# Framed and framing inquiry: A pragmatist proposal

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**Abstract**

In this article, I draw an important distinction between two kinds of inquiry. "Framed inquiries" take for granted and use a conceptual framework in order to ask and answer questions, while "framing inquiries" require the creation, revision, or expansion of the conceptual framework itself in order to address the problem at hand. This distinction has been largely ignored in epistemology, and collapsed by two radically opposed philosophical camps: representationalism and antirepresentationalism. While the former takes all inquiries to be in the business of discovering mind-independent facts, the latter takes all inquiries to be primarily governed by pragmatic considerations. Against the objections raised by both camps, I defend a pragmatist and substantive distinction between framed and framing inquiry, inspired by Rudolf Carnap's distinction between internal and external questions and reformulated in terms of John Dewey's theory of inquiry.

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## 1 Introduction

Consider two examples of inquiry:

*Inquiry 1* Biochemists study the effects of temperature on protein synthesis.[1]
*Inquiry 2* William Thompson builds a theoretical framework based on the notion of absolute temperature.[2]

I believe these two inquiries deserve a different epistemological treatment, so much so that they deserve to be classified as different kinds of inquiry. In Inquiry 1, research relies on a conceptual framework which is taken for granted and used in order to ask and answer questions. I call such inquiries "framed." In Inquiry 2, the conceptual framework is questioned, devised, or revised. I call such inquiries "framing." In the account I am defending, the distinction between the two types of inquiry is *substantive*, although it is neither sharp nor absolute.

My proposal for a new epistemological distinction is not without challenges. The substantivity of this distinction has been denied by two philosophical archenemies, representationalists and antirepresentationalists. According to representationalists like Theodore Sider, both inquiries are in the discovery business, and their answers can be assessed in terms of a representational standard, such as correspondence with the world. Inquiry 1 discovers particular

[1] See, for example, Imbert and Gancel (2004).
[2] For a historical and philosophical account of Thomson's inquiry, see Chang (2004) and van Fraassen (2008).

facts about the interaction between temperature and proteins, while Inquiry 2 discovers facts about the nature of temperature itself. According to antirepresentationalists like Richard Rorty, none of these inquiries can be viewed as discovering mind-independent facts, and their answers can only be assessed in terms of pragmatic or social standards such as usefulness, fruitfulness, or agreement between peers.

The fact that such two radically conflicting positions can agree on one thing – that there is no substantive or interesting distinction to be made between framed and framing inquiries – does not bode well for my proposal, which faces objections coming from two opposite directions. Representationalists want to account for our realist intuitions concerning both kinds of inquiries, which appear to be equally factual and constrained by how things are. Antirepresentationalists reject the idea that the world might have an authority over our language and our beliefs, as well as the distinction between questions of meaning and questions of fact.

I have an ambitious goal, which is to defend a pragmatist account of the distinction capable of addressing the objections coming from representationalism and antirepresentationalism. The proposal I am defending here is similar in spirit to Rudolf Carnap's distinction between internal and external questions and Thomas Kuhn's distinction between normal and extraordinary science, and is formulated in terms of John Dewey's theory of inquiry. I also have a more modest goal, which is to convince epistemologists that there is *something there*, i.e., a substantive and interesting distinction to be made between framed and framing inquiry, although it might be formulated in different terms.

In Section 2, I present the philosophically neutral formulation of the distinction, before presenting Carnap's distinction between internal and external questions. In Section 3 and 4, I present two ways in which the distinction has

been collapsed: representationalism and antirepresentationalism, as well as the motivations for assimilating framed and framing inquiry. In Sections 5 and 6, I defend my pragmatist formulation of the distinction, starting with the notion of conceptual framework. In Section 7, I address the objections raised by representationalists and antirepresentationalists against the Carnapian distinction, and show that my account of framed and framing can respond to them. In the concluding remarks, I draw the consequences of my proposal for epistemology and its relation to pragmatism.

## 2 Preliminary formulation of the distinction between framed and framing

In this section, I present a philosophically neutral formulation of the distinction between framed and framing inquiry. By "philosophically neutral," I mean that most of the terms employed (concept, meaning, knowledge) are left uninterpreted at the philosophical level. In its neutral formulation, the distinction between framed and framing inquiry is a distinction that all philosophers should be able to acknowledge, even if they go on to give very different interpretations of it.

The distinction relies on the notion of conceptual frameworks. Conceptual frameworks can be defined minimally as networks of concepts and methods, both implicit and explicit, more or less systematically organized, and usually tied to a specific domain or a specific approach to a domain. For example, we can distinguish between the conceptual framework of particle physics and that of ordinary middle-sized dry goods, the conceptual framework of intersectional sociology and that of neurobiology. (There can also be overlaps between frameworks.)[3] I define concepts minimally and functionally as placeholders for

[3] As should be clear from this, the idea of conceptual frameworks at play should not be confused with the idea of a global conceptual scheme that stands between us and the world attacked by

whatever is expressed by terms and predicates, independently from the way they are further defined (as linguistic classificatory devices, mental representations, general or abstract ideas, meanings, linguistic norms governing the use of a term, etc.).

In the course of a situation, conversation, or inquiry, conceptual frameworks can be taken for granted and used to express particular beliefs or asking and answering questions: I will call such cases *framed*. Or they can be challenged, revised, expanded: I will call such cases *framing*. In the following sections, I will be exclusively interested in framed and framing *inquiries*. I define inquiry minimally as an activity of resolving some doubt, answering a question, assessing the validity of a statement, proposal, theory.

In ordinary life, it is fair to say that situations are mostly *framed*. I look around me and immediately see objects of a certain kind, possessing certain properties: red chairs, green grass, dark clouds that I take as signs of impending rain. I wonder what the temperature of the room is, and check the thermometer, which tells me that it is 19°C. In the latter case, I take for granted and make use of the conceptual and operational framework of temperature (definitions and theories of temperature, measuring instruments and procedures) without even realizing it. However, we can also find ourselves in *framing* situations. For example, we can realize that our concepts are ill-formed, or ill-adapted to the situation, and require to be changed: this is the case of activists calling for the modification of our concept of *woman* so as to include trans women in its extension. We can disagree on the correct application of a given term in a certain context: this is the case of "metalinguistic negotiations," as described by

Davidson (2001). My notion is closer to what Michael Lynch calls the "neo-Kantian, broadly Wittgensteinian" notion of conceptual framework, which he argues is not liable to Davidson's attacks (Lynch, 1997); see also (Baghramian, 1998). I also follow Carnap (1950a) and Teller (2021) in using a *local* notion of conceptual frameworks, although like Teller, I do not assume clear-cut boundaries or identity conditions for conceptual frameworks. What we take to be the scope of a conceptual framework depends on our unit of analysis, which itself depends on the problem we are concerned with, or what practice or discourse we want to describe and explain (Teller, 2021, S5018).

Plunkett and Sundell (2021). Similarly, physicists working on temperature in the 18$^{\text{th}}$ and 19$^{\text{th}}$ centuries were not merely applying existing concepts but creating and revising concepts such as *temperature* (understood as a theoretical quantity) as inquiry progressed, devising instruments and ways of operationalizing the concept, and relating them to other concepts such as *pressure*. The most dramatic examples of framing in scientific inquiry are discussed under "conceptual change" in philosophy of science.

One useful way to think about this distinction is in analogy with the legal domain. In some trials, the case falls neatly under the categories of the civil law or common law (depending on the judicial system). The judge's decision is primarily based on a legislative framework which consists in a set of rules classifying and qualifying types of offenses and the legal consequences that ensue (civil law) or a body of law derived from judicial decisions of courts and tribunals (common law). The judgment therefore consists in applying the existing framework to the particular case at hand. However, there are also cases which do not have any legal precedent, for which existing laws conflict, are ambiguous, or are deemed unfair. In those cases, depending on the judicial system, a creative decision has to be made by the judge, which sets a precedent for future similar cases (common law), or new legislation has to be passed, under which future similar cases will be subsumed (civil law). The legal analogy is particularly useful because different legal systems and theories can be chosen to fit one's preferred philosophical account of the framed–framing distinction: common law is best if one considers the distinction to be gradual, civil law if one thinks it is sharp, positivism if one believes the norms of the framework come from the practice itself, natural law if the norms themselves need to conform to a transcendent standard, etc. I will be using the analogy in the next sections in order to bring out the differences between these different accounts.

## 2.1 Carnap's internal and external questions

The distinction I want to develop has more or less explicit ancestors or cousins in the history of philosophy. Such accounts can be divided into (at least) two categories: those that interpret the difference between framed and framing as nonsubstantive and epistemologically insignificant, and hence tend to collapse the distinction; and those that interpret the distinction as substantive. Within the latter category, some of its ancestors or cousins are: Kant's distinction between determinant (*bestimmende*) judgments and reflective judgments (Kant, 2008); Carnap's distinction between internal and external questions (Carnap, 1950a); Kuhn's distinction between normal science and extraordinary or revolutionary science (Kuhn, 1962); recent work on the constitutive or relativized a priori (Friedman, 2001; Stump, 2015; Creath, 2010) developing Reichenbach's (1965) and C. I. Lewis's (1923) thought. In this section, I will focus on Carnap's formulation of the distinction, as first presented in "Empiricism, Semantics, and Ontology" (1950a).

Carnap's distinction between internal and external questions rests on the notion of linguistic frameworks, which consist in languages with syntactic rules (formation and transformation rules for propositions) and semantic rules (stating the vocabulary, meaning postulates, truth conditions). For example, the "thing language" is used to talk about ordinary objects such as cats, trees, and chairs (Carnap, 1950a, 22). Another example is the system of natural numbers in mathematics (Carnap, 1950a, 24).

Based on the notion of linguistic frameworks, Carnap distinguishes between two kinds of questions. *Internal questions* are formulated and answered within a particular linguistic framework. For example, within the thing language, we can ask "Is there a white piece of paper on my desk?," "Did King Arthur

actually live?," "Are unicorns and centaurs real or merely imaginary?" (Carnap, 1950a, 22). Inquirers use the linguistic framework without questioning the utility of certain concepts or the linguistic framework as a whole. *External questions*, on the other hand, are questions about the linguistic framework itself. They concern the introduction of new semantic rules for a new kind of entities, the decision to adopt a linguistic framework rather than another, or the replacement of a vague and inexact concept with a more precise and exact concept, which Carnap calls "explication" elsewhere (Carnap, 1950b).

According to Carnap, the semantic properties and assessment of answers to internal or external questions are importantly different. Internal questions are "theoretical," i.e., they concern what is or is not the case, and "cognitive," i.e., they admit true-or-false answers, which are discovered by empirical inquiry in the case of an empirical linguistic framework or by reasoning in the case of a formal linguistic framework. By contrast, external questions are "practical question[s], a matter of a practical decision concerning the structure of our language" (Carnap, 1950a, 23), i.e., they concern what to do, and they are "non-cognitive," i.e., their answers are neither true nor false, but convenient or inconvenient, satisfactory or unsatisfactory.

In that article, Carnap introduced the internal/external distinction in order to criticize metaphysics, which is why he is mainly concerned with ontological or existence questions. According to him, metaphysicians make the mistake of asking external questions about, for example, the existence of a whole system of entities such as physical objects, propositions, or numbers, and treating them as if they were theoretical questions admitting of true-or-false answers ("Do numbers *really* exist?"). Instead, Carnap claims that legitimate questions about existence are internal questions, and their answers are either trivially

true (numbers do exist according to the linguistic framework quantifying over numbers) or answered in empirical inquiries (horses exist, unicorns do not).

Carnap's account of the distinction has two important characteristics: it draws a sharp and substantive distinction between internal and external questions. The distinction is *sharp* because the rules constituting the framework are clearly distinct from the sentences in the object-language, and the process of creating, revising, and choosing between frameworks is clearly separate from the process of using and applying the framework. To pursue the legal analogy, Carnap's distinction can be modelled on civil law, by contrast with a common law system, where there is no proper distinction between the law and the judgments issued in courts. The distinction is *substantive* because there is a genuine semantic and/or epistemological difference between the two processes. In what follows, I will show that Carnap's particular way of formulating and interpreting the distinction faces important challenges from both representationalists and antirepresentationalists. After introducing such challenges, my goal will be to show that my own formulation of the distinction between framed and framing inquiry avoids the shortcomings of the Carnapian distinction.

## 3 Collapse under representationalism

I now turn to accounts that collapse the distinction into a *nonsubstantive* one: representationalism and antirepresentationalism. Both stances provide motivations for collapsing the distinction and objections against Carnap's distinction, although they end up in radically different places.

Representationalism is best characterized as a philosophical stance: it is exemplified by a certain approach to some philosophical problems, and covers a variety of conflicting positions, while also including a shared set of philosophical beliefs about the nature of thought or language. On the representationalist

view, concepts and conceptual frameworks are primarily understood as representational devices. There are semantic word-world relations such as reference and truth that relate our language (concepts, terms, predicates, sentences) to the world (objects, properties, state of affairs, facts).[4] Such word-world relations are normative: they provide the (semantic) standard of correctness for our language and claims.[5]

Representationalists generally face a problem of scope: some of our predicates, and even whole domains of discourse, do not seem to genuinely represent the world. Many of our ordinary concepts are highly conventional: what activities count as games or what dishes count as *ratatouille* depend on current practices and contextual considerations. Accordingly, representationalist views most often come with a distinction between *privileged* conceptual frameworks, which purport to accurately represent reality (typically, scientific or metaphysical ones), and *non-privileged* conceptual frameworks, which fail to accurately represent reality in some way or another, and might have been devised in order to serve other needs and interests. There are different ways of drawing this distinction. Some philosophers claim that whole domains of discourse, such as mathematics, morality, or modality, systematically fail at representing the world (eliminativism, error-theory, fictionalism), or are simply not in the representational or descriptive business (local expressivism). Other philosophers, like Sarah Sawyer (2021), use an externalist semantics in order to distinguish between concepts with a "mind-to-world" direction of determination, such as

[4]For the sake of simplicity, I will be focusing on *linguistic* representationalism, which is most widespread today; the same argument can be made for a kind of representationalism in which language is only secondarily representational, and thoughts or ideas are the primary representational stuff.

[5]Rorty, who contributed to the definition of representationalism by attacking it, placed the idea of the normativity or authority of the world is at the core of representationalism (Rorty, 1999b). More recently, Dasgupta (2018) argued that realism consists in two independent claims: one of "pure metaphysics," concerning the word-world relations that obtain objectively, and a "value-theoretic claim," "to the effect that the metaphysical posit functions as an objective standard against which our theorizing is to be assessed" (Dasgupta, 2018, 283).

*game* or *juice*, and concepts with a "world-to-mind" direction of determination, such as *water* or *tiger*. While the former ultimately depend for their individuation on our communal conceptions or beliefs, the latter are ultimately individuated "by relations between a thinker and objective properties with instances of which she stands in an appropriate causal claim" (Sawyer, 2021, 6). Others draw a gradual distinction between concepts or predicates that are more or less "natural" (Lewis, 1983) or "joint-carving" (Horgan and Timmons, 2002; Sider, 2011). According to Sider, a concept is joint-carving if it matches the world's structure. Concepts like "electron" carve nature at the joints, while gerrymandered concepts like "being an electron or a cow" are "bizarre carvings" that do not match the world's structure (Sider, 2011, 1-2).

In the case of *privileged discourses*, representationalists assimilate framed and framing inquiries, in the sense that both are interpreted as discovering mind-independent facts. I will take Sider's and Sawyer's views as examples. At first sight, representationalists have room for a substantive distinction between framed and framing inquiries, which appear to be about different things and have different goals. Framing inquiries involve questions about the conceptual framework itself and ways to improve it, such as how to define "electron," "mass," and "virus," while framed inquiries are directly concerned with the objects that the conceptual framework allow us to talk about: electrons, mass, and viruses. However, the two activities actually amount to the same thing. In the context of Sider's work, framing inquiries can be understood on the model of substantive debates aimed at finding and choosing the most joint-carving "candidate meaning" for a term (Sider, 2017). For example, in the course of the development of the scientific theory of mass, physicists put forward several candidate meanings by defining "mass" in different ways. These candidate meanings are not all equally joint-carving. Based on what we know,

the meaning of "mass" in Einstein's theory is more joint-carving than "mass" in Newton's theory, although there could be an even more join-carving meaning that physicists have not discovered yet. We might be mistaken, but which candidate meaning is the most joint-carving is an objective, mind-independent matter, in which purposes and interests play no role (Sider, 2011, 6).

On Sawyer's account of conceptual engineering (which can be understood as a kind of framing inquiry), the goal is to change our conceptions (beliefs and theories) and our linguistic meanings (understood as patterns of use and deference) so as to get as close as possible to the nature of the referents of our concepts.[6] In changing the classification of whales (from fish to mammals), we corrected our conceptions of whales and aligned our use of the term "whale" with a previously unknown fact about "the nature of whales" (Sawyer, 2020a, 386), namely, their being mammals rather than fish. In that sense, this type of inquiry is not substantially different from other empirical inquiries, say, into the reproduction habits of whales – its only specificity is that it is "a form of theorizing that involves a revision in the use of a term" (Sawyer, 2020b, 1009). Furthermore, for Sawyer, the answers to framing inquiries can be assessed in terms of truth and falsity: "the correct explication of a concept would provide a true characterization of the subject matter" (Sawyer, 2020b, 1009). While she does not mention Carnap, her claim is meant to be in clear contrast with Carnap's account of explication. As with external questions, Carnap writes about explication that, "[s]trictly speaking, the question whether the solution is right or wrong makes no good sense because there is no clear-cut answer. The question should rather be whether the proposed solution is satisfactory" (Carnap, 1950b, 4). By contrast, on Sawyer's account, the new definition of "whale" as a kind of mammal is not merely useful but true (assuming, of course,

[6]Sawyer makes a distinction between (linguistic) meaning and (representational) concept, which is inspired by Frege's distinction between sentence and proposition, language and thought (Sawyer, 2020a).

that scientists settled on the correct answer), while the previously received definition of "whale" as a kind of fish is false.

On the representationalist account, mass itself, or whales themselves (the properties or kinds that exist in the world) can be the ultimate standard of correctness for different candidate meanings or definitions precisely because they are the legitimate referents of the terms "mass" or "whale," regardless of the historical shifts in meaning and theory: "When a term like 'mass' is introduced in physics, it's intended to stand for a fundamental physical magnitude, and so if there's a joint-carving property in the vicinity then that property is meant by 'mass,' even if it doesn't quite fit the physicists' theory of 'mass'" (Sider, 2011, 32). This is possible because, according to Sider, fundamental or natural properties are "intrinsically eligible meanings" or "reference magnets" (Sider, 2011, 27).

The only interesting difference that remains between framed and framing might be that framing inquiries produce knowledge at the most general level (for example, the essential properties of electrons) while framed inquiries also produce knowledge at the particular level (for example, how electrons behave in specific conditions).

The representationalist collapse of framed and framing inquiry is primarily motivated by realist intuitions, which also constitute objections against any attempt at maintaining the distinction in a Carnapian way:

*Realism* The correct way to construct and revise our conceptual frameworks is dictated by how things are, rather than by our interests and purposes.

On Carnap's view, external questions are about language rather than about the world, and their correct answers are decided by our purposes or interests rather than by the world itself. However, it seems that when scientists are concerned with the best way of defining "electron," there is an important sense in which

their inquiries are about electrons themselves, rather than merely about the word "electron" (or its associated meaning, concept, idea) (Sider, 2011, 44-45). Relatedly, it does not seem to be up to us or dependent on our interests whether we should introduce a new class of entities, such as electrons, in our linguistic frameworks, nor how they should be defined. For the representationalist, any account that rejects this idea inevitably leads to counter-intuitive positions, such as subjectivism, according to which electrons are grouped together in our conceptual frameworks purely because it pleases us or it is useful for us to do so, or a magical kind of idealism, according to which by adopting certain ways of talking, we can make things exist or determine what features they have. The appeal to subjectivism and idealism as a *reductio ad absurdum* of a philosophical position is very effective, as the counter-intuitive nature of such views is usually enough to discredit them or any philosophical position that seemingly leads to them, with no need for further argument: "It is really, really hard to believe that the fact that electrons go together, in a way that electrons-or-cows do not, is merely a reflection of something about us" (Sider, 2011, 18).[7]

## 4 Collapse under antirepresentationalism

Antirepresentationalists have collapsed the distinction between framed and framing in the opposite direction, by extending Carnap's treatment of practical external questions to all questions. I take William James' and Rorty's pragmatism as representatives of this position, although it should be noted that their position has been expressed more subtly in other passages.[8]

As the name indicates, antirepresentationalism is based on the rejection of representationalism: the assumption according to which the primary

[7]Beyond the expression of disbelief, arguments *have* been formulated against subjectivism, idealism, and relativism. For an overview, see Boghossian (2013).

[8]I cite one such passage in section 7.

function of language is to represent the world, and with it, representationalist standards of correctness such as accuracy of representation, joint-carving, or correspondence, and the distinction between privileged and non-privileged conceptual frameworks. Instead, antirepresentationalists emphasize the plurality of conceptual frameworks and the plurality of their uses and purposes:

> There are so many geometries, so many logics, so many physical and chemical hypotheses, so many classifications, each one of them good for so much and yet not good for everything, that the notion that even the truest formula may be a human device and not a literal transcript has dawned upon us. (James, 2000, 58).

> [T]he vocabulary of science is merely one among others — merely the vocabulary which happens to be handy in predicting and controlling nature. It is not, as physicalism would have us think, Nature's Own Vocabulary. (Rorty, 1982, 140).

Returning to the legal analogy will be useful for comparing the two stances. *Representationalism* is akin to natural law theory. The postulation of a natural law that provides the standard of correctness for the positive law encoded in legal frameworks is equivalent to the postulation of the structure of the world as the standard of correctness for our conceptual frameworks. Both particular judgments and decisions to change legal frameworks can be assessed in terms of correspondence with the natural law, in the same way that answers to framed and framing inquiries can be assessed in terms of their correspondence with the world. *Antirepresentationalists* eliminate the reference to the natural law as an external standard for action as well as to the mind-independent world as an external standard for language and belief.[9] According to Rorty, such postulations "add nothing to our ordinary, workaday, fallible ways of telling right from wrong, and truth from falsity" (Rorty, 1999b, 9). Instead, our only

[9]Rorty himself drew the parallel between the rejection of external standards for action ("the Will of God") and belief ("the Intrinsic Nature of Reality") (Rorty, 1999b, 7).

available standards are internal to our social practices, such as usefulness, verification, or consensus between peers.

The motivation for collapsing the distinction in the antirepresentationalist direction comes from holism and the rejection of the idea that we could neatly separate between, on the one hand, the contribution of the mind (concepts, categories, meanings, languages), and on the other hand, the contribution of the world (experience, sense data, facts). This rejection was formulated by Quine (1951) and developed by Rorty in its explicitly antirepresentationalist version (Rorty, 1979), which itself influenced Brandom (1994, 2000b):

*Attack on the meaning/belief distinction* There is no way of sharply distinguishing between (stipulated) meanings and (empirical) beliefs, or between analytic and synthetic sentences.

Against Carnap's notion of linguistic framework, which allows for a strict separation between analytic and synthetic sentences, Quine defends a holistic notion of "conceptual scheme," conceived as a web of beliefs which "impinges on experience only along the edges" (Quine, 1951, 39). The laws of logic are at the centre of the web, followed by fundamental principles in science, while empirical beliefs such as "There is a red cup in front of me" are at the periphery. According to Quine, all beliefs, including the ones at the core of the web of beliefs, are revisable. On this point, Quine's view does not differ from Carnap's, since Carnap takes linguistic frameworks and their rules to be revisable.[10] Where Quine's view differs is in its rejection of any principled distinction between sentences that are true or false in virtue of meanings, in the sense of freely stipulated linguistic rules immune to *empirical* revision, and sentences that are true or false in virtue of experience. For Quine, all that remains from

[10] As Friedman notes (2002, 176), Quine sometimes misleadingly equated the analytic/synthetic distinction with the distinction between truths that are immune to revision, and truths that are revisable in light of experience.

the distinction between analytic and synthetic sentences is that some beliefs are harder to give up in the face of experience because they would entail an important reorganization of the web of beliefs, while others (nearer the "periphery") are more easily revisable.

The consequence of holism is that it is no longer possible to distinguish between inquiries that revise our meanings and inquiries that apply them and in so doing simply add to our body of factual, empirical beliefs, or between pragmatic questions of meaning (external questions) and empirical questions of fact (internal questions). According to Brandom, Quine attacks "the Kantian strategy of sharply distinguishing between the activity of *instituting* conceptual norms (fixing meanings) and the activity of *applying* those norms (forming and expressing beliefs)" (Brandom, 2000b, 156). For example, if I think that acid is that which tastes sour and turns litmus paper red, and I "run across something that tastes sour and turns litmus paper blue," it is not clear whether my decision to call it acid or not should "count as a change of belief about acids or a change in what I mean by acid" (Brandom, 2000b, 176).

So far, holism alone does not automatically warrant a collapse of the distinction between framed and framing inquiry in the *antirepresentationalist* direction. For that, we need another motivation:

*Inescapability of pragmatism* All inquiries and questions involve pragmatic considerations.

The result of holism, for Quine, is "a more thorough pragmatism" (Quine, 1951, 43). As Quine notes, "Carnap, Lewis, and others take a pragmatic stand on the question of choosing between language forms, scientific frameworks; but their pragmatism leaves off at the imagined boundary between the analytic and the synthetic" (Quine, 1951, 43). For Carnap, once the freely chosen linguistic framework is fixed, the correct answers to our internal (empirical)

questions are determined by facts or experience. For Lewis, the a priori alone is "malleable to our purpose" (Lewis, 1923, 177), by contrast with "brute fact, the a posteriori element in knowledge" (Lewis, 1923, 169).[11] For Quine, *all* our inquiries and questions will necessarily involve pragmatic considerations regarding the best way to reorganize the whole web of beliefs: he agrees with Carnap that the question regarding the existence of classes is a question "of choosing a convenient conceptual scheme or framework for science ... only on the proviso that the same be conceded to regarding scientific hypotheses generally" (Quine, 1951, 43). Thus, Quine extends the pragmatic factor to all questions. This is the lesson that Rorty learnt and built upon.[12] In some texts, Rorty equates the norm of truth and the norm of justification, which he defines in terms of consensus between peers (including future audiences), and which he applies to the evaluation of the vocabulary of Newtonian physics (Rorty and Searle, 1999, 48), the concept of *giraffe* (Rorty, 1999a, xxvi) as well as the belief that there are rocks (Rorty, 1990). For Rorty, whether we are revising our concept of *giraffe* or describing the features of West African giraffes, our answers can only be evaluated in terms of usefulness or justification, rather than in terms of accurate representation of giraffes and their features.

## 5 A pragmatist account of conceptual frameworks

My goal is to defend a pragmatist *and* substantive distinction between framed and framing, while avoiding the objections raised by representationalists and antirepresentationalists. Taking on the challenge one step at a time, I start with

[11] Lewis's view is much more subtle than Quine's reading suggests. In fact, some of his statements could have been written by Quine himself: "Conceptions, such as those of logic, which are least likely to be affected by the opening of new ranges of experience, represent the most stable of our categories; but none of them is beyond the possibility of alteration" (Lewis, 1923, 177). Misak (2013, 2022) shows how much Quine owes to C. I. Lewis, who was his teacher at Harvard.

[12] This lesson is often forgotten. On contemporary metaphysicians' selective reading of Quine, see Price (2009); Thomasson (2015).

the notion of conceptual frameworks and the *Attack on the meaning/belief distinction* objection. In order to attain my goal, I need to provide an account of conceptual frameworks that makes it possible to distinguish between propositions that belong to the conceptual framework (e.g. meanings) and those that do not (e.g. beliefs), while avoiding Quinean attacks against the meaning/belief distinction.[13]

My account of conceptual frameworks is inspired by Dewey's functionalism and Robert Brandom's inferentialism. I define conceptual frameworks as the constellations of implicit and explicit rules that guide our activities. More specifically, conceptual frameworks can be understood as the patterns of inferences and operations which constitute our ways of thinking about and dealing with things; meanings can be understood as the rules that govern the use of terms and expressions in discursive, intellectual, and/or practical activities; and methods can be understood as the rules that govern the procedures for asking questions and verifying hypotheses. Inferential rules are not only intralinguistic: following Sellars, operations can be understood as language-entry and -exit rules. For example, the meaning of "gold" is constituted by the inferential rules governing our use of the term in discourse and practice, concerning the chemical composition of the substance, its behavior in interacting with other substances, relations of implication and incompatibility with other terms such as being metallic or being iron, and methods and operations for the determination of the atomic number. This notion of meaning is nonrepresentationalist in that it does not appeal to representational notions such as truth conditions or reference.[14]

[13] I leave open the possibility that different accounts of conceptual frameworks are capable of fulfilling these requirements.

[14] Following Robert Brandom (1994), the pragmatist or inferentialist reverses the representationalist order of explanation: inference is prior to representation, pragmatics are prior to semantics, linguistic use is prior to conceptual content. This means that the pragmatist rejects the strong form of representationalism introduced in Section 3, which Price calls "(big-R) Representationalism" (Price et al., 2013, 24). However, note that in the formulation of my account, I prefer the appellation "*non*representationalism" to distinguish it from the "*anti*representationalism" introduced in Section 4, since the latter suggests the rejection of the very notion of representation.

How should we think about the distinction between conceptual frameworks and the rest of our knowledge or beliefs? Dewey often compares the process of inquiry to a process of construction, and distinguishes between two kinds of means that inquirers use to achieve their end. To put it in a simplified way, every inquiry relies on already existing materials and tools, which are themselves the products of previous inquiries, "just as the manufacturer always has a lot of already extracted ore on hand for use in machine processes as it is wanted" (MW10: 341),[15] and "just as an artisan has at hand a set of tools relevant to his line of activity" (LW12: 173). In the "materials" of inquiry, we find descriptive propositions that state matters of fact (the results of our inferences or observations), which Dewey calls "existential propositions." The "tools" of inquiry include prescriptive propositions that make explicit the inferential rules of the conceptual framework (necessary conditionals of the form "if x, then y"), which Dewey calls "universal propositions" (LW12: 321).[16] What is perhaps not fully expressed by this metaphor is the interdependence between the prescriptive and descriptive parts of our knowledge: materials (descriptive propositions) could not be obtained or ascertained without the use of certain tools (prescriptive rules, concepts, methods). For example, the scientific definition of gold as the metal with atomic number 79 prescribes the operations to be performed (here, the experiments involved in the determination of the number of protons) and the conditions to be fulfilled (the results of such operations) if the predicate "gold" is to be warrantedly asserted of an existant (LW12: 257).

[15] All references to John Dewey's work are to the critical edition *The Collected Works of John Dewey, 1882–1953* (Vols. 1-37), edited by Jo Ann Boydston (1969-1991). Citations give the volume abbreviation, followed by volume and page number. For example: LW4: 45.

[16] The former can be likened to Ramsey's "variable hypotheticals," themselves interpreted as "rules for judging" (1990, 149), C. I. Lewis's pragmatic a priori, i.e., the "network of categories and definitive concepts" with which we "interrogate experience" (1923, 175), or Arthur Pap's functional a priori (1946).

The descriptive proposition "This ring is made of gold" states that the conditions have been or would be fulfilled if the operations were performed. The distinction roughly maps onto the distinction between meaning and belief.

Most importantly, the distinction between prescriptive (tools) and descriptive (materials) is *functional*. For Dewey, a proposition is descriptive or prescriptive, existential or universal, "in virtue of the distinctive function it performs in inquiry" (LW12: 270). This functional view of conceptual frameworks has several consequences. First, descriptive propositions can become prescriptive propositions, i.e., move from the body of empirical knowledge to become a rule in the conceptual framework. The history of science shows that empirical laws have taken on the status of constitutive principles, like Newton's laws of motion (Stump, 2015, 104). Similarly, when it was discovered that what was determined to be gold on the basis of other rules had atomic number 79, the descriptive proposition "Gold has atomic number 79" gained the status of a definition. Conversely, what was prescriptive in the definition of a concept can become secondary and descriptive. We are currently noticing such a change in the concept of "woman," for which the inference to "adult human female" used to be prescriptive, but now functions in some contexts as a generic description about most (but not all) women.

Secondly, the function of a proposition can not only vary over time, but also according to the context. While most propositions have either a prescriptive or a descriptive function across different contexts, some propositions can function in both a descriptive and prescriptive way depending on the context. Taking the example of "All men are mortal," Dewey writes:

> In one interpretation, ... it means 'All men have died or will die' — a spatio-temporal proposition. On the other hand, it means that 'If any thing is human,

> then it is mortal': a necessary interrelation of the characters of being human and being mortal. (LW12: 254-255)

The expression functions as the result of an inductive generalization when humans strive to find the secret of immortality, and it also functions as a (partial) definition of humanity when immortal beings in myths are systematically conceived as being of a different kind: spirits, demons, angels, Gods.[17]

This functionalist view of conceptual frameworks takes on Quine's lesson that there is no principled way of distinguishing between meaning and belief, while improving on Quine's picture in several respects. The prescriptive/descriptive distinction is much more flexible than the analytic/synthetic distinction that Quine attacked. Given its functional nature, it allows for variation that is not only diachronic (evolution of the function of a proposition over time) but also synchronic (variation of the function of a proposition from context to context). More importantly, it avoids the problem of Quinean holism, which misses the "distinctive epistemological status" of some principles, propositions, or methods in science or practice more generally (Stump, 2015, 9) – a special status which is most conspicuous when they are replaced in scientific revolutions. Friedman points to the "fundamental asymmetries" within Newton's system: "without the mathematics of the calculus [the] second law of motion could not even be formulated or written down, let alone function to describe empirical phenomena" (Friedman, 2002, 178). Yet, as he notes, calculus was far from "entrenched" at the time. Hence, Dewey's tool metaphor is more appropriate than the metaphor of a sentence having a position in the (mostly) undifferentiated web of beliefs. Tools and materials have a importantly different function in inquiry; the tools of one inquiry can become the

[17] An interesting illustration of this prescriptive function is found in some versions of Heracles' apotheosis, according to which the demigod became immortal only when his human part was burnt away: "[Heracles] cast off whatever of the human he had from his mother, and soared up to the Gods with his divine part pure and unalloyed, sifted by the fire" (Fowler and Fowler, 1905).

materials of another inquiry; the tools of inquiry may be necessary for a certain domain of inquiry, but dispensable in another; they may be the best tools at one time, and later discarded or revised.

## 6 A pragmatist account of the distinction between framed and framing inquiry

The terminology of my distinction comes from conceptual *frameworks*. "Framed" indicates that the framework is taken for granted and operative. "Framing" indicates that the framework underdetermines the matter at hand, is being questioned, produced, or revised. In order to draw my distinction, I draw on Dewey's theory of inquiry, and more particularly on the three stages identified by Matthew Brown (2012): the indeterminate or problematic situation that leads to the inquiry (there is a matter to be resolved, a confusion to be dispelled), the activity of inquiry itself (which consists in formulating the problem, establishing the facts of the case, suggesting and testing the possible solutions or interpretations), and the outcome of inquiry (the judgment that terminates the inquiry). The distinction between framed and framing inquiry can be characterized with respect to each stage of inquiry. The following three conditions are fulfilled by a *typical* framed inquiry and framing inquiry, respectively:

**FRAMED INQUIRY**

**Situation** The question or problem can be formulated in terms of an existing conceptual framework.

**Inquiry** The inquiry consists in using an existing conceptual framework without questioning or revising it.

**Outcome** The inquiry ends with the addition, elimination, or revision of descriptive propositions to our body of knowledge.

**FRAMING INQUIRY**

**Situation** The question or problem cannot be fully formulated in terms of existing conceptual frameworks.

**Inquiry** The inquiry involves questioning, choosing, revising, expanding, creating the rules of a conceptual framework.

**Outcome** The inquiry ends with the modification or creation of the conceptual framework.[18]

In the rest of the paper, I will consider the first two conditions to be definitory of a framed or framing inquiry. That is to say, I will consider an inquiry to be framed or framing if it fulfils these conditions without fulfilling the third one. For example, an inquiry concerned with the definition of "rape" in feminist activist circles is a framing inquiry, even if it does not end in the revision of the conceptual framework (the conclusion might be that the current definition is suitable, or the newly proposed definition is not implemented in practice). Conversely, the inquiry that led to the discovery of the atomic element of gold is a framed inquiry, even if it has framing consequences (shifting the inferential rule governing the use of "gold"). The reason for this focus is that I am primarily interested in the epistemological differences between framed and framing inquiry. I will also focus primarily on framing inquiries that create or revise concepts (either as their primary or secondary activity), for three reasons. First, such inquiries are prime examples of framing inquiries, since concepts are at the core of conceptual frameworks. Secondly, the literature I engage with or take inspiration from focuses primarily on the creation and

[18]This is not to say that framing inquiry cannot end with descriptive propositions, but some of these propositions will involve a modification of the concepts that are used to state them.

revision of concepts (Dewey, C. I. Lewis, Carnap, Rorty, Sawyer, Sider, etc.). Thirdly, it is a pragmatic choice that helps me focus on a limited set of examples and engage with a specific body of literature. However, it should be noted that framing inquiries are more varied, and encompass inquiries in which the methods of inquiry are questioned or revised, new instruments are created, new models are conceived.[19]

While I have defined framed and framing inquiry as two kinds of inquiry, it should be noted that the distinction is neither absolute nor sharp, although there are clear and unequivocal cases of each. The question "What is the temperature of this room?" in an ordinary context is purely framed, as it relies on the existing conceptual framework defining temperature and the instruments for measuring temperature, without involving any change to the framework itself. On the other hand, the question "How should we define 'gender'?" understood as a conceptual engineering or ameliorative project, as in Sally Haslanger's (2000, 2012) work, is a clear case of framing inquiry.

The distinction is not absolute, but relative, given that an inquiry can be framed or framing depending on three conditions, which are not all mutually exclusive. For example, the inquiry defining the different metals in terms of their chemical element is framing in the sense that it creates new rules for defining "gold," "iron," etc. that will regulate future practice. Nevertheless, once the choice and method of defining metals in terms of their chemical element is chosen, the inquiries implementing that method and choice can be seen as framed. Whether an inquiry is taken to be framed or framing also depends on what we take as a unit of analysis for "inquiry" and "conceptual framework." As Dewey notes, "complex inquiries involve a constellation of sub-problems" (LW12: 178). For example, the collective inquiry leading to the construction of

[19] More generally, my account is perfectly compatible with current trends in philosophy of science which emphasize the importance of practice over theory, activities over propositional knowledge.

a new theoretical and operational framework for the scientific study of temperature in the 19th century is a clear case of framing inquiry. However, within this wider unit of analysis, there is a multiplicity of local inquiries in which data were collected, experiments performed, applying available conceptual frameworks without changing them. Conversely, a primarily framed inquiry might have phases in which we settle on the meanings of the terms used in the debate, a moment of "metalinguistic negotiation" (Plunkett and Sundell, 2013) before returning to the application of the framework to the particular case at hand. An inquiry can also start as a framed inquiry ("Is it the case that x is F?") and end as a framing inquiry (changing our concept of F itself), or a framing inquiry can become a (relatively) framed inquiry (for example, the investigation of a new phenomenon seems to require a modification of the conceptual framework, but it ends up being subsumed under the existing one). Finally, when several conceptual frameworks are involved, an inquiry can be considered as both framed (applying the overarching framework) and framing (developing the secondary framework).

The distinction is not sharp, but gradual. An inquiry which mostly takes the conceptual framework for granted but slightly revises some of its application rules (for example, the decision to raise the age of consent, which changes the application conditions of the concept of rape in the legal domain) is less framing than an inquiry which revises or creates some of the most fundamental rules of a conceptual framework (what Kuhn calls "scientific revolutions"). If the framed–framing distinction could be placed on a spectrum, we would find many inquiries in the middle. Of course, it would be difficult to actually place inquires on a spectrum, because of the relative character of the distinction: how moderately or radically framing an inquiry is taken to be will depend in part on what inquiry we take as a unit of analysis, on which parts of the

conceptual framework we take to be fundamental, whether we focus on the activity or the outcome, etc.

A note on both extremes. Even in the most revolutionary cases of framing, inquiry is never *unframed*, in the sense of not relying on any conceptual framework. At least *some* parts of conceptual frameworks are taken for granted and used in the course of inquiry, *some* concepts are used to guide inquiry, even if they are very coarse or inchoate. This is a common pragmatist idea, often illustrated by the metaphor of Neurath's boat, repaired plank by plank while at sea (Misak, 1995, 113): all inquiries have to start from somewhere and take for granted previously established knowledge, even if part or most of it ends up being revised or discarded. Conversely, even in the most framed cases of inquiry, the conceptual framework never completely determines how the situation should be dealt with, or how we should "go on." This is a Wittgensteinian point about rule-following, which follows from the practice-based account of the rules constituting the conceptual framework. The relevance and applicability of a conceptual framework in a particular inquiry or conversation is always a matter of the practices that sustain it.[20]

## 6.1 Epistemological differences between framed and framing inquiry

The fact that the distinction between framed and framing is neither sharp nor absolute does not mean that it is not *substantive*. The distinction between rich and poor is neither sharp nor absolute, yet no one would claim that it is therefore insignificant. *Contra* Brandom, there are relevant epistemological differences between inquiries that rely on conceptual frameworks that are taken

[20] Nevertheless, I disagree with Brandom's suggestion that every claim is framing with respect to its outcome: "There is no such thing as ... the mere application of a previously determinate conceptual content" (Brandom, 2000b, 157); "Every claim and inference we make at once sustains and transforms the tradition in which the conceptual norms that govern that process are implicit" (Brandom, 2000b, 177). When I make claims about the temperature of the room, or many other ordinary claims, I am merely applying concepts, not transforming them.

for granted, and inquiries that involve the revision or creation of conceptual frameworks. In Brandom's example, there is a conflict between two inferential rules governing the use of "acid." In that case, there are grounds for changing the inferential rules themselves. In Dewey's words, "one or other of the involved universal propositions must be revised and reformulated" (LW12: 271). Usually, the best strategy is to select a common ingredient or character that can explain both behaviors (liquids tasting sour and turning litmus paper red): in that case, hydrogen. The decision counts as a change in meaning, because a new character becomes *prescriptive* of what it is to be an acid: it will guide the discovery of further facts about acids, some of which might in turn become prescriptive of what it is to be an acid, thereby changing the extension of the concept of acid, and so on.[21] This is a clear case of framing inquiry, which can be compared with a clear case of framed inquiry: for example, a physics student has to determine whether the liquid they are examining is acid or sour. In that case, the rules of the conceptual framework are not questioned, but only applied to the task at hand. The difference between cases which change the rules and cases in which the rules are simply applied or relied upon is a difference that makes a difference in practice.

The epistemological significance of that difference cannot be overstated. In a framing inquiry such as the one described above, there is an openness with regard to what counts as a correct answer, and a creative decision has to be made. Scientists could have chosen to distinguish between two concepts of acidity, but for the purposes of inference and explanation, the choice made (the redefinition of acidity in terms of hydrogen) opened up more avenues for inquiry. The openness of framing inquiry is exemplified by the fact that the concept of acidity continued to evolve in non-straightforward ways, leading to

[21] For a history of the iterative process of the formation of the concept of acid, see Chang (2012, 2015).

the distinction between two notions of acidity: the Brønsted notion maintains and generalizes the connection with hydrogen, and defines acids as H+ donors, while the Lewis notion departs from it, and defines acids as the acceptors of a lone pair of electrons (Chang, 2012). Hence, in framing inquiries, at least some questions are normative and practical: "How should we define X?," "How should we apply this concept to this hitherto unencountered situation?." The correct answers are not simply dictated by the existing conceptual framework, nor by the structure of the world. The standards of correctness in framing inquiry include the inquirer's goals, the problems they are dealing with, the resources available, how things are or behave, which all enter into the determination what counts as an effective or satisfactory framework.[22] By contrast, in the chemistry test, the correct answer is determined by the rules of the conceptual framework, and whether the liquid studied counts as an acid or a base according to the rules of the conceptual framework. While the stability of the framework rests on a shared agreement on the rules of the framework that have proven effective in the past, once it is accepted, whether the subject-matter of inquiry satisfies those rules is not up to us – the claim that a certain liquid is acid or base is either true or false, independently from our needs, interests, or from whether the claim is useful or justified.[23] Furthermore, while the framing inquiry concerning acidity influenced future scientific practice, and allowed for new ways of thinking, talking, and dealing with acidity-related phenomena, the outcome of the student's inquiry would not have any impact on future scientific practice, but only on their individual beliefs.

[22] As James notes, "Satisfactoriness has to be measured by a multitude of standards ... and what is more satisfactory than any alternative in sight, may to the end be a sum of pluses and minuses, concerning which we can only trust that by ulterior corrections and improvements a maximum of the one and a minimum of the other may some day be approached" (James, 2000, 148).

[23] I say more on how truth and standards of correctness more generally should be conceived for framed and framing inquiry in Henne (2022).

## 6.2 Comparison with Carnap's distinction between internal and external questions

Carnap's distinction is focused on the position of the question with regard to the framework (is it *external to* and *about* the linguistic framework, or *internal to* and *using* the linguistic framework? Is it object-level or framework-level?). External questions are wholly concerned with the creation and revision of linguistic frameworks apart from practice, while internal questions apply the framework to particular cases without changing it. Instead, the heart of my distinction is the status and operation of the conceptual framework: Does it determine the question to be asked and the way to answer it? Is it merely taken for granted and applied, or is it questioned and revised? Following the legal analogy, my account is not set on the civil law or common law model. Framing inquiry can happen in separate processes of inquiry, which are directly concerned with the conceptual framework, like in civil law legislation; or it can happen in a gradual way in the course of applying the framework, while answering object-level questions, like in the common law system. For example, the rules governing the use of the term "torture" or "cheating" can be negotiated or revised in the course of an argument about a particular case (Plunkett and Sundell, 2021). In common-sense inquiries, the dialectic between framed and framing is more likely to be similar to the common law system, while in contemporary scientific inquiries, it is more comparable to civil law – although scientific concepts also emerge and evolve through the use of frameworks in experimental practice.[24] Conversely, we can have a framed inquiry about a conceptual framework, for example in linguistics or anthropology or

[24]For philosophical and historical accounts of the development and refinement of scientific concepts in experimental practice, see Rouse (2015) and Steinle (2016).

conceptual analysis, which would technically count as an "external question" on Carnap's account.[25]

Carnap's distinction between internal and external questions is extensionally equivalent to another distinction he makes between theoretical and practical questions. As noted in section 2.1, the metaphysician's external questions asked as theoretical questions are illegitimate or "pseudo-question[s]": "disguised in the form of a theoretical question while in fact it is non-theoretical" (Carnap, 1950a, 25). From a pragmatist point of view, the sharp dichotomy between theoretical and practical is misguided. *All* inquiries, including primarily theoretical ones, involve practical decisions and evaluations, determination of *what to do* and *for what purpose* (see e.g. Dewey LW12: 162-163). Conversely, all inquiries, including primarily practical ones, involve considerations regarding how things are (Dewey LW12:164).[26] Nevertheless, my distinction does exhibit similarities with Carnap's with regard to the importance of practical considerations in the determination of problem and solution in framing inquiries. When the conceptual framework underdetermines the problem at hand or is itself problematic, questions about what to do and for what purpose come to the fore. As Dewey himself notes, "The more problematic the situation and the more thorough the inquiry that has to be engaged in, the more explicit becomes the valuational phase" (LW12: 181). Furthermore, since concepts are conceived as rules or tools, their evaluation in terms of purposes will play an important role in inquiries concerned with their creation or revision. This allows my notion of framing inquiry to combine Carnap's insight

[25]Carnap could still interpret them as "internal" questions in the sense that they are using their own linguistic framework, that of linguistics or anthropology, in order to study their object, which happens to be a linguistic framework.

[26]Carnap does acknowledge the contribution of theoretical knowledge to practical external questions (Carnap, 1950a, 23). Nevertheless, he emphasizes the theoretical and practical as two completely separate kinds of questions. Another major difference is that for Carnap, practical questions are non-cognitive, i.e., their answers cannot be true or false, while for Dewey and most pragmatists, practical and theoretical judgments are true or false in the same way, namely, in a pragmatist sense.

regarding the importance of practical considerations when conceptual frameworks are questioned or revised, all the while allowing for framing inquiries to be about the world, in the sense that they are concerned with finding better ways of thinking about and dealing with our environment.[27]

# 7 Response to objections

I have already shown that my distinction can avoid the objections raised by the antirepresentationalist's *Attack on the meaning/belief distinction*. However, the representationalist's *Realism* objection as well as the antirepresentationalist's *Inescapability of Pragmatism* are more difficult to address, since they pull in opposite directions. I do so by rejecting the premise shared by representationalists and (Rortian) antirepresentationalism, namely, that realist intuitions can only be preserved by appealing to representationalism.[28]

## 7.1 Realism

The question of realism is an issue that I cannot hope to cover or resolve in one section. Nevertheless, a few remarks can be made. *Contra* Rorty, I argue that my pragmatist account can accommodate realist intuitions regarding framing inquiry while remaining nonrepresentationalist. While I present only one

[27] For reasons of space, I cannot compare my account with all of its predecessors. However, it is worth noting that my account exhibits important similarities with Kuhn's distinction between normal and extraordinary science, as well as with recent discussions of the relativized and constitutive a priori by Friedman (2001) and Stump (2015). Creath characterizes their approach to (scientific) knowledge as a "two-tier" approach, inspired by Kant: beliefs at the "A-level" are "not empirically tested in any straightforward way," while beliefs at the "B-level" require the A-level for their "intelligibility, identity, and testability" (Creath, 2010, 494). Contrary to Kant, all these authors believe that the A-level is revisable. While Kuhn maintained a pretty sharp distinction between what he called revolutionary and normal science, Friedman, Stump, and Creath stressed the continuity and overlap between different phases of scientific practice. For example, Creath points out that "No period has been free from debate on fundamental methodological issues" (502). Because of the context of discussion, and given their focus on constitutive principles, these authors still tend to focus on a limited set of examples in which a scientific framework is evaluated, or the core principles (usually belonging to geometry, arithmetic, logic) in a scientific practice are replaced. My distinction covers more ground, first because it is not exclusively focused on scientific practice, and secondly, because it can accommodate the evaluation and revision of core constitutive principles as only one special case of framing inquiry. Additionally, other uses of the metaphor of framing in philosophy cannot be discussed here but deserve to be mentioned, including recent ones by Haslanger (2015) and Chang (2022). I develop such comparisons in Henne (2022).

[28] From which Rorty concluded that realist intuitions are not worth saving (Rorty, 1995, 298).

aspect of Dewey's theory of inquiry in support of this claim, one can find several resources within pragmatism to deal with this issue.[29]

The rejection of a purely representationalist view of conceptual frameworks does not entail the view that we are completely free to stipulate and use any concept we want, let alone that we can somehow mould (or worse, create) the world and the things that it contains with our concepts. Concepts can be both instruments *and* informed by how things are. According to Dewey, scientific concepts in particular are devised in order to promote inference, which means that special attention is paid to the way things are connected to one another, how their emerge, how they interact: "our conceptions attain a maximum of definite individuality and of generality (or applicability) in the degree to which they show how things depend upon one another or influence one another" (LW8: 246). Hence, given the purposes and requirements of inquiry *and* given how things depend upon one another, there are better and worse ways of defining and describing things. For example, given our inferential purposes, and given how organisms reproduce, inherit their traits and evolve, it is fruitful to classify biological species according to their ancestry (LW12: 295). The successful creation and use of conceptual frameworks partly depends on empirical facts about things whose existence and features do not depend on us.

This is not going back to the representationalist picture, where objects and kinds are already individuated in the world, and act as the referents for our concepts. We always start with some conceptual frameworks, even vague

[29] If one wants to maintain a strong distinction between causal and normative relations between our inquiries and the world, one might appeal to Brandom's feedback (Test-Operate-Test-Exit) cycle in accounting for the contribution of things in correcting our descriptions (Brandom, 2008); for a discussion, see Levine (2019). Other alternatives include Davidson's concept of triangulation (Davidson, 1982); Putnam's pragmatic realism in combination with conceptual relativism or pluralism (Putnam, 1990), for a discussion, see Case (2001), Button (2013); Price's distinction between e-representation, conceived as world-tracking, and i-representation, which is inferential and internal to language games (Price et al., 2013); and more recently, Teller's perspectival realism (Teller, 2018, 2019, 2021), according to which our perspectival, framework-bound access to the independent world provides us with inexact yet practically adequate knowledge of how things are.

or defective, in order to ascertain the empirical facts that will guide our conceptual choices. Going back to Brandom's example, we can discover further properties of acids by using vague and even conflicting conceptual rules (such as "tasting sour" and "turning litmus paper red"), and such discoveries can in turn lead to an evolution of the conceptual rules, which will lead to further discoveries, etc. The relation between framed and framing inquiry can be understood in terms of the dialectical process which Chang (2004) calls "epistemic iteration," in which the results of framed inquiry, obtained by the application of imperfect concepts, provide the grounds for improving those very concepts, which are used in subsequent framed inquiries, and so on.[30]

## 7.2 Inescapability of pragmatism

My account partly disagrees with *Inescapability of Pragmatism*, in the sense that, once we settle on a conceptual framework, our needs, interests, or purposes do not (directly) enter into the determination of the correct answers to our questions. In fact, Rorty himself endorsed a similar position (and similar to Carnap's) towards the end of his career:

> Once you've decided to call something a mountain, and given the word 'mountain' a place in your language game, you can say sentences about mountains have truth conditions. Then it's out of your control whether there are mountains or not, just as it's out of your control whether there are unicorns or not. (Rorty and Searle, 1999, 48)

Once we have a conceptual framework that defines temperature as a physical quantity and determines its means of measurement, there is indeed a "fact of the matter" about what the current temperature of the room is – one that does not depend on what we need, think, or do. However, my account agrees with

[30] Dewey describes a similar process in the *Logic* (LW12: 274-276).

the general idea behind the *Inescapability of Pragmatism*, in the sense that truth and verification conditions are fixed by conceptual frameworks, rather than by the things themselves. The representationalist idea that criteria for correctness come from the world alone can be traced back to the transparency of conceptual frameworks. In a typical framed inquiry (or in framed situations more generally), the conceptual framework is not merely taken for granted provisionally, as a tool, but passively accepted without question; hence, it is "transparent."[31] We only come to notice it when it is challenged or defective. Therefore, it is easy to believe that normativity exclusively comes from the things themselves, instead of having anything to do with us. However, the stability and normativity of conceptual frameworks are sustained by our shared and coordinated practices, rather than immutable. This means that, even when the pragmatic considerations do not seem to play any role (for example, in the case of "What is the temperature of this room?"), framed inquiries are never immune from pragmatic considerations leading to the modification of the framework, although in practice, this rarely happens. As Price notes, "There is still a big difference, in practice, between the day-to-day business of empirical science and the sort of rare occasions on which Quinean science has to confront its pragmatic foundations" (Price, 2009, 327).

[31] On the transparency of linguistic frameworks, see Burgess and Plunkett (2013), Teller (2021). As a reviewer pointed out to me, there are framed inquiries in which the conceptual framework is taken for granted but not settled or widely accepted, either because it is newly invented and hence still controversial, or because it is being questioned by other groups. Such inquiries are *locally* framed, because they take for granted and apply a conceptual framework which, in a larger context, is being questioned and/or evaluated (among other things, through its use in locally framed inquiries).

# 8 Conclusion. Towards a pragmatist epistemology

Both representationalists and antirepresentationalists reject the Carnapian way of drawing a distinction between factual questions relying on a conceptual framework and pragmatic questions concerning the conceptual framework itself. For representationalists, all questions are factual, even questions about conceptual frameworks, since the latter (in some domains at least) purport to represent the structure of the world. For antirepresentationalists, all questions are pragmatic, since there is no way of distinguishing between the contribution of language and the contribution of the world in our inquiries. My distinction between framed and framing inquiry maintains the spirit of Carnap's distinction while avoiding its main shortcomings. The epistemology of inquiry changes depending on whether we hold conceptual frameworks fixed and merely apply them or whether we expand, revise, or create them. Framed inquiries are more directly factual since pragmatic considerations are settled and hence kept in the background, but they can resurface with new problems. In framing inquiries, pragmatic considerations come back to the fore, although factual considerations play an important role in making and testing conceptual choices. These are tendencies, not dichotomies. More generally, the distinction itself is gradual and relative, since the extent to which an inquiry is considered framed or framing will depend on how much of the conceptual framework is fixed and operative, as well as on our unit of analysis both for the scope of the inquiry and of the conceptual framework. In way of concluding remarks, I would like to stress the importance of the distinction between framed and framing inquiry for epistemology and its relation to pragmatism.

Epistemology is concerned almost exclusively with the nature and acquisition of propositional knowledge – how knowledge is gained in framed situations

and inquiries. However, this is not the only way in which we gain knowledge of the world. In fact, the very possibility of framed knowledge rests on greater epistemic achievements: the construction of fruitful conceptual frameworks that make the world intelligible, allow us to talk about things, and open up new possibilities for asking and answering questions. The study of framing inquiry – the methods and procedures by which inquirers create, discard, and revise conceptual frameworks – deserves to be part of, and even central to, the study of knowledge.[32]

Introducing a pragmatist account of framed and framing inquiry in the field of epistemology might seem like a daring project. On the one hand, the dominance of the representationalist theory of knowledge over philosophy and epistemology has prevented framing inquiry from receiving any special attention. On the other hand, Rorty positioned himself and his pragmatism against epistemology, deeming the whole enterprise futile. On my account of framed and framing inquiry, there is plenty of room for reconciliation. Pragmatism can leave intact much of what is currently done in epistemology: accounts of justification, knowledge, the relation between different epistemic concepts, the epistemic status of evidence and testimony, etc., as long as the terms "truth" or "facts" that are commonly used in such accounts are understood in a deflationary sense. This is because pragmatism is mostly concerned with framing inquiry, while these discussions usually fall under the scope of framed knowledge acquisition. Of course, many accounts and debates would have to be presented differently: accounts of knowledge should not be seen as accounts of

[32]Despite Paul Thagard's (1990) call for distinguishing between belief revision and conceptual change and integrate the latter as a topic of its own in epistemology, the situation has not changed since. In fact, his paper was heavily cited in science education or learning theory, rather than in analytic philosophy journals. This does not mean that philosophers are not interested in conceptual change. However, conceptual change is mostly discussed in philosophy of science or in philosophy of language, where the issue is often set in representationalist terms: How can scientists talk about the same things, or how can reference be stable, if the meanings of the terms themselves change with major theory changes? Although the issues raised often belong to metaphilosophy or philosophy of language, the field of conceptual engineering has recently revived the interest in the importance of conceptual change and improvement. For an overview, see Isaac et al. (2022).

the *nature* of knowledge, but as different accounts of knowledge attributions,[33] for example. More importantly, there should be a greater focus on the pragmatic and contextual constraints that necessarily enter into the acquisition of all knowledge. In that sense, pragmatism is indeed inescapable. But for the study of framing inquiry, pragmatism is *indispensable*.

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[33] See (Brandom, 2000a, 117): "Epistemology is usually thought of as the theory of knowledge. But epistemological theories in fact typically offer accounts of when it is proper to *attribute* knowledge."

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