



Constructivist Facts as the Bridge Between Is and Ought

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Abstract

This article describes how the facts in social reality take an intermediate position between objective facts and purely subjective ‘facts’. In turn, these social facts can be subdivided into constructivist and non-constructivist facts. The defining difference is that non-constructivist facts are completely determined by an approximate consensus between the members of a social group, while constructivist facts are founded in such a consensus but can nevertheless be questioned. Ought facts are such constructivist facts. Because they are founded in social reality, a naturalistic theory of ought facts is attractive. Because constructivist facts are always open to questioning, we can explain why the facts in social reality may found ought facts but are nevertheless not the final word about them.

Keywords Constructivist facts · Is · Ought · Social reality

1 What is the Issue?

In every system of morality, which I have hitherto met with, I have always remarked, that the author proceeds for some time in the ordinary way of reasoning, and establishes the being of a God, or makes observations concerning human affairs; when of a sudden I am surprised to find, that instead of the usual copulations of propositions, *is*, and *is not*, I meet with no proposition that is not connected with an *ought*, or an *ought not*. This change is imperceptible; but is, however, of the last consequence. For as this *ought*, or *ought not*, expresses some new relation or affirmation, it’s necessary that it should be observed and explained; and at the same time that a reason should be given, for what seems altogether inconceivable, how this new relation can be a deduction from others, which are entirely different from it. [26: 469]

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This fragment from Hume's *Treatise* has become the starting point of endless debates about Is and Ought, the alleged fundamental difference between the two, and the possibility to derive ought-statements from only is-statements [5].

The debates have not only been endless, but they are often also vague or confused. For instance, they often lack precise circumscriptions of what belongs to the realms of Is and Ought, or what is meant by derivation or possibility. In this article I will make another attempt to show how the alleged gap between Is and Ought can be bridged, or—more precisely—why no gap needs to be bridged in the first place.

Before outlining my main argument, I want to discard two possible misunderstandings. First, I do not claim that there is no difference between judgments such as 'John ought to stop for the traffic light' and 'John is approaching a red traffic light'. Clearly, ought-judgments differ from non-ought-judgments and statements of the former category cannot be deduced from only statements of the latter category. However, there is nothing spectacular about this impossibility and the impossibility is certainly no evidence for some kind of gap, logical or ontological. It is nothing other than the impossibility to deduce information about one topic from information about another topic. The same impossibility also prohibits the deduction of statements about tables from only statements about chairs. Going by the quotation above, Hume might agree with this.

Second, I wrote in the previous paragraph about deduction and not about the more general notion of derivation. The reason is that the notion of deduction, as used in modern logic, is narrower than the notion of derivation. Neither notion has a generally accepted definition, but the demands on deduction are, contrary to those on derivation, typically very strict. Not all acceptable derivations are deductively valid.¹ It is therefore not excluded beforehand that ought-judgments can be derived in an acceptable manner from non-ought-judgments, without the derivation being deductively valid. In fact, I hope to show in the argument that follows that it is possible to derive ought-statements in an acceptable manner from statements that do not include an ought.

The main lines of the argument are as follows. There are many facts that depend for their existence on being recognised, directly or indirectly, by human beings. These facts are elements of social reality and are for that reason called 'social facts'. Some social facts are special in the sense that their existence does not only depend on what people actually recognise, but also on what people rationally ought to recognise. These are constructivist facts. And, to make things more complicated, what constructivist facts ought to be recognised also depends on what people actually recognise. In that way, they bridge the alleged gap between Is and Ought.

This article consists mainly of the explanation of how social reality in general, and constructivist facts in particular, exist. Because of its topic, which focuses on

¹ An important case of 'acceptable' arguments that are not deductive, or deductively valid, are arguments that have rules as one or more premises. Deductive validity is typically defined in terms of the truth values of the premises and the conclusion of arguments, and rules have no truth values because they do not describe. Therefore, rule-applying arguments cannot be deductively valid (nor deductively invalid, for that matter).

the Is/Ought gap, there will be special attention to the question of how ought-facts are part of social reality. Section 2 contains some preliminaries about language, the World (in a technical sense) and the nature of rules. Section 3 discusses objective, subjective and social facts, with emphasis on the latter category. Section 4 addresses the very question of what Is and Ought are. Section 5 introduces the most basic form of social facts, which I will conveniently call ‘basic social facts’. The more sophisticated version of social facts is based on rules and these facts will therefore be called ‘rule-based facts’ in Sect. 6. Section 7 is devoted to ought-facts. Section 8 discusses a special category of social facts, the constructivist facts, and their complex mode of existence. This section concludes the foundational work of this article and allows Sect. 9 to show the implications for Moore’s open question argument, the naturalistic fallacy, and the possibilities to derive Ought from Is and –perhaps more surprisingly—Is from Ought. The article is concluded in Sect. 10.

2 Preliminaries

2.1 Language and the World

First it is important to distinguish between language and the World. I will use ‘the World’ as a technical term that stands for two collections: the collection of all facts and the collection of all things. I will focus on the facts.

All facts are language-dependent, because every fact is the fact that ..., where the dots need to be filled in by a statement [41]. Examples are the facts that the sun shines, or that 3^3 equals 27. Statements are obviously language-dependent, and so are facts because they are statement-dependent. However, facts do not only depend on language, but also on the World. All statements express states of affairs, but only true statements express facts, and what makes statements true is their correspondence to the facts.² Facts are then states of affairs which obtain (exist) in the World.

So, we have a complicated relation between language, facts and the World. Only the existence of a language makes it possible to distinguish facts in the World, and at the same time the World is defined in terms of the facts (and things) that are language-dependent. A language determines, by means of the statements it makes possible, what states of affairs can exist. The phrase ‘state of affairs’ has a technical meaning too: it stands for a possible fact and this possibility is created by a language that allows to formulate the state of affairs. The World, in turn, makes the difference between states of affairs that are facts (in the World) and states of affairs that do not obtain in the World and are therefore not facts [42].

This is a brief argument, but an argument with far-reaching implications. One implication is that there cannot be facts which are completely mind-independent.

² The definition of facts in terms of both a language and the World takes away a major objection against correspondence theories of truth, namely that the nature of facts is obscure. See the discussion of the correspondence theory of truth in [29: 119–140]. In the classificatory scheme for correspondence theories developed there, the theory of truth proposed here is a non-realist correspondence theory.

Only when minds have appeared in the course of evolution and these minds have developed a language, is it possible to identify the World as the collection of facts and things. A second implication is that language determines what kinds of entities can count as facts. If a language does not distinguish between the sentences ‘Karl walks’, ‘Karl ought to walk’, and ‘It is uncertain whether Karl walks’, and treats all three sentences as statements, the language makes what all these sentences express, if true, into facts. Obviously, the three sentences express three different kinds of facts. The first fact is non-modal, the second one is a deontic modality and the third an epistemic modality. However, the distinction between kinds of facts is not a distinction between facts and non-facts.

2.2 Kinds of Rules

Rules are ‘things’; they are not facts that can be described by true statements,³ nor are they statements which can be true or false. That rules are things is suggested by the facts that rules can:

- Be quantified over, as in ‘He forgot all the rules that he learned at school’;
- Be created or repealed, for instance by Parliament;
- Exist or not exist, as in ‘The rule that forbids homosexual practices does not exist anymore’.

It is sometimes thought that rules are about prescribing behaviour.⁴ Admittedly, many rules do, in a sense, prescribe behaviour. These are mandatory, or duty-imposing rules. However, many rules do not prescribe at all.

Let us consider some examples of rules.

1. The moment that the President dies, the Vice-President becomes the new President.
This is a rule about succession. It operates in time and attaches a new fact—the person who happened to be the Vice-President is the (new) President—to the occurrence of an event: the (old) President died.
2. Statutes are created by Parliament.
This rule attributes the exclusive competence to create statutes to Parliament. In doing so, it attaches a fact—this entity has the competence to create statutes—to another fact: this entity is Parliament.
3. A bachelor is an unmarried man of marriageable age.

³ This opposition between facts which are denoted by descriptive sentences and rules which are denoted by terms is more complicated than may seem at first sight. By introducing terms (‘state of affairs’, ‘fact’) for what corresponds to truth bearers, these corresponding entities are objectified. Still, they differ from rules, which are not objectified counterparts of truth bearers. Thanks to Paolo di Lucia for drawing my attention to the complications.

⁴ This confusion is strengthened by using the notion of normativity for both situations involving prescriptions of behaviour and situations that involve rules [17 and 22].

This rule both defines the meaning of a word, and at the same time conceptually connects two kinds of entities: bachelors and unmarried men of marriageable age.

4. If two or more parties conclude a valid contract, everything in the contract holds between the contract partners.

This is a (strongly simplified) rule about the consequences of a contract. These consequences often—but not always—involve mutual obligations, but the rule does not mention them explicitly (Hage [19], 97–102). Neither does the rule mention duties or permissions. Therefore, we cannot say that it is a mandatory rule, even though its application will often lead to obligations.

5. Car drivers must stop at red traffic lights.

This is a typical mandatory rule. It imposes a duty—to stop—on agents that belong to a particular category—car drivers. Notice that the duty itself, for instance that Henry must stop at this red traffic light, is not a rule. The duty is a ‘thing’, and the existence of this duty is a fact. This fact is attached by the rule to other facts, namely that Henry is a car driver and that the traffic light before Henry is red. By attaching this fact to the other facts, the rule creates a new duty, which exists as a result of being attached to facts.

Although sometimes the application of a rule leads to a duty or an obligation, there is no inherent or conceptual relation between rules and the guidance of behaviour. There are different kinds of rules, but the common element which makes them all rules is not that they guide behaviour, but that they attach facts to other facts. In this sense, all rules, including so-called ‘regulative rules’ are constitutive [17 and 21]. A rule is a general connection between kinds of facts, which attaches the presence of facts of kind B to the presence of facts of the kind A.⁵

If a rule exists, it attaches its consequences to the already existing facts. People who do not recognise these consequences, for instance by not believing that $3 + 5$ equals 8, make a mistake and what they do is in that sense wrong. However, this wrong is not the wrong of the violation of a duty, but merely the wrong of misapplying, or not applying, a rule. So, the rules that govern addition do not prescribe to give the correct answers to additions. However, they make it the case that, rationally speaking, people ought to recognise that the sum of 3 and 5 equals 8. In that way, they also bring about that the answer of 7 to the question of what $3 + 5$ equals to, is wrong.

If rules are—or, perhaps better, ought to be—applied, the World comes to fit the content of the rule. For instance, application of the rule about the succession of the President *makes* the old Vice-President into the new President. Similarly, the application of the rule that car drivers must halt at red traffic lights *imposes* the duty to

⁵ Obviously, this definition of rules is much broader than other ways of characterising rules, such as in the opposition between rules and principles. Readers should be careful not to apply everything that is written about rules here blindly to other discussions about rules, or the other way around.

halt on a car driver who approaches a red traffic light. Also, being an unmarried man of marriageable age *makes it the case* that a person is a bachelor.⁶

Based on their effects, it is possible to distinguish two main kinds of rules: dynamic rules and static rules.⁷ A dynamic rule attaches a new fact to the occurrence of an event or takes an existing fact away or modifies it. The rules (1) and (4) above are examples of dynamic rules. An example of a dynamic rule that takes a fact away would be the rule that a right of usufruct ends as soon as the right-holder passes away.

A static rule attaches a fact to an already existing fact. The rules (2), (3) and (5) above are all static rules. It is possible to subdivide the category of static rules into counts-as rules and fact-to-fact rules. A counts-as rule makes that an entity of one kind is also an entity of another kind. Rule 3 above is such a counts-as rule. An unmarried man of marriageable age counts as a bachelor. A fact-to-fact rule attaches a fact to some other fact. This category of static rules is exemplified by the rules (2) and (5) above. If an entity happens to be Parliament, it also has the competence to create statutes.

3 Objective, Subjective, and Social Facts

If nobody would believe that the United Nations existed, the United Nations would not exist. In this respect, the United Nations differ from Alpha Centauri, the solar system that is closest to that of Earth. Alpha Centauri existed even before there were any human beings to know about it. The Belgian chess champion can only exist if he is recognised as such, but for every person taken individually, he is the chess champion, whether they believe it or not. The same holds for the ownership of my car. If I were the only person to recognise it,⁸ I would not be the owner; if sufficient many recognise that I am the owner, this ownership exists also for those few individuals who do not recognise it. The three examples illustrate the existence of entities whose existence depends on recognition. I will describe this situation by saying that these entities exist in the social World, a part of the full World.

As a first indication of what social facts are, it is useful to contrast them to objective facts and subjective 'facts'. Objective facts are facts that exist independent of whether people believe in their existence.⁹ Examples of objective facts that spring

⁶ This is the so-called 'world-to-word direction of fit' of rules. Directions of fit play an important role in the work of Searle, and the present account of rules was developed in interaction with Searle's developing ideas on this topic. There are, however, major differences, which are implicitly discussed in [19: 59–62].

⁷ A more elaborate account of the distinction between static and dynamic rules can be found in [19: 93–118].

⁸ In this contribution, I will distinguish between belief and recognition and explain the distinction in Sect. 5.1. For the present purposes, the difference between belief and recognition can be ignored.

⁹ In Sect. 5.2 I will claim that whether a particular kind of fact is objective is a matter of meta-beliefs. If people do not believe in objective facts, this may mean that – for those people – there are no objective facts.

to mind are the facts that the Pacific contains water, that $3+5$ equals 8, or that most human beings have lungs. Because objective facts do not depend on what people believe, they are the same for everybody, even if people have different beliefs about them. If two persons disagree about an objective fact, at least one of them must be wrong.

Subjective ‘facts’ are completely personal. Many people would not even want to call them ‘facts’, because of their personal nature. Examples are that Carla is a pretty woman, that chocolate tastes good, or that Johann Sebastian Bach was a better composer than Paul Hindemith. Because subjective ‘facts’ are so personal, disagreements about these facts will be common, and in such a case it makes little sense to ask who is right. If Joanna believes that white wine tastes better than red wine and Frédéric believes the opposite, they are both right with regard to their own preference.¹⁰ Subjective facts depend completely on what individual people believe or find, and in this sense, everybody has her own subjective ‘reality’.

Social facts take an intermediate position between objective and subjective facts. They depend on what people recognise, but not on individual recognition. This means that people may disagree on what the social facts are, for instance on whether Philippe is really the king of the Belgians. However, if all Belgians agree on who their king is, it does not make sense to ask whether they are right. For every individual person, social facts are like objective facts: they exist whether people recognise them or not. However, for a whole group, social facts are like subjective facts: it depends on what the members of the group believe these facts are. Different groups may have different social facts, as different countries may have different systems of positive law.

Figure 1 gives a brief overview of the conceptual distinctions that were made above.

4 What are ‘Is’ and ‘Ought’?

In discussions of the alleged gap between Is and Ought, it is typically assumed that it is clear what is meant by ‘Is’ and by ‘Ought’. However, one reason the discussions are often unfruitful is that it is not at all clear what is meant by these terms.

‘Ought’ is the easier case. There are, it seems, two main kinds of ought: ought to be (*Sein Sollen*) and ought to do (*Tun Sollen*) [6]. Examples of ought to be are that a letter ought to be stamped, or that parents ought to be silent when their children are talking. Examples of ought to do are that Enide ought to stamp her letter before posting it, or that Bart’s parents ought not to shout if Bart is talking. An ought sometimes belongs to a point of view, such as the points of view of law, morality, or reason. This division over points of view is orthogonal to the distinction between ought to be and ought to do. For instance, mathematically the outcome of the addition of

¹⁰ For subjective facts it also holds that it depends on a social group what kinds of facts are considered to be subjective. A brief exchange with a wine *connoisseur* convinced me that some do not consider the quality of wine as a subjective matter.

3 and 5 ought to be 8, or mathematically John ought to arrive at 8 when adding 5 to 3. Legally, the tax declaration ought to be submitted on the first of June and morally, Alice ought to give the beggar some money.

Notice that value judgments do not express an ought, not even when actions are evaluated as good or bad. If a particular action would be good, this may be a reason why the action ought to be performed, but logically it is possible that an agent ought to perform a bad action, or that the best possible action is forbidden and ought not to be performed [25]. The Fact/Value gap—if there is one—is therefore not the same as the Is/Ought gap [18].

‘Is’ is more difficult than ‘Ought’. Ought-judgements typically—although not always—make use of the auxiliary verb ‘ought’. Many judgments that do not use the words ‘is’ or ‘are’, are nevertheless deemed to express an ‘Is’. For instance, both ‘John is walking’ and ‘John walks’ are deemed to express an ‘Is’, just as ‘The train is late’ and ‘The train will certainly be late’. Apparently, whether something counts as an ‘Is’ does not depend on the words used to express it. Regrettably, it is not at all clear on what it does depend.

It is tempting to qualify only objective facts as belonging to the sphere of ‘Is’. However, then the fact that it is certain that the train will be late would not belong to the sphere of ‘Is’ because it is modal and therefore mind-dependent.¹¹ Here, I will assume that the sphere of ‘Is’ is not well-defined in common parlance, and that we need a partly stipulative definition of what belongs to this sphere. I propose the following definition:

The sphere of ‘Is’ consists of the World.

This means that the sphere of ‘Is’ consists of precisely all facts and things.

Notice that this broad definition of the sphere of ‘Is’ makes it possible that ought-facts, if they exist, belong to the sphere of ‘Is’. Of course, it is possible to give a narrower definition of ‘Is’, for instance by making an exception for ought-facts. However, for a discussion about the alleged gap between ‘Is’ and ‘Ought’, this exclusion by definition has—to quote [38: 71]—‘all the advantages of theft over honest toil’. For this reason, I will continue working from the assumption that ought-facts may be a subset of the World and therefore may belong to the sphere of Is.

‘May’, because there is still a need for an explanation of the way in which ought-facts can exist and for an answer to the question of whether they can be ‘derived’ from facts that do not include an ought. This explanation must wait until Sect. 7. First, we need to delve deeper into the nature of social facts in general, and constructivist facts in particular.

¹¹ Here, I assume that all modal facts are mind-dependent. See [47] for a discussion of modalities supporting my view.

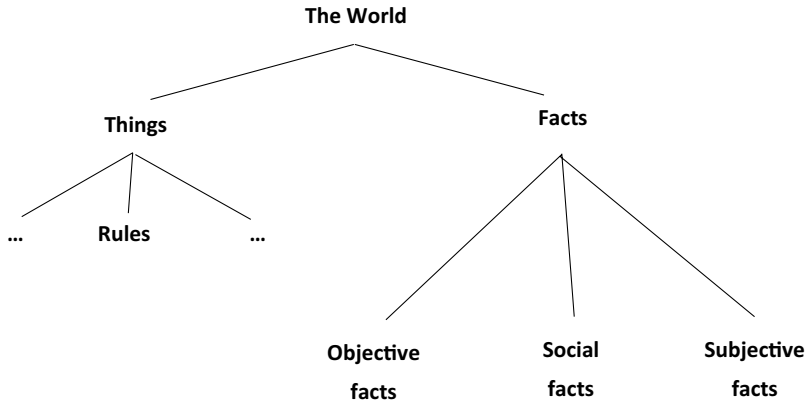


Fig. 1 Facts and things

5 Basic Social Facts

5.1 Recognition

Social facts exist relative to (for) a group. For the Maastricht Cycling Club (MCC), Hendrik is their leader, but for the United Nations, António Guterres is the leader (Secretary-General). The members of MCC are decisive for who is the leader of this club, while the members of the United Nations are decisive for who is their Secretary-General. Many social facts are the products of rules—they are rule-based or institutional facts—but for a proper understanding of social reality it is better to start with *basic social facts*. As a first approximation, basic social facts exist in a group if sufficiently many members of that group believe that they exist. For instance, Hendrik is the leader of MCC if most members of that club believe that Hendrik is their leader.

For some kinds of basic social facts, it does not suffice if sufficiently many members of a group *believe* them. Suppose, for instance, that all members of MCC believe that Hendrik is their leader, but do not attach any consequences to this belief. If Hendrik proposes to take a break during a cycling trip, this proposal is treated like the proposal of any other club member. If such a situation would occur, it cannot be said that Hendrik is the leader of MCC. Apparently, the club members do not realise what it means to be the leader of a club, and they ‘believe’ something which they do not fully understand or appreciate. To have a leader for a club means not only that sufficiently many club members believe that (s)he is the leader, but also that they attach the relevant consequences to this believed leadership. What these consequences are, depends on how the notion of leadership is given content in MCC, but there cannot be leadership without any consequences. If a person is to be the leader of a social group, the members of the group must accept his leadership. This acceptance includes the belief of leadership but is not confined to it. Acceptance of leadership typically includes

recognition of the duties imposed by the leader and of the competence of the leader to impose (some kinds of) duties.

We find that for some kinds of basic social facts mere belief satisfies, while other kinds of basic social facts can only exist if their consequences are accepted. It is convenient to introduce a technical term that stands for belief if that is all that is required for the existence of a basic social fact, but that includes acceptance if that is an additional requirement. I propose to use the words ‘recognise’ and ‘recognition’ to this purpose. From here on, ‘recognition’ stands for belief, or for belief and acceptance, depending on what is required for the existence of the basic social fact in question.¹²

5.2 Meta-Beliefs

Suppose that all members of MCC recognise that Hendrik is the leader of the club but are not aware that the other members do the same. Individually, they are all disposed to follow the directives of Hendrik about destinations, breaks or departure times, but at the same time they are surprised that the others also follow Hendrik’s suggestions. In such a case, we cannot say that Hendrik is (already) the leader of the group. More is needed, and this more includes that the group members should be aware that Hendrik fulfils the same function for most other members that Hendrik fulfils for them personally. It should not only be the case that the members of MCC recognise Hendrik as their leader, they should also believe that the other members also recognise Hendrik as leader of the group, and that these other members have the same beliefs about their fellow cyclists. In other words, a group member P should not only have beliefs about Hendrik, but also about what her fellow group members believe and accept, including what her fellow group members believe about the beliefs of P herself. The beliefs of P should include indirectly—namely via the beliefs of her group fellows—meta-beliefs about her own beliefs. I will call these beliefs *reflexive meta-beliefs*; reflexive because these meta-beliefs are also about the believer’s own beliefs.¹³

Reflexive meta-beliefs are crucial for the existence of basic social facts, but there are other important meta-beliefs. Imagine we are in the early Middle-Ages, a time at which most people believed Earth to be flat.¹⁴ Moreover, these people not only believed Earth to be flat, but also that others believed both that Earth is flat and that all others believed the same. In other words, sufficiently many members of the group consisting of all humanity believed Earth to be flat and also entertained the reflexive meta-beliefs

¹² The introduction of the technical notion of recognition here is meant to overcome the complications noticed in [40: 8] when he used in earlier publications the word ‘acceptance’ for a spectrum of situations ranging from ‘enthusiastic endorsement to grudging acknowledgment’.

¹³ The idea of reflexive meta-beliefs occurs in slightly different forms in [31: 52–57; 37: 105–119; 30; and 44: 66]. See also [45] on common knowledge.

¹⁴ It is not at all clear that most people believed this. Likely, most schooled people believed also in those days that Earth is round. Cf. [7: 82]. Of course, the percentage of schooled people was much smaller in the Middle-Ages.

necessary for Earth's being flat to exist as a basic social fact. Can we, therefore, say that in the early Middle-Ages, Earth was flat as a matter of basic social fact?

No, we cannot, and the reason is that another important meta-belief was lacking. Most likely, also in the early Middle-Ages, people believed that whether Earth is flat is a matter of objective fact. In those days, people would not only believe that Earth was flat, but also that if in a different society people would believe that Earth was round, those people would be wrong, objectively wrong. People who thought that the flatness of Earth was something to be established by shared recognition in a group would not understand what kind of fact the shape of Earth was.

Something similar would hold if one member of MCC claimed that, even though all other members recognise Hendrik as their leader, Hendrik was objectively speaking not their leader. This single person would show by his claim that he did not understand that being the leader of an informal club is a matter of basic social fact and that it does not make sense to talk about 'objective leadership'.

The point that these examples are meant to illustrate is that something can only exist as a particular kind of fact (objective, social, or subjective) *if it is a social fact that it belongs to this kind of fact*. So, Hendrik can only be the leader of MCC if sufficiently many members of MCC recognise him as the leader and if they consider leadership to be a matter of social fact.

Obviously, it cannot be expected from all members of a cycling club that they distinguish between objective, social and subjective facts and we should not expect all members to have an opinion on whether group leadership is a matter of social fact. However, implicitly, most people distinguish between facts that are 'objective', facts that are purely 'subjective', and facts that are somewhat in between. The relevant meta-belief may therefore be formulated slightly differently: something can only exist as a social fact if people do not believe it to be an objective or purely subjective fact.

5.3 When Does a Basic Social Fact Exist?

Based on the discussion in the previous sub-sections, we can formulate the following conditions for the existence of a basic social fact:

F exists as a basic social fact in social group G, if and only if:

- a. Sufficiently many members of G recognise the existence of F,
- b. It is not a basic social fact in G that facts like F are either objective facts or subjective facts, and
- c. Sufficiently many of these members of G, implicitly or explicitly, have the relevant reflexive meta-beliefs about F existing as a basic social fact in G.

6 Rule-Based Facts

6.1 Social Rules; Existence and Efficacy

The next category of social facts consists of rule-based facts. I will argue that there are two kinds of rule-based facts, namely those based on social rules and facts based on rule-based rules. The most basic form of existence for rules is existence as a social rule. Later I will define the existence of social rules as their efficacy. To make this definition understandable, I first need to say something about on the one hand the efficacy of duties and on the other the efficacy of rules. A duty is efficacious, if and only if the duty-holder tends to do what it is his duty to do. For instance, the duty for Gerald to wear a hat in church is efficacious if Gerald tends to wear a hat in church.¹⁵

Many rules do not impose duties, and this definition of the efficacy of duties can therefore not be used for rules. A definition of efficacy for rules should refer to what rules do, namely attach facts to other facts. Therefore, I propose the following definition for the efficacy of a rule:

A rule is efficacious in a group if sufficiently many members of the group are disposed to recognise the fact of the rule consequence if they believe the facts of the rule conditions.¹⁶ For instance, the rule that the person to whom a property was validly transferred has become the (new) owner of this property is efficacious in a group, if most group members are disposed to recognise the person to whom a property was validly transferred as the (new) owner of the property. The fact of the rule consequence can—but need not—be the existence of some duty. For example, the rule that car drivers must stop for red traffic lights is efficacious in a group if and only if sufficiently many members of the community who believe that a person is a car driver approaching a traffic light recognise that this person has the duty to stop.

A social rule exists in a group if sufficiently many members of the group are disposed to recognise the rule consequence if they believe the facts of the rule conditions. For instance, if most people in Belgium are disposed to recognise the person to whom a property was validly transferred as the (new) owner of the property, then the social rule exists in Belgium that the person to whom a property was validly transferred has become the (new) owner of this property. Another example deals with a duty-imposing rule. If most members of the Maastricht Cycling Club normally recognise the duty to do what the leader of the club told them to, the social rule exists in MCC that if the leader says that you must do something, you have a

¹⁵ Some will object against this definition of the efficacy of duties, as the definition does not mention that the duty holder performs the required behaviour because of the duty, or that the duty is the reason why the agent acted. This 'omission' is intentional. I try to avoid a discussion of what it means to act for a reason, as it is not obvious that humans actually act for reasons, even though they typically have the experience of doing so. For a discussion of these issues from a psychological perspective, see [46; 48; and 3].

¹⁶ What I wrote about not mentioning a causal or reason-giving connection between duties and their corresponding behaviour applies *mutatis mutandis* also to the relation between belief of the conditions of a rule and recognition of the rule's consequence.

duty to do it. This definition of when a social rule exists makes that the existence and the efficacy of a social rule coincide and implies that all existing social rules are efficacious and that a social rule will stop to exist if it loses its efficacy.

A direct consequence of this characterisation of social rules and their existence is that members of a group who do not recognise the consequences of social rules make a mistake, at least in the eyes of the other group members. Rationally speaking, they ought to recognise these rule-based facts. This perceived mistake may lead to social pressure to recognise the rule-consequences, and to (self)criticism [24: 88–9]. Notice, however, that this ‘internal aspect’ of rules is not intrinsically connected to mandatory rules. Rules that prescribe behaviour may lead to (self)criticism in case of non-compliance, but the same holds for rules that govern addition, the succession of presidents, or the use of words. Somebody who claims that $3 + 5$ equals 7, or somebody who calls a dog a cat may attract criticism (‘that is stupid’). On one hand, social rules depend for their existence on the recognition of their consequences, but on the other hand they determine for individual group members what they ought to recognise. This is an example of how an *ought* depends on facts that do not include an ought.

6.2 Rule-Based Rules

Rules attach ‘new’ facts to existing facts or to events. I will call these new facts ‘rule-based facts’. One special kind of rule-based fact are the facts which involve that a particular thing exists. The things that exist because their existence is a rule-based fact, will be called ‘rule-based things’. Let us assume that the rule exists that the team that has scored the most goals is the winner of the soccer match. On the assumption that Team A scored more goals than Team B, this rule brings about that Team A is the winner of the soccer match. The winner exists because of the mentioned rule, and the winner is, therefore, a rule-based thing.

There are very many rule-based things, such as the Dean of the Law School, a bank note, a property right, a legal obligation, and the United Nations. However, for our present purpose, the most important entities are rules that exist because they were created, rule-based rules. Rule-based rules can exist anywhere in a society where there are rules that specify how new rules can come about. For instance, MCC may have the rule that the finance committee of the club in its annual meeting can make rules on the yearly contribution members have to pay. If the finance committee uses this power, it makes rule-based rules. However, most rule-based rules exist in law.

Apart from rules of so-called customary law, which are best seen as social rules, legal rules typically come about through creation. This creation takes place in a legislative procedure, or—if court decisions have the official status of precedents—in a court procedure. If the procedure was followed correctly, a dynamic rule attaches the existence of one or more rules to the occurrence of this event. These rules exist, whether they are efficacious or not. Here lies a major difference with social rules, which depend for their existence on their efficacy.

Rule-based rules can exist without being efficacious, and therefore they can generate consequences which are not broadly recognised. In the Netherlands such a rule arguably exists with regard to traffic lights for pedestrians. If a traffic light for pedestrians is red, pedestrians are not allowed to cross the street. However, many pedestrians ignore the rule. They do not feel bound by it and make their crossing behaviour dependent on the intensity of the traffic, or the presence of a police officer. Despite this massive lack of recognition, the rule about traffic lights does create legal duties and a pedestrian who crosses the street while the traffic light is red violates the law and becomes liable to be punished.

In general, it is possible to distinguish, with regard to rule-based rules, between two kinds of validity and efficacy. Rule-based rules are typically the result of rule-creation, for instance by means of legislation. A legislative product is valid if it came about in the proper way. Typically, this will mean that the product was created by a body that had the power to do so, and by means of the correct procedure for legislation. If a piece of legislation came about in the proper way, it is by definition valid in the sense of being based on a proper source. We may call this ‘source-validity’ and this source-validity applies to both the legislative product as well as the rules that stem from it. So, legal rules will typically be source-valid.

The second kind of validity is validity as a mode of existence for rules. This will be called the rule’s ‘binding force’ [20]. A rule that binds in this sense normally attaches legal consequences to those fact situations that match its conditions.¹⁷ It should be noted in this connection that the binding force of rules has nothing to do with the question of whether rules impose duties or obligations. The binding force of rules is nothing other than the fact that rules attach legal consequences, of any kind, to the facts that match their conditions. For instance, if the rules that skateboards count as vehicles for the purpose of the Traffic Act is binding, this means nothing other than that for the purpose of the Traffic Act skateboards count as vehicles.

In the case of social rules, the consequences exist because they are recognised and then the binding force of these rules coincides with their efficacy. We have seen that this may be different for rule-based rules and with respect to these rules, it is possible to distinguish between their validity in the sense of their binding force and their efficacy. The efficacy depends on the recognition of the legal consequences; the binding force of these rules will typically depend on their source-validity.

If we reconsider the Dutch rule about traffic lights for pedestrians from this perspective, we obtain the following results. The rule was created by means of legislation by the government (a by-law) and on the assumptions that the government had the power to make such rules and that it followed the correct procedure, the rule is source-valid. This source-validity is the reason the rule is also valid in the sense of having binding force. This means in the case of this mandatory rule that the rule imposes duties on pedestrians. These duties exist, independent of whether they are recognised. Another issue is whether the rule for pedestrians is efficacious. It is

¹⁷ Reasoning with rules is more complicated than the syllogism as which it is often presented. These complications can bring about that a binding rule does not lead to its usual consequences. See [12: 78–129; and 23].

efficacious if Dutch pedestrians recognise their duties imposed by the rule. In the case of duties, recognition involves a disposition to comply. Therefore, in this example, the rule is efficacious if the duties imposed by the rule are efficacious. Notice that this efficacy neither depends on the source-validity of the rule, nor on the rule's binding force. However, if the rule is efficacious without being source-valid, the rule is a social rule, not a rule-based rule.

7 Ought-Facts

Next to objective facts, which are by definition mind-independent, there are also social facts that depend on the minds of the members of a social group. Of course, it is possible to define facts in a narrow way, to allow only objective facts as 'real' facts, but that would also exclude the existence of the United Nations as a fact, as well as the facts that John the thief is *punishable* (a disposition), that it is *certain* that the train will be late, or that Harry *cannot* play chess (an epistemic and an anankastic modality, respectively). Many more kinds of fact than we may initially think are mind-dependent, including the existence of all dispositions and all modalities, and if we disallow all these to be facts, the notion of a fact will become much narrower than our actual use of it.

As soon as it is recognised that facts do not need to be objective, but that they can also be mind-dependent, it should become easier to accept the idea that some facts are about what ought to be the case, or about what ought to be done. Ought-facts are mind-dependent, but they are facts nevertheless. Perhaps some ought-facts are purely subjective, for instance if I impose some duties on myself. However, most—if not all—ought-facts exist independent of whether you personally recognise them. Those facts are social facts; they exist in social reality.

Ought-facts 'supervene' on other facts.¹⁸ If an agent ought to perform some kind of action, there are reasons why this is the case. If all the reasons why an agent ought, or ought not, to do something are taken into consideration, it is not possible that the normative position of the agent with regard to this kind of action changes without there being a change in the set of all these reasons. For example, there are reasons why Alice ought to give money to a beggar and also reasons why she ought not to do that. If the reasons are balanced, the outcome may be that Alice ought to give money to the beggar. Because this ought supervenes on the reasons for and against it, it is not possible that Alice ought to do something else, without there being a change in the set of underlying (subvening) reasons.¹⁹

¹⁸ A set of properties A supervenes upon another set B just in case no two things can differ with respect to A-properties without also differing with respect to their B-properties [32]. For example, the property of being a bachelor supervenes on the properties of being male, unmarried and of marriageable age. Or John's being punishable supervenes on John's being a thief.

¹⁹ In the present account of the relation between reasons and what an agent ought to do, I am (perhaps too) relaxed about the logical details. A more precise account would be along the following lines: There are reasons which lead through the intermediary of rules (in the present broad sense) to one or more duties for an agent to perform or omit an action. The balance of these duties leads by means of deontic logic to the outcome that the agent ought (not) to perform this action. The reasons for the existence of

The fashionable term to express this kind of relation is ‘grounding’ [9: 74–87].²⁰ The reasons why an agent ought to perform some action are said to ground this fact. Earlier, I defined rules as follows: A rule is a general connection between kinds of facts, which attaches the presence of facts of kind B to the presence of facts of the kind A. Given this broad definition of rules, the grounding- relation is often given by a rule. The facts mentioned in the rule conditions ground the fact mentioned in the rule conclusion.

A notion that is closely related to grounding is anchoring [10]. There is no broadly accepted definition of anchoring yet, but a good working definition seems to be that a rule is anchored in facts which make that the rule exists. For instance, the rule that bachelors are unmarried men of marriageable age is anchored in the facts that this rule is used by native speakers of the English language. Or the rule that thieves are punishable is, in the Netherlands, anchored in Sect. 310 of the Criminal Code.²¹

I pay attention to grounding and anchoring in relation to ought-facts, because these two notions are important for the question of how the alleged gap between Is and Ought can be bridged. Even if it is taken for granted that there are ought-facts and that these ought-facts, being facts, also belong to the sphere of Is, it may still be questioned whether it is possible to move from the facts that ground an ought-fact to the supervening ought-fact. Is it possible to derive from the facts that Alice is rich and the beggar is poor that Alice ought to donate some of her money to the beggar (assuming that these are all the relevant facts)?

That the latter facts ground the former ought-fact is given with the existence of the rule that if one person is rich and another person poor, the former has the duty to give some of his money to the latter. However, does this rule exist? And if it does, is the existence of this rule a matter of fact that can be discovered by inspecting social reality? Or does this rule express an ought that can never be anchored in social reality alone, without support from some underlying ought?²² These questions lead us to the central issue of this article’s argument: is it possible to anchor rules that underly ought-facts in social reality? Is it possible to naturalise mandatory rules? The answer lies in constructivist facts.

Footnote 19 (continued)

the duties are indirectly also reasons for what the agent ought to do, on the balance of all duties. See [19: 141–155].

²⁰ Supervenience, grounding, and ontological dependence are closely related notions. For a discussion, see [32].

²¹ A predecessor of the relation between grounding and anchoring can be found in the distinction made in [42: 97–113] between data supporting a claim (the counterpart of grounding) and a backing supporting a warrant (the counterpart of anchoring).

²² This view has become popular in legal theory as the *Stufenbautheorie*, popularised in [27 and 28].

8 Constructivist Facts

8.1 Introducing Constructivist Facts

In the brief discussion of legal validity above, we already saw that sometimes a legal rule that was created in a valid manner, that is source-valid, nevertheless does not lead to its ordinary legal consequences. In this connection there are two possibilities. The one possibility is that the rule has its ordinary binding force and normally leads to its usual legal consequences, but not in some particular, exceptional case.²³ The other possibility is that the rule never leads to any legal consequences; the rule is not binding at all, even though it was validly created. Some—for instance [1]—would claim that this is the case with highly unjust laws. Here, I am not interested in the circumstances under which a source-valid law is not binding, but only in the theoretical possibility that this is the case. The two situations, that a rule is not binding at all, or that there is an exception to it in special circumstances, both illustrate the phenomenon that is the central topic of this essay: constructivist facts. Because the phenomenon of constructivist facts does not only occur in law and is, strictly speaking, independent of law, I will start my discussion of constructivist facts with a non-legal example.

Suppose that the members of MCC in their annual administrative meetings take a vote on what was the best cycling trip they made this year. Suppose, moreover, that in 2020 they decided unanimously that the trip to the castle gardens in Arcen was the best trip of the year. Does this mean that the Arcen trip really was the best trip? No, even if all club members agree on what was the best trip, this does not mean that it *really* was the best trip. It remains possible to raise the question of whether all members of the club were mistaken about the best trip. Perhaps, they drank so much alcohol during the trip that was really the best, that they completely forgot about its occurrence. Or all club members mistakenly feel that the trip with the best weather was the best trip, while some reflection would have made them prefer the trip with the largest number of flat tires, because that trip created the strongest personal ties between the members.

There seems to be a difference between what most or even all members of the group accept as the best trip and what really was the best trip. It is interesting to compare this with the leadership of the club. Suppose that MCC does not have a leader as a matter of rule-based fact, but that all members of the club recognise Hendrik as their informal leader. In this case, Hendrik *is* their informal leader, independent of the quality of the reasons why he is recognised as the leader. In the case of leadership, bad reasons bring about that Hendrik is the leader for bad reasons. In the case of the best cycling trip, bad reasons for preferring one trip over another mean that the preferred trip was not really the best one.

Facts such as the fact about what was the best cycling trip of the year seemingly do not fit in the simple trichotomy of objective, social and subjective facts. They are

²³ This is a topic that has become fashionable in the 1990s under the heading of the defeasibility of legal reasoning. See, for instance, [33 and 4].

not objective, because they depend on how people ‘feel’ about things. Neither are they merely subjective, as it makes sense to argue about them. And, finally, they do not seem to be ordinary social facts either, because they are often not based on a rule and nevertheless a broadly shared belief about them is not the final word. I will call such facts *constructivist facts*.

8.2 Constructivist Facts and the Naturalistic Fallacy

Constructivist facts need to be distinguished because there are facts that depend on what is broadly recognised, but for which a broad consensus is nevertheless not the final word. The predicament that the idea of constructivist facts is meant to solve is perhaps best illustrated by Moore’s famous empty question argument.

What precisely was Moore’s argument? Moore started from the question what is (morally) good and raised the issue of whether this question could be answered by providing the meaning of the word ‘good’. In this connection he hypothesized that there is a specific answer to the question of what ‘good’ means. This answer would—in the spirit of how meaning was conceived in the beginning of the twentieth century—consist of an analysis of the meaning of ‘good’ in terms of necessary and sufficient conditions for being good. Conceivable answers are that morally good is what maximizes happiness, or what (almost) everybody recognises as morally good.

And then Moore raised the question of whether something that satisfies these conditions is therefore by definition good. Moore noted that, whatever the proposed analysis might be, the analysis might still be contested [11] and the question still makes sense. On the assumption that such a question could not make sense if the analysis would really give the meaning of ‘good’, Moore concluded that it is impossible to specify the conditions for being good by providing the meaning of the word: *good* cannot be analysed.

This argument has become known as the ‘open question argument’, because the answer to the question of what is good remains open, whatever answer is hypothesized. Moore himself drew from this argument the conclusion that it is not possible to naturalise ethics by defining the proper subject of ethics—the nature of what is good—in terms of natural properties. Any attempt to do so would commit the *naturalistic fallacy*.

Moore’s open question can not only be applied to the question of what is morally good, but also to the questions of what ought to be done, or what ought to be the case. Any answer to these questions may be questioned or contested. If it were an ‘ordinary’ basic social fact what ought to be done—from here on I will ignore the question of what ought to be the case—the answer would be that it is what (almost) everybody agreed that ought to be done. This answer is, in the case of an ordinary basic social fact, true by definition and cannot sensibly be questioned or contested. However, any answer to the question of what ought to be done can be seriously questioned, and this shows that the issue of what ought to be done cannot be a matter of ordinary basic social fact.

Could it be a matter of rule-based social fact then? If it were, there should be a valid rule that answers the question of what ought to be done. Let us ignore the possibility that the rule is itself rule-based, as that would only shift the issue at stake. Then the rule determining what ought to be done should itself exist as a social rule. Its existence would depend on the recognition of its conclusion in the cases to which the rule is applicable. However, we have seen that such recognition is essentially contestable or questionable. This means that if the open question argument applies to the rule conclusions, to judgments on what ought to be done, it also applies to the validity of the rule underlying these judgments. Judgments on what ought to be done can therefore also not express ordinary rule-based facts.

So, we find that a judgment on what ought to be done cannot be a matter of ordinary social fact, whether basic or rule-based. Nevertheless, we have good reasons to assume that ought-to-do facts are social facts, and if they cannot be 'ordinary' they must be extra-ordinary. These 'extra-ordinary' social facts are the phenomenon that needs to be explained.

8.3 Constructivism

There are facts which seem like basic or rule-based social facts but differ from them because it makes sense to question them, even if there is a consensus. The consensus may be wrong, and how is that to be explained? One possible answer is that the facts in question are determined by reason. They essentially depend on our minds, but they are not subjective. Humans share, in this view, a faculty called *reason* and this faculty not only helps us arguing about the world, but also brings the truths of reason into existence. If some facts are facts because they are determined by reason, this explains why people can seriously disagree about them: some people are not completely reasonable and therefore they make mistakes.

Mathematics and morality provide us with good examples of domains that might be based on reason. In the philosophy of mathematics, mathematical truth is seen by some as the product of reason in the shape of logic. In ethical theory, a prominent branch considers ethical truths as the products of practical reason. This view is called *constructivism* as opposed to *realism*. Realism is best interpreted as the view that facts are objective in the sense of mind-independent. A realist in ethical theory believes that there are moral facts which are as objective as the fact that the Pacific Ocean borders on the USA, or the fact that iron is a metal. A constructivist, on the contrary, believes that there are no such objective moral facts, but that moral facts depend on moral argumentation. The facts are what the best moral argument tells us they are [35 and 2]. Constructivism is a form of rationalism, because reason in the form of argumentation determines what the facts are.

This is not the place to start a debate on the plausibility of rationalism in mathematics or ethics. I only want to point to an issue connected to traditional rationalism which makes it attractive to consider alternative views. This issue is that there is no clear theory of what reason is. We can point out that some views are (un)reasonable. We can often give reasons why these views are (un)reasonable. However, we are not able to prove, rather than merely claim, that these reasons are good reasons.

Somehow, the reason in traditional rationalism seems to fall out of the blue. The solution to this predicament is to treat the rules of reason as social things, and more in particular as constructivist things. These rules depend on what people recognise as rational but are always amenable to questioning.

The constructivism of constructivist facts has a lot in common with constructivism in mathematics or in ethical theory but emphasizes—in a manner that will still be discussed—that the reason necessary to establish the constructivist facts has a strong foundation in human practices. To state it in an overly simple manner: reason itself is a matter of social fact, more in particular of constructivist fact.

8.4 The Possibility of Questioning

Constructivist facts are social facts, facts that exist because they are recognised as existing, but which are nevertheless open to questioning. How is this combination possible? The answer is easy: the social practice of a group does not only recognise the existence of these facts, but also the possibility to question them. The possibility of questioning is a social fact, just as much as the questionable fact. If the possibility of questioning a particular kind of fact does not itself exist in social reality, facts of that particular kind are perhaps social facts, but not constructivist facts.

This is quite abstract, and it may be useful to consider some examples. Let us start with the best cycling trip. Let us assume that, if interviewed about it, all members of MCC would mention the trip to the castle gardens of Arcen as last year's best trip. Moreover, they do not believe this to be an objective matter, because it depends on their appreciation of the trip, but neither do they believe the issue is purely subjective. And, finally, they do not only consider this trip the best one of the year but they also believe that the other club members feel the same and also know that their feelings are shared by the others. In short, it is a basic social fact in MCC that the trip to the castle gardens of Arcen was the best trip of the year. That is: in first instance, because they also agree and know that the others also agree that, theoretically speaking, everybody might be mistaken. If somebody came up with convincing reasons that another trip was even better, this other trip would be even better. There is an ambiguity in this argument to which I will return later. Let us assume for now that the value judgment about the best cycling trip expresses a constructivist fact.

Before turning to the next example, I want to point out that the present example shows that some value judgments express constructivist facts. However, this does not hold for all value judgments. For instance, the value judgment that white wine tastes better than red wine does not express a constructivist fact, not even if everybody would agree about the better taste of white wine. Taste is generally considered to be a subjective matter, and when a matter is considered subjective, it cannot be the topic of a constructivist fact. Some wine *aficionados* might believe that the taste of wine is an objective matter. Also on that view, the taste is not a matter of constructivist fact.

A second example deals with rule-based duties. Assume that the legal system of France has the rule that car drivers must halt at red traffic lights. This rule was created by means of a statute and exists as a matter of rule-based fact. Zala drives

her car and approaches a red traffic light. The rule imposes on her a duty to halt, or that would at least be the normal situation. However, Zala brings a severely injured person to the hospital, and it is important that they arrive there as soon as possible. This is a reason to make an exception to the general traffic rule and to conclude that Zala should not stop for the traffic light (assuming, of course, that she does not cause a collision by driving on). This example differs in two respects from the former one about the best cycling trip. First, it deals with a normative judgment—what should Zala do?—rather than with a value judgment. And second, the normal social fact, namely that Zala should stop, would be a rule-based fact, rather than a basic social fact. However, these two differences do not make a difference; it is still possible to argue that the normal situation does not occur, by adducing convincing reasons to this effect.

Let us abstract from these examples again. Constructivist facts are characterized by the possibility to have a *serious* debate about them. ‘Serious’ means in this connection that the participants in the debate believe that it is possible to disagree about these facts without thereby showing a misunderstanding of what the debate is about. For instance, if Joanna and Frédéric disagree about whether red wine is better or white wine, while considering that their disagreement is not serious because they believe it is just a matter of taste, they consider the issue at stake to be a merely subjective one. If two members of MCC disagree about whether Hendrik is their leader, while both know that practically all members of the club accept Hendrik as their leader, their disagreement is not serious. The reason is that not believing that Hendrik is the leader while also believing that ‘everybody’ recognises Hendrik as the leader, shows misunderstanding of the conditions for leadership. The example about the best cycling trip of the year illustrates that it is possible to disagree seriously about what was the best trip. Similarly, it is possible to disagree seriously about whether somebody should donate money to Oxfam, for the reason that this maximizes happiness, or whether a parrot which assists a blind person should be classified as a guide dog for the purpose of allowing it in the butcher’s shop. The seriousness of the debate becomes manifest in the assumption of all participants that there is a right answer to some question, even though it is not a matter of objective fact, and that this does not change if people disagree about what the answer is.

The outcome of a potential debate about what the constructivist are, matters for what the facts are. The reasons that could be adduced in the debate contribute to the facts that are the topic of the debate. Earlier [16], I described this by claiming that the debate constructs the facts, and not merely reconstructs them, as would be the case in a debate over objective facts. A slightly too simple way of stating the point is that the facts are what the best possible argument claims they are. This constructive role for arguments in determining what the constructivist facts are justifies their name as being *constructivist* facts.

It is time to return to the ambiguity that I pointed out in the example of the best cycling trip. By adducing arguments for why the trip that everybody initially thought to be the best one was not really the best one, it turned out to be possible to ‘change’ the facts about the best cycling trip. The ambiguity lies in the role of the arguments. There are three possibilities:

- a. Because the arguments were adduced, (almost) everybody changed her or his mind, and now the other trip has become the best one because ‘everybody’ recognises it as the best one.
- b. Because the arguments were adduced, and because the arguments are good, the reasons why the facts are different have, so to speak, become ‘available’ and for this reason, the other trip has become the best one, even if it is not widely recognised yet.
- c. Given what the group members already recognise and given what the objective facts are, it would be possible to give reasons why another trip is ‘really’ the best, and this mere possibility suffices for making the other trip the best one

Much can be said about these three possibilities [13], but here I will confine myself to making a choice without giving more reasons: I adopt possibility c, although I still need to refine this option a bit. This means that constructivist facts depend on what ought to be recognised given the objective facts and what is already recognised in a social group. Constructivist facts depend on whether their existence ought to be recognised. *This shows that sometimes—namely in the case of constructivist facts—what is the case depends on what ought to be done (ought to be recognised).*

Finally, a second complication deserves mentioning. I mentioned that whether a kind of fact is considered to be constructivist depends on the social practice in a group. This needs to be specified: it is not only a social fact; it is even a constructivist fact. So, if ought judgments are considered to describe constructivist facts, this is itself a constructivist fact. It is possible to seriously question whether ought-judgments are constructivist, and alternative views would be that they are purely conventional (non-constructivist social facts), or that they are objective or purely subjective. The debates in the philosophy of mathematics about the plausibility of mathematical constructivism and in ethical theory about constructivism in ethics illustrate this very phenomenon. Constructivism bites its own tail: whether some kind of fact is constructivist is itself a matter of constructivist fact.

8.5 When Does a Constructivist Fact Exist?

It becomes time to give a more precise account of the conditions for the existence of a constructivist fact. I start with some informal observations, which will for some readers be more informative than the semi-formal characterisation at the end:

1. Constructivist facts are social facts, which means that they are or ought to be²⁴ recognised as social, and not as objective or subjective facts.

²⁴ This insertion ‘or ought to be’ was made to account for the fact that whether a kind of fact is constructivist is itself also a matter of constructivist fact.

2. A constructivist fact is a fact that is recognised as result of a rational reconstruction of the set of objective facts and social facts that are actually recognised in a social group.

- a. This reconstruction may involve no change for a particular social fact, and then that fact exists as a social fact in the group because it is actually recognised.

An example would be that the members of MCC group believe that the cycling trip to the castle gardens of Arcen was the best trip of 2020 and that this belief survives a rational reconstruction of the belief set. Then the belief that the cycling trip to the castle gardens of Arcen was the best trip is in the rationally reconstructed belief set, because it was already in the original belief set and nothing changed in this respect.

- b. This reconstruction may involve the inclusion of a particular social fact, and then that fact exists as a social fact in the group because it ought to be recognised according to the rational reconstruction.

An example would be that the members of MCC initially did not have the rule that members of all religious convictions should be treated equally, but that the existence of this rule is included in the rationally reconstructed belief set and the rule therefore already existed as a matter of constructivist fact.

- c. This reconstruction may involve the removal of a particular social fact, and then that fact does not exist as a constructivist fact in the group because it ought not to be recognised according to the rational reconstruction.

An example would be that the members of MCC group should have recognised that the cycling trip with the largest number of flat tyres was the best trip of 2020 and that they ought not to have recognised the trip to Arcen as the best one. Then the belief that the cycling trip to the castle gardens of Arcen was the best trip is not part of the rationally reconstructed belief set and the trip to Arcen was, everything considered, not the best trip.

3. The rational reconstruction of the belief set of a group takes two factors into account: the objective facts and the recognised social facts.

For instance, if the belief that the cycling trip to the castle gardens of Arcen was the best trip of 2020 was mistaken, but if most members of the group did not realise that, the belief set is reconstructed on the basis of this mistaken belief. However, objectively speaking, the trip with the largest number of flat tires has led to the most personal ties between the group members, something that would have been judged decisive by the members if only they would have realised this fact. Therefore, the result of the reconstruction would, *ceteris paribus*, be that the original mistaken belief is replaced.

Together, these observations lead to the following semi-formal characterization of when a constructivist fact exists:

A constructivist fact C exists in a group G if and only if:

- Facts like C are, or ought to be, recognised in G as constructivist facts;
- C is an element of f ($F \cup I$), where:
- F is the set of all objective facts;

- I is the initial set of social facts recognised in G;
- f is the function that rationally reconstructs the combination (join) of the objective facts F and the initial social facts I into a new set of social facts.
 - The function f includes a fact D in its outcome (value) if either:
 - D is an old social fact in G ($D \in I$) and it is not so that D ought not to be recognised in G; or
 - D ought to be recognised in G.

It is on purpose left unspecified when precisely a fact ought (not) to be recognised in a social group, as this would involve many epistemological technicalities.²⁵ However, an important constraint is that ought-facts are themselves constructivist facts which can only exist in a group if either they are broadly recognised, or they ought to be recognised. This means that all ought-facts that exist in a social group must in last instance have a foundation in (other) facts that are either objective or are recognised by the group.

8.6 A Table of Kinds of Facts

The following table gives an overview of the different kinds of facts that were distinguished. The table may be read as a partial expansion of the schema presented in Sect. 3.

Facts			
Objective facts	Social facts	Subjective 'facts'	
	Basic social facts	Rule-based facts	
		Facts based on social rules	Facts based on rule-based rules
	Constructivist	Constructivist	Constructivist
	Non-constructivist	Non-constructivist	Non-constructivist

As this table illustrates, the distinction between constructivist and non-constructivist facts applies only to social facts. Within social facts, the distinction constructivist/non-constructivist is orthogonal to the distinction between basic and the two variants of rule-based facts.

9 Some Implications

It becomes time to take stock of the findings. I will discuss three of them: the (non-existence of the) naturalistic fallacy, the derivation of Ought from Is, and the derivation of Is from Ought.

²⁵ For some of the details, see [14].

9.1 Moore's Open Question and the Naturalistic Fallacy

In the 1700s, Hume raised the question of whether it is possible to deduce an ought-conclusion from only is-premises. At the beginning of the twentieth century, Moore (33, 5–7) presented a brief argument to the effect that it is not possible to give a naturalistic definition of the word 'good'. The topics addressed by Hume and Moore are quite different. Hume addressed the Is/Ought gap, while Moore wrote about the Fact/Value gap. Moreover, Hume's issue concerns the possibility of a derivation (deduction), while Moore's argument deals with the possibility of definition. Despite these differences, Hume's remark and Moore's argument are often taken together as addressing the same fundamental issue. If this is indeed the case, Moore's argument against a naturalistic definition of 'good' is relevant for the possibility to derive 'Ought' from 'Is'.

We have seen that according to Moore the meaning of the word 'good' cannot be analysed and that it is not possible to naturalise ethics by defining the proper subject of ethics—the nature of what is good—in terms of natural properties. Much can, and has been, said about Moore's argument and the conclusion he drew from it [36]. With the conceptual tools developed here, it is perhaps possible to say something new about it. What word is used for which things is purely conventional; another word might have done just as well. Therefore, it makes little sense to question the proper use of a word. If I see an ordinary horse under normal circumstances and question whether the animal should be called a horse rather than a cow, I thereby show that I do not know what 'horse' means. The fact that it is a horse, rather than a cow depends, next to the characteristics of the animal, on a social rule that exists as a matter of non-constructivist fact. This social rule determines what kind of animal is properly called a 'horse'.

For the word 'good' as used in ethics, such a social rule does not exist. There may be moral conventions that determine when something counts as good, but these conventions are open to questioning. Why? Because it is a social fact that the standards for goodness are open to questioning, while the standards for counting as a horse are not open in that way. Being good is a matter of constructivist fact—also in many non-moral settings—while being a horse is not. Moore was in this respect right, although the phenomenon he pointed out is not a matter of deep ethical fact, but 'merely' our social convention to treat goodness as a matter of constructivist fact. However, all of this has nothing to do with naturalism; in that respect, Moore was not right.

9.2 How to Derive Ought from Is and Vice Versa?

I have already argued that it is not possible to deduce an ought-conclusion from only non-ought premises. That is quite uninteresting, being comparable to the impossibility to deduce a conclusion about tables from premises that only deal with chairs.

More interesting is the issue of whether it can be rational to accept an ought-conclusion of the basis of only non-ought reasons. If we take derivation in a broader sense than only deduction, there can be no reasonable doubt that it is possible to

derive Ought from Is. One way to do so, based on the possibility that a dynamic rule creates *new* ought-facts, was shown by Searle in the 1960s [39; 40; 15; 19: 97–102; and 8].

A different way—which is the central topic of this article—is that an ought-fact can be grounded in other facts, based on a rule that is anchored in social reality. Let us assume that Alice ought to give the beggar money, because the beggar is poor, and Alice is rich. The ought-fact supervenes on, is grounded in, two other facts, namely that Alice is rich and that the beggar is poor. This grounding relation is supported by a social rule that rich people have a duty to give money to poor people.²⁶ This social rule is anchored, let us assume, in our social practice. The anchoring involves that sufficiently many people recognise that rich people have a duty to give money to poor people, and that the recognisers have the relevant meta-beliefs. Together, this establishes the ought-fact as a social fact.²⁷ See Fig. 2.

However, the ought-fact is a constructivist fact, which means that if the fact ought not to be recognised, it does not exist. Unless this latter negative ought-fact can be grounded in the social practice, the initial social fact that Alice ought to give the beggar money stands. In the absence of reasons to the contrary, Alice ought to give the beggar money because Alice is rich, and the beggar is poor. This shows by means of an example that it is possible to derive an Ought from an Is.

Perhaps more interesting than the derivation of Ought from Is, is the derivation of Is from Ought. I must be brief here, and therefore shortcut my formulation. For social facts in general it holds that they exist if they are recognised as existing. For constructivist facts, actual recognition can be replaced by the rational requirement of recognition.

The conditions for the existence of constructivist facts include that a constructivist fact exists if its existence ought to be recognised.²⁸ It is, for instance, the case that Alice ought to give the beggar money if the members of the relevant social group ought to recognise that this is the case. A legal example of the same phenomenon is that Pierre owns a particular car if the (relevant) legal subjects of Pierre's legal system ought to recognise that Pierre owns this car.

In general, it holds that if a particular kind of fact is in a social group considered to be constructivist, it is possible to derive that a concrete instance exists from the fact that this instance rationally ought to be recognised as existing. In the case of constructivist facts, it is possible to derive Is from Ought.

²⁶ Yes, I am aware that this is overly simplistic.

²⁷ The similarity to Toulmin's [43] lay-out of arguments is no coincidence. However, discussing the relation to Toulmin's work is beyond the scope of this article.

²⁸ See the last clause of the definition in Sect. 8.5 of when a constructivist fact exists.

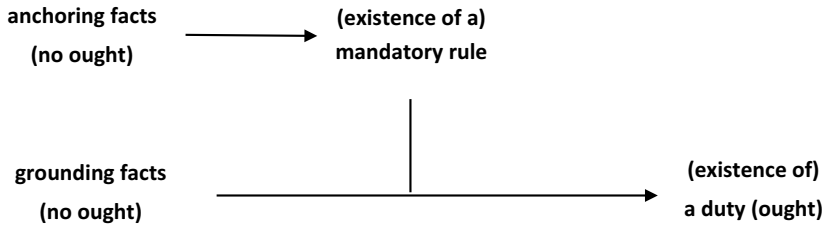


Fig. 2 The grounding and anchoring of an ought-fact in social reality

10 Conclusion

This article addresses the possibility to bridge the alleged gap between Is and Ought and in particular the derivation of ought-judgments from only is-judgments. In a sense, the argument begged the questions by almost postulating that the sphere of Ought is a part of the sphere of Is and by relaxing the demand of deduction to the demand of ‘mere’ derivation. This manoeuvre is not a fallacy, however, because the opposite views—that Is and Ought are different spheres and that deduction is the only reliable form of derivation—are at least as controversial as the postulations of this article.

Moreover, the body of this article is devoted to making the view that Ought is a subcategory of Is plausible. It does so by introducing social facts as a category of facts that are mind-dependent, but at the same time not completely subjective, and by describing constructivist facts as a kind of social facts that are fundamentally open to questioning. These two characteristics of ought-facts can not only be explained by assuming—wrongly—that the sphere of Ought differs from the sphere of Is, but also—and better—by assuming that ought-facts are constructivist. Having the notion of constructivist facts available also allows us to see how ought-facts are similar to legal facts, and to many value-facts which are also constructivist.

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