Making Sense of History? Thinking about International Relations

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Can international relations (IR) be a distinctive discipline? In the present paper I argue that such a discipline would be a social science that could be formulated within the perspective of comparative paradigms. The objections to scientific methods are thus overcome by the logic of international oppositions, in other words a model takes several paradigms into account and considers three kinds of foreign relation (enemy, friend, and rival) in the light of three main questions: what is IR about (ontology); what does relate therein (epistemology); and how to assess such a relation (logic).

Keywords: international relations (IR), state, nation, country, foreign policy.

Introduction: What is IR?

Roughly speaking, the 'international relations' is the study of relations among nations. Therefore, it deals with foreign policy. But what does a 'nation' mean as distinct from its twin concept of a state? In the present paper I would like to deal with this issue by investigating the foundations of the so-called theory of international relations (hereafter, IR), to-gether with the possibility of its formalization from a logical point of view. In what follows, I investigate three main domains helping to face this challenge having assumed a formal philosophy of global processes for the method of my study.

Ontology (who?)

The first domain is the *ontology* of IR: What sort of being is there, that is what are the political categories that matter in such a discipline? Ontology is the domain of philosophy concerned with the identity of agents; in short, it purports to answer the following question: What are the relata a,b in any international relations of the form R(a,b)? The plausible candidates for these are states, regional alliances, transnational firms, non-governmental organizations, mere individuals, and the like.

Epistemology (what?)

The second domain is the epistemology of IR which concerns the relation R in itself, namely: What is the nature of the relation between any two specified relata?

Because of the troublesome distinction between facts and interpretations, the problem here is how to characterize a relation: by means of a natural or a human science whose methodological rules crucially differ. As the German philosopher of culture Wilhelm Dilthey (1833–1911) stated, 'We explain nature; we understand psychic life'. For this reason, a genuine theory of IR should be clarified either through the explanation (causal dis-

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course) or through the understanding (intentional discourse) it is supposed to provide in order to make sense of any given 'fact'.

On the one hand, the sort of discourse attached to a given political event may differ following the Aristotelian fourfold set of *causes*, whether these are material (the material conditions under which an event happen), efficient (the agents who caused the event), formal (the definition of the event), or final (the reason why some event was provoked by some agents).

On the other hand, the kind of cause the IR theorist tends to choose actually depends upon the sort of questions she/he naturally asks before making her/his point; indeed, questions make sense of events and relevantly betray the questioner's assumptions. We will return to this crucial role of questions with the case of *paradigms*, as implicit theoretical representations in the construction of IR. This role is all the more crucial for whoever doubts the positivist view that facts are transparent data.

To put it blantly: what is a fact? Against the positivist dream of a Sirius point from which any situation could be easily depicted, it hardly makes sense to assume a theorist asking neutral questions. A radically opposed view has been endorsed by the Frankfurt School and famously stated by the post-positivist Robert Cox in the following words: 'Theory is always for someone and for some purpose', thus discarding the common belief in bare facts. Correspondingly, the choice of specific questions to make sense of political events may lead to such paradigms as realism, liberalism, or some more fine-grained variants. Their level of abstraction may vary, according to the theoretical concerns that make them arise: any investigation about the geopolitical strategy of a state leads to technical questions about material resources, for example, while a larger reflection about the motivations of mankind resort to the more general domain of political philosophy and leads to what may be called 'meta-questions' (abstract questions about more concrete questions).

To account for the complexification of world politics throughout the notion of *globalization*, the paper aims at describing the transition from state-centred relations to Global Studies by means of an inquiry into the construction of a world space and through the set of social interrelation networks. Such a large-scale ambition may lead to a disciplinary holism, in the sense that such a large topic as IR calls for a number of related disciplines from politics to other social sciences like sociology (religion and culture), anthropology (human nature), psychology (folk behavior, statesmen's rationale), or economics (geopolitical motivations).

A natural objection to this project concerns its philosophical flavor. After all, the story of the world patently showed how the history of ideas departs from the history of nations. From Plato's expedition in Syracuse to utopian speculations, recall these words by Frederick II of Prussia (1712–1786) that summarize some reluctance in the air at floating abstractions, 'If I wished to punish a province, I would have it governed by philosophers'. The king argued by these words against the liberal-minded view of Enlightenment philosophers, among which Rousseau's concept of general will or Kant's project of perpetual peace. At the same time, it should be noted that not every philosopher is a liberal thinker. Think about Hobbes' republican absolutism, or Heidegger's fascination for the Third Reich. Notwithstanding a common opinion of the effect that philosophy distorts reality, I would reply that the present paper aims at a philosophy for IR rather than a theory of IR

for philosophers. In short, the point is not to give a prescriptive view of what IR *should* be but, rather, to think speculatively about what IR *might* be, without any definite answer and by means of proper interrogative methods.

Accordingly, philosophy is not to be taken as a field of ideologists or idealists opposed to the so-called 'internationalists', that is the theorists of IR whose favored domain would be the field of action and pragmatics. There are two main objectives of the next sections: to break with this shared view and to show how both domains are interrelated.

Logic (how?)

Finally, the third domain is the logic of IR: How to account for the sort of relation R between the relata a, b in R(a, b)?

Against a positivist stance that claims to penetrate reality and its facts with one-sided answers, the primary role I impute to questions in the very process of a theory leads to a 'logic of IR' in a larger sense of the word, that is a guess-who game, where a variety of questions makes sense of political events without giving a final answer to the question how the world politics is ruled. While this method has already been applied in other contexts by means of a so-called Question-Answer Semantics (see, *e.g.*, Schang 2012), I suggest to organize the content of IR in the form of a qualitative model with coefficients (see Section 3).

By doing so, a difference must be made between what is meant by a *paradigm* and an *ideology* (compare with the debate between Kuhn and Feyerabend about the legitimacy of natural science) and be able to overcome the oversimplifying dichotomy between philosophy (orating about morality) and politics (aiming at efficiency). In particular, such an enterprise amounts to a formalization of IR towards a continuist dynamics: enduring questions may lead to changing answers, in order to account for (giving a sense to) the theory of IR and its numerous '-isms' (realism, liberalism, neo-structuralism, culturalism, marxism, constructivism, and so on). In case of successful results, formal epistemology of IR has to clarify their technical parlance and numerous concepts related to the previous areas of ontology and epistemology. A sample of it is given by what the French internationalist Jean-Louis Martres said about his German fellow Alexander Wendt (who depicts himself as a 'constructivist' or second-rank theorist, strives to establish the identity of neo-liberal and neo-realist views, both relying upon an 'ontological atomism and an epistemological positivism'); in short, Martres blames both neo-liberal and neo-realist theories for reifying instances, whether the agent, the state, or the world system (Martres 2008: 34).

Let us review in detail the way in which IR can be characterized in its foundations and prospects.

1. The Object: State vs Country

Let us consider again the primary question: what is the object of IR?

The traditional answer is *state-centrism*, according to which the IR deals with nothing but states since the Treaty of Westphalia (1648). In the same vein, the French politologist Raymond Aron (1905–1983) depicted IR as the set of relations between states that are endowed with the monopoly of legitimate physical violence (for external war and inner repression). This means that political relations are uniquely about states, insofar as these rule armies and are entitled to declare war against foreign powers. The American internationalist Kenneth Waltz (1924–2013) summed up this classical view by a *reductio* argument, 'For what can act on the international scene, if not states?'

In contradistinction to such a mainstream approach, I want to formulate a plea for political pluralism which is an alternative view stating that IR is not so much about states or even nations than *countries*, so to a wide extent it is the agents that matter. Thus, the English Susan Strange was depicted as blaming the abuse of state-centrism in political science:

Being exclusively interested in the state (state-centrism) is oversimplifying and leads to develop a conception of political science that does not help understand human condition and does not take into account the various entities having an economic and political power (Tooze 2001: 103).

Borrowing from an analogy of the American philosopher Willard van Orman Quine, countries are not homogenous entities but, rather, force fields composed of contradictory forces. They include military forces (states), but also economic forces (multinational firms, transnational holdings, lobbies) and social movements (undergrounds organizations, ethnic minorities, leagues of civil rights). To manage these contradictory forces and ensure their foreign policy, states have to do with such 'inner enemies' to maintain their coercive force and attempt to legitimate what Aron referred to as the monopoly of physical violence. While state-centrism assumes that states are the only efficient forces in IR, the aforementioned counter-forces often occur from the public opinion, especially *medias*.

And conversely, a more comprehensive approach to IR should take into account the influential role of medias over mass beliefs: sometimes medias serve as a public weapon against the state policy; sometimes the states employ them to turn public opinion into a general will. It results in a two-fold behavior, that is to construct an official propaganda of *state-nations* or to provoke a reaction of public opinion against the state's action. The role of propaganda corroborates a previous objection to the positivist belief in bare facts, insofar as the power of mass media constructs a collective picture of reality beyond its duty to tell the truth to educated people.

Concerning the very nature of the relata a,b in the general scheme R(a,b) embedding IR, a difference is to be made between state, nation, and country. Just as a *state* organizes the inner policy in a country, a *nation* means a homogeneous set of people ruled by a state (state-nation) whereas a *country* is the spatial territory on which a state rules its given nation. My emphasis upon countries thereby enlarges the scope of IR while avoiding to reify the state as a static representation of a standing nation. Instead of talking about such static elements, the general trend of the following goes towards a dynamic approach to countries as the proper relata of IR A balance is to be found between total order and total chaos, as argued by Martres, neglecting slyness removes the agent while favoring deep forces and trends; extolling the uniqueness of a phenomenon cancels any logicality to the system of international relations and leads to chaos.

For this purpose, a reference to countries amounts to a set of moving forces whose interrelations are supposed to make sense of the worldwide history. Once the agents are identified (in a provisory way, at the very least), let us consider the nature of their relation in any foreign policy. What are they doing exactly that justifies the construction of a theory of IR?

2. The Relation: Force vs Power

Here is the second question of our inquiry: Which sort of relation stands in IR? A brief overview of the origins helps to give a preliminary answer. Let us note indeed that the discipline has been founded to understand and warrant the conditions of peace between

states; it has been created in 1919 by the Welsh sponsor David Davies, who supported the first professorship of international politics at the University College of Wales in Aberystwyth. Despite this primary goal of stable peaceful relations between states exhausted by the First World War, the breakdown of the League of Nations and the subsequent the Second World War dramatically showed a patent failure of *idealist optimism* from the twenties onwards and led to the shared conclusion that international right, democracy, and free trade would not be sufficient conditions for peace. In this sense, the external anarchy between states marked the triumph of state-centrism and the related view that states are the only necessary organizations of human societies. This accounts for the fall of idealism and the rise of realism, given the historical context of the young discipline.

A philosophical, more general assessment of the situation consists in saying that the theory of IR is nothing but a social science whose agents are naturally determined by human desires, including *power*. Thus, any realist would say that she/he aims at assessing the action of states through their essential search for power. Note that while the realists equate power with the aggressive or offensive way to satisfy one's own interests, such a concept is not as clear as it stands. As a matter of fact, power has more to do with the status of a political *force* than the conditions under which it can preserve it, assuming force as a physical aggression at the forefront. In a sense, the relation of cooperation may be also viewed as a single mode of power obtained with the help of other means within a set of peaceful relations. Nevertheless, power is usually viewed as a one-sided action used by a single state for its unilateral interest. If power corresponds to a general situation of satisfaction, however, its necessary and sufficient conditions are not given unanimously among the theorists. For the ones, power requires violence as the best defense of its own interests against the others' (Thucydides, Machiavelli, Hobbes, Schmitt, and Huntington); for the others, it requires peace in order to ensure a standing and fruitful cooperation between potential partners (Rousseau, Kant, Fukuyama). Actually, the characterization of power depends on how mankind and societies are viewed from an anthropological perspective. No wonder if the historical context contributes to the answers, as witnessed by, for example, the role played by the bloody civil war of England on Thomas Hobbes (1588–1679) and his subsequent anthropological pessimism. Hence his words from the Leviathan (ch. XI), 'In the first place, I put for a general inclination of all mankind a perpetual and restless desire of power after power, that ceases only in death'. A similar description of mankind as a perpetual quest for maximizing power can be also found in the concepts of *conatus* (any effort to persist in being) by Baruch Spinoza (1632–1677), or the concept of will of power ('Wille zur Macht') by Friedrich Nietzsche (1844–1900). Between war and peace as preconditions for power, a primary dichotomy thereby occurred within the theory of IR between liberalism (or idealism) and realism. Marxism was introduced into IR only after the Second World War, to account for the economical relations between states.

Whatever the answer given to the sources of power, each of these stands for a given paradigm, that is, a system of assumptions, concepts, values, and practices that constitutes a way of viewing reality. The role of paradigms in the theoretical construction of IR was represented as follows:

Etymologically speaking, 'paradigm' means 'declination' and, without altering the sense, we can accept the view that paradigm functions as a dogma; dogma from which the sense of the object at hand can be gathered (Martres 2008: 37).

Returning to the difference between a paradigm and an ideology, the former can be taken to be a set of interrelated implicit beliefs whereas the latter reduces all these beliefs to a central one (compare with the Marxist reduction of superstructures to the economic infrastructure of production modes). In both cases, the problem concerns the way to organize values and the criteria attached to their political relevance. What is to be favored between economical and military power, for instance? Starting from a binary opposition between idealism and realism, the theory of IR increasingly introduced more complex data to explain historical events: no black-or-white scenario between either total war or total peace but, rather, a pale gray lore of interrelations between different agents and their common environment.

A large literature on IR attempts to inject some rationality behind these international facts, while attempting to justify their own paradigms at hand. Let us go through a list of such theorists and their main assumptions.

In response to the failure of British idealism, the American realist Hans Morgenthau supported a classical realism by advocating offensive power against the alleged threat of the Soviet Union.

Then the complex evolution of the Cold War was paralleled by a general reflection about *international regimes* in the eighties and nineties, to do justice to the role of common objectives among the states through regular international institutions or general agreements.

Although most of the theorists agree about the situation of *anarchy* between states (no higher authority rules them over and above their own sovereignty), the existence of regional or worldwide organizations (UNO, NATO, and the like) refined the notion of anarchy in three ways: in a Hobbesian (states are mutual enemies), Lockean (states are mutual rivals), or Kantian (states are mutual friends) sense of the word. By augmenting the binary opposition friend-enemy with a third intermediary term of rivalty (following Carl Schmitt in this respect), Kenneth Waltz took the logic of Lockean anarchy to be the prominent way to understand the contemporary history (Waltz 2003); it resulted in a so-called neorealism, or structural realism, that differs from the classical version by strengthening the role of economic relations towards the global task of sustaining power.

In other words, realists and idealists are at odds as to the fundamental objectives of a state; nevertheless, they may agree about the way to achieve it as in the common objective of economic growth (among the liberal-minded defenders of idealism and the neorealists). For example, Robert Gilpin equally defends neo-realism by arguing that economy takes growing interest in coercive relations; while Andrew Moravcsik claims that the rational individual is prime and supports neo-liberalism against the realist assumption of state-centrism. But trading is at any rate the central factor that most of the international relations rely upon, whether in a competing or in a friendlier way.

Given the increasing influence of commercial relations after the Second World War and the ensuing hegemony of the United States, a large network of interrelations has developed between the states until then. The upshot is a number of more or less cooperative agreements, thus favoring a global *status quo* around two blocks (Western *vs.* Eastern blocks) with economic pressures and nuclear weapons as their major arguments. Therefore, the history of the post-war world led to a number of more intricate paradigms between the absolute relations of peace and war. On the one hand, the school of Neo-Marxists (also known as dependency theory) emerged with Immanuel Wallerstein or Johan Galtung during the period of decolonization, rendering the American hegemony in terms of dominant centers and dominated peripheries. On the other hand, the development of information through mass media strengthened the role of public opinion in the collective decisions; it followed from it some impetus on soft constructivism and transnationalism. The former has been famously formulated by Alexander Wendt as follows, 'Anarchy is what states make of it', in order to turn the realists' negative connotation of anarchy into a more positive field of rational and responsible relations between states. The latter weakens the role of these states in the international relations, stressing upon the complex interdependence of collective institutions around the states like non-governmental organizations and economic firms. Joseph Nye described this globalized situation in terms of soft power, according to which the states try to defend their interests by means of cooptation rather than the classical coercion of hard power. Likewise, James Rosenau argued for a general situation of interstate or multi-centered sphere between interdependent states. Again, the binary opposition of peace and war has been muddled by the historical context of the postwar world: Bretton Woods, oil crisis and liberal values produced a multi-polar framework where rigid masters and servants turned into flexible sellers and clients.

That is a sketchy (not exhaustive) overview of the paradigms in IR, from the idealist sources of the theory to its interdisciplinary stance. To put all of this in order, a question naturally arises: How many schools or paradigms can there be in the discipline? To answer this question requires a capacity to specify the sort of questions that make sense of such worldwide relations between states or broader decision groups: the more questions there should be to define the properties of foreign relations, the more paradigms there can be to assign a definite value to each of these and establish a resulting hierarchy between them.

Note that such a debate already occurred within the 'Four Great Debates' of the theory of IR, concerning the opposition between traditional and behaviorists: Morton Kaplan advocated the use of quantitative methods to characterize the relations between states, whereas Hedley Bull blamed the latter for not taking the random character of human decisions into account. Between science and art, or determination and wisdom, a division occurred as to the role of exact sciences while some of the writers called for the knowledge of balance theory, game theory of complex systems to model international relations. Does it make sense to use formal tools into a social science, insofar as the latter primarily deals with agent's intentions? How to find room inside such a debate between positivists and post-positivists, in order to make of history without reducing it to a mechanist and continuous line?

3. The Value of the Relation: A Comparative Logic

A general logic is to be found for the discipline, but not in the sense of explaining the occurrence of foreign relations by means of computing data. Rather, the point is to find a way to understand the reasons underlying any expected or unexpected relation between states or broader items like countries.

For one thing, the theory of IR is naturally concerned with *truth* in two respects. It ought to respect the criteria of *formal* (or logical) truth as any normal science, insofar as science aims at truth by obeying criteria like consistency. Moreover, it is obviously con-

cerned with *material* truth but should not access to it by a mere observation of allegedly bare facts: again, facts and interpretations cannot be disentangled in scientific theories. To discard the black-and-white picture of reality, Quine (1960: 374) noticed the point that 'The lore of our fathers is a fabric of sentences. A pale gray lore, black with fact and white with convention'. This means that one and the same political relation may take different meanings in different theories, that is depending upon the paradigm adopted to make sense of it. A way has been devised to go beyond the naïve distinction between facts and interpretations, thus referring to the Chinese Yixing that emerged during the Warring States Period (around 475–221 BC) for political motivations. Thus,

it is easy to imagine, by resorting to the fundamental matrices of Chinese thought, the construction of a theory of international relations which, ignoring the Western binary distinction between Good and Evil, would give a much better account of the genuine sense of international politics (Martres 2008: 36).

I see a connection between this Eastern reference and IR, since I developed elsewhere (see Schang 2011) a translation of the Yiking in the form of Boolean bitstrings that express the context-sensitive identity of any meaningful sources of information. In our present case, this purports to give a definite number of criteria to characterize the identity of context-sensitive countries within our globalized world.

Consider a 'guess-who' game for IR, assuming that there is a finite number of maximally relevant questions to define the foreign relations between countries. Let us say that any yes-answer corresponds to an agreement, that is a *friendly* relation between two relata a and b, whereas any no-answer expresses a disagreement, that is an *unfriendly* relation between them. Four questions are meant to discriminate international relations between countries, viz. q1: 'military agreement?'; q2: 'economic agreement?'; q3: 'cultural agreement?'; q4: 'social agreement?'. The source of agreement between countries relates to what is investigated in geopolitics, and the previous questions represent a set of metaquestions to assess such relations. Indeed, any agreement between countries can be established by the existence of international alliances, whether military, economical, or even cultural: EU, NATO, NAFTA, Mercosur, and the like. It can also be obtained according to the compatibility of their political system (democracy, dictatorship, etc.), their population (ethnical, religious kinship), or their standard of living (employment, way of life, mentalities). Furthermore, the main import of paradigms is to establish a hierarchy between the previous domains included into the questions: the realists favor military over economic criterion; and the other way around for the liberals. In a context-sensitive process of identification, the relations are defined from a reference country to make sense of the answers.

Following some previous works about the *logic of opposition* in Schang (2012), let us state that the logical value of a country varies according to this basic reference of a country. In the context of the Cold War, for example, the United States could be given as such a reference (or hegemonic) country. What are the foreign relations between the latter and other countries like Yugoslavia, the USSR, France, or Poland? Let '1' be the symbol of a yes-answer and '0' be a no-answer, this yields a set of logical values (an ordered set of answers A) to our preceding four questions: A(Yugoslavia) - 0100, A(USSR) - 0000, A(France) - 1110, and A(Poland) - 0010. Following the definition of the logical relations of opposition, any two countries are said to stand into a normal friendship if and only if they are subcontrary to each other – they have at last one common yes-answer, while they

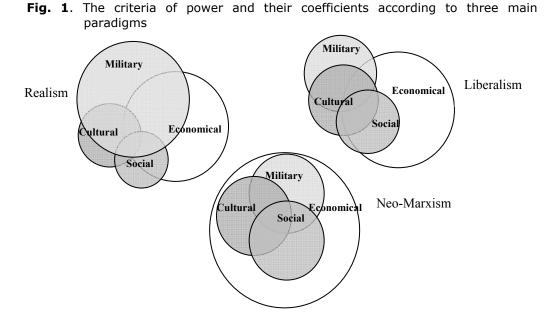
stand into a mere non-friendship (as either rivals or enemies) if and only if they are contradictory or even contrary to each other – they have no common yes-answer. How to make sense of the difference between contradiction and contrariety in IR, taking to be granted that such logical relations lead to a mutually hostile relation? Let us say that any two countries are mutual *enemies* whenever they are incompatible relata, and *friends* (allies) as compatible relata. Insofar as international relations are more dynamic than static processes, we can refer to a relation of political *integration* between a given country and a reference country whenever there are more yes-answers than no-answers between them; as to the relation of political *assimilation*, it means that there are only yes-answers (no distinction) between these. A political *preference* between countries can be stated as follows: any country *a* prefers *b* to *c* if and only if the logical value of *b* is less different with *a*'s one than *c*'s one is. A *balance of power* obtains within a set of related countries once these are balanced poles with equivalent forces (logical values).

In accordance to the notion of hegemony, the assumed hierarchy within friendly groups can be determined by their *power measurement*. Thus, a country can be said to be *strong* according to a set of criteria. The military criterion includes army capacity, technical equipment, and nuclear force. The economic criterion relies upon features like self-sufficiency, or business resources (production, subsoil resources). The cultural criterion can be equated with cultural data like the religious or linguistic sources of a country. Finally, the social criterion refers to some inner harmony from base (public opinion) to tip (state). Now what is the hierarchy between these criteria themselves? It depends upon which paradigms are mentioned to order them, and a criterion for measurement can make use of *coefficients* in this respect (see Fig. 1). That is, the *power* of a country (superpower, average power, lower power) is characterized by the sum of its coefficients, and a reference country corresponds to any country such that its sum is *maximal* in a given pole (set of countries).

To sum up, such a question-answer game results in a logic of IR that wants to account for the difference between enemies, rivals, and friends by more fine-grained relations than unique yes- and no-answers.

There are some advantages in such a game. On the one hand, no *quantitative* methods from natural science have been used in the preceding presentation. As a reply to postpositivists, this means that not any logical approach to the IR leads to mechanic equations. On the other hand, such an 'IR game' goes beyond the realist paradigm by taking into account the role of paradigms through the various coefficients assigned to each ordered question (definitional criterion of context-sensitive countries).

There are some defects related to these political oppositions, however. Firstly, the number of questions required to individuate countries remains undetermined. Secondly, the logical calculus hinges upon paradigms which lead to a variable hierarchy of the criteria. Thirdly, there may be some *interdependence* between the given criteria of economy, culture, and social condition (following the statements of Marxists and constructivists). Fourthly, the amount of a given coefficient should be given by means of quantitative measurements after all; while it arguably corresponds to a quantity of efficient equipment in the military domains, any quantification of the cultural or social areas is a more trouble-some affair.



A number of technical challenges remain open within such a logic of IR and its foundations, accordingly. Let us quote three of these. Two of these are about the nature of foreign relations: Why need not 'the enemies of my enemies' be my friends (calculus of opposites)? How can a given country prefer a to b, b to c, but not a to c (compare with the socalled Condorcet's Paradox)? Another one is about the criterion of identity and unity between countries: what makes them politically differ, and how many questions are required to individuate them (so as to make them minimally distinct from each other)?

4. Conclusion and Prospects (So What?)

Let us summarize the main statements of the present paper, before recalling its expected developments.

- a) The theory of IR is centered on *countries*, rather than states.
- b) It relies upon a variety of paradigms.

These can be summarized in two main questions, namely: what the countries want above all, and how they proceed for this purpose. The variety of corresponding answers leads to a variety of paradigms, mostly based upon two core concepts: *force* (to be opposed to cooperation, and distinguished from the broader notion of power) and *state*. Thus, realism emphasizes the role of states to maximize the force of any homogeneous country; and conversely, liberals tamper the notion of power in the sense of a cooperative relation while sustaining the central role of states in the realm of international relations.

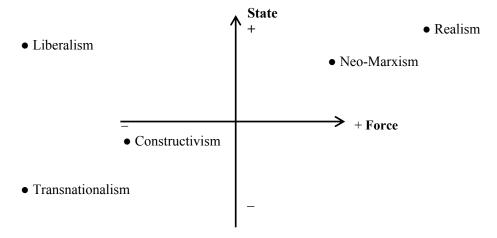
c) No such paradigm normally prevails over the others, because IR is a *social* science.

As a matter of fact, this sensibly differs from what is meant by a 'normal' science as any discipline which ought to change its theory after a scientific revolution: according to Thomas Kuhn's related works, the uniqueness of paradigms in natural science is warranted by the fact that the rule of *consistency* prevents several paradigms from ruling a given science at once. If so, then IR proceeds as a *non-normal* science accordingly.

d) IR is an interdisciplinary social science requiring an investigation into human *beliefs* and *intentions*.

Such a context-sensitive discipline must cope with randomness, thus leading to a set of unpredictable coefficients in the 'IR game'.

Fig. 2. A diagram for IR through two main imports: force and state



This formal epistemology of IR gives room for a number of prospects to implement its content. Three of these can be stated as follows. For one thing, the ontology of IR is based on *countries*, hence the need of a contemporary history of countries to characterize their relative identity and subsequent relations. Then, the role of opinions with respect to the construction of public opinions demands an investigation into mass media as belief formers; such is the task of a so-called *mediology*. Last, but not least, the crucial role of criteria to make sense of relations between dynamic countries assumes a preliminary analysis of *paradigms* in the theory of IR.

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