominant paradigmatic positions.

It follows from the above observation that scientific-claims are conditioned not by some universal standards of objectivity and truth but by the social practices and discourses of a scientific community. Subsequent challenges to Kuhn's framing of theories as paradigms are also, to a lesser or greater extent, ambiguous in their judgement of what constitutes scientific progress. Lakatos re-characterised theories as 'research programmes" but agreed that core foundational assumptions of these research programmes cannot be easily falsified or even subjected to empirical testing (Lakatos, 1970). Laudan's (1977) looser concept of 'research traditions' as an alternative to paradigms and research programmes seeks to move away from the idea of science as competing centralised theoretical clusters. As such it is even more vague and relativistic on the issues of theoretical progress and theory choice (Bennett. 2013, p.464).

Scientific truth is not discovered but is invented and established by social acceptance, rather than the world *per se*. Whilst different conceptualisations of theories as paradigms, research programmes or research traditions may differ in their assessment of what constitutes scientific progress, they all acknowledge its social condition. This focus on social construction of knowledge-claims is at the heart of the third key Philosophy of Science to make a major impact on International Relations - Social Constructivism[6].

For PoS social constructivists all knowledge is constituted by linguistic discourse and social practices, with language as the central determinant of meaning in the world. The distinction between epistemology and ontology is less prominent in social constructivism because these are seen as deeply enmeshed, mediated as they are through language and social context. Therefore, possibility of objective knowledge of reality is dismissed. For social constructivists the purpose of scientific inquiry is not the search for truth as such but the process of unmasking how such truth-claims are themselves product of power-relations in a socially-produced consensus.

For example, Nelson (1994) employs Constructivist Counterfactual Argument to point out that what are considered to be scientific facts are not simply contestable but that this contestability is due to scientists making certain choices and not others, and that other choices could have been made: "*If scientists had chosen to confer facthood otherwise than they actually did, then subsequent history would reflect this in world-view consistent with the choice they counterfactually made. Therefore, the 'facts' are determined by scientists' choices, not by 'objective reality'*" (p.541 in Kukla, 2000, p. 3).

In International Relations the Social Constructivist philosophy of science is taken up by critical theory, post-structuralism, feminism and pragmatic approaches, and forms the cornerstone of the fourth Great Debate. These reflectivist approaches reject positivist dominance of IR and emphasise "[] *reflexivity and non-neutral nature of*

[6] Social Constructivism in PoS is not to be confused with social constructivist theory in International Relations, which takes up Scientific Realist philosophy of science as its foundational basis.

political and social explanation (Kurki and Wight, 2013, p.24). Poststructuralists and other anti-positivists may well reject any notion that they are engaging in foundational debates but the very fact of their explicit commitment to social construction of knowledge makes them Social Constructivist in the PoS sense.

Critical theory's starting point is the Marxian dictum that the purpose of science is not only to understand but to change the world – a commitment to a classical idea of practical philosophy (Shapcott, 2008, p.327). At the core there is a normative commitment to a scientific emancipatory project, which firmly ties critical theory to a practical discourse on possibilities and conditions of human freedom. It may be an anti-positivist paradigm but is nevertheless laden with far-reaching foundational commitments.

The latter are rooted in the Social Constructivist PoS. For example, the Frankfurt School theorists' emphasis on the dialectical imagination as the driving force of the emancipatory project is rooted in the idea that "[] *it is the imaginational that allows one to connect the social purpose of ideas and creative faculties with the radical desire for social change*" (Roach, 2013, p.183). Thus critical theory harvests Social Constructivist PoS exploration of the dynamism between linguistic expression and material action.

Critical theory rejects neutrality of knowledge and emphasises its social and political dimensions – "*Theory is always <u>for</u> someone and <u>for</u> some purpose* (Cox, 1986, p.207). Simultaneously its proponents explicitly assume a highly normative, foundational purpose for the science of IR. As Cox argues: "*The study of international relations should focus first on the key issues affecting the biological survival of the human race; and then on the pursuit of justice in the condition of peoples, which is essential to maintaining their support for a survivable world order*" (2008, p.87). This far-reaching philosophical framework of IR as envisaged by critical theory is in itself a metanarrative of emancipation – science as a practical, normative project.

Similarly, feminism and poststructuralism represent a set of foundational projects, grounded in the Social Constructivist PoS. Postmodern or poststructuralist strand of critical theory represents a self-consciously combative effort to challenge dominant

practices and conceptualisations in IR. The aim and motivating force behind this challenge are explicitly normative – to uncover, unmask, debunk modern institutions, structures, events and show them as historically contingent products of human action, language and thought (Burke, 2008, p. 359). Existence of a mind-independent reality or Objective Truth is thunderously rejected.

Poststructuralism is explicit in its anti-foundationalism but as such it constitutes a meta-theoretical critique of positivist IR. As Campbell defines it, poststructuralism is "[] *a critical attitude, approach, or ethos that calls attention to the importance of representation, the relationship of power and knowledge, and the politics of identity in an understanding of global affairs*" (2013, p.225). This is simultaneously a critique of the discipline of International Relations and an expose of the practice of international relations, and a critical exploration of the relationship between the two.

The strong influence of the linguistic turn - a philosophical tradition focusing on the relationship between philosophy and language – and the works of Michel Foucault, places language at the centre of poststructuralist analysis; and this binds poststructuralism firmly to the epistemological and ontological foundational commitments of the Social Constructivist philosophy of science. As Burke argues, when it comes to the ethics of poststructuralism, its critique of positivism and rationalist IR aims to "[] *unmask the operations of power in the "knowledge" of global politics, and to uncover its formal and rhetorical structures, so as to open up suppressed choices in policy-making and bring out the voices of the marginalised and the oppressed*" (2008, p. 354). Poststructuralism, therefore, constitutes not just a foundational metatheory but a fully developed normative political mission. Campbell (2013) is only too right when he demands that critiques of poststructuralism "*need to engage it on its own terms*" (p.244) - because that is what one does with metatheoretical, foundational arguments.

Feminist theory of international relations is similarly explicitly and positively a normative project (True, 2008). Determinations of masculinity and femininity in international relations matter because they determine forms of exclusion and inclusion in decision-making and distribution of power (Enloe, 2007). Furthermore, feminists insist that simply acknowledging gender is not enough. When traditional IR is not

ignoring gender the discipline engages with the concept in a highly depoliticised fashion, which "[] *removes from it any examination of the ways in which relations of power sustain (or sometime challenge) prevailing assumptions about men and women and masculinity and femininity*" (Whitworth, 2008, p. 392).

By placing gender as a social construct at the heart of their international political analysis, feminists are making a foundational truth claim – that gender is a key, central factor in the ideational, material, historical, and institutional configurations of power (Ibid, p.400; Tickner and Sjoberg, 2013, p. 205). From a metatheoretical viewpoint, feminist IR theory shares common reflectivist scepticism about possibility of objective knowledge and scientific truths. With its emphasis on politics of identity, feminist IR is an example of Social Constructivist PoS analytical framework.

The pragmatic turn in IR is also circumscribed by foundational claims rooted in Social Constructivist PoS (Monteiro and Ruby, 2009, p.29). It is counterintuitive to assume so if one takes IR pragmatism's expressed prioritisation of the practical and its pluralist, anti-foundational claims at face value. However, pragmatism is bound by empirical-theoretical commitments which establish it as fully-fledged metatheoretical framework.

Pragmatist philosophical epistemology has wide-ranging implications for Philosophy as a whole and the Philosophy of Science specifically. Yet this influence is highly heterogeneous and intellectually diverse, reflecting perhaps pragmatism's epistemological agnosticism. Pragmatism[7] is a 20th century American philosophical tradition, commonly associated with the works of John Dewey, William James, Charles Pierce; it is based on the principle that science is to be practical, useful and judged upon predictive quality of its inquiry, rather than representative, descriptive accuracy.

In the Philosophy of Science, a broader pragmatist influence was brought to bear on Instrumentalism and Logical Positivism, as well as Social Constructivism and Scientific

[7] For a review of classical and contemporary pragmatist philosophy see Goodman, R. (ed.), 2005. Pragmatism: Critical Concepts in Philosophy, London: Routledge; Haack, S. (ed.), 2006. *Pragmatism, Old and New* Amherst NY: Prometheus; Talisse, R. and S. Aikin (eds.), 2011, *The Pragmatism Reader: From Peirce through the Present*, Princeton: Princeton University Press

Realism. Yet in IR, the pragmatic turn came from an expressly Social Constructivist PoS standpoint. It is characterised by a deep scepticism over possibility of any meaningful resolution to epistemological and ontological debates (Sil, 2000, p.354). For IR pragmatists there is no way to settle arguments of what constitutes truth or about validity of moral claims. Epistemological disputes are thus seen as excluding possibility of other rationales and purposes for social enquiry, for example the search for solutions to real-world problems and addressing immediate concerns of policy-makers and other practioners.

For Monteiro and Ruby (2009, p.29) the pragmatist turn in IR is bound by a foundational commitment to the practicality of knowledge – "[] *inquiry is inextricable from intervention in the world, in effect ascribing common normative goals to the discipline as a whole*". This sets pragmatic approaches in International Relations, such as Sil's and Katzenstein's *Analytic Eclecticism* (2010), within a clearly structured metatheoretical framework – "*a distinctive kind of social-scientific project, one with particular boundaries and particular content*" (Reus-Smit, 2013, p.596).

What all reflectivist theories of IR founded upon Social Constructivist philosophy of science share is a deep scepticism on the possibility of objective knowledge and agnosticism about (and often denial of) reality that exists 'out there', independently of human mind. Above all they represent a critical discourse on the practices of IR as a discipline itself. These practices influence and shape the world IR scholars claim merely to be observing. From this follows that when it comes to science, interpretation and critiques are the best that can be done. Thus the anti-positivist discourse of the Social Constructivist PoS had had a profound impact on the course of the Fourth Debate in IR, challenging the very notion of what constitutes science of international politics. This marks it as the second Foundational Debate.

Scientific Realism and IR

By contrast *Scientific (Critical) Realist*[8] philosophy of science is "*committed to (indeed founded upon) the possibility of scientific progress*" (Monteiro and Ruby, 2009, p. 31).

[8] See Archer et al (Eds.), 2007, Critical Realism: Essential Readings, London and New York: Routledge

As a philosophy of science Scientific Realism holds that the world is knowable in principle, especially since science had already produced considerable progress. Knowledge about the world therefore corresponds to the truth of how the world really is. This truth is accessible to scientists and there should be no limitations on the pursuit of the scientific enterprise. As Leplin argues: "*What realists do share in common are the convictions that scientific change is, on balance, progressive and that science makes possible knowledge of the world beyond its accessible, empirical manifestations*" (1984, p.2).

Scientific Realism challenges epistemic scepticism of other PoS positions. Observable and unobservable elements of scientific theories must actually be true and correspond to the reality of the world out there. Otherwise there would be no accounting for the technological successes of modern science without recourse to miracles – the so called "no miracles" argument (Monteiro and Ruby, 2009, p. 30; Putnam, 1984, p.141). At the heart of Scientific Realism is a foundational commitment to a 'correspondence theory of truth' (Ibid, p. 140).

Table 2. Fourth IR/Second Foundational Debate

International Relations Theories	**PoS Positions**
Critical Theory Poststructuralism Feminism Eclecticism	SOCIAL CONSTRUCTIVISM
Social Constructivism	SCIENTIFIC (CRITICAL) REALISM

This ontological realism is coupled with epistemological relativism and methodological pluralism. Scientific realists posit that there should be no *a priori* limitations on what and how can be known about the world. This epistemological relativism does not, however, prevent possibility, in principle, of choosing between different competing theories or explanations - what Patomaki and Wight call "*judgemental rationalism*" (2000, p. 224).

There is a degree of confusion and conflation when it comes to determining between Scientific and Critical Realism[9]. For Monteiro and Ruby there is no distinction between the two versions, as "*the boundaries between Critical and Scientific Realism are fuzzy*" (2009, p.31). Indeed, the terms are often used interchangeably and both share common philosophical foundations and commitments. What distinguishes Critical Realism as a more nuanced and attenuated upgrade on the original is a critical stance towards truth claims and the attendant notion of *deep ontology* (Patomaki and Wight, 2000, p. 225).

Critical Realists build on the work of the philosopher Roy Bhaskar (1975) to argue that social outcomes are produced by the dynamics of both ideational and material factors: "*According to critical realists, the question of whether material factors or ideational issues are the most important in determining outcomes is an empirical matter that can be decided only on the basis of research that examines the relationship and interplay of both*" (Kurki and Wight, 2013, p.26).

It follows, therefore, that the social reality is more than its experiential qualities and intersubjective elements. The concept of deep ontology emerges from an understanding that this social reality consists of more than can be experienced and is not exhausted by intersubjective meanings. In fact, "*the surface appearance of inter-subjectivity, although possessing causal power, is typically distinct from its underlying - and potentially hidden, reified, or mystified – essential relations*" (Patomaki and Wight, 2000, p.225). Critical Realism is thus an ontological endeavour, committed to the notion of perpetual science where "*no claim is ever immune from challenge*" (Ibid. p.218), and which "[] *rather than being committed to a dogmatic insistence on the certainty of its claims, rests on a commitment to constant critique*" (Murki and Wight, 2013, p.25).

Critical and Scientific Realism form a single PoS super-structure that consists of a) prioritisation of ontological realism; b) general epistemological relativism; and c)

[9] For a review of Critical Realism see Archer, M., *et al*. 1998, *Critical Realism: Essential Readings*. London: Routledge. For a review of Scientific Realism see Leplin, J. (ed.) 1984. *Scientific Realism*. London, Berkeley and Los Angeles: University of California Press.

judgemental rationalism – the view that despite epistemological relativism it is still possible to establish justifiable criteria for theory/explanation choice (Ibid. p.31). Distinctions emerge where Scientific Realism focuses its broad attention on the correspondence theory of truth, calling on science to adhere to strict ontological discipline and to get at the way the world *really* works (Leplin (ed.), 1984; Wight, 2006; 2007).

Meanwhile Critical Realism adopts a vision of science as a perpetual and open-ended endeavour to test and challenge truth claims about the world constructed of the interplay between the material and ideational elements (Bhaskar, 1975). Whether treated as a single analytical framework or via its component perspectives, realist philosophy of science stands out within the PoS by its central and contentious claim that science provides a roadmap to mind-independent reality (Monteiro and Roby, 2009, p.32).

Scientific and Critical Realism have been enthusiastically endorsed in International Relations, predominantly by proponents of social constructivism (Wendt, 1999; Patomaki and Wight, 2000; Chernoff, 2002; Wight, 2007; Joseph and Wight, 2010; Kurki and Wight, 2013). By prioritising ontology, epistemic relativism and methodological pluralism Scientific Realism is seen as carrying a post-positivist potential to bridge IR's foundational divisions. Alexander Wendt, a key proponent of Scientific Realism, argued in "*Social Theory of International Politics*" that Scientific Realism *"captures what IR scholars of all stripes already do*" (1999, p.67).

Patomaki and Wight dismiss IR inter-paradigmatic debates as an arbitrary "*epistemological speculation in an ontological vacuum*" and endorse Critical Realism as "*a broader, non-reductive perspective, capable of incorporating the strengths of all* (2000, p. 227). Critical Realism is seen as a philosophical foundation upon which a multi-theoretical, multi-methodological IR framework can be built, thus providing the discipline with the elusive post-positivist consensus. As Monteiro and Ruby define it, Critical Realism comprises *"…relativism at the epistemological level (making for pluralism by allowing all sorts of approaches, theories, paradigms, research traditions, etc., to operate side-by-side within a discipline) and realism at the ontological level*

(continuing to view scientific knowledge as getting at the way the world really works, independent from our efforts to know it" (2009, p.31).

Implications of the fourth Great Debate

International Relations today may be seen as an intellectual maelstrom of competing philosophical frameworks and normative and theoretical visions, with little internal coherence or external relevance. Janice B. Mattern describes it as "*an (un)discipline*" - "*less of a discipline than a collection of insular research communities*" (2008, p.692). She proposes return to metatheoretical discussion and a search for a singular theoretical framework, albeit more permissive of internal pluralism (Ibid. pp.696-697).

Yet today even realists like Randall Shweller are sceptical of the very possibility of IR theory and question its potential as scientific enterprise. In "*Maxwell's Demon and the Golden Apple: Global Discord in the New Millennium***"** (2014**)** Shweller argues that contemporary international relations are increasingly characterised by growing entropy – unpredictability, randomness and inexorable chaos, on macro and micro-levels, which over time reduce IR's explanatory power as it becomes ever impossible to predict and explain world events.

Shweller's is a complex argument about the future of global affairs and the role of states in the international system. This is not the place to examine it in detail but what is most interesting about it is its use of novel scientific concepts/metaphors rooted in physics, specifically in thermodynamic theory. "*Maxwell's Demon and the Golden Apple*" is a highly eclectic book, combining discussions of ancient Greek myth of the Golden Apple of Discord with the second law of thermodynamics. It employs rolling descriptive narrative and wide-ranging analogies complete with pop culture references. Yet IR scholars will immediately recognise familiar concepts such as anarchy, polarity and hegemonic wars, well represented across Shweller's analysis. Given his traditionalist academic background, previous publications and IR scholarship grounded in Realism, this book is particularly surprising, not least because it has an almost postmodernist quality to it. This suggests that at the very least even orthodox IR approaches are more tolerant of intellectually diversity.

If Positivist dominance is at an end, then the last Great Debate cannot be considered as having been completely inconclusive. Its outcomes and implications are complex and it is difficult to characterise the Fourth Debate in terms of conventional IR historiography (Schmidt, 2013, p.19). And few would actually agree that IR theory has come to an end in its wake. It is therefore important to examine future directions of theoretical development and how these could contribute to meeting the challenges facing the discipline of International Relations.

Indeed, the editors of the special issue of *European Journal of International Relations* dedicated to the question - 'The End of International Relations Theory?' cautiously concluded that the Fourth Debate does not mean "theoretical peace" or a return to a paradigmatic 'war of all against all". Instead they argue that *"...one of IR's comparative advantages over other disciplines might just be its strong sense of being a theory-led and theory-concerned field*" (Dunne et al, 2013, p. 420).

Other contributors similarly argue that the state of IR theory is in much better shape that is generally thought (Jackson and Nexon, 2013, p. 544). Charlotte Epstein (2013) goes further to argue that the last Great Debate was a reformative process which greatly expanded the "world" of IR and the scope of the discipline. Rather than decline or diminution of theory the process instead is one of theoretical consolidation, as IR acquires a stronger grasp of its enlarged subject matter and seeks to deepen understanding of its workings (p. 500). There is no sense here that theoretical pluralism is detrimental to the intellectual enterprise of IR.

Elsewhere, Ole Wæver underlines this implicit connection between theoretical inquiry and knowledge of real world – the ideal of "*relevance through theory*" (2013, p.324). Development of theoretical debate within IR is indeed a formative function for the structure of the discipline: "*The debates serve to focus the discipline and to define both a hierarchy of forms of work [] and to give a meaningful role to larger parts of what goes on*" (Ibid. p.317). Casting the discipline in terms of "great debates" should not therefore be seen as having a disabling effect on IR, as is often argued. Instead, as Wæver points out, the Debates are a framework for intellectual continuum – a process of knowledge production in IR, with new theories emerging from and of a pre-existing IR setting (2013, p. 318).

Abandoning this framework and adopting a narrow empiricist approach to theory risks reducing the discipline to "*IR for IR's sake*" (Ibid. p. 323). Treating the discipline as an end in itself is erroneous in the case of IR because of the importance of its subject matter – a view of International Relations as a scientific enterprise "*ultimately justified by the severity of its issues*" (Ibid, p. 324). Implicit in Wæver's argument is recognition of the symbiotic relationship between theoretical and practical and the inherently complimentary nature of epistemological and ontological inquiries in IR: "*In a diverse discipline like IR, the challenge is not to achieve knowledge, but how to understand multiplicity of it, and this is only possible when we understand both the world and the processes through which our understanding of it came about. By knowing how we know, we know more about what we know*" (Ibid. p. 324).

Thus one area of consensus in the post-Fourth Debate IR may be a general recognition that theory should and does remain at the heart of IR and animates its intellectual vigour – there is a "*shared commitment to the importance of theory in understanding the world*" across IR paradigmatic matrix (Smith, 2013, p. 8; Guzzini, 2013: Mearsheimer and Walt, 2013). As Reus-Smit and Snidal argue, "[] *theoretical assumptions (and debates surrounding them) determine the contours of the field and inform even the most empirical research* (2008, p.5). Similarly, theory shapes the discipline's relevance to the real world – "*In practice, theory is unavoidable*" (Nye, 2008, p.648).

What is being energetically contested, therefore, is not whether there *is* theory or that it is at an end but rather *what* constitutes theory in International Relations? Indeed, what emerges from the overall reading of the special issue of the *European Journal of International Relations* on the end of IR theory is that approaches to the issue are largely determined by different conceptions of theory (Berenskoetter, 2013). When Lake, for example, declares theory dead he expressly means "grand theory", not all theory (2013, pp. 567-568). His conception of theory reflects a wider turn in IR towards mid-range theorizing, focused on producing practice-relevant real -world knowledge, and placed outside grand-theoretical debates (Ibid., pp. 571-572).

Mid-level or eclectic theorizing of the type proposed by Sil and Katzenstein (2010) and championed by Lake (2013), is called upon to provide a way out of paradigmatic wars of the "isms" and to offer a multi-theoretical analytical framework capable of illuminating "[ ] *substantive relationships and revealing hidden connections among elements of seemingly incommensurable paradigm-bound theories, with an eye to generating novel insights that bear on policy debates and practical dilemmas*" (Sil and Katzenstein, 2010, p.2). Other mid-level theoretical models similarly focus on explanation via study of causal mechanisms in international relations, but take a more structured approach (Bennett, 2013). What they have in common is explicit disavowal of Grand Theory – Lake's "evil tyrant" (2013, p.568) – and prioritisation of practice-orientated academic work, free from dogmatic constraints of inter-paradigmatic contestation.

Yet as Reus-Smit persuasively argues, metatheoretical assumptions cannot be avoided no matter how much they are bracketed (2013, p.590). Even the most explicitly pragmatic and self-reflectively eclectic approaches are structured by implicit epistemological assumptions which constitute metatheoretical constraints, undermining their very goal of producing practically-relevant knowledge (Ibid, p.602). The kind of knowledge required to address key questions in global politics cannot be produced by a purely empirical inquiry. Such knowledge by definition demands normative analysis and awareness (Ibid. p.606).

New prominence of norms and ethics in international relations is therefore another characteristic feature of the post-Fourth Debate IR theoretical pluralism. As Robert Keohane put it, "*We do not study international relations for aesthetic reasons, since world politics is not beautiful*" (2008, p.708). For all the theoretical diversity a characteristic feature of contemporary IR is the serious attention increasingly being paid to normative questions and issues of morality and ethics in world politics (Erskine, 2008; 2013).

Normative IR theory can be viewed as a distinct body of scholarship focused on international ethics (Nardin, 2008). But, as Smith argues, in contemporary post-Fourth Debate IR, all theoretical approaches should be seen as having normative commitments (2008, p. 727). When, for example, Brown cautions against abandoning the aspiration to produce "Grand Theory", he qualifies it with a need to make such

theory '*action-guiding as well as world-revealing*', concerned with "*critical problem solving*" and addressing the challenges facing disempowered communities – rationalist IR as a normative theoretical pursuit (2013, p. 494).

Multi-theoretical, pluralist and self-reflective – contemporary IR is an expanding field and this is reflected in growing attention being paid not only to different conceptions of theory and its functions, but its normative properties and practice-relevant implications. The image of IR as an un-discipline, facing demise and plagued by disagreement and fragmentation is only valid if we are to accept that it is necessary to have agreement on aims, objects and definitions in a discipline. As Wæver points out - '[] *history of science is full of disciplines that didn't agree at all on their self-definition, subject-matter, or methodology, and continued nevertheless*' (2013, p. 309).

Implications of the second Foundational Debate

Ironically one such discipline with unresolved foundational issues is Philosophy of Science (PoS), which, as noted above, continues to have a profound impact on the "science debate" in International Relations. As was shown above, PoS provides vocabulary and analytical frameworks for foundational disputes in International Relations, with various theoretical paradigms seeking scientific validation and legitimacy through association with corresponding PoS positions. The fourth Great Debate was explicitly the Second "Foundational debate in IR, concerned with what the discipline should study and how (Kurki and Wight, 2013, p.16).

However, Monteiro and Ruby are sceptical of PoS general influence on International Relations. They point out that each philosophical approach when applied as foundational basis for science in IR falters, because each demands "*at least one leap of faith*" (2009, p. 32). For example, instrumentalism limits knowledge to what can be observed, yet the notion of 'observability' itself is not scientifically knowable. In other words, there is no scientific basis for determining where the distinction between observable and unobservable lies, making the boundary fuzzy and arbitrary.

Social constructivist leap of faith is that "*despite the social nature of knowledge, claims about social construction of knowledge are themselves not socially constructed*" (Ibid p.34). But it is Scientific Realism that requires the deepest faith, according to Monteiro and Ruby. The correspondence theory of truth that underpins the approach is "*plagued by a problem of logical circularity*" (2009, p.34). The observation that science is successful and therefore must be 'right' or 'correct' is an example of inference to the best explanation and that in turn has no solid logical foundation, rather a great leap of faith.

None of the foundational positions in PoS can fulfil the promise of philosophical foundations for International Relations and Monteiro and Ruby argue for "*an attitude of foundational prudence in IR*" (Ibid, p.35) – a move away from taking a foundational position, in favour of simply having an attitude towards the foundational debate – a kind of agnosticism that acknowledges philosophical diversity but does not seek to impose one or another foundation upon the discipline. They rightly point out that it is highly problematic when "...*IR scholars deploy foundational arguments to show how their scholarship is 'scientifically' superior to that of others*" (Ibid., p.36).

Instead, they argue that IR pluralism, both theoretical and methodological, can be better served by rejecting *a priori* criteria and various forms of essentialism and instead determining theory and method choice on the basis of their contribution towards substantive understanding of international politics. Hence, arguments in IR should be judged on their substantive merits, not foundational claims and, therefore, scientific standards should not come from outside the discipline. Monteiro and Ruby argue that standards generated outside the discipline, specifically foundational PoS standards, "*allow for no gains compared to the standards generated by our own discipline – and make for important losses*" (Ibid., p.37).

Yet the authors do not extrapolate on what internal IR scientific standards are or could be. Their foundational prudence is agnostic on the questions of scientific progress and objectivity – it is defined more by its opposition to attempts to apply foundational commitments "*as the basis for determining the scope of scientific IR*" (Ibid. p.40). They conclude that the Great Debates should "*be about substantive questions, not about inevitably shaky meta-theoretical positions*" (Ibid. p.44).

As we have seen, however, attempts to bracket foundational commitments in any case are unlikely to succeed and foundational prudence advocated by Monteiro and Ruby is in the end yet another attempt to bracket metatheoretical issues in IR. And it is premised upon nothing less than a leap of faith of its own – that International Relations has empirical foundations as an independent academic discipline that require no metatheoretical philosophies to underpin them. Monteiro and Ruby actually call for scholars "*to trust IR's ability to stand on its own, without recourse to philosophical foundations*" (Ibid., p. 37). For some critics of Monteiro and Ruby these problems with their notion of 'foundational prudence' stem from the authors' unintended misunderstanding and mischaracterisations of PoS positions, leading towards a hyper-empiricist, neo-behaviouralist vision of IR (Jackson, 2009).

But even on its own terms the notion of foundational prudence is problematic. What are the empirical standards inherent or internal to IR, for example, is never defined or elucidated – there is a quality of arbitrariness to the argument. Its stated purpose ("*a truly pluralistic IR*" (Monteiro and Ruby, 2009, p.41)) – is never developed or explained. It claims to be scientific but post-foundational, and that 'bad science' "*can be debunked on theoretical, methodological or empirical bases*" (Ibid. p.43).

But what are the foundations of those theoretical, methodological and empirical bases? What should constitute as criteria for theory choice; for choosing one methodology over another? And how does one build an empirical body of scholarship when philosophical questions about what constitutes the ontology of International Relations are at the very heart of post-Fourth Debate disciplinary diversity?

Philosophy of Science may itself be a contested field, divided on questions of epistemological and ontological commitments, and what constitutes "scientific" inquiry (Monteiro and Ruby, 2009, pp. 24-25). But for PoS these are substantive issues which do not impede theory development and dialogue amongst scholars. There is no reason why they should do so in IR. Given the correspondence in the relationship between evolving PoS positions and foundational debates in IR, it is not difficult to view the rise of anti and post-positivist PoS schools of thought in parallel with the ending of rationalist dominance of IR. Cast in this light, "science debate" in International

Relations is not deadlocked. Instead, it should be seen as having re-founded International Relations as a massively expanded field of social inquiry.

It can be argued furthermore, that the Fourth Debate was informed and shaped by growing awareness of philosophies of science which are more enabling of theoretical and methodological pluralism. Thus theoretical diversity in IR is a reflection of growing foundational confidence across the discipline and a more refined and nuanced understanding of epistemological dynamics. More importantly it potentially points to a (re)discovery of an expanded ontology of International Relations – a distinct social realm not studied by other, older disciplines.

One outcome of the Second Foundational Debate could be that "[] *IR has finally found its world*" (Epstein, 2013, p.500). This is now potentially a meta-social science, constituting the study of the totality of human interactions across the globe and a normative intellectual enterprise animated by an ongoing emancipatory interest rooted in the foundation of the discipline in the aftermath of the horrors of WWI.

And this may help explain a peculiar phenomenon in IR foundational debates – scholars' IR-theoretical allegiances do not always (or even often) match or correspond to PoS-foundational positions either explicitly or implicitly endorsed by them. Thus, for example, some IR social constructivists and realists endorse Scientific Realism, which is a post-positivist philosophy of science (Wendt, 1999, p.67; Mearsheimer and Walt, 2013, pp.432-434). Meanwhile other realists take *Instrumentalism* as their positivist PoS position of choice, including Kenneth Waltz (1979 pp. 1-13; p.124). Poststructuralists and critical theorists (mostly implicitly) embrace PoS Social Constructivism – expressly anti-positivist philosophy (Cox, 1981); those rejecting paradigmatic discourse and seeking to do practice-oriented International Relations often root their middle-range causal accounts in the Pragmatist PoS tradition (Sil and Katzenstein, 2010).

This philosophical diversity, with sometimes counterintuitive matches between IR theories and PoS traditions underpinning them, suggests that IR scholars engage with foundational ("science") questions through the prism of their own discipline and on its own terms. The fact that today post-positivist philosophies of science, such as

Pragmatism and Critical Realism are being increasingly accepted by IR scholars from across theoretical backgrounds and are then employed to facilitate IR theoretical pluralism, simply means that this is useful for contemporary, post-Fourth Debate International Relations.

Problems of Pluralism in International Relations

On foundational level, therefore, the discipline is characterised by philosophical pluralism, marking the end of positivism as the only science of International Relations, and (re)establishing and considerably expanding its ontological realm. On theoretical and methodological levels, a picture of dynamic diversity emerges, as the discipline adapts to multiplicity of knowledge and ways of producing it.

On one level, this is reflected in the changing structures of IR academia – renewed focus on university teaching and research, growth in the number of journals and periodicals, and in transformation in the way IR knowledge is presented in traditional text books (see, for example, Booth and Smith (Eds.), 1995 (1997); Reus-Smit and Snidal (Eds). 2008; Dunne et al (eds). 2013; Carlsnaes et al (Eds.), 2012; Edkins and Zehfuss (eds), 2009).

But IR is also being opened up from below, with proliferation of online blogs and social media resources, which have not only provided platform to voices that would not ordinarily be heard, but also massively expanded the reach of the discipline, e.g. *E-International Relations* blog has an average of 200,000 unique visitors a month (*E-IR*, 2014; see also *The Duck of Minerva*). Unaffiliated to any academic institutions but often endorsed by the scholarly community (*E-IR*, 2015), ran not-for-profit by enthusiastic volunteers and hugely popular amongst students, academics, practioners and wider general public, these new IR platforms simultaneously shape and respond to disciplinary diversity and facilitate flows of interdisciplinary exchange.

This is not to suggest that the discipline had reached some lofty peak of its development. But in his contribution to *International Studies Quarterly* symposium 'The Third Debate' 25 Years Later (Jackson (ed.) 20.03.2014) Yosef Lapid tellingly

references Randall Jarrell's remarkable refrain that the *"people who live in a golden age usually go around complaining how yellow everything looks"* (1958, p.290). Lapid acknowledges the decentring of metatheoretical enterprise in IR but enthusiastically endorses its growing reflexivity and makes the following observation:

"If the discipline is in reasonable theoretical health, why do we witness all this talk about "the end of theory" with or without a question mark? The answer to this question is, of course, very complex, but my hunch is that a secret urge to become a "normal" science is still deeply rooted in the disciplinary psyche... Strong and sustained therapy is needed to successfully address this insatiable urge" (2014).

That is certainly a legitimate position to take but it does not address some of the fundamental questions facing IR. Diversity is established and normalised yet the extent to which it is being contested is equally undeniable. What may appear as a blooming if unruly garden to some, is "*an ivory-tower effete debate about very little of consequence"* to others (Ferguson and Mansbach, 2014).

There is no agreement on what constitutes proper theory in IR and different conceptions or types of theory are utilised across disciplinary landscape. Pluralism appears to have also put an end to metatheoretical engagement as the primary focus of theoretical development. Moreover, different paradigms prioritise different ontologies of international relations – what should constitute a proper empirical focus or unit of study is also being robustly contested. In post-Fourth Debate IR pluralism is not limited to epistemological and ontological issues – methodology can be argued to be very much at the heart of the contested diversity.

Pluralism raises a whole range of wider disciplinary issues – what is the relationship between IR scholarship and the practical world of international relations? What is the effect of the emergence of a growing set of autonomous subfields on the International Relations? What impact pluralism is having on the academic and administrative structures of the discipline? But the issue of theoretical diversity is the one that animates debates around pluralism in IR, not least because reaffirmation of theory as its intellectual centre of gravity is the single most important outcome of the Fourth Debate.

Perhaps, it is anxiety over these kinds of questions, rather than some psychological urge for a "normal science" that provokes a profound angst about whether "IR theory is dead". As Dunne, Hansen and Wight point out in the special issue of *European Journal of International Relations* nobody "*is arguing against pluralism per se: in fact, everyone agrees that it is a desirable position (albeit under certain conditions, such as 'relevance' or 'science'). This leads us to consider the question: what kind of pluralism can, and should, IR embrace?* (2013, p. 415).

If pluralism to be welcomed unconditionally, it means envisaging IR as a social scientific enterprise animated by an ever expanding, critical and reflective theoretical diversity. It means embracing the fact that there is no possibility of ever settling theoretical disputes in International Relations and allowing for an open-ended and unrestricted proliferation of theoretical positions. Commitment to pluralism as an end in itself would characterise such an approach. After all, since there are no common epistemological standards by which to assess competing knowledge claims why not accept all perspectives and just get on with it?

Yet, in reality post-Fourth Debate IR is characterised by a pluralism of a different kind – a "*disengaged pluralism*" (Ibid, p.416). If all claims are valid in their own right there is little incentive for theorists to engage with different viewpoints. Theory-development thus proceeds in separate, independent islands of knowledge-production, with "*no attempt to specify the relationships between theories*" (Ibid). Yet for proponents of theoretical diversity relativism is not a real constraint on inter-paradigmatic engagement. Some go as far as to dismiss the "incommensurability" problem altogether:

"*The notorious "specter" of relativism is rarely invoked and the once formidable obstacle to cross-paradigmatic communication known as Kuhnian "incommensurability" has been so utterly demolished that one finds herself secretly hoping for partial restoration"* (Lapid, 2014).

Whether or not this assessment is over-optimistic depends on what is meant by cross-paradigmatic communication. Could it be taken as far as a genuine theoretical

synthesis? Such a synthesis would require combining of different elements, in this case abstract entities of International Relations theories, to form a new unified, coherent and complete theoretical whole. This, in turn, would require constituent theoretical components to shed their constitutive epistemological and ontological properties and then arrive at a new common set of core foundational assumptions to form a theoretical synthesis - another grand-theory, a supra-theory in fact.

An alternative to such metatheoretical solutions to the challenges of disciplinary pluralism is increasingly sought amongst mid-level or eclectic theoretical approaches to global politics. These broadly positivist approaches eschew paradigmatic pretensions and holistic accounts of international relations, focusing instead on various parts of the political process, rather than the whole; examining individual variables and how they determine policy choices and outcomes. Mid-level theorising is methodologically pluralist and places great emphasis on historical contingency, whilst also looking to broader patterns in world politics:

"*Bridging and in many cases simply violating boundaries between the levels of analysis, this strain of theorizing about international politics was self-consciously eclectic"* (Lake, 2013, p. 571).

The argument for such an approach is not necessarily a new one and it has been argued that many of the classical theoreticians of international relations have indeed been either proponents of eclectic endeavour in IR or at the very least recognised a need for multiplicity of approaches, especially when it came to practical issues in foreign affairs. As Kenneth Waltz argued:

"*The prescriptions directly derived from a single image* [of international relations] *are incomplete because they are based upon partial analyses. The partial quality of each image sets up a tension that drives one towards inclusion of the others... One is led to search for the inclusive nexus of causes*" (1959, pp.229-230).

Admittedly Waltz's search ultimately led him to parsimonious structural vision of international relations. What is undeniable, however, is that eclecticism does have a strong historical foundation in IR, especially in the United States. It is no surprise,

therefore, that its most prominent and coherent articulation had emerged there with the publication of Rudra Sil and Peter Katzenstein's influential "*Beyond Paradigms. Analytic Eclecticism in the Study of World Politics*" (2010).

Sil and Katzenstein's approach is based on a key argument that various features of theoretical analyses, which are initially embedded in separate paradigms or research traditions can be separated on foundational level, reinterpreted in a coherent way and then "*recombined as part of an original permutation of concepts, methods, analytics, and empirics*" (2008, p. 111).

What sets analytic eclecticism apart is an explicit commitment to production of practically relevant knowledge. By integrating empirical observations and causal stories from different paradigmatic traditions it seeks to identify important substantive issues that have relevance to real world problems and have practical value beyond abstract academic debate. As an intellectual project it seeks first and foremost to address normative and policy debates in which real-life actors in international relations find themselves in real-time.

This concern over practicality of theoretical endeavour is rooted in the Pragmatist Philosophy of Science. In fact, Katzenstein and Sil go to great length to provide strong foundational underpinnings to their approach, arguing that Pragmatism offers the most solid philosophical basis for analytic eclecticism because of its "*aversion to excessively abstract ontologies and rigid analytic principles in favour of useful interpretations that can be deployed to cope with concrete problems*" (Ibid., p.113). Analytic eclecticism is thus driven by an urge for relevant and practical knowledge about international politics, and therefore constitutes an explicit rejection of grand theoretical meta-projects in IR: "*The making of practically relevant knowledge cannot wait for the emergence of a definitive consensus on methodological procedures or axiomatic principles that may reveal 'final' truths*" (Ibid).

Sil and Katzenstein go to great length to promote a vision of pluralist International Relations rooted in the Pragmatist Philosophy of Science and committed to production of practical, useful knowledge about world politics. However, it will be shown in the next chapter that for all its ambition analytical eclecticism remains limited in its

pluralism - limited by its curtailed ontology and by its implicit, if unacknowledged, metatheoretical commitments. Both these limitations stem from a specific and highly delineated choice of pluralism – rooted as it is in dominant IR theoretical traditions and characterised by largely American disciplinary convention.

Conclusion

This Chapter offered an overview of theoretical and foundational debates in IR with the aim of setting the context for theory-synergetic approach proposed in this thesis. It is not clear whether the latest, fourth Great Debate and the second Foundational debate running alongside it are yet at an end. But it is beyond doubt that they have already profoundly impacted the study of international politics and greatly advanced and expanded the field.

The end of the rationalist consensus and opening up of the IR to multiplicity of knowledge and ways of producing it, create both opportunities and problems for the development of the discipline. Whether International Relations can fulfil its potential as a multi-disciplinary, pluralistic social science, confident of its normative mission and foundational status, depends on whether intellectual output of the latest debates translates into further fragmentation of the field or results in fruitful cross-paradigmatic dialogue and scholarship.

It is not enough to overcome incommensurability problems across a limited range of paradigmatic positions characterised by common foundational commitments. Nor is it sufficient to employ combinatorial techniques or offer open-ended multi-theoretical critiques of problems and puzzles in international politics. It is argued here that any multi-theoretical engagement in IR must proceed from foundational beginnings – how epistemological and ontological divergences between different paradigms are to be reconciled is a fundamental question. In the next chapter it will be shown that when assessed present efforts at theoretical synthesis and mid-range theorising are characterised by major shortcomings and flaws, severely limiting their potential as a way forward for a truly pluralistic IR research agenda. Theory-synergetic approach is then advanced as a means of achieving this and responding to foundational and theoretical challenges of the latest debates in International Relations.

II

Theory-Synergetic Approach

Introduction

Foundational challenge posed by the Fourth Debate goes to the very heart of International Relations as a scientific enterprise. What constitutes science in the discipline is a philosophical question and at the core of the *theory synergetic approach* (TSA) is a clear recognition of this foundational and defining condition. The *raison d'être* for TSA is contained in the challenges thrown up by the latest theoretical and foundational debates in IR. Its scientific claims are necessarily foundational and there is no attempt made here to avoid meta-theoretical debates or the scientific ones.

The overall aims of this chapter are to establish these foundational claims, to explain TSA, how it might work in practice, as well as to demonstrate how it differs and is superior to other contemporary multi-theoretical approaches. The chapter opens with an exploratory definition of TSA and introduces *international energy politics* as the proposed empirical field to serve as case study in this thesis to demonstrate how the approach is to be operationalised.

Issues of epistemology and ontology are very much at the forefront of the analytical framework characterising theory-synergetic approach. The latter is not a proposal for a new paradigm or a specific methodology – it is a pitch for a wider, more general conception of a disciplinary *method*, a common way to do things or to approach substantive issues. TSA makes use of existing theoretical and methodological diversity. As such it makes no sense to attempt an escape from the discipline's history and structure. TSA is an explicitly IR approach; it proposes no abandonments or new starts, merely restructuring and reformulation of existing thinking.

TSA, therefore, is not an attempt at meta-theory, nor a paradigm, nor a research programme in a Lakostian sense. Neither is it a specific methodology. It is a technique or a systematic approach, which seeks to chart a roadmap for fully utilising the knowledge-producing potential of the post-Fourth Debate International Relations. It is posited that TSA is a *method* – a systematic way of thinking about substantive issues

in international politics and approaching empirical research tasks – which allows for full application of the discipline's theoretical and methodological pluralism.

Theory-synergetic approach is epistemologically pluralist in the widest sense and is called upon to address the challenges posed by the changed intellectual environment of IR - its deep ontology. TSA calls for a greater focus on real-world issues, normative commitments and reflective qualities in International Relations scholarship. But this self-conscious epistemological relativism is not arbitrary. TSA holds that IR theories can be viewed as *research tools* and proposes to study and reveal international political reality through a systematic application of these tools to specific substantive issues and empirical puzzles, such as the case studies in this thesis: international energy politics in general and specific oil and gas pipeline projects.

Theoretical matrix of International Relations is held to be comparable to the periodic table in chemistry – the importance is attached not only to individual theories but to reactions and interplay between them, as they come into the empirical mix of TSA. It is a proposed framework for organising epistemological and ontological properties of contemporary IR and as such, it is founded and rooted in Critical Realist Philosophy of Science. This Chapter explores foundational claims that underpin the argument for theoretical synergy and demonstrates how applying Critical Realist concept of *deep ontology* helps unlock the inherent knowledge-maximising potential of multi-theoretical IR.

This chapter will detail general principles, mechanisms and workings of TSA and demonstrate how they are to be operationalised through empirical modelling, using case-studies of energy politics. This will be achieved by showing that TSA represents a superior method of harnessing IR pluralism, especially compared to attempts at inter-paradigmatic synthesis. It will be argued that such efforts are unlikely to succeed at tackling incommensurability problems without highly abstracted disaggregation of epistemological and ontological elements and properties of various constituent theories. Instead of synthesis the concept of theoretical synergy is proposed as a means of engaging with epistemological and ontological divergences across the IR-theory matrix.

Similarly, it will be demonstrated that mid-level theoretical approaches such as analytic eclecticism are characterised by distinct epistemological commitments that limit their theoretical pluralism. Attempting to avoid meta-theory and refocus IR as a practice-led project ends up arbitrarily constraining theory-choice and results in a highly delineated, curtailed ontological field. Theory-synergetic approach shares analytic eclecticism's concern with real-world problems and its emphasis on ontology. However, it proposes to tackle substantive issues in IR without seeking to bracket theoretical diversity or by sacrificing normative concerns. TSA holds that theory-choice should be determined by specific problems of a given empirical puzzle, not be restricted by a priori assumptions about what constitutes valid knowledge or how the puzzle fits within parameters of an "acceptable" eclectic-theoretical combination.

Theoretical synergy

Theory-synergetic approach is called to realise the inherent meta-disciplinary power of IR and to reveal a deeper ontology of international relations. As such it is a proposed mechanism for systematic application of IR epistemological matrix to complex ontological problems, puzzles and challenges that encompass the widest possible range of global social incidence. That IR theories are lenses through which to view the reality is a common analogy (Smith, 2014). What TSA does is to translate that analogy into a practical and systematic approach. If the discipline of International Relations is to take seriously its commitment to a deeper (expanded) social ontology, then a common standard for a multi-paradigmatic approach is needed.

That is not to suggest an attempt to impose uniformity or to "discipline the discipline". Rather, TSA is an attempt at a minimal IR epistemological reconciliation. Epistemological relativism implicit in the synergetic approach may suggest that anything goes. Ultimately, however, there are always good reasons for choosing this or that particular lens through which to examine a particular puzzle – what Patomaki and Wight call epistemological opportunism (2000, p. 227).

However, the rationale for judging which theories are most suitable for addressing a given puzzle should be grounded in the ontological priorities of that specific research, rather than grand theory dogmas. And, as will be shown, ontological problem field of

international politics of energy allows for a wide range of IR theoretical applications, with each epistemic lens revealing a particular set of questions and issues, which all overlap in a synergetic way upon the same empirical question or puzzle.

Epistemological incommensurability thesis posits that since different theories have different epistemological criteria there is simply no way to compare them. TSA directs attention to the question of ontological overlap between theories. If incommensurability thesis declares that theories clash then there must be something to clash over: "*Put simply, if there is no ontological overlap then there is little point in trying to compare theories, or bemoan the fact that we can't*" (Patomaki and Wight, 2000, p. 227). Theory synergetic approach is essentially a technique for in depth theoretical analysis of such ontological overlaps.

For example, a neo-realist analysis of oil pipeline politics in the Caspian-Mediterranean region in the period following collapse of the USSR, might focus on the relationship between the Russian Federation and the United States, Turkey and Iran, and/or the implications of additional volumes of hydrocarbons on the balance of power in the region and beyond. Green Theory, by contrast, would seek to establish the additional amount of CO2 that would be produced when that additional volume of hydrocarbons is burnt, its implications for global warming and the politics which prioritise fossil fuels over renewable energy. Critical theory would seek to expose the interests driving the building of particular pipelines (and not others) and how these serve hegemonic tendencies, and so on.

All levels of theoretical applications would have something valid and useful to reveal about the ontological problem at hand – international politics of energy. The picture that emerges at the end is far richer, textured, detailed and complete than if this given ontology was subjected to a single grand theoretical level of analysis. But the real value of the TSA is the *synergy* that emerges through such intensive multi-paradigmatic application. This theoretical synergy pivots upon ontological overlaps.

It is immediately clear, for example, that all theories when applied to international politics of energy will address to greater or lesser extent the issue of environment. But the angle at which the problem will be viewed will depend on the paradigmatic

properties of a given theory. The colouring of the lens will determine what aspect of reality is revealed. It is in the way different lenses interact and interplay with each other within a single research framework – theoretical synergy as a kaleidoscope made up of multi-coloured lenses – that makes TSA what it is.

Politics of oil (and gas)

Politics of oil and gas provide for a particularly dynamic empirical field upon which TSA might be applied (see Chapter 3). This is partly down to an opportune overlap in the story of oil in the twentieth century and historical development of IR as a discipline in the Great Debates. Thus, emergence of petroleum as a key strategic resource in the aftermath of WWI overlapped with the timeline of the first Great Debate between Idealists and Realists. Prominence accorded by Realists to oil as a strategic factor in world politics is not accidental. Realists pointed to the value of oil in its material impact on relative and absolute power of states and as subject of international competition. As Wheeler and Whited put it in their seminal account of the oil industry:

"*The name of the game is power – power to mobilize transportation, industry, and mechanical hardware; power to heat and cool; power to influence foreign affairs and domestic policies; power to conduct the most expensive and uncertain gamble on earth; and power to win or lose world conflicts*" (1971, p.1).

Control and possession of natural resources generally and oil specifically are thus a central component of national power (Morgenthau, pp.131-135; Waltz, 1979, p.131). Hence the relative value of oil - its implications for power politics. E.H. Carr identified economic strength as instrument of political power through its relationship with military strength (Carr, 2002 (1981; 1939), p. 105). Pursuit of economic self-sufficiency or autarchy, especially in raw materials, is the first measure by which states utilise economic power in the service of national policy (Ibid. p.110). Carr viewed economic independence as "...*primarily a form of preparedness for war*" (Ibid, P.111). Morgenthau is even more emphatic about *"the power of oil*" (1985, p.133). He too recognised the historical relationship between raw materials, economic power and military strength (ibid, p.131).

These brief observations serve to underline how theoretical debates do not take place in a vacuum and have always been informed and structured by substantive issues and real-world concerns and contemporary questions in international affairs. Moving from realism onwards through Great Debates, IR theoretical matrix offers a unique prism through which to analyse evolution in international energy politics. The latter in turn provides for a particularly useful empirical problem-field for studying how different IR theories tackle real-life puzzles, from inter-state war to global climate change. As such it is precisely the type of ontological overlap referred to by Patomaki and Wight, over which theories clash and may be compared (2002, p. 227). TSA, however, goes further in arguing that they can be synergised.

Specific case-studies of Baku-Tbilisi-Ceyhan (BTC) oil pipeline and the Southern Gas Corridor (SGC) pipeline project, will be used to demonstrate how this can be done in practice and to operationalise the workings and mechanisms of theory-synergetic approach. BTC is an international commercial oil pipeline, operated by BP, spanning three countries, from the Caspian Sea to the Mediterranean coast and has been in operation since 2005 (BP Operations and Projects 1, 2017). Southern Gas Corridor is a proposed EU-backed, multilateral international energy project, comprising a series of natural gas pipelines, running from Azerbaijan to Italy (BP Operations and Projects 2, 2017; European Commission 1, 2017).

These case-studies will be systematically examined throughout this thesis, as part of theoretical modelling and other TSA analytical tools (see below). However, it is argued that that the advantage of using synergetic, as opposed to single-paradigm or eclectic approaches, is that it unlocks a deeper ontological realm of any given problem field. Applying TSA to study international projects, such as BTC and SCG pipelines will necessitate understanding of the underlying material and ideational factors, social forces and historical processes that constitute those projects and determine their real location in the deeper ontological realm of energy politics.

There are no *a priori* limitations or brackets on what constitutes that realm – the wider the epistemically-defined scope of applied theoretical synergy on a given problem, the more can be revealed about its material constitution, normative claims and debates surrounding it, historical contingencies and conditions that gave rise to it, in other

words - its place in the “world out there”. Ontology, therefore, precedes epistemology - theory-synergetic approach begins with a recognition that the first purpose of IR here is to study politics of oil and gas by all means available; the choice of the means being determined by empirical concerns alone.

Synthesis vs synergy

There are, of course, other multi-theoretical, pluralistic approaches, briefly discussed in the previous chapter, that are animated by the same sense of ontological focus, drive to produce practically-relevant knowledge and by the same commitment to epistemological flexibility as TSA. At this stage. it is worth examining these analytical frameworks, not least because TSA proceeds from the same starting positions as synthesis and eclectic approaches in identifying the need for pluralist theoretical engagement as the necessary direction for IR to pursue in the aftermath of the Fourth Debate. There is agreement that complexity of modern international phenomena precludes mono-causal explanations and requires more comprehensive elucidation, even at the cost of diminished theoretical parsimony (Moravcsik, 2003, p.131).

However, there are fundamental problems with synthesis and eclectic approaches which raise doubts over their potential to fulfil the task of building multi-theoretical IR. First, as previously stated, synergy is not synthesis. It is highly debateable that a truly cross-paradigmatic theoretical synthesis in International Relations is possible at all, whatever its proponents might claim. It is true that for them incommensurability is not considered an obstacle because, as Moravcsik argues*:*

“... the elements of a synthesis, though necessarily coherent at some fundamental level, need not share a full range of basic ontological assumptions. Although the overarching assumptions embedded in a given model must be minimally coherent and justify the relative position of the elements within a multitheoretical synthesis, there is no need for each subtheory of the synthesis to make identical assumptions about fundamental ontological matters” (Ibid., p. 132*).*

For Moravcsik IR theoretical synthesis can and should be theoretically diverse – its only test comes from the necessity for proposed syntheses to be empirically

established. Epistemological status of any given synthesis is thus no different to that of its component individual theories: *"in both cases, our confidence is a function of plausibly objective empirical support"* (Ibid). However, methodological problems associated with testing of complex theoretical syntheses are likely to be considerably more significant than those of a single theory. Moravcsik's proposes to overcome or rather bypass this hurdle by disaggregating or breaking down elements of the synthesis and testing those separately using specific methods (Ibid, p.133).

The main reason Moravcsik believes this is possible and that theoretical synthesis is easier than one might think is because he proceeds under a particular conception of synthesis: "*Most syntheses comprise a set of discrete theories, linked by a set of overarching assumptions."* (Ibid, p.132). However, in reality genuine synthesis means that component elements are subsumed by a synthetic new entity and cease to function as independent variables. Their material or abstract integrity is deconstructed and then reconstructed as part of a new whole.

Therefore, disaggregating component elements of theoretical synthesis and empirically testing each one and the assumptions underpinning them separately will not tell us anything about how they operate within synthetic theoretical model. Since they do not function as distinct entities within a synthesis their foundational properties and underpinning epistemological and ontological assumptions would by definition have been subsumed and incorporated into a new unified theoretical model. They would have effects within the synthesis but not of the causal kind that can be discerned through disaggregation – to be a genuine IR theoretical synthesis its causal claim must have intellectual integrity independent of its constituent parts.

Moravcsik, by contrast sees synthesis as characterised by a set of overarching assumptions; his argument proceeds from there and his choice of examples to illustrate workable synthesis models is telling: *"The overarching assumptions take various forms, each embedding subtly different formal and substantive assumptions: multivariate regression equations, game theoretical models, explicit models of interactions, decision trees, lexicographical orderings, narrative accounts, multistage sequences..."* (Ibid). But is it really that simple?

We know that theoretical synthesis is possible in IR but only when its component elements are founded on common ontological and epistemological assumptions. Common subject matter is not sufficient to provide a basis for a credible synthesis. For example, a neo-realist, a Marxist, a social constructivist and a feminist might all study armed conflicts in South Caucasus but the conflicts they will see will differ markedly given different foundational claims underpinning their respective paradigms. Proponents of the synthesis approach have not yet provided a compelling illustration of how this degree of incommensurability might be overcome on substantive level.

Setting the above aside and, for the sake of the argument, accepting disaggregation as a way around the problem of theoretical incommensurability would still not provide a workable synthesis model, because "*different methods of theory testing are predicated on different epistemological assumptions*..." (Sil and Katzenstein, 2010, p.17). Without a common and agreed unity of method the standards by which component theories would be empirically tested will be internal only to those theories and not the synthetic whole. Whilst a degree of synthesis may well be possible between theoretical positions which share common epistemologies, any wider inter-paradigmatic synthesis is not therefore a credible model for IR theoretical pluralism.

Analytic eclecticism vs synergetic analysis

Turning now to analytic eclecticism it is important to first acknowledge that TSA shares some of its concerns with prioritisation of real-life problems experienced and its eschewal of excessive simplifications, often employed to fit within paradigmatic boundaries – what Sil and Katzenstein call the "*no extrageneous factors*" rule (2010, p.10). They set out their eclectic theoretical model as a means to explore "*how diverse mechanisms posited in competing paradigm-bound theories might interact with each other, and how, under certain conditions, they can combine to affect outcomes*" (Ibid).

Yet there again is the spectre of incommensurability and Sil and Katzenstein do acknowledge difficulties it poses, especially when it comes to the old problem of establishing objective criteria for evaluating theoretical claims drawn from different paradigms (Ibid., p.15). However, unlike the disaggregation approach offered by

proponents of theoretical synthesis, analytic eclecticism posits the way out of incommensurability problem based expressly upon its substantive focus.

Analytic eclecticism prioritises ontology over epistemology and therefore questions of theory-selection and testing are to be determined and operationalised by empirical referents, embedded within specific substantive matters and concepts. Analytic eclecticism overcomes the incommensurability thesis not through abstract theoretical evaluations but through systematic empirical analysis of research-specific substantive indicators: "*It is possible to ensure that concepts and analytic principles are properly understood in their original conceptual frameworks, and to adjust or translate these terms by considering how they are operationalised in the relevant empirical contexts by proponents of various paradigms*" (Ibid).

Sil and Katzenstein go to great length to stress that analytic eclecticism is not a metatheoretical approach and nor is it an attempt "*to hedge the bets to cope with uncertainty"* (Ibid., p.16). They are explicit in their insistence that it is not theoretical synthesis and that does not imply that 'anything goes'. What marks eclectic scholarship out are a set of key features (Ibid, p. 19):

- open-needed, non-paradigm-bound problem formulation;
- middle range causal accounts of international political phenomena drawn from more than one paradigm;
- research outcomes which pragmatically engage both academic and practical dimensions and address the needs of policy makers and practioners.

This combinational approach employing middle range theories is "*specifically constructed to shed light on specific sets of empirical phenomena*" but is not a juxtaposition or substitution for paradigm-based research (Ibid., p22-23). Analytic eclecticism is concerned with pragmatic engagement with social reality with the aim of identifying those knowledge clusters "*that can enrich policy debates and normative discussions beyond the academe*" (Ibid.): "*Even when it is not offering explicit policy prescriptions, eclectic scholarship should have some clear implications for some set*

of policy debates or salient normative concerns that enmesh leaders, public intellectuals, and other actors in a given political setting" (Ibid).

A consistent commitment to production of practically-useful knowledge is informed in part by a sense that historic privileging of grand contests over epistemology has made International Relations less relevant to the world of practioners. As Ferguson and Mansbach argue contemporary IR should seek to use its pluralist theoretical framework in a "*practical fashion*" to address issues of importance in world politics. Analytic eclecticism certainly responds to their call to enhance the use of traditional paradigmatic perspectives in order "*to bring more than one of them to bear on particular problems—different theories illuminate different aspects of "reality"* (2014).

Yet this systematic commitment to practical scholarship is not without problems of its own. Sil and Katzenstein briefly acknowledge the risk of loss of critical thinking "*in relation to existing policy agendas*" (2010, p.13). They also refer to Anne Norton's paper "*Political Science as a Vocation*" warning, as she does, that "*problem-orientated scholarship can end up enlisting scholars in the unreflective service of those exercising power*" (2004, p.68). But they quickly move on to warn of the danger of over-preoccupation with purely academic debates "*that are hermetically blocked off from public discourse and policy debates about important issues of interest to both scholars and practioners*" (2010, p.13).

Yet, perhaps, it would have been useful to pay more attention to Norton's warnings about the ethical implications of the relationship between knowledge and power. All science is a priori political and is conducted in languages which both constitute and reflect "*contemporary preferences, prejudices, norms, standards, and assumptions*" (2004, p. 74):

"*Science comprises institutions and discourses. We have studied institutions. We have learned that institutions call identities and interests into being. The presence of funding for particular projects, the absence of funding for others, will ensure that in some (if not in many) cases, individuals will undertake research projects not because they think these are the most important, but because these are the projects that can be accomplished, or even because these are the projects that bring the greatest rewards.*

The power of the state is evident here but that of private funding is no less to be deprecated" (Ibid., p.73).

The above is not a mere abstract warning. For example, Joseph Nye's article "Scholars on the Sidelines" in *The Washington Post* (13.04.2009) is often cited (including by Sil and Katzenstein (2010, p.1)) to argue in favour of academics and researchers becoming directly involved in the world political practice. But that is the world of power and politicians, some of whom are tyrants. Joseph Nye's own experience with the regime of Colonel Gaddafi of Libya should serve as a cautionary tale (Silverstein, 2014, p.9).

As Norton argues problem-orientated scholarship "*is bad for politics and bad for science*": *"It encourages arrogance; persuading the young and the uneducated (and occasionally the old and the erudite) that they can solve problems beyond their reach; that they can answer questions they do not fully understand... Quick conclusions are encouraged; study, consideration, refection, and debate are not. Science is not advanced in this economy. Politics is harmed by it"* (2004, p.73). It is not necessary to subscribe to Norton's view in its entirety. But it is important to acknowledge that practical, real-world problem-orientated scholarship must be rooted in a reflective and critical understanding of world politics. It is essential to spell out what is meant by useful knowledge and this is where the problem with Sil and Katzenstein's approach stems from.

Theirs is an unapologetically an empirical enterprise and its theoretical focus is circumscribed by clearly delineated material categories – structural factors, causal mechanisms, various social processes. These are drawn from existing mainstream paradigmatic traditions in IR. As Reus-Smit contends, this makes analytic eclecticism "*epistemologically an empirical-theoretical project*" (2013, p. 591). Normative reflection is absent from it with IR remaining an explanatory enterprise, interested in only empirical problems.

And there is a reason for this. Sil and Katzenstein self-consciously seek to bracket metatheory and prioritise ontology by locating analytical eclecticism in the wider framework of the pragmatic turn in American social science. Geographic location

matters because Sil and Katzenstein refer to the TRIP surveys (Maliniak et al, 2007; Jordan et al, 2009) to argue that paradigmatic research continues to dominate the discipline (2010, p. 24). They then point out that almost two thirds of all IR scholarship comes from the triad of realism, liberalism and constructivism (Jordan et al, 2009, p. 18).

And it is on that basis that Sil and Katzenstein proceed to locate their eclectic vision of international relations scholarship in the context of realist/liberal/constructivist matrix – the Triad. They do concede that "*other paradigms have acquired significance, at times for long periods, in various countries*" (2010, p. 25). However, they refer to TRIP studies to indicate that the Triad remains the most viable contender for paradigmatic dominance in IR and argue that "*it is in the context of debates between realists, liberals and constructivists that we find it most useful to elaborate on the significance of analytical eclecticism for the study of world politics*" (Ibid). The reason they find it "most useful" is because "*these are the most prevalent approaches in the United States and worldwide*" (Ibid, p.36).

Limiting the approach to a three-dimensional paradigmatic framework provides both its distinct ontology and the epistemological foundation of analytical eclecticism. The examples of eclectic scholarship Sil and Katzenstein presented in "*Beyond Paradigms*" (2010) are chosen specifically to highlight convergences and overlaps within the Realist/Liberal/Constructivist paradigms (which could be tagged as Neo-Neo-Con). Interestingly, constructivism here appears as consequentially logical addition to a dominant paradigmatic pairing – its addition is useful, almost utilitarian, adding value to analytical eclecticism, which Sil and Katzenstein explicitly posit as a practical empirical-theoretical approach, aimed at providing useful knowledge for policy-makers. One is tempted to recall Walt's prescription from two decades ago:

"*The "compleat diplomat" of the future should remain cognizant of realism's emphasis on the inescapable role of power, keep liberalism's awareness of domestic forces in mind, and occasionally reflect on constructivism's vision of change"* (1998, p.35).

Furthermore, as Reus-Smit argues, bracketing metatheory "*does not free one's work of metatheoretical constraints*" (2013, p. 605). In Sil and Katzenstein's analytical

eclecticism these constraints are structured by "*a grund epistemological assumption that admits only empirical-theoretic forms of inquiry and knowledge"* (Ibid). He examines the concept of practical knowledge from Aristotelian and Kantian perspectives, and revisits E.H.Carr's supposed ultra-realism, concluding that for all these thinkers, "*practical knowledge is the kind of knowledge that can address questions of how I, we, or they should act*" (Ibid, p.602):

"By not reflecting on the metatheoretical assumptions that constitute the epistemological boundaries and ontological contours of their conception of analytical eclecticism, Sil and Katzenstein fail to see how these assumptions impede the production of Aristotelian forms of practical knowledge, the kind of knowledge required to address key questions of political action in contemporary world politics. Such knowledge can only ever be the product of the integration of empirical and normative insights, yet the latter are epistemologically outside the scope of analytical eclecticism" (Ibid., 605-606).

Even without committing to production of practical knowledge it is clear that these criticisms are valid - for all its pluralist claims analytic eclecticism remains bound by restrictive ontological and epistemological constraints. To demonstrate how theory-synergetic approach can overcome these problems it is first necessary to explain fundamental philosophical differences between the two approaches. Unlike eclecticism, which is founded in the pragmatist tradition, TSA is rooted in critical realist philosophy of science.

Critical Realism and TSA

The rationale for placing theory-synergetic approach within the realist PoS springs from a starting foundational proposition, a thesis that holds that in the course of the Fourth Debate an ontological realm has been revealed and established, comprising an international reality – a global political subject matter, consisting of both material and ideational properties and qualities. This ontological realm is specific and particular to the discipline of International Relations and is not studied by other, older social sciences - IR has found the world of its own (Epstein, 2013, p.500).

Moreover, this international realm comprises *deep ontology* of International Relations – a complex reality consisting of multiple layers and dimensions. It exists as a historical fact and process in its material and ideational condition, regardless of whether it is observed or spoken of. In fact, its existence is a condition of possibility of it being observed or spoken about – it is a mind-independent reality. For example, as Wendt argued, in mainstream and critical IR scholarship states and states systems are treated as real structures and are referred to even if they are physically unobservable (1999, p.47). As such, theory-synergetic method is designed and called for to provide a model for studying and revealing the deep ontology of International Relations, one puzzle and one layer at a time.

Yet to take this stance requires accepting a proposition that international realm exists independently of human beings and that it comprises a real, although often unobservable structure that can be revealed through science, in this case IR. Ontology precedes epistemology. Although Wendt argues that "*most IR scholars are at least tacit realists*" (Ibid), these claims need to be further justified, as they are highly contested and disputed, both in PoS and in IR. For example, the correspondence theory of truth that underpins critical realism may be viewed as simply inference to best explanation – the idea that that something that has been proven to be true must have always been true because it has now been proven true – and, therefore, lacks solid logical foundation (Monteiro and Ruby, 2009, p. 33-35).

Can ontology really be defined simultaneously as both a fallible interpretation of reality and as a definitive definition of a reality beyond our knowledge-claims? Critical realism is charged with confusing and conflating these meanings in attempt to justify the claim that critical realist ontology ought to supply the terms of reference for the scientific project (Cruickshank, 2004). Instead, critics argue, ontological theories in social sciences ought to be revised and replaced in the course of an on-going critical dialogue about reality (material and ideational) and should be defined in terms of fallible, empirically-testable interpretations of social reality (Ibid, p. 582).

Social reality is just too complex to be assessed within one fixed ontology supplying universal terms of reference for the sciences. In fact, reality is such that "*it is not possible to describe and explain it theoretically using the forms in which it immediate appears to us, without irresolvable problems and contradictions arising*" (Magill, 1994,

p. 131). That means even if one acknowledges applicability of ideational, unobservable, illusionary concepts, it is not necessary to accept any overarching philosophical ontology in social science to apply them in research (Ibid, p.121). Critical realism is just too vague and general to provide any real guidance or clear implications for resolving specific ontological problems with social sciences, such as IR (Ibid). This echoes Monteiro and Ruby's call for foundational prudence and abandonment of ontological philosophies (2009, p.35).

The problem with these criticisms is that in challenging Critical Realism they offer no clear alternative criteria by which ontological claims could be evaluated and no roadmaps of their own for resolving foundational problems in the social sciences, save for a call for renewed empirical focus. Some critics drew on a contrast with ontological arguments in the natural sciences to claim that critical realist concept of deep ontology lacks legitimacy. In the natural sciences, ontological claims can be given some justification, but only when they are derived from research that is widely held to be empirically successful, whereas realist ontological claims in the social sciences do not have this basis and alternative critical realist mode of justification for these claims is simply unconvincing (Kemp, 2005).

However, arguing that social scientific research should be conducted without philosophical legislation takes us back to narrow empiricist ontologies which posit that the fundamental characteristics of the social realm can only be established *ex post facto* to the production of empirically successful research in that realm. That, in turn takes us back to unresolved debates in IR. Drawing analogies with the natural sciences to borrow their ontological standards poses no special problems for materialists who hold there are no fundamental differences between natural and social realities but would not be acceptable for post-structuralists or social-constructivists (Wendt, 1999, p.49). TSA's justification in seeking an epistemologically relativist, ontologically-centred foundational rooting is in seeking to resolve these problems and contradictions. Nevertheless, reliance on critical scientific analytical concepts, such as deep ontology, mind-independent reality, the no-miracles argument, requires further elaboration and validation.

Critical realism holds that both positivist and anti-positivist philosophical approaches are inherently anti-realist. Empiricists do, in fact. accept "the world out there" that

exists independently of scholars studying it, but posit that it can only be made *real* though observation and experience. Anti-positivists are categorical in denying the existence of "the world out there", claiming that reality is socio-linguistically constructed. Thus positivists embrace anti-realism in their attempt to purge science of any traces of subjectivity, whilst anti-positivists become anti-realist through their emphasis on human agency in the process of creating or constructing reality (Wendt, 1999, p.47).

It is a common metaphysical structure – "*anthropocentric reality*" – a shared belief that reality can be real only if it is experienced (positivists) or spoken (anti-positivists) (Patomaki and Wight, 2000, p.216-217). Yet to exist must surely mean more than to be 'experienced' or 'spoken': there must be a reality that gives rise to that experience and language in the first place - "*A world prior to the emergence of humanity is a condition of possibility for that emergence*" (Ibid.). The workings and techniques of TSA are explored in this thesis using the case-study of international oil and gas pipelines. Yet the *grund*-ontology – the deep reality – of this case-study is neither "international politics", nor "energy", nor "production and transmission", but *hydrocarbons*.

Oil and gas are hydrogen combined with carbon (hydrocarbons), deposited underground in liquid and vapour forms respectively. Hydrocarbon deposits are the buried remnants of ancient algae, plankton and vegetation – they have a biogenic historical origin. Through various industrial processes, such as blending, distillation and refining, hydrocarbons can be transformed into a multitude of products for a whole range of uses, generation of power emerging as the most important since in the course of the 20th century. Before hydrocarbons can be burnt in internal combustion engines of our world they must be extracted and transported from the few locations on the planet where they are found. The geography of oil and its chemistry, the engineering and industrial processes that go into production of energy are all deeply ingrained and enmeshed in the social, economic, cultural and political fabric of the hydrocarbon reality of modern human civilisation.

And yet oil has a much longer human history, having been used by generations since deep antiquity, for a variety of purposes, from medicine to illumination, from lubrication

to religious ceremonies. Most significantly, however, it predates the emergence of humanity and is of itself a state of metamorphosis of biological matter – an ongoing historical process. The few thousand years of human experience and discourse of oil are but a blip in the timeline of many millions of years. Oil, therefore, exists in a "world out there" – a mind-independent reality, which shapes the deep ontology of this TSA case-study.

Thus, for example, Zoroastrian fire worshippers on the western coast of the Caspian Sea around 600BC had no conception of the origins and the chemical composition of the gases that fed the naturally occurring flames at their temples, or the complex geology that created the seemingly eternal fires breaking out of rocks. The social construction of oil began before its scientific discovery and empirical observation. But the prior existence of oil constitutes a condition of possibility for both.

And the discovery of oil involved no miracles. Scientific advances over the course of centuries have revealed chemical composition of hydrocarbons and technologies were developed to apply oil and gas to multiple uses. The latter process itself was incremental. In the early stages of industrialisation oil was used almost exclusively for illumination because technology available for refining at the time allowed for creation of only one product – kerosene. As science progressed technologies were developed creating thousands of uses for oil products (Montgomery, 2010, pp.14-29).

Perhaps, the "no miracles" argument for the success of science is not necessarily "better off" argument. Science can be used for good and ill and technologies can have positive and negative consequences. The "no miracles" claim "*is merely that because of science we can manipulate the environment in ways we could not before, even when we wanted to. By that limited criterion scientific knowledge is progressive"* (Wendt. 1999, p.64). As Wendt argues the "no miracles" claim shows how science has been successful by gradually bringing our theoretical understanding of the world "*into conformity with the deep structure of the world out there*" (Ibid., p.64-65).

The brief discussion above illuminates the fallacy, even arrogance, of anthropocentric philosophical approaches and anti-philosophical critiques of realism. Hydrocarbons do not stop 'being' if not measured or made subject of a discourse. Their existence is not

conditional upon human agency and given that humans are themselves a carbon-based life form, a degree of humility would not be out of place. Critical realism is informed by this sense of humility on the wider scale of scientific endeavour. It holds there are no miracles in the process of knowledge discovery and is premised upon the argument that "*the world is real and science is dependent upon the making of existential hypothesis*" (Patomaki and Wight, 2000, p.218).

There is, therefore, complexity to the critical realist conception of the world – it is not limited to discourses, impressions, experiences and so on, but is also of deeper underlying structures; there are different levels of reality, with the latter making the former possible. This is what is meant by deep ontology and the reason why critical realism is sometimes referred to as Depth Realism. Critical realism therefore is an ontological enterprise – a perpetual scientific enquiry: "*Science is seen to proceed through a constant spiral of discovery and understanding, further discovery and revision, and hopefully ore adequate understanding*" (Ibid, p.224).

But there is also an implicit recognition that knowledge is not arbitrary – it is a social product which is dependent on antecedent social products and comes into being in non-spontaneous manner (Bhaskar, 2007, p.18). Not only different disciplines but different theories within a discipline can interpret the same ontological reality in radically different ways. This means that there are grounds for choosing one approach over another and justifiable reasons for preferring one theory to another (Patomaki and Wight, 2000, p.224).

Theory-synergetic method pivots on the idea that Critical Realism, with its commitment to perpetual scientific enquiry, ontological foundationalism, epistemological relativism, and "*judgemental rationalism*" (grounds for choosing between theories (Ibid)), can be applied to the social world. And that is a major challenge - can "social kinds" exist independently of human mind? And can the "no miracles" argument really be applied in the case of social science, such as International Relations, where there is less compelling evidence of scientific success (Wendt, 1999, p.67-68)?

Roy Bhaskar had set out three key differences between social and natural kinds ((1979) 1998), p. 42). Firstly, the existence of social structures is dependent on the

activities that govern them. That is to say the social kinds are more space-time specific than natural kinds. Oil has been found at various times in various locations – it is a general natural phenomenon. Meanwhile the 18th century Scottish Enlightenment is defined and constituted by its spatial and temporal context.

Secondly, the existence of social kinds is dependent on the conceptions, beliefs and theories held by actors or agents participating in the activities that make-up the social structures. For example, the emergence in the late 19th/early 20th century of a particular category of the *oil trader* created a certain set of shared ideas about that category, which are not reducible to the actual act of trading oil. Before the emergence of these shared ideas the category did not exist. Thirdly, social kinds are ultimately dependent on human practices and "*may be only relatively enduring*" (Bhaskar, 1998, p. 42). As Wendt argues, social kinds, are "*a function of belief and action*" (1999, p.71). Again, this raises question whether social kinds can be independent of the human agency and discourse.

Critical realists have responded to these problems with various counterarguments. For starters, the social world may well depend on the concepts agents acting within it possess, "*but it cannot be the case that any given social phenomenon requires the existence of a social scientist to conceptualise it before it comes into being*" (Patomaki and Wight, 2000, p.225). Critical realism envisages a deep ontology of the social world that cannot be reduced to the simple fact of its experience or to its intersubjective elements. The sense that when it comes to social kinds intersubjective meanings have causal power may well obscure their deeper, previously hidden, essential relations.

Furthermore, the role of material forces in forming and shaping the social kinds cannot be overstated. Ultimately human beings are natural kinds of themselves. As Wendt puts it: "*In the last analysis a theory of social kinds must refer to natural kinds, including human bodies and their physical behaviour, which are amenable to a causal theory of reference. Constructivism without nature goes too far* (1999, p.72). But for Wendt excessive materialism is unhelpful and he brings forward a further argument – the self-organisation hypothesis. This is a claim that the social world is self-organising in the same way as the natural world.

For example, the human descriptions of animals in no way make the animals what they are. The self-organising quality of natural kinds determines our understandings and theories about them. Similarly, social kinds of various types can also be self-organising. For example, Wendt focuses on the distinction between the empirical and the juridical sovereignty of states to argue that when it comes to states as self-organising social kinds, the "*process of boundary-drawing receives much of its impetus from forces "inside" the space around which the boundary will be drawn*" (Ibid, p.74).

It is not simply a question of whether social kinds can be self-organising, or whether they are underpinned by material foundations greater than the force of intersubjective meanings attached and brought to life by them. Neither is it enough to simply emphasize the role of material forces in constituting and forming social kinds. Critical realism as applied through theory-synergetic approach seeks to demonstrate that natural and social kinds can exist in a mutually referential relationship, as one and the same, simultaneously.

The example here is again oil. Crude oil is a most natural kind – unrefined hydrocarbon straight from the pressure cooker of Nature where it has accumulated over millions of years. A barrel of oil contains 159 litres of crude. It is extracted in one place, sold in another and then physically transported to a power plant elsewhere to be burnt to produce electricity. Or it might be transported to a refinery where it can be turned into petroleum for cars, diesel or jet fuel. The various by-products of refining can then be utilised to produce anything from plastics to Vaseline. Whilst all these production and transportation processes, and arguably their outcomes, are social endeavours and structures their relation to oil (the natural kind) is ultimately determined and limited by material factors – its molecular structure that allows for an X number of uses and transformations.

But a barrel of oil can also exist as a product of agents' imagination and nothing else. A *paper barrel* exists in the virtual international realm of futures commodity trading even when the physical barrel does not. It can be bought and sold but will never change hands. It is not a source of energy or anything material at all but an investment opportunity for a hedge fund or a local government authority somewhere in the world.

Futures markets emerged in 19th Century America primarily for agricultural products – a way for farmers to manage long-term risks of expanding production. Basic human needs give rise to complex social structures. The role of oil futures markets, such as NYMEX (New York Mercantile Exchange, formerly Butter, Cheese and Egg Exchange), is discussed in Chapter VII. Here it suffices to say that what first emerged as a risk management tool for people who used and those who produced oil – "hedgers" – has now become something else entirely.

It is a social structure of its own kind, where traders – "speculators" – who have no interest in taking delivery of the physical commodity, operate with a single purpose of making profit by anticipating and acting on constant changes in price. These "speculators" could be institutional investors representing, perhaps, a major European pension fund or independent traders in South East Asia in search of greater returns on their personal wealth funds. Most of them have never seen crude oil in their lifetimes. Millions of paper barrels can be sold and bought around the world without being extracted, delivered, burnt into energy or refined into other products. It does not mean they do not exist.

A barrel of crude and a paper barrel of oil, a natural kind and a social kind, exist as one and the same but separately and simultaneously. The former has no causal relationship with the latter; the latter is underpinned by materialist assumptions but is entirely self-organising, possessing social qualities and properties which add specific value distinct and different from the former. It is possible, for example, to do with paper barrels what is physically impossible to do with actual crude oil barrels e.g. buy them two years in the future whilst someone else hedges their retirement pension to your purchase, in the future, and all of that takes place virtually on a computer screen.

This suggests that trans-historical claims can be made about social kinds. Whilst the Scottish Enlightenment is specific to its temporal/spatial context, insofar as enlightenment refers to a broader social kind of outpouring of intellectual and cultural achievements, it is not limited by time and place. Similarly, futures trading in eggs in 19th century United States is space/time specific, whilst general futures trading in commodities, be these paper barrels of oil or other goods, are trans-historical

phenomena and are not defined or limited by the spatial/temporal context in which these activities take place.

Furthermore, as argued above, the emergence and existence of social kinds may be dependent on interlocking concepts, beliefs and theories held by agents as well as the human practices that carry them from location to location over time. A critical realist account of the world, however, identifies a deeper multi-layered ecological, biological and social reality and a more causally interactive relationship between social and natural kinds.

A paper barrel – a social kind – may come into existence as a product of human imagination and agency, rooted in the material assumptions associated with the value of a natural kind (crude oil). However, once it is operational it acquires self-organising quality and real-life value of its own, independent of the intersubjective meanings attached to it by actors. And what can be said about mind-independent quality of social kinds when we consider that such activities as emissions trading in pollution or commodity futures trading in oil often take place virtually with almost no input from humans – complex risk assessment and price adjustment operations are carried out by computers, acting on advanced algorithms.

Importantly these social kind/natural kind transactions and interactions have profound real-life economic, political and social impacts. For example, international financialisation of oil has been one of the driving factors in the rise of global oil prices from mid 2000s onwards. The rise in the price of oil and other commodity prices in turn led to new political dynamics in relations between energy producing and consuming states, and so on. Implicit and explicit historicism of critical realism unlocks analytical mechanisms for identification of trans-historical characteristics of international political phenomena.

If, for example, we take systemic theories of IR such as structural realism and ask whether its insights can be generalised through time and space, a philosophical answer would be yes, "*provided the essential features of the relevant kinds are preserved*" (Wendt, 1999, p.70). States interacting under conditions of anarchy are the relevant kinds in this case and whilst the cultural characteristics of "states" and

"anarchy" are variable ("*anarchy is what states make of it*" (Ibid)), the formative defining characteristics that make them "social kinds" are not historically variable: "*The culture of international politics in ancient Greece may have been different than the culture of international politics today, but this does not mean there are no commonalities between the two worlds which distinguish them jointly from bowling leagues*" (Ibid).

Theory synergetic approach seeks to adapt critical realist historicism with the aim of identifying these trans-historical commonalities within given pieces of research. This is possible to achieve without dismissing the complexity of culturally-contingent social phenomena. For example, strategic value of oil retains its essential features as a trans-historical relevant social kind regardless of the time-specific analytical framework, e.g. WWI and the Russian Civil War, or the Battle of the Caucasus in WWII. It follows, therefore, that trans-historical claims can be made about, for example, pipeline politics as all pipeline projects share certain trans-historical commonalities. This trans-historical-interplay between natural and social elements constitutes, defines and influences the multi-layered reality revealed by critical realist analysis – the multiplicity of global political, economic, social, cultural, demographic and other aspects of human condition.

These can be studied separately within particular disciplinary sub-fields of social science designed to tackle particular sets of questions – economics, (international) finance, (international) law, political theory, demography, anthropology, history, sociology, strategic studies and so on. However, International Relations comes with a disciplinary superstructure that possesses the necessary intellectual toolkit (from theoretical diversity to methodological pluralism) that could allow for a holistic analysis of complex global phenomena, one that is multi-layered and is made up of the dynamic interplay between natural and social realities of human condition and experience. Through application of critical realist reasoning theory-synergetic approach is capable of demonstrating complex trans-historical dynamics between the material and the ideational in international relations. Critical realism is a sound philosophical grounding for TSA, an ontology-centred, epistemologically-relativist theoretical IR approach.

Operationalising theoretical synergy

In summary, theory-synergetic approach is primarily an ontological enterprise that envisages international realm to be a real entity, comprising material and ideational structures and processes, and the discipline of IR is the science dedicated to studying it. TSA is an epistemologically-relativist multi-theoretical method of enquiry that rests on a hypothesis that IR paradigms are analytical tools that shed light on specific aspects of international political phenomena and that applying them systematically in a synergetic fashion can considerably enhance and amplify holistic understanding of a given empirical problem (Table 3 sets out broad outlines of TSA).

Table 3. Theory Synergetic Approach and International Relations

- TSA holds that there is a deeper ontology of International Relations and that it exists "out there", independently of the scholars who study it;
- TSA is epistemologically and methodologically relativist and committed to the widest possible multi-theoretical enterprise;
- TSA is judgementally rationalist, holding to the view that theory selection should be determined in terms of ontological relevance in a given empirical problem and not upon *a priori* theoretical bracketing;
- TSA seeks to reveal a deeper social reality and answer important substantive questions about international politics by generating theoretical synergy through a systematic application of IR multi-theoretical matrix to substantive empirical puzzles.

To avoid the disaggregation problem identified with the synthesis multi-theoretical model, it is proposed instead to use the principle of *paradigmatic dynamism*. Broadly, it could mean an idea that scholars should internalise disciplinary-theoretical discourse as an integral language of International Relations, permeating all aspects of research. Multi-theoretical matrix of IR should be viewed as a kind of a periodic table, with each theory representing elements with corresponding epistemic and ontological properties and methodological characteristics, capable of producing specific types of knowledge about the international realm.

Paradigmatic dynamism requires engaging with IR research outputs, regardless of methodology, in the context of a roadmap. Data sets, secondary sources, historical accounts, questionnaires, interviews etc. can all be analysed and assessed in a paradigm-dynamic fashion, even if produced within confines of specific single-paradigm models. In effect, theoretical matrix of IR is a sieve through which substantive issues can be passed through to produce multidimensional vision of international reality. Each theory, as mentioned, is a potential research tool. There is always more than one way of reading a particular set of results and the real interesting and revealing quality of any piece of research is identifying the ways in which these different dimensions of the same ontological framework interact and clash with each other.

This relates to the second element of the theory synergetic method. Once the logic of *paradigmatic dynamism* permeates research and is applied to concrete substantive puzzles and problems the prospect of *theoretical modelling* arises. The different visions of international reality that emerge can be systematically sorted into specific theoretical models. Over the next chapters this approach is systematically applied to the case-studies of international energy pipelines and politics of oil and gas production, transmission and consumption.

Briefly, it is being argued here that substantive subject matter of the case studies, set in a deeper ontology of global energy politics, can be modelled in accordance to epistemic values associated with various paradigmatic traditions of IR theoretical matrix. For example, a classical realist model of energy politics might centre on the role of great powers, drawing on the historical ebb and flow of strategic interests; a Marxist one might examine the dynamics of oil politics through analysis of class interests; a neo-realist model might in turn focus on how variables such as production and transmission of oil impact on distribution of power amongst states under conditions of anarchy; and so on.

The principal idea here is that multi-theoretical analysis of the same ontological problem can produce widely different accounts and that these accounts can be systematically organised into epistemologically integral models. This is not an attempt to merely avoid the incommensurability problem. In fact, much of the

incommensurability arises from methodological differences and significant divergence in the data (research outputs) produced by these different methods. For example, a liberal institutionalist analysis of politics of Caspian oil is likely to focus on the activities of multi-national energy corporations, with emphasis on trade volumes, business geography, technologies, the role of financial institutions and banks, and a plethora of other commercial factors. Meanwhile, a critical model will inevitably seek to expose underlying power relations of Caspian energy politics and identify how the choices informing them came to be configured at specific points in time.

It is unlikely that a synthesis of these two models can be produced in an epistemologically integral format and disaggregation on empirical level negates the very purpose and aims of a multi-theoretical research approach. Instead, theory synergetic method insists on preserving epistemological integrity of individual theoretical models built around the same subject matter, puzzle, or substantive problem. Theoretical synergy is built through such dynamic interactions between these epistemologically integral theoretical models, overlapping around specific ontological core. This is possible because it quickly becomes apparent that rather than unbridgeable incommensurability ontologically-focused multi-theoretical modelling is in fact characterised by a multitude of conceptual overlaps and thematic commonalities.

These stem from directions of substantive research which cut across paradigmatic divides because their essence is not epistemological. Different theories may be addressing different aspects of international reality but because the substantive problem is the same it is inevitable that these different narratives will produce specific convergences, to greater or lesser extent. Thus, for example, as will be shown, *all* theoretical models of international politics of oil and gas address the issues of environment and climate change. The diversity of theoretical knowledge addressing this complex issue produces a kaleidoscopic panorama, ranging from neo-liberal preoccupation with environmental transaction costs and resulting regulatory regimes to environmentalist critique of increased CO2 emissions and the politics leading to them. Such thematic commonalities, conceptual overlaps and various substantive convergences is the stuff that synergies are made of.

They are, however, messy and do not fit neat patterns – instead they cut across paradigmatic lines. Different research sources and pieces of analysis (even, for example, the way quantitative data is created and read) can produce widely different conclusions and may contain elements of more than one paradigmatic analytical framework. The challenge for a theory-synergetic IR scholar, therefore, is to be able to identify thematic commonalities and other convergences by consistently retaining ontological focus whilst exercising and applying the wealth of the discipline's theoretical knowledge.

Systematic identification of substantive convergences (thematic commonalities and conceptual overlaps) between different theoretical models of the same ontological puzzle or problem is a crucial part of the theory synergetic method. However, the key objective of TSA research is to build a holistic theory-synergetic model of a given subject matter. That requires bringing theoretical synergies into operation within a single analytical framework. There needs to be a format for organising synergetic knowledge in a coherent and credible way.

The active part of theoretical synergy arises when substantive convergences between different theoretical models are operationalised within a holistic narrative – the way they interact in a particular analytical framework and the mechanism by which they do so are referred to in TSA as *inter-paradigmatic pivots*. These are the pins or shafts upon which the whole analysis rotates. The task is to establish how different paradigmatic analytic frameworks of the same ontological phenomena interact with each other. Specific points of that interaction within wider areas of theoretical convergence constitute inter-paradigmatic pivots upon which the whole synergetic narrative revolves. The purpose of TSA is that theoretical pluralism is brought to life, activated within a specific substantive problem-field and is animated in an intensive and live-action, continuously expanding body of analysis of that problem-field. The more inter-paradigmatic pivots in a research the richer, more diverse and amplified theoretical synergy will be.

Constructing inter-paradigmatic pivots

The process of engaging paradigmatic dynamism, developing theoretical models, identifying ontological convergences, overlaps and commonalities between single-paradigm models and constructing inter-paradigmatic pivots to generate synergetic analytical insights is explored systematically over the next chapters using empirical case-studies of BTC and SGC oil and gas pipeline systems. At this stage it is necessary to introduce this process out sequentially to illustrate operations of TSA mechanisms in principle upon a substantive issue, for example the Southern Gas Corridor project (SGC) (BP Magazine, 12.10.2017).

Theory-synergetic approach proceeds by first recognising that the empirical depth of SGC as a subject of investigation cannot be predetermined. One way to proceed is to envisage SGC as a substantive issue or puzzle, set within wider empirical field of oil and gas politics, which in turn is established within the *grund*-ontology of international politics of energy. That is to say that that whilst the subject matter is SGC, a project comprised of series of existing and proposed gas pipelines, the ontology of this study is not bracketed by *a priori* assumptions about what constitutes the reality of the project - complex material/ideational structure that might be revealed through synergetic theorising.

The latter similarly begins with broad assumption that all IR paradigms will reveal something important about some aspects of SGC, even if each theory might be more useful at explaining or exposing certain elements, features, facets and characteristics of the project than others. No *a priori* assumptions are made on theory selection and the logic of paradigmatic dynamism dictates that such judgements should be made after empirical test is applied to theoretical assumptions about SGC. Single-paradigm models of SGC serve as the building blocks of multi-theoretical construction, as well as the basis for judging whether a particular theory is an appropriate analytical tool in a given research.

Rationalist models of SGC focus on the role of states, international financial institutions, multilateral lenders, regulatory bodies and regimes, strategic issues of energy security, cooperation and competition (see Chapter IV). Meanwhile, reflectivist

models constitute both intellectual and praxeological critique of the project, aiming not only to expose its normative implications but to prevent the project from happening at all (see Chapter V). Synthesis of rationalist approaches is centred on the strategic and institutional dimensions of the project (see Chapter 4). Neo-realist modes of analysis of Southern Gas Corridor might address such issues as EU/Russia energy cooperation/rivalry (Shiriyev, 19.07.2017), EU energy strategy of gas supply diversification and relations with countries-suppliers (Karagöl and Kaya, 2014). Neo-liberal institutionalist model might focus on the role of EU bodies, such as the Commission (Van Aartsen, 2009) and actions of multilateral financial institutions (Gurbanov, 09.03.2017).

Analytic-eclecticism approach builds on the rationalist synthesis by drawing on social constructivist insights to explore how politics of SGC are shaped by competing normative-regulatory frameworks and policy agendas of various participants, state and non-state (Siddi, 2017; Verda, 2016). Meanwhile, critical post-structuralist theories submit SGC to sustained normative and political critique, seeking to expose its negative consequences for the environment (Counter Balance, Platform and Re:Common, 08.03.2016), and to demonstrate how the project contributes to human rights abuses (ARTICLE 19, Banktrack & Others, 12.09.2017).

Reflectivist critique of SGC is coupled with a praxeological element - an international political campaign by counter-hegemonic agents (NGOS, activists, civil society groups) aimed at stopping the SGC project (see Chapter 5). Critical-poststructuralist alternative to the rationalist consensus around the politics of Southern Gas Corridor involves plethora of activity, from direct action on local grassroots level in countries traversed by SGC pipelines to empirical-normative research, aimed at challenging dominant narratives about SGC (Gotev, 29.03.2017; Stone, 30.11.2017; Bacheva-McGrath, 2015).

Construction of these single-paradigm models of SGC (as well as stories of BTC and wider Baku oil), as set out in the next chapters, requires IR scholar to employ different epistemologies and ontologies of the subject matter, engaging with different theories on their own terms and paying attention to multiplicity of understandings and claims about the project. In essence, this is IR experimentation – the same subject is

consistently submitted to the same empirical test but with different variables. The outcomes will differ and result will illuminate a particular property of the subject matter. It is clear that for all this epistemological diversity, SGC project comprises a common ontological intersection on which different single-paradigm models pivot. All theories will address common themes and issues, e.g. the role of EU and its member-states, and all theories will overlap over concepts such as, for example, environmental and social impacts of the pipelines, especially when the focus of analysis is centred on narrow empirical problems, such as international public institutional funding of Trans-Adriatic pipeline (see Chapter VI).

Constructing synergetic inter-paradigmatic pivots means more than simply extricating theoretical concepts, logics, mechanisms from these single-paradigm or synthesis models of SGC and then attempting to translate and selectively integrate them into a new holistic analytic framework. Synergetic theorising must go further and requires looking at causal dynamics and reactive relationships between these analytic elements in real time and identifying how these are manifested in real world situations and in political outcomes. Theory-synergetic approach engages with specific empirical puzzles but enables operationalisation of complex multi-causal questions which shed light on the deeper ontology of international relations. For example, operationalising the issue of SGC financing as an inter-paradigmatic pivot can help illuminate co-constitutive relationship between socio-normative change and political decision-making of major states and institutions (see Chapter VI).

For example, how do post-modernist critiques and civic-popular opposition to SGC stimulate state behaviour and institutional responses of international actors involved in the project? Do normative changes in state and institutional environmental identities and socio-economic interests influence multilateral financial organisations when it comes to funding decisions on SGC, BTC and other fossil-fuels projects? How do counter-hegemonic networks – coalitions of environmentalist NGOs, climate change campaigners, civil society groups, marginalised communities, human rights activists and others – employ international regulatory systems and institutional normative standards, to challenge prevailing social order in global energy politics and to set out possible alternatives? How do competing national identities and strategic interests of

energy-producing and consuming states determine political outcomes in the wider global energy order and are we at a point of fundamental transition in this order?

Conclusion

In this chapter TSA is grounded in the Critical Realist philosophy of science. It is argued that *international relations* constitute a distinct ontological sphere, which exists independently of attempts to study it but one that can be revealed through a systematic scientific enterprise. This science is the discipline of International Relations and its language and intellectual properties are contained in its theoretical diversity and methodological pluralism. It is a mega if not a meta-social science.

If we are to accept that unity of science consists alone in its method then what International Relations requires is a common language – a cross-disciplinary discourse and a general technique to utilise, apply and coherently communicate IR disciplinary diversity. This approach, with all its normative priorities and theoretical pluralism, should aim towards resolution of concrete substantive puzzles and problems in international politics. Theory synergetic approach is proposed as this common ontology-prioritising technology for maximising the value potential of intellectual properties and vigour of IR theoretical pluralism.

It is worth repeating that TSA is not a methodology in itself and is not an attempt to impose any universalising conditions on the multi-theoretical progress. It is, however, an argument for a more self-confident disciplinary approach and one that recognises the full empirical potential inherent in IR's multi-disciplinary and theoretically heterogeneous knowledge pool. It is also a proposal for a disciplinary way of thinking – the *method* in TSA consists of internalising theoretical diversity, until it becomes part of IR architecture and is treated as a matter of fact. No theory or combination thereof should be accorded a higher status in any given research, until and unless ontological conditions demand prioritisation of particular set of explanations. Anything goes as long and as much as it is practically useful.

TSA can therefore be seen as a proposal for an applied science of International Relations. Theoretical models are to be utilised as tools for experimentation. The latter

is posited to consist of specially constructed synergies – a mechanism for pivoting into motion IR theoretical pluralism and bringing it to bear upon concrete empirical questions. The reward for mobilising synergetic thinking is a deeper, multidimensional and hyper-active real-time panorama of the subject manner, not limited by any a-priory paradigmatic assumptions, and unshackled from any dogmatic grand-theory commitments. The king of IR is the subject matter of international relations and theories are the interactive tools of the synergetic method, called to reveal them.

In disciplinary terms, therefore, TSA may be said to be responding to the challenges of the Fourth Debate and addressing its many implications. It is intended as a way to reconcile IR's disciplinary diversity; to bridge cross-paradigmatic divide; to find a solution to the incommensurability problem; to develop a common discourse; to make IR more practical and relevant to real-life challenges of international politics; to effectively integrate the normative/ideational content into an accentuated empirical enterprise; to provide a degree of ontological cohesion to a highly diverse and eclectic theoretical field. In the following chapters theory-synergetic approach is demonstrated through its application to the study of international politics of oil.

III

IR and Politics of Oil (and Gas)

Introduction

Oil. Power. World. Security. Glory. Quest. Scramble. Earth. Struggle. Prize. Blood. These are the words most commonly featured in the titles of some of the most famous and prominent histories, textbooks and critiques of oil politics. There are few topics that capture imagination the way oil does. It is a subject that crosses disciplinary boundaries and concerns the broadest spectrum of human activity. Directly and indirectly oil shapes the modern world, impacting on everything from physical condition to popular culture. There is drama, romance and adventure in the story of oil, which underline its essential quality.

Our relationship with oil and the world it created, our fascination and ambivalence towards it, and all the paradoxes therein are borne out by that very essentialism – we live in the hydrocarbon age. Over one hundred and fifty years since Edwin 'Colonel' Drake first struck oil at Titusville, Pennsylvania we still have "oil on the brain"[10]. That is not to say that the ontology of oil begins at the point of its modern 'discovery' and industrial application. Indeed, the question of what *is* oil in terms of its ideational (social) *and* material (physical) kinds, lies at heart of its own subject matter. It is so expansive a subject that few have attempted to provide a universal account of oil (although Daniel Yergin (1991) is often credited as having done just that – see below).

[10] "Oil on the brain" refers to the title of a popular Joseph Eastburn song (1865, Lee & Walker, Philadelphia, USA), which captured the frenzy of the first ever oil boom that hit Western Pennsylvania in the aftermath of 'Colonel' Drake's discovery and successful commercial drilling of oil at Titusville in 1859:

"The Yankees boast that they make clocks
Which "just beat all creation:"
They never made one could keep time
With our great speculation.
Our stocks, like clocks, go with a spring,
Wind up, run down again;
But all our strikes are sure to cause
"Oil on the brain."
Stock's par, stock's up, Then on the wane;
Ev'rybody's trouble with "Oil on the brain."

Therefore, the choice of oil and natural gas projects as case-studies for TSA is by no means arbitrary. Oil provides a broad empirical field upon which theories of International Relations can be systematically applied and tested in a synergetic method. The task is not to determine which theory gets it 'right' about the deeper reality of oil; it is to find out which aspects of that reality, or rather what different realities different theories of IR reveal. What should emerge at the end of this enterprise is an expanded and complex ontologies of these substantive puzzles, which will remain subject to further challenge and open to greater clarification and explanation. There are no legitimate *a priori* limits or brackets that can be placed upon what *can be* potentially known about the material and social realities of oil and gas projects studied here.

This chapter explores this wider empirical field of international oil and gas politics, and sets out the case-studies of BTC and SGC pipelines that are examined in this thesis. It opens with a historical review of IR engagement with oil politics and examines how different theoretical traditions shaped contemporary political and academic discourses. The overall aim of this chapter is to set out a theoretical rationale for choosing energy politics and the case-studies of oil and gas pipelines as the empirical testing ground for applied theory-synergetic approach.

Theories of international oil and gas politics

Oil emerges as a distinct international political theme in the second decade of the 20th century, and studies of oil often begin with examination of the role it played in imperial politics of the late 19th century, leading up to and through WWI. Indeed, Yergin opens "*The Prize*" (1991), his much lauded history of oil, with Winston Churchill's fateful decision to convert the Royal Navy from coal to oil in the aftermath of the 1911 Agadir crisis and the ratcheting up of the Anglo-German arms race: "*He decided that Britain would have to base its 'naval supremacy upon oil' and, thereupon, committed himself, with all his driving energy and enthusiasm, to achieving that objective [] There was no choice – in Churchill's words, 'Mastery itself was the prize of the venture'*" (1991, xiv).

Churchill's use of the term 'mastery' goes to the heart of the political subject of oil and introduces its most potent theme. It is no surprise therefore that the classical Realists

of the interwar and post-WWII period focused their attention on the role of oil as both constitutive of state power and as its instrument. Classical Realist assumptions about strategic value of oil are evident in this excerpt from Edmond J. W. Slade's lecture entitled "*The Influence of Oil on International Politics*", delivered at Chatham House, in 1923: *"The lack of money has never stopped a nation from fighting, but the lack of the means of producing mechanical power brings everything to a standstill… It is therefore evident that since, under existing conditions, petroleum is indispensable, the country which can control the supply of petroleum to the rest of the world is in a position to enforce its will so long as its sources of supply are not open to attack"* (p. 254).

E.H. Carr clearly identified this central relationship between economic and military power in "*The Twenty Years' Crisis*", published in 1939. In his examination of autarchy as political instrument Carr argued that pursuit of economic self-sufficiency and independence are issues of military significance and are "*primarily a form of preparedness for war*" (Carr, 2001 (1981), p.111). A clear relationship between oil and power, especially military power is for the first time located as a causal factor in policy making. This theme is echoed, then defined and expanded upon, by H.J. Morgenthau in "*Politics Amongst Nations*", first published in 1946: "*The absolute and relative importance of natural resources in the form of raw materials have for the power of a nation depends necessarily upon the technology of the warfare practiced in a particular period of history* (1985, p. 131).

Referring to '*the power of oil'* Morgenthau is first to identify its critical quality – in the post-WWII world oil was no longer one of many natural resources that go into making up the power of a nation-state but "*a material factor whose very possession threatens to overturn centuries-old patterns of international politics*" (Ibid, p.133). Thereafter realist analysis of oil focuses almost exclusively on its function in power relations between states, in particular its role in war and military affairs.

This approach was further reinforced and refined by neo-realists, who showed little interest in the workings of the global oil industry or wider issues, dismissing such concerns as reductionist and posing their questions about oil solely within the framework of a parsimonious structural theory of international relations. Oil was interesting only in so far as it could help explain differentials in power capabilities of

states. The 1973 oil crisis ('the first oil shock') served to further consolidate this structural approach and to bring centre stage issues of resource dependency and national strategies for withstanding embargoes. Kenneth Waltz, writing in his "*Theory of International Politics*" (1979) (published at the time of the 'second oil shock' caused by the Islamic revolution in Iran), discussed the impact of the OPEC embargo in precisely in those terms, asking whether the crisis showed "*that the unequal capabilities of states continue to explain their fates and to shape international political outcomes*" (p.152).

For Waltz and other neo-realists oil was not 'special' and did not constitute a factor in its own right. States are not ranked on the basis of excelling in one or another sphere, and their economic, military and other capabilities cannot be disaggregated and assessed separately. The status of nations depends on how they score across a broad spectrum of items, resource endowment being just one of these (Ibid., p.131). What interested neo-realists is how possession of oil or lack thereof impacted on behaviour of states in a self-help, anarchic system. As Waltz argued: "*Countries that are highly dependent, countries that get much of what they badly need from a few possibly unreliable suppliers, must do all they can to increase the chances that they will keep getting it*" (1979, p. 153).

Yet ideas about politics of oil then continued to develop broadly in parallel with the evolving themes of IR theory and debates about oil continued to correspond roughly with the intellectual schisms of the Great Debates in IR. So much so that by 1991, as the Soviet Union collapsed and the world was shaken by the first Gulf War, Daniel Yergin identified three great themes which underlie the story of oil: the rise of capitalism and modern business; oil as a strategic commodity central to global politics, national strategies and power; and what he called the 'anthropological argument' – the rise of the 'hydrocarbon society' and the 'Hydrocarbon Man' ("*The Prize*", pp.13-15).

It is not surprising that Yergin chose to rank the business of oil above its politics. Whilst realists were preoccupied with the power-maximising capability of oil as a strategic resource, the impact and consequences of the 1973 and 1979 oil crises prompted a growing attention to the oil industry itself - "*the world's biggest and most pervasive business"* (Ibid., p. 13). From the late 19th century onwards the scale of the energy

enterprise began to draw together the worlds of engineering, commodities trading, banking, international financial institutions, commercial and property law, marketing, to name but a few.

Driven by the global geography and geology of oil and by the constant need to discover new sources the industry rapidly expanded across the world, and the force behind this expansion was the power and the capital of the oil companies – the first truly multinational corporations[11]. Writing about these giants of industry in his seminal 1975 study "*The Seven Sisters*", Anthony Sampson observed: "*For decades the Companies (with a capital C) seemed possessed of a special mystique, both to the producing and the consuming countries. Their supranational expertise was beyond the ability of national governments. Their incomes were greater than those of most countries where they operated, their fleets of tankers had more tonnage than any navy, they owned and administered whole cities in the desert*." (p. 24).

For Yergin the business of oil is full of the drama and the adventure reminiscent of the golden age of exploration: "*No other business so starkly and extremely defines the meaning of risk and reward – and the profound impact of chance and fate*" (1991, p. 13). Yet the story of corporate oil is one of continuous transformation, shrinkage and growth again. As governments, independent producers, global, national and local regulators sought to curb the growth and power of the oil companies and to develop a rules-based system to keep "Big Oil" in check, there developed complex relationships, bodies and organisations, all possessing their own institutional dynamics and cultures, which became a focus of a new, neo-liberal turn in energy studies. The role of markets and institutions came to the fore of the field.

The politics and the business of oil, two of Yergin's themes in combination constitute the mainstream core of oil studies. It can also be argued that the epistemology of this combination corresponds roughly to the 'neo-neo synthesis' in International Relations. For neo-realists, oil was a strategic commodity that goes into making up national state power. Therefore, states, acting in a self-help system, will behave in ways designed to maximise access to reliable supplies of this precious commodity whilst seeking to lessen their dependence on other countries.

[11] Sampson remarks that Exxon 1973 Annual report referred to the company as having been a multinational corporation "*at least fifty years before the term was commonly used*" (1975, p.24).

For neo-liberal institutionalists, who built upon the insights of earlier, classical liberals, oil was first and foremost a major enterprise of complex legal and institutional design, involving trans-national actors and processes and driven primarily by market forces and regulatory pressures. For example, some economists at the time of the 1973 crisis argued that the rapid rise in prices was caused exclusively by market forces (Gilpin, 2001, p. 59). Focusing on the power of international oil corporations and their ability to mobilise technology, capital and human resources on monumental scale some neoliberals point to the fact that these forces are often more powerful than nation-states. Additionally, neoliberals are more likely to pay attention to the role of personalities and individuals (leaders and innovators) as active actors in shaping outcomes.

The synthesis of these two approaches provides the framework of much of the discussions around oil today. Yet Yergin (1991, pp. 14-15) identifies a further theme – what he terms as the anthropological argument - that oil forms the basis of modern civilisation, fuelling both its late industrial and the post-industrial phases. The invention of kerosene and later of the internal combustion engine marked the end of the dominance of coal, which came to be displaced by oil as the fuel of modernity. An entire culture had arisen as the result – the '*Hydrocarbon Society'*: "*Today, we are so dependent on oil, and oil is so embedded in our daily doings, that we hardly stop to comprehend its pervasive significance*" (Ibid., p.15).

Meanwhile, what started out in the 1960s and 70s as a set of broad concerns over ecological implications of industrial society, was by early 1990s a fully-fledged movement, led by international civic organisations and campaigning groups such as Greenpeace. It was informed by a growing awareness of the risks of pollution, wider environmental impact of the use of fossil fuels and the emerging debate about human-made climate change. Ethical concerns were not limited to this newly political environmentalism. The latter was further reinforced by a growing distrust and criticism of the oil industry and of the very politics of oil. Decolonisation and anti-imperialism of the post-war period saw nationalisation of oil assets around the world, cancellation of concessions and often violent resistance to exploitation of natural resources from indigenous groups (see for example, Betancourt, 1978).

The wider post-structuralist, critical turn in social science was beginning to influence debates around oil. Yergin, whose epistemological and normative commitments fall within the broad 'neo-neo synthesis' framework, is forced to acknowledge that the oil industry was being "*increasingly scrutinized, criticized and opposed*" and that the growth of ethical concerns "*challenges the basic tenets of industrial society*" (1991, p.15). But he goes on to argue that the appetite for oil remains unabated, the demand is growing, driven by the developing world and population growth, as more and more countries join the ranks of industrialised countries and exercise their "*right to consume*" (Ibid). Looking ahead, Yergin then identifies the terms of the key normative debate at heart of "*The Prize*":

"*In the meantime, the stage has been set for one of the great and intractable clashes of the 1990s between, on the one hand, the powerful and increasing support for greater environmental protection and, on the other, a commitment to economic growth and the benefits of the Hydrocarbon Society, and apprehensions about energy security*" (Ibid). The very nature of industrial modernity is at stake.

At this stage it is important to acknowledge the full significance of "The Prize" - Yergin's encyclopaedic work in the field of oil and wider energy studies. Daniel Yergin is a figure not only of considerable academic but also political authority, serving in senior advisory roles to US government and the private sector; he is a founder of *IHS Cambridge Energy Research Associates* – a major political and business consultancy firm (Yergin, 2016).

Few texts have had as much impact, across such a wide disciplinary spectrum, as Yergin's "*The Prize*", which won the Pulitzer Prize for General Nonfiction (1992). As the result Daniel Yergin had established what Dwight Garner described in The New York Times as "*a virtual monopoly on the subject of energy and geopolitics. Such is his influence that one half expects his competitors to file antitrust litigation against him*" (20.09.2011); for a contemporary review see Vietor, 1991). However, it can also be argued that "*The Prize*" represents an apogee of mainstream rationalist approaches to oil politics. At its core is a solidly positivist analytical framework that prioritises modernist interpretation of social phenomena and does not seek to question, let alone to critique, prevailing orthodoxies.

All of this has interesting implications for this study, part of which is concerned with charting the ways in which theoretical debates are translated on empirical level, and how such scholarship relates to political practice. For that purpose, "*The Prize*" takes a central position in the bibliography of this study, not only as a source of empirical data but also as an example of a possibly hegemonic academic discourse, which in itself should be a subject to critical challenge.

In the decades that followed publication of "*The Prize*" the world of oil had undergone further dramatic transformations and cataclysmic crises, developing into one of the most fiercely contested fields in public policy and wider debates. Environmental concerns have been elevated from isolated direct action campaigns of eco-groups of the 1970s to the top of the international political agenda. By the time of the historic 2015 UN Climate Change Conference in Paris the link between fossil fuels and rising global temperatures has been widely accepted and the task of cutting human-made CO2 and other greenhouse gas emissions has been identified as the key challenge facing the world (*The Paris Agreement,* 12 December 2015).

The impact of the post-structuralist turn on the development of oil studies and associated debates around the issue can hardly be overstated. If oil is the fuel of modernity, then by definition any post-modern critique of social reality is, at least implicitly if not explicitly, about oil. For much of the history the world of oil was dominated by politicians and lawyers, engineers, oil company executives, bankers, traders and speculators. Therefore, discussions around oil were bracketed by clearly defined parameters of what can arguably called a "problem-solving" conceptual framework (Cox, 1983).

Questions about oil were confined solely to issues of supply and demand, distribution of political power and competition between oil-producing and consuming states, strategic control over prices and production, transportation and refinement and so on. Oil remained a dominant topic, whose "*doings and controversies are to be found regularly not only on the business page but also on the front page*" (Yergin, 1991, p.13).

But by early 1990s a critique began to emerge seeking to expose power relations in the world of oil and to illuminate the social and material costs of a civilisation built upon consumption of fossil fuels. This critique was strong enough so that mainstream

positivist scholars, such as Daniel Yergin, were forced to acknowledge its impact. In initial stages it sought to raise awareness of environmental concerns, to challenge the power of international energy companies and the conduct of governments engaging in oil politics, with the Middle East in particular focus. A whole range of issues, from post-colonialism to human rights, began to bear upon the debates about oil.

But the post-modern critique went further and with the new century it came to question the very foundations of the 'Hydrocarbon Society', the basis of modernity. It asks whether there is really no alternative to the reality of industrial and economic growth, consumerism and global free trade fuelled by the burning of oil and other fossil fuels. Technological, economic and cultural change in the decades that followed the end of the Cold War, sped up and amplified by rapid advances in computing and the exponential growth of the Internet, reinforced the intellectual and social impact of post-modernism on discussions about oil.

Thus, the rise of renewable sources of energy came to represent not merely a replacement for oil but a force for a total transformation of society, heralding possibility of a different kind of living (see, for example, Armaroli & Balzani, 2010). Oil is no longer seen as a monolithic, perennial and inescapable reality. Post-structuralist insights brought not only a renewed historicism to the critique of the modern oil industry, but brought a critical edge to mainstream thinking about energy, reconceptualising the terms in which it is understood. Climate change, for example, is no longer an "environmentalist" issue but a major economic challenge (Stern, 2007) and potentially catastrophic security threat (Schwartz and Randall, 2003).

Therefore, given the fact that humanity had been using sustainable energy sources for its entire history up to the industrial age, might it not mean that, as Aitken argues, *'the world will necessarily again have to turn to sustainable resources before the present century is over?": "The fossil fuel period is therefore an "era", not an age, and highly limited in time in comparison with the evolution, past and future, of civilizations and societies. Accordingly, it is critical for governments to view what remains of the fossil fuel era as a transition"* (2003, p.3).

For positivists, such as Yergin, this may only be possible if the problems associated with renewable energy are solved (by government policies and market forces). The question for him is: *"What kind of energy mix will meet the world's energy needs*

without crisis and confrontation?" (2012, p. 5). But the fact that "*The Quest. Energy. Security, and the Remaking of the Modern World*" (2012), Yergin's follow up to "*The Prize*" (1991), is not about oil per se but is about *energy*, is indicative of the extent of the transformation in the thinking about the subject.

Synergetic readings of oil and gas politics

The brief overview of the evolution of debates around oil and energy issues is presented here, in broad brush-strokes, in conjunction with the corresponding set of developments in the epistemological and ontological evolution of International Relations theory, as told through the history of the Great Debates, culminating with the reflectivist turn of the Fourth Debate. The two strands intertwine continuously, presenting a broad common timeline from WWI to present day; the implications of the post-structuralist challenge may mean that the timeline should be in fact moved back to earlier human interaction with oil and forward – towards possible alternatives to fossil-fuel dominated energy order. A scientific realist might well argue from a philosophical standpoint that there should not be any arbitrary limits placed on the ontological space-time framework at all.

Ontological turn in IR provides the rationale for the theory synergetic approach. It is no longer feasible, in the aftermath of the Fourth Debate, to bracket the greatly expanded ontology of International Relations in either exclusively positivist or anti-positivist frameworks. To take ontology seriously is to posit that the discipline of International Relations encompasses the study of the totality of organised human relations across the globe - from affairs of states to institutions and processes; the normative expanse - international ethics, justice and law, the interests of marginalised groups; the 'problem-solving' agenda and the 'emancipatory project' – the entirety of IR knowledge capital – 'all that we've learnt'.

This does not mean an end to paradigm-driven research, but rather a reconceptualization of what paradigms represent in International Relations. Prioritising ontology does not mean dismissal of theoretical questions or blind adherence to epistemological relativism. It means, for example, that if the empirical task at hand is an investigation into politics of oil, then issues of epistemology are to be subordinated to the demands of that task. The questions are not what is the right way to study politics of oil or what should be studied and how. The question here is which part of the

empirical puzzle of oil is revealed by what theory and how these different elements come together in the grand ontology of oil politics?

Therefore, to apply theory-synergetic approach to a specific empirical case-study requires first to adopt a particular way of thinking about the discipline of International Relations. The latter is a meta-disciplinary grand-ontological social-scientific enterprise, built around a highly complex theoretical super-structure, which developed over a hundred years of Great Debates. This pan-disciplinary identity holds irrespective of any paradigmatic commitments, or rather theoretical specialisations, scholars might have. Indeed, pursuit of theory-synergetic scholarship does not preclude paradigmatic research agenda, and helps to enrich and sharpen its analytical edge.

Within the empirical framework of theory synergetic research individual theories and schools of thought are valuable tools for revealing different aspects or layers of reality (if not altogether different realities) of and about the same phenomena. Taking such view may suggest that in terms of the IR disciplinary structure, paradigmatic research constitutes specialisation – scholars focusing on particular set of questions, requiring different methodologies and research skills, but all striving towards the same goal of "getting at the way things really are".

But the disadvantage of paradigmatic research is that it can only reveal a partial, epistemologically-specific and ontologically-bounded element of the grander reality under study. This in turn will have normative implications. There is ever only so much that can be discovered through theoretically limited research. Synergetic research, by contrast, offers a way for harnessing specific paradigmatic insights in a holistic analytical framework systematically applied to grand-ontology of a given problem field. This grand-ontological approach applies equally to issue-specific, mid-range empirical puzzles and to wider, more comprehensive investigations of various socio-political phenomena.

For example, a theory-synergetic study of the Turkmenistan-Afghanistan-Pakistan-India Pipeline (TAPI) (*Asian Development Bank*, 2016) would aim to reveal the grand ontology of its subject matter, comprising a diverse and complex mix of social, economic, cultural and political forces, actors and processes, all operating across a wide historical span. The scope of such an enquiry could include but not be limited to

issues and themes, such as inter-state relations in Central Asia; 9/11 and the US power in the region; the heritage and local dynamics of political Islam; Pakistani and Afghan Taliban; the interests of ethnic minorities in the regions traversed by the proposed pipeline; the impact of the TAPI project on women, tribal and clan groups and other marginalised communities in the affected territories traversed by the pipeline; the role of China in the regional energy market; the role of Russia in Central Asia; religious demography of the regions traversed by the proposed pipeline; the role of international energy corporations; the role of international financial institutions, such as the Asian Development Bank; environmental impact assessments of the TAPI project, locally and globally; energy market implications of the project; comparative historical analysis of the Great Silk Route and the TAPI pipeline; political and civic opposition movements and domestic politics of states participating in the TAPI project; wider legal and normative debates about the project.

This is by no means an exhaustive list and may in fact underestimate the complexity of the empirical challenge posed by this hypothetical international-political problem-field. The starting point is recognition of the material foundation of the social discourse of the proposed pipeline. The TAPI pipeline project is an engineering challenge of considerable magnitude – a 1,420 millimetres (56 in) in diameter pipeline, of over 1800 kilometres in length, running from Galkynysh gas field in southern Turkmenistan, traversing complex topography of Afghanistan and Pakistan through Herat to Multan, and culminating at the city of Fazilka, in north-western India.

When operational (from 2019) it will carry 33 billion cubic metres of natural gas per year, supplying 5 billion cubic metres to Afghanistan and 14 billion cubic metres to Pakistan and India respectively. Six compressor stations would be constructed along the pipeline, which will run alongside Kandahar-Herat Highway in western Afghanistan. The cost of the project, being led by the Turkmenistan's state energy giant Turkmengaz, is expected to rise to $12 billion (*Alexander's Gas & Oil Connections*, 21.11.06; Graeber. D.J., 03.12.14; Abdurasulov, A. 16.07.15; Tanchum. M. 3.12.15; Gurt & Auvezov, 13.12.15).

The immense scale of the physical reality of the TAPI pipeline endows it with a historical and imaginational history, before it is even constructed. This history goes back beyond the mid-1990s when the project was first envisaged, all the way back to

the ancient Silk Route, the geographical route of which is relatively closely matched by the proposed pipeline. The sheer range of stories, narratives, ideas – the full spectrum of imaginative potential - is implicit in such an analytical framework. This material, physical reality, therefore, exists as a condition of possibility of any kind of social discourse around the TAPI pipeline project.

As such there is no reasonable justification for a priori assumptions about what constitutes legitimate scholarship about the TAPI project, or for limiting or circumscribing the ontological scope of the study. The set of hypothetical questions listed above, modest as it is, indicates the breadth of knowledge that is *possible* about this subject matter and might be revealed through scholarship. Any attempt to exclude one or other question would necessarily be a product of political decision, and not of some arbitrary standard of scientific or scholarly objectivity or judgement. For it would determine which parts of the grand-ontology of the TAPI pipeline project are to remain obscured, unrevealed and unexamined, and this would inevitably have normative implications. The same is true for the case-studies examined in this thesis – BTC and SGC pipelines represent a complex social-material reality not subject to reduction.

By contrast, theory-synergetic analysis seeks to systematically expand the scope of scholarship, striving for an ever growing, open-ended epistemological engagement with various ontological challenges presented by a given empirical problem-field. The key here is not simply identifying specific paradigmatic insights but determining how these different theoretical models of the same subject matter interact with and relate to each other within a single, holistic research framework.

Therefore, a theory-synergetic analysis of a major pipeline project would include a model of inter-state relations, a normative enquiry, a critical examination of its social order, a study of institutions, processes and identities from global market forces to local tribal traditions and so on, set within an expansive timeline and exploring complex ideas and concepts about changing relations between East and West, emergence of the Eurasian sphere, modernity and tradition, religion and nationalism and more. The resulting theory-synergetic multidimensional map of a vibrant, epistemologically pluralist, deep(-*er*) grand-ontology of a given project contrasts markedly with what appears from a theory-specific, single paradigm research perspective as a

straightforward, clearly-defined and reducible empirical puzzle, e.g. a regional gas pipeline.

The same approach can be taken to a more expansive subject matter of global politics of energy by envisaging a greatly enhanced social and material ontology of "*oil international*". A synergetic study of international oil and gas politics would comprise a holistic examination of the totality of paradigmatic models. Thus, methodological individualism of rational choice and game theory approaches, balance of power calculations and examination of institutional and processual characteristics of inter-state energy competition and conflict, market dynamics, trade and other constituent features and characteristics of a positivist analysis are operationalised within the *same* empirical framework as normative critiques of oil politics, with a particular attention paid to revealing and identifying underlying power structures and distribution of gains, and marginalisation of disempowered groups; *and* a social constructivist exploration of oil/energy as identity-forming factor, both domestically and internationally within states (e.g. the social dynamics of energy-producing and energy-consuming states); *and* a general post-modernist critique of the *hydrocarbon society*; *and* so on.

Thus, for example, a positivist analysis, what Robert Cox (1986) termed "*problem solving theory*", might take "*the prevailing social and power relationships and the institutions in which they are organized, as the given framework for action*" (p. 208) when it comes to oil politics e.g. what to do to stabilise oil prices? how a merger between two international energy corporations affects the oil market? what might a state do to reduce its dependency for oil on another country? what impact will the development of alternative energy sources, both fossil fuels and renewables, have on energy markets of tomorrow and on relations between energy-producing and consuming states? etc.

A reflectivist critique, by contrast, "*does not take institutions and social and power relations for granted but calls them into question by concerning itself with their origins and how and whether they might be in the process of changing*". In doing so it "*allows for a normative choice in favour of a social and political order different from the prevailing order*" (Ibid.) e.g. who and how sets the oil prices? who benefits and who loses out from the operations of international energy corporations? how sustainable is

the existing energy order? what alternative energy sources might be used and who benefits from maintaining the fossil fuel status quo? etc.

What is interesting from theory-synergetic perspective is how these two levels of analysis interplay as they converge on specific empirical questions. If, for example, the empirical puzzle under investigation relates to political regulation of a major international oil project (an off shore deep-water development or exploration in an environmentally and socially sensitive area) it is important to ascertain the role of international financial institutions and their environmental and social impact assessment apparatus and mechanisms, the role of states and how they compete and cooperate on these projects and for what purpose (how do they seek to maximise their power and interests by promoting this or that option?); as well as to investigate whether there is an alternative to the world envisaged by these projects and to expose existing power relations, underlying the dynamics driving these projects to completion.

To continue with this hypothetical empirical example - what is ultimately of interest here for an International Relations scholar is the international relations of a major international oil project, and not the debate about what constitutes legitimate scholarship about a major international oil project and so on indefinitely and without final determination. In order to gain as full an understanding of how things really are – complex knowledge – it is essential to pursue explanatory and prescriptive research agendas, systematically applying and deploying the full spectrum of epistemological and methodological tools available in the IR toolkit.

All approaches are taken as potentially valid models of a same given empirical problem, coexisting simultaneously but independently. This does require taking each paradigmatic model on its own terms. The synergetic value is generated through construction of inter-paradigmatic models of the same subject matter. It is in these substantive intersections of various autonomous paradigmatic models that theoretical synergy can be operationalised.

One reason why this may be possible is because theory-synergetic method is located and grounded within the disciplinary pluralism of International Relations. As noted above, IR is the only social science with the necessary structures and properties - a sufficiently extensive international ontology, encompassing both material and ideational/social kinds; an epistemological heritage of considerable diversity, making

it an ideal platform for complex, multidisciplinary social-scientific enterprise. But this is only possible if we engage with IR as a discipline that prioritises and expands our conception of what constitutes ontology and allows for true epistemological pluralism.

The social and the material in oil and gas

Alexander Wendt is right to argue that, '*Epistemology generally will take care of itself in the hurly-burly of scientific debate*" (2010 [1999], p.373). But theory-synergetic approach departs from Wendt in two important ways – it differs considerably to his conception of an exclusively "social" and "constructionist" ontology of international life and employs a more nuanced understanding of epistemological relativism. It is worth briefly commenting on this.

Wendt prioritises ideational factors over material, taking distribution of ideas and culture as the starting point of theorising about international politics, with material forces coming in later (Ibid, p.371). He draws upon realist philosophy of science to support his view of a constructivist ontology of international relations (Ibid., p. 372). Finally, Wendt argues that, "*it is through ideas that states ultimately relate to one another*" and these ideas "*help define who and what states are*" (Ibid).

Positivists remain sceptical about constructivist emphasis on ideational factors as key units of analysis. Robert Gilpin (2001) argues that any international theory must "*seek to integrate both ideas and material forces*", because ideas are important but, "*the world is composed of many economic, technological, and other powerful constraints that limit the wisdom and practicality of certain ideas and social constructions*" (p.20). What echoes in Gilpin's observations is a positivist notion of ontology of international relations that is on final account a materialist one. And this materialism is ultimately defined in terms of power: "*While I agree that ideas are very important, they are important politically only insofar as they are supported by the interests and power of important actors such as states or domestic political coalitions*" (Ibid., p.86n).

Wendt's critique of materialist ontology in IR (and hence his justification for replacing it with a socially constructed one) is limited to this narrow conception of material forces "*defined as power and interest*" (2010 [1999], p. 371). However, the theory-synergetic approach is premised on a deeper conception of international ontology. As discussed above, theory-synergetic approach employs scientific realist philosophy of science to

posit an unlimited international ontology, composed of material *and* ideational forces. This ontology is “unlimited” in the sense that there are no a priori limits on what constitutes legitimate ways of generating knowledge about it.

For it exists independently of the mind, as a condition of possibility of it being discovered and have ideas formed about it. As, for example, mentioned before, the ontology of oil predates human agency i.e. just because humans were not capable of refining kerosene until late 19th Century does not mean that oil did not have the potential of being refined until then. The process of scientific discovery suggests a complex relationship between material and social forces which should not, therefore, be viewed exclusively through the prism of causality and agent/structure modes of analysis. The symbiotic interactions between the two present a far more interesting focus for scholarship. The fact that material forces can give rise to ideas that then shape identities and determine types of political behaviour is evidenced by the historical experience of oil producing societies and states. Therefore, when it comes to ontology, scientific inquiry should seek to pose causal *and* constitutive questions.

It is difficult, therefore, to agree with Wendt’s argument that “*relatively little of international life is a function of material forces as such*” without us ascribing implicit ideational content to power and interest explanations (Ibid.). Geography, environment, topography, natural resource endowment, even terrain type can have a determining impact on both material and social development of states, societies and community identities. Natural catastrophes and climate change can have as material an impact on international relations as war or genocide, whilst simultaneously giving rise to ideas and social constructions capable of generating social change.

Therefore, a theory-synergetic conception of the materialist component of its ontology of international life is not bracketed but is defined in broadest terms, from planetary conditions and physical and environmental forces to power and interest of powerful actors, and not only between states but all international human communities (for example, from multinational corporations to global digital social movements). Implicit here is a recognition that material (physical) kinds can give rise to construction of social (ideational, imaginational) forms. And in turn ideas and culture often constitute the content and meaning of material forces, as Wendt argues (Ibid, p.371).

The social component of theory-synergetic international ontology is taken to be similarly expanded, possessing causal and identity-constitutive potential in international politics. Social kinds do not form in vacuum and are shaped by interplay with material kinds. Certain ideas may give rise to particular identities, which in turn provide impetus for social change; or they may in turn be products of material forces impacting on imaginational, social constructionist dynamic of international life.

In sum, theory-synergetic ontology of international politics of oil and gas is social-materialist, in the sense that it is through a continuous, flowing and mutually-constitutive interplay between ideas and material forces (defined in broadest possible terms) that international life occurs and proceeds. It therefore makes more sense to begin our theorising about international politics with the dynamic interplay between ideas (identities, culture and so on) and material forces (physical environment, power, wealth and so on).

Coupled with this enhanced and fluid ontology is a nuanced understanding of epistemological relativism. Wendt draws on a realist philosophy of science to argue that there is "*nothing in the intellectual activity required to explain processes of social construction that is epistemologically different than the intellectual activity engaged in by natural scientists*" (Ibid., p. 372). He acknowledges that different social and material kinds of objects of study may require different methodologies of scientific inquiry, but "*methods are not epistemologies*" (p.373). Wendt then asserts that what constitutes "*epistemic authority of <u>any</u> scientific study*" is the applicability of the falsifiability criteria on empirical level – something that post-positivists acknowledge (Ibid.).

It is worth, however, to take epistemological diversity more seriously. There is nothing incompatible between commitment to epistemological relativism and recognising significant differences where they exist. Methods of inquiry are not epistemologies but they do differ in significant ways between sciences and amongst paradigmatic traditions on intra-disciplinary level. Different objects of scientific enquiry requiring different methodologies involve different disciplinary structures, contents, cultures and ultimately different procedural standards for applying falsifiability criteria.

It is therefore important to recognise in different paradigmatic traditions their specific natures as forms of various specialisations in International Relations, requiring their own specific standards of epistemic authority. Retaining epistemological integrity of

individual paradigmatic models of the empirical puzzle under research is an essential part of TSA. These models can then be examined and falsified by those specialising in those particular theoretical traditions. Epistemic authority of theory-synergetic research as a whole, however, is determined not by deconstruction of its synergetic parts but on its holistic merit, i.e. that on empirical level it constitutes a unit of publicly available evidence and its results (the synergetic model of a research subject matter) can be falsified.

Epistemological relativism does not require us to abandon all sense of theoretical integrity, which could lead to what is likely to be fruitless attempt at theoretical synthesising. The intellectual value of paradigm-bound research within a synergetic empirical programme stems from a unique set of knowledge-generating properties specific to that particular paradigm. It is therefore counterproductive to seek to gloss over these real differences because to do so would be to undermine the very purpose of the synergetic intellectual enterprise.

Because, as noted above, synergy is a simultaneous operation of different, fully autonomous, self-contained parts. Through this operation a new whole emerges which is necessarily greater than the sum of its constituent parts. Therefore, an IR theory-synergetic method relies upon a systematic application of different, epistemologically-integral modes of paradigm-bound analysis upon the same empirical puzzle. The synergetic model of that puzzle that emerges through this process constitutes something more than simply agglomeration of theoretical perspectives. Thus, it will be shown that the synergetic model of international oil politics (Chapter 6) is necessarily greater, deeper and more substantial than the sum of its individual constituent parts - realist, critical, liberal, social constructivist, Marxist, post-structuralist and other paradigmatic analytical models (see chapters 4 and 5).

This relates to an earlier statement that TSA first and foremost aspires to serve as a pan-disciplinary culture – a formalised acknowledgement and acceptance of multiplicity of knowledge in International Relations and a way for IR scholars to communicate across theoretical boundaries, and collaborate on empirical level in meaningful and potentially more fruitful ways. Turning to the empirical question at hand – theory-synergetic analysis of international politics of oil and gas – the task is to

demonstrate how such a professional cross-theoretical discourse can be established and operationalised in practice.

Case-studies: BTC and SGC projects

Over the past ten years Baku-Tbilisi Ceyhan pipeline proved central to unlocking Caspian hydrocarbon reserves. It provided Azerbaijan, Kazakhstan and Turkmenistan - oil and gas producing states in the region - with a critical infrastructure link to global energy markets (Frederick-Starr, 2005, pp. 8-9). The pipeline runs from the Azeri-Chirag-Gunashli (ACG) off-shore field across Azerbaijan, Georgia and Turkey, and links Sangachal terminal on the shores of the Caspian Sea to Ceyhan deep-water marine terminal on the Turkish Mediterranean coast (see Map 1). The 1,768km pipeline became operational in 2006 and has since carried around about 2.8 billion barrels of crude oil to world markets (BP 3, BTC co. Shareholders, 2017).

Yet, the BTC pipeline represents far more than an energy conduit. It is a multifaceted international project, involving a wide range of actors and comprising a complex mix of multi-level politics. Multinational corporations (MNCs), international financial institutions (IFIs), global advocacy groups and NGOs participated in the project alongside states, in a drawn out process that was marked by much friction and controversy (Carroll, 2010, p.2). As such, it was characterised by "*the close correspondence that existed at all stages of the pipeline's development between politicians, businessmen, and economists who defined the project's ends and the engineers and builders who devised the means by which those ends could be achieved*" (Frederick-Starr, 2005, p.8).

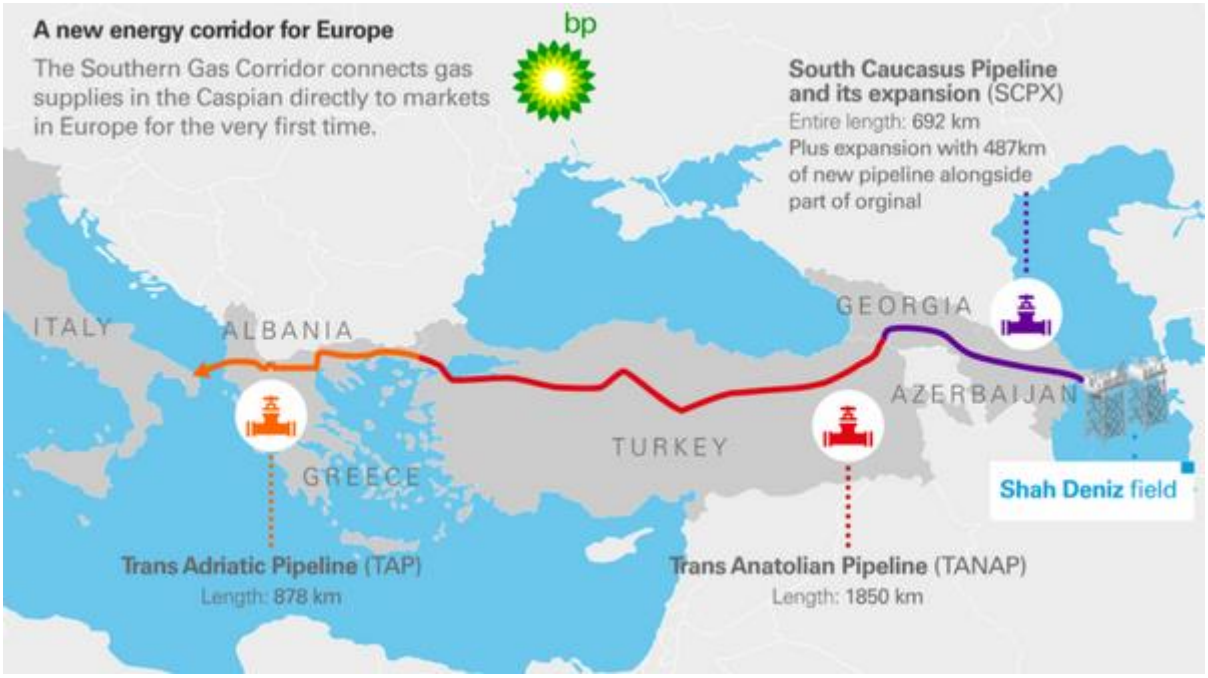
Map 1. BTC pipeline (Source: Oxford Engineering Alumni, 2008)

Furthermore, BTC and related projects are underpinned by an impressive legal architecture made up of national constitutions, international agreements and commercial contracts between MNCs, host governments and IFIs, and an array of additional legal instruments. In total it comprises a hierarchal legal structure that governs the operation of the project and determines relations between its participants. Provisions of this international legal framework supersede domestic laws of the countries hosting the pipeline (Blatchford, 2005, p.120).

BTC project had also had considerable normative implications, with concerns raised over human, social and environmental impact of the pipeline. These concerns are at the heart of the debate around BTC, both within participating states and internationally. This is reflected in the sustained criticism of the project before and since its operation commenced (Muttitt and Marriott, 2002; Carroll, 2010). It is also reflected in the widespread integration of social, environmental, human rights and developmental considerations in the workings of the project (Frederick-Starr, 2005, pp. 11-13). Therefore, BTC project and political debates around it in the late 1990s and early 2000s should be understood in their wider historical context, as part of an evolving story of energy exploration and development in the region.

Running alongside BTC for much of its route is its natural gas sibling the South-Caucasus Pipeline (SCP). The 700km pipeline transports gas from Azerbaijan's Shah Deniz off-shore gas field, running across Azerbaijan, Georgia and Turkey, where it is currently connected to the local distribution network, although it has been considerably expanded over the past few years (BP, SCP, 2017). It is intended as the first link in an interlocking chain of pipelines which, when completed, will form the Southern Gas Corridor (SGC) – SCP, Trans-Anatolian Pipeline (TANAP) and Trans-Adriatic Pipeline (TAP) (BP Magazine, 12.10.2017). Just as BTC proved central to unlocking Caspian oil reserves, SGC is seen as a major energy project of global significance:

"*Seven countries, 11 companies, as many gas sales agreements, more than $40 billion of investment and upwards of 30,000 people employed during its busiest phase of activity: the Southern Gas Corridor is one of the global oil and gas industry's most significant – and ambitious – undertakings yet. It is also one of the largest projects in BP's portfolio – and of strategic importance in the business's shift towards gas*" (BP Magazine, 12.10.2017).



Map 2. BP Visual Guide to SGC (Source: BP Magazine, 12.10.2017)

It is clear, therefore, that whilst SGC and BTC represent different points in evolution of energy politics they form part of a common empirical framework when it comes to adopting the theory-synergetic approach. Like BTC, Southern Gas Corridor is a

multifaceted international project, characterised by a set of complex multi-agency interactions and informed by highly polarised normative debates. The project is of crucial importance for states, companies and institutions involved in its development but for environmentalists and others who oppose it, SGC is "*an emblematic project likely to lock in a fossil fuel model instead of promoting a de-carbonised future"* (CounterBalance, Platform and Re:Common, 08.03.2016). BTC and SGC projects are not merely pieces of industrial infrastructure for energy transmission – they symbolise normative choices about energy, environment, and the kinds of possible social orders these choices determine.

In this chapter international politics of oil and gas is introduced as the broad ontological field of this study and is placed within historical framework of IR theoretical debates. The next two chapters set out rationalist and reflectivist/post-positivist models of BTC and SGC case-studies. Perhaps the most important observation to be drawn at this point is that oil serves as a single, common but complex empirical field, upon which different theoretical models (from Classical Liberalism, Realism and Marxism, through to the "neo-neo synthesis", to the reflectivist critique and then on to positivist response and so on), operate independently but simultaneously, in synergy. Again, the objective is not to ascertain which theory gets it *right* about oil but to accurately determine which part of the deep ontology of oil is being revealed by the insights of a specific theoretical model or paradigm, and how that particular framework relates to others in forming the empirical problem-field of international oil and gas politics.

Thus feminism may not be useful in explaining the crude oil prices collapse of 2015, but it is invaluable in identifying the effects of the Niger Delta oil crisis on marginalised groups (Ihayere et al, 2014). Marxism may not be the best theoretical tool to address the question of the environmental impact of Chinese state energy policy in Africa in 2000s, but it does, for example, provide a sharp analytical framework for understanding the rise of anti-imperialist and socialist movements in oil producing regions of Russian Caucasus in 1900s (Suny, 1972). Positivist approaches might focus on the power of oil (physical, material and political) (e.g. Montgomery, 2010), critical theories - on exposing the costs and vagaries of its industry (and who benefits from it globally) (e.g. Silverstein, 2014), post-modernist analysis - on deconstructing the narrative of oil consumption (e.g. Margonelli, 2008), constructivist paradigm - on

the development and outcomes of social processes in the business and politics of oil (e.g. Bower, 2010) and so on.

These different paradigmatic approaches are telling the same story, or rather different threads of the same story, occurring simultaneously or at different times in history but cumulatively constituting an epic, Tolkienesque tapestry of knowledge about oil, into which a new element has come in: the resultant picture is greater than, and not explained by, the sum of the component threads. It is explained and animated by the knowledge-maximising effect of theoretical synergy.

It can be argued, based on discussion above, that any decision to arbitrarily set limits upon or to bracket the scope, breadth and depth of a given ontological and epistemological framework (in this case - oil) is not only fundamentally subjective but is antithetical to the goals and purpose of any knowledge-producing intellectual enterprise. Theory choice then should be determined not by a narrow set of *a priori* epistemological and ontological commitments but by the specifics and circumstances of the empirical question or puzzle under study and with a firm commitment to knowledge-inclusivity in the widest sense. Generally, the broader a particular empirical problem-field is, the greater theoretical synergy that can be produced.

This should not, however, mean that where the empirical set is narrower particular forms of knowledge-production should be dismissed on grounds of incommensurability. A commitment to synergetic analysis, with its implicit historicism, requires constant recognition of a deeper ontology of any given subject matter or empirical puzzle – a mystified, obscured reality which can be revealed through an open-ended scientific engagement.

This commitment is not an ideological standpoint or an arbitrary aspiration. It is beyond debate that the grand, deep ontology of oil suggested in this cursory analysis is expansive, multi-layered, complex, multidimensional, and one that encompasses a wide array of concepts, actors and processes of both social and material kind. As a complex ontological field its geographical scope is truly global in terms of the physical, geological occurrence of oil in different locales around the world, and international in terms of the historical process of its distribution and movement across the planet. As Francisco Parra observes: "*Most of the oil consumed in the world today has moved from one country to another*" (2013, p.1).

Conclusion

As an empirical research problem hydrocarbons pose an implicitly interdisciplinary challenge. The natural science of oil and gas comprises a multidisciplinary combination, bringing together geology, chemistry, seismology, engineering; it is highly-technology dependent and is driven by a continuous process of innovation and discovery. As will be shown technology emerges as one of the key factors determining the course and nature of relations between oil producing and consuming states, societies and multinational energy companies.

As a social scientific enterprise oil studies represents an even broader range of disciplinary approaches, ranging from history and sociology to game theory modelling and international finance and economics, domestic and international law, anthropology, business management and administration. This is before wider arts and humanities are considered – the drama, even romance of oil has a potential to capture imagination few other phenomena possess. It has had a profound cultural and social impact, inspiring works of art, literature and cinema.

This ontological complexity has profound empirical implications, for it transmits and permeates the entire subject matter, on macro and micro-levels, on grand- and mid-range theoretical scale. For example, a pipeline carrying 700,000 barrels of oil per day is not merely a product of an intergovernmental agreement, cannot be reduced to the terms of the corporate contract underpinning it and does not represent a purely technological enterprise. It encompasses all three and many other elements, social, political, cultural, even imaginational.

An oil pipeline can be a symbol, representing simultaneously a triumph of corporate endeavour, a standard of great technological achievement, a threat to national security, a solution to the problem of regional energy diversification, an environmental threat to local natural habitat, a hope for national progress and prosperity, additional CO2 in the atmosphere, a reminder of past historical accomplishment, challenge to national pride e.g. as a reminder of loss of territorial or imperial control, and many other different things to different actors.

Therefore, any attempt at construction of a parsimonious model of oil politics is bound to be unsuccessful. Seeking to ascribe systemic, structural qualities to a complex,

multidimensional ontological field (one that is constantly evolving and changing in response to external stimuli and internal dynamics, and is hyper-sensitive to ideational and material shifts) is a futile enterprise. Similarly, the belief that this ontology can be reduced solely to the sum of its social construction, e.g. forms of linguistic expressions through which it is constituted or its underlying, hidden power-structures, is unfounded. Ontological complexity is universal and remains true at all levels of analysis and for this reason no forms of knowledge can be excluded on a priori grounds.

Given the task of tackling such a challenge a social scientific project of meta-disciplinary proportions is required. The extent of theoretical, methodological and wider analytical properties of this meta-discipline must match the challenges presented in empirical problems, on all levels of analysis. It needs to possess a particular disciplinary culture and a common language to effectively communicate across disciplinary and epistemological boundaries. As has been argued already International Relations has the potential to fulfil this function. Post-Fourth Debate IR is a discipline bursting with epistemological diversity. It is increasingly interdisciplinary, reflective, intellectually responsive to real world developments. And the wealth of its intellectual capital, accumulated through nearly a century of Great Debates, provides for the right analytical toolkit with which to tackle the ontological complexity of oil.

IV

Rationalist Models

Introduction

This chapter explores rationalist approaches to oil and gas politics and sets out rationalist models of the BTC and SGC pipelines. Positivism forms the core of mainstream international energy studies and constituted the dominant discourse of the field for over a century. Classical liberal and realist theoretical traditions establish key themes in petroleum politics – economic and political power of hydrocarbons. Neo-realist and neo-liberal institutionalist paradigms develop these themes, advancing more attenuated and complex forms of rationalist analysis of oil and gas production, transportation and trade.

Therefore, BTC and SGC pipeline systems take their place in a structure of oil politics that is set in an expansive timeline, spanning over a century of history from Industrialisation to present day. Yet key themes and issues that characterise rationalist paradigms as shaped by the realist/liberal and the 'neo-neo' discourses, recur continuously throughout these debates. This chapter aims to provide an introduction to these debates about petroleum politics in general, as well as to set BTC and SGC case-studies within the rationalist paradigmatic analytical framework. The chapter opens with an overview of classical liberal and realist accounts of Baku petroleum and the origins of the global oil industry, before proceeding to set out neo-realist neo-liberal institutionalist accounts of energy politics and the BTC and SGC case studies.

Classical rationalist approaches and the story of Baku oil

Liberalism

A classical liberal analysis of international oil politics begins with an explicit recognition that "*virtually from the very beginning, petroleum was an international business*" (Yergin, 1991, p.56). For classical liberals, or idealists, the focus of enquiry is not limited to aspects of state power but is directed towards identifying opportunities for international cooperation. Liberal internationalism, underpinned by Kantian ethics, holds "*democratic government, economic interdependence, and international law and organizations as means to overcome the security dilemma of the international system*" (Russett, 2013, p.95). Unlike realists, classical liberals, such as Alfred Zimmern, treat economic forces as independent factors, separate from military and political power,

and more important: "*It is enough to emphasise the fact that the economic weapon is the most powerful in the varied armoury of the Allies*" (Ibid. p.20).

This theme runs consistently through idealist accounts of international politics (Angell, 1913). In the liberal account the dynamics of international oil politics are driven by the economic and technological forces, by free trade and international finance, and by the global reach of international oil companies, which exercise considerable influence over national policy. For example, the decision by the British government to lift the prohibition on tanker traffic through the Suez Canal in 1890 was dictated in large part by *Shell*'s expansion into cross-ocean oil trade and the need to give a British-owned private company a competitive edge against the dominance of the American *Standard Oil* (Yergin, 1991, p. 67).

The story of oil, therefore, begins with the establishment and growth of the global oil industry in the second half of the 19th Century (Yergin, 1991). Particular attention is, therefore, paid to the prominent role of international oil companies, banks, various regulatory frameworks under international law, especially international commercial law, and the relationships between various actors participating in global oil trade. By liberal account, this is first and foremost the story of international oil companies and their leaders, whose names have become synonymous with the very idea of capitalism – John, D. Rockefeller and his Standard Oil empire, the Nobels, the Rothschilds, Marcus Samuels and the rise of Shell/Royal Dutch, amongst others. This is the story of free trade and enterprise, of global banking and financial forces, of international organisations and firms, led by irrepressible characters, committed to promoting the causes of commercial industrialism and scientific and technological advancement.

This is also a story of how the interests of states and governments are subsumed and shaped by the interests of private commercial enterprise. By late nineteenth century oil was already a valuable commodity, traded around the world in the form of finished products, namely kerosene (Yergin, 1991, p.56). The business of oil preceded the politics of it. By 1900 oil was already a global industry, dominated by the *Standard Oil Company* in the United States and the Nobels, the Rothschilds and Marcus Samuels' *Shell Transport and Trading Company* in the Russian Transcaucasia (Azerbaijan and Georgia) (Hiro, 2007, pp.10-12).

The origins of BTC and later SGC projects are to be found here. The region of present day Republic of Azerbaijan has been renowned for its hydrocarbon reserves since antiquity (Yergin, 1991, p.57; Adams, 2002, p.5; Sebag Montefiore, 2008, p.195; Gŏkay, 1999, pp. 2-20). The Arab conquest marked the beginnings of Caspian oil exploration and its rise as a commercial resource (Ashurbeili, 1992, p.64). By mid-19th century all of present-day Azerbaijan and the whole South Caucasus had been annexed by the Russian Empire. And from a classical liberal perspective it was the introduction of a new contractual system by Tsarist authorities in 1870s that marked the beginning of the oil industry in Baku (Adams, 2002, p, 8-9; LeVine, 2007, p.7).

The new system replaced state monopoly on oil and the lease back system (LeVine, 2007, p. 7). Instead a new legal regime of publicly tendered long-term oil concessions was introduced, establishing clear legal relationship between oil producers and the state and ensuring multitude of incentives for private investment and technological innovation. The scene was set for rapid industrialisation of Azerbaijan, with Baku emerging as one of the birthplaces of modern oil industry (Adams, 2002, pp.8-9; Muttitt and Marriott, 2002, p.20; LeVine, 2007, pp.4-27; Yergin, 1991, pp.57-63).

It was in Baku that the first drilled (as opposed to hand-dug) oil well was constructed in 1844, ten years prior to the method being used in Pennsylvania. By 1878 there were over three hundred such drilled wells (Adams, 2002, p.8). New uses for oil were also being developed with dozens of kerosene refineries opening in Baku by 1870s.This was the as yet underdeveloped but pregnant with possibilities environment that greeted the Swedish Nobel family upon their arrival in Baku in 1873 (Sebag Montefiore, 2008, p.195). The story of the first Baku Oil Boom is to a large extent the story of the Nobels (see Asbrink, 2002; Tolf, 1976).

In 1875 Robert Nobel Refinery was established in the city's industrial Black Town district. Having pioneered new refining techniques Nobels dominated the Russian kerosene market (Adams, 2002, p.12). They developed local pipeline network to connect their wells to transport infrastructure and in 1876 Ludwig Nobel began work on a cistern ship, essentially the world's first oil tanker (Yergin, 1991, p.59). In 1878 tankers "Zoroaster" and in 1880 "Moses" were launched from Baku, delivering kerosene and fuel oil to Russia through Caspian Sea and by river Volga. By 1885 the

Nobels had 11 tankers in the Caspian and two in the Baltic (Adams, 2002, p.15; Yergin, 1991, p. 59).

Similarly, the Nobels' involvement in Baku oil opened "*a further universal theme in global oil - the competitive search for international capital to finance oil development"* (Adams, 2002, p. 19). Concerned with overexpansion of their operations in the Caspian, the Nobels sought to mitigate their risks by forming a publicly owned Nobel Brothers Petroleum Company, in order to attract additional private capital. Eventually this resulted in cooperation between the Nobels and another legendary 19th Century business family - the Rothschild banking empire (see Lottman, 1995; Fursenko & Freeze, 1990). As Yergin contends, Nobels' borrowing arrangements with the Rothschilds' Credit Lyonnais "*set a significant precedent in that it may have been the first loan for which future petroleum production was used as collateral*" (1991, p. 60).

One of the end products of this cooperation was a railway between Baku and the Georgian port of Batumi on the Black Sea – a strategic alternative route for Caspian oil to the world markets; its launch in 1883, "*opened a door to the West for Russian oil, it also initiated a fierce, thirty-year struggle for the oil markets of the world*" (Yergin, 1991, p. 61). The rail-line was complimented by a 900km pipeline that traversed Azerbaijan and Georgia parallel to the rail line. It was not completed until 1906 when it was the world's longest oil pipeline (Yergin, 1991, p.69; LeVine, p.24). Terry Adams, one of the architects of what came to be the BTC pipeline, points out: "*Ninety-two years later the pipeline route again became the preferred strategic option for evacuating South Caspian oil from Baku to the Black Sea*" (Adams, 2002, p.22) (see below).

The Rothschilds capitalised on their investment in the Baku-Batumi railway and pipelines, setting up the Caspian and Black Sea Petroleum Company in 1886, with headquarters and refineries in Batumi (Yergin, 1991, p.60). By 1900 Baku was supplying 50% of the world's oil (Ibid. p. 24; Shaffer, 2002, p. 27; LeVine, p. 26). In the United States the industry was dominated by J.D. Rockefeller's Standard Oil cartel; but in Russian Azerbaijan a new level of complexity emerged – local small-holders, Nobels and Rothschilds all operated in an intricate web of financial and technological relations heralding the advent of modern oil industry – capital and technology were all

brought to bear upon the task of bringing Caspian petroleum reserves from Baku to world markets.

There were also many other smaller, independent producers and traders around the world, and along with the oil giants, they were brought together in a complex web of commercial competition, technological innovation, financial expansion, geographical race for new sources and an evolving regulatory legal framework to govern it all. It is inconceivable from an idealist perspective to reduce this complexity to mere power politics and inter-state military competition (Zimmern,1918, p.2).

Realism

Classical realists, and E.H. Carr in particular, were scathing of such liberal assessments of world politics. Their analysis of international politics of oil begins with examination of *power*, and in particular military power. There is a strong association, therefore, between economic and political power (Carr, 1939 (1981), pp.104-106). This point is emphasised by H.J. Morgenthau: "*Control over [oil deposits] has been an important factor in the distribution of power, in the sense that whoever is able to add them to his other sources of raw materials adds that much strength to his own resources and deprives his competitors proportionately*" (1985, p. 133).

What distinguishes classical realist analysis of oil politics is this central role it accords to power. Instrumentality of oil as a source and conduit of economic, military and political strength of states is prioritised. Normative framework of such analysis is far from absent but it is bracketed by the terms of core power relations amongst national states. This is well illustrated by E.H. Carr's treatment of economic factors in international politics. Having characterised economic power as an instrument of policy, he sets out two means by which it is deployed – the export of capital and control of foreign markets (1981 [1939], p. 113).

In the former case, British government's aforementioned direct purchase of shares in the Suez Canal and Anglo Iranian (formerly Anglo Persian) Oil Company are amongst examples of direct government ownership as means of projecting and accumulating state power (Ibid., p.114). The role of private companies and individual entrepreneurs, celebrated by idealists, is downplayed as subordinate to the priorities of states: "*More often, government used their power to stimulate investments by banks and private*

individuals in the interests of national policy. [] Political interests were furthered by private investors enjoying, like the chartered companies of the nineteenth century, government patronage or, more commonly, diplomatic support" (Ibid.).

By this account, international oil companies in the first decades of the twentieth century were extensions of state policy, rather than autonomous economic actors, pursuing independent objectives. The liberal narrative of progressive advance of industrial capitalism and international systems of legal governance is rejected in favour of analysis of inter-state competition in an anarchic system. Therefore, processes such as the internationalisation of trade, commerce and industry are seen as a product of the struggle between states for control of foreign markets.

And, to paraphrase Carr, it is not clear whether political power is being used to acquire control over oil resources in far flung corners of the world for the sake of their economic value or whether oil resources are being sought in order to establish and strengthen political power: *"…powerful countries found their "natural" markets in areas where their political interests lay and where their political interests could be most readily asserted*" (Ibid., p. 116). For example, Carr brings up the example of Britain's Export Credit Guarantee Department, set up by the government to apply its purchasing power as an international political asset, by issuing guarantees for overseas private projects considered to be "*in the national interest*" (Ibid, p. 116).

Carr is dismissive of classical economists' insistence on theoretical separation of the economic from the political, symbolised by the *laissez-faire* approach of the 19th century. He criticises what he calls "*the illusion of a divorce between politics and economics*" (Carr, 1939 (1981), p.107). From a realist standpoint economic forces do not constitute an independent factor in international relations and, along with military strength of nations, are integral to the political dynamics of inter-state competition and balance of power (Ibid., p. 120).

Not surprisingly, access to and control of natural resources, such as oil, are prioritised as fundamental functions of economic and therefore political military power. Possession of natural resources such as oil is instrumental to a state's ability to exercise military force and is therefore essential. As Carr wryly observes: "*Where home supplies were not available, the unfettered control of overseas supplies became*

a primary objective. The desire to control adequate supplies of oil inspire an active British policy in more than one oil-producing country" (Ibid., p. 113).

Morgenthau paid particular attention to this relationship between military strength and economic power in the form of raw materials. He considered that their relative and absolute importance for the power of a state depended "*necessarily upon technology of the warfare practiced in a particular period of history*" (1985, p. 131). Hence, from a realist standpoint the importance of oil in international politics over the past century and a half is determined chiefly by the central role it plays in the efficacy of various dominant military technologies.

Military technology/strength – power: this schematic symbolises the crude material value of oil as translated into power politics. It also provides for a starting point in the classical realist analysis of international oil politics, with oil emerging as the instrumental raw material of war in the early 20th century. Growth of German power in late 19th century was stimulated in large part by its consistent pursuit of a decisive technological advantage over its rivals to give itself a critical military edge (see, for example, Bernhard von Bülow, 1932; Kelly, 2011; Sondhaus, 1997).

Ultimately, as Yergin observes, this aggressive arms build-up, especially construction of oil-powered ocean-going gunboats was to have a decisive consequence (1991, p.152). In line with Morgenthau's dictum, Britain's decision to switch the Royal Navy to oil "*was driven by the technological imperatives of the Anglo-German naval race*": "*Oil for the first time, but certainly not the last, had become an instrument of national policy, a strategic commodity second to none*" (Yergin, 1991, p. 163).

In the first decade of the 20th century there were two oil companies representing private British interest – the Royal Dutch/Shell and smaller Anglo-Persian Oil Company (APOC), operating a concession in Iran. It became clear from the outset that the British government was particularly concerned about APOC[12], fearing its concession might pass under control of a foreign syndicate (Ibid., p. 159). For their part, APOC's management consistently emphasised "*that Anglo-Persian was a natural adjunct to British strategy and policy and was a significant national asset – and that all the company's directors saw it just that way*" (Ibid.). By May 1914 the British Government

[12] Anglo Persian Oil Company was renamed Anglo-Iranian Oil Company in 1935 and British Petroleum Company in 1954. It is one of antecedents of the modern BP.

acquired 51% stake of APOC and a 25-year contract with the Admiralty to supply Royal Navy with cheap fuel oil (Ibid, p.160).

Thus, in line with Carr's observations, Britain lacking domestic supplies of oil, sought unfettered control of overseas supplies, which in turn inspired an active British policy in Iran and wider Gulf region. In fact, in "*The Twenty Years' Crisis*" Carr mentions British government's purchase of Anglo-Persian Oil Company as an example of political objectives being attained by direct government economic investment (1939 (1981), p. 114). And many in Whitehall wondered about the purpose of Anglo-Persian – was it to merely supply the Royal Navy with fuel or was it "*to help create an integrated, state-owned oil company, a national champion, and then to assist that company in expanding its commercial interests worldwide?"* (Yergin, 1991, p.175).

In other words, governments often use political power to stimulate private investment in furtherance of political objectives – they provide banks and private capital with patronage, diplomatic support and access (Carr, 1981, pp.114-115). Historical record suggests that this was the case with BP-led BTC project, as US, Turkish and British governments intervened repeatedly in support of the pipeline and companies behind them, and provided political legitimacy and security through funding of the project by international public institutions such as the World Bank (Adams, 2009, p. 249; Carroll, 2010, p. 10).

Control of markets overseas is another direction of government policy and powerful countries often found their "natural markets" close to where their political interest lay. Purchasing power of rich states is an international asset that allows them and not the producer, "*to call the tune*" (Carr, 1981, pp.116-117). Carr brings up the example of Britain's Export Credit Guarantee Department, which was established by the Board of Trade in 1939 to provide UK state financial guarantees for British firms investing abroad or engaged in transactions "...*in connection with which it appears to them* (ed. – the Board of Trade) *expedient in the national interest that guarantees should be given"* (Ibid, p.116).

For Carr ECGD represents a substitution of the military weapon by the economic. Sixty years later, the very same ECGD served as the institutional framework for British public funding of the BTC project. Providing a $150 million of taxpayers' money in

credit for the construction of Baku-Ceyhan pipeline, ECGD argued that the project "*contributes to the development of further energy supply routes in accordance with the Government's policy of ensuring a range of secure energy sources to Western markets*" (ECGD, 2003, p.2). The point here is that classical realism can offer a useful historical-analytical prism through which to understand contemporary international energy projects such as BTC. And not surprisingly, therefore, on realist account, Baku oil first attains strategic significance in the aftermath of WWI.

By the terms of the October 1918 armistice between Britain and Ottoman Empire, Britain took control over Baku and the entire Trans-Caucasus region - "*The British Oil Administration had come into effect*" (Adams, 2002, p.44-45). Azerbaijan and Georgia declared independence earlier that year and the British Oil Administration was in reality a reluctant intervention – Britain was economically and militarily overstretched. Still, some five thousand troops under command of General WM Thompson arrived in Baku from Iran by autumn 1918 (Altstadt, 1992, p.92). One notable reason for British involvement was emerging American isolationism – it was clear that President Wilson would not commit US troops to the region. Possibility that France or another European power would play that role in the oil-rich Baku was equally unacceptable to Britain (Adams, 2002, p. 46).

Azerbaijani government made repeated appeals for international recognition, particularly that of the US. Basing its claims on President Wilson's "Fourteen Points", Azerbaijani leadership was also keen to utilise what Adams calls *oil diplomacy*; for example, by offering preferential treatment in award of oil contracts for American companies as incentive for US establishing full diplomatic relations with Baku (2002, pp. 47; 54; 57). The Paris Peace Conference in January 1919 opened with Azerbaijan at the top of its agenda. No recognition, however, was forthcoming.

From a classical realist perspective, the abandonment of Baku oil and the Caucasus to the Russian Red Army in 1920 was down to recalibration of strategic interests by great powers, especially Britain – discovery of oil in Iran and acquisition of concession rights by Anglo-Persian significantly reduced strategic value of Baku reserves (Adams, 2002, pp.56-58). Despite Wilson's "Fourteen Points" it was clear that neither Britain, nor anyone else will come to the aid of Azerbaijan or Georgia: "*Churchill, reflecting the*

imperial school of thought, argued that it was all right to support self-determination in the abstract but that no vital interests were at stake in the Caucasus; owing to their weakness, these states would be reabsorbed into Russia eventually" (Altstadt, 1992, p.106).

The British quickly recognised that Azerbaijani and Georgian independence could only be maintained by an outside force, not just for external but for internal reasons too, and were not keen to play that role (Adams, 2002, p.54). The cost of British presence in the Caucasus was rising and political support for it quickly disappeared. Winston Churchill in particular saw no competitive advantage for Britain's continued involvement in the region and believed the future of Britain's energy security to be in Iran. The Americans too refused to become involved. By early 1919 plans were being made for British withdrawal from the region. As Adams contends: "*For reasons of expediency and affordability, Curzon and the British abandoned the newly democratic independent states of the Caucasus to their Bolshevik fate"* (2002, p.56). The British withdrew by end of August 1919. The Red Army entered Baku in April 1920.

Neorealist and Neo-Liberal Institutionalist Approaches

Azerbaijan's incorporation into Soviet Union put an end to international involvement in Baku oil until the collapse of USSR and restoration of Azerbaijan's and Georgia's independence in 1991 (Le-Vine, 2007, pp.144-173; Adams, 2009). By that stage, however, international petroleum order has been completely transformed. World War II was a turning point in the history of global energy. It marked the pivotal shift from coal to oil as the primary fuel of industrial and economic growth, ushering in a new world petroleum order. Oil production and consumption in the West and in the USSR increased rapidly, fuelling the reconstruction effort and the post-war economic boom (Yergin, 1991, p. 409-410).

Oil proved to be <u>the</u> strategic commodity in war – powering tanks, ships and planes, but also trucks and other internal combustion engine vehicles. And the post-war period heralded a golden age of the automobile – by 1950 there were forty million cars in operation in the United States alone, leading to an explosion in demand for petroleum (Ibid.). By 1960 worldwide consumption of oil rose to 21 million barrels per day (from just 6 million barrels in 1945) (Roberts, 2005, p.40). What began as a cottage industry

in the nineteenth century now was the life-force of the Modern Age. Oil was now a colossal international enterprise comprising a myriad political, economic, social and technological processes and interactions on a truly global scale, bringing together geologists and engineers, lawyers, traders and corporate executives, politicians and civil servants, in pursuit and competition for the world's critical commodity: "*to be a world power a nation needed either oil or the money to buy it*" (Ibid.).

Moreover, the post-war scientific turn in the oil industry was complemented by development of increasingly specialised theories about the economics of oil. The sheer volumes now being traded on the open markets and the growing complexity of the international political economy of oil and energy more generally, required holistic understanding of a wide array of issues, from supply and demand dynamics, to prices and corporate governance, to marketing and trade, to international contract and commercial law (for a definitive rationalist overview of oil politics in WWII and the post-war petroleum order see Yergin, 1991, pp. 289-431)

Neo-realism

These themes were all playing out against a backdrop of escalating Cold War tensions. Indeed, one of the first crises in the conflict was the Soviet occupation of northern Iran. Soviet troops were ordered out of the country in May 1946 but this did little to assuage Western fears over possible Soviet advance in the Gulf (Yergin 1991, p. 403). US policy makers were worried about the security of oil supplies and the threat of Soviet expansionism in the region; this being at least partly the motivation behind the launch of the Truman Doctrine in 1947: "*Ostensibly aimed at Greece, Iran and Turkey, its true target was the oil-rich area of Western Asia"* (Hiro, 2007, p. 90). As Daniel Yergin summarised: "*Oil provided the point at which foreign policy, international economic considerations, national security, and corporate interests would all converge. The Middle East would be the focus*" (1991, p. 410).

On empirical level, these developments contributed to the development of a more attenuated forms of realist thinking on oil politics. Access to stable and secure supplies of petroleum emerged as a key issue. Heavily influenced by economics, scholars working in the field of oil and energy politics produced complex quantitative studies focusing on issues of available oil reserves, security of supplies and the behaviour of actors in the global energy market in the context of evolving dynamics of the Cold War

(Stocking and Watkins, 1948; Schwartz, 1950). Such scholarship was not limited to raw data analysis, but also involved systematic examination of key topics and themes in oil studies – strategic value of oil, interplay between government and business, the impact of various regulatory frameworks, interstate competition for control of supplies, the role and increasing power of oil-producing states, and the influence of international institutions and legal frameworks (Shwardon, 1974 [1955]; Stocking,1970; Shwardon,1977).

It can be argued that this was a formative stage in the development of the mainstream, rationalist approach to energy studies. The key themes of the neo-realist, structural model (security of supply being the paramount one) were set out in the scholarly and political debates of the post-war period, not least by the policy-makers themselves (US Joint Chiefs of Staff, 1946). The Cold War structured international oil politics in the late 1940s and through the 1950s with Middle East, and Saudi Arabia in particular, emerging as new centre of gravity in the post-war world (Yergin, 1991, p.393).

These themes and modes of analysis dominated both scholarly and policy debates throughout the 1950s. It can be argued that the Second Debate had the effect of transforming the study of international oil politics from a historical-sociological intellectual enterprise into a highly specialised, data-focused subfield of strategic studies. With the rise of OPEC, academic (and public) attention shifted to relations between producing and consuming countries, but the core characteristics of the rationalist oil paradigm remained in place – quantitative methodologies, game-theory applications, states and national oil companies as key units of analysis. The Middle East crises and wars of 1960s and 1970s only served to bring oil to the very top of political, academic agenda and, importantly, to the attention of general public. The issue of Western dependence on Middle Eastern oil came to the fore in the debates about energy and petroleum.

Kenneth Waltz's seminal "*Theory of International Politics*" was published just months before the second major oil shock, brought about by the Islamic Revolution in Iran in 1979. Applying his economics model to set out a structural theory of international politics, Waltz argued that, like a market, the international system "*is made by the actions and interactions of its units, and the theory is based on assumptions about their behaviour* (Waltz, 1979, p. 118). His discussion of oil politics therefore, proceeds

within the framework of this parsimonious structural theory, where states competing in a self-help system, do all they can to ensure secure supply of strategic resources: "*Countries that are highly dependent, countries that get much of what they badly need from a few possibly unreliable suppliers, must do all they can to increase the chances that they will keep getting it*" (Ibid., p. 153).

The OPEC embargo of 1973, the fall of Shah's regime in Iran in 1979 and the consequent spikes in oil prices (and shortages) shook Western confidence and raised fears of permanent dependence on the Middle Eastern oil. Writing in later editions of "*Politics Amongst Nations*", Henry Morgenthau observed that in the past consumers controlled prices "*through colonial and semi colonial arrangements"*, but now it is the producers who were organised to raise prices considerably by means of their independent, collective control of oil production (1985, p. 135). Morgenthau advocated energy conservation, stockpiling of reserves, developing alternative energy sources and interestingly, limiting and curtailing importation of oil – classical realist strategy of self-sufficiency and autarky (Ibid.).

By contrast Waltz advocated increasing imports in the short to medium term and conserving domestic resources: "*Having imposed quotas on foreign oil for decades to make sure, in the name of resource development, that we would use our own oil first, it makes sense now to rely more on imports*" (1979, p. 155). Perhaps on this issue there emerge early distinctions between offensive and defensive realisms, but in other respects Waltz's policy prescriptions on oil matched that of Morgenthau, other experts and indeed the US Government – energy conservation and building up of reserves to withstand embargos. Establishment of the *US Strategic Petroleum Reserve* in 1975 echoes Waltz's suggestion of a "*petroleum stockpile sufficient for riding through, say, a six-month embargo*" (Ibid., p.156).

Neo-realism did not completely subsume more traditional forms of realist thinking on oil – many scholars continued to produce historical comparative analysis, emphasising themes of change in the international energy system and inter-state oil politics, as well as the role of non-state actors (see, for example, Stoff, 1982). Yet given the overall impact of neo-realism on International Relations it is not surprising that international oil politics, as an academic sub-field (as well as wider policy community), came to be heavily influenced by neo-realist thinking. Analysis of oil politics now took place in the

context of a structural international political theory. Natural resources such as oil did not constitute independent units of analysis and were not especially important by themselves; their significance was tied to their contribution to the composition of national power, resource endowment being one of the key elements that determines a nation's power-ranking (Watz, 1979, p. 131).

Yet there was another emerging theme that began to impinge on the mainstream neo-realist thinking about oil politics – environmentalism. Daniel Yergin's "*The Prize*", as mentioned, remains perhaps the most important and influential book on oil within the mainstream rationalist framework. What Yergin calls the "*anthropological argument*" forms the third key theme of this monumental study (business and politics of oil being the other two) (Ibid., p.14). This is the argument that oil is the basis of modernity, underpinning the very foundations of daily life – the rise of "*Hydrocarbon Society*" (Ibid.).

Whilst Yergin hardly addresses substantive environmental issues in any real detail (in the first editions of the book), it is notable that "*The Prize*" opens with questions about environment that are pertinent to neorealist understanding of the problem: "*In the meantime, the stage has been set for one of the great and intractable clashes of the 1990s between, on the one hand, the powerful and increasing support for greater environmental protection and, on the other, a commitment to economic growth and the benefits of Hydrocarbon Society, and apprehensions about energy security*" (Ibid., p. 15). And the book concludes with Yergin envisaging possibility of "*the almost incomprehensible costs and disruption… that could result if there's a major climate change*" (Ibid., p. 779).

There are, therefore, two strands of thought emerging here: 1) that environmental issues represent a policy problem to be managed on balance with other strategic considerations or as Yergin describes it: "*a competition of two great themes – energy and security, and energy and the environment*" (Ibid, p. 779); and 2) that the climate change is a foundational threat to the very notion of modernity (Ibid., p. 780). These two approaches were to increasingly dominate mainstream rationalist debates around politics of oil in the 1990s and beyond (see, for example, Brown et al, 2007; Raleigh and Urdal, 2007; Broder, 2009).

Elevation of environmental concerns from empirical fringes to mainstream scholarship and their integration into mainstream paradigm of international oil politics took place in the context of evolving public debates, in politics and media. Nevertheless, mainstream positivist approaches to energy and environment retain their essential problem-solving normative focus. To illustrate this point, it is worth considering Daniel Yergin's "*The Quest: Energy, Security and the Remaking of the Modern World*" (2011) – his follow up to "*The Prize*" (1991).

If environment and climate change were barely mentioned in the latter publication, in "*The Quest*" Yergin accords them a central place in the narrative. Yergin opens "*The Quest*" with three key questions about energy, which in sum constitute the ontology of the contemporary positivist research programme and, at the same time, reflect the changes and transformations in neorealist thinking about energy over the past twenty years and especially, the role of oil: "*Will enough energy be available to meet the needs of a growing world and at what cost and with what technologies? How can security of the energy system on which the world depends be protected? What will be the impact of environmental concerns, especially climate change, on the future of energy*?" (2012 [2011], p.3).

In a neorealist research programme, the central important question on climate change is not how to stop it in principle but on how it might affect the global energy regime e.g. in terms of balance of power amongst states. This is not because the human cost of climate change is unimportant but simply because such considerations do not fall within the ontological sphere of the rationalist model of energy politics. The story is no longer just about oil but its underlying ontological, epistemological and normative foundations remain unchanged, connecting various intellectual strands of "*The Prize*" (1991) and "*The Quest*" (2011).

Neo-liberal Institutionalism

Yet such an approach undoubtedly obscured the complexity of international oil politics. Specifically, neo-realist accounts failed to incorporate within their analytical framework the growing role of trans-national, intergovernmental and non-governmental actors and economic and social processes, whose dynamic interactions had direct and often decisive impact on political outcomes. This shortcoming was clearly demonstrated by the oil crises of the 1970s – the market, the companies, the oil traders and speculators,

even domestic consumers had all played critical parts in the unfolding drama of rising prices, petroleum shortages and economic recession.

As the oil crisis of the early 1970s unfolded some scholars, notably Robert Keohane and Joseph Nye, were already tentatively beginning to seek to "*to establish the political significance of international organizations in certain issue areas – as arenas and members of transgovernmental coalitions, and as potential points of intervention in transnational systems*" (1974a, p. 61; see also, Ibid., 1972). Keohane and Nye (1974b) focused on the role of non-state actors, such as multinational corporations pursuing profit in a global marketplace, and emphasised significance of trans-national processes in world politics and their implications for national states (1973, p. 158).

Major differences between neo-realist and neoliberal institutionalists began to emerge around disagreements over a possibility and the degree of international cooperation (Nye, 1980), which offered ample opportunities for applying various game-theory scenarios to international oil politics; and b) the extent to which transnational factors can be said to impinge on the primacy of states as key units in the international system (Bucknell III, 1981; Ebinger, 1982; Hoffman and Johnson,1981; Krapels 1980; Ross and Williams, 1981).

Another important component of the institutionalist research programme of international oil politics centred on the study of non-state corporate institutions that dominated production and trade in oil – the international oil companies (IOCs). Ever since publication of Anthony Sampson's definitive "*The Seven Sisters*" (1975), which to this day remains the benchmark text on corporate history of oil, academic scholars consistently sought to incorporate international oil companies as units, or at the very least sub-units, in the architecture of international political oil regimes.

The dynamics of relations between producing and consuming states on one hand, and international oil companies on the other, represents another level of complexity. In 1945 US Navy Secretary James Forrestal stated that he did not "*care which American company or companies developed the Arabian resources, as long as they were American*" (quoted in Yergin, 1991, p. 412). IOCs are certainly trans-national in their operations, which are determined by the facts of geology above all, but their headquarters and shareholder base remains in their countries of origins. Meanwhile, the 1960s and 1970s saw proliferation of publicly-owned national oil companies

(NOCs) emerging to take their place alongside the majors – a process driven by decolonisation and independence movements across the developing world, as oil producing nations increasingly assumed control over their own resources, leading to the decline of the old concessionary system.

Therein lies the paradox - Western oil majors have historically been viewed as national champions, promoting state interests, often with direct state involvement (for example Anglo-Iranian/BP (Sampson, 1973, pp. 70-74)); yet they also had had a complicated, often fractious relationship with national governments in Europe and especially in the United States, beginning with the dissolution of Standard Oil in 1911 and the ongoing anti-trust battles between oil companies and the federal government (for an example of contemporary 'trust-busting' in academic literature, see Blair, 1978).

These debates were not taking place in a vacuum – the 1980s was a decade of growing global, especially financial, markets and, in the West, government deregulation and privatisation of public enterprises. Oil was first introduced in the futures markets at the *New York Mercantile Exchange* (NYMEX) in 1983. And in 1985 Margaret Thatcher abolished *British National Oil Company* (BNOC) and then, two years later, "*reversed Winston Churchill's historic decision of 1914*" and sold off the government's 51% stake in *British Petroleum* (BP) (Yergin, 1991, pp. 746, 767). Such developments were seen as victories for the market – could it be that oil was becoming just another commodity (Ibid., pp-743-744)?

Furthermore, towards the end of the decade there emerged a consistent strand of scientific argument that the use of fossil fuels is having an impact on global climate, coupled with a growing public awareness of the issue (Yergin, 2012, p. 463). Establishment of the *Intergovernmental Panel on Climate Change* (IPCC) in 1988 marked the beginning of the political evolution of international environmental and climate change agenda – from the Earth Summit in Rio de Janeiro in June 1992 to the Paris Agreement (to cut carbon emissions) in December 2015 (UNFCC, 12.12.15). Environmental security agenda was subsequently picked up by international institutions, such as the World Bank (Mearns and Norton (eds.), 2010) and increasingly governments (Schwartz and Randall, 2003).

Climate change and global warming were increasingly being taken seriously by governments and policy-makers and formed an arena for growing international

cooperation. Evolution of the IPCC process and the UN Framework Convention on Climate Change centred the issue at the heart of global political agenda. The signing of the Kyoto Protocol in 1997 served to underline this shift. Kyoto also introduced markets in emissions trading and established several other foundational principles in the process that eventually led to the Paris Agreement of 2015 (UNFCC, 12.12.15; see also Yergin, 2012, pp.487-492).

These themes – the declining role of the state in the oil industry, growing power of international oil companies, gradual marketization of oil pricing mechanisms, growth in global commodities and financial markets, the weakening of OPEC and of other producers (including Soviet Union), gradual decrease in oil prices, growing regulatory authority of international organisations and evolving international cooperation in tackling environmental crises, all provided the backdrop to neoliberal discussions about oil in the 1980s/1990s and beyond.

This brief overview of neo-realist and neo-liberal accounts of post-war international energy politics sets out broad topical themes - supply of energy, security of this supply, how the environment (climate change) might affect it in the long run, and international financing of energy projects are some of the central analytical planks of an expanded neo-neo rationalist model of global energy politics. The next task is to locate BTC and SGC projects within these single-paradigm rationalist models and the wider rationalist synthesis they comprise.

Neo-realist account of BTC

Soviet collapse in 1991 heralded what some described as “the new great game” and others, more sensibly, “pipeline politics”: “…*the fact that the decisive clash was not that of weapons but of the routes by which oil and natural gas from the landlocked Caspian would get to the world’s markets*” (Yergin, 2012, p.4-46). Newly-independent Azerbaijan did not possess necessary technology to develop its off-shore oil wealth independently and needed foreign companies’ expertise and capital (Omarova,1998, p.187). Russia, Britain, the United States, Turkey, Iran, the European Union and major multinational energy companies were all to become players in what Yergin described as the “Caspian Derby” (2012, pp.46-50).

For Georgia and, in particular, Azerbaijan, newly independent but weak, unstable and riven by conflicts, this was seen as an opportunity to avoid the repetition of 1918-1920 and to secure independence through "oil diplomacy" (Adams, 2009, p.229). In the wake of the Gulf War, the U.S. and Europe were seeking ways of diversifying their energy supplies away from Middle East and OPEC-controlled resources and were particularly enthusiastic about the potential of the region's hydrocarbon future (Carroll, 2010, p.4). Turkey's attempt to position the country as a major transit route for Middle Eastern oil and gas was stumped - specially-constructed deep-water Ceyhan port facility was designed primarily to process Iraqi oil being exported to Europe. But the sanctions against Saddam Hussein's regime effectively shut down the Kirkuk-Yumurtalik (Ceyhan) pipeline, resulting in serious underuse and additional financial costs for Turkey (Baran, 2005, p.104).

The United States government immediately recognised independence of all Caspian states and became actively engaged with them in a policy that effectively remains in place to this day. As one of its architects, former U.S. Ambassador to the European Union, Richard Morningstar argued (2006): "*The principal component of U.S. policy was to help these new states develop as stable independent countries that would ultimately become market democracies in an uncertain part of the World... In addition, the United States believed and still believes that the development of natural resources in the region should provide an alternative source of oil and gas at a time when South Asia and the Middle East are becoming increasingly unstable and demand is soaring from India and China"*.

Yet it was the British who were first to return to Baku, some seventy years after they were expelled by the Bolsheviks (LeVine, 2007, p. 144). And it was BP, of Anglo-Persian fame, that was to win the prize when on 20th September 1994 the "Contract of the Century" was signed in a ceremony in Baku – a comprehensive agreement between Azerbaijan and a consortium of ten oil majors, including BP, Amoco, Norwegian STATOIL, as well as Russian Lukoil and Turkish TPAO, to explore Baku's Azeri-Chirag-Guneshli offshore oilfield and Shah Deniz offshore gas-field – Azerbaijan International Operating Company (AIOC) was formed (Adams, 2009, p.228).

The Contract was signed, yet the perennial question of how to transport Baku oil to global markets remained (DeLay, 1999, p.47). The Early Oil Project (EOP), which

emerged as the solution to the problem, involved production of relatively small quantities of oil for export via existing or new pipeline infrastructure (DeLay, 1999, p.51-54; Yergin, 2012, pp-57-59). Two potential pipeline routes emerged– Northern Export Route (NER) from Baku to the Russian Black Sea port of Novorossiysk and Western Export Route (WER) from Baku to the Georgian port of Supsa. The first option would involve re-activation of the existing Baku-Novorossiysk Pipeline, whilst WER would require considerable construction work in Georgia (see LeVine, 2007, pp.217-235; Yergin, 2012, p.59). The issue of routing became immediately highly politicised. The United States and Turkey were both initially strongly opposed to NER, whilst some investors in AIOC were quite happy to proceed without WER.

In Russia two policies seemed to have emerged in the Yeltsin period – one, embracing a zero-sum approach, aimed at frustrating any Azerbaijani attempt to develop its oil with Western help and the other one followed a more realistic aim of improving Russian position in relative terms (Fincher, 2005). Given that no agreement on sub-division of the Caspian Sea (the seabed and the territorial waters) existed between the newly independent Caspian states (Azerbaijan, Kazakhstan and Turkmenistan) and Russia and Iran, it was claimed by the latter two that Azerbaijan's negotiations with oil companies were in fact illegal and any contract for off-shore exploration unenforceable (Adams, 2009, p.234). This was a major challenge to Azerbaijani sovereignty and one that Baku dealt with by placing Russian interests at the top of the agenda in the Early Oil Project and mobilising major international political pressure on Moscow – Yergin described this policy as "*offend no one*" (2012, p.56).

Thus, from early on, NER became the main option for transportation of Baku oil. In addition, Lukoil, the Russian energy giant, was given a 10% share in the Contract, becoming a shareholder-member of AIOC. By 1999 (the outbreak of the Second Chechen War which temporarily shut down Baku-Novorossiysk pipeline) WER was also commissioned – a new pipeline from Baku through Tbilisi to the Black Sea port of Supsa, built at a cost of $640 million (Adams, 2009, p. 251). Political strategic considerations prevailed.

By 1998 scores of additional production sharing agreements were signed with companies representing commercial interests of the United States, Iran, Saudi Arabia,

Belgium, France and Italy. EOP was a resounding success, paving the way for wholesale exploration of Baku's off-shore reserves. For Azerbaijan this meant diversification of its political interests, binding the country closer to the West, whilst placing it once again at a centre of the global energy industry in the early 21st Century. As Adams concludes in his discussion of the Contract of the Century: "*Regional powers [Moscow, Ankara, and Tehran] were well served as well as Washington and London. Most of the capitals in Europe together with Tehran, Tokyo and Riyadh had embassies in Baku"* (Ibid. p.252).

Yet the question of the main export pipeline (MEP) remained unanswered (Carroll, 2010, p.5). Whilst successful, NER and WER were relatively small projects with limited operational capacity and beset by technical and operational difficulties. A major new pipeline, capable of carrying up to and above a million barrels of crude per year was needed – Baku-Tbilisi Ceyhan was to become that main export pipeline and to reshape politics of energy transportation in the Caspian region.

The issue of MEP and its routing has been a subject of much debate and speculation amongst journalists, industry experts and political commentators right from the start – "*good media fodder*", as Hill describes it (2004, p.20). Yet it is clear now that BTC was always going to emerge as the primary choice in the selection of export routes for Caspian oil – "... *the question for BTC as an MEP had always been 'when' and 'how', not 'if' or 'where'..."* (Adams, 2009, p. 246; Yergin, 2012, p. 60). There were several initial proposals for potential route of the MEP. These included expansion of the existing Baku-Novorossiysk pipeline (NER), developing WER pipeline and a new port facility in Georgia, a new route through Iran to Turkey (Ceyhan) or an Iranian port, a route to Ceyhan through Armenia, a route to Ceyhan through Georgia.

Adams argues: *"Any Russian option for an MEP was to be destroyed by security problems in Chechnya. Likewise, an MEP export from Georgia would have required Black Sea constricted and competitive oil transits through the Bosporus that created an unacceptable long term environmental risk for AIOC investors. The American investors in AIOC, constrained by the US Iran Libyan Sanctions Act, could never accept Iranian transit to Turkey. A similar transit through Armenia was equally*

unacceptable for Baku, with its unsettled war in Nagorno-Karabakh" (2009, pp.245-246).

This brief examination requires further discussion. It is true that any Russian option would be constantly threatened by security challenges in North Caucasus. The outbreak of the Second Chechen War in 1999 briefly shut down Baku-Novorossiysk pipeline and necessitated a by-pass through Dagestan in 2000 to avoid areas where fighting was taking place (Carroll, 2010, p. 5). Yet, there is a more important explanation why the Russian option was unacceptable and it is to do with the U.S. policy objectives, which are not confined to commercial interests of American companies.

As Svante Cornell et al argue, BTC represents "*the most important pillar*" of a major transportation network known as the New Silk Route or the Eurasian Transport Corridor – a planned, fully integrated infrastructure network of pipelines, highways, telecommunication facilities to connect Central Asia/Caspian region to Europe and the Far East, thus facilitating global trade and commerce (2005, p.21). BTC should therefore be seen in the context of a wider pipeline system in the region (planned and operational).

The United States, chief architect of this vision, pursued a double aim of diversifying energy supplies through support for multiple pipelines system and ensuring that the dynamics of global trade and energy transportation flowed East to West, rather than North to South (Joseph, 1999, p.12). Preventing monopolisation of pipeline routes (by Russia or Iran) was thus seen as a fundamental facet of American policy in the region and Washington's intense support and promotion of BTC fits neatly into this paradigm LeVine, 2007, p. 347). It is "... *the biggest project anywhere in the former Soviet Union that the United States has backed, promoted and carried out strategically over three differing administrations*" (Svante Cornell et al, 2005, p. 30). US sanctions against Tehran, introduced in 1996 Iran Libya Sanctions Act by the US Congress, imposed severe penalties on businesses investing in the Iranian energy sector, thus precluding possibility of MEP being routed through Iran, despite this being the most economically attractive option (Hill, 2004, p.19; Carroll, 2010, p. 5; Yergin, 2012, p.60).

Turkey represents another major facet of the BTC story. With a collapse of Soviet Union this NATO member found itself at a strategic location – crossroads of Europe, Russia, the Caucasus and Middle East. With significant mineral resources, vibrant young population and growing economy Turkey was an attractive option for newly independent Turkic states of the Caspian, particularly Azerbaijan (Yergin, 2012, p. 49). Yet the Turkish Republic was severely energy dependent with some 75% of all energy expected to be imported by 2025 (Baran, 2005, p.103). Realising the full potential of the Caspian oil and gas reserves, Turkey immediately saw an opportunity in land-based pipeline connecting Baku oilfields to Ceyhan export terminals on the Mediterranean Sea. This pipeline would help bind the former Soviet states in the Caspian region to Turkey and strengthened Turkey's importance for Europe and the US (Ibid, p.104).

As Adams points out: *"Guaranteed access to Turkish military infrastructure was fundamental to the US political policy and practical containment of Iran and Iraq. This would be directly linked to US reciprocal support for BTC. At the same time increased American influence in the Russian near abroad was seen to correspondingly decrease Russian political influence in the same areas, bringing with it direct access to considerable non-OPEC oil and gas reserves in which BTC would play a lead function"* (2009, p.246-247).

In addition, there was the issue of the Straits of Bosporus in Istanbul (Yergin, 2012, p.60). Extensively used for tanker shipment from the states of the Black Sea region, the Straits experienced a massive increase in use in the 1990s due to the additional oil traffic from the Caspian, leading to congestion and a high environmental risk (Baran, 2005, p.106). Turkey argued vociferously against any additional shipments through the Bosporus and sought to restrict these (Carroll, 2010, p.6). Ankara's position was supported even by oil companies who faced "an *unacceptable long term environmental risk*" (Adams, 2009, p. 246; Hill, 2004, p.22).

BTC option would avoid the Bosporus by delivering crude oil directly to southern Mediterranean and generating higher revenues in tariffs for the Turkish state (Elkind, 2005, p.5). The Bosporus dilemma severely undermined the case for any MEP routing through Russia and Georgia. Turkey, therefore, pursued BTC from the outset (Carroll,

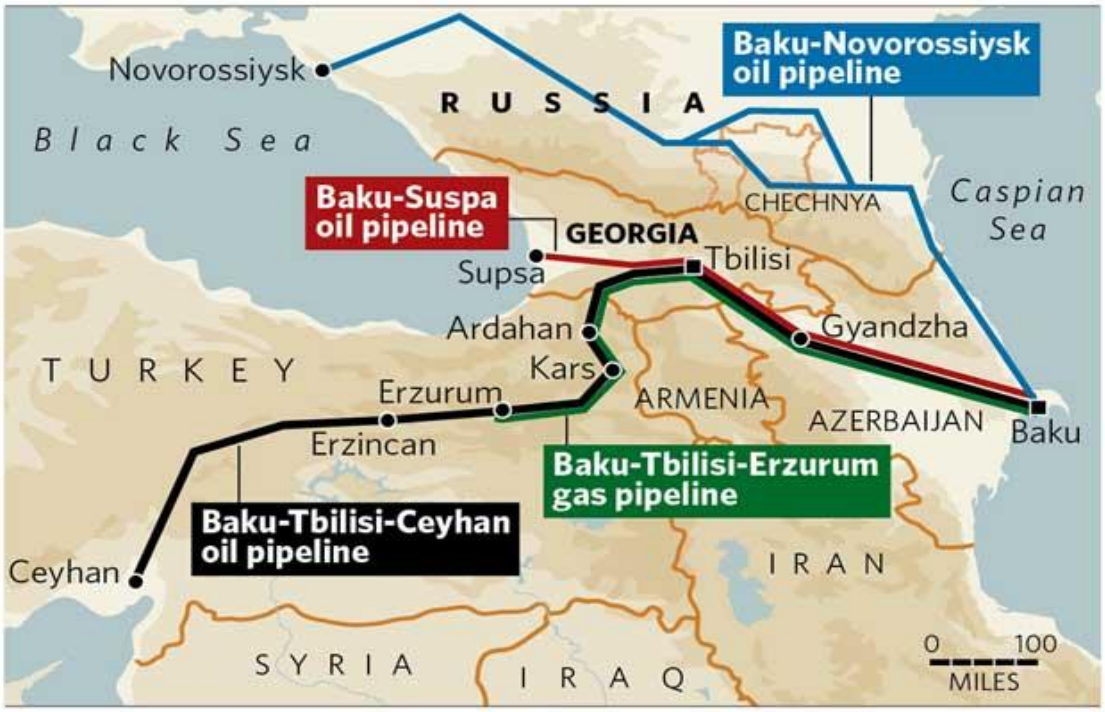
2010, p.6). Turkish state oil company TPAO was a minor shareholder but nevertheless a founding investor of AIOC. Ankara also offered to provide public-funds as guarantee to meet any construction cost overruns for BTC (Carroll, 2010, p. 6; Baran, 2005, p.107). This strengthened the Ceyhan option for the MEP. Any possibility of the pipeline being built to Turkey through Armenia was unacceptable to Azerbaijan. Azerbaijani strategy was to use oil development in general and pipeline routing in particular to strengthen its position in the ongoing conflict with Armenia over Nagorno Karabakh (Cornell and Ismailzade, 2005, pp.81-83).

The route from Sangachal oil terminal in Baku through Tbilisi, capital of Georgia, and onto the export terminals at the Yumurtalik deep-water Turkish Mediterranean Sea port of Ceyhan, was the only acceptable option for the main export pipeline (Yergin, 2012, p.61). The U.S. government made it clear by 1999 that the AIOC consortium "*could build any pipeline they desired, so long as it ran from Baku to Ceyhan without touching either Iran or Russia*" (LeVine, 2007, p.351).

Ten years of negotiations, debates, conflicts and disputes ended on 18th November 1999, when, during an OSCE summit, US, Turkey, Azerbaijan, Georgia and Kazakhstan signed the Istanbul Declaration on main export pipeline from Baku to Ceyhan – the Intergovernmental Agreement, obliging all parties to provide all possible assistance in financing and building BTC pipeline (LeVine, 2007, p.356). At the same time, an agreement was made to fully explore large Azerbaijani Shah-Deniz gas fields and build a natural gas pipeline parallel to BTC but only up to the Turkish city of Erzurum (Baku-Tbilisi-Erzurum or South Caucasus Pipeline (SCP)) – Azerbaijani gas was to supply Georgian and Turkish consumers, greatly alleviating the countries' energy shortages (Hill, 2004, p.23) (see Map 1). The gas pipeline amplified BTC's regional impact and laid the foundation for future expansion – what came to be the Southern Gas Corridor (SGC).

Financing and construction were now the focus of international effort behind BTC (LeVine, 2007, p. 356; Yergin, 2012, p. 62). The issue of funding, which faced the Nobels over a century before, was of critical importance. Any project of such size would require support from public financial institutions, such as the World Bank (International Finance Corporation (IFC)) and the European Bank for Reconstruction

and Development (EBRD), as well as private capital. Over the years that followed BP and its partners embarked upon a long drawn research consultation and development process. But in the end, it was U.S. government backing and political support that ensured public funding of BTC and SCP pipelines: "*Washington's was the most influential voice with the banks that counted – with its own Export-Import Bank and Overseas Private Investment Corporation as well as with the World Bank and EBRD. All could be relied on to put up money and make it safe for commercial banks to participate*" (LeVine, 2007, p. 357).



Map 1. Caspian/Black Sea pipeline network *(http://eurodialogue.org/Caspian-Pipelines-Map)*

With public financing from EBRD and IFC approved in 2002-2003, BP and its partners in the Baku Tbilisi Ceyhan Pipeline Company (BTC Co), an 11-member joint venture led by BP, acquired powerful backers for their investment in BTC, which in turn attracted additional private capital from Citibank, ABN Amro and other institutions (Carroll, 2010, pp. 7-11). In total, the project cost in excess of $3.9 billion with some 70% of the cost met by loans from public financial institutions (Upstream Online, 2006; Carroll, 2010, p.9).

It took two years to complete construction of the 1760 km pipeline and it was officially launched on 24th May 2005, at a ceremony at Sangachal, Baku (Yergin, 2012, p. 63).

Some ten million barrels of oil was needed to fill the pipeline and it took over a year to arrive at Ceyhan and by 2017 "*it carried a total of about 2.8 billion barrels (more than 374 million tonnes) of crude oil loaded on 3,674 tankers and sent to world markets*" (BTC co., 2017). State power is what made BTC possible.

As Wheeler and Whited put it in their seminal account of the oil industry: "*The name of the game is power"* (1971, p.1). Morgenthau is even more emphatic about *"the power of oil*" (1985, p.133). He too recognised historical relationship between raw materials, economic power and military strength (ibid, p.131). For Morgenthau competition for oil has important implications in terms of distribution of power – as states seek to control energy reserves they do not merely aim to add to their own resources but to deprive their competitors proportionately (Ibid, p. 133). Contract of the Century and its attendant pipeline system should be seen in the context.

Morgenthau goes on to argue that since oil *"...has become the lifeblood of industrially advanced nations...*", it represents a revolutionary value in international politics (1985, p.134). States which do not necessarily possess all or any elements of national power (large territory, population etc.) suddenly become very powerful factors in international politics if they have the strategic asset of oil. Historically low oil prices in the late 19th and early 20th centuries were product of colonial and semi-colonial relations which existed between powerful imperial consumer states and weaker producer-colonies. Possession of oil in the 20th century reinforced independence of these former colonies and enabled them to raise prices by controlling production (e.g. through formation of OPEC).

At the same time demand for energy grew exponentially and many industrial societies are totally or in considerable measure dependent on supplies from abroad (Ibid, p.134). This helps explain why Azerbaijan failed to secure independence in 1918-1920. Having extracted itself from a colonial relationship with imperial Russia, Baku was plunged into a semi-colonial relationship with Britain, before being re-captured by Bolshevik Russia. With Britain acquiring sovereign control over the Anglo-Iranian Oil Company (later BP) and thus Iran's oil reserves, prices for oil plunged to record lows. Under such conditions Azerbaijani "oil diplomacy" was bound to fail. By contrast, BTC in the early 21st century represents success of Azerbaijan and Georgia, their

independence underpinned by hydrocarbon reserves and transportation infrastructure, far more valuable now that at the turn of last century. Operating in this new “sellers’ market”, two small Caucasian states, with tiny populations, beset by separatist conflicts and territorial disputes with neighbours were nevertheless able to transform their petroleum wealth into political power (Yergin, 2012, pp. 63-64).

Neo-liberal institutionalist account of BTC

Neo-liberal institutionalist model of BTC holds the project to be a product of the post-Cold War liberal settlement – “end of history” in action. For Fukuyama Soviet collapse signalled a final victory of world democratic capitalism (Fukuyama, 1992 in Burchill, 1996b, p. 30). Azerbaijan’s and Georgia’s independence from the USSR and their adoption of western democratic model and free trade, symbolised by the Contract of the Century and BTC, represent a natural culmination of the countries’ historical evolution to liberal democracy and integration with the West (Fredrick-Starr, 2005, p.14).

Neo-liberal institutionalists stress the importance of transnational institutions of governance and global economic forces in development of world politics (Keohane and Nye, 1977). In this context, BTC is first and foremost an economic project, devised and implemented by multinational energy corporations, supported by global financial institutions. The single, most repeated statement about BTC is that economics still had to make sense before the project could be implemented (Adams, 2009, p. 247; Carroll, 2010, p. 6; Frederick-Starr, 2005, p. 9, Yergin, 2012, p. 62). It was primarily a commercial venture that only went ahead when business conditions were right and it was profitable to build the pipeline.

A “*continuous alignment of common interests between the host government and foreign investors*” was required to ensure the success of the Contract of the Century (Adams, 2009, p.233). Azerbaijan required participation of oil majors with necessary technology and expertise in development of its oil reserves, representing a broad range of international sovereign interests (especially US, UK and Turkey) and who, most importantly, would be prepared to self-finance the early part of the development

project. Political and economic considerations went hand in hand in the Azeri government's considerations (Ibid; Yergin, 2012, p.55; LeVine, 2007, pp.174-200).

As Adams contends, the oil companies, on the other hand, had to ensure that *the commercial terms within the Contract would realistically reflect the risk environment involved* (Ibid). The companies also needed guarantees that the contract would be enforceable under both Azerbaijani and British law, with mechanisms for international arbitration. Thirdly, the oil companies insisted on unanimity clause in all management and operation decisions involved in the contract, effectively slapping the right of veto and placing themselves on par with government of Azerbaijan, a sovereign state. The contract is an extremely detailed document, spelling out all the particulars to leave no room for future disagreements (Adams, Ibid, p.235).

Oil majors involved in the development of Caspian oil pursued interests of their global shareholders and not those of individual nation states (Adams, 2009). The idea behind the Contract of the Century was ambitious from the start – in the long-term it envisaged creation of a main export pipeline (MEP) to carry some one million barrels per year. In 1994, however, at the time such ambition must have seemed extremely premature and risky (Yergin, 2012, p.56). A pilot project was needed that would demonstrate credibility of the Contract and of the parties involved, and instil confidence to attract additional investment. It was necessary to show that export of land-locked Baku oil to the energy markets was feasible (Adams, 2009, p. 235).

Despite heavy political pressure from the US, UK and Turkey in support of BTC, members of AIOC insisted on the Early Oil pilot project, built two preliminary pipelines to diversify their risks and acquired extensive financial support from the public and private funders before proceeding with the BTC project. It took over a decade after the Contract of the Century before BTC was built and as Adams categorically argues:

Despite so many later claims to the contrary, when BTC was finally built, it was on the basis of commercial not political decisions. Investment had always been dependent on AIOC first proving bankable oil reserves at ACG, that were required to finance this international mega project. Claims of a geopolitical "win" by Washington and Ankara over Russian regional interests could not have been further from the truth. Commercial reality had prevailed (2009, p.247).

Some liberals go further and challenge the underlying logic of strategic competition underpinning the politics of energy development in South Caucasus. For them BTC is a manifestation of unnecessary geo-political confrontation brought about by state conflict and detrimental to the goals of free trade and individual prosperity (de Waal, 2010, p.4). The great powers should desist from disruptive competition and accept mutual interests in the region. On top of that South Caucasus should be developed as "...*a free trade zone and communications hub, radiating out to five points of a star: to Russia, the Caspian Sea, Iran, Turkey and the Black Sea. The day the railway line is reopened through Russia, Abkhazia, Georgia, Armenia, the Azerbaijani exclave of Nakhichevan to Iran -- with a sideways connection to the Black Sea, Turkey and Europe -- is the day the South Caucasus regains its role as a region with real prospects for the future"* (Ibid.)

Market forces is what made BTC possible in the end. As oil prices began to rise (from £13 in 1994 to $30 per barrel by 2000) AIOC investors' scepticism about an MEP began to wane (Adams, 2009, p. 247). With existing pipelines (NER and WER) hampered by limited capacity and other challenges, BP and other companies were keen to take the project to its logical conclusion (Ibid). BP/AMOCO merger in 1998 had a significant impact on BTC process – BP emerged by 2002 with a massive joint 31% stake in AIOC – western Caspian now constituting a major part of the company's global oil portfolio (Hill, 2004, p.24; LeVine, 2007, p. 352).

If anything, BTC represents diminution of state powers. Host Government Agreements signed by Azerbaijan, Georgia and Turkey with energy corporations can be viewed as challenging state sovereignty, by taking precedence over national legislation. As Blatchford argues, local social, environmental, safety and emergency laws apply only in so far as they do not conflict with provisions of the HGAs (2005, p.120). For mainstream neo-liberals, however, BTC is a transformative project, delivering normative outcomes as well – local economic development, strengthening of domestic liberal-democratic regimes and tying Azerbaijan and Georgia to the West (Frederick-Starr, 2005; Yergin, 2012, p.64). BTC is part of a highly interdependent international economic system (Ibid.).

In addition to this, liberal institutionalists will point to international legal architecture and formalised ethical and political standards that govern the BTC project. Legal and

compliance policy regime of the BTC project are designed to have binding authority on international level and provides not only for commercial and technical issues, but for enforceable social, environmental and human rights standards (Blatchford, 2005). MNCs operate within a regulated global environment, where international standards are set by international financial institutions - provision of funding for BTC was based on normative *and* commercial conditions. Decision to route the pipeline to bypass congested straits of Bosporus was dictated by issues of cost to participating companies and environmental concerns over risks posed by additional tanker traffic (Elkind, 2005, p.39).

On top of comprehensive technical, feasibility research, due diligence and planning, topographic and seismic studies, BP (embracing its new motto of corporate social responsibility) carried out major environmental and social impact assessments, publishing all findings and making all documents publicly available (BP, BTC ESIAs, 2017). A massive consultation process, involving NGOs, interviews with members of affected communities, compensation schemes and other remedial actions were undertaken (Carroll, 2010, pp. 9, 11; Blatchford, 2005, pp.121-122). BP also publicly committed itself to the UK government's Extractive Industries Transparency Initiative (EITI) requiring the company to "publish what it pays" to host (Azerbaijani) government in revenues and bonuses under both the Early Oil and BTC project – major act of information disclosure (Carroll, 2010, p.9).

From neo-liberal institutionalist perspective, therefore, BTC represents far more than a piece of geo-political infrastructure – it operates in a normative framework, reflecting social and political concerns, bringing together a wide variety of actors into a rule-governed system of complex interdependency.

Neo-realist account of SGC

Neo-realist account of SGC is ontologically congruent with that of BTC, the two elements forming part of a wider geo-strategic confrontation in international oil politics, marked by the moment in the 1990s, *"when the US decided to challenge Russia's domineering hold on Central Asia and the Caucasus by championing the construction of independent oil and natural gas pipelines from these former Soviet hinterlands to the West*" (LeVine, 2.12.2014; see also, Yergin, 2012, pp.341-343; Kandiyoti, 2012,

pp.163-172). The launch of Southern Caucasus Pipeline in 2006, a year after BTC, heralded the next round of inter-state competition for energy dominance, with Russia seeking to stem growing power of the US and the EU (Yergin, 2012, p.342; BP 4, 2017). The same year Russian-Ukrainian gas dispute brought into sharp relief EU's dependence not only on Russian gas but also on Russian-controlled gas transmission infrastructure in Europe (BBC News, 01.01.2006).

With demand growing exponentially through 2000s, natural gas was increasingly being seen as the "fuel of the future" – a relatively low-carbon resource that could help reduce use of coal and oil in energy generation and transport (Yergin, 2012, p. 343). The EU was seeking to increase and to diversify its gas supplies and supply-routes, whilst the United States was seeking to expand influence in the post-Soviet sphere and across Central Asia (especially so in the wake of 9/11 attacks) (LeVine, 02.12.2014; Kandiyoti, 2012, pp. 170-171). With BTC fully operational the stage was set for a new gas pipeline to bring "*non-Russian gas to Europe by skirting Russia's southern border*" (Yergin, 2012, p. 342).

The strategic rationale for what came to be Southern Gas Corridor was first laid out in the proposal for Nabucco gas pipeline (so called in reference to the Verdi opera) (Yergin, 2012, p.342; LeVine, 02.12.2014). That ambitious project envisaged a single transmission system carrying gas from Erzurum in Turkey all the way to Vienna, Austria but it never materialised (see Map 2). In fact, 2000s was a period of intense competition between Nabucco and rival proposals for alternative pipelines, which soon followed. First, Russia announced its own proposal for an alternative South (or Blue) Stream gas pipeline to run across Black Sea to Turkey and onwards into Europe, and to be operated by Russia's state energy giant Gazprom (Dempsey, 22.06.2006; Rodova,15.11.2012). Second, two other consortium-led projects – Trans-Anatolian Pipeline (TANAP) and Trans-Adriatic Pipeline (TAP) – offered politically more credible alternatives to Nabucco (Demirmen,19.12.2011; Socor, 04.04.2012).

However, from neo-realist perspective these issues are of secondary importance – political actors remained primary forces throughout the process and the eventual outcome represented dominant state interests. Just as with BTC development of Southern Gas Corridor was primarily driven by strategic concerns of state actors. The

end-result was a product of interplay of competitive dynamics of gas-producing states such as Azerbaijan (Jafarova, 2017), actions of transit states such as Turkey (Tagliapietra and Bruegel, 02.07.2015), and gas-consuming EU member-states such as Greece and Italy (Geropoulos, 3.3.2016), as well as intergovernmental institutions, such as the EU Commission and public financial bodies under its jurisdiction. The fact that Nabucco Consortium operated without an understanding of the interests of key state actors and proceeded to engage with potential natural gas suppliers for its proposed pipeline (including Russia and Iran) from purely commercial standpoint, meant that key strategic objectives of key interested parties, including USA and Azerbaijan were not being met. In the end it was fatal lack of American support that killed the Nabucco project off, as it "*withered on the branch, in the face of opposition from Washington*" (Kindiyoti, 2012, p.194).

Map 2. The route of the proposed Nabucco pipeline (Source: Deutsche Welle, 26.04.2012)

The Commission played a particularly important role in stimulating SGC process – establishment of an East-West, Caspian to Europe gas transmission system was formally set out as a matter strategic priority in the 2007 EU "energy package" policy framework, although it has been on European Energy Union agenda since early 2000s (Van Aartsen, 2009, p.11). EU support was critical in generating political impetus necessary to realise such a complex strategic project as SGC.

By prioritising SGC-related pipeline projects the Commission ensured that financial institutions under its jurisdiction, such as EBRD and European Investment Bank (EIB)

approve critical public financing and credit lines. For example, EBRD decision to allocate €500 million towards SGC was spelt out in terms remarkably similar to the EU gas-energy strategy (EBRD Project 48376, 18.10.2017): "*Stretching across five countries of operations of the EBRD, the Southern Gas Corridor [] is an important strategic gas infrastructure project aimed at improving the security and diversity of the energy supply to Europe and Turkey* (EBRD Policy Statement Document, 18.10.2017). International financial institutions, therefore, reflect interests of state financing them and make decisions on projects such as SGC in accordance to the political priorities of member-states, not by some autonomous institutional logic.

TANAP was formally launched in 2012 by the governments of Azerbaijan and Turkey, and it offered Baku a reliable transit route for its Shah Deniz gas to the rapidly growing Turkish market. It will run from SCP termination point in Erzurum across Anatolia to Turkish-Greek border. TANAP consortium is dominated by Azerbaijani and Turkish state energy giants SOCAR and BOTAS, with BP holding a 12% minority stake (Agayev, 23.12.2011; Socor, 27.06.2012). As such it represents a perfect example of state-led energy policy, aimed at maximising political and financial interest – pipeline diplomacy redux.

Then, in 2013, Azerbaijan's Shah Deniz gas consortium announced Trans-Adriatic Pipeline (TAP) as their chosen route for the export of Azerbaijani natural gas to southern Europe. TAP is a corporate-led project and comprises a proposal for pipeline running from TANAP's termination point in Turkey across northern Greece, through Albania, along Adriatic seabed, to southern Italy (Tungland, 20.01.2013; TAP, 2017; TANAP, 2017).

Speaking at a press conference after the decision Kjetil Tungland, TAP Managing Director, said: "*This is the first and important step in opening up the Southern Gas Corridor and, as we look ahead, the Southern Gas Corridor will have a major role to play in Europe's energy security and ensuring the diversification of gas supplies to Western and South Eastern European markets.*" (TAP, 28.06.2013). TAP private shareholders understood from the outset that success of their business model would be determined by the extent to which it corresponded with interests of powerful state actors.

Pipeline wars were over, Nabucco was dead and SGC was born. Southern Gas Corridor (SGC), therefore, is not a single pipeline but a network of three interlocking pipelines – South-Caucasus Pipeline (SCP), Trans-Anatolian Pipeline (TANAP) and Trans-Adriatic Pipeline (TAP), running from Azerbaijan to Italy: "*The Southern Gas Corridor is one of the most complex gas value chains ever developed in the world. Stretching over 3,500 kilometres, crossing seven countries and involving more than a dozen major energy companies, it is comprised of several separate energy projects representing a total investment of approximately US$40 billion*" (TAP 3, 2017) (see Map 3).

Map 4. Southern Gas Corridor (Source: TAP 1, 2017).

With works on SCP and TANAP nearing completion, TAP remains the last piece of the value-chain. It is currently in the funding stages and there are some obstacles to securing full funding from some of the international financial institutions involved. However, just as with BTC, these will be resolved – from neo-realist perspective strategic interests determine political outcomes, not normative concerns. For example, despite Azerbaijan withdrawing from the international transparency watchdog EITI in 2017, EBRD and World Bank nevertheless approved funding for TANAP (EITI, 20.03.2017). In fact, EITI's own assessment of the costs of Azerbaijan's withdrawal

concludes that "*considering the importance of the Southern Gas Corridor Project (TAP&TANAP) for the European gas market, the government of Azerbaijan may expect that European and international investments in this project will remain actual*" (Alili and Bittner, 2017, p. 10).

SGC, therefore, is a geo-political mega-project which excludes Russia and Iran, is backed by the US and the EU, involves a dozen countries and strongly promoted by its chief gas supplier – Azerbaijan (The Jamestown Foundation, 13.09.2013). When fully operational by early 2020s SGC will be delivering six billion cubic metres of Shah Deniz natural gas to Turkey per year and a further ten billion to markets in Europe; early deliveries to Turkey are expected in 2018 (BP 5, 2017). SGC represents a piece of critical energy infrastructure that not only connects Caspian gas reserves to Europe, but also provides politically independent, non-Russian East-West gas route, analogous in significance to the BTC oil route a decade earlier.

SGC serves the EU's goal of diversifying both its gas supplies and gas supply routes, whilst meeting urgent energy demands in southern member-states. It fulfils US policy aims of strengthening independence of post-Soviet states and supporting EU energy security. For Azerbaijan the Corridor is a flagship national project of strategic significance, both politically and economically. For Turkey it represents a critical step in establishing the Republic as strategic energy transit hub. SGC reinforces Georgia's role as the cockpit of the entire East-West energy transmission system, the key piece in the strategic chain.

Neo-liberal Institutionalist account of SGC

A neo-liberal institutional account of SGC envisages it as primarily a commercial mega-project representing key corporate interests of multinational oil and gas majors, especially BP. It is a financial mega-project requiring some $40 billion worth of investment (TAP 3, 2017) and involving a plethora of private and public international financial institutions (IFIs), including the World Bank, EBRD and the financial arm of the EU – the EIB (EBRD, 18.10.2017; Buckley and Foy, 18.10.2017). It represents a complex system of state, corporate and institutional interests – separate consortiums of private and state energy companies operate separate elements and segments of

SGC, with BP and SOCAR present if not dominant across the length of the Corridor (BP Magazine. 12.10.2017).

First, it is essential to recognise foundational role played by private gas and pipeline companies in initiating what came to be SGC. The original Nabucco project, spearheaded in 2002 by a consortium of mostly European companies laid the foundations for subsequent developments and whilst it quickly won the backing of the United States and Europe, the business of Caspian gas transmission preceded the politics of it (Taylor, 22.02.2008; Cendrowicz, 13.07.2009). By the time the EU Commission identified it in 2009 as a project of strategic significance, a host of intergovernmental agreements were being signed between Nabucco Consortium and each of participating transit countries - Turkey, Romania, Bulgaria, Hungary and Austria (Van Aartsen, 2009, pp.2-3; Turkish Press, 13.07.2009). By 2012 a financing framework was established, involving external private funding as well as participating states, companies and important international state financial institutions, including World Bank and the European Investment Bank (DW staff, 29.01.2009).

The eventual failure of the Nabucco project was down to market-driven commercial factors – it was clear from the outset that Azerbaijan's gas supplies from the Shah Deniz field will not be sufficient to make such a large project economically viable and that additional supplies from sources elsewhere in the region would be needed (Rowley, 2009; Conor, 5.06.2008; Kandiyoti, 2012, p. 184). Smaller more competitive alternatives to Nabucco, such as TANAP and TAP, offered better economic models and were designed to meet immediate needs of the BP-dominated Shah-Deniz consortium.

Nabucco responded to these challenges by proposing a drastically revised and de-scaled version of the project in 2012 – the so-called Nabucco-West (Socor, 24.05.2012). What is essential to recognise here is that the 2013 decision against Nabucco-West and in favour of the Trans-Adriatic Pipeline (TAP), was dictated primarily by Shah-Deniz commercial and corporate interests. As BP Azerbaijan president Gordon Birrell explained it at the time, BP and its partners considered plethora of factors before settling on TAP: "*In the last two years, we have been considering various options for pipelines and have made the right choice. We have*

been looking at for various aspects, including technical, financial and security issues as well as the possibility of extension" (Birrell quoted in Dadasheva, 23.06.2013).

For BP and other energy majors TAP and the rest of SGC are a valuable asset in corporate portfolio, attractive to private investors reassured by support from various public IFIs. Neo-liberal institutionalism emphasises the importance of market forces and global economic trends and processes in shaping complex international infrastructure projects such as SGC. Strategic priorities of competing states will be served as long as market conditions are right. The emergent architecture of SGC – three interlocking pipelines – became reality only when they made commercial sense for investors: "*Despite the political risks involved in all the Southern Gas Corridor projects, reducing EU dependence on Russian oil and gas is not proving as expensive as initially predicted in terms of borrowing costs*" (Burroughs, 15.08.2017).

Furthermore, SGC is an international legal regime, governed by a series of intergovernmental agreements and commercial contracts for each of the value chain pipelines – a complex legal structure representing a fine balancing act of multiple interests (TAP 3, 2017). It was subject to extensive social and environmental impact assessments in order to satisfy plethora of regulatory requirements for major international infrastructure and energy projects. International financial institutions such as EIB, World Bank, EBRD and others are not treated as subordinate agents of government action but as autonomous international actors which determine the legal basis of monetary relations underpinning complex enterprises such as SGC (Martin and Simmons, 2001).

By end of 2017 SCP segment of the Corridor is nearing completion – the original Baku-Tbilisi-Erzurum (SCP) pipeline has been significantly expanded to raise capacity to in excess of 20 billion cubic metres per year (BP 4, 2017). The work on TANAP went underway in 2015, with bulk of its financing already secured (Burroughs, 15.08.2017). TAP, meanwhile, is currently at the financing stage with funding secured from EBRD and a record €2 billion credit agreement is expected from the EIB, although it has recently been delayed until 2018 (Morgan, 13.12.2017).

In sum, the project is a perfect model of strategic interest alignment and cooperation between states, oil and gas majors and international institutions. It balances economic viability with geo-political realities and brings technological innovation to realise what in the end is a major engineering challenge. It is symbolic of the complex web of interdependency that characterises contemporary global energy order.

Conclusion

Discussion above demonstrates that BTC and SGC pipelines are underpinned by a materialist paradigm of oil and gas politics – these projects are ultimately about power, state and corporate. This is the core of rationalist models or rather model, for both projects ultimately constitute a single geo-political enterprise that has its antecedents in past historical power relations. Some of the players have changed but the structural properties of the game are the same, and are often referred to as such, e.g. the New Great Game (Yergin, 2012, pp.45-46; Cooley, p.3).

From liberal and institutionalist perspectives, therefore, these projects represent far more than scattered pieces of geo-political infrastructure – they operate in a normative framework, reflecting social and political concerns, bringing together a wide variety of actors into a rule-governed system of complex interdependency. This argument is strongly opposed by neo-realists, who reject the assertion that trans-national economic factors such as oil corporations and global financial institutions undermine state sovereignty. Kenneth Waltz, whilst recognising the importance of natural resources in making up of national power, dismisses the idea of interdependency (1979, p. 152). States have displayed a considerable ability to challenge the conduct of MNCs and even when engaging with them were able to effective pursue national objectives). Agreements, such as those for BTC, which states enter with multinational corporations, "... *may be viewed as an exercise of their sovereignty and not as an impairment of it*" (Bull,1995, pp.261--263).

What emerges from this debate is that contemporary rationalists accounts of pipeline comprise a "neo-neo" synthesis model of the project. In this rationalist model BTC operates as a geo-strategic pipeline fulfilling political objectives of participating states and as a commercial project resulting from operation of global market forces. It is

composed of a complex mesh of relations between South Caucasus states and the EU, Russia and Iran; the role of the United States, Turkey and Britain; balance of power in the region, the role of energy multinationals and international financial institutions, issues of public and private corporate funding, environmental concerns, issues of risk mitigation and management, and technological processes.

Hydrocarbons remain the primary fuel of the global energy order. And oil geopolitics – "*that high, thin stratum where the business and politics of energy merge into a single, swiftly moving current*" (Roberts, 2005 [2004], p. 93) – remain at the heart of the neo-realist and neoliberal institutionalist paradigms of international oil politics. The stories of BTC and SGC pipelines fit in this power-politics schematic of global energy order. Competing interests of global powers and regional states, market forces and multinational energy companies, global financial institutions with their social and environmental regulatory frameworks, technological processes and technical challenges all contributed to shaping and evolving BTC and SGC infrastructures. Multilateral financing, growing awareness of environmental risks, US-EU-Russia energy competition in Eurasia, European energy policy, rise of Azerbaijan as European oil and gas supplier are just some the themes emerging from these discussions.

Yet, as much as neo-realists and neoliberals ignore the reflectivist turn in IR, its implications are inescapable and are made ever more pertinent as international events unfold. As debates about BTC and SGC continue to evolve, issues and subject matter long ignored and dismissed by positivist orthodoxy, and groups and interests marginalised and excluded by rationalist scholarship are increasingly finding their recognition and empirical attention in the Fourth Debate. Reflectivist analytical models of international oil politics and BTC and SGC projects are set out in the next chapter.

V

Reflectivist Modelling

Introduction

This chapter sets out the reflectivist critique of the rationalist paradigm of international oil politics and sets out reflectivist models of BTC and SGC pipeline projects. The Fourth Debate has had a profound impact on debates around global energy and the environment and whilst the chapter explores these in broad terms, particular attention is paid to Marxism, critical theory and to poststructuralist and social constructivist insights, with a special focus on environmentalism.

The chapter opens with a reflectivist critique of the problem-solving paradigm of international oil and gas politics. The task of the post-positivist critique is not only to unpick and problematize rationalist consensus on fossil fuels but to provide a theoretical alternative to the dominant orthodoxy around the prevailing social energy order and offer a praxeological direction to achieving that order (Cox, 1986). Differentiating between rationalist treatment of issues in the world of oil and gas and that of anti- and post-positivist approaches enables envisioning of alternative energy realities.

The chapter explores these approaches and possible alternatives by examining BTC and SGC projects through the prism of a reflectivist critique – from classical Marxism to post-structuralism. This is by no means a comprehensive account but is intended to demonstrate an alternative vision of these pipeline projects, establishing these complex infrastructural assemblages as social, ideational, as well as material artefacts.

Reflectivist critique of problem-solving theory of oil politics

In his assessment of Hugo Chavez' presidency, author Bart Jones argued: "*Chávez has retaken control of the oil industry, implemented laws taking a larger share of profits from foreign companies, and instituted a historic shift of the revenues to the majority poor",* (2008, p.11). By contrast, Daniel Yergin argues that oil – "*the soul of the Venezuelan state*" – became subject of Chávez' growing authoritarianism, as he asserted control over PDVSA, Venezuelan national oil company and used it to further consolidate his hold on power: "*He could use the money as he wanted, whether social*

spending and subsidies for favoured groups at home or pursuit of his political objectives within the country and abroad. More than ever before, Venezuela was truly a petro-state" (2012, p. 125).

Such divergent perspectives may not be simply a result of some arbitrary biases of these particular scholars. They may reflect deeper underlying conditions borne out of these authors' specific theoretical commitments, which in turn are tied to their specific temporal and spatial political standpoints. This observation could well serve as the starting premise in the discussion of the reflectivist paradigmatic models of international oil politics. What all reflectivist approaches share is a deep scepticism about mainstream definitions of what constitutes proper subject matter in the study of petroleum politics and those traditional methodologies most commonly associated with rationalist IR.

Reflectivists, especially proponents of the Critical Theory, argue that "*the way the academy limited the scope of IR has impacted, and continues to impact, drastically on the practice of world politics*" (Sutch and Elias, 2007, p.14). From this angle comments on Hugo Chavez' presidency above carry important implications. As Robert Cox put it: "*Theory is always <u>for</u> someone and <u>for</u> some purpose. All theories have a perspective. Perspectives derive from a position in time and space, specifically social and political time and space*" (Cox, 1986, p. 207).

In addition to being a Pulitzer Prize-winning author, Daniel Yergin is the Vice Chairman of *IHS, Inc.* and the founder of *IHS Cambridge Energy Research Associates*, a leading oil and gas industry consultancy. He also serves on the U.S. Secretary of Energy Advisory Board and is a member of the National Petroleum Council, among other roles (IHS website, 2016). Meanwhile, Bart Jones is a journalist and social commentator, who had spent eight years in Venezuela, having worked as the Newsday and the Associated Press correspondent, and also as a Catholic mission worker in the Caracas slums (Milne, 2008).

Of course, Yergin's and Jones' specific professional qualifications and experiences do not necessarily determine their respectively negative and sympathetic assessments of Chavez' presidency. Rather, their perspectives on Venezuelan oil politics are determined by their implicit theoretical commitments. And theories are not merely explanatory tools – they inform and arbitrate on the very possibility of human

intervention and, as Smith argues, define "*also our ethical and practical horizons*" (1996, p. 13). Thus, theoretical commitments can serve particular purposes in an intellectual enterprise – explicitly or implicitly they reflect political choices, loyalties and identities of those who espouse them.

Robert Cox (1986, pp.207-208) posited that as all theories have a perspective they ultimately serve one of two possible purposes: either help to solve the problems that arise within the framework of their original perspective, or reflect upon how that perspective came to be chosen for theorising in the first place and whether there may be another valid perspective which, if chosen, could give rise to an alternative world – the dichotomy of the problem-solving vs. critical theory. By such definition all of rationalist scholarship on international oil politics falls within the realm of the problem-solving theory.

This type of theory operates within a given socio-political framework, where power relationships and institutional arrangements are taken as a given reality and not called into question - for example, a pre-Chavez Venezuela. The purpose of such theory is to ensure that "*these relationships and institutions work smoothly by dealing effectively with particular sources of trouble*" (1986, pp.207-208). According to Yergin, in the 1980s and the early 1990s Venezuela's sources of trouble were low economic growth, falling incomes, high inflation, rising foreign debt and rapid population growth (2012, p. 114). The solution, therefore, lay in economic reforms – privatisation, inviting back foreign oil companies and fiscal discipline – which failed in part due to opposition from special interests but most importantly because of Chavez-led failed coup of 1992 and his subsequent victory in 1998 presidential election (Ibid. pp. 114-122).

Problem-solving theoretical approaches, exemplified by Daniel Yergin's scholarship (1991; 2012), all start with a general *a priori* acceptance that the reality of the international petroleum order is a given fact –human progress in the Modern Era is driven by consumption of energy, derived largely through combustion of fossil fuels, and the task is to ensure that this process is as smooth and effective as possible. Problems arise because the process may well be driven by global energy markets and international oil companies but ultimately it takes place amongst competitive nation-states, under conditions imposed by an anarchic international system. Energy resources are finite and their use produces externalities, such as pollution.

The task of problem-solving theories is to develop a sound political-economic understanding of the structural properties of all these challenges, which may in turn be used to devise comprehensive policy solutions to address them. The task is not to question the prevailing social order of international energy politics or to ask how and why it came about, or who benefits from it (and who does not). If anything, rationalist approaches serve to validate and legitimise the status quo. Daniel Yergin is particularly effusive in his celebration of the advent of the hydrocarbon dominance: "*If it can be said, in the abstract, that the sun energized the planet, it was oil that now powered its human population, both in its familiar forms as fuel and in the proliferation of new petrochemical products… It was the Age of Hydrocarbon Man"* (Yergin, 1991, p. 523).

Rhetorical flourishes aside, what is evident here is a whole range of underlying normative assumptions. For example, growth and expansion are automatically assumed to be the desired outcome. Economic performance is the sort of measure that makes for "astonishing" in the rationalist world-view - one where there is nothing about human activity which does not have a material base and cannot, therefore, be measured and quantified, assessed and evaluated. This general attitude characterises much of the rationalist, or problem-solving thinking about global energy.

It is, perhaps strikingly exemplified in the following passage from Scott L. Montgomery's aptly named "*The Powers That Be"*: "*A book, in short, is no static object but a kind of social container, bursting with resources and processes. The same, indeed, can be said for any other objet d'art, whether made of stone, canvas, film, or text. We may speak of genius and inspiration, higher pleasures and heavenly beauty, yet it is the things of this Earth – coal, petroleum, gas, water, wind – that give such brilliance a material reality. A simple truth, conveniently (and understandably) left out of courses on the humanities*" (2010, p.5).

Within this statement are contained elements of both: the self-legitimising positivist discourse of the rationalist orthodoxy and the epistemological mechanism for disciplining alternative modes of scholarship. Having bracketed (perhaps even reduced) the full complexity and entire intellectual capacity of the human condition to the framework of a purely materialist reality, positivist discourse seeks to delegitimise and exclude those insights and methods of enquiry which deal with the non-material, social and imaginative elements. Determining what counts as proper science,

therefore, allows for effective means of policing scholarship and deciding upon what constitutes legitimate questions and correct answers.

For example, when it comes to dealing with a state oil company, the “right” question to ask is how to ensure that it is run professionally and effectively. By contrast, asking who benefits from the operations of that oil company and under what conditions is not the right question. Such judgements are not, however, made in accordance with some immutable universal standard of truth and objectivity, but are in fact reflections of scholars’ political and normative choices, forming a rationalist perspective, in favour of the existing set of power relations, within the given global energy order.

This specific perspective gives rise to a problem-solving theory of international oil politics, as outlined in previous chapter. Its normative dimension cannot be overstated, for the underlying assumption of the problem-solving approaches is also a normative choice in favour of the status quo. Breaking down prevailing orthodoxies, questioning underlying assumptions, deconstructing various elements of the rationalist discourse are all hallmarks of critical analysis and reflectivist approaches more generally – a sociological project accompanying the normative and praxeological projects (Linklater, 1992; see also Ibid., 1998; 2002).

This persistent challenge to positivism is not limited to mid-level theory but is informed by varying degrees of scepticism about claims of immutability or universality of existing social structures in the global energy order. Not all these approaches are post-modern in terms of their normative commitments but they all hold modern conditions to have been historically constituted by way of complex social processes and that radically alternative social realities are possible and often desirable.

Thus, dissatisfaction with mainstream IR explanations of complex phenomena in the realm of energy politics stimulated growth of theoretically and methodologically diverse, interdisciplinary research agenda. Drawing on Habermasian and Foucauldian analytical traditions, post-structuralism, feminism, post-colonialism and environmentalism, this body of scholarship took on the positivist arguments with renewed radicalism, whilst decisively moving on from the rigidly bounded neo-Marxist world-systems and dependency approaches. As Bronner (2002) argued, the very complexity of globalised, hyper-technological modernity required a more nuanced and comprehensive critical approach.

The critique should not, therefore, be limited to specific processes, institutions or subsystems of the prevailing social order because: "*Commodities like oil link them together: they affect planetary society from the foreign relations undertaken by its most industrially developed governments, to the ways we breath, to the spills that devastate the environment, to the derivative products produced by economic subsystems*" (Bronner, 2002, p. 253). Recognising this as a holistic analytical framework is the first step in moving towards a critical theory that is engaged not only with questions of the social character of modernity and modernisation but also with ethical implications of scientific and technological progress.

Envisaging global energy order holistically, as an integrated production-consumption network, creates conditions and sets the terms for normative enquiry. In the first instance, the task of identifying the inequities and injustices of the prevailing energy order necessitates focus on the production end of the spectrum. This is because, contrary to problem-solving assumptions, there is *"no reason to believe that the mere recognition of future risks will somehow cause the oil industry or nuclear energy to 'reform' themselves... There is ultimately no way around it: achieving accountability with respect to nature requires achieving accountability in respect to production*" (Bronner, 2002, p. 254).

On empirical level in the domain of international oil politics this shift to a deep normative critique of the global energy order produced an expansive body of reflectivist scholarship, which not only served as a critique of rationalist explanations for various problems, but also as an epistemologically autonomous body of knowledge, which dealt with issues marginalised by mainstream academia and expert community. Partly, as discussed elsewhere, this was the result of the determined effort by the rationalist mainstream to ignore and exclude radical approaches. Partly, this was a result of a conscious or perhaps reflexive efforts of radical authors who believed in democratising the debate around issues of technological and scientific progress, and argued that it is "*incumbent upon critical theory to prevent the scientific enterprise from remaining identified with the discourse of experts* (Bronner, 2002, p. 254; Feenberg, 1991).

It is clear that reflective engagement with oil politics is an essential counter-balance to excessive positivism and rationalist dogma of much of the debate on the issue. By

revealing underlying social structures and political value of knowledge, reflectivist critique offers a way for a normative engagement with international politics of Caspian oil and provides a framework for the emancipatory mission in learning. Reflectivist approaches are diverse and eclectic and there is no space here to explore the full range of possible post-positivist paradigms of BTC and SGC pipelines, such as colonialism or feminism. However, critical accounts of Baku oil and its pipelines set out below, provide for a broad range of post-positivist theoretical analysis, from Marxism to critical theory, poststructuralism and social constructivism**.**

Reflectivist critique of BTC and SGC pipelines

Marxism

It can be argued that Marxist thinking and influence in IR predates its establishment as a formal field of theoretical study inside the discipline – a process that in any case was "*belated, partial and problematic*", bound as it was by the Cold War dynamic (Teschke, 2008, p. 163). Today it can be argued that in contemporary International Relations Marxism constitutes "*a vibrant and rich subfield that produces some of the most trenchant challenges to mainstream international relations theory and general social science*" (Ibid., p. 164). This is true of critical and other reflectivist approaches influenced by Gramscian political theory, and through which Western Marxism sought to reformulate its materialistic framework and to develop powerful critiques of economic determinism and positivism more generally (Rupert, 2013, p. 167).

In classical Marxist analysis the quest for raw materials and new markets, and the export of capital drives competing capitalist alliances (cartels and monopolies) towards securing direct political control over extra-territorial colonies, leading to empire formation and creation for rival national blocks (Ibid., p. 375). Lenin repeatedly underscored a critical role played by natural resources in stimulating imperialist competition – "…*и мы видели, с каким рвением международные союзы капиталистов направляют свои усилия на то, чтобы вырвать у противника всякую возможность конкуренции, чтобы скупить, например, железорудные земли или нефтяные источники и т. п*." (Lenin, 1961 [1917], p. 382)[13].

[13] "…and we have seen the ferocity with which international capitalist unions direct their efforts to remove from their opponents all possibility of competing, to purchase, for example, iron-ore deposits or petroleum sources and so on".

For Marxists, therefore, the period of the first Baku oil boom at the turn of the 20th Century is that of social radicalism and organised resistance to imperialism and international capital, providing fertile ground for various competing political and religious ideologies and social movements (Suny, 1972). Rising Bolshevik party and various other socialist and Marxist organisations thrived in the industrial underbelly of Baku, Batumi and other oil towns of the Caucasus. Joseph Stalin established himself as key Bolshevik operative by organising strikes, robberies and kidnappings of oil barons and managers all over Azerbaijani and Georgia in the 1900s (Sebag Montefiore, 2008, p. 195-198). It was in Baku that Stalin established printing press facilities for the Bolshevik flagship publication "Iskra" and other propaganda materials (Marriott and Minio-Paluello, 2013, p.44).

Marxist analysis of this period focuses on charting how "*the real control of the oil industry steadily drifted from the city to foreign investors with their headquarters in St. Petersburg or abroad*" and how monopolisation of Baku oil stimulated class and nationalist antagonisms and struggles (Suny, 1972, p.5). The rise of Bolshevism and establishment of the Baku Commune in 1918 signalled popular resistance to capitalist hegemony and a possibility of a radically different social vision: "*Amid the chaos of the oil rush and the gushers of Balakhani grew a vision of a new order, "the Promised Land that is called a Socialist World*" (Marriott and Minio-Paluello, 2013, p.46).

According to Muttitt and Marriott, the Baku Commune set a model *"for 20th century resistance to capital*" ([PLATFORM], 2002, p.20). It captured attention of a generation of Marxist scholars and historians, who often drew analytical parallels with the experience of the French Revolution of 1871 and the Paris Commune (Suny, 1972, pp.353-362). The Soviet period of Baku oil, especially during WWII, often completely overlooked and ignored in mainstream scholarship, is accorded particular attention in Marxist and neo-Marxist analyses (Muttitt and Marriott, 2002, p.21; Werth, 1964; Omarova, 1998).

Critics of BTC and SGC pipelines often point out that the projects had their origins in the discoveries and technological innovations of Soviet planners, who pioneered off-shore drilling in the Caspian oil and gas fields off Baku half a century ago (Hoffman, 1999). The fact that off-shore fields, Azer-Chiraq-Guneshli (ACG), were not explored by the Soviet authorities, however, made BTC and SGC possible (Muttitt and Marriott,

2002, p.24) - it was these reserves that Western energy companies returned to develop, once Azerbaijan regained its independence with collapse of USSR in 1991 (Adams, 2002, pp. 75-77). It is perhaps emblematic of changing reality of Baku oil that the ACG off-shore oil field (and its Shah-Deniz gas sibling) were once named after the twenty-six Baku commissars – commanders of the Baku Commune (Marriott and Minio-Paluello, 2013, p.50).

Meanwhile, Robert Cox's (1983) introduction of Gramscian concepts, such as hegemonic power as an irreducible transfiguration of dominant ideas, institutions and world orders, heralded the anti-positivist challenge of the Critical Theory. This (coupled with the positivist backlash in the 1980s and 1990s), in turn, stimulated a later revival in classical, political Marxism (see, for example, Halliday 1994), which can be said to represent a re-foundation of Marxist IR as an international historical sociology (Teschke, 2008, p.177). This sociological framework extended into Marxist critique of mainstream globalisation theory, prompting a renewed interest in imperialism and neo-imperialism (see, for example, Robinson, 2002; Hardt and Negri, 2000)[14].

It is clear that what lies at the heart of Marxist analysis of international oil politics is its normative commitment to an emancipatory international intellectual and political project. And for neo-Marxists, adherents of the world-systems and structural dependency theory (which remains a productive theoretical field in its own right) the rationalist consensus serves to legitimise, consolidate and reinforce structural domination of the industrial North over the developing South. For example, Hinnebusch (2003) casts international energy issues in the context of anti-imperialist and Arab nationalist struggles of the 1960s and 1970s, charting what he characterises as local resistance to Western hegemony and the power of multinational corporations through to the collapse of the Soviet Union and US victory in the struggle for regional dominance (see also, Dannreuther, 2010).

Other Marxist-inspired approaches to international oil politics Wallerstein's (1976) world-systems theory and (re)prioritise Western, and specifically US hegemony as a key unit of analysis. Partly prompted by increasing marketization of the oil trade and growing power of producing nations, authors such as Simon Bromley sought to refocus

[14] Neo-Gramscian International Political Economy (Critical Theory), sociological Marxism and neo-classical Marxist theory in the study of international politics of oil are discussed at greater length in Chapter VI.

attention on the expansion of US hegemony in the global energy order, arguing that "*the structural reach of its power has increased and remains qualitatively and quantitatively more extensive than that of its competitors* (1991, p.2). In doing so Bromley was implicitly and explicitly responding to neo-realists and neo-liberal institutionalists, such as Stephen Krasner (1985) and Robert Keohane (1989) and who claimed, to greater or lesser extent, that Western oil hegemony was in decline, especially in light of the rise of OPEC and growing relative power of producer-nations (Bromley, 1991, p. 3; 1994).

Hence, the "return" of the West - governments and companies – to Baku oil after Soviet collapse represents reassertion of structural reach of Western power as it asserted itself across former USSR. For example, some have alleged that BP and the American oil giant Amoco (which later merged) played a role in the removal of Azerbaijan's democratically-elected government in 1993, paving the way for the rise of authoritarian regime of President Heydar Aliyev (see Leppard et al, 2000). Others point to the outcome of post-coup negotiations and highlight differences in the final composition of companies taking part in the project and allocation of shares.

Thus Muttitt and Marriott contend that Azerbaijani state oil company SOCAR lost out considerably in the final negotiations with Western companies, with Azeri state share was eventually cut to just 20 per cent ([PLATFORM] 2002, p.23): "*The grandiose title given to the deal, the 'Contract of the Century', suited all the signatories. It is still used today, yet few ask for whom it was the contract of the century – for the Azeri people, for the Aliyev clan, or for the oil corporations who had signed an immensely profitable deal and gained control over a major new resource base?"* (Marriott and Minio-Paluello, 2013, p. 60).

Consequently, pipeline projects which emerged out of the 1994 Contract, similarly served interests of oil companies and Western governments. For example, when in 2004 UK's Export Credit Guarantee Department (ECGD) approved $150 million of public funding for the BTC pipeline, its critics claimed the decision was politically motivated: *"It's pretty obvious that the ECGD has decided to back the BTC project for the same reason everybody else has: massive political pressure from the US"* (Anders Lustgarten, Baku-Ceyhan Campaign quoted in Kurdish Human Rights Project, December 2013). When in November 2004 left-wing activists occupied ECGD offices

in London in protest against final approval of BTC funding agreement, they claimed it was because, "*The ECGD is now the single largest source of taxpayer subsidy for big multinationals seeking to offload onto the public the risks of their unwanted and exploitative projects in the South."* (Rising Tide, 11.11.2004).

Marxist materialist conception of history and analysis of economic factors, class, property relations and production have important implications for the study of Caspian oil. The region's history, and experimentation with Marxism during the Baku Commune and the Soviet periods, offer an ontological basis for assessment of Marxist propositions about international energy politics. Both Marxist and critical theories share common epistemology but an explicitly Marxist analysis of pipeline politics would be essential in a future expanded synergetic study. Although Marxist approach to international relations suffers from considerable weaknesses, it can still provide a valuable means of analysis (Linklater, 1996, p.150).

Critical theory

Key issues affecting biological survival of the human race should be the first purpose of study in IR (Cox, 2008, p. 87). Critical theory, as if anticipating the coming concerns of global environmentalist movement, helped ground this discourse within an explicitly normative domain: "*Its willingness to emphasize the human price of progress, the costs of alienation and reification, the implications of scientific reason for moral capacities, and the potential 'revenge of nature' were all major contributions*" (Bronner, 2002, p. 252).

Critical theory views realist-liberal consensus as problematic because it does both – condones the structural injustices of the prevailing global order and helps to perpetuate them by devising problem-solving policy prescriptions, whilst, as in the case of the liberal tradition, espousing seemingly benign universal moral principles and ethos (Monbiot, 2006). Inspired, as it is, by Marxist tradition, critical theory is post-Marxist in espousing an explicit normative agenda behind the intellectual enterprise - *"…the normative purpose of the inquiry precedes and facilitates the definition of the object of inquiry*" (Linklater, 1992, p. 92).

As Robert Cox argues: "*When we think now of "change" in world politics and society we think of what has to be done to ensure the survival of the human race and to*

moderate conflict among peoples. The primary task of the study of international relations along with the other departments of knowledge about human affairs is to help people to organize so as to achieve this" (2008, p. 87). Therefore, whilst the process begins with a substantive critique of the dominant rationalist discourse, it must then necessarily move into the praxeological domain of political and civic action aimed at bringing about substantive change (this is important in the context of international politics of oil).

As a matter of intellectual priority critical theorists are concerned with the politics of knowledge. Knowledge is not power-neutral but reflects perspectives and vested interests of those who produce it. Cox's differentiation between problem-solving and critical theory has important implications for the study of BTC/SGC projects, as knowledge produced about them can be tested on that criteria (1986, pp.207-209). Rationalist approaches fail because they are "*oblivious to the way power and interest precede and shape knowledge claims*" (Devetak, 1996, p. 160). It is clear that most enthusiastic support for the BTC project and its backers is found in the literature within the "neo-neo" model of the project.

Thus, for example, one of the few major contemporary studies produced on BTC and highly supportive of the project - "*BTC – Pipeline: The Oil Window to the West*" by Frederick-Starr and Cornell *et all*, (2005) - was published by the Central Asia-Caucasus Institute at John Hopkins University– an international think-tank with HQ in Washington and funded by US government grants and corporate donations. Knowledge claims are not produced in a political vacuum but reflect the agendas of those producing them. It does not automatically invalidate them, but whether acknowledged or not, the purpose of these "problem solving" approaches to BTC or SGC is, having accepted the prevailing framework of the project with its implicit power relationships, institutions and processes, "... *to make these relationships and institutions work smoothly by dealing effectively with particular sources of trouble*" (Cox, 1986, p. 208).

It is taken for granted that oil and gas had to be extracted from its land-locked location in the Caspian and the problem is how to do it with minimum cost and maximum benefit. Critical theory seeks from the start to question the prevailing order and asks how it came about. This requires a historicist approach and an ever-present concern

with "*a continuing process of historical change*" (ibid, p. 209). Furthermore, the knowledge critical theory produces is not neutral either – "*it is politically and ethically charged by an interest in social and political transformation*" (Devetak, 1996, p.161). This interest is amplified by a praxeological enterprise aimed at achieving political goals. From the outset BTC and attendant gas projects were met with fierce opposition from organised civil society.

In the case of BTC this took form of the Baku-Ceyhan Campaign (Baku-Ceyhan Campaign website, 2017). Launched in 2002 it brought together local and international NGOs, human rights and environmental groups and activists to oppose the pipeline, not least by raising "*public awareness of the social problems, human rights abuses and environmental damage that are being caused by the Baku-Tbilisi-Ceyhan oil pipeline"* (Baku-Ceyhan Campaign website, About Us, 2017). The Campaign aimed to show how international treaties between the AIOC consortium and governments of the countries traversed by BTC have largely exempted BP and its partners from any laws in those countries – present or future – which conflict with the company's project plans: "*The agreements allow BP to demand compensation from the governments should any law (including environmental, social or human rights law) make the pipeline less profitable. The agreements have for these reasons been described by non-governmental organisations (NGOS) as 'colonialist'*" (Baku-Ceyhan Campaign website, Colonialism, 2017).

Considerable research was also carried out to demonstrate how BTC contributes to conflict, human rights abuses and militarisation of the Caspian region (KHRH et al, 2004) and how it hampers social development and promotes corruption in Azerbaijan, Georgia and Turkey (Baku-Ceyhan Campaign website, Social Impacts of BTC pipeline, 2017). On climate change the Campaign argued: "*The climate impact of this project will dwarf the combined impacts of all UK initiatives to combat climate change. The emissions from the oil and gas coming through the pipelines would be more than twice the emissions saved through the UK's 12.5% reduction under the Kyoto Protocol (73,000 tonnes CO2) and ten times more than the emissions saved through the UK's target of meeting 10% of electricity demand from renewables (wind, sun, water power) by 2010"* (Baku-Ceyhan Campaign website, Climate Impact of BTC, 2017).

The central focus of anti-BTC opposition was directed at international financial institutions, such as the World Bank and EBRD, and export-credit agencies, such as the UK's Export Credit Guarantee Department (ECGD) (Baku-Ceyhan Pipeline website, Financial Institutions, 2017). The Campaign criticised the lack of due diligence efforts of these international funding institutions, pointing out the compromising extent to which IFIs have relied on information and factual verification provided solely by BP (Baku Ceyhan Campaign, 06.09.2004).

Critics charged that BTC was "*the most controversial oil pipeline in the world*", due to its "*damaging geo-political, environmental and social impacts, its role in augmenting the power of corporate interests over national governments… as well as allegations of corruption, incompetence and malpractice"* (Lustgarten, 2005). When in 2003 ECGD agreed to underwrite £150 million credit line for BTC project with public funds Human rights groups dismissed the decision as politically motivated, arguing that ECGD should not be using taxpayers' money to support projects *"that will further fuel climate change. We're bitterly disappointed that despite its so-called commitments to the environment, ECGD is still supporting unsustainable projects*" (Hannah Griffiths of Friends of the Earth quoted in Baku-Ceyhan Campaign press release, 13.12.2003).

Opposition to the BTC project, both political and academic persisted even after the project was completed and operational – see for example, Marriott and Minio-Paluello's seminal "*The Oil Road*" (2013). More importantly, the same coalitions of global civil society groups, environmental NGOs and human rights campaigners came together to organise against the next phase of pipeline projects – specifically the Southern Gas Corridor (CounterBalance, 28.01.2016; CEE Bankwatch Network, 2017). The thrust of the campaigning is again directed at international financial institutions and public credit funds with the aim at preventing public funds from being used to enable fossil fuel projects (Bill McKibben, Naomi Klein et al, CounterBalance, 30.06. 2017; Marriott and Minio-Paluello, 2013, p.348; Gotev, 29.03.2017; Stone, 30.11.2017; Bacheva-McGrath, 2015).

Similarly, critical opposition to SGC project, comprising praxeological project and empirical programme, is motivated by a normative commitment to stopping the project. Preventing public funding of SGC is the centre-piece of an ongoing political campaign by coalitions of NGOs, local community and civil society groups, human rights

campaigners and environmentalists, involving political lobbying, grassroots activism (CounterBalance, 28.01.2016; CEE Bankwatch Network, 2017). The entire campaign is a direct political appeal to multilateral financial institutions, such as EBRD and EIB, as well as the EU Commission not to fund any of the SGC pipelines (McKibben, Klein et al, CounterBalance, 30.06. 2017).

Popular resistance, indigenous struggles and grass-root, local communities' opposition against corporate and state interests is an important empirical strand in critical engagement with international energy and mineral politics (Dunning and Wirpsa (2004). For example, protests at Standing Rock against Dakota Access pipeline in 2016 and 2017 helped reprioritise indigenous local opposition to the energy industry and served to recast the issue in terms of resistance to colonial oppression (Hayes, 2016). A clear connection is maintained between local/subnational, national and international factors, along with a normative assessment of the causes and consequences of resource-linked conflict.

Each segment of the SGC project (SCP, TANAP, TAP), requiring multilateral funding has been subjected to the same consistent opposition, aimed at preventing funding from public financial institutions (NHC, 19.12.2016). The very same structural mechanisms of standard-setting, environmental and social impact assessment criteria, reporting-compliance and procedural-administrative architecture of SGC financing is utilised with the aim of precluding any potential financing agreements. For example, when in early 2017 Azerbaijan was suspended from transparency watchdog EITI for non-compliance on human rights grounds human rights NGOs have sought to use the issue to raise doubt over viability of public financial support for SGC (EITI Board paper 36-5-A, 09.03.2017; Allili and Bitner, 2017, p.3; pp.6-7).

On grassroots level opposition to SGC manifested as angry protests by local communities that greeted SGC pipeline along its route. In Puglia region of Italy local farmers vociferously protested construction of the Trans-Adriatic Pipeline. (Stone, 30.11.2017). In Azerbaijan, former presidential candidate in Azerbaijan, widely believed to be unjustly imprisoned by the government of President Ilham Aliyev, declared himself to be an "*inmate of Southern Gas Corridor*", arguing that: "*International investment in fossil fuel extraction is making me and other Azerbaijani*

political prisoners hostages to the Aliyev regime" and mobilising opposition groups against SGC (Mammadov, 20.01.2017; CoE Committee of Ministers, 25.10.2017).

Anti-SGC political praxeological project is informed and energised by a critical research programme which aims to expose the true extent of negative social and environmental consequences of SGC (CounterBalance, Platform and Re:Common, 08.03.2016). Its empirical output comprises a plethora of methodologies e.g. in-depth environmental and social impact assessments, which challenge results of corporate and institutional ESIAs produced to support SGC projects (Banktrack and Counterbalance, 20.02.2017). These efforts aim to show that SGC fails on its own terms e.g. economic viability or to meet energy diversification targets and on human rights, environmental, climate change and other criteria (Sol, 24.09.2017; Bacheva-McGrath et al, 2015; CEE Bankwatch EBRD Brief, May 2017).

Signatories of a letter to the EIB President argued that "…*the Southern Gas Corridor is one of the biggest and most controversial infrastructure projects that have ever seen the light in Europe. This massive financial investment entails serious environmental and geopolitical risks and is likely to become the European equivalent of the Keystone XL pipeline. Therefore, we call for no public money to go to the Southern Gas Corridor*" (ACT Alliance EU, Les Amis de la Terre (France) and Others, CounterBalance, 28.01.2016).

Another group of NGOs challenged EIB over human rights impact of SGC, especially in Azerbaijan and Turkey, arguing that: "*…the development of the Southern Gas Corridor will only strengthen oppression in these countries where civil liberties and the security of individuals are currently being drastically impaired. This runs contrary to the EU Charter of Fundamental Rights which binds the EIB to not finance projects that would encourage or support human rights violations. Therefore, we call on the EIB to adhere to the principles of fundamental rights and withdraw its offer to finance the project in light of such prevailing conditions*" (Article 19, Banktrack and others, 12.09.2017).

When in December 2017 EIB postponed funding decision on Trans-Adriatic Pipeline organisations and communities opposed to SGC greeted the news as vindication of their campaign (Nuttall, 13.12.2017). Political effect of this critical praxeological project

does not only represent success for the anti-SGC movement but also of wider efforts "*to make European public finance a key driver of the transition towards socially and environmentally sustainable and equitable societies"* (CounterBalance, 2017). This effect was amplified when on the same day as the EIB postponement of SGC financing, the World Bank announced that it will be divesting from fossil fuel projects altogether (World Bank, 12.12.2017). Analytical critique of SGC and praxeological project to prevent the harm it may bring is an ongoing process and the issue has not yet been settled.

Poststructuralism

Poststructuralist analysis of international energy politics is set within a wider critical inquiry which asks existential questions about relationship between humans and nature; about the status of nature as material reality and as a social, imagined kind; about science and progress as social forces and how they account for distribution of power; and about possibility of change in the prevailing energy order. Poststructuralism represents a radical anti-positivist challenge to the rationalist mainstream – an epistemological and ontological reordering of social-scientific enterprise.

For rationalists, materialism underpins the entire historical structure. Whatever ideational or imaginational quality oil might possess, its status as an energy-generating natural kind precedes that and defines its relationship to humanity; as such it is perennial: "*Here's a humbling truth: despite all our advances and wealth, the fundamental forms of energy today echo those at the dawn of society… Above all, we remain a world lit, built, and moved by fire… It is fire that brings electricity and modern civilisation into most of our lives, that powers our technology and our modes of transport. Indeed, discovering new forms of fire making defines a hallmark – perhaps the hallmark – of the modern energy era"* (Montgomery, 2010, p.14).

This is a positivist view of history as unchanging, structurally-determined, shaped by material reality of human condition. Reflectivist approaches reject this view outright. Burning fossil fuels is not a value-free act of energy production: "*All of this cornucopia has been powered by a liquid distilled from fossilised ecosystems, from plants and animals that lived from the Jurassic to the Tertiary era. These visions of the future have been dependent upon the ceaseless combustion of ancient rocks, just as Victor*

Frankenstein constructed his dream from the organs and limbs of the dead" (Marriott and Minio-Paluello, 2013, p.334). There is the implicit scepticism about claims for material foundations of modern social orders but also a clear recognition of the constitutive role natural, physical kinds fulfil in creating, constructing, inventing, imagining social kinds. Therefore, a poststructuralist critique of BTC and SGC pipeline projects makes for a consistent challenge to the rationalist consensus around the projects and is animated by a single overarching paradigm – that there are historical alternatives to the social order represented by these fossil fuel enterprises.

BTC and SGC are not products of some immutable "natural" laws of energy politics but are outcomes of historically-constituted, politically significant, normative choices – choices that are different to those made by societies in the past or might be made in the future: "*For centuries the Absheron Peninsula was a place of pilgrimage, a shrine of fire. Burning gas leaked from the ground since the last Ice Age. This was the most sacred site of Zoroastrianism which, prior to Islam, was the dominant faith in the region. The oil-bearing rocks drew people to this place, not to extract petroleum and carry it off to some other site of burning, but to worship it here in the sheets of flame, among the rock*" (Marriott and Minio-Paluello, 2013, p.23).

Hence, post-modernist critiques of Baku oil and of BTC/SGC projects proceed from treating the subject as unique historical events unprecedented in the region's history, to one with profound normative implications (Muttitt & Marriott, 2002, p.9-14; Thomas, 2004). This is a rejection of positivist view of history as unchanging, structurally-determined and ethically-neutral. Regularities and repetitions in human behaviour in different historical periods are not evidence of any universal quality to balance of power processes (Cox, 1986, p.244).

As Marriott and Minio-Paluello forcefully argue, completely different historical structures existed in the region in the past and the materialist conception of hydrocarbons, as opposed to an alternative, rarefied, ideational, is itself constructed by prevailing social orders and dominant ideologies: "*As other faiths arrived – Sunni and Shia Islam, Russian Orthodoxy, Marxism and Capitalism – the holy fire of this peninsula was transformed into a material to be extracted and exported*" (Ibid.). Poststructuralist paradigm seeks to problematize, question and unpick the very idea of BTC/SGC projects, arguing that political and environmental costs, especially the

impact on global climate change amongst other factors, are unacceptably high (Muttitt and Marriott, 2002, p. 162).

Poststructuralist thinking on oil and wider issues of energy politics, therefore, requires understanding of the impact it had had on the wider environmental movement and the growth of global awareness of ecological issues. As Arran Gare put it: "*Reflection on the postmodern condition and reflection on environmental crisis have much in common. They both involve efforts to understand the culture of modern civilisation and how it has come to its present state*" (1995, p.1).

Yet first, it is important to distinguish 'post-modernity' as "*the cultural, economic, social, and political formation within modernity that results from changes in time-space relations*", and poststructuralism as a reflectivist analytics that "*critically engages with the production and implication of these transformations*" (Campbell, 2013, p. 231). For poststructuralism, the ethical prerogative (of saving the world from environmental catastrophe) raises intellectual stakes; it predicates and prioritises a normative engagement with the issue. It can be argued that this by itself constitutes a foundational paradigm which, in turn accounts for the tension between poststructuralism's imperative to critique and the eco-political imperative to act "to change the world".

However, poststructuralism does not present itself as another IR paradigm but rather as "*a critical attitude, approach, or ethos that calls attention to the importance of representation, the relationship of power and knowledge, and the politics of identity in an understanding of global affairs*" (Campbell, 2013, p. 225). As such, poststructuralism is a meta-theoretical critique of positivist International Relations, which aims to unsettle the subject of IR (Lawler, 2008, p. 380). When it comes to critique of fossil fuel projects such as BTC or SGC, the aim is not to solve problems with these projects or to alleviate or compensate for their negative repercussions but to question the prevailing order underpinning them in favour of an alternative action, e.g. a non-fossil fuelled vision of the future.

It is not surprising therefore that the critique and opposition to BTC were generated by the kind of active, campaigning grassroots global civil society that poststructuralists believe will generate transformational change in world political order. Environmental and human rights groups, such as Friends of the Earth and PLATFORM, carried out

extensive research into BTC in the early 2000s and sought to mobilise international public and political opinion against the pipeline (Muttitt and Marriott, 2002). Poststructuralist critique of BTC is set within a wider post-structuralist inquiry, where oil is envisaged as a historical social force: "*The presence of crude in the body of society since 1870s has fuelled a kaleidoscope of visions for future social orders… Above all, as planes and cars burst into our consciousness, it has fuelled 'modernity' – the imagination of the machine age*" (Marriott and Minio-Paluello, 2012, p. 334). Thus, social construction of modernity is located in the material potential of oil at a particular historical juncture.

Similarly, critique of and opposition to SGC can be viewed as a poststructuralist intellectual praxeological dynamic of a kind that seeks to unbalance prevailing narratives about the issue and to empower marginalised voices, previously excluded and silenced. Whether it is through producing documentaries telling the stories Azerbaijani prisoners of conscience and community organisers in Melendugno, southern Italy protesting against the Trans-Adriatic Pipeline (CounterBalance, Platform and Re:Common, 08.03.2016) or carrying out research showing how alternatives to SGC are not only possible but credible, the cumulative aim is to make a sustained argument against public funding of the project: "*Preventing the use of public money for massive fossil fuel projects such as the Southern Gas Corridor can open space for more serious efforts on energy efficiency and sustainable forms of renewable energy*" (Bacheva-McGrath et al, 2015).

From social constructivism to analytic eclecticism

In contrast to poststructuralism, social-constructivist critique of rationalism has not involved wholesale rejection of positivist scientific method. Constructivism does emphasise immaterial, ideational and social dimensions of international relations and challenges instrumentalist materialism that underpins neo-realist and neo-liberal assumptions. For example, when Mearsheimer (1995) states: "*the distribution of material capabilities among states is the key factor for understanding world politics*" (p. 91), he is articulating the rationalist argument that material objects such as oil, determine political outcomes, regardless of any ideas that actors – people – might attach to them (Hurd, 2008, p. 300).

Constructivists reject such instrumentalist logic and shift focus instead on the ideational properties in IR – the central role of beliefs, expectations and interpretations in shaping international affairs; the social, rather than the material, content that makes up state interests and identities; the effects of various interactions between structures and agents, and that these are mutually constituted (Ibid., p. 304). What this may suggest is that the constructivist debate with rationalist approaches is primarily ontological, rather than epistemological (Fierke, 2013, p. 193).

One result of marrying a social ontology to an epistemology indebted to positivism was a thriving research tradition, and consistent and rigorous empirical defence of constructivist arguments (Price, 2008, pp. 317-318). However, a key question is whether this combining of a constructivist ontology with an empiricist method of knowledge generation is consistent? For example, constructivism is not specific about what constitutes primary unit of analysis in IR – inquiry proceeds at different and all levels, often treating actors and processes as "a given". However, does taking oil companies, for example, as a given imply that previous social construction of these oil companies as institutions is somehow to be set aside?

Underlying these questions is an assumption that rationalism and constructivism are two irreconcilable ontological commitments. Hurd (2008) suggests an alternative position, which holds that "*the two are relevant to the same subject matter, but their different emphases allow, when combined, for greater insight into a problem than is provided by each alone"* (p. 312). Whatever the case, this internal ontological tension does nonetheless go some way to account for both – the breadth and volume of constructivist empirical input on substantive issues in international energy politics, and the often contentious dynamics in social constructivists' debates with fellow reflectivists and rationalists alike.

For example, it is interesting to contrast post-positivist IR social-constructivism with the anti-positivist radicalism of critical theory and poststructuralist approaches, in their discussion of environmentalism. Here, constructivism has had significant impact, especially in the field of environmental sociology, where some have argued it acquired "*prime paradigmatic status*" (Hannigan [1995], 2006, p. 29; see also Freudenburg, 2000, p. 103). Lockie (2004, p.29) similarly suggests that the idea that the environment

is socially constructed may well be the key foundational concept in environmental theory.

However, this does open up charges of relativism, with critics painting social constructivism as Hannigan put it, as "*a sort of Darth Vader, perverting the force of sociological understanding and ignoring the "reality" of environmental crisis* ([1995], 2006, p. 29)". But this is a misreading of constructivist claims. Just because something is interpreted as having been socially constructed does not mean it is not real: "*Pollution does cause illness, species do become extinct, ecosystems cannot absorb stress indefinitely, tropical forests are disappearing. But people can make very different things of these phenomena and – especially – their interconnections, providing grist for political dispute*" (Dryzek, 2005, p.12, cited in Hannigan, [1995] 2006, p. 31).

Social constructivism moves beyond positivist materialism and rejects oversimplifications of nature-centric ecological approaches. It focuses attention on how environmental issues and related subjects are framed and presented in public discourses; on the norms and belief systems which inform various political and social processes that, in turn, shape public understanding and decision-making on environmental matters; and on how these norms and values came to be in the first place (Savigny and Marsden, 2011, pp. 237-238; see, for example Yearley, 2002). Steven's "*The Social Construction of Environmental Problems*" (2002) is a good example of such scholarship as it explores precisely the kind of ways in which specific environmental problems are "constructed" and how this "construction" of environmental discourses serves as "*an arena for social action or policy interventions*", leading to some topics to rise to the top of political agenda and the centre of public attention, and others not.

Turning to other substantive issues in the study of energy, social constructivist scholarship is characterised by this combination of epistemological pluralism, normative humility and the "deep ontology" of its social theory. Oil politics, for example, provide fertile ground for empirical constructivism. Starting with rejection of crude materialism of rationalist approaches, constructivists proceed to develop complex socio-historical modes analyses of various substantive issues. This is because, as Ross Coen (2012, p.6) notes, "*an oil strike requires more than simply oil in the ground,*

men with a daring spirit, and state-of-the-art machines at their disposal". Social constructivism offers a more useful paradigmatic lens to the study of oil politics because it helps reveal how different stages of energy exploration, discovery, production and transportation "*always occur within particular set of political, social, economic, and historical circumstances whose cumulative influence equals if not exceeds the mere physical nature of the operation*" (Ibid.).

As is with environmentalism, the social construction of oil politics is simultaneously the act of imaginational construction and an arena for social and political behaviour of various actors; and when it comes to political outcomes what is "counted in" matters as much as what is "counted out". Ross's study "*Breaking Ice for Arctic Oil*" (2012), is the story of the oil-tanker SS Manhattan, the first commercial vessel to successfully complete the transit of the North West Passage. It was hoped that the ship's epic journey would herald the advent of a new transit route for recently discovered Alaskan oil. But the plans failed to materialise and the story came to be largely forgotten, a non-event. However, as Ross argues: "*Non-events such as Manhattan provide an important perspective… the history of development schemes that did not pan out may prove as instructive as those that did*" (p.6).

Constructivists often turn attention to the role of markets and international corporations in shaping energy politics but here again the empirical interest is centred on the role of identities (those of directors, shareholders, regulators and so on) and the social relations which inform the energy and environmental trajectory of capitalism in a long-term historical context (see, for example, Prasad and Mir, 2007; Pulver, 2007). Nonetheless, it can be argued that constructivist model of international energy politics is overall state-centric. This is not to suggest constructivists neglect other actors or system-level analysis but simply to highlight the consistent overlap between social constructivist and more traditional, positivist approaches, notwithstanding their different ontological focus – different lenses through which to examine the same phenomena.

Positivists, such as Yergin (1991; 2012), have undoubtedly paid considerable attention to the ideas which inform and shape international politics of energy, and fossil fuels in particular. Strands of constructivist thinking, various combinatorial logics and often explicit responses to postmodernist critiques can be found across rationalist

scholarship on oil reviewed in Chapters IV. This should not be surprising; as Scott L. Montgomery argues: "*It is because energy issues evoke some of the most fundamental questions about the nature of society. Name any related subject – the place of nuclear power, a plan for a carbon tax, the need for public transport – and in the timbre of discussion you will hear, close by, ideas about whether our civilization has been progressive or regressive, whether it is a bringer of treasures or tragedies, and whether it now requires revision or revolution*" (2010, pp.11-12).

This would suggest that rationalist approaches to energy issues require a more nuanced reading, which in turn would enable a more reflective engagement with various normative critiques juxtaposed against them. It could be that positivists such as Montgomery and Yergin, are in fact making a normative claim – that modern life is good, certainly better than the harsh and brutish pre-industrial existence. Their scepticism about postmodern claims stems not from some sort of dogmatic materialism and reactionary opposition to emancipatory change but out of genuine concern for the future of humanity and appreciation for the complexity of the global energy order. They acknowledge that "*perhaps more than ever before, a stance on energy implies a philosophical, even an ethical, outlook*" (Montgomery, 2010, p. 12).

It is precisely because Yergin considers growth of the environmental concerns to be extremely important that he characterises them as challenging "*the basic tenets of the industrial society*" (1991, p. 14). Much of "*The Quest*" (2012), Yergin's follow-up to "*The Prize*" (1991), is devoted to exploring the possibility of a non-fossil fuel energy order. Energy is a problem field that requires a problem-solving approach, and that in itself is a normative commitment: "*A famous geologist once said, "Oil is found in the minds of men". We can amend that to say that the energy solutions for the twenty-first century will be found in the minds of people around the world. And that resource base is growing*" (Ibid., p. 724).

There is a danger, therefore, in binary readings of energy debates or employing single-paradigmatic analytical frameworks, which bracket these debates and often turn them into polemical discourses. As Montgomery points out, "*Complexities are endemic to positions on energy*" (2010, p. 12). Prominence of these complexities accounts at least in part for the internal tensions in critical and poststructuralist debates around issues such as environmentalism. The pragmatic imperative to do something about existential

threats facing humanity and the world comes up against anti-positivist impetus for a normative critique that views these threats as embedded in and constituted by the prevailing social order, with its inequitable distribution of power and marginalisation of oppressed and marginalised interests and groups.

Analytic eclecticism, as proposed by Rudra Sil and Peter Katzenstein (2008; 2010), proposes to overcome these contradictions. Complexity and messiness of everyday social life encourages political leaders and policy makers to seek out complex, pluralist, multi-level explanations of the problems facing them (Sil and Katzenstein, 2010, p.12). What is effective is what matters in the end. Excessively abstract ontologies, self-imposed analytical brackets and foundational principles of single-framework paradigmatic approaches impede production of practically relevant knowledge – a task that "*cannot wait for the emergence of a definitive consensus on methodological procedures or axiomatic principles that may reveal "final truths*" (Sil and Katzenstein, 2008, p. 113).

Examples of eclectic theorising about international politics of energy characteristically focus on middle-range theory, multi-causal explanations of specific empirical problems or themes (Falola and Genova, 2005; Branden, 2008;). Analytic eclecticism proceeds from identifying important substantive questions to integrating empirical observations and causal stories set out in separate paradigms, in order to posit less simplified, more interactive and comprehensive assessment, aiming not only for scholarly but also practical relevance (Frankel and Ernst, 2007). What is not clear is whether analytic eclecticism with its pragmatic combinatorial logic, epistemological pluralism and praxeology-orientated ontology, constitutes a normative agenda or if it is simply a framework for problem-driven research. As discussed earlier, in its eschewal of foundationalism eclecticism risks attracting the charges of conceptual haziness and theoretical inconsistency.

Rationalists engaging in eclectic theorising might seek to overcome these antagonisms by integrating elements of social-constructivist analysis into a broadly positivist framework; for example, by engaging with BTC and SGC projects as both material and ideational constructs: "*The challenge is how to understand the role of materials in political life in a period when existence of materials is becoming progressively more bound up with both the production and the circulation of*

information" (Barry, 2013, p.5). Material artefacts, including major infrastructural assemblages such as oil and gas pipelines increasingly play a highly visible part in political life, and are therefore becoming increasingly determined by ideational and normative factors underpinning the projects (Ibid.).

This in turn necessitates complex regulatory, legal and administrative systems to create normative and material regimes to acquire legitimacy and to ensure effective management and operation of the physical pipelines (Carroll, 2010). Carroll demonstrates how deployment of corporate social responsibility techniques by corporations and the formalised process through which funding for BTC was procured make up a socially constructed and procedural legitimisation and risk mitigation structure for global capital and political interests (p. 17). There is an on-going interplay between international and domestic law on the one hand, and various intergovernmental environmental, social and developmental standards adopted by global financial institutions, on the other. At the same time energy corporations have also undergone a shift in their projected identity in response to normative shifts in wider society (e.g. rebranding of BP into Beyond Petroleum in early 2000s). In aggregate, these processes constitute a new social neo-liberalism (Ibid, p. 8).

Or to take another example - if SGC project can be explained in a parsimonious structural model populated by interest-maximising states, multilateral lender-organisations and markets, then what explains certain persistent anomalies? For example, why has it taken Italy nearly two years to authorise construction of the Trans-Adriatic Pipeline, the final leg and a key component of SGC (Gotev, 29.03.2017)? The matter was finally resolved through a complex legal process, subject to challenges in local and national courts and submission of extensive environmental and social impact assessments for each country traversed by the proposed pipeline – Albania, Greece and Italy (Jamestown Foundation, 30.04.2017: TAP-AG, 2017). Such delays in the implementation of the project proved a constant irritant for SGC planners and those backing the project (Gotev, 4.10.2016).

This suggests that a purely rationalist conception of the structure of international gas politics is at least incomplete. It cannot account for persistent anomalies which manifest as real world political outcomes in the evolution of SGC project. This is

because social forces, shaped by normative identities of various actors engaged in the project, have significant consequences on these political outcomes. For example, strategic priorities do indeed inform EU energy policy, as set out in the *European Union Energy Security Strategy* (EU Commission, 2018; EU Commission Working Document SWD(2014)330, 02.07.2014). But so do environmental, climate change and social concerns and these are reflected in the EU's *2030 Framework for Climate and Energy* (EU Commission, 2018; EU Commission Working Document SWD(2014)255, 23.7.2014). Together the two regulatory frameworks form the core of the *Energy Union* – EU's overall energy strategy that "…*will lead to a sustainable, low carbon and environmentally friendly economy, putting Europe at the forefront of renewable energy production, clean energy technologies, and the fight against global warming*" (EU Commission, 2018).

A situation, therefore exists where support for SGC and other natural gas projects is coupled with a commitment to reduce carbon emissions and transition to renewable sources of energy. Apparent contradictions of this position give rise to normative reflection and social constructivists seek to raise possibility of alternative courses of action by asking, for example, whether SGC is the only viable method of supply diversification and Europe's energy security (Siddi, 2017)? The argument here is not only that EU can acquire sufficient and affordable energy resources by other, already existing means but that the goal of the EU's climate agenda implementation is at odds with the EU's financial and political support for long-term, fossil fuels import project, such as the SGC (Ibid. p.19).

Eclectic theorising enables expansion of structural conception of energy politics to allow for ideational as well as material elements. For example, when it comes to multilateral financing of complex international infrastructure systems, such as the SGC, political decision-making process does not occur in a normative vacuum but is mediated through a continuously evolving complex web of politically relevant inter-subjective beliefs. These are constituted through clearly defined and codified normative frameworks e.g. permissibility standards, compensatory mechanisms, environmental and social impact assessment criteria, policy goals derived from international treaty obligations, and so on. Hence, each segment of the SGC pipeline (SCP, TANAP, TAP) had to meet certain material standards in delivering the project

in order to qualify for funding. These assessments are legal documents, part of regulatory architecture of the SGC project. Their significance demonstrates the extent to which norms are politically actualised – as a) the material articulation of socio-normative aspirations of participating actors and b) standard setting-mechanisms necessary for successful implementation of a project (TAP ESIAs 2012-2014; SCP ESIAs 2013; TANAP ESIAs 2014-2015).

Complimentary application of social-constructivist insights to the structuralist model of SGC financing helps understand how strategic and normative priorities of states and institutions are mediated, formalised through procedural, standard-setting and administrative mechanisms, and internalised by actors in the discourses about the issue.

Conclusion

Regardless of specific demands of individual campaigning NGOs, the key argument of critical theoretical and poststructuralist challenges to BTC and SGC projects is that opposition to these projects is part of a wider rejection of the prevailing energy order; that the latter is determined and shaped by political and normative choices, and that possibility of alternative choices is therefore credible: "*A society fuelled by community-controlled renewable energy systems might look very different from one dependent on gas controlled by private and state organisations. So this is also a struggle between different social structures. Our current dependency on fossil fuels may frighten us away from experiments and freeze imaginations. Yet when we break out of the internal logic of the Oil Road, we begin to envision other futures*" (Marriott and Minio-Paluello, 2013, p. 355).

As BTC pipeline goes on transporting oil and the SGC saga continues to unfold, the future of Caspian and European energy future is still undecided. Ultimately, BTC and SGC – the 'oil road' and the 'gas road' – are representative of a particular political and social order that can be changed - "…*this headlong rush to lock our societies into further fossil fuel dependence can be prevented*" (Ibid., p. 354). To achieve this, it will not suffice to simply critique these specific projects, not least because those "*who benefit from the current system are opposed to changing it, so stepping off the Oil*

Road and preventing the Gas Road from being locked in will require a struggle" (Ibid., p. 355).

This chapter outlines various reflectivist approaches to oil and gas politics and proposes a reflectivist model – an analytic critique of BTC/SGC pipeline systems and the social orders these projects represent. Different theoretical strands of the Fourth Debate offer different diagnostic prisms, enabling specific angles of normative reflection on energy politics, the environment and the existential threat of climate change. Cumulative effect of looking through these post- and anti-positivist paradigmatic lenses – from their classical Marxist foundations to robust postmodernist take-downs of underlying power structures – is to discern an overarching tapestry of discontent with the material reality of fossil fuels' production, transmission and consumption in modern society.

This discontent manifests itself as two mutually-reinforcing elements: 1) systematic critique of BTC and SGC super-structures and 2) as a praxeological programme aimed at thwarting these projects and changing the wider global energy reality. The first aims to expose environmental, social and human rights costs of the projects and informs the second - a political imperative to act to prevent these. Anti-positivist critiques of international oil politics and anti-BTC/SGC campaigns constitute a common theoretical and praxeological framework – a foundational, not simply paradigmatic, challenge to the prevailing social order represented by these grand energy infrastructure projects.

VI

Synergetic Modelling

Introduction

Synergetic analysis of any given problem or puzzle in international relations begins with a systematic application and modelling of individual IR paradigms. Preceding chapters set out broad overviews of rationalist and reflectivist approaches to international oil politics and their application to the case-studies of BTC and SGC pipeline projects. What is immediately clear is that all of IR literature on oil politics and indeed on energy in general, much of such policy-relevant research and the bulk of empirical output are at least implicitly theoretical, with key arguments and positions underpinned by various theoretical assumptions found in the IR paradigmatic matrix. It can and should be analysed, characterised and classified as such, and then placed in its appropriate paradigmatic location on the IR "periodic table", which then serves as a "road map" of the vast empirical field that is politics of oil and energy in general.

The fact that it is a complex empirical field is another important observation – different paradigmatic analyses are telling different strands of the *same* story occurring in real time, e.g. much of the SGC project is still ongoing. Theory-synergetic approach is intended to develop a more dynamic, real-time and less parsimonious reading of this deep ontology of oil and gas politics driving these projects. The chapter sets out synergetic readings of examples of cross-theoretical conceptual overlaps and thematic convergences to demonstrate how synergetic analysis can help reveal deeper multidimensional understandings of contemporary political problems.

Synergetic theoretical readings of energy politics

Theory-synergetic approach starts out by casting off epistemological determinism altogether and recognising that all these paradigmatic perspectives are exploring different aspects and dimensions of the same social phenomena. A question 'which theory gets it right?' is arbitrary. The important questions are what theory uncovers which part of the deeper ontology of the subject matter and how these parts relate to each other within a historical timeline? And such questions can only be addressed on

empirical level, upon substantive matters. Prioritising empirical engagement ahead of theory selection allows for a more nuanced understanding of ontological complexity of a given problem-field. Synergetic approach does not mean abandonment of normative inquiry but it does involve eschewal of partisanship in the conduct of the inquiry.

Paradigmatic dynamism of the synergetic approach requires systematic application of specific theoretical models upon substantive questions and issues, with the aim of generating a synergetic outcome that would be greater than the sum of its constituent parts. Therefore, judgements about which theoretical perspective offers better causal explanations or responds better to the normative agenda of a particular research project and so on, should be made upon assessment of the empirical output, and not on *a priori* assumptions or partisan standpoints.

Theory-synergetic approach does not require glossing over these real epistemological differences and divergences in normative agendas between different paradigmatic traditions. How and why particular theoretical research strand arrives at a specific empirical observation and what conclusions are drawn, matters as much as their substance. It makes it all the more interesting when such observations of the same social phenomena carried out within different single-theoretical frameworks arrive at the same empirical finding, albeit with different normative assessments of it.

Attenuated empiricism of the theory-synergetic approach enables clear identification of these multidimensional linkages between various paradigmatic standpoints and allows for more nuanced assessments of their normative implications. Regardless of epistemological and ontological divergences, IR empirical project proceeds under its own dynamics. Events took place, processes occurred and so on - facts are facts, although interpretations of them differ. Hence, there may be a theoretical consensus on the material outcomes, for example, of 1967-1974 period in international oil politics but not on what these outcomes mean and represent. Such convergences occur often across the empirical timeline of oil politics and often they do not. It can be that analysis of the same empirical phenomena within different single-paradigmatic frameworks will produce widely different interpretations and conclusions.

Differing theoretical assessments of the same events and processes provide synergetic potential of equal, if not greater, value to when different paradigmatic forms of analysis converge on the same substantive arguments. Different epistemologies,

varying conceptions of ontology, competing normative agendas is what makes for the kaleidoscopic quality of IR theoretical matrix. A choice of this or that theoretical research agenda will produce empirical results informed by epistemological, ontological and normative properties of the chosen paradigmatic model. From the TSA standpoint the question is not which theory "gets it right" but how different theoretical models of the problem-field fit together in the grand synergetic tapestry - the expanded and the *deep(er)* ontology of the empirical puzzle.

Turning first to the classical theories of international politics, it is worth reiterating again that arguments for multi-theoretical engagement with Liberalism, Realism and Marxism are not new (Williams, 2005; Rengger, 2008). There are clear cross-paradigmatic conceptual overlaps and thematic commonalities that cut across the three traditions and this often manifests on empirical level. What characterises a synergetic quality of analysis is the systematic identification and examination of such empirical intersections – the inter-paradigmatic pivots. *A priori* assumptions regarding, for example structure/agency, do not inform decisions about what constitutes proper units of synergetic analysis. This is determined by substantive issues in a given research.

In the case-study of Baku oil and BTC and SGC projects it gave rise to, these single-paradigm research strands can be synergised in a common research programme built around a number of inter-paradigmatic pivots. These are essentially points of empirical intersection, where single-paradigm explanations converge upon common substantive matters - various conceptual overlaps and thematic commonalities. One clear theme that runs through liberal, realist and Marxist theoretical accounts is that of the rise, growth and expansion of the great oil majors. This thematic commonality covers the stories of Standard Oil, Royal Dutch Shell, Nobel Petroleum, Anglo-Persian/BP and other industry pioneers. Each single-paradigm approach views the role of oil companies through its own epistemological prism.

Liberal research programme begins with the examination of the birth of the modern oil industry and its evolution in the 19th and early 20th century (see Chapter IV). Key areas of interest here is the establishment and growth of the industry, financialisation of the oil business, technological innovation in production and transportation, and the increasingly global nature of oil trade. For classical Liberals oil companies, exemplified

represented key agents of a growing oil business and their behaviour determined the contours of the emerging market.

Marxist research programme examines emergence of oil as “use-value” commodity and charts its entry into the capitalist production cycle (see Chapter V). Marxist tradition is concerned with the nature of historical change whereby oil production transforms from a cottage industry into an increasingly global trade, a fundamental part of the international capitalist system. Classical Marxist analysis charts the growth of oil companies from their early, pre-capitalist origins to consolidation and eventual cartelisation, and is centred on the relationship between European and US imperialism and corporate monopolism (Lenin, 1961 [1917], p. 88). Competition between oil cartels, such as Standard Oil, Anglo Persian and Bnito is set in the context of global imperial conflicts, with dominant powers facing off challengers (Suny, 1972).

For realists the importance of oil stems from its strategic value in the European power politics in the run up to WWI (see Chapter IV). Oil as a key commodity in determining preparedness for war and the political struggle over its control amongst states are principal directions of a classical Realist research programme. Oil companies are viewed as instruments of state policy, rather than truly independent agents in their own right. Each of these single-paradigm account of the problem-field represents only a partial reading of the role of oil companies in the early stages of the petroleum order. One direction for a future comprehensive synergetic study of the history of Baku oil would be to establish a synergetic understanding of this puzzle contributes to elucidating a more multidimensional conceptualising of this thematic convergence.

For example, realists view developments such as the British government acquisition of controlling stake in the Anglo-Persian Oil Company or the establishment of the Export Credit Guarantee Department to publicly finance private overseas enterprise, especially in the realm of oil exploration, as examples of the subordinate role oil companies play in view of the dominance of state policy in the evolution of the oil industry. As Carr argues, “*…powerful countries found their “natural” markets in areas where their political interests lay and where their political interests could be most readily asserted*” (Ibid., p. 116). Carr, hardly a Marxist and generally sceptical of socialism did, however, acknowledge that “The Twenty Years’ Crisis” was “*strongly impregnated with Marxist ways of thinking, applied to international relations*” (Carr, “*An*

Autobiography", pp. xvi-xvii quoted in Cox, 2000). Carr brings up the example of Britain's Export Credit Guarantee Department, set up by the government to apply its purchasing power as an international political asset, by issuing guarantees for overseas private projects considered to be "*in the national interest*" (Ibid, p. 116).

One advantage of incorporating Marxist historical critique of Baku oil into a synergetic historical analysis of the role of oil companies is to help understand contemporary issues facing BTC and SGC projects. For example, debates that followed the 2004 Export Credit Guarantee Department approval of public funding for the BP's BTC pipeline could be better understood if Realist and Marxist understandings of the role of institutions such as ECGD are synergised: *"It's pretty obvious that the ECGD has decided to back the BTC project for the same reason everybody else has: massive political pressure from the US"* (Anders Lustgarten, Baku-Ceyhan Campaign quoted in Kurdish Human Rights Project, December 2013). And the incident in November 2004 mentioned in Chapter V, when left-wing activists occupied ECGD offices in London in protest against final approval of BTC funding agreement was justified in neo-Marxian terms: "*The ECGD is now the single largest source of taxpayer subsidy for big multinationals seeking to offload onto the public the risks of their unwanted and exploitative projects in the South."* (Rising Tide, 11.11.2004). These normative critical claims are set out in terms which underline trans-historical saliency of Marxist, realist and liberal insights.

Another example of a thematic commonality cutting across theoretical models is the issue of environment and BTC pipeline. This specific narrow empirical issue offers juxtaposition of competing conceptualisations of the same substantive questions about BTC. In previous chapters several key narratives emerge in empirical treatments of environmental issues and BTC: tanker-traffic through the Straits of Bosporus in Istanbul; global climate change and local impact on the environment; the role of oil companies and corporate social responsibility; international environmental regulatory framework.

Contemporary mainstream studies and commentary on BTC emphasise the ecological dimension of the BTC project and point to the final routing of the pipeline as serving an environmental objective of reducing tanker-traffic through the highly-congested Straits of Bosporus in Istanbul (Blatchford, 2005, p.119). Nearly two million barrels of

oil in addition to other goods was being transported through the Straits by 2005 (Elkind, 2005, p.39). Practically all the new oil from the Caspian region and Russia went to global markets from Black Sea onto Mediterranean via Bosporus. Frequent leaks and accidents added to increasing costs for the companies involved in trade and shipment, as congestion, administrative tariffs and insurance fees rose (Ibid).

A neo-liberal focus on the issue conceives the environmental factor as an economic one. BTC route was chosen because environmental costs precluded additional tanker traffic through Istanbul. Risk assessments and technical studies identified BTC as the optimal method of transportation in terms of managing environmental risks and costs (Ibid). Similarly, the idea of Corporate Social Responsibility as expressed in extensive Environmental and Social Impact Assessments (ESIA), consultation and local environmental risk assessments, as well as systematic engagement with NGOs carried out by BP, the project operator is seen in the context of business needs, corporate policy and international institutional regulatory framework (Ibid, p.59).

Neo-realists, however stress the strategic dimension of the environmental factor. Increased tanker traffic through Bosporus represented a physical security threat to the city of Istanbul. Baran argues that whilst oil companies measured Bosporus in terms of its commercial value as a transportation route, the Turkish government considered it to be *"...a highly sensitive lifeline of Istanbul and the Black sea region*" (2005, p. 105; see also Yergin, 2012, p.60). Neo-realists are, therefore, interested in showing how environmental factors are in fact political and are deployed as such in the sphere of international relations in the form of state-enacted regulation, standards, tariffs and fees, with which non-state actors must comply. States measure the environmental factor in terms of its material impact on their security (and how to mitigate it) and as a political asset to be utilised through national policy (see Kandiyoti, 2012, pp.29-48).

Critics of BTC echo this concern with state power and its utilisation of environmental security logic to serve political goals. Muttitt and Marriott, for example, point out that Turkey's intentions over the Bosporus issue were far from "*green*" ([Platform], 2002, p. 30). Since the Straits are classified as "*international waters*" Turkey would be neither able to collect commercial tariff fees from additional oil passing through them nor control an energy route, whereas pipeline met both those objectives (Ibid.). Critical engagement challenges knowledge claims about environment and BTC. It identifies

"problem-solving" nature of mainstream approaches and seeks instead to provide an alternative understanding of the problem (Thomas, M. 2004; Platform et al. 2006; Platform et al. 2008; Memorandum from Concerned Non-Governmental Organizations, 2002).

Critics do agree with the need to reduce oil transport through Bosporus, but place it within a wider context of climate change and the need to stop the use of fossil fuels altogether and not add to it by opening up new reserves such as the Caspian. They demonstrate a direct link between current modes of production and the oil industry in particular, whilst warning against local, regional and global impact of BTC, arguing, for example, that once burnt the one million barrels of oil transported daily through BTC (working at full capacity) would contribute 160 million tonnes of CO2 emissions per year, whilst contributing to BP's profits (Muttitt and Marriott [Platform], 2002, p. 159).

Operationalising environmental problem-field as an inter-paradigmatic pivot in a synergetic analysis of BTC reveals its full ontological depth. The historical timeline of the pipeline is no longer limited to its physical existence – it is set in a global temporal space, where it occupies its place in relation to the very notion of modernity. Inter-paradigmatic pivots upon which elements of this grand empirical timeline of Baku oil rotate can be constructed upon myriad of conceptual overlaps and thematic commonalities occurring at multiple junctures along the way.

This is particularly true of a broad conceptual convergence around the theme of financing of energy projects. Classical realist, Marxist and liberal traditions address this issues at length, from the role of private banking dynasties to government institutions such as ECGD (see Chapters IV and V). The theme runs consistently through the story of the Contract of the Century in 1994 right up to present day debates around the financing of SGC pipelines. EIB decision to postpone TAP funding until 2018 is but a latest twist in this thematic paradigmatic timeline. What follows below is a demonstration of how an inter-paradigmatic pivot could be constructed around a specific empirical problem of SGC financing.

Rationalist consensus on the issue proceeds from a starting premise that "*securing financing is of primary importance for this strategic energy transit corridor's timely implementation"* (Gurbanov, 2017). This is a problem-solving approach, characterised

by attempt to identify obstacles to successful realisation of the SGC project and ways to overcome them (Cox, 1986, p.208). How states, international financial institutions, multilateral agencies, multinational energy corporations and other actors approach questions of oil and gas project financing in general is determined by the interplay of strategic and economic factors, set within the structure of international energy politics (see, for example, Economou et al, 2017, for a structural model of world oil market).

Political developments outside the realm of oil and gas markets and regulatory frameworks (e.g. wider geopolitical events or processes) are treated as exogenous factors. Meanwhile, issues such as investment dynamics within the oil/gas sector are treated as endogenous factors, and outcomes are determined by the interplay between the two. For example, volatile oil and gas prices, domestic supply squeezes or fluctuations in global supply chains may affect financial viability of a complex regional infrastructure project such as the SGC (Pirani, 2016; Rzayeva, 2018). Yet such endogenous factors are mitigated and mediated by the strategic pull of extrageneous forces – interests of gas-producing states such as Azerbaijan (Jafarova, 2017), actions of transit states such as Turkey (Tagliapietra and Bruegel, 02.07.2015), or gas-consuming EU member-states such as Greece and Italy (Geropoulos, 3.3.2016), as well as EU institutions, such as the Commission and financial bodies under its jurisdiction.

The latter are particularly important. EU Commission has been exploring possibility of a natural gas infrastructure link to Caspian energy reserves for over ten years, having identified early proposals as a strategic priority in the 2007 “energy package” policy framework (Van Aartsen, 2009, p.11). Since then, as the project evolved into SGC the EU Commission continued to provide robust support because of underlying strategic priorities of its member states: “*A key part of ensuring secure and affordable supplies of energy to Europeans involves diversifying supply routes. This includes identifying and building new routes that decrease the dependence of EU countries on a single supplier of natural gas and other energy resources. [ ] Many countries in Central and South East Europe are dependent on a single supplier for most or all of their natural gas. To help these countries diversify their supplies, the Southern Gas Corridor aims to expand infrastructure that can bring gas to the EU from the Caspian Basin, Central Asia, the Middle East, and the Eastern Mediterranean Basin*” (EU Commission, 2017).

To achieve this EU policy is to include component pipeline infrastructure projects needed for the Corridor on the EU's list of Projects of Common Interest. This means they can benefit from streamlined permitting process, receive preferential regulatory treatment, and be eligible to apply for EU funding. EU is also committed to cooperating closely with gas suppliers in the region including Azerbaijan, Iraq and Turkmenistan, with transit countries including Azerbaijan, Georgia and Turkey and to a long-term goal of negotiating with Azerbaijan and Turkmenistan on a Trans-Caspian pipeline to transport gas across the Caspian Sea, thus securing more supplies (EU Commission, 2017).

These strategic priorities are then translated into financial policies of multilateral lending organisations such as the European Bank for Reconstruction and Development (EBRD) and European Investment Bank (EIB), functioning under EU and other inter-governmental jurisdictions. Thus, EBRD policy statement on Southern Gas Corridor reads:

"*Stretching across five countries of operations of the EBRD, the Southern Gas Corridor [] is an important strategic gas infrastructure project aimed at improving the security and diversity of the energy supply to Europe and Turkey. It will expand gas supply options and provide new energy transportation routes enabling Europe to access gas from the Caspian region and, in the longer term, beyond it, including the Eastern Mediterranean, Central Asia and the Middle East*" (EBRD Policy Statement Document, 18.10.2017).

In justifying its decision to allocate five hundred million dollars' worth of public funds to finance a key component of SGC, the Bank argued that the project will "*support the diversification of gas supply sources in Europe and Turkey… The enhancement of energy security and diversification of energy supplies are important elements of well-functioning economies*" (Ibid). Securitisation of financial planning in relation to SGC is, another important feature of rationalist modelling of the issue (Jafarova, 2017; Verda, 2016; Karagöl and Kaya, 2014; D'Agostini, 2014; Manolis, 2014).

Neo-liberal institutionalists might emphasise interdependent role of funding institutions, public lenders, oil companies and global financial markets in determining outcomes. Strategic priorities will be served and political risks ameliorated, provided market conditions are right: "*Despite the political risks involved in all the Southern Gas Corridor projects, reducing EU dependence on Russian oil and gas is not proving as expensive as initially predicted in terms of borrowing costs*" (Burroughs, 15.08.2017). Neo-realists, however, emphasise pivotal role of states and their strategic interests. Economic factors, such as price volatility, are not seen as determining decisions of individual states and multilateral lenders, because in the end strategic interests prevail: "*The difficult economic environment notwithstanding, the timely implementation of the SGC is unlikely to be affected given the potent commitment of the international financial institutions and Azerbaijan's government, which underlines the strong political will to deliver the project"* (Gurbanov, 2017).

As argued in Chapter V, eclectic theorising enables expansion of structural conception of energy politics to allow for ideational as well as material elements. For example, when it comes to multilateral financing of complex international infrastructure systems, such as the SGC, political decision-making process does not occur in a normative vacuum but is mediated through a continuously evolving complex web of politically relevant inter-subjective beliefs. Complimentary application of social-constructivist insights to the structuralist model of SGC financing helps understand how strategic and normative priorities of states and institutions are mediated, formalised through procedural, standard-setting and administrative mechanisms, and internalised by actors in the discourses about the issue. For example, in the quote above, a senior SOCAR executive, Vitaly Baylarbayov (Gotev, 4.10.2016) lists environmental and social benefits of the pipeline in an almost exact match to key parameters set out in the various EISAs for the project, (TAP ESIAs 2012-2014). And from post-structuralist and critical standpoints this is a major problem.

Critique of and opposition to SGC financing can be viewed as a post-structuralist/neo-Gramscian intellectual/praxeological synthesis of a kind that seeks to unbalance prevailing narratives about the issue and to empower marginalised voices, previously excluded and silenced. Whether it is through producing documentaries telling the stories Azerbaijani prisoners of conscience and community organisers in Melendugno,

southern Italy protesting against the Trans-Adriatic Pipeline (CounterBalance, Platform and Re:Common, 08.03.2016) or carrying out research showing how alternatives to SGC are not only possible but credible, the cumulative aim is to make a sustained argument against public funding of the project: "*Preventing the use of public money for massive fossil fuel projects such as the Southern Gas Corridor can open space for more serious efforts on energy efficiency and sustainable forms of renewable energy*" (Bacheva-McGrath et al, 2015).

Post-structuralist and critical standpoints on SGC financing would not be included in theoretical eclectic mix of the kind advocated by Sil and Katzenstein (2010). Their analytic eclecticism is rooted in theoretically-bound realist/liberal/constructivist matrix on the grounds that these theories are "*the most established and most viable contenders for paradigmatic dominance*" in International Relations (Ibid., p.25). Rationale for locating analytic-eclecticism in the dominant theoretical Triad is dictated by the results of recent TRIP surveys, showing that most IR scholars work within these three traditions (Jordan et al, 2009, p.18). It might be a rhetorical question but does real world really work in accordance with TRIP survey results?

If post-structural forms of knowledge and critical claims about SGC are not valid and are to be excluded from analytical mix, then why do they appear to have effects in real world? From a critical realist philosophical standpoint – why do they meet the correspondence theory of truth test if they are assumed not to be true? Specifically, for example, why the European Investment Bank (EIB), the financial arm of the EU, decided not to approve record €1.4bn investment package for the crucial western segment of SGC – the Trans Adriatic Pipeline and postponed the decision to 2018 (Nuttall, 13.12.2017)?

There was widespread expectation that financing will be approved; all the strategic conditions for support of the project were in place, including direct lobbying of EIB by the European Commission itself - vice president Maroš Šefčovič and climate and energy commissioner Miguel Arias Cañete wrote to the bank's president Werner Hoyer to make clear the importance of the project, arguing that the Southern Gas Corridor "*is a strategic project for the EU, directly contributing to the diversification of gas*

sources and security of supply objectives of the European Energy Union strategy" (13.07.2017 in Mathiesen, 27.11.2017).

All the environmental and social impact assessments have been logged and formally processed; EBRD has already approved €500mln worth of funding for SGC (EBRD Project 48376, 18.10.2017). Nevertheless, in December 2017 EIB delayed financing SGC, a spokesperson citing "*a number of due diligence issues that merits proper discussion*" as the reason (Nuttall, 13.12.2017). This might have been in reference to hundreds officially logged representations and formal complaints raised with EIB compliance and accountability mechanisms against SGC (EIB Accountability, 2018).

EIB decision came out of the blue, leaving the project in limbo and it is just one anomaly that mainstream scholarship and commentary on the issue of SGC financing - single-paradigm, synthetic and eclectic - failed to explain, let alone predict. Structuralist/constructivist framework alone simply cannot account for this real-world outcome – all the strategic interest boxes were "ticked", all insufficiencies, problems were "solved" and yet the empirical outcome did not correspond to theoretical claims about it. This is because analytic-eclecticism remains a theoretically-parsimonious analytical framework and its empirical reach is circumscribed by its foundational theoretical commitments.

It is true that most IR scholarship does fall within the paradigmatic Triad of realism, liberalism and constructivism (Jordan, et al 2009, p 18). The field of international energy politics is no exception and much of its empirical research comes from within this dominant paradigmatic matrix (see Chapter 3). For example, *the Oxford Institute for Energy Studies* (OIES, 2017) carries out its research programmes within clearly defined ontological boundaries – oil, natural gas and electricity – and sets them out across clear epistemological parameters, described as "*the disciplines of the Institute: economics, politics and sociology, international relations of gas-producing, consuming and transit countries*"; issues of environment are explicitly bracketed in terms of their relevance to primary ontological focus areas – fossil fuels and generation of electrical power (OIES, Natural Gas Research Programme, 2017).

There is logic to arguing that since the Triad is closest to achieving paradigmatic dominance it makes it convenient to locate multi-theoretical efforts here. Sil and Katzenstein justify this choice for this reason precisely: "*Thus, it is in the context of debates between realists, liberals and constructivists that we find it most useful to elaborate on the significance of analytical eclecticism for the study of world politics*" (2010, p.25). But useful for whom? Analytic-eclecticism is ostensibly posited as a problem-orientated research programme, concerned with producing knowledge of relevance "*for real-world dilemmas facing political and social actors*" (Ibid., p.9). Single-paradigm analytical frameworks are viewed as deficient precisely because in pursuit of parsimony they lead us to overlook complexity of social life, thus inhibiting policy-relevant research (Ibid, p.12).

Yet, there does not appear to be a causal connection between this pragmatic normative motivation for analytic-eclecticism (i.e. policy-relevant, real-world orientated scholarship) and its internal criteria for theory selection (i.e. the means by which such scholarship is to be generated). The latter is in fact determined and justified chiefly by implications drawn from TRIP survey results, not by any would-be empirical needs/demands of political and social actors, nor by any substantive standards for assessing scholarly or practical significance of a given problem. And as the example of EIB decision anomaly demonstrates, there are real-world, practice-level implications and costs in such arbitrary exclusion of certain types of knowledge and means of attaining it – empirical results can end up contradicting theoretical assumptions underpinning research models.

Analytic eclecticism therefore fails even by its own pragmatist test, e.g. what use does an Italian energy minister, an environmentalist campaigner or BP corporate executive have for SGC forecast models, research briefs, journal-published papers and complex technical and sociological explanations, and policy prescriptions on institutional dynamics of multilateral funding bodies etc., when they are suddenly faced with the actual reality of the EIB decision, leaving a $2bln budget hole in a major international energy infrastructure project for which they are responsible?

If post-structuralist knowledge forms and critical claims about SGC are not valid, they should not be having real effects in real-world situations. If they are found to be having

such effects, as determined so on empirical grounds, then they should be included in synergetic analytic framework. Their validity is not absolute, e.g. EIB may change its position and approve funding in the future as other international financial institutions already have. All theoretical claims remain open to empirical challenge but the focus always remains on the ontological pivot around which these contested claims are being made. And it is not enough simply to extricate theoretical concepts, logics, mechanisms from single-paradigm or synthesis models of SGC and then attempt to translate and selectively integrate them into a new holistic analytic framework.

Synergetic theorising must go further and requires looking at causal dynamics and reactive relationships between these analytic elements in real time and identifying how these are manifested in real world situations and in political outcomes, for example, the EIB decision on SGC funding. Post-structuralist challenge to SGC funding is clearly a normative standpoint grown out of concern over environmental, social and economic consequences of the project. Yet it is not simply a case of opposition to a specific modernist enterprise, but a statement against the prevailing social order that the project represents and the EIB decision, therefore, is assessed in these contexts. For example, interests of marginalised groups affected by the pipeline are set within a wider counter-hegemonic narrative of a post-fossil fuel energy future:

"*Communities in Italy, like the people of Melendugno, have been bravely resisting this pipeline in the face of fascist-era laws. Now, everyone that has been demanding the European Investment Bank defund the Trans Adriatic Pipeline just got the decision on a €1.5bn delayed until next year. This is a massive blow to this dangerous new pipeline – we're turning the tide on new fossil fuel projects. TAP will not go ahead*" (Ratcliffe, in CEE Bankwatch, 12.12.2017).

"*The climate paradox at the heart of the project, together with the human rights abuses, impacts on local communities and corruption links associated with it have made it harder and harder for the EU's bank to endorse*." (Sol in CEE Bankwatch, 12.12.2017).

From a neo-Gramscian critical perspective the focus of counter-hegemonic efforts is not the state but institutions such as the EIB and EU – transnational networks underpinning global capitalist hegemony (Cox, 1981; 1983). The thrust of the anti-

SGC campaign, led by international coalition of counter-hegemonic forces, is directed at these networks, with the aim of redirecting their function towards advancement of emancipatory interest. In fact, these forces are often purposefully formed to target specific elements of these transitional networks – anti-SGC NGOs such as CounterBalanace operate on a normative mission "*to make European public finance a key driver of the transition towards socially and environmentally sustainable and equitable societies"* (CounterBalance, 2017).

Rationalists underestimated pertinence of post-positivist insights and normative concerns, just as proponents and sponsors of SGC underestimated potency of civic forces opposing them. The extent of these mistakes is underscored by the wider turn taking place – EIB decision is a reflection of changes transforming global energy order, as it moves away from fossil fuels towards renewable, sustainable future: "*Clearly it was too much even for the EIB to fund this fossil fuel mega project on the anniversary of the Paris Agreement – now they should make sure that 2018 sees them end support for fossil fuels entirely*'' (CEE Bankwatch, 12.12.2017)

EIB decision on SGC not only coincided with the second anniversary of the Paris Climate Accord but occurred on the same day as the One Planet Summit – gathering of global financial organisations to develop strategies for implementing the Paris climate accord and "*to strengthen the financial sector's involvement in combating climate change, financing the energy transition and the adaptation to global warming*" (Climate Finance Day. 11.12.2017, No 252, 11.12.2017; Harvey, 12.12.2017). On the same day, 12 December 2017, the World Bank, one of SGC funders, announced its divestment from fossil fuel projects: "*As a global multilateral development institution, the World Bank Group is continuing to transform its own operations in recognition of a rapidly changing world. To align its support to countries to meet their Paris goals: The World Bank Group will no longer finance upstream oil and gas, after 2019.* (World Bank, 12.12.2017).

As important and symbolic as these developments undoubtedly are, it is worth considering that World Bank, EBRD and other financial institutions, as well as individual states, have already agreed and approved funding for various sections of SGC project. Furthermore, EIB merely postponed its decision and may still approve

the €1.5bln record-breaking credit to the TAP segment of Southern Gas Corridor (APA, 09.01.2018). For all their claims, post-positivist empirical programme and its associated normative-political project cannot account for persistence of power relations between states and the extent to which material factors determine state identities and interests. This leads to persistent overemphasising of ideational factors, even in the face of obvious empirical facts.

For example, Azerbaijan's withdrawal from the Extractive Industries Transparency Initiative (EITI) in 2017 was widely heralded as the death knell for prospects of international financing of SGC: "*The withdrawal throws into doubt current and future financing for Azerbaijan's contribution to the $46bn Southern Gas Corridor pipeline to connect its Caspian Sea gasfields to European markets*" (Foy, 10.03.2017). EITI is an international organisation, comprised of governments, NGOs and energy companies that sets "*the global standard for the good governance of oil, gas and mineral resources*" (EITI Standard, 2017). The Standard is meant to ensure transparency and accountability in energy politics across a broad spectrum of criteria, from how exploration rights are issued, to how the resources are monetised and how this advances public interest in resource-rich countries (Rogan (Ed.), 2016).

European Investment Bank, EBRD, World Bank, European Commission and other multilateral institutions are partners of EITI and employ its country assessments and compliance reports as regulatory frameworks in assessing funding applications; therefore, Azerbaijan's withdrawal raised questions over SGC: "*Azerbaijan's EITI status has taken on greater significance amid discussions with international lenders such as the World Bank and the European Bank for Reconstruction and Development for billions of dollars in loans to fund its share of the Southern Gas Corridor project*" (Farchy, 26.10.2016). In early 2017 Azerbaijan was suspended for non-compliance on human rights grounds, after EITI International Board found that the country "*did not fully meet the corrective actions related to civil society space"* (EITI Board paper 36-5-A, 09.03.2017). The very next day Azerbaijan unilaterally withdrew from the organisation (EITI, 20.03.2017).

Human rights NGOs have sought to use EITI Standard to hold Azerbaijani government accountable over human rights abuses and persecution of civil society, and argued

that the country's suspension and withdrawal from the body should "…*raise red flags for international financial institutions… which have publicly endorsed the EITI and committed to participation, transparency, and accountability* (Gogia, 10.03.2017). Funding SGC and other Azerbaijan-led energy projects would lead to erosion of public scrutiny and international normative standards (Mammadov, 20.01.2017). Revoking EITI membership was widely assessed as having major detrimental impact on SGC financial viability: "*Azerbaijan's membership in the EITI is considered a key asset to the country's oil and natural gas economy. As a result of leaving the EITI, Azerbaijan might be regarded as ineligible for future loans by the World Bank and other international institutions for projects, such as the Southern Gas Corridor Project (TAP&TANAP)*" (Allili and Bitner, 2017, p.3; pp.6-7).

In reality, however, SGC continued to receive financial support from multilateral organisations, with EBRD and World Bank (EITI partners) proceeding to approve new funds despite Azerbaijan's withdrawal and civil society protests. In November 2017 Trump administration took the United States out of EITI compliance mechanisms and the organisation dropped out of SGC debates (Simon, 02.11.2017). There are, therefore, limits to how far post-positivist claims can be taken. Post-structuralist single-paradigm models on their own fail to sufficiently account for persistence of state power and strategic-materialist interests underpinning it.

In summary, neo-realist analysis sets developments around SGC funding in the context of state action - environmental and energy politics as platforms for exercising state power and advancing strategic interests (see Chapter 4). Neo-liberal argument explains state action in terms of ideas, such as climate change, and institutions, such as the EIB (see Chapter 4). Social-constructivism, in turn, examines how state power, actions and interests are constituted by ideational forces – "*the meaning of power and the content of interests are largely a function of ideas*" (Wendt, 1999, p. 96; p.134; see Chapter 5). Anti-positivist, post-structuralist critiques challenge dominant ideational orthodoxies and set out alternative normative and political agendas for changing the prevailing social order, and these are now beginning to have political effects (see Chapter 5).

These single-paradigm models as well as their synthetic and eclectic configurations, provide useful analytical frameworks that shed light on specific elements of a puzzle and explain certain aspects of a phenomena, as they spin on a single ontological pivot, in this case the issue of SGC financing. The resulting synergetic picture is larger than the sum of its constituent parts. There are clearly multiple causal explanations for why the European Investment Bank had not agreed funding for the Trans-Adriatic Pipeline segment of Southern Gas Corridor and had not rejected it so far either. States have multiple identities and interests, which come about through continuous interplay of both social and material forces – they are not necessarily in alignment. The European Commission, representing collective interests of EU member states, is committed to implementing Paris Climate Accord commitments and to building new gas transmission pipelines:

"*By 2020, the EU aims to reduce its greenhouse gas emissions by at least 20%, increase the share of renewable energy to at least 20% of consumption, and achieve energy savings of 20% or more*" (EU Commission, 2020 Energy Strategy, 2018).

"*A key part of ensuring secure and affordable supplies of energy to Europeans involves diversifying supply routes. This includes identifying and building new routes that decrease the dependence of EU countries on a single supplier of natural gas and other energy resources*" (EU Commission, Gas and Oil Supply Routes, 2018).

EIB's decision or rather prolonged indecision on SGC funding arises out of this maelstrom of competing identities and contradictory interests as they are manifested in state actions and institutional dynamics. Ideas about the environment, climate change and energy are undergoing a major shift, not least due to growing democratic pressure, global environmental movements and coordinated actions of international civil society. Changing norms cascade through institutional architecture of energy politics as states and other actors adapt to this new normative environment – from standard-setting international quangos, such as EITI to integration of environmental, social and human rights standards into decision-making processes around fossil-fuel projects. It is symbolic, perhaps, that research critical of SGC project, an EU-supported initiative, is often funded directly by agencies of the European Union (CEE Bankwatch, May 2017; Bacheva-McGrath et al, January 2015).

However, this change is running against a prevailing energy order, made up of powerful material and ideational forces – economic, technological, social and cultural forces borne out of over two centuries of fossil fuel consumption (see Yergin, 1991; see Chapter 3). EIB decision on SGC funding is mediated by material realities of European energy order and reflects European Union's key energy priorities. EU Commission identifies dependence on energy imports as *"…a particularly pressing issue, with the EU currently importing over half its energy at a cost of €350 billion per year. Other important challenges include rising global demand and the scarcity of fuels like crude oil, which contribute to higher prices. In addition, the continued use of fossil fuels in Europe is a cause of global warming and pollution*" (EU Commission, Energy Strategy and Energy Union, 2017).

EU states' structural dependence on fossil fuels and dependence on Russia as chief supplier of natural gas, delivered through Russian-controlled pipelines is one factor determining EU energy strategy: "*About one quarter of all the energy used in the EU is natural gas, and many EU countries import nearly all their supplies. Some of these countries are also heavily reliant on a single source or a single transport route for the majority of their gas. Disruptions along this route caused by infrastructure failure or political disputes can endanger supplies. For instance, the gas dispute between Russia and Ukraine in 2009 disrupted supplies to some EU countries*" (EU Commission, Secure Gas Supplies, 2017).

This may well explain why in 2018 EIB may well approve final finding for TAP and why SGC will become eventually become a reality. What is revealed by synergetic readings of the SGC financing issue is the causal interplay between social and material conceptualisations of energy order and how it manifests in real-world situations. What the above reveals is that future fossil fuel projects may well stall in the face of a new political paradigm that is moving away from hydrocarbon energy status quo. SGC may go ahead but will other projects such as TAPI (briefly discussed elsewhere in the thesis)? Those opposed to SGC may well have underestimated strategic significance of the project but BP and SOCAR executives working on SGC seriously underestimated the power of counter-hegemonic grass-root communities, armed with alternative vision for a global energy order. These mistakes have real practical

implications for actors involved in energy politics and TSA offers a way to overcome them.

The role of oil companies in establishment of the Baku oil industry, environment as a factor in BTC debates and financing of SGC are some, arbitrary examples of thematic commonalities and conceptual convergences, constituting inter-paradigmatic pivots. A future, comprehensive study of Baku oil or BTC and SGC pipelines specifically may well reveal other such commonalities. But it is demonstrated here how this is possible and how reading differing theoretical accounts of the same empirical questions can reveal novel insights and help understand contemporary problems facing political actors.

Conclusion

Operationalising tanker traffic through Bosporus or the EIB decision anomaly as inter-paradigmatic pivots in synergetic analytical framework shows that these substantive issues emerge out of a deeper ontology of global energy, comprising a complex multi-layered socio-political dynamic that cannot be reduced to or explained by reference to any single element or factor. Any theoretical claims about it can only be assessed or verified on the extent to which they correspond to the reality of political outcomes - it is only possible to make relatively more accurate judgements on balance of empirical evidence. By not excluding certain paradigmatic approaches in favour of others TSA maximises intellectual opportunity of a given research enterprise and expands the breadth and depth of the empirical pool.

Synergetic modelling of BTC and SGC projects enables greater elucidation of the co-constitutive function of socio-normative and physical-material elements that make up these complex, international structures. Perhaps the clearest empirical implication of synergetic theorising about these pipelines is discovering the extent to which postmodernist, environmentalist, critical counter-narratives have impacted on political outcomes over the past twenty years. By ignoring or underplaying transformative effect of structural normative change, rationalist paradigms consistently failed to account for political changes it brings, not least implications of growing inter-state cooperation against the threat of climate change e.g. Paris Agreement. By ignoring or underplaying strategic and geo-political factors, post-positivist approaches failed to account for

persistence of power-relations and growing resource competition between states and historically consistent role played by national and international oil and gas companies, and multilateral financial institutions.

In November 2017 EU Commission included Trans-Caspian Pipeline (TCP) proposal into its list of Project of Common Interest, opening up possibility that the BTC/SGC system might be expanded East, opening up Turkmenistan's vast hydrocarbon reserves to European markets (EU Commission, 23.11.2017; Caspian Policy Centre Editorial, 13.12.2017). Caspian energy politics will continue to evolve and will continue to be shaped by competing dynamics of strategic and normative interests characterising them. How TCP is to be funded will again be at the heart of these tensions and antagonisms. Synergetic readings of Baku-Tbilisi-Ceyhan and Southern Gas Corridor pipelines can help better understand the course these future debates might take.

Conclusion

This thesis opened with Buzan and Little's question, "*Has International Relations failed as an intellectual project*?" (2001). The proposal for theory-synergetic approach set out in this thesis is animated by a belief that not only International Relations is not a discipline in decline but that it is a thriving intellectual project, which has the potential to serve as a meta-disciplinary enterprise, bringing together different strands of social science to bear upon issues of existential importance of global significance. Buzan and Little's ambition for IR as a holistic theoretical framework with a cross-disciplinary reach is realistic and credible (Ibid., p. 22).

TSA is an explicitly IR analytical technique that absorbs and integrates heritage of the Great Debates as essential elements in the genealogy of the discipline (Smith, 1995, pp.1-37; Schmidt, 2013, pp. 3-28; Waever, 2011, p.98). TSA is grounded in historiography of International Relations – the structure of the discipline, shaped in the Great Debates, is viewed not as an impediment to scholarship in IR, but as its road-map - the intellectual prism through which to analyse substantive problems in world politics. Theories of international relations are the tools of our trade, the elements of our periodic table, the equipment of our laboratories, kaleidoscopic lenses through which we view the world.

As full implications of the Fourth Debate become clear, the field of IR is recast and reconstituted, with a significantly expanded ontology and widened epistemological reach far beyond the narrow confines of positivism. Rather than view this as a challenge to IR disciplinary identity, TSA instead is designed to take advantage of new empirical opportunities. TSA is an argument in favour of ontological primacy in International Relations – the purpose of the discipline is to get at the deeper ontology of world human affairs. Critical Realism provides TSA with its philosophical foundations and imbues it with a commitment to an open-ended social-scientific project, aimed at getting at the reality of international relations, without excluding or bracketing various forms of knowledge.

Taking theoretical pluralism in International Relations seriously requires moving away from attempts to place epistemological brackets on knowledge-production. We have seen that mid-range theorizing and eclectic approaches are limited in their pluralist applications by their restricted ontologies and metatheoretical assumptions. One of the key conclusions in this thesis is that excluding knowledge claims based on *a priori* foundational assumptions carries significant empirical costs – any advantages brought to research by enhanced parsimony are offset by considerable loss of explanatory and predictive analytical power.

TSA does seek to produce scholarship relevant to practice of world politics – the choice of international oil and gas politics as the empirical field and BTC/SGC projects as case-studies was not arbitrary. TSA, however, is not a proposal for a practice-orientated research programme; at its core, it is a proposal for applied critical realist philosophy of science in IR – an argument that echoes Pearson's remark: *"The unity of science consists alone in its method, not its material*" (1892, p.15).

A normative challenge for TSA, therefore, is that there are no in-built ethical commitments inherent to what is essentially a method or a technique for approaching substantive issues in international relations; in other words, anyone can use it. Providing that normative commitments are set out throughout intellectual process involved in any given research project, TSA could be used with equal success by adherents of any paradigmatic school of thought in IR or sponsors of any political cause.

It has been shown in this thesis how applying different theoretical models synergetically increases the empirical yield of the study and enhances its analytical impact by pooling different bodies of scholarship, bodies of information, knowledge claims and normative arguments in a maelstrom of ontological and epistemological contestation. It is hoped that the case-study of oil politics in this thesis served to underline its key argument that theoretical disagreements in IR can be used as tools to advance knowledge about substantive issues in international relations.

To harness inherent power of IR theoretical pluralism TSA is advanced as a common methodological culture – a language, an analytical toolkit - by means of which scholars can utilise and apply different theories to the limitless substantive field of the science of international relations. A metaphor for IR theories as lenses through which to see different aspects of the same material reality has sometimes been employed (Smith, 2014). The objective is both – to find out about things that occur in stories and about their effect in any given story (Tolkien, 1983, p.121).

Oil is a fascinating topic in its own right; it has a primordial and perennial quality to it and yet is pervasive and persistent in its presence in everyday life. Questions about oil and energy go to the very heart of foundational and normative debates in IR and at the same time have immediate, urgent relevance to real-world political practice. It is arguably an existential global phenomenon, which is perhaps why it generates such partisan academic coverage and public debate. Yet, it was shown in this thesis that a deeper, truer reality of international oil politics is to be found in the empirical overlaps and commonalities between competing claims and bodies of knowledge. Synergetic analysis pivots upon these inter-paradigmatic connections, constructing more holistic, multidimensional representations of the reality of various problems in oil politics, than is possible in single-paradigm or even eclectic approaches.

Rationalist discourses around BTC and SGC pipelines are underpinned by a materialist paradigm of oil and gas politics – these projects are ultimately about power, state and corporate. This is the core of the rationalist models or rather model, for both projects constitute a single geo-political enterprise, that has its antecedents in past historical power relations. Reflectivist critiques, meanwhile, pose a foundational challenge to the dominant materialist-rationalist conception of the role BTC, SGC and Caspian hydrocarbons play in international energy order. They fundamentally question the prevailing fossil-fuelled social order, expose its costs and existential risks it poses and sets out a politically and normatively charged praxeological programme aimed at preventing the pipelines from being built in the first place.

Modelling these competing paradigmatic accounts within a common empirical timeline offers new theoretical-comparative perspectives, establishing clear conceptual overlaps and thematic commonalities across theoretical spectrum. Operationalising

these overlaps and commonalities (e.g. BTC environmental factors or the EIB's SGC funding decision) as inter-paradigmatic pivots in synergetic analytical framework shows that theoretical claims about substantive issues can only be assessed or falsified upon the extent to which they correspond to the reality of political outcomes (to empirical truth).

For example, persistence of empirical anomalies in single-paradigm mono-causal explanations pivoting upon the EIB financing of SGC pipeline, reflects both, the extent to which anti-positivist intellectual agenda has been ignored and excluded by mainstream scholarship on gas and pipeline politics, and the extent to which post-positivist approaches overlook strategic factors and overemphasise prescriptive normative politics. Applying synergetic reasoning illuminates these shortcomings in single-paradigm (and eclectic) theorising and reveals underlying cross-theoretical causal mechanisms determining outcomes in pipeline politics. Applying TSA systematically across the entire political expanse of the Caspian hydrocarbons helps identify evolving trends in global energy politics and draw conclusions about other pipeline projects elsewhere in the world.

Rather than viewing these mono-theoretical or synthetic accounts in opposition to each other, TSA generates greater empirical clarity and insights by engaging with them simultaneously in real time. The idea that stories in IR can be told approached this way and in the resulting narrative produce a whole greater than the constituent theoretical parts that make it up is the defining feature of the theory-synergetic approach. TSA is proposed as a common language through which to communicate across the breadth of IR spectrum and with the world beyond; a language to express theoretical pluralism and to cover the expanded ontology of International Relations - a type of IR culture.

J.R.R. Tolkien's description of synergy as set out in his philological essay "*On Fairy Stories*" can serve as a metaphor for the theory-synergetic approach – "*It is indeed easier to unravel a single thread — an incident, a name, a motive — than to trace the history of any picture defined by many threads. For with the picture in the tapestry a new element has come in: the picture is greater than, and not explained by, the sum of the component threads.* ((1947, 1964), 1983. p. 121). TSA is about envisaging

International Relations as a picture tapestry and each theory as a particular thread in that picture, all operating in *synergy,* to constitute a picture greater than the sum of the individual threads that make it up:

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