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Revisiting the measure of development: A critique of sustainametrics

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For sustainametrics to gain a firm ground as an effective concept, the meaning of development shall be revisited first without depending on any statistical measurement. The word “development” originally meant the act of disclosure or opening a cover to disclose what is inside. Martin Heidegger (1889–1976) analyzed the significance of *alētheuein*, or “to bring the world out of its hidden and covered state and into ours,” and explicates that the *alētheia* under the condition of modern technology is dominated by a mode of revealing that is destructive to the earthly beings. Here, the danger inherent in the essence of technology, i.e., enframing [*Ge-stell*], renders human beings incapable of encountering the essence of beings as they are challenged and demanded to frame everything they encounter, including themselves, as mere variables. In contrast to Heidegger’s thinking as releasement [*Gelassenheit*], Hannah Arendt’s (1906–1975) conception of disclosure is closely tied to action. Following Heidegger’s and Arendt’s threads of thought, the authors conclude that any measures of development must be fundamentally grounded in disclosure through speech and action in the public realm. In this respect, the experts on the sustainametrics shall inspire fellow citizens to join the discourse by taking the risk of acting and speaking in public, disclosing who they are and what it is really meant for us. The course of development must ultimately be grounded in such an act of disclosure, only through which we may find something worth sustaining in our future development, and sustainametrics is no exception.

KEYWORDS

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Introduction

Sustainametrics addresses the question of the measurability of the objects of sustainable development. Sen’s Human Development Index and Arrow’s Inclusive Wealth Index have laid the ground toward the conception of sustainable development goals and thereby marked the beginning of this question, which is by no means closed at this point. We may recall that these indexes were the products of welfare economics, which have taken pains to articulate, quantify and measure wellbeing that does not appear in the market when left alone. Precisely because they deal with such hidden values that await articulation, measures of this kind will inevitably call for the question of legitimacy:

Who should quantify wellbeing under what right, or even about what and how wellbeing ought to be quantified? There is always an element of arbitrariness in these decisions, no matter how they may be formulated.

The arbitrariness inherent in such decisions reminds those of us who have come to uphold the motto “leave no one behind” that experts are no longer the only ones with the prerogative to adjudicate them. The arbitration on measures of development concerns all of us, including future generations to come. In this respect, the Great Acceleration, the exacerbation of sustainability indicators in the second half of the 20th century that coincided with the technocratic adoption of GDP as the sole indicator of development, reminds us of the grave weight of our task ahead. With this in mind, perhaps we can begin by looking back and thinking about what development has meant to us beyond the surface.

Development and metrics

The immanent problems we face today concerning the global environment are problems that we have caused ourselves through our own activities of development with the advances of modern technology. Today, it has become almost self-evident that development in this context is used synonymously with growth and progress. The tripartite association of productivity growth, social progress and development was already evident in Marx, but, it was not until after World War II that its amalgamation acquired seamless façade of calculability (Coyle, 2014).

The concept of GDP, i.e., gross domestic product, is rooted in the national income calculation first presented by Kuznets in a report submitted to the US Congress in 1934. The national income calculation used herein later led to the concept of GDP. However, Kuznets was concerned about such measures to be used as a deterministic instrument for the country’s management as they create “illusions” by oversimplifying the object of what is being measured and “invite abuse” in conflicts between antagonistic social groups (Kuznets, 1934).

Whether it is GDP or sustainometrics, they share the fact that they cannot operate without the use of statistics. The word statistics is rooted in the medieval Latin *statisticum*, meaning “the affairs of states,” and is a loanword from the German word *Statistik*, which was originally introduced as “the study of the matters pertaining to the prosperity of empires and states” by Gottfried Achenwall in 1749 (Meitzen and Falkner, 1891; Onions, 1994). Whether it is preparation for war, growth, progress or sustainability, statistics always implicitly point to the direction toward which a community ought to move forward. In other words, what is implicit

in the use of statistics as a measure of development is a particular political standpoint from which certain objects are perceived as good under certain teleological end. No matter how effective a certain measure seems to statisticians, should they promote its adoption without endorsing critical examination of its underlining assumption, it will end up failing us as surreptitious propaganda cloaked in the guise of numerical rationality. This point brings us back to the problem at hand which calls for us to firmly grasp the meaning of development without depending on any mathematical formula, any statistical measurement for its definition or the illusion of growth or progress that previous measures projected on us for half a century.

The meaning of development

The word “development” has not always meant growth and progress, nor does economics have a prerogative over its definition. The word “develop” is a variant of “disvelop,” which had been in use until around the 17th century. While development in modern English is a form later influenced by modern French “*developer*,” “disvelop” is a loan word from Old French “*desveloper*,” the earliest variant of which can be found in *chanson de geste of Aiol* from 12th century (Normand and Raynaud, 1877; Greimas, 1969; Onions, 1994; Hartman and Malicote, 2014). The negative prefix, “des-,” creates an antonym of “velop,” which means “to envelop.” In this sense, “development” means the act of disclosure or opening a cover of something to disclose what is inside. The meaning of “growth” and “progress” is later derived from the meaning of disclosure and was not originally linked to the meaning of development.

What does it mean to grasp development in the sense of disclosure? Though there are no preceding studies of this kind, we are not left without clues in addressing this question. It may seem surprising to some readers of this volume, but in this paper, we would like to refer to the contribution of Martin Heidegger (1889–1976) and Hannah Arendt (1906–1975) particularly with regard their conception of disclosure as a guiding thread to the issue at hand.

An important clue to examining the meaning of disclosure in Heidegger can be found in the lecture notes on Plato’s Sophists given at the University of Marburg in the winter semester of 1924–5. Heidegger devoted more than a hundred pages of his lengthy introduction to an analysis of the Greek word *alētheia*, the etymology of truth, through a detailed interpretation of Aristotle’s *Nichomachean Ethics* and *Metaphysics*. In the introduction, Heidegger articulates the composition of the word *alētheia* by breaking down its prefix “*a-*,” indicating absence, and its stem “*lētheia*,” indicating a hidden state or a state of oblivion. In contrast to the common understanding of truth

as *adequation intellectus et rei*, he explicates the fundamental meaning of *alētheia* as the state of being no longer hidden, that is, “disclosure [*Das Erschließen*]”¹ (Heidegger, 1967, 1992, 1997).

Heidegger further analyzes the significance of the verb form of *alētheia*, *alētheuein*, as “to bring the world out of its hidden and covered state and into ours,” and stresses that this act of disclosing “appears first in speaking, that is, in speaking with one another, in *legein*” (Heidegger, 1992, 1997). This suggests that the activity denoted by the verb *alētheuein* has a fundamental significance for the existence of human beings, understood by Aristotle as a living being that has language, i.e., *zoon logon echon*, corresponding to the human experience of speaking. Heidegger discerns that “*legein* or to speak constitutes a human being in the most fundamental sense,” since “[i]n speaking, Being expresses itself—by speaking about something, about the world” (Heidegger, 1992, 1997). In other words, the disclosing act of speaking about the world constitutes being human so fundamentally, that is in relation to Being, that it takes precedence over all the other activities.

Here, one may question how the act of disclosing fares in the modern world, to which Ancient Greek city-states might seem nothing but a distant past. Tracing Heidegger’s interpretation of *alētheia* to his later analysis of technology provides an insight into how a diminutive understanding of development can have catastrophic consequences for human beings whose existence and activities are grounded in the experience of the act of disclosure. Heidegger’s later interpretation has important implications in considering what “development” means to human beings in the modern time in which “development,” understood as growth and progress, is overshadowing everything from global policies to the minutiae of everyday life while forcing its yardstick onto everything it encounters, debasing its meaning as a mere means to an end.

In his later work concerning the question of technology, Heidegger explicates that the *alētheia* under the condition of modern technology is dominated by a mode of revealing [*Entbergen*] that is destructive to the earthly beings. This mode of *alētheia* endlessly engages in the activities of setting up artifacts while challenging nature to give up what is in store. Hence,

1 Through the course of his work, he produced many variants of the terminology inspired by *alētheia*, to describe briefly, such as disclosedness [*Erschlossenheit*] of Dasein and the world, unconcealedness [*Unverborgenheit*], uncoveredness [*Enthülltheit*] of being, discoveredness [*Entdecktheit*] of present-at-hand, and revealing [*Entbergung*] of standing-reserves (Inwood, 1999). They have different connotations according to the context in which they are placed. Nonetheless, what remains constant about *alētheia* or “truth understood as Un-hiddenness or Unconcealment, is always on the side of Being,” with the sole exception found in the exegesis of Anaximander fragment (Arendt, 1978).

The energy concealed in nature is unlocked, what is unlocked is transformed, what is transformed is stored up, what is stored up is, in turn, distributed, and what is distributed is switched about ever anew. Unlocking, transforming, storing, distributing, and switching about are ways of revealing. But the revealing never simply comes to an end (Heidegger, 1977, 2000).

A resonance between modern development and this mode of *alētheia* in the sense *Entbergen* can hardly be denied. What is described here is precisely what we have witnessed under the name of development leading into the era of Anthropocene where every being the development encounters get stripped of their essence as they are commodified and thrown into the endless vortex of economic activities, wherein human beings are no exception. Here, “the revealing never simply comes to an end” nor does it simply runoff uncontrollably.

The revealing reveals to itself its own manifoldly interlocking paths, through regulating their course. This regulating[Steuerung] itself is, for its part, everywhere secured. Regulating and securing even become the chief characteristics of the challenging revealing. (Heidegger, 1977, 2000).

We may recall that measures, whether it is GDP or susteinametrics, are deemed necessary precisely because they are needed to regulate and steer the course of development. Heidegger calls what he sees in the essence of technology “*Ge-Stell*” or “enframing.” There is an inherent danger to *Ge-Stell*, where “human beings are caught [*gestellt*], demanded, and challenged by a force that is revealed in the essence of technology.” Being caught as such, human beings are rendered incapacitated to encounter their own essence, i.e., who they are, as they are challenged and demanded to frame everything they encounter, including human beings and even themselves as mere variables. Under the reign of technological rationality, it becomes impossible to govern otherwise as everything becomes framed on its accord. Thus, according to Heidegger, “the technological state would be the most obsequious and blind servant in the face of the reign of technology.”

In an interview with Spiegel, who asked what one can do about these potential dangers of modern technology, Heidegger remarked:

Philosophy will be unable to effect any immediate change in the current state of the world. This is true not only of philosophy but of all purely human reflection and endeavor. Only a god can save us. The only possibility available to us is that by thinking and poetizing we prepare a readiness for the appearance of a god, or for the absence of a god in [our] decline, insofar as in view of the absent god we are in a state of decline (Sheehan, 1981).

Disclosure as action

In such Heidegger's thoughts on technology, Arendt discerns the avoidance of action in the comportment of *Gelassenheit*, i.e., the "Will-not-to-will," where "the actions of men are inexplicable by themselves and can be understood only as of the work of some hidden purpose or some hidden actor" (Heidegger, 1969; Arendt, 1978). In contrast, Arendt's conception of disclosure (disclosure/*Enthüllung*) is closely tied to human action. For the sake of an action to be "fully revealed," it must be seen, in the void of propaganda that dazzles everybody, and thus requires "the shining brightness we once called glory and which is possible only in the public realm" (Arendt, 1998). In other words, it is only in the uncovered *openness* of the public sphere [*Der öffentliche Raum*], brightly illuminated by being seen by plural beings, that it is possible for the actor to appear through his action (Arendt, 1998, 2015). Needless to say, development, hence, must be fundamentally grounded in such disclosive action.

Here, it is important to note Arendt's emphasis on the etymological meaning of action, i.e., *archein*, which originally meant to begin something new but came to be understood predominantly to rule in the western tradition since Plato (Arendt, 1998). Politically speaking, rulership finds its expression in the notion of sovereignty, which is rooted in *majestas* in Latin. According to Arendt, one of the decisive differences between American Revolution and French Revolution has to do with their relation to sovereignty. "National sovereignty" is "the majesty of public realm itself as it had come to be understood in the long centuries of absolute kingship" (Arendt, 1990). Since it demands "undivided centralized power," it contradicts "the establishment of a republic" in principle as was seen in the failures of the French revolution and subsequent rise of European nation-states (Arendt, 1990). What was revealed in American Revolution was "an entirely new concept of power and authority," where those who are elected to constitute body politic received the power and authority from the below as "they held fast to the Roman principle that the seat of power lay in the people" (Arendt, 1990). What were defeated or in the European revolutions were council systems which held the same principle of organization as American "townships" of people from which the power to constitute sprang (Arendt, 1990).

Disclosure and measure

The above discussion suggests that any measure in development must be fundamentally grounded in disclosure through speech and action in the public realm. Through the action of beginning something new, then, how can we determine the measure of development? With the issue of statistical indicators in mind, I would like to consider Arendt's

interpretation of Solon's "*aphanes metron*" i.e., "non-appearing" or "invisible measure" toward understanding measures of sustainable development.

In her post-humously published book titled *The Life of the Mind*, Arendt quotes Solon's reference to measure in passing. In the passage to which Arendt refers, he says, "it is difficult to see the invisible measure that alone determines the limits of all things" (Tyrtaeus and Theognis, 1999). Since this measure is *aphanes*, i.e., non-appearing or invisible, it concerns things that are "indicated to my senses by what I have seen, though they themselves are not present in sense perception," such as happiness or courage (Arendt, 1978). Hence, Solon answered to Croesus, the king of Lydia renowned for his wealth, that wealth is not what determines one's happiness, but the "invisible measure" of happiness.

According to Arendt, Solon's "invisible measure" corresponds to what was later called "Idea" by Plato and has come to be understood as "concept" in modern times. It is what is conceived in such words as "courage," "justice," "knowledge," and "beauty," nouns derived from words describing the scene of particular events that occurred and appeared as such.

The "invisible measure" includes not only concepts that have been the object of philosophical inquiry, such as "justice" and "beauty," but also more mundane concepts such as "house." Words such as "development" and "measure" can also be counted among these concepts. These words, Arendt emphasizes, are "like a frozen thought that thinking must unfreeze whenever it wants to find out the original meaning" (Arendt, 1978). Thinking, in this sense, "inevitably leads to the destruction and overthrow of all established standards, values, and measures of right and wrong," that is, "the habits and rules of behavior dealt with in morals and ethics." On the side of common sense, thought is indeed fraught with these dangers, but what is even more dangerous for us is the desire for results in thought and the desire to escape from thinking. Arendt says the following about this.

[N]onthinking, which seems so recommendable a state for political and moral affairs, also has its dangers. By shielding people against the dangers of examination, it teaches them to hold fast to whatever the prescribed rules of conduct may be at a given time in a given society. What people then get used to is not so much the content of the rules, a close examination of which would always lead them into perplexity, as the possession of rules under which to subsume particulars (Arendt, 2003).

This quoted passage is also instructive for those of us who are pondering on the question of measures that should instruct the course of sustainable development. We may indeed have become accustomed to the long-lasting "possession of rules" under the dominance of gross domestic product. If we try to offer a new measure for sustainable development, only to teach people to

behave according to the rationality built into such measures, we will end up reproducing another “non-thinking” calculations and behaviors. If a society is once again unthinkingly oriented toward a certain measure, it will be forced to continue to harbor potential crises. Herein lies one of the limitations of development measures.

Conclusion

What Arendt sought to clarify in her late studies of political philosophy, which revolved around Kant’s Critique of Judgment, was the relationship between thought and action, which is linked through our ability to judge. Thinking, a silent dialogue between “two in one” (Arendt, 1978) in solitude, makes possible the understanding of experience through logos. What is fostered by judgment, on the other hand, is critical thinking in which communicability of thought is at stake. Without a public realm where thoughts can be expressed in the form of speech of an actor, the thinking mind eventually suffocates in destitute of common sense, let alone being critical in any sense. Arendt suggests that the way in which we can restore and preserve such a public realm is through our action and speech as one among equals. It is then up to us to rise to our occasion to exchange opinions and cultivate critical thinking on an equal footing, irrespective of social status or attributes of the participants so that the public realm can be felt to be our reality. This translates to constituting and sustaining the public realm through institutionalization where citizens can make substantive political decisions including the one on sustainmetrics.

If the discipline of sustainmetrics is to devise and propose measures for the sustainability of the world, then it must be conscious of the limit and prevent the reproduction of its thoughtless adoption by constantly exposing its outcomes to the scrutiny of political debate in the public realm. In this respect, the experts on the sustainmetrics can inspire fellow citizens to join the discourse by taking the risk of acting and speaking in public as one of the fellow citizens, disclosing who they are and what it is really meant for us. The course of development must ultimately be grounded in such an act of disclosure, only through

which we may find something worth sustaining in our future development, and sustainmetrics is no exception.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author/s.

Author contributions

Conceptualization, formal analysis, and writing—original draft preparation: GO. Writing—review and editing and project administration: ST. Both authors contributed to the article and approved the submitted version.

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