

Generative Epistemic Injustice

Wanhong HUANG

huangwanhong.g.official@gmail.com

Abstract

Existing accounts of epistemic injustice share a structural presupposition: the event is common to both parties, and the wrong lies in how knowledge about it circulates. This paper identifies a distinct form of epistemic injustice that violates that presupposition. Two processes may agree at the level of the result, under a public description that discards their generative history, while differing at the level of generation, such that one party has no knowledge of the other path and does not know that there is anything to know. Where either a relation of co-construction owed that party recognition of the shared generative history, or another party has actively foreclosed that recognition, the party is silently diminished as a generator of the shared reality, at the level of process, with no trace at the level of result. We name this generative epistemic injustice and give it a formalization in which sameness of outcome is always sameness under a chosen coarse-graining, non-equivalence of paths is their inequivalence in the fundamental group of a relational space, and non-recognition is the loss of access to the other path's class. We offer two complementary measures of its severity, a structural measure on the fundamental group and an information-geometric measure of the depth of the epistemic deficit. The wrong obtains whether the recognition lapsed unbidden or was made to lapse through the imposition of the very description under which outcomes are called the same, the manner of arising bearing on how the wrong comes about and not on whether it obtains. We locate it at the first of three levels of justice, epistemic, practical, and phenomenal, and argue that it is the most concealed form extraction can take.

Keywords: epistemic injustice, generative justice, co-construction, fundamental group, information geometry

1. The Presupposition to Be Broken

Theories of epistemic injustice have mapped the ways a knower can be wronged as a knower. A speaker may be given too little credibility on account of prejudice. A community may lack the shared interpretive resources to render its own experience intelligible. These are real and distinct wrongs, and they have a common shape. In each, the fact at issue is available to both parties in principle, and the injustice enters through the channel by which knowledge of it is transmitted, weighed, or made sayable.

This paper concerns a wrong of a different shape, one the received framework cannot register. Consider two communities managing forests of the same type. One proceeds through a long practice of ecological knowledge, of a sustained relation between people and land. The other applies a standardized modern forestry procedure. The two forests come to look the

same. An external body, observing the identical result, replaces the first practice with the second on grounds of efficiency. What has occurred is that the recognition of one path has systematically foreclosed the possibility that the other path be recognized at all. The wrong is invisible at the level of the result and complete at the level of generation.

The uninformed party here is not misjudged and is not silenced. The party is not even in a position to know that a second path existed. This is the mark of the form we isolate: the diminishment is undetectable from within, and it falls on the party's standing as a co-author of the shared reality rather than on any interest that could later be tallied.

2. Definition

Generative epistemic injustice is the silent diminishment of a subject as a generator of a shared reality. It occurs when two generative paths agree at the level of the result, under a public description that discards their generative history, while the paths themselves are not equivalent, and the subject's recognition of the path other than its own has lapsed either through the failure of a duty owed within a relation of co-construction or through another party's act of foreclosing that recognition. The subject is thereby treated as though the shared reality had a single generative history, and the subject's standing as a generator of the path that the description discards is not contested but quietly erased.

Four conditions are jointly necessary.

Identity of outcome. The two paths agree at the level of the result, under a public description that both parties would accept. What the shared result description records, whether the measurable yield, composition, and coverage of a forest or any comparable set of publicly checkable indicators, is the same for both. This identity is objective, since it is fixed by a description available to and endorsable by all parties, and it is not the artifact of any one party's viewpoint. Nothing at this level distinguishes the paths, which is why no interest-based or distributive account can detect the wrong. The injustice will turn on a party's mistaking identity under the public result description for identity of the outcome as such.

Non-equivalence of paths. The paths are genuinely different at the level of generation. They are two processes and not two descriptions of one process, differing in who generated, through what relations, and by what practice. The public result description does not record this difference, and a party who takes that description to exhaust the outcome thereby erases it.

Non-recognition. The wronged subject has no knowledge of the other path and, in the sharpest case, no knowledge that there is a path to be known. The subject does not know what the subject does not know.

What raises this non-recognition above ordinary ignorance is a fourth element, which fixes when the lapse of recognition is a wrong at all rather than mere absence of knowledge. The

element takes one of two forms, and either suffices.

A duty within co-construction, or an act of extraction. The subject's not-knowing counts as a diminishment, and not as innocent ignorance, in either of two cases. In the first, the party through whom the recognition lapsed stands with the subject in a relation of co-construction. To be co-authors of a shared reality is to stand in a relation that owes each party an unerased place in the generative history they share, and this duty can go unmet through inaction as much as through action. Here the lapse is a wrong whether it was brought about or merely allowed to settle in, because the relation itself carried the requirement that it not. In the second, the party through whom the recognition lapsed stands in no such relation to the subject, and here mere inattention is no wrong, since no relation obliged that party to secure the subject's recognition. What makes the lapse a wrong in this case is a positive act: the party actively forecloses the subject's possibility of recognizing the path, most characteristically by imposing the very description under which the outcomes are called the same. This is a violation of the negative requirement not to extract another's possibility of recognition, a requirement that binds without any relation, exactly as the requirement not to harm binds strangers who owe each other no care.

Where neither holds, where no relation of co-construction was in force and no act of extraction was performed, one party's ignorance of the other's path is a misfortune and not an injustice. The two grounds are stated here as sufficient, and the paper rests on them, without claiming that no further ground could support the same wrong.

The two grounds correspond to a familiar division in moral thought, between a positive requirement arising from a relation and a negative requirement binding independently of one. The first has a structural affinity with the duty of care: a requirement owed by one party to another in virtue of the relation between them, capable of going unmet through inaction. The second has the form of a duty not to harm, owed even to strangers. The present account borrows these structures and stops there. It makes no claim about actionability, remedy, or fault, and locates the wrong at the level of moral ontology, in the erasure of a subject's standing as generator of a path, rather than at the level of any liability that erasure might or might not attract.

3. Formal Structure

The conditions admit a compact formalization. Its work is to make the severity of the wrong measurable and to make precise the sense in which two outcomes count as the same, rather than to restate the definition in symbols. The formal contribution of the paper lies in the measures of severity introduced below, which decompose the wrong into a structural and an epistemic dimension that natural language does not separate cleanly.

Let the relational space be a manifold M , and let a generative process correspond to a path $\gamma : [0, 1] \rightarrow M$. There is no view of the endpoint that is unmediated. Any comparison of outcomes proceeds through some public result description, a coarse-graining $r : M \rightarrow N$

that records certain publicly checkable indicators and discards the rest. Sameness of outcome is always sameness under such an r : $r(\gamma_A(1)) = r(\gamma_B(1))$. Difference of generation is non-equivalence of the paths as elements of the fundamental group, $[\gamma_A] \neq [\gamma_B]$ in $\pi_1(M)$. Non-recognition is the condition that the wronged subject has no access to the homotopy class of the other path.

Generative epistemic injustice holds when $r(\gamma_A(1)) = r(\gamma_B(1))$ under a public result description r , while $[\gamma_A] \neq [\gamma_B]$ in $\pi_1(M)$, and one party has no recognition of the homotopy class of the other's path. The injustice lives in the topology that r discards, not in the geometry that r records.

The last phrase is the crux. Two paths that agree under r can be topologically inequivalent only where the space is not simply connected. A relational space rich enough to support genuine co-construction is such a space. The wrong is possible precisely because the generative history of a shared result carries information that r does not.

The topological definition fixes whether the injustice obtains. It does not by itself fix how severe it is, and severity is real: a path foreclosed briefly and a path foreclosed across generations are not equally wronged. We therefore add two complementary measures.

Structural measure. Where $\pi_1(M)$ carries a word metric d_W , the distance $d_W([\gamma_A], [\gamma_B])$ measures the structural divergence of the two generative histories, and thereby the irreducibility of one to the other. The greater the distance, the deeper the process-level alienation and the less one path can be continuously deformed into the other.

Epistemic measure. Represent the subject's knowledge as a distribution over the path space. Foreclosure is the collapse of that distribution along the dimension that distinguishes homotopy classes, so that the subject is confined to a quotient space in which the distinction is erased. The depth of the epistemic deficit is the minimum information required to reconstruct the other path's class from the shared endpoint, measured by the Fisher metric and the associated divergence.

The two measures view one phenomenon from two sides. The first measures how far apart the generative histories are as structures; the second measures how much knowledge of the foreclosed one has been lost. The two need not vary together, and their precise relation is left open here. Structural distance and reconstruction cost can come apart: two histories may be far apart in $\pi_1(M)$ yet, being highly distinguishable, cheap to tell apart, while two histories separated by a single fine distinction may collapse almost entirely under r and demand the most information to recover. What the two measures share is that both vanish exactly when no injustice obtains and both grow as the foreclosure deepens along their respective dimension.

4. The Description Under Which Outcomes Are Called the Same

The formalization makes explicit that sameness of outcome is never read off the world directly. It is always sameness under a chosen result description r . This relativity is not a weakness to be hidden. It shows that the same wrong can arise in a further way, through the fixing of the description itself.

To judge two outcomes the same is to select an r and to apply it. The selection can be made in good faith or not. An r is well chosen when the indicators it records are ones all affected parties would accept as capturing what matters about the outcome, and when its adoption does not carry with it the erasure of a generative structure that one party has reason to hold significant. An r is ill chosen when it records exactly the indicators one party's own path optimizes, and when its coarseness serves, wittingly or not, to render a rival generative history invisible while presenting itself as a neutral measure of results.

Generative epistemic injustice can therefore come about through either of its two grounds, while remaining one and the same wrong. Under the first ground, within a relation of co-construction, the coarse-graining may be settled and defensible and the generative history still lapse from recognition with no one imposing anything, the history simply never surfacing under a description all would accept, and the duty owed within the relation is thereby unmet. Under the second ground, a party outside any such relation fixes the description itself, adopting an r under which a rival generative history cannot appear, so that the erasure is brought about by an act. The forest case is of the second kind. The external body does not foreclose a path after the outcomes are found identical; it first fixes what counts as the outcome, by adopting an r of measurable yield and standardized composition, under which the two forests are the same. The judgment of sameness and the erasure are one continuous act, and the imposition of the description is the very form the act of extraction takes.

The two grounds differ in what makes the lapse a wrong, and not in how much of a wrong it is. The erasure of a subject's standing as generator is the same diminishment whether a duty within co-construction was left unmet or an outside party engineered it through the choice of r , and its depth is registered by the measures of severity, independently of which ground obtains. What the second ground makes salient is a site at which the wrong can be understood and, where the description is still open, resisted: the choice of the description under which outcomes are called the same is itself open to scrutiny, before any comparison it licenses becomes visible to the party it will erase.

5. Three Levels of Justice

Generative epistemic injustice sits at the first of three levels of justice that a generative economy must satisfy: epistemic, practical, and phenomenal.

Epistemic justice requires that the recognition of one generative path not foreclose the possibility that others be recognized. This is the level at which the present wrong is located. Its criterion is relational and structural. The foreclosure is a wrong even where the foreclosing

party intends none, because what constitutes it is the objective closing of a path's recognizability rather than any attitude.

Practical justice requires that a path not wholly foreclose others' freedom to choose their own generative path. This strengthens the Kantian prohibition on treating another merely as a means, and makes it structural. A subject may be wronged at this level even where no one adopts a wronging attitude, provided the space of path-choice has in fact been closed.

Phenomenal justice requires that the value a path generates return to the community that generated it. This is the level addressed by the theory of generative justice.

The three levels are not strictly ordered as a chain of preconditions. Value can be extracted at the phenomenal level from a community that sees the extraction plainly, so phenomenal injustice does not require epistemic foreclosure. The relation is weaker and more specific. Generative epistemic injustice is the most concealed and least resistible form that extraction can take, because it closes, in a single act, both the generative history at issue and the conditions under which a grievance about its loss could be formed. Where extraction is accompanied by foreclosure at the epistemic level, it removes not only the value but the standing from which its return could be demanded. Generative epistemic injustice is in this sense the epistemic infrastructure of the most complete extraction, the kind that leaves its subject unable to know that anything is owed.

6. Why the Wrong Resists the Received Framework

The received framework locates injustice in the circulation of knowledge about a shared event. The present wrong is not a defect of circulation. There is no testimony being discounted and no interpretive gap being suffered, because the wronged subject has no access to the very existence of the second path. The subject cannot bring a claim, because the subject cannot form the thought that a claim is owed. This is what makes the wrong both distinctive and grave. It is a wrong that removes, in the same motion, both the standing it violates and the awareness that the standing has been violated.

A framework that recognizes only credibility deficits and interpretive gaps will therefore read a case of generative epistemic injustice as no injustice at all, since results agree under the operative description and no testimony was refused. The formal criterion offered here is what allows the wrong to be named where it would otherwise be invisible: it registers inequivalent and unrecognized paths beneath results that a chosen coarse-graining reports as the same.

7. Recap

Generative epistemic injustice is the silent diminishment of a subject as a generator of a shared reality, when two generative paths agree under a public result description, differ as elements of $\pi_1(M)$, and the subject's recognition of the other's path lapses, either through the failure of a duty owed within a relation of co-construction or through another party's act of foreclosing that recognition. It is undetectable at the level of the result, and measurable in its severity by a structural metric on the fundamental group and an information-geometric measure of foreclosed knowledge. It is the most concealed form that extraction can take.

Naming this form completes the account of how a shared reality can wrong one of its generators while leaving no trace that a wrong occurred, and supplies the missing first level beneath the practical and phenomenal justice that a generative economy requires.