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How to Know the Future – and the Past (and How Not). A Pragmatist Perspective on Foresight and Hindsight in International Politics and the Social Sciences

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"A main source of our failure to understand is that we do not command a clear view of the use of our words.—Our grammar is lacking in this sort of perspicuity. A perspicuous representation produces just that understanding which consists in 'seeing connexions'. Hence the importance of finding and inventing *intermediate cases.*"

Wittgenstein 1958, §122 (emphasis in original)

"The aim of philosophy, abstractly formulated, is to understand how things in the broadest possible sense of the term hang together in the broadest possible sense of the term. Under 'things in the broadest possible sense' I include such radically different items as not only 'cabbages and kings', but numbers and duties, possibilities and finger snaps, aesthetic experience and death. To achieve success in philosophy would be, to use a contemporary turn of phrase, to 'know one's way around' with respect to all these things, not in that unreflective way in which the centipede of the story knew its way around before it faced the question, 'how do I walk?', but in that reflective way which means that no intellectual holds are barred."

Sellars 1963(1962): 1

"Political philosophy is realistically *Utopian* when it extends what are ordinarily thought to be the limits of practicable political possibility and, in so doing, reconciles us to our political and social condition."

Rawls 1999: 11 (emphasis in the original)

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1. Introduction

Much has been written about "scientific" or other (more or less "sophisticated") ways of engaging with or thinking about "the future". This is one more contribution to a voluminous body of publications. Why so if, as I hasten to acknowledge, no claims to novelty will be made? The simple answer is that much of what we do in scholarship is to arrange and rearrange bodies of scholarship in order to, perhaps, gain a different perspective on a subject matter. This is one such effort. The new perspective which I hope to develop in rearranging different bodies of scholarship in *theorizing social action and thought* (to instantly submit my formula in contrast to notions such as "epistemology" or "theory of knowledge") is one which hopefully may ease established strictures in the field of international studies in thinking about "the future".

Today's future of international politics is *not* more important than yesterday's although it may look "darker" than, say, the looming "new world order" envisaged at the horizon of international politics at the time of the "end of the Cold War" around 1990.² Yet it seems as if the *need* for "better knowledge" about the future has risen significantly (as the production of books such as this one and, even more so, the proliferation of "forecasting" and "scenario building" (including its increasing bureaucratic institutionalization in governments and the private sector) show.

Common understandings of the concept of "knowledge" normally associate a type of *certainty* with the future which the future, in hindsight, seldom delivers. However, this is not future's fault but ours – at least if we burden "knowledge" in a futile "quest for certainty"³ with notions of "truth" which are *unreal*. Knowledge as "know how" is all we can get and all we need – and it is "know how" largely of the same type about the past, the present and the future. This, in a nutshell, is the thesis which this chapter will develop. I will arrange and rearrange different bodies of literature in order to show that there are good reasons *not* to think that knowledge about the past is fundamentally different from knowledge about the future. These reasons are provided by a tradition of thought roughly labeled "pragmatist" – *roughly* pragmatist because "isms" usually

² One of the most influential forward-looking studies in international politics is the "Global Trends" study by the National Intelligence Council. The most recent version projected "rising tensions within and between countries" as of early 2017 (National Intelligence Council 2017: ix).

³ Dewey 1929.

subsume authors under a unifying label who tend to insist on the distinctiveness of their respective thinking. To think of pragmatism as a *tradition* of thought means that it is taken as a "narrative of an argument" which is "only recovered by an argumentative retelling of that narrative which will itself be in conflict with other argumentative retellings."⁴ Here I assemble authors such as Charles Sanders Peirce, William James, Ludwig Wittgenstein, John Dewey, Hans Georg Gadamer, Wilfrid Sellars, Richard Rorty, Donald Davidson and Robert Brandom under the label "pragmatism", again *roughly* only because their work differs in several respects. However, I will argue that they essentially support a pragmatist understanding of "knowledge" which emphasizes the very practical "knowing one's way around" ("sich auskennen").⁵

In this understanding one "knows" one's way around if the descriptions and explanations we provide are *cogent* – ie. if they resonate, if they are acknowledged and/ or if they enable us to cope (better). Descriptions and explanations as answers to "what" and "why" questions can be thought of narratives about how "things hang together". The next section discusses how "why" and "what" are often separated in "positivist" or "realist" social science in ways which is neither helpful for "theory-based" backwardlooking "explanation" (hindsight) nor helpful for structurally analogous forward-looking "prediction" (foresight) – not to mention the "constitutive" hanging-together of *concepts* (meaning and definition) and *facts* (what is the case). Section 3 grounds these understandings of backward-looking and forward-looking ways of sense-making in the classical pragmatist doctrine of the primacy of practice and in an antirepresentationalist perspective on knowledge production influenced by the "linguistic turn". Section 4 elaborates on what it practically means to engage in narration about the past and future along these lines and how it differs from alternative "epistemological" or "ontological" understandings emphasizing a strong distinction between "mind" and/ or "consciousness" on the one hand and "world" on the other. In section 5 I will argue that the emphasis on the possibilitarian nature of an open past *and* an open future suggests

⁴ Bernstein 1995: 54. In this view, the history of pragmatism has not only been a conflict of narratives "but a forteriori, a conflict of metanarratives" (ibid.).

⁵ To just pick a few: On Sellars see introductory quote, on Wittgenstein see Wittgenstein 1958, §123 ("A philosophical problem has the form: 'I don't know my way about' ["ich kenne mich nicht aus"].") On Gadamer's discussion of "practical knowledge" (or "verstehen") as "knowing one's way around" see Gadamer 1989(1960): 250-252 and Grondin 2002: 37-40.

that we should also take into account how an anti-representationalist view of sensemaking impinges on the difference between different forms of *projection* (eg. prediction, forecasting or scenario-building) and *imagination* (eg. Rawlsian "realistic utopias") and why the latter should be more appreciated.

2. Why and What

"Why" is the favored pronoun of historians and social scientists. This is so because causation (ie. the connection of "causes" and "effects" about what has *happened*) and justification (ie. the formulation of reasons why x was *done*) enjoy a privileged status in empirical research and normative theorizing respectively. This privileged status may also easily explain, why Charles Tilly, one of the most influential historical sociologists, produced a small book with this very title shortly before he died. The subtitle specified that the book was supposed to explore "what happens when people give reasons … and why". Tilly was puzzled why the mass media as well as his "fellow social scientists customarily explained complex social phenomena" by focusing "so regularly on the decision making of a few influential actors while neglecting unanticipated consequences, incremental effects, and the incessant, subtle negotiation of social interaction".⁶

Following Wittgenstein puzzlement may equally strike social scientists why "what"questions are somehow considered to be *epistemologically* less demanding than "why"questions. There seems to be broad agreement that asking "why" presupposes that answers to "what"-questions have already been given and that "what" is in this sense *prior to* "why". "What"-questions in this understanding are "What is the case"-questions – questions which usually boil down to conceptual questions of *meaning* and/ or factual questions of *description*. In the standard story of "empirical" social science, conceptual and factual "what"-questions are easier than causal and normative "why"-questions because they can, and ought to be, answered quickly. To be sure, "careful descriptions of specific phenomena" are "indispensable" even to "scientific research". This is even granted by influential authors in "scientific" research design.⁷ However, these authors also hasten to add that "the *accumulation of facts* alone is not sufficient." Proper

⁶ Tilly 2006: ix.

⁷ King, Keohane and Verba 1994: 7.

scientific research "requires the additional step of attempting to infer beyond *the immediate data* to something broader that is not *directly observed*".⁸ In other words, "description " in this understanding boils down to *the collection of the obvious* – which is why "scientific" scholars commonly use "description" jointly with the depreciative qualifier "mere".⁹

As *descriptions*, in this understanding, quickly solve questions of fact, *definitions* quickly solve questions of meaning. In the standard story of "scientific research" definitions clarify facts in what scientists consider to be *determination* of meaning. This is both necessary and acceptable in order to free observation and analysis for focusing on causation which, in Thomas Kuhn's words, "invokes an original act of baptism or dubbing as an *essential determinant of reference*".¹⁰ In other words, causal analysis is about the nexus between some *definite* thing taken as cause and some *definite* thing taken as effect. You cannot have it otherwise because if "scientific research" were to be conducted on the basis of potentially *different meanings* of (or even *different concepts* for) those connected facts that ought to be *explained* it would not only be a waste of time, but actually undermine the very task of causal explanation by adding complexity to already complex connections.

In this chapter I will argue that answers to "what"-questions and "why"-questions are *not* as dichotomously different as "scientific" representations of a strong distinction between ("mere") "description" on the one hand and (causal) "explanation" on the other have it. "What" *and* "why" both address Sellars point in the introductory quote that philosophy (or, for that matter, social inquiry more broadly) ought to contribute to our understanding of "how *things* in the broadest possible sense of the term *hang together* in the broadest possible sense of the term". Translated into the commonly used "metatheoretical" vocabulary in IR and the social sciences, "things" may *hang together* constitutively (or conceptually) and they may *hang together* causally. A *description* of different things – ie. the formation of concepts and the ordering of "the world" around us by drawing distinctions about what is the case – is as much about some form of

⁸ King, Keohane, and Verba 1994: 8, emphasis added.

⁹ Waltz 1979: 1, Gerring 2012.

¹⁰ Kuhn 1990: 309, emphasis added.

"hanging-together" as are those causal stories connecting "causes" and "effects" which we usually call "explanation".

3. The Primacy of Practice and the Necessity and Sufficiency of Redescriptive Sense-Making

One can read Wittgenstein in the introductory quotes as saying more or less the same thing when he hints that we should, in order to solve a (philosophical) "problem", develop "perspicuous descriptions" or "overviews" of how things are *connected* in everyday linguistic practices.¹¹ "We must do away with all *explanation*, and description alone must take its place".¹² Because words and concepts lack "precision" or "clarity" and because our cognitive and linguistic capacities are delimited the lack of "a clear view" calls for identifying connections by "finding" *and* "inventing" links.

Wittgenstein and the tradition of American pragmatism¹³ were not in synch on all key issues in what we, in the social sciences, sometimes call "philosophy of science", sometimes "epistemology". However, they did share positions on a few issues which are central in thinking about "the future" and, therefore, worth recalling in a contribution on the "epistemology" of future studies.¹⁴ In the following I will briefly summarize where I see those commonalities and explain why they are directly relevant to our ways of

¹¹ Wittgenstein 1958, § 122: "(A) main source of our failure to understand is that we do not *command a clear view* ["übersehen"] of the use of our words. – Our grammar is lacking in this sort of perspicuity ["Übersichtlichkeit"]. A perspicuous representation ["übersichtliche Darstellung"] produces just that understanding which consists of 'seeing connexions'. Hence the importance of finding and inventing *intermediate cases*" ["Zwischenglieder"] (emphasis in the original). §123: "A philosophical problem has the form: 'I don't know my way about' ["ich kenne mich nicht aus"]."

¹² "We must do away with all *explanation*, and description alone must take its place. And this description gets its light, that is to say its purpose, from the philosophical problems. These are, of course, not empirical problems; they are solved, rather, by looking into the workings of our language, and that in such a way as to make us recognize those workings: *in despite of* an urge to misunderstand them. The problems are solved, not by giving new information, but by arranging what we have always known." Wittgenstein 1958, §109 (emphasis in the original).

¹³ Robert Brandom, Richard Rorty's student and Wilfrid Sellars' colleague who is considered to belong to this tradition as well has characterized Sellars' philosophy as "pragmatism of a recognizably late-Wittgensteinian sort". He also ranks him as "the greatest American philosopher of the middle years of the twentieth century." Brandom 2015: 1, 5.

¹⁴ For a more detailed discussion see Grimmel and Hellmann 2016.

thinking about the future in general and the future in the field of international politics in particular. At its core it is an argument which combines the classical pragmatist doctrine about the *primacy of practice* ("beliefs are rules for action"¹⁵) with the *Gestalt switch* initiated by the *linguistic turn* which, in Richard Rorty's words "turned philosophers attention from the topic of experience towards that of linguistic behavior", thereby "break(ing) the hold of empiricism – and, more broadly, of representationalism".¹⁶ Let's elaborate on these two dimensions in turn.

The primacy of practice is widely regarded as "perhaps the central" principle of the pragmatist tradition.¹⁷ It is also unquestionably one of the principal beliefs driving the philosophy of the later Wittgenstein.¹⁸ According to this principle, the inevitability of individual and collective action is to be thought of as the necessary starting point of any theorizing about thought and action. Individual and collective action is largely habitualized and at the same time genuinely creative. As William James put it, the beliefs which guide our action live "on a credit system". They "'pass', so long as nothing challenges them".¹⁹ Yet since we cannot flee from interacting with each other and with the world (and since others and the world keep interfering with us and our beliefs) we habitually have to readjust our habits. In such "problematic situations" a very practical form of "inquiry" helps us to find appropriate new ways of coping with the respective problems at hand. Three (Sellarsian) "things" combine in producing new beliefs and habits: experience (roughly: the sum of past thoughts and actions of ourselves as well as others); expectation (i.e. hopes and fears as far as desired or disliked future states of the world are concerned); and *creative intelligence* (ie. "the function of the mind (...) to project new and more complex ends - to free experience from routine and from caprice").²⁰ The upshot of this emphasis on the primacy of practice is that the *genuine*

¹⁵ Peirce 1997(1878): 33; James 1995(1907): 18.

¹⁶ Rorty 2007: 160. On different readings of the "linguistic turn" see Rorty 1992(1967).

¹⁷ Putnam 1995: 52, emphasis in original.

¹⁸ On Wittgenstein as one of the key sources of "practice theory" or the "practice turn" see Schatzki 1996 and Stern 2003 respectively.

¹⁹ James 1995(1907): 80.

²⁰ Dewey 1917: 63 and Dewey 1991(1938): 41-47, 105-122, 248-251.

*creativity*²¹ and, thus, *necessary contingency* of social action has to be taken into account *when* we try to account for it in backward-looking explanations or forward-looking projections of social practice.

The significance of the linguistic turn comes into view when we think about our ways of *accounting* for (creative) human *practice* and (habitualized) social *practices*.²² In principle, the Peircean and Deweyan notion of "inquiry" applies in a similar fashion to ("practical") action based on some form of belief *and* to our ("theoretical") ways of *accounting* for action based on some form of belief.²³ Yet language plays a different role in each. Moreover, accounting for social action is fundamentally different from accounting for "nature" or the physical world. Since "nature" and "the world" do not "speak"²⁴ the natural sciences are dealing with a world that still needs to be "discovered" or "invented", as Heinz von Foerster once put it – it needs to be *grasped* in the first place.²⁵ In other words, the object of study of the natural sciences is, at least initially, *meaningless* – and insofar non-existent in an "epistemological" sense. Only after "marking the unmarked state" of nature by drawing (linguistic) distinctions²⁶ can we

²³ Dewey had obviously been strongly emphasizing the internal link between "theory" and "practice". The distinction between the two here is one which uses "theory" in a Gadamerian sense derived from the Greek *theoria*, which means "observing" and not merely "seeing". As Gadamer put it: Theory "does not dwell on a particular entity, but in a region. Theoria is not so much the individual momentary act as a way of comporting oneself, a position and condition. It is 'being present'" (Gadamer 1998: 31).

²⁴ One of the best discussions of the "contingency of language" in social action and human interaction in/ with "the world" and "nature" is still provided by Rorty 1989, chapter 1.

²⁵ Foerster 1984. The German word for "grasping" is "begreifen" – und the verb "begreifen" is related to the noun "Begriff" (or "concept"). In other words, to "grasp" what is going on in nature involves naming, describing or conceptualizing the things we observe.

²⁶ Brown 1972: 5.

²¹ The pragmatist understanding of *situated* and *genuinely creative* social action is most systematically reconstructed in Joas 1996.

²² This weak (!) distinction between (more strongly *creative* and *novel*) "practice" in the singular and (more strongly *routinized* or *habitualized*) "practices" in the plural is worth highlighting at least in a footnote since the so-called "practice turn" has reached those in IR who had been receptive to it mostly by encountering "ontological"/"epistemological"/"methodological" IR predispositions heavily infected by different versions of "positivism" or "scientific realism". The net effect of this encounter has been a form of IR "theorizing" of "practices" which has – from a Deweyan point of view – one-sidedly emphasized the *repetitive* features of "habits" which suited the *generalizing* "theory" instincts of positivist "science" much more easily than the Deweyan emphasis on the *genuine creativity of all social action* would allow for.

make sense of the physical world. In contrast, the social sciences are concerned with a social world *already constituted* by man-made concepts, rules and established practices of describing it. In other words, in doing social science we are necessarily engaging in *redescription* because we are dealing with a terrain that is already constituted and developed by means of human language and, thus, *conceptually autonomous* from our ways of sense-making as the natural world is not.²⁷

Yet, irrespective of whether we are engaging in ("natural sciences"-type) "scientific" *description* or ("social sciences"-type) *redescription*, both types of scholarly engagements are inquiring into "how things in the broadest possible sense of the term hang together in the broadest possible sense of the term" – and they necessarily express the "hanging-together" of these things *linguistically*. "Practice theorists" in IR could have taken note of this Wittgensteinian/pragmatist notion of "hanging-together" more broadly than they actually have had Ted Schatzki's often cited work of "Social Practices" been taken more seriously.²⁸ Schatzki had pointed early to the *connected* "practical" "hanging-together" of social practices *and* the "hanging-together" of our "theoretical" ways of sense-making:

"Human coexistence (...) is people forming what is best described with the German word *Zusammenhang*. A *Zusammenhang* is a state of held-togetherness. As suggested by the two words that render the German expression in English, 'nexus' and 'context,' a *Zusammenhang* is a hanging-together of entities that forms a context for each. Human coexistence is a hanging-together of human lives that forms a context in which each proceeds individually. This formulation is designed to accommodate states of sociality of varying breadths and complexity. Lives hang together in the microsituations of intimate relations, club activities, and classroom teaching as well as within the wider macrophenomena of economic systems, artistic practices, global communications networks, and international football. That by virtue of which lives in such formations hang together, moreover, is obviously varied and complex."²⁹

²⁷ This is most systematically developed in Gunnell 2014: 59-63. Gunnell's work in political theory and on Wittgenstein is particularly instructive in our context because he has also directly engaged with the scholarship of some influential IR "scientific realists" such as Alexander Wendt ad Colin Wight, see Gunnell 2011b.

²⁸ For an exception see Bueger and Gadinger 2014: 9-11 and 63-66.

²⁹ Schatzki 1996: 14.

Besides this "practical" side of social "hanging-togetherness", the "theoretical" side of *rendering* these social "things" *as hanging together* is emphasized in Wittgenstein's quote about "perspicuous representations" ("übersichtliche Darstellung"). Schatzki reads this passage, correctly in my view, as applying equally to the philosopher trying to understand "the use of our words" and the social scientist "grasping the spirit expressed in a practice." He adds that "grasping the spirit of a practice does not require penetrating or digging below the surface phenomena of life. It requires, instead, gaining a proper overview of the surface."³⁰

This is another way of saying – with Rorty's "pragmatic Wittgensteinians"³¹ – that our "grasping" of practice(s) requires no "digging below" what one may take to be "merely" "surface phenomena of life". Instead, gaining a *proper overview* of "the surface" is precisely what is needed – *and* what *must suffice* because there is nothing to be found "below the surface". The equivalent thought formed the core insight of the linguistic turn, at least as Rorty himself put it when he initially announced it: "(T)raditional philosophy has been (...) largely an attempt to burrow beneath language to that which language expresses." The adoption of the "linguistic turn" meant "that there is nothing to be found by such burrowing".³² "Burrowing beneath" stiffens the wrong-headed "descriptivist"³³ view that social "facts" are equivalent to natural facts and that we indeed *can and ought* to "infer to something broader that is not directly observed" "beyond the immediate data" which we can somehow easily "accumulate".³⁴

Sellars' "anti-descriptivism" and Rorty's "anti-representationalism" draw similar lessons from the bad "epistemological" accounts "about the relation between language and non-language" in the social world given by previous "theories of knowledge".³⁵ They build on

³⁰ Schatzki 1991: 318.

³¹ Rorty 2007: 161-175.

³² Rorty 1992(1967): 10.

³³ On empiricist "descriptivism" and Sellars' "anti-descriptivism" see Brandom 2015, esp. chpt. 1 and pp. 93–97.

³⁴ King, Keohane and Verba 1994: 8.

³⁵ Rorty 1979, esp. Part II, provides the by now classical critique of the very "idea of 'a theory of knowledge'".

the insight of the classical pragmatists who, in Louis Menand's pointed formulation, didn't "believe there is a problem with the way people think. They believe there is a problem with the way people think they think" – i.e. they believe that alternative "epistemologies" which separate thought and action are mistaken since they create misleading conceptual puzzles. In dissolving the "problem" of epistemology in the context of a unified theory of thought and action classical pragmatists "unhitched" human beings from "a useless structure of bad abstractions about thought".³⁶ They also prepared the ground for what Rorty, in hindsight, sees as "an unnecessary detour" of the "linguistic turn" in ceasing to "distinguish between knowing a language and knowing our way around in the world generally".³⁷ Sellarsian social "things" are not "out there" in the world which we represent (correctly or wrongly) as "data" or "mental entities". Instead such supposed "essences" have been discarded in favor of the view that our linguistic habits are to be thought of "as strings of marks and noises used by human beings in the development and pursuit of social practices".³⁸

In this view representationalism is problematic, because it misrepresents how we actually *make sense* of the past, the present and the future when we *redescribe* it in terms of how "things hang together". Representationalism misrepresents these ways of sense-making because it falls prey to what Andreas Schedler calls the "double false consciousness" of "dual reification".³⁹ "Dual reification" means that representationalists look at concepts in terms of the classical distinction between "mental creations" and "real objects" while at the same time reifying both sides of the mind–world distinction. The error of "reification of reference" lies in the mistake of treating what is referred to in the social world as *objects* with "observable" properties rather than taking it as a conventionalist linguistic abstraction of symbolic realities. The error of "reification of concepts" boils down to the mistake of treating concepts themselves as if they were tangible objects, fixed in time and space with observable properties instead of looking at them as tools for coping.

³⁶ Menand 1997: xi.

³⁷ Rorty 2007: 166.

³⁸ Rorty 1992(1967): 373.

³⁹ Schedler 2011.

Many influential "isms" in contemporary social science - ie. "(neo-)positivism", "scientific realism" and even many versions of "constructivism" – are committed to such a representationalist view. Alexander Wendt, for instance, who has been one of the most influential IR scholars during the past decades in shaping IR "meta-theoretical" discussions with his importation of "scientific realism"⁴⁰ implicitly defends a representationalist perspective when he chastises "anti-realist" "empiricists" and "postmodernists" to "privilege epistemology over ontology".⁴¹ His central charge in his early, "pre-quantum social science phase" was (and in that regard largely remains⁴²) that "anti-realist" empiricists and postmodernists did not sufficiently "ground meaning" and truth in an external world that regulates their content".⁴³ Instead of an empiricist "description theory of reference" or a postmodernist "relational theory" which "emphasizes relations among words" Wendt favored what he calls a "realist" causal theory of reference: "According to the causal theory the meaning of terms is determined by a two-stage process. First there is a 'baptism' in which some new referent in the environment (say, a previously unknown animal) is given a name; then this connection of thing-to-term is *handed down a chain of speakers* to contemporary speakers." At both stages "discourse" may "affect meaning". However, this "does not mean that meaning is entirely socially or mentally constructed. In the realist view beliefs are determined by discourse and nature" which presumably "solves the key problems of the description and relational theories: our ability to refer to the *same object* even if our descriptions are

⁴⁰ Note, for instance, that even ("political") "realists" such as John Mearsheimer and Stephen Walt who used to be seen as being located at the opposite ("epistemological") end of IR compared to (Wendtian) "constructivism" now refer to themselves as "scientific realists" (Mearsheimer and Walt 2013: 432).

⁴¹ A quick look at the usual "meta-theoretical" or "philosophy of science" debates in IR up until the 1980s shows that "ontology" – one of those "many strange and exotic specimens in the gardens of philosophy" which Sellars deconstructed already in the 1950s (Sellars 1956: 300) – did not bother too many IR scholars until Wendt introduced "scientific realism" to IR discourse in his IO article in 1987 (see Wendt 1987).

⁴² To be sure, todays "later Wendt" of "quantum social science" (Wendt 2015) has dropped a major part of the theoretical vocabulary of the "early Wendt". Yet in arguing "that human beings and therefore social life exhibit *quantum coherence* - in effect, that we are walking wave functions" and by insisting that this argument is not meant "as an analogy or metaphor, but as a realist claim about *what people really are*" he is essentially sticking with the core program of his early "realism" (Wendt 2015: 3, emphasis added; cf. Wendt 1999).

⁴³ All quotes in the remainder of this paragraph from Wendt 1999: 57; with the exception of the "and" connecting "discourse and nature" all emphases have been added.

different or change, and the resistance of the world to certain representations. Mind and language help determine meaning, but *meaning is also regulated by a mind-independent, extra-linguistic world.*"

The anti-representationalist position favored by Richard Rorty, Donald Davidson or political scientist John Gunnell, does not only entail a different grouping of "schools of thought". It also boils down to the argument that the strong distinction drawn by Wendt and fellow representationalists between "realists" and "anti-realists" misses a *fundamental similarity* in outlook among them and even arises as a problem only for representationalists:

"The idea that human knowledge aims primarily at giving an adequate representation of reality determines both picture-theoretic as well as constructionist epistemologies. Even though realistic picture-theories and antirealistic constructionisms apply different criteria of adequation and presuppose different concepts of reality, both remain within the paradigm of a representationalism that aims at correspondence. While the adequation of a representation is determined picture-theoretically by its relation to a represented transcendent object, the constructionist correspondence criterion is defined as immanent to the process of representation. The deciding question here is whether the representation of a state-of-affairs formally corresponds to the rules of the construction of something as something, understood as the conditions of the possibility of representation in general." ⁴⁴

Again, according to the anti-representationalist view the very idea that language "represents" objects "out there in the world" is misleading because it is based on what Donald Davidson calls the "dualism of scheme and world" which engenders talk about "relativism" (and its conceptual opposite, "absolutism") in the first place.⁴⁵ To be sure, the world and language are "both autonomous". But "the world only appears in the concepts embedded in our language or, as Wittgenstein put it, 'essence is expressed in grammar,' which 'tells us what kind of object anything is' (…) Wittgenstein emphasized

⁴⁴ Rorty 1991: 2.

⁴⁵ "Content and scheme (...) come as a pair, we can let them go together. Once we take that step, no objects will be left with respect to which the problem of representation can be raised. Beliefs are true or false, but they represent nothing. It is good to get rid of representations, and with them the correspondence theory of truth, for it is thinking there are representations that engenders intimations of relativism. (It is, of course, harmless to say true beliefs and thoughts are true because of the way the world is: they correctly 'represent' the world.)" Davidson 2001: 40, 46.

that it is in the application of language within human practices that language makes contact with the 'world' and that this was also where the 'world' finds expression."⁴⁶ Concepts, therefore, do not "refer" or "represent" things "in the world". Rather "they are kinds of things designated and discriminated by various forms of linguistic usage."⁴⁷

4. Narrating the Past and Future by Hanging Things Together

Acceptance of the primacy of practice and the necessity (and sufficiency) of redescription changes how we look at our ways of make sense of the past, present and future. Hindsight and foresight – my alternative suggestions for a host of largely synonymous concepts such as "historical explanation", "prediction" or "forecasting" which carry too much "epistemological" baggage – basically reflect a similar *narrative* structure.⁴⁸ When we explain (looking backward) or predict/ forecast (looking forward) we similarly combine what we take to be meaningful linguistic expressions in ways which help us to make sense of the past, present or future – and, thus, enable us to cope (better).

The explanations we give and the forecasts we offer gain credibility (or "validity"), and thus become candidates for what we consider to be "knowledge", not because we can claim a special status of "truth" for them but because these explanations or forecasts *resonate* in the sense that we are willing to *act* upon them. This is the old insight offered by Charles Sanders Peirce almost 150 years ago when he explained how we "fix" our "beliefs" as a result of an "irritation of doubt (which) causes a struggle to attain belief" – a "struggle" he termed "inquiry":

"The irritation of doubt is the only immediate motive for the struggle to attain belief. It is certainly best for us that our beliefs should be such as may truly guide our actions so as to satisfy our desires; and this reflection will make us reject any belief which does not seem to have been so formed as to insure this result. But it will only do so by creating a doubt in the place of that belief. With the doubt,

⁴⁶ Gunnell 2011a: 136; the reference is to Wittgenstein 1958, §§371, 373.

⁴⁷ Gunnell, ibid..

⁴⁸ On the role of narrative in general see Abbott 2002; on its role in history see White 1987; on "political narratives" see Gadinger et.al. 2014; on future narratives see Dahlhaus and Weißkopf 2017.

therefore, the struggle begins, and with the cessation of doubt it ends. Hence, the sole object of inquiry is the settlement of opinion. We may fancy that this is not enough for us, and that we seek, not merely an opinion, but a true opinion. But put this fancy to the test, and it proves groundless; for as soon as a firm belief is reached we are entirely satisfied, whether the belief be true or false. And it is clear that nothing out of the sphere of our knowledge can be our object, for nothing which does not affect the mind can be the motive for mental effort. The most that can be maintained is, that we seek for a belief that we shall *think* to be true. But we think each one of our beliefs to be true, and, indeed, it is mere tautology to say so."⁴⁹

Obviously, this view positions Peirce (as well as all subsequent pragmatists) clearly on the side of the anti-foundationalist and fallibilist critics of notions of "knowledge" as "justified true belief" because the qualifiers "justified" and "true" add nothing at all to the quality of "belief" to the extent that we are *willing to act* upon it. Of course, there is a difference between an *explanation* (or belief) about something that has already happened and a forecast (or belief) about something that lies ahead in the future in the sense that the former has been actualized whereas the latter remains in the realm of pure possibility for the time being. However, the function of the respective *belief* (as "know-how") is similar because it is considered to "justified" and "true" in both cases to the extent that we are willing to act upon it. There is also a certain difference if we aggregate *individual* beliefs at a *collective* level. However, this is a difference of degree, not of principle. "Believers" of the laws of gravity and "believers" of Jesus Christ, Karl Marx⁵⁰ or, for that matter, Donald Trump *act* upon their beliefs irrespective of whether what they believe in is doubtful for others. They are "entirely satisfied" that their beliefs

⁴⁹ Peirce 1877(1997): 13-14, emphasis in original.

⁵⁰ Richard Rorty frames the same argument in terms of his conviction that learning a particular *language* (in the sense of "vocabularies-as-wholes") involves acquiring novel (and potentially collective) beliefs: "When the Christians began saying 'Love is the only law', and when Copernicus began saying 'The earth goes round the sun', these sentences must have seemed merely 'ways of speaking'. Similarly, the sentences 'history is the history of class struggle' or 'matter can be changed into energy' were, at the first utterance, prima facie false. These were sentences which a simple-minded analytic philosopher might have diagnosed as 'conceptually confused', as false by virtue of the meanings of such words as 'law', 'sun', 'history', or 'matter'. But when the Christians, the Copernicans, the Marxists, or the physicists had finished redescribing portions of reality in the light of these sentences, we started speaking of these sentences as hypotheses which might quite possibly be true. In time, each of these sentences became accepted, at least within certain communities of inquiry, as *obviously* true." On Rorty's notion of "vocabularies-as-wholes" see Rorty 1989: 5-7; see also Brandom 2000: 167-171 and Rorty 2000: 187-189.

are "true" and "justified" *for them*. Wittgenstein hints that he equally sees little difference between *shared* "beliefs" and "knowledge" when he writes that "knowledge is in the end based on acknowledgement".⁵¹

This understanding of the direct link between "belief" and "action" is relevant for our understanding of hindsight and foresight because the underlying Peirceian and Deweyan notion of "inquiry" always applies in the same fashion to solve *practical* and *theoretical* problems.⁵² Irrespective of whether policy-makers in a defense ministry are devising a (forward-looking) medium-term security strategy, whether EU bureaucrats are developing "scenarios" for the future of the European Union⁵³ or whether "scholars" or other "experts" in the field of IR or European Studies are writing about these policy processes as "mere" observers – the underlying "theory of inquiry" (Dewey) is always applied to solve some problem in order to cope.

This is important because it differs fundamentally – "epistemologically" or "ontologically", depending on your preferred Sellarsian "exotic specimen" from "the gardens of philosophy" referred to above – from "empiricist", "positivist", "realist" or (in my preferred terminology) *representationalist* alternatives which stick to a strong "mind"/"consciousness" $\leftarrow \rightarrow$ "world" distinction. The very notion of "a 1: 1 correspondence between theory and reality"⁵⁴ is only the most recent version of representationalism in IR, even though it is now clothed in a "quantum" vocabulary. Its central problem from the point of view of a pragmatist ("beliefs are rules for action") vocabulary is that its *probabilistic*⁵⁵ view of quantum social action remains essentially stuck (as old-fashioned Hempelian logical empiricism and its many "positivist" IR variants) in the determinism of "scientific explanation" and "prediction" which, in Hempel's words, "have the same logical character: they show that the fact under

⁵¹ Wittgenstein 1975, §378: "Das Wissen gründet am Schluß auf der Anerkennung".

⁵² Recall that "theory" here simply carries the Gadamerian notion of "seeing what is" (Gadamer 1998: 31).

⁵³ European Commission 2017.

⁵⁴ Wendt 2015: 66.

⁵⁵ Cf. Wendt 2015: 3-4, 40, 154-161.

consideration can be inferred from certain other facts by means of specified general laws". 56

From a pragmatist point of view this is problematic because it systematically ignores the open-endedness of *possibility* as a result of genuinely creative social action – or, as Rorty and Brandom agree: it is problematic because representationalists *cannot* have any sense for "the role of vocabularies in changing what we want and even what we need".⁵⁷ In his later writings Rorty granted that earlier he may have been "in danger of over-romanticizing novelty by suggesting that great geniuses can just create a new vocabulary *ex nihilo*". Yet he continues to emphasize that "inquiry" ought to be understood "as enlarging our imagination, and thus our alternatives" rather than to think of it in terms of predictive success as "getting more and more things right".⁵⁸

A possibilistic (rather than a probabilistic or even deterministic) view of past- and future-oriented thinking may be seen to contrast too starkly with any reasonable understanding of "knowledge", even in the Peirceian understanding which takes it largely as collectively held belief. And indeed, there is a critical difference between "the past" which is "closed" in the sense of *actually having taken place* and "the future" which is "open" in the sense of still to be actualized in one way *or* the other. Yet even though the distinction between belief and action is primarily *analytical* rather than in any strong sense *temporal* (i.e. "action" temporally following "belief") past and future *practice(s)* are clearly distinct from our *ways of making sense* of actualized practices in the past and *possibly* actualized practices in the future. This is why, in real life, the difference between future-oriented "possibility" and "probability" may merely amount to the difference between a form of practical inquiry which is satisfied with creatively managing the evolving interplay between means and ends on the one hand and the epistemological idea (or fancy) on the other hand that the management of this interplay may somehow be "controlled" in percentage-terms as in the natural sciences. The *metaphorical* roots of

⁵⁶ Hempel 1958: 37.

⁵⁷ Rorty 2000: 188, Brandom 2000: 170.

⁵⁸ Rorty 2000: 188.

the German word for "probability" ("Wahrscheinlichkeit", literally: the *appearance* of *truth*⁵⁹) in any case strengthen that point.

Possibility therefore opens broader horizons for the future – and the past – which is why (in a very different sense compared to the Hempelian thesis of structural equivalence between explanation and prediction) hindsight and foresight are indeed not as distinct as strong "futurologist" research posits.

5. The Openness of Past and Future and the Promises of Possibilistic Imagination in Contrast to Deterministic and Probabilistic Projection

Prediction, forecasting or scenario-building as academic (or scholarly) tools of futureoriented projection usually imply (and entail) an assumption of *epistemic control* associated with notions of determinism or probabilism.⁶⁰ Possibilism, in contrast, might be thought of as a set of beliefs that things *may* hang together (or, for that matter, *be hung together* via narration) in ways which we may not (yet) understand because our ways of making sense of things have not (yet) developed a vocabulary to *make* such sense. The point of drawing this distinction between determinism and probabilism on the one hand and possibilism on the other is not that the former is somehow misleading whereas the latter is not. Rather it is to point to a dimension of *openness* of past and future with *possibilities* of social action which we cannot yet describe because of the genuine creativity of social action (which, of course, includes both the creativity of the action itself as well as the creativity in coming up with cogent descriptions) and which deterministic or probabilistic forms of foresight may fail to appreciate sufficiently.

This is another way of saying that belief in the fundamental *contingency* of social action cautions us to systematically allow for *possibility* in making sense of both the past and the future. Geoffrey Hawthorn has developed this argument most thoroughly with regard to historical explanation by pointing out that in explaining social phenomena we always face the *inherent* paradox that *possibilities* at once decrease *and* increase. The

⁵⁹ On the conceptual history of "Wahrscheinlichkeit" see Blumenberg 1960: 88-105.

⁶⁰ "Probabilism" here stands for a belief (or "epistemology") that opinions display different grades of plausibility or rationality in the sense of being justifiably acknowledgeable as *true* belief; see Jeffrey 1992: 44-45.

former is obvious since we expect a good explanation to identify those causes which made a *particular* outcome possible (rather than some alternative). However, the better our explanation the more it will have to draw on counterfactual reasoning, that is, engage in a discussion of plausible *alternative* developments: if we were to slightly change some of the initial conditions, an alternative path would have been more plausible instead. In other words, the force of an explanation turns on the counterfactual which it implies – and in this sense, the horizon of possibilities is also systematically increasing in any good explanation as it decreases.⁶¹ These possibilities, however, are not *knowable* in the positivist sense of "precisely" locating counterfactuals⁶² since we do not dispose of a reliable method to "precisely" define the *horizon* of possibilities making up the world. In any case, the notion of a *complete description* of *all* available possibilities would at least be incompatible with a belief in the genuine creativity of human agency.⁶³

In this sense, Hawthorn argues, we can achieve better *understanding* of the past by exploring the possibilities implied in counterfactual reasoning, but we can never "know" the past in any strong sense. The corollary of this argument as far as foresight is concerned is, in analogous fashion, that our grasp or understanding of the future may improve to the extent that we explore as broad a range of possibilities as possible. Yet here the critical difference between past and future – the former actually having been *actualized*, whereas the latter has not – multiplies the complication of counterfactual reasoning (ie. that possibilities increase *and* decrease at the same time) since we lack

⁶¹ "An explanation, in short, locates something in actuality, showing its actual connections with other actual things. Its success as an answer to the question 'why' will turn on the plausibility of the reasoning (...) that we invoke to make the connection. The plausibility of this reasoning will turn on the counterfactual it suggests. And if the counterfactual is itself not plausible, we should not give the explanation the credence we otherwise might. (...) Yet causal possibilities, if they remain merely possible, are not actualised. Practical possibilities are before the event at most actualised in someone's thoughts, as something that an agent or set of agents might have done or might yet do; after the event, in celebration or regret. Possibilities are not items at any world or in any head on which we can suppose that we or actual agents will cognitively converge, or about which, even if we do, they could be said to be certain, and thus to know" (Hawthorn 1991: 17).

⁶² For instance, given their necessarily deterministic (or at least probabilistic) understanding of causality King, Keohane, and Verba, believe that it is possible "to define the counterfactual conditions making up each causal effect very precisely" (King, Keohane, and Verba 1994: 89).

⁶³ Cf. Emirbayer and Mische 1998: 983-991.

the "factual" in counterfactual reasoning. In other words, possibilities are ubiquitous since we cannot even *know* how to reliably differentiate between the possible and the impossible. Ironically, Wittgenstein here provides a telling example about the insight that "what we believe depends on what we learn".

"We all believe that it isn't possible to get to the moon; but there might be people who believe that that is possible and that it sometimes happens. We say: these people do not know a lot that we know. And, let them be never so sure of their belief – they are wrong and we know it. If we compare our system of knowledge with theirs then theirs is evidently the poorer one by far."⁶⁴

Already in the late 1940s when Wittgenstein wrote these lines his *knowledge* claim about the impossibility of "getting to the moon" was contested by some who believed this to be possible in principle⁶⁵ even though nobody yet had the opportunity to practically *learn* that this utopia was realistic indeed. Thus, since beliefs about the possible and the impossible are a matter of learning and since we cannot know today what we may learn tomorrow foresight (ie. "understanding" the future based on a version of future-oriented "counterpossible" reasoning) is obviously more complicated than hindsight (ie. understanding the past based on counterfactual reasoning).

The conclusion to be drawn from this insight is not that future-oriented projections based on assumed (deterministic or probabilistic) epistemic control are useless. Rather, it is that the propagated (or, at least, *implicitly assumed*) epistemic *superiority* often associated with "theory"-based prediction, forecasting or scenario-building in contrast to more "fictitious" forms of imagination is precarious indeed. This is so not only because we (should) *know* that we cannot draw a clear line between the possible and the impossible but also because, practically speaking, "fictions also 'remake' human action or praxis as the practical fictions which are called ideologies and utopias".⁶⁶ Moreover, a welter of sociological research should have taught us that Robert Merton's adaptation of

⁶⁴ Wittgenstein 1975, §286.

⁶⁵ Robert H. Goddard, a recognized pioneer of space exploration, published a basic mathematical theory underlying rocket propulsion and rocket flight in 1919 which included calculations about reaching the moon, developments, Goddard argued, which "involve many experimental difficulties, to be sure; but they depend upon nothing that is really impossible" (Goddard 1919: 57); see also Clary 2003: 124-127.

⁶⁶ Ricoeur 1979: 123.

the "Thomas theorem"⁶⁷ in inventing the "self-fulfilling prophecy" provides for a constant constraint in our intellectual engagement with the future because futureoriented hopes or fears will inevitably affect subsequent developments to the extent that they become an integral part of the *projected* definition of the situation.⁶⁸

In international relations (as well as and in IR) there is a tendency to practice what Merton also assumes to be his definitional criterion of a self-fulfilling prophecy, ie. that fears (rather than hopes) dominate future-oriented thinking. For instance, one of the central practices of systematic future-oriented thinking in foreign policy-making, ie. threat assessment as a key ingredient of strategy-making and defence planning, is, by definition, based on bad-case or even worst-case thinking. Similarly the dominance (or at least: ubiquity) of "positivism" and "realism" in IR discourse also provides for an inbuilt disciplinary tendency towards conceiving of future possibilities in deterministic or probabilistic ways epistemologically and in sceptical or even pessimistic terms substantively.

Thus, practical as well as normative reasons can be mobilized why the expansion of horizons of possibility in future-oriented thinking may indeed be advisable. Rather than merely engaging the future deterministically or probabilistically a form of possibilistic "inquiry" which focuses on "enlarging our imagination" by adding *preferred* futures to *likely* futures will be helpful in that regard. Richard Rorty and John Rawls may differ on a number of issues. However, what Rorty calls "imagination" as a special form of "recontextualization" is similar to Rawls' plea for "realistic utopias". It is based on a distinction between inference and imagination.

"We speak of inference when logical space remains fixed, when no new candidates for belief are introduced. Paradigms of inference are adding up a column of figures, or running through a sorites, or down a flow-chart. Paradigms of imagination are the new, metaphorical use of old words (e.g., gravitas), the

⁶⁷ "If men define situations as real, they are real in their consequences" Thomas 1928: 572 quoted according to Merton 1995: 380.

⁶⁸ Merton 1948: 195.

invention of neologisms (e.g., "gene"), and the colligation of hitherto unrelated texts (e.g., Hegel and Genet [Derrida])".⁶⁹

Imagination, thus, expands "logical space" by allowing for new beliefs or vocabularies in a similar fashion as Rawlsian "realistic utopias" extend "what are ordinarily thought of as the limits of practical political possibility".⁷⁰ Emphasizing ends and goals as being "achievable"⁷¹ rather than focusing on forces or trends on trajectories beyond our control also has the advantage of encouraging agency to change or affect the course of events in terms of our preferences, including the possible side effects that might accrue as a result of the dynamics of self-fulfilling prophecies built on hopes rather than fears.

6. Conclusion

Nobody doubts that *things hang together* in the world *and* in our ways of making sense of the world. Contestation arises about the "how". Representationalists maintain that our ways of sense-making "correspond" to how things "really" are in the world. Antirepresentationalists, in contrast, emphasize that our ways of hanging things together in a constitutive or causal sense are primarily the result of bets that these ways of sensemaking will enable us to cope (better). One of the central arguments of this chapter has been that the basic narrative structure of sense-making applies in analogous fashion to the past (hindsight) and the future (foresight). We will not be able to achieve "knowledge" in the sense of *certainty* or "justified true belief" because the contingency of social action usually offers multiple possibilities for acting and for explaining such action. This is not a problem since knowledge as acknowledgement (i.e. as ways of sensemaking that resonate in relevant fields of social action) is all we can get - and all we need because it allows us to relate to the past and the future in terms of acting upon it. Allowing for an expansion of horizons of possibility does not only help to ease "epistemological" strictures it also allows to move beyond empiricist fixations on causal determinism and probabilism, especially as far as our ways of thinking about the future

⁶⁹ Rorty 19991: 94.

⁷⁰ Rawls 1999: 11.

⁷¹ Rawls 1999: 6.

is concerned. Since there is ample evidence that our desires and normative preferences influence both hindsight and foresight and since scholarship as well as practitionership in the field of international relations are shaped by a "realist" tendency to privilege threats over opportunity in future thinking, the injection of some imagination and a few "realistic utopias" in addition to the proliferating practice of forecasting and scenario building will not hurt.

Bibliography

Abbott, H. Porter (2002) The Cambridge Introduction to Narrative, Cambridge: Cambridge University Press.

Bernstein, Richard J. (1995) American Pragmatism: The Conflict of Narratives, in: Rorty and Pragmatism. The Philosopher Responds to His Critics, ed. Herman J. Saatkamp Jr., Nashville: Vanderbilt University Press, 54-67.

Blumenberg, Hans (1960) Paradigmen zu einer Metaphorologie, in: Archiv für Begriffsgeschichte, Vol. 6, 7-142.

Brandom, Robert B. (2000) Vocabularies of Pragmatism: Synthesizing Naturalism and Historicism, in: Robert B. Brandom, Ed. Rorty and His Critics, Malden, Mass.: Blackwell Publishers, 156-183.

Brandom, Robert B. (2015) From Empiricism to Expressivism. Brandom Reads Sellars, Cambridge, Mass.: Harvard University Press.

Brown, George S. (1972) Laws of Form. New York: Julian Press.

Bueger, Christian and Frank Gadinger (2014) Internationa Practice Theory. New Perspectives, Houndmills, Basingstoke: Palgrave Macmillan.

Burch, Robert (2017) Charles Sanders Peirce, in: The Stanford Encyclopedia of Philosophy, ed. Edward N. Zalta, URL = <https://plato.stanford.edu/archives/fall2017/entries/peirce/>.

Clary, David A. (2003) Rocket Man : Robert H. Goddard and the Birth of the Space Age, New York: Hyperion. Dahlhaus, Nora and Daniela Weißkopf, Eds. (2017) Future Scenarios of Global Cooperation. Practices and Challenges, Global Dialogues 14, Duisburg: Käte Hamburger Kolleg.

Davidson, Donald (2001) Subjective, Intersubjective, Objective, Oxford: Oxford University Press.

Dewey, John (1917) The Need for a Recovery of Philosophy, in: John Dewey et.al., Creative Intelligence. Essay in the Pragmatic Attitude, New York: Henry Holt and Company.

Dewey, John (1929) The Quest for Certainty. A Study of the Relation of Knowledge and Action, London: George Allen & Unwin.

Dewey, John (1991[1938]): Logic. The Theory of Inquiry (The Later Works, 1925-1953, Vol. 12, edited by Jo Ann Boydston), Carbondale and Edwardsville: Southern Illinois University Press.

Emirbayer, Mustafa and Ann Mische (1998) What is Agency?, in: American Journal of Sociology 103(4): 962-1023.

European Commission (2017): White Paper on the Future of Europe. Reflections and Scenarios for the EU27 by 2025, European Commission COM(2017)2025, Brussels.

Foerster, Heinz von (1984) Disorder/Order: Discovery or Invention, in Livingston, Paisley (ed.): Disorder and Order: Proceedings of the Stanford International Symposium (Sept. 14-16, 1981). Saratoga: Anma Libri, 177–189.

Gadamer, Hans-Georg (1989[1960]) Truth and Method (Second, Revised Edition, Translation revised by Joel Weinsheimer and Donald G. Marshall), London: Continuum.

Gadamer, Hans-Georg (1998) Praise of Theory (trans. by Chris Dawson). New Haven: Yale University Press.

Gadinger, Frank et.al. (2014) Politische Narrative. Konzepte, Analyse, Forschungspraxis, Wiesbaden: Springer VS.

Gerring, John (2012) Mere Description, in: British Journal of Political Science, 42:721-746.

Grimmel, Andreas and Gunther Hellmann (2016) Theory Must not Go on Holiday: Wittgenstein, the Pragmatists and the Idea of Social Science, Paper Presented at the Conference "Wittgenstein and Pragmatism", Helsinki Collegium of Advanced Studies, Helsinki University, May 16-17, 2016.

Goddard, Robert H. (1919) A Method of Reaching Extreme Altitudes, in: Smithsonian Miscellaneous Collections, 71(2), available at

http://www.clarku.edu/research/archives/pdf/ext altitudes.pdf (12 January 2018).

Grondin, Jean (2002) Gadamer's Basic Understanding of Understanding, in: Robert J. Dostal, Ed., The Cambridge Companion to Gadamer, Cambridge: Cambridge University Press, 36-51.

Gunnell, John G. (2011a) Political Theory and Social Science. Cutting Against the Grain, New York: Palgrave McMillan.

Gunnell, John G. (2011b) Social Scientific Inquiry and Meta-Theoretical Fantasy: The Case of International Relations, in: Review of International Studies 37, 1447–1469.

Gunnell, John G. (2014) Social Inquiry After Wittgenstein and Kuhn: Leaving Everything as It Is. New York: Columbia University Press.

Hawthorn, Geoffrey (1991) Plausible Worlds. Possibility and Understanding in History and the Social Sciences, Cambridge: Cambridge University Press.

Hempel, Carl G. (1958) The Theoretician's Dilemma. A Study in the Logic of Theory Construction, in: Concepts, Theories, and the Mind-Body Problem, (Minnesota Studies in the Philosophy of Science, vol. II), ed. Herbert Feigl, Michael Scriven, and Grover Maxwell, Minneapolis: University of Minnesota Press, 37–98.

James, William (1995[1907]) Pragmatism, New York: Dover Publications.

Jeffrey, Richard (1992) Probability and the Art of Judgement, Cambridge: Cambridge University Press.

Joas, Hans (1996) The Creativity of Action, Oxford: Polity Press.

King, Gary, Robert O. Keohane and Sidney Verba (1994) Designing Social Inquiry. Scientific Inference in Qualitative Research, Princeton: Princeton University Press. Kuhn, Thomas S. (1990) Dubbing and Redubbing: The Vulnerability of Rigid Designation, in C.W. Savage, (ed.), Scientific Theories, Minneapolis: University of Minnesota Press, 198-218.

Mearsheimer, John J. and Stephen M. Walt (2013) Leaving Theory Behind: Why Simplistic Hypothesis Testing is Bad for International Relations, in: European Journal of International Relations 19(3): 427-457.

Menand, Louis (1997) An Introduction to Pragmatism, in: Louis Menand ed., Pragmatism. A Reader, xi-xxxiv, New York: Vintage Books.

Merton, Robert (1995) The Thomas Theorem and the Matthew Effect, in: Social Forces 74(2): 379-424.

Merton, Robert K. (1948) The Self-Fulfilling Prophecy, in: The Antioch Review 8(2): 193-210.

National Intelligence Council (2017) Global Trends. Paradox of Progress, Washington, D.C.: Government Printing Office.

Peirce, Charles Sanders (1997[1877]) The Fixation of Belief, in: Louis Menand, Ed., Pragmatism: A Reader, New York: Vintage Books, 7-25.

Peirce, Charles Sanders (1997[1878]) How to Make our Ideas Clear, in: Louis Menand, Ed., Pragmatism: A Reader, New York: Vintage Books, 26-48.

Putnam, Hilary (1995) Pragmatism: An Open Question, Oxford: Blackwell.

Rawls, John (1999) The Law of Peoples, Cambridge, Mass.: Harvard University Press.

Ricoeur, Paul (1979) The Function of Fiction in Shaping Reality, in: Continental Philosophy Review (formerly: Man and World), 12(2), 123-141.

Rorty, Richard (1979) Philosophy and the Mirror of Nature, Princeton: Princeton University Press.

Rorty, Richard (1989) Contingency, Irony, and Solidarity, Cambridge: Cambridge University Press

Rorty, Richard (1991) Objectivity, Relativism, and Truth. Cambridge, New York: Cambridge University Press. Rorty, Richard (2000) Response to Robert Brandom, in: Robert B. Brandom, Ed., Rorty and His Critics, Malden, Mass.: Blackwell Publishers, 183-190.

Rorty, Richard (2007) Philosophy as Cultural Politics: Philosophical Papers Vol. 4. Cambridge: Cambridge University Press.

Rorty, Richard (Ed.) (1992[1967]) The Linguistic Turn. Essays in Philosophical Method. With Two Retrospective Essays, Chicago: The University of Chicago Press.

Schatzki, Theodore (1991) Elements of a Wittgensteinian Philosophy of the Human Sciences, in: Synthese 87, 311-329.

Schatzki, Theodore R. (1996) Social Practices: A Wittgensteinian Approach to Human Activity and the Social. Cambridge: Cambridge University Press.

Schedler, Andreas (2011) Concept Formation, in: International Encyclopedia of Political Science, SAGE Publications. 2 Dec. 2011. http://www.sage-ereference.com/view/intlpoliticalscience/n90.xml.

Sellars, Wilfrid (1956) Empiricism and the Philosophy of Mind, in: Minnesota Studies in the Philosophy of Science, Vol. I, ed. H. Feigl and M. Scriven, Minneapolis, MN: University of Minnesota Press, 253-329.

Sellars, Wilfrid (1963[1962]) Philosophy and the Scientific Image of Man, in: Wilfrid Sellars, Science, Perception and Reality, Atascadero, CA: Ridgeview Publishing Company, 1-40.

Stern, David (2003) The Practical Turn, in: Stephen P. Turner and Paul A. Roth, Eds., The Blackwell Guide to the Philosophy of the Social Sciences, Malden, Mass: Blackwell Publishing, 185-206.

Tilly, Charles (2006) Why? What Happens When People Give Reasons ... and Why, Princeton: Princeton University Press.

Waltz, Kenneth N. (1979) Theory of International Politics, Reading, Mass.: Addison-Wesley.

Wendt, Alexander (1987) The Agent-Structure Problem in International Relations Theory, IO. Wendt, Alexander (1999) Social Theory of International Politics, Cambridge: Cambridge University Press.

Wendt, Alexander (2015) Quantum Mind and Social Science. Unifying Physical and Social Ontology, Cambridge: Cambridge University Press.

Wittgenstein, Ludwig (1958) Philosophical Investigations (translated by G. E. M. Anscombe). Oxford: Basil Blackwell.

Wittgenstein, Ludwig (1975) On Certainty (Parallel Text, German and English), ed. and translated by G. E. M. Anscombe, Georg Henrik Wright, and Denis Paul, Oxford: Basil Blackwell.