**Article**

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# Causal Social Construction

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**Abstract:** In the social constructionist literature, little has been said about what it means for social factors to cause X in such a way that X would count as causally socially constructed. In this paper, I argue that being caused by social factors – and thus being causally socially constructed – is best defined in terms of a contrastive counterfactual notion of causation. Unlike some plausible alternatives, this definition captures what is at stake in actual social constructionist debates. It makes transparent which factors the truth of a causal constructionist claim may depend on. By doing so, it sheds light on what the disagreements over whether X is causally socially constructed may turn on. It also helps us to see under which condition the claim that X is socially causally constructed is compatible with the claim that X is caused by biological factors.

**Keywords:** Contrastive causation; Social construction; Social causation; Causal social construction; Social ontology.

## 1 Introduction

In recent philosophical literature, a number of authors have attempted to clarify what it means for a phenomenon X to be socially constructed (Haslanger 2003; Mallon 2008, 2016; Ásta 2015; Diaz-Leon 2015). The focus is usually – and likewise in this paper – on the social construction of phenomena involving human categories and properties (typically race, gender, sexuality). In this literature, it is common to distinguish between two broad ways of how X might be socially constructed. First, X is *constitutively* socially constructed if social factors *constitute* X. Social factors constitute X if they are part of what being X consists in. For example, that Donald Trump is a president is a paradigmatic constitutively constructed fact in that what it is for Donald Trump to be a president is for him to

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stand in appropriate relations to certain social institutions. Secondly, X is *causally* socially constructed if it is *caused* by social factors. For example, the fact that David Beckham has many tattoos is a paradigmatic causally constructed fact in that it is caused by the interplay between various social expectations, technologies, etc. Of the two notions, constitutive construction has gained more philosophical attention – there are quite a few elaborations of what it is for social factors to constitute X (e.g. Ásta 2013; Schaffer 2017; Griffith 2018a,b). Little has been said about causal social construction – i.e. about what it is for X to be caused by social factors – despite the fact that causal constructionist claims are abundant if not predominant among the constructionist claims both in philosophy and in the social sciences. Typically, one is content with some variation of the following definition:

CAUSAL CONSTRUCTION. X is causally socially constructed iff social factors cause X.[1]

The precise conditions on which X is indeed caused by social factors are typically not specified.[2]

Yet, on a closer look, the concept of causation by social factors and, accordingly, the concept of causal construction are not clear at all. Here is an illustration of the ambiguity. Suppose one wants to determine if any of the following facts are caused by social factors.

(1) I am 1.78 m tall.
(2) Most adult humans in Italy speak a language.
(3) In 21st-century Western societies, many women but few men wear high heels.
(4) In 21st-century Western societies, women are primary caregivers more frequently than men.

In a sense, it is plausible that (1)–(4) are all caused by social factors. The fact that I am 1.78 m tall is partly attributable to my social environment having shaped my diet in certain ways. That most adult humans in Italy speak a language is partly because most adult humans in Italy grow up in a socio-linguistic setting, and so on. Then again, there seems to be a sense of "caused by social factors"

**1** Frequently cited examples are: "X causally constructs Y if and only if X causes Y to exist or to persist or X controls the kind-typical properties of Y." (Mallon 2008) "X is socially constructed causally as a T iff social factors play a significant role in causing X to be T." (Haslanger 2003, p. 317).

**2** In addition, it is rarely clarified what makes a factor social. I will continue this (regrettable) trend and talk of social factors whilst relying on an intuitive understanding of what the "social" in "social factors" amounts to.

on which one could at least dispute that it applies to all of (1)–(4). For instance, without denying that social factors have in some way contributed to all of (1)–(4), many people would probably hesitate to accept that (1) and (2) are caused by social factors, at least until provided with further empirical evidence. So, intuitions vacillate, and this vacillation, it seems, has to do with the ambiguity of the very notion of one thing causing another. But if the notion of one thing causing another is ambiguous, so is CAUSAL CONSTRUCTION – and this is something that a category with explanatory ambitions should better avoid.

In this paper, I propose a way to disambiguate the meaning of "cause" in CAUSAL CONSTRUCTION. I argue that causal constructionist claims are best understood in terms of a contrastive counterfactual account of causation (e.g. Hitchcock 1996; Schaffer 2005; Northcott 2008). According to this proposal, the claim that X is caused by social factors and thus causally socially constructed is true just in case it is true that if in place of some actually obtaining social factors certain alternative would obtain then X would not obtain, and this alternative meets certain constraints. I will argue that unlike some tempting alternatives, this definition satisfies certain desiderata that a definition of a concept like causal construction should satisfy. First, the definition is general enough to accommodate a variety of interesting kinds of constructionist accounts for a wide range of X-s, yet specific enough to provide clear guidelines for deciding in a particular context whether some X counts as causally constructed. Second, the definition tracks how participants in the relevant debates usually talk of social construction. Thus, the definition applies to X-s that are uncontroversially seen as socially constructed, and does not apply to X-s that are uncontroversially seen as not socially constructed;[3] it sheds light on what the disagreements over whether X is causally constructed may turn on and therefore helps to organize, negotiate and solve these disagreements; it accords with the explanatory and practical aims of actual constructionist theorizing (which I am going to spell out later). Third, the definition helps to lay out the relationship between the often contrasted properties of being socially constructed and being caused by biological factors. In particular, it helps to see when exactly causation by genes excludes (or does not exclude) being socially causally constructed and *vice versa*.

I will proceed as follows. In Section 2, I motivate my account by demonstrating why certain intuitive non-contrastive ways to conceptualize causation by social factors do not meet the above desiderata. In Section 3, I lay out the definition of causal construction in terms of a contrastive counterfactual

**3** I therefore do not aim to cover those constructionist positions according to which everything is socially constructed.

account of causation and clarify how this definition does meet the desiderata. In Section 4, I highlight certain further benefits of this definition. Finally, in Section 5, I use the contrastive account to elucidate the relationship between being socially causally constructed and being caused by biological factors, in particular, genes.

A terminological point is in order before proceeding. Throughout the discussion I will assume the object of social constructionist analysis to be some or other particular – for example, some actually obtaining contemporary or historical situation, spatiotemporally extended event or worldly state involving the existence, instantiation, distribution, persistence, etc. of a human category or property. For ease of expression, I will call such particulars facts.

## 2 Causation as Production and Causation as Difference-Making

I suggested that our everyday causal discourse is ambiguous. A similar suggestion has been made, for one, by Ned Hall (2004). Hall argues that our causal discourse is ambiguous between two concepts of causation. According to the *causation-as-difference-making* concept, C causes X just in case had C not obtained, X would not have obtained. The c*ausation-as-production* concept, on the other hand, is evoked when we say of C that it helps to generate or bring about or produce X (Hall 2004, p. 225). Typically, if C helps to bring about X, then C also makes a difference with regard to X, but not always (Hall gives many examples of the two coming apart). Typically, which of the concepts is evoked – and what are, respectively, the truth conditions of a given causal claim – is often intuitively clear from the context, but, again, not always. The relevant intuitions can break down especially in theoretical contexts where we abstract away from concrete situations.

I find it uncontroversial that there are indeed these two divergent kinds of intuitions, central to our causal discourse, about what it is for one thing to cause another, whether or not we accept Hall's more specific view that these intuitions derive from two different *concepts*. These intuitions are preferentially taken up by two types of theories of causation. On the one hand, there are counterfactual theories of causation (e.g. Lewis 1973; Woodward 2004) that build upon the causation-as-difference-making intuition. On the other hand, there are various physical connection or mechanistic theories of causation (Craver 2007; Craver and Tabery 2017; Glennan 2017) that build upon the causation-as-production intuition. Given these two distinct intuitions and prominent theories

of causation, it seems to be a reasonable hypothesis that when X is argued to be causally socially constructed, social factors are claimed to either produce X or make a difference with regard to X.[4] However, as I will now argue, neither of the disjuncts leads us to a satisfactory account of what it means for X to be causally constructed, unless we understand the claim that X is caused by social factors as a contrastive claim that contrasts the candidate causative social factors with some relevant alternatives.

Let us begin with considering the hypothesis that CAUSAL CONSTRUCTION should be understood in terms of causation as production. Glennan (2017) offers a recent defense of the claim that causation amounts to production. I will use Glennan's account as my point of reference. According to Glennan, "'event *c* causes event *e*' will be true just in case there exists a mechanism by which *c* contributes to the production of *e*" (Glennan 2017, p. 156). This generic characterization captures the core of various mechanistic accounts of causation *qua* production. A mechanism is an arranged system of entities and their interactions that jointly bring about an event (or some other phenomenon). An event *c* contributes to the production of a different event *e* by a mechanism insofar as *c* or some entities or interactions that make up *c* are part of the mechanism that produces *e* (Glennan 2017, p. 157). Our focus is on cases where the entities and interactions are social. CAUSAL CONSTRUCTION interpreted in the mechanistic production sense of causation would then read as follows:

CAUSAL CONSTRUCTION$_1$. X is causally socially constructed iff social factors are part of the mechanism that produces (or produced) X (hereafter "X-mechanism")

where X is some actual, contemporary or historical, social fact.

CAUSAL CONSTRUCTION$_1$ is much in the spirit of how social constructionist projects are discussed in the literature. For example, Hacking (1999, p. 50) holds that any claim of X having been socially constructed is an empty metaphor unless it means, quite literally, that X has been built by social processes and entities. Haslanger (2012, p. 183–184) writes that "the goal of social constructionist analyses is to locate the (often obscure) mechanisms of injustice and the levers for social change". Marques (2017) stresses that it is indispensable for a constructionist agenda to identify the mechanisms by which social factors contribute to X, and continues by giving concrete examples of the mechanisms by which stereotypes and silencing produce gender-related

**4** Some see counterfactual and mechanistic theories as competing ontological accounts of causation. However, the two theories can also be viewed as explications of causation-talk in different contexts. Here I commit to the latter approach.

facts. Mallon's (2016) account of the construction of causally relevant social roles comprises a detailed clarification of the mechanisms by which various social factors contribute to bringing about and sustaining causally salient human categories.

Yet, on a closer examination, CAUSAL CONSTRUCTION$_1$ is extensionally inadequate. To see this, let us first consider – what makes an entity part of X-mechanism? According to Glennan, it is necessary and sufficient for C to be part of X-mechanism that C is spatiotemporally connected to X and participates in bringing X about (Glennan 2017, p. 157). But assuming this criterion for being part of a mechanism, far too many paradigmatically non-constructed X-s would turn out to be causally constructed. In modern societies, social factors (e.g. food industry and industrially produced food products) have participated in bringing about very many, if not most of the facts that involve human traits. These include the fact that most adult humans in Italy speak a language, that most people have functioning kidneys, that I have 32 teeth etc. This implication, however, trivializes the concept of causal construction, and runs counter to what most constructionists subscribe to. CAUSAL CONSTRUCTION$_1$ also fails to capture what is at stake in many actual disagreements over whether X is socially constructed. Take for example (4), the fact that in the 21$^{st}$-century Western societies, women are primary caregivers more frequently than men. It is obvious that various social factors are spatiotemporally connected to this fact and have participated in bringing it about. Nevertheless, it is not uncommon to argue that it is not socially constructed, but, rather, biologically caused (e.g. Browne 1999; Hrdy 2000; Pinker 2002, p. 354–358). Those who disagree recognize that this position is, at least, not trivially false.

Therefore, if understanding CAUSAL CONSTRUCTION in terms of the production notion of causation is to have any hope, there has to be something more to the fact that X is caused by social factors than being produced by a mechanism that merely contains social factors. Let us rule out some "bad" options for cashing out this "something more".

Bad Option 1. X is causally constructed iff only social factors are a part of X-mechanism.

All facts about every human property and category are produced by mechanisms that contain some paradigmatically non-social, e.g. psychological, biological, and physical entities and processes (genes, oxygen, digesting food, cells etc.). Bad Option 1 therefore implies that no human trait is causally constructed. A definition of social construction with this implication clearly cannot serve the interests of social constructionist theorizing.

Bad Option 2. X is causally constructed iff social factors form a sufficiently big part of X-mechanism.

Such "counting" approach would stumble upon numerous practical and conceptual difficulties concerning the individuation of X-mechanism components. Are the cells and metabolic processes that make up the bodies of the relevant social agents part of the mechanism that produces, say, gender-inequality? Or should we also (or instead) be counting the atoms that make up these cells? How should we count the various interactions between these cells, organisms, atoms? And even if we manage to settle these issues, where should one set a non-arbitrary threshold for the "sufficiently big part"? 60% of the constituents of X-mechanism? 50%? 30%? These and other difficulties make Bad Option 2 practically useless. Neither is there any indication of such counting considerations in fact guiding the judgments of a social constructionist regarding whether X is causally constructed.

Bad Option 3. X is causally constructed iff certain *kinds* of social factors are part of X-mechanism.

Bad Option 3 does not look that bad at first glance. There is a *prima facie* appealing candidate for the "certain kinds of social factors". Namely, it is a popular view that the social constructedness of X implies that X is caused by collectively held mental representations – ideas, attitudes, concepts etc. (e.g. Searle 1996). Yet, it would be premature to hold causation by mental representations as *definitive* of causal construction. First, sometimes the fact that the mechanism that produces X contains collectively held ideas can show precisely that X is *not* socially caused – like when the ideas in question are innate. For instance, it is sometimes argued that the fact that females typically occupy certain womanly social roles like caring for children is not socially constructed as it is partly caused by inborn female-specific psychological preferences that have evolved in the course of natural selection (Browne 1999; Hrdy 2000). Thus, being caused by certain mental representations suggests that X is causally constructed only if these representations are themselves socially conditioned in some relevant sense. And this "relevant sense" is precisely what we were after in the first place. Second, sometimes the kinds of causes that qualify X as causally constructed in the eyes of a constructionist are not mental representations at all, but rather social practices, institutions, material realities (Haslanger 2003, p. 312–315; Sundstrom 2003; Thomasson 2003). Most importantly, however, Bad Option 3 seems to address a wrong level of analysis. Any concrete proposal as to what the "certain kinds of social factors" are presumes that exactly these rather than some different kinds of factors are *relevant* as parts of X-mechanism and thus owes an account of what

makes them such. It is a secondary question if the relevance criteria pick out a particular kind of social factors (e.g. collectively held mental representations). Bad Option 3 therefore boils down to

Potentially Good Option. X is socially causally constructed iff social factors are a relevant part of X-mechanism

So, the most promising way of interpreting CAUSAL CONSTRUCTION$_1$ in the spirit of the production notion of causation arises the need to spell out what makes certain social factors *qua* parts of X-mechanism relevant to whether or not X is socially constructed. In the mechanistic framework, a common baseline criterion for determining whether C is a relevant part of X-mechanism and thus a relevant cause of X is this: C makes a difference with regard to whether X obtains (see for example Glennan 2017, Section 7.2 for discussion on this topic). However, supplementing Potentially Good Option with this relevance criterion would mean conceding that CAUSAL CONSTRUCTION$_1$ is suitable as a definition of causal construction only if combined with the difference-making notion of causation. This suggests that, perhaps, CAUSAL CONSTRUCTION is better understood in terms of the difference-making notion of causation in the first place.

CAUSAL CONSTRUCTION interpreted in the difference-making sense of causation would read as follows:

CAUSAL CONSTRUCTION$_2$. X is causally socially constructed iff if certain social factors SF did not obtain, X would not obtain

where X is some actual, contemporary or historical, fact, and SF are some contemporary or historical social factors that actually obtain in the target social environment where X obtains.[5]

The hypothesis that X must depend on social factors in order to be causally constructed is clearly motivated in light of different constructionist theories. Broadly speaking, there are two kinds of projects that a typical constructionist could be engaged in when arguing that X is socially constructed. First, she might want to show that facts of type X do not obtain in all but only in some social

**5** The requirement that in order to be causally constructed, X must depend on SF (as in CAUSAL CONSTRUCTION$_2$) can, but need not, be combined with the requirement that X has to be part of X-mechanism (as in CAUSAL CONSTRUCTION$_1$). Whether or not it should be so combined, turns, for example, on whether we want the absence of certain social factors to qualify as a cause of X (absences, one would commonly assume, cannot be parts of anything, including X-mechanism). This is a topic for further discussion. Since nothing in the following discussion of the fittingness of CAUSAL CONSTRUCTION$_2$ turns on how this issue is settled, we can ignore it.

environments – namely in environments where certain social factors are present. Second, she might want to demonstrate that X can be changed by intervening on social factors. Both require demonstrating that X depends upon certain social factors, i.e. that if these factors would not obtain, then X would not obtain.

However, CAUSAL CONSTRUCTION$_2$ does not avoid the previously discussed shortcomings of CAUSAL CONSTRUCTION$_1$, in particular, the issue of overapplication. With most facts about individuals in contemporary industrialized societies, one is likely to find a social factor such that if this factor would be absent, the fact would not obtain. Consider the fact that most adult humans in Italy speak a language. It is true that if the language-speaking individuals in Italy had not grown up in an environment of linguistic interaction, then it would not be the case that most adult humans in Italy speak a language. Or consider the fact that I have 32 teeth. It is plausible that had I not had access to industrially produced food products for the past 10 years, I would have died of hunger and consequently would not exist. What lacks existence also lacks 32 teeth. Therefore, had I not had access to industrially produced food products for the past 10 years, I would not have 32 teeth. The fact that I do have 32 teeth is therefore causally constructed according to CAUSAL CONSTRUCTION$_2$. This reasoning generalizes to very many paradigmatically non-constructed facts about various properties of modern individuals. Therefore, CAUSAL CONSTRUCTION$_2$ overapplies as severely as CAUSAL CONSTRUCTION$_1$.

But there is also another and related problem with CAUSAL CONSTRUCTION$_2$. Consider again fact (4):

(4) In the 21st-century Western societies, women are primary caregivers more frequently than men.

Suppose that one claims that (4) is causally constructed because it is caused by the approximately 20% increase in the wages of lower-middle-class industrial workers in the late 19th century (call the latter event "20%-WAGE-INCREASE") that triggered certain changes in the working-class family structure (Seccombe 1986 argues along these lines). Given CAUSAL CONSTRUCTION$_2$, this claim is true if it is true that had 20%-WAGE-INCREASE not occurred, then (4) would not obtain. But clearly, whether the latter is true depends on what would have occurred *instead of* 20%-WAGE-INCREASE. So, suppose that it is true that if wages had increased 10% instead of 20%, then (4) would nevertheless obtain. Therefore, given CAUSAL CONSTRUCTION$_2$, (4) is not causally constructed. But suppose that it is also true that if instead of 20%-WAGE-INCREASE wages had *de*creased, then (4) would *not* obtain. If so, given CAUSAL CONSTRUCTION$_2$, (4) *is* causally constructed. So, given CAUSAL CONSTRUCTION$_2$, it looks like the proposition that (4) is causally constructed has no determinate truth value.

This example is no exception. Similar scenarios can be set up for all X's that are plausibly or even obviously socially constructed, meaning that virtually *any* causal constructionist claim would fail to have a determinate truth value. Moreover, for any facts about modern human traits whatsoever, there will be some social factors SF and some conceivable alternatives to SF – SF* and SF** – of which it is true that if SF* obtained instead of SF, then the fact would obtain, but if SF** obtained instead of SF, then the fact would not obtain. So, CAUSAL CONSTRUCTION$_2$ implies not merely that no causal constructionist claim has a determinate truth value, but also that most human facts are simultaneously constructed and not constructed.[6] This problematic result as well as the issues with overapplication can be avoided by recognizing that causal constructionist claims are contrastive claims.

## 3 Causal Construction and Contrastive Causation

The apparent indeterminacy described in the previous section can also be observed in the case of most ordinary causal attributions. This has led some (e.g. Hitchcock 1996; Schaffer 2005; Northcott 2008) to conclude that rather than having an indeterminate truth value, causal claims with binary surface form "C causes X" hide an underlying semantic structure *C rather than C* causes X rather than X**, where C* is some salient non-actual (set of) alternative(s) to C and X* is some salient non-actual (set of) alternative(s) to X. If we integrate this proposal with the counterfactual dependence account of causation, then "C causes E" is true iff if C* rather than C obtained then X* rather than X would obtain. This contrastive account elucidates how causal *qua* difference-making claims can have determinate truth values. A causal claim can have a determinate truth value insofar as the contrasts that matter for deciding whether a causal claim is true or not are implicitly or explicitly specified by the context. So, even if in the case of some C*, X would obtain, and in the case of some C**, X* would obtain, the truth value of "C causes X" is nevertheless determinate if only one of C* or C** is the intended contrast.

My suggestion is that causal constructionist claims are likewise appropriately (and productively) understood as *contrastive* claims of the following form:

CAUSAL CONSTRUCTION$_3$. X is socially causally constructed iff, if SF* rather than SF obtained, then X* rather than X would obtain

**6** One might suggest that X is causally constructed only if X would not obtain on *any* possible alternative to the relevant social factors. Yet, this would be of no use for a constructionist, as no human fact satisfies this condition.

where X is some actual, contemporary or historical, fact, X* is some non-actual alternative to X, SF are some contemporary or historical social factors that actually obtain in the target social environment where X obtains, and SF* is some non-actual alternative to SF.[7]

According to this proposal, the claim that X is causally constructed always contains (or if not, should contain) an implicit reference to certain specified alternatives, SF* and X*, and is true just in case if SF* obtained, X* would obtain. For simplicity, in the following exposition of this proposal, I shall assume that X* has but one value, the absence of X, without specifying what this absence may consist in. For example, assuming CAUSAL CONSTRUCTION$_3$, the claim that (4) is caused by 20%-WAGE-INCREASE and is thus causally constructed could either mean that if instead of 20%-WAGE-INCREASE wages had decreased, then (4) would not be the case; or it could mean that if the wages had increased 10% instead of 20%, then (4) would not be the case; and so on. Depending on which contrast salient, the truth value of the thesis that (4) is caused by 20%-WAGE-INCREASE and is thus causally constructed may vary. For instance, if the intended contrast is a decrease in wages, and if in case of a decrease in wages (4) would not obtain, then it is true that (4) is caused by 20%-WAGE-INCREASE and therefore causally constructed. If the intended contrast is a 10% increase in wages, and if in case of a 10% increase in wages (4) would nevertheless obtain, then it is false that (4) is caused by 20%-WAGE-INCREASE and (4) is not causally constructed. However, since the different truth values are attached to *different propositions*, it does not follow that the truth values of "(4) is caused by 20%-WAGE-INCREASE" and "(4) is causally constructed" are indeterminate. The truth values of these claims are indeterminate only if the relevant contrasts are not specified in the context of the constructionist thesis, or if there are many salient contrasts, some of which counterfactually entail X* while others do not.

CAUSAL CONSTRUCTION$_3$ helps to explain how constructionist theses can have determinate truth values. However, it does not escape the problem of overapplication. For most such X that involve modern human traits, one can find some SF and SF* such that SF* counterfactually entails the absence of X. For example, it is surely true that most westerners would not have 32 teeth if, instead of the rise of modern food industry that now provides most westerners with their daily nutrition, an asteroid had hit the Earth in the end of the 19$^{th}$ century and put an end to all life on this planet. Insofar as this apocalyptic event is the intended contrast to the rise of modern food industry, the fact that most westerners have 32 teeth is caused by the rise of modern food industry and counts as causally constructed

7 Again, this definition can, but need not, be combined with the requirement that X has to be part of the mechanism that produces X (as in CAUSAL CONSTRUCTION$_1$). See footnote 5.

according to CAUSAL CONSTRUCTION$_3$. Analogous asteroid-involving scenarios can be set up for all sorts of human facts. The moral of ths is that with CAUSAL CONSTRUCTION$_3$, one only needs to pick the right contrast, make it part of the meaning of the causal claim, and a true constructionist claim is guaranteed to follow. This means that CAUSAL CONSTRUCTION$_3$ renders it far too easy to make true causal constructionist claims, potentially leaving us with an abundance of socially constructed facts. This signals that not all SF* should be seen as relevant for establishing the truth of a given constructionist thesis.

Most proponents of contrastive causation hold that the question of which contrasts are relevant for the truth of a given causal claim is a pragmatic one and depends on one's interests. Therefore, insofar as different social constructionists have different theoretical and practical interests, the criteria for deciding whether some SF* is relevant can vary. Nevertheless, there are certain interests and commitments that constructionists in general share. This allows to fix some generally valid constraints on which SF* matter for establishing the truth or falsity of a constructionist claim. As I already mentioned, there are two kinds of theses that a constructionist might want to establish when arguing that X is causally constructed:

(A) Facts of type X are not universal, but obtain only in some social environments due to the presence of certain social factors in these environments.
(B) X can be done away with by changing certain social factors.

(A) claims that facts like X obtain only in some cultural-historical contexts and do so because certain social factors are present in these contexts. Foucault's social constructionism with regard to homosexuality serves as an example of a constructionist thesis of kind (A). According to Foucault (1979), there were no homosexuals before the 19$^{th}$ century. Only after certain medical and moral ideas and institutions became established in the 19$^{th}$-century Europe did the concept of homosexuality come into circulation and began to shape certain kinds of people to satisfy the concept's inclusion criteria.

While (A) is a claim about what is actually the case, (B) is a claim about what could and would be the case if certain actually pertaining social factors were altered. Social constructionism about X is often driven by the recognition that things would be better without X. Often, the ultimate goal of constructionist theorizing is to do away with X. It aims to contribute to this goal by showing that certain social factors that actually obtain in the target social environment can be changed, and if they were changed, then X would cease to obtain (e.g. Hacking 1999, p. 6; Diaz-Leon 2015). This ameliorative goal of social constructionism is a practical goal. Thus, "can be changed" in this context should be understood in terms of practical possibility, as "can be changed by means that are in fact practically tenable".

Theses (A) and (B) are often endorsed together. Also, it is often the case that when (A) is true, so is (B). But they should not be conflated nor taken to entail one another. To demonstrate the truth of (A), one has to show that there in fact exists a historical or contemporary social environment where X is not the case due to the absence of certain social factors. To demonstrate the truth of (B), one has to show that it is practically possible to *bring about* some social environment where certain social factors do not obtain and where X is not the case. But even if there are actual environments where due to the absence of certain actually obtaining social factors X is not the case, this does not yet mean that these social factors could be easily or reasonably removed from the target social environment. As to that matter, there might be no such social factors in the target social environment that could be reasonably replaced with the consequence that X would cease to be the case. *Vice versa*, there may be practicable ways to do away with some undesired X by modifying certain social factors, even if in all the actual social environments of past and present, these social factors obtain and so does X. For example, consider MacKinnon's (1987) position according to which the fact that there are women – where to be a woman is in part to be oppressed along one or other dimension of social hierarchy – is socially constructed, both constitutively and causally. What MacKinnon ultimately wants to achieve with arguing for this position is to convince us that this fact could and should be done away with by means of social intervention [see also Wittig (1981) and Haraway (1991)]. Is this so or not depends upon whether some actually existing social factors can be changed in some practicable way with the result that there are no longer any women in the aforementioned sense. Whether there in fact are any historical or contemporary social environments where the absence of certain actually obtaining social factors has led to there being no women is irrelevant for the success of MacKinnon's project. So, projects (A) and (B) can be, and sometimes are, pursued independently.

Given these considerations, I suggest that the content of "X is caused by social factors" in the context of a constructionist thesis should be such that its truth implies the truth of either (A) or (B). This assumption allows us to specify the conditions under which the contrasting SF* in CAUSAL CONSTRUCTION$_3$ is relevant. SF* is relevant only if the truth of "If SF* rather than SF obtained, then X* rather than X would obtain" (CAUSAL CONSTRUCTION$_3$) implies the truth of either (A) or (B). This is the case if SF* meets either (A*) or (B*):

(A*) SF* obtains in some actual, historical or contemporary, social environment that is not the target social environment
(B*) it is possible make SF* obtain in the target social environment.

If SF* obtains in some contemporary or historical social environment that is not the target environment, and in case of SF* X would not obtain, then it follows that there

are actual social environments where facts like X do not obtain. This would vindicate (A). If it is true that X would not obtain in case of SF* that can be brought about in the target social environment, then it is true that it is possible to eliminate X by changing social factors, namely, by bringing about SF*. This would vindicate (B).

With (A*) and (B*) we have confined the range of relevant SF* in CAUSAL CONSTRUCTION$_3$. For example, given (A*) and (B*), the paradigmatically non-constructed facts considered earlier that most adult humans in Italy speak a language and have 32 teeth no longer qualify as causally constructed. Even though social factors like growing up in an environment of linguistic interaction do make a difference with regard to the fact that most adult humans Italy speak a language, in no actual social environment is linguistic interaction absent,[8] and no social environment without linguistic interaction is a practical possibility. Likewise, even though it is true that most westerners would not have 32 teeth if instead of the rise of modern food industry an asteroid had ended life on Earth, there is no actually existing or practically possible human society where an apocalyptic collision with an asteroid is or could be the case. In case of an apocalyptic asteroid collision, there would simply be no human societies.

It is worth noting that only certain kinds of facts can be causally constructed, given CAUSAL CONSTRUCTION$_3$ combined with condition (B*). To see why, consider a hypothetical fact that *cannot* be causally constructed, given CAUSAL CONSTRUCTION$_3$ in combination with condition (B*). Suppose that on May 19, 2019, Mary had a rose tattooed on her neck. There seems to be no alternative SF* to any actually obtaining social factors such that, first, it is possible to bring SF* about and, second, the consequence of bringing SF* about would be that Mary did not get a rose tattooed on her neck on May 19, 2019. Whatever SF* of which it is true that if SF* obtained, Mary would not have had a rose tattooed on her neck on May 19, 2019, the SF* would have to obtain in the past, before May 19, 2019. However, surely it is not practically possible to bring about past events.

If all human facts were like in the above example, CAUSAL CONSTRUCTION$_3$ combined with condition (B*) would have no instances (which would render condition (B*) pointless).[9] However, not all human facts are like this. Many facts of

**8** I take this to be an empirical fact about *homo sapiens*.

**9** Driven by similar considerations, Diaz-Leon (2015) draws the conclusion that when pursuing project (B), demonstrating that X is causally constructed is of relatively little interest. Rather, if the constructionist wants to demonstrate that it is possible to change X by changing social factors, she should be first and foremost interested in demonstrating that X is constitutively constructed. X is constitutively constructed if social factors are a metaphysically necessary part of what being X consists in. Thus, having revealed that social factors SF constitute X, one has automatically demonstrated that replacing SF with some alternative social factors SF* results in X ceasing to be the case. Marques (2017) has offered some pertinent reasons why Diaz-Leon is wrong to dismiss the relevance of causal construction for project (B).

interest to social constructionists are about the *persistence* of a phenomenon (e.g. that a category continues to have instances; that some property continues to be distributed in a certain manner, etc.). For example, consider the hypothetical persistence-fact that women continue to exist, where to be a woman is, partly, to occupy a certain subordinate position within certain hierarchal social relations (e.g. per MacKinnon). Given this definition of womanhood, the fact that women continue to exist consists partly in the persistence of these hierarchical social relations that an individual has to occupy in order to be a woman. The fact that women continue to exist is caused by whatever causes the persistence of these womanhood-constituting hierarchical relations. Now, the persistence of certain hierarchical social relations does not seem to be something that is caused by any particular past event. Rather, it is caused by certain ongoing processes that generate the successive "time-slices" of the social hierarchies that constitute women.[10] Whatever their exact nature, it is quite plausible that (1) these processes are social, (2) if something else obtained instead of these processes, then the womanhood-constituting social hierarchical relations would cease to exist, and (3) it is practically possible to make this something else obtain. If so, then the fact that women continue to exist and other similar persistence-facts can indeed be causally constructed on condition (B*).

However, (A*) and (B*) specify only necessary conditions for the relevance of SF* in the context of CAUSAL CONSTRUCTION$_3$. The following examples illustrate why.

Example 1. In 21$^{th}$-century Western societies, most girls have grown up wearing shoes that fit their feet. In these societies, the average female foot-size-to-height ratio is 1/6.6. If most western girls had not grown up wearing shoes that fit their feet but, instead, their feet had been bound at an early age in order to hamper their growth, then the average female foot-size-to-height ratio in 21$^{st}$-century Western societies would not be 1/6.6.

Example 2. In contemporary Western societies, given the obtaining norms of mothering and fathering, women are primary caregivers more frequently than men. If women were forbidden by law to stay home nurturing their newborn for longer than 3 days, while fathers were obliged to do so for at least 5 years from the birth of the child, women would not be primary caregivers more frequently than men.

Both counterfactuals are very likely to be true. Also, the antecedents of these counterfactuals meet either (A*) or (B*). On the one hand, the custom of binding women's feet is a social factor that obtains in at least one actually existing social environment, namely, in 19$^{th}$-century northern China, where the feet of up to 60%

**10** Marques (2017) offers concrete examples of such processes.

of women were bound in order to squeeze them into "lotus feet". On the other hand, a social environment in which women are forbidden to stay home nurturing their newborn is at least *prima facie* practically possible. Yet, this seems insufficient to establish that the facts about the average foot size of women and gender distribution of primary caregivers in Western societies are caused by social factors and thus causally constructed. This suggests that in order to vindicate the causal constructionist thesis, the relevant contrasts have to meet certain additional constraints. What these constraints are, and to what extent are they universal or specific to concrete constructionist projects, falls out of the scope of this paper. To name but one plausible candidate, a relatively universal constraint might be that SF* has to be morally acceptable. For example, prohibiting women from attending to their children, or binding their feet in a manner that has negative consequences on women's life quality might strike us as irrelevant because of being morally unacceptable. There is empirical evidence that moral considerations routinely guide our causal judgements in various ordinary and theoretical contexts (e.g. Hitchcock and Knobe 2009; Alicke et al. 2011; Lynch 2017). In this light, it is likely that moral considerations bear upon causal attributions also in the context of social constructionist theorizing which is, after all, an explicitly normative, morally motivated and oriented.

Putting the pieces together, I suggest that the most viable definition of causal construction is this:

CAUSAL CONSTRUCTION$_4$. X is socially causally constructed iff there is SF and SF* such that

i) if SF* rather than SF obtained, then X* rather than X would obtain
ii) SF* obtains in some actual, historical or contemporary, social environment that is not the target social environment, or SF* obtains in some practically possible social environment
iii) SF* meets other (contextually specified) constraints (e.g. is morally acceptable).[11]

## 4 Further Pros of CAUSAL CONSTRUCTION$_4$

CAUSAL CONSTRUCTION$_4$ makes sense of how constructionist claims can have determinate truth values. It also gets the extension of the term "socially con-

**11** Depending on one's stance on issues discussed in footnote 5, one can add to this definition the fourth condition that SF would also have to be part of X-mechanism.

structed" as it is usually used right. In addition, it makes transparent which factors the truth of a causal constructionist claim may depend on. By doing so, it sheds light on what disagreements over whether X is causally constructed may turn on, sometimes in rather non-obvious ways.

Suppose that one argues that (4) – the fact that in the 21st-century Western societies, women are primary caregivers more frequently than men – is socially constructed, since it is caused by the social expectation that men, more than women, should pursue leadership jobs. This constructionist claim could be false due to the falsity of any of (i)–(iii). First, the constructionist might be mistaken that the particular SF* she has in mind counterfactually entails the absence of (4). For instance, perhaps she hypothesizes that if women were expected to pursue leadership positions exactly as much as men, then (4) would not be the case. This hypothesis might simply be false. Secondly, the intended SF* might not obtain in any actual social environment [if the constructionist thesis is of type (A)] or be impossible to bring about by practically feasible means [if the constructionist thesis is of type (B)]. For example, even if it was true that if women were expected to pursue leadership positions exactly as much as men then (4) would cease to be the case, the costs of implementing and sustaining this social expectation might be too high to be practically tenable. Thirdly, the thesis that (4) is causally constructed might be false because the intended SF* does not meet some other contextually salient constraints. For instance, expecting women to pursue and take up leadership positions as much as men could possibly mean pressuring women into pursuing certain careers against their preference and at the cost of their happiness, which might be morally unacceptable (see, e.g. Browne 1999, 2011; Pinker 2002, p. 359–360, 2009, for considerations of this kind).

Accordingly, the reasons for disagreement with a given constructionist thesis may vary. Parties might disagree over whether a given SF* would result in X*, or whether SF* is present in an actual or practically possible social environment, or whether SF* is morally viable. Thus, in order to avoid talking past one another and guarantee that the right kind of evidence is consulted for solving the disagreement, it is important to be explicit about which of these aspects is at issue. Also, it is worth stressing that disagreement over whether certain social factors SF are the cause of X is genuine only if the disagreeing parties have in mind the same contrast SF*– only then are they talking about the same proposition. So, for example, suppose that when claiming that (4) is causally constructed the constructionist means that if women were expected to pursue leadership positions *exactly as much as men* (SF*), then (4) would not obtain. In this case, demonstrating that (4) would obtain if women were encouraged to pursue leadership position *more than they in fact are* (but still less than men) would not yet amount to a refutation of the constructionist claim at hand. Rather, it would mean asserting a

different proposition. In order to refute this particular constuctionist thesis, one would have to show that it is not the case that if women were expected to pursue leadership positions exactly as much as men then (4) would not obtain, or that the intended contrast SF* – i.e. women being expected to pursue leadership positions exactly as much as men – fails to meet either (ii) or (iii). Finally, it should be stressed that even if one has demonstrated that, *pace* a constructionist, the intended SF* does not meet (i)–(iii), this does not yet refute causal constructionism about X *tout court*. This is because there may well be some other contrasts to SF that do meet (i)–(iii). Constructionism about X is false *tout court* if there is *no* such SF and SF* that meet conditions (i)–(iii).

## 5 CAUSAL CONSTRUCTION$_4$ and Being Biological

Often, the claim that X is socially constructed is contrasted with the proposition that X is caused by biological factors. By "biological factors", one usually means genes. Thus, it is increasingly common that debates over the social construction of X consult findings from genetic sciences, and that empirical evidence of X having genetic causes is presented as evidence against the hypothesis that X is socially constructed.[12] CAUSAL CONSTRUCTION$_4$ helps to make it transparent under which conditions such findings of genetic causes of X do indeed undermine constructionism about X, and under which conditions they do not.

In order to spell out these conditions, we first need to clarify what it means for X to be caused by genes. This is a controversial topic in its own right. However, there is some consensus that in the context of empirical research, the claim "X is caused by genes" is appropriately understood in terms of the counterfactual dependence notion of causation (Gannett 1999; Waters 2007; Birch 2009; O'Neill 2015). The counterfactual dependence notion is especially apt when the focus is on the attribution of genetic causation in quantitative and population genetics that employ various types of heritability and genome-wide association studies. Most of our current knowledge about the genetic causes of human properties – including those of interest to social constructionists – originates from precisely those fields. In what follows, I will rely on Northcott's (2012) version of the counterfactual dependence account of genetic causation.

According to Northcott, the content of the claim "X is caused by genes" is best captured in terms of the very same contrastive counterfactual dependence

**12** E.g. Sesardic (2010), Shiao et al. (2012). For a skeptical perspective on the use of genetics in this context see Gannet (1999, 2010), Kaplan et al. (2014), Kaplan and Winther (2013, 2014), Winther (2014).

account of causation that I employed in CAUSAL CONSTRUCTION$_4$. The gist of Northcott's account is this.[13] Suppose that Roberta is the primary caregiver in her family. According to Northcott, this fact is caused by genes either if it is true that had Roberta (with her actual developmental environment fixed) had a different genome instead of her actual genome, then she would not be the primary caregiver in her family; or it is true that had Roberta (with her actual genome fixed) experienced some alternative environment instead of her actual environment, then she would nevertheless be the primary caregiver in her family. This schema can also be applied to facts about the instantiation and distribution of a property in a group of individuals (e.g. Northcott 2008). For example, suppose we want to know if the fact that in Australia, women are primary caregivers more frequently than men is caused by genes. This fact is caused by genes if the following is the case. Either it is true that if the women in Australia had different genomes instead of their actual genomes, then it would not be the case that, in Australia, women are primary caregivers more frequently than men; or it is true that had the women in Australia experienced a different environment, it would nevertheless be the case that, in Australia, women are primary caregivers more frequently than men.[14] This concept of genetic causation can be summarized as:

X is caused by genes iff

(iv) if ($G^*$ and $E^a$) rather than ($G^a$ and $E^a$) obtained then $X^*$ rather than X would obtain
or
(v) if ($G^a$ and $E^*$) rather than ($G^a$ and $E^a$) obtained then still X rather than $X^*$ would obtain

where X is a fact about the instantiation of a property by an individual or group of individuals, $X^*$ is some non-actual alternative to X, $G^a$ is the actual genome of the individual(s), $G^*$ is some non-actual alternative genome of the individuals, $E^a$ is the actual environment of the individual(s), and $E^*$ is some non-actual alternative environment of the individuals (Northcott 2012, p. 65).

What this definition highlights is that the claim that X has genetic causes is always true *relative* to some specified contrast genome(s) or environment(s). Whether the relevant contrast is some alternative genome (or set of genomes) $G^*$ or some alternative environment (or set of environments) $E^*$, and which specific

**13** This rough sketch clearly glosses over many otherwise relevant details, but suffices for the present purposes.

**14** The same structure can be adjusted to cases where the claimed biological causes of X are not genes but, for example, anatomical features or hormonal processes.

alternative genomes or environments are implicated, is specified in the context of the genetic study and can vary. Accordingly, that X is caused by genes does not imply that in any possible alternative environment whatsoever, X rather than X* would still be the case. Neither does it imply that if the relevant individuals had whichever alternative genome, then X* rather than X would be the case. It only implies that in the case of *some* such alternatives either is the case. In order to get clear about the implications of a particular attribution of genetic cause, the relevant contrasts must be made explicit.

Now, assuming this account of genetic causation, when (if ever) does the fact that X is caused by genes undermine the claim that X is causally constructed, or *vice versa*? I will discuss (iv) and (v) separately.

Suppose that the claim that X is caused by genes means, per (iv), that if certain relevant individuals had a different genome G*, then X* rather than X would obtain. This claim, if true, informs about what would be the case if the *genome* of the studied individuals had been different. However, it is mute with regard to what would be the case, including whether or not X would obtain, if the *environment* of these individuals had been different. In this case, that X is caused by genes is consistent with the claim that if the relevant individuals, with their actual genome fixed, had experienced a different environment (for example one where certain actually obtaining social factors are absent) then X* rather than X would obtain. For example, let us suppose that it is true that if instead of her actual genome $G^a$ Roberta had had some alternative genome G*, then she would not be the primary caregiver in her family. The fact that she actually is therefore counts as caused by genes, given condition (iv). This, however, is consistent with the claim that if Roberta (given her actual genome $G^a$) had been subject to parenting norms different from what she actually experienced, then she would not be the primary caregiver in her family but, rather, would engage in childcare no more than her husband Pete. The latter, in turn, is consistent with the thesis that Roberta's being the primary caregiver in her family is socially constructed according to CAUSAL CONSTRUCTION$_4$.

Alternatively, suppose that the claim that X is caused by genes means, per (v), that if the relevant individuals had not experienced their actual environment $E^a$ but rather some alternative environment E*, then X would still obtain. Now, recall that in the context of attributing genetic causes E* is always constrained to a particular, contextually specified range of values. Thus, even if it is true that X is caused by genes in the sense that if some relevant E* rather than $E^a$ obtained, X would still obtain, it can be simultaneously true that if some *other* alternative environment E** obtained, then X would *not* obtain, but rather some different fact X* would obtain. And E** might as well be an actually existing or practically possible environment that differs from the actual environment of the relevant

individual(s) by virtue of SF* rather than SF obtaining. For example, suppose that it is established by a genetic study that the fact that Roberta is the primary caregiver in her family is caused by genes in that had Roberta experienced the parenting norms prevalent in Italy, Greece, Russia and Germany rather than in Australia, Roberta would nevertheless be the primary caregiver. This, however, is consistent with the thesis that had Roberta experienced the parenting norms prevalent in, say, Denmark, or parenting norms not yet existent in any actual society, Roberta would not be the primary caregiver in her family. The latter, in turn, is consistent with the thesis that Roberta's being the primary caregiver in her family is socially constructed according to CAUSAL CONSTRUCTION$_4$.

Therefore, that X has genetic causes need not rule out that X is at the same time caused by social factors and thereby causally constructed. That X is caused by genes conflicts with the claim that X is causally constructed only if the E* that is invoked in the particular claim of genetic causation subsumes the E** invoked in the particular constructionist thesis. Whether this is so in a given case can only be decided by ascertaining how the environmental contrasts are specified in the particular claims of genetic causation and social construction at hand.

## 6 Conclusion

I have argued that social causal constructionist claims should be understood as contrastive causal claims. According to my account, a phenomenon is caused by social factors only if in the case of some alternative to certain pertaining social factors, the phenomenon would not be there. This alternative has to be such that either obtains in some actually existing social environment or some practically possible alternative social environment. This account tracks how social constructionists in fact talk about causal construction. It helps to see how the claims of social constructionists can be determinately true or false. It makes transparent what the disagreements over whether a phenomenon is socially constructed may turn on. It also helps to see why and when the presence of a genetic cause need not undermine the claim that the phenomenon is causally constructed.

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