

# Seeking transparency makes one blind: how to rethink disclosure, account for nature and make corporations sustainable

Paolo Quattrone

*Alliance Manchester Business School, The University of Manchester,  
Manchester, UK*

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## Abstract

**Purpose** – Financial and nonfinancial disclosures are still anchored to conventional notions of transparency, whereby corporations “push” information out to various stakeholders. Such information is now “pulled” from various sources and addresses aspects of corporate behavior that go well beyond those envisioned by the disclosure framework. This shift makes notions of values, measurement and accountability more fragmented, complex and difficult. The paper aims to bring the accounting scholarly debate back to what and how transparency can be achieved especially in relation to issues of social inequality and sustainability.

**Design/methodology/approach** – After an analysis of the limitations of current approaches to disclosure, the paper proposes a shift toward normative policies that profit of years of critique of positivism.

**Findings** – Drawing on the notion of value-added, the paper ends with a new income statement design, labeled as Value-Added Statement for Nature, which recognizes Nature as a further stakeholder and forces human stakeholders to give voice, or at least acknowledge the lack of voice, for non-human actors.

**Originality/value** – The author proposes a shift in the perspective, practice and institutional arrangements in which disclosure occurs. Measurement and transparency need to happen in communication exercises, which do not presuppose what needs to be made transparent once and for good but define procedures on how to make fragmented, complex, multiple and volatile notions of value transparent. Income statements and accounting more in general is to be reconceived as a platform where stakeholders will have to continuously negotiate what counts as the common good in the interest of all, including Nature.

**Keywords** Transparency, Disclosure, Governance, Value-added, Nature, Environmental and social responsibility, Common good

**Paper type** Research paper

*Who wants transparency when you can have magic?*

(The Duke of Windsor, *The Crown*).

## The paradox of transparency: why searching for (and believing in) it makes us blind

Transparency presupposes what one wants to make transparent (Strathern, 2000). If one is accounting for bottles of water, only bottles of water will be seen. If one is accounting for profits, only profits will be visible. If one is accounting for CO<sub>2</sub> emissions, one will see only

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CO<sub>2</sub> emissions. This is common sense. Every way of seeing something is a way of not seeing something else.

In responding to the limitations of transparency in dealing with nonfinancial disclosure, recent approaches such as the Global Reporting Initiative (GRI), Accounting for Sustainability (A4S), Sustainable Development Goals (SDGs) and Integrated Reporting (IR) have pursued the gradual enlargement of the realm of the measurable, from financial to societal and environmental metrics. The intent is commendable. In seeking to render transparent the entire realm of the now-relevant invisible, these initiatives have left the underlying approach to measurement unchanged.

Seeing, measuring and knowing are complex processes. Looking at the photo in [Plate 1](#), what do you see? Flags. The United Nations 17 SDGs. They appear obvious and clear; no one can take a stand against them. Who would be against alleviating poverty? Or eliminating anger? Common sense would suggest that these are urgent goals. I fully support them too.

But wait a minute! The photo is blurred. At closer look, there is something standing between you (who wants to see, measure and know whether you are moving toward these targets) and the SDGs (what you want to see, measure and know). That something is the artist, Liu Bolin, the invisible man, who holds a written sign, “Future”, which gives a name to this work of his. Bolin plays with the interplay between visibility and invisibility to alert us on social issues affecting the world in which we live ([Liu Bolin Studio, 2000](#)). “Future” speaks to the complex relationships between us and the economies, societies and environments in which we live.

For an accountant like me, this is also a work that alerts us to the perils of transparency. Accounts, reports, targets and measurements are like this photo: They make us believe that we can see things clearly, that we can measure complex phenomena by reducing them to numbers and numerical calculations, and that through these numbers we can know and



**Plate 1.**  
*The Future.* Liu Bolin  
(reproduced with the  
permission of the  
author)

manage the world around us. Bolin's work warns us that the process is a bit more complex. First, it is a matter of *perspective*. If you changed perspective—the focus of the photo—you would understand that there is something between you and the SDG measures, thereby discovering the trick. Bolin's photo makes us reflect on the *practice* of making things transparent—the complex and patient work required for Bolin to become invisible and for transparency to become illusorily real. It signals that what is outside the picture (the brushes, the assistants, etc.)—*the arrangements* surrounding the photo—are possibly more important than the photo in itself in helping us understand what the SDGs measures tell us, and why and how they tell us that. It is this perspective, the role of measuring practices and the institutional context in which they occur that make transparency powerful, deceptive, illusionary and enchanting [1].

There is as much to learn from art as there is from science, when one deals with seeing things through numbers and through other visual and more recently digital representations (Hoskin, 1995; see also, Quattrone, 2017).

This deception is the theme of another of Bolin's work, Rialto Bridge (see Plate 2), in which he becomes transparent and makes the onlooker believe in the mirage of a free gondola in a busy, hot and humid summer day in Venice: running toward the target that looks like salvation, but bumping into the artist who stands between the onlooker and the goal. What is believed to be an incontrovertible target, so clear, so obvious, so just, makes one lose sight of the fact that measuring is risky business. The onlooker forgets that targets are moving that they are ambiguous and result from complex negotiations. It is this ambiguity that makes them so appealing that no one can be against them. Efficiency is good, as far as I am not the resource to be cut.

We tend to trust numbers because of their aura of objectivity (Porter, 1995). We tend to think of accounting and performance measurement systems as oracles: One interrogates the past, present and future of corporate behavior, and the system of disclosure should provide



**Plate 2.**  
*Rialto Bridge.* Liu Bolin  
(reproduced with the  
permission of the  
author)

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incontrovertible answers (not by chance, “Oracle” is the name chosen for one of the most powerful Enterprise Resource Planning System!). Numbers and targets make us forget that for the framework to ensure that we ask corporations the right questions about their behavior, the framework should create doubt rather than certainties about corporate conduct. Doubt, not prophecies, creates the space for scrutiny.

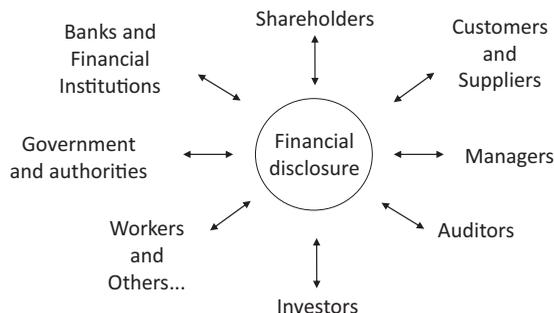
Given that current approaches to nonfinancial disclosure seem to be enchanted by the same chimera of transparency as financial disclosure has been for decades, I propose a brief detour back to the limits of financial disclosure, to identify some problems with value measurement. This identification should help to clarify how we can avoid the same mistakes in measuring and disclosing when measuring and disclosing nonfinancial values. These problems, as I discuss later, relate to issues of *perspective* when we seek transparency and design disclosure systems, the measuring *practices* adopted and the institutional *arrangements* in which these practices occur. How much do we make invisible by seeking transparency? And why? Is there an approach to transparency and disclosure other than the one underpinning the existing initiatives, which are still very much underpinned by a belief in market efficiency and the supremacy of shareholders’ value as the driver of corporate behavior?

Scrutiny and morality require a different kind of institutional work, an acknowledgment of the unavoidable and continuous shift of perspective when measuring and a set of disclosure practices that are coherent with both scrutiny and morality. They do not happen by magic. Numbers alone cannot make the trick.

**The problem with disclosure and transparency: the focus/perspective, the practice and the institutional arrangements of measurement**

Take any first-year accounting textbook or any manual for an accounting qualification. The first chapter will likely contain a picture like the one in Figure 1. Financial reports are defined as instruments to disclose financial results to a wide set of stakeholders, from shareholders to the State. They are supposed to contribute to the transparency needed for the efficient and effective functioning of financial markets. This disclosure framework also indirectly guarantees internal controls and good manager—shareholder relationships; if managers do not perform well, the market will react and share prices will drop. Poor share performance will force shareholders to intervene to put the situation back on track, possibly by firing managers and substituting them with better ones. The idea is that in guaranteeing and protecting the interest of shareholders, the system also helps to regulate relationships with all the stakeholders and magically acts in the interest of the entire economy and society. Too good to be true.

The practice of disclosure is relatively distant from a theory that assigns predefined roles to supposedly rational actors who play on that financial stage called “the market”. What



**Figure 1.**  
Financial disclosure:  
de-fining stakeholders

Figure 1 and its underlying idea of disclosure describe a world in which idealized stakeholders are given a script to play on a stage.

The analysis of every accounting scandal would unveil such a fiction and show that the assumptions underlying a theory of disclosure inspired by the dream of transparency are, at best, naïve. Take the Parmalat scandal for instance (Capolino *et al.*, 2004; Macintosh and Quattrone, 2010). The main shareholder, Calisto Tanzi, had a much more complex agency than simply maximizing his return on equity. He was at the center of a network of relationships that made Parmalat one of the instruments through which a great part of the Italian political system of the time was financed. Rather than maximizing profits, shareholders often choose to compromise. Tanzi, as much as every supporter of the US President Elect, provided support to politicians—in some cases, legally. There is nothing wrong in compromising within the boundaries of the law. The issue is that the current theory of disclosure does not account for compromises; it accounts for clear-cut agencies and relationships, thereby making these compromises disappear under the illusory impression that shareholders care only about profits, that banks care only about their credits, that the State and its governors care only about taxes and that auditors seek only to certify fair truths. Politicians and governments care about taxation, but even more about their re-election and their social network of power. Auditors care about their professional standards, but they also care, and possibly even more so, about their financial viability. Professional standards and mandatory rotation should guarantee independence, but as the case of Parmalat reminds us, every law has a loophole, and in that scandal this loophole allowed the physical auditor to move to the newly appointed firm after the rotation. Such an approach is based on clear *de-finitions* (from the Latin *finis*, “boundary”, putting boundaries around messy realities) of roles and functions but ignores that the etymology of the word warns as that such *de-finitions* are always precarious (as the Latin prefix “*de-*”, “to deprive”, reminds us). The description of the relationships among stakeholders in the Parmalat scandal would much look like Figure 2, in which entrepreneurs are politicians, auditors are not independent from the auditee and governors are entrepreneurs (the case of Mr. Berlusconi and Mr. Trump are just two cases of a much broader lack of clear-cut boundaries between stakeholders).

In a nutshell, stakeholders’ agencies and interests are nested in ways that often, if not always, escape the attempts of the regulators to black box them in categories as comforting as they are misleading: they are *de-fined*, i.e. deprived of fixed and immutable boundaries, agencies and identities. Every other recent accounting scandal, from Enron, where some executives could not care less about shareholders, to Carillion, with auditors missing red flags that others had clearly seen, would provide material for questioning the validity of any attempt to define stakeholders, their agencies and the attempt to represent value and values neutrally. This fiction presupposes a set of critical assumptions that currently tend to be

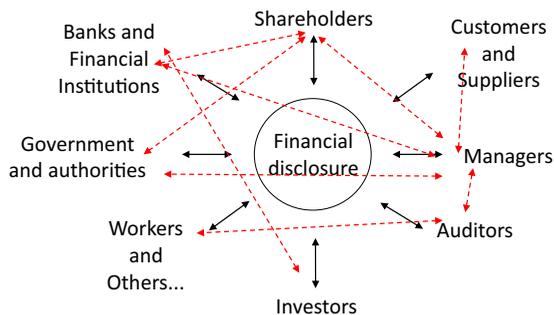


Figure 2.  
Financial disclosure:  
*de-fining* stakeholders

ignored—assumptions that are crucial in defining what is measured, and how and why it is measured.

Current approaches to disclosure, measurement and transparency seem to ignore the notion that transparency is a matter of *perspective* and what we decide to account for—that the *practices of measurement* embody that bias—and how and why we measure is not independent of the *institutional arrangements* in which regulations are designed and in which various types of measurement standards, from accounting to SDGs, are implemented. I briefly describe these problems below and relate them to social and environmental approaches to disclosure.

*Measuring transparency is a matter of perspective*

The very meaning of the word “disclosure” presupposes that there is something, be it the value of a bottle of water, a derivative or quality of work, environment and life, out there ready to be seen, measured and becoming knowledge to prompt management decisions and ensure accountability and corporate responsibility. The literature on accounting for sustainability has explored the whole range from the need for greater transparency in order to inform stakeholders (Gray *et al.*, 1997) to more nihilist approaches that view disclosure as another form of organizational hypocrite (Cho *et al.*, 2015).

It is not the purpose of this paper to review the literature on sustainability in full [2]. Here, I want just to offer a space for reflection on the notion of transparency and what notion needs to underpin accounting practices if one wants to develop more participatory forms of governance (Brown and Dillard, 2015). Take any of the 17 SDGs. “Quality of education”, for instance, means little until it is defined though measures that specify what we mean by “quality” and “education”. And it is exactly because of the ambiguity of words such as “quality” that nobody can be against it. Entering primary education, for instance, is not a measure of quality *per se*, as it ignores the differences among various schooling systems and schools. Compare a state school in the UK on its facility, class size and extracurricular activities with those of an independent school, for example. A comparison between schools in the northern and southern hemispheres would be even more striking.

Although such words as “quality”, “decent”, “affordable”, “equality” and “sustainable” used in uttering SDGs are ideals that are difficult to argue against, it is only when we define these ideals through measures that the problems of measurement begin to surface. As the etymology of the word “definition” reminded us earlier in this text.

Reducing the ambiguity, polysemy and evolving nature of such qualities as “decent”, “affordable”, “equal” and “sustainable” to a number ignores the fact that value and values are contested and contextual categories. They are intrinsically subject to changing preferences, biases, functional uses and political influences, which define in whose interest the value calculation is performed. Note the supremacy of shareholders’ interest.

In pursuing a strategy of enlargement, recent initiatives and policy pronouncements are still anchored to a misleading principle based on the assumption that value and values can be defined in clear and static terms. They ignore that accounting lives of, and thanks to, ambiguity: people believe it reduces it, while very likely it augments it (Meyer, 1986; Davie, 2000). That strategy ignores the fact that “what is worth” is relational; it happens in networks of relations; it depends on framings, contexts, opportunities and choices about what gets measured and then managed and what becomes an “externality” instead (Callon and Muniesa, 2005; Unerman *et al.*, 2018). A bottle of water in central London differs from the value of the same bottle in the middle of a desert, and I doubt that Pablo Picasso’s *Women of Algiers* worth USD 179.4 million at Christies in New York in 2015 would be worth that much had it been sold in a degraded suburb in any part of the world, if that were the context in which the sale took place. Not to mention that a bottle may become a weapon, if it is smashed on someone’s head. SDGs are moving targets. Both value and that which is to be measured are

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in a constant state of flux—a flux that current initiatives to measurement want to stop (Gray *et al.*, 1997).

As demonstrated in the description of financial disclosure that I have recalled previously, the same problem afflicts the *de-finition* of stakeholders and their agency. Looking at who finances various environmental and social disclosure initiatives (assuming one can find the information, which is often not disclosed on public websites) would cast doubt on the complexity of the definition of stakeholders and their interest in taking part in the process. It should surprise no one then, when assessing the quality of food sold in fast food chains, that one proposed measure was the average caloric intake of the menu served in a restaurant. Adding a salad not only diminishes this average and makes the menu officially “healthy” but generates a shift in accountability: from the corporation selling junk food to the customer who can now choose between junk food and healthy food—as if one entered a burger shop to eat salads!

Every way of seeing is indeed a way of not seeing. If one were to believe that shareholders have the intrinsic motivation of maximizing profit, one would forget that they have much more complex agencies. This is not a problem, *per se*; it is the spice of life. It becomes a problem when we want to seek transparency by using this principle. Reducing what counts as healthy to an average menu’s caloric intake makes us forget that that definition of healthy does not necessarily correspond to what is to be measured, if the calculation that defines the measure is done in the interest of the consumer rather than the corporation that sponsors the initiative. The root cause of the failure of transparency is the fact that searching for it through these *de-finitions*, blinds us, as we miss all the other relations for which we are not accounting. In seeking to represent reality, accounting constructs one reality (Hines, 1988), the only one we are allowed to see: Seeking transparency indeed renders us blind.

That every way of seeing is a form of not seeing is indeed common sense. But it has become so engrained in the mechanisms of financial and nonfinancial disclosure that we no longer pay attention to it. The current frenzy for more and more metrics is based on this forgetting and amplifies rather than reduces the paradox of transparency. That paradox implies that we are blinded by a search for transparency based upon agreed standards, central definitions of what is worthy of measurement, how and why, and on metrics to be pushed out to the market. There is much to know—preferences, technologies of measurement, quality of data, vested interest and the like—but little to disclose, if disclosure is done from a single perspective, with a single focus. That would make the picture blurred rather than limpid. Common sense is indeed no longer very common.

We do not want to repeat the same mistake when we design measurement systems aimed at assessing the environmental and social impact of corporate behavior. We run the risk of assuming that Nature, society and financial behaviors can be treated as if they were unrelated by measuring them in separate sets of measures. Figure 1 and the underlying theory of disclosure is closer to fiction, enchantment and magic than it is to reality. It is fiction for the assumptions it makes. It is enchanting because it promises a way out of the maze of measurement, making us see the light of clarity thereby becoming *a-mazing*. It is magic, because it promises a quick and unmediated access to financial value and nonfinancial values. Just as Alchemy promised an effortless transformation of iron into gold, data technologies and measurement promise a quick access to the essence of values, as if they were not ambiguous, contested categories (Eco, 2014).

If we want to improve the quality of transparency, the approach to transparency needs to change. Measurement is naturally relative to a perspective. As Bruno Latour reminds us “a little relativism brings us away from reality; a lot brings one back” (Latour, 1988, p. 173). In order to assess the relativity of every measure, we need to design practices of measurement based on this relativity rather than on certainties. Doubt prompts judgment, not beliefs. We need to foster scrutiny, not compliance.

*Measuring transparency is a matter of practice*

Table 1 shows a familiar income statement—so familiar that few people could think of any other possible format. It begins with revenues and ends with profit, passing through functional results (e.g. manufacturing, other operations, finance). Designed with the US Corporation in mind, it seeks to represent how business functions contribute to profit and allow shareholders to control their functional managers once ownership and management became separated with the emergence of corporate capitalism. The statement was drawn in the shareholder’s specific interest in the context of US corporate capitalism, which viewed the stock exchange as the primary financial source for the corporation. What is now universally conceived of as *the* income statement is intrinsically a political statement, which speaks to the contested notion of value and its measurement by making a statement about it. And in making that statement, it discloses profits but eventually makes invisible the social, economic and political arrangements it embodies.

At least until global dominance of the International Financial Reporting Standards (IFRS), and in non-Anglo-American traditions, the income statement of a firm would have had different formats. When I was an undergraduate at the University of Palermo, I studied at least six variants (Ranalli, 2004). Two of these variants did not classify expenses according to their business function (e.g. marketing, finance) but to their nature (i.e. supplies, labor costs, etc.). This was the case in Italy at least until the adoption of the IFRS. But Italy was not the only anomaly. The German accounting tradition, for example, would favor an income statement in which the focus was, and in some cases still is (see BMW’s 2020 annual reports), on the production and distribution of *value-added*, therefore taking the role of labor explicitly into account and not merely considering capital in the production of value, as shown in Table 2.

**Table 1.**  
The income statement

<i>Revenues</i>	+
Cost of goods sold	–
<i>Gross margin</i>	=
Operating expenses	–
<i>Operating income</i>	=
Financial income	+/-
<i>Profit before tax</i>	=
Tax	–
<i>Net profit</i>	=

**Table 2.**  
The value-added  
income statement

<i>Revenues</i>	+
Cost of production and services	+
Value-added by operating activities	+
Interest received	+
Dividends received	+
<i>Wealth created</i>	=
Distributed as follows	
Employees (through salaries, wages and benefits)	–
Providers of interest bearing capital (through interest)	–
The state (for services through tax payments)	–
The firm (through retained earnings)	–
Shareholders (through dividends)	–
<i>Wealth distributed (= to wealth created)</i>	=

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The option between a classification of items by *function* and *nature* was still allowed under the IV European Directive as a compromise between the European continental tradition and the Anglo-American one.

The measurement logic underpinning the income statement in [Table 1](#) is driven by a search for certainty. It assumes that financial data are measurable and certified by an army of supposedly independent auditors in the interests of shareholders who delegated the management of their corporation to a new cadre of professional executives.

But, once again, the etymology of the word “data” helps to disentangle the complexities of measurement. “Data” comes from Latin *datum*, which means “given,” but also “attributed,” therefore begging those looking at data to investigate the ambiguous meaning in the space between the two. Values, as much as meanings, are “given”, but more importantly, they emerge from a process of attribution, of measurement, which is not neutral. Truth stands somewhere between these two opposite poles.

The measurement logic underpinning the income statement in [Table 2](#) is based upon a greater awareness of this intrinsic ambiguity and recognizes the irreducible uncertainty and relativity of both measurement and measures. The value-added income statement was a platform to allow negotiation among stakeholders who would question the validity of the figures in their respective interest in the general assembly, rather than naïvely expecting that auditors would do that on their behalf. Income statements classified by nature (of which the value-added is possibly the most common, [Lipari, 1993](#)) were inspired by a logic of compromise (from the Latin *cum*, “with”, and *promisum*, “promise”), signaling the impossibility of absolute truth (even when it is fair) of the full alignment of interests. Rather, it offers the promise of an agreement, a need to agree to disagree in order to keep working together in that social space that was the firm, conceived as the institutional space where social compromises could be searched and made possible.

A shift from [Table 1](#) to [Table 2](#) would immediately speak to social issues of income distribution and (in-)equality, without the need for additional measures that would dilute the key issue of value distribution in an ocean of newly defined metrics that little have to do with the amount of money that goes into stakeholders’ pockets. That shift would make stakeholders argue about what people can measure and care about—money—leaving them to decide what is meant by “equal”. And while I would agree that what format the income statement has is the result of social and political structures, showing that alternatives are possible is the precondition to change and emancipation ([Gallhofer and Haslam, 1996](#)).

Indeed, the value-added statement reduced to numbers the complex judgment about what was equal and just. However, it did so in order to augment our understanding of the ambiguity of the notion of value and the reasons underpinning its production and distribution. When deciding how to distribute value among a set of stakeholders nested in a complex net of relationships, this ambiguity required wise judgment, and not merely measurement ([Puyou and Quattrone, 2018](#)). It measured what could be counted (financial movements) in order that what cannot be measured (issues of equality and justice) can be questioned, thereby placing them on the same plane. Balance and proportionality are the ultimate source of wisdom and the precondition for social cohabitation (as the word *rationality*, secretly reveals, from *ratio*, “proportion”, and “account”—not reason, in Latin).

When the author of the first accounting treatise that described the accruals introduced his manual ([Flori, 1636](#)), he clearly stated in the preface that accounting is a pragmatic science. It solves problems. It does not seek immanent truths; that is the role of theology—or at least it was until the advent of post-modernism. Accounting and the related practice of measurement are much humbler; they must be driven by pragmatism, that is, its ability to address problems such as sustainability, not by searches for impossible truths.

The statement in [Table 2](#) also signals the risk of separating financial from nonfinancial disclosure ([Unerman et al., 2018](#)) when dealing with issues of peaceful social co-habitation.

Not by chance, the value-added format is used for national accounting, as it links what happens in the economy to the kind of society a nation wants to be. The current frenzy about moving away from financial to nonfinancial measures, other than the obvious and documented nature of being a public relations tool (Cho *et al.*, 2015), runs the risk of distracting us from important matters of corporate financial returns and how they are obtained at the expense of societal and environmental values. They may be considered integrated, as in the case of Integrated Reporting and thinking, but they fall short when integration is made visible, having shareholders' interests as the main perspective giving focus to the measurement. The other risk is to seek integration among financial and nonfinancial indicators, while leaving the disclosure of corporate production and distribution of value out of the equation or supplanted by other nonmandatory disclosures outside the normal cycle of financial reporting—as is the case with SDGs.

If one wants to make a disclosure about societal issues a productive rather than a sterile ritual, an effective practice of addressing inequality rather than a box-ticking exercise leading to compliance to gain legitimacy in the new world of vacuum political correctness, one must design accounting practices that account for and care for the social. Everyone cares about society and the environment until caring affects their wallets. Value-added statements are the first step toward embedding a fruitful negotiation among stakeholders on the question of who has to take care of those left behind. My proposal in the section titled “**A pragmatic approach to transparency**”, in which I describe the value-added statement for Nature, seeks to provide a response to these issues by ensuring that we ask the right questions about how we collectively care for both society and the environment, without forgetting that care cannot be given without taking care of the finances. As the Jesuits knew far too well, pursuing only profit is amoral and makes us sinners, but one cannot pursue God without the appropriate financial resources (Quattrone, 2015). The Jesuits were indeed advanced when discussing externalities and issues of integration!

#### *Measuring transparency is a matter of institutional arrangements*

The process of disclosure could not occur without a clear set of institutional arrangements to make it possible. These arrangements are made of various institutional actors such as standard setters and initiatives (International Accounting Standard Body, GRI, A4S, United Nations), professional bodies and sponsoring agencies. They rely on specific standards or on guidelines that organizations are trying to turn into standards, in favor of which such institutional actors act as spokespeople competing in arenas devoted to this purpose. These arenas become institutional fields comprising networks, alliances, sponsors, independent advisors, exposure drafts, international agencies, new headquarters and a list of funding bodies and foundations. Various material arrangements (this time not in accounting but in concrete physical and procedural terms), from standards to expensive headquarters, contribute to establishing credibility in various standardizing attempts competing to become the ultimate legitimate standard setter.

This search for legitimation is not new (see, for example and in relation to environmental accounting, Cho and Patten, 2007; Archel *et al.*, 2009; Deegan, 2019). If one looked at the history of accounting standards in the USA and replaced FASB with any three-letter abbreviation (GRI, SDGs, A4S) that populates the arena in which the fight for legitimation happens, one would see much the same story (see, the brief history of standardization in the USA in Baxter, 1981, pp. 3–10). It is also a legitimate search, as every form of social cohabitation requires rules that are recognized as valid by a community, in order that the rules to be adopted and that the community adheres to them.

The problem is that current attempts at establishing standards for both financial and nonfinancial disclosure are still anchored to an idea of transparency based on a central entity that centrally seeks to “push” information out to the public—the central entity being the

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regulator that issues the standards or the firms that prepare and publish the accounts. The reality is that the public can currently pull that information from a varied and decentralized set of data sources. One effect is that its worth (from financial value to social and environmental values) is now more volatile than ever. Another effect is that a simple Tweet may make months of disclosure preparatory work collapse at the speed at which the news becomes viral, regardless of its facticity.

Yet, there is no infrastructure, no institutional arrangement that acknowledges this change in communication models. And despite the various attempts at taming fake news, there are no platforms for debating the facticity of news (as if a true one existed). The current loss of legitimation of financial reporting is due partly to this change in modes of disclosure. Information is now available to users in quantity and quality, and despite the glitches of fake news, a growing number of tools for scrutiny are available to information users. Technology is finally making visible what a good accountant has always known: Value is a matter of judgment, of definition of what is to be measured, how, and above all, why.

The production and distribution of value is also moving from a push to a pull model with platform organizations (from Uber to Facebook and Spotify) becoming ubiquitous and gradually supplanting the model of the corporation that has characterized the development of economies and societies for most of the twentieth century (Davies, 2016). Meanwhile our disclosure frameworks are anchored to a preindustrial revolution model, in which fruits are produced by assets, not by managerial coordination, and even less by data and communication exchanges (Kornberger *et al.*, 2017). And although the production and distribution of value and their definition and representation are changing dramatically, current regulatory attempts and proposed practices of measurement are assuming a push model—a model of standards, central bodies and auditing and assurance practices.

Again, going back to the various failures of disclosure in the financial reporting space will help to clarify mistakes that the growing number of initiatives on nonfinancial disclosure have to avoid in the future. Commentators often herald two things as the solution to recurring accounting scandals: transparency in financial reports and the independence of auditors as fact checkers. The more transparency and auditor independence fail, the more regulators and the press call for more transparency, independence and objectivity. Unfortunately, to paraphrase H.L. Menken, this “well-known solution” is as neat and plausible as it is wrong.

Conventional wisdom conceives of disclosure as a communication of given facts. It treats value measurements to be disclosed as boxes that travel unquestioned from producers to users of these measures. This journey is supposed to be made safe and smooth by a specific institutional arrangement—auditing—with the auditors playing the difficult role of certifying that appropriate health and safety standards have been followed.

As much as we take the perspective of disclosure and related practices for granted, however, we tend to forget that auditors have a big stake in those practices. The biggest elephant in the auditing room is the conflict of interest between the auditor who performs the check and the auditee who pays for it (today a band of executives, no longer Rockefellers, Agnellis and the like, who check on them through audits). It should be no surprise that auditing scandals emerge regularly. Auditors may be driven by professional values aimed at guaranteeing the true and fair value of their accounts, but it is more likely that they are driven by the commercial interest that bonds them to their customers. Accounting scandals such as the recurrent Enrons, Parmalats and Carillons are a painful and costly testimony of the constant failure of transparency and related market mechanisms for ensuring it. The response to these failures has been a call for greater transparency, more market and more audits.

The recent enlargement of the realm of the measurable does not alter the basic underlying assumption that the disclosure of nonfinancial values must provide “true and fair” views, forgetting, again, what the Romans taught us: Facts are always “made” (from the Latin *factum*, “made”). The process of disclosure is not mere communication of a measured value.

Academic research has now consistently shown that in communicating financial and nonfinancial values, practices of disclosure construct these values (Hines, 1988). It has shown that various forms of disclosure and metrics are more often than not instruments for negotiation (recent mergers and acquisitions in the automotive industry being used to justify growing scale); for stakeholders' management (British universities rendering staff redundant by using recurrent financial crises, from pension deficits to COVID-19 shortage of students, and trade unions using different assumptions to make the opposite case); and, more often than not, for rationalization and legitimation of immoral conduct made invisible behind the institutional veil of auditors, accounting standards and market-based accounting (see, Burchell *et al.*, 1980; Carruthers and Espeland, 1991). The list of accounting scandals is far too long for the word limit of this article). It should not be surprising that most of the disclosure of societal and environmental impacts is prepared by marketing and public relations departments rather than by the finance function, and even financial disclosure is now increasingly in fancy, glossy, digital reports—testimony to the fact that they are rituals of impression management rather than rituals of actual verification (Cho *et al.*, 2015; Bebbington *et al.*, 2008; Davison, 2008; Power, 1997). It will be of no surprise that once the race for legitimation in the field of nonfinancial disclosure has been won by one of the current combatants (with the UN and its SDGs in pole position for the victory), the next step will be the emergence of data audits. Auditing will replicate the enlargement of the realm of the measurable (from financial to nonfinancial values) that various initiatives in the field for disclosure have conducted, finally making audit societies real but meaningless (Power, 1997).

It is time to seek other institutional arrangements for disclosure and make them consistent with emerging models of communication. Platform organizations have moved from a push-to-pull mode of production of value. An analogue move toward a platform for disclosure is needed—a platform in which communication is conceived of neither as communication of a given fact or the construction of a legitimate reality—where what is to be communicated, how and why it is co-defined in communities, is communicated in social networks and various forms of media (Cornelissen *et al.*, 2015).

Various institutional arrangements will be required in order for all of this to happen: Various practices will have to be designed, and a multiplicity of perspectives will have to be acknowledged and respected in defining what counts.

What follows is a pragmatic attempt to ensure that transparency is a true source of dialogue and competitive advantage. Paradoxically, I argue that that will happen only when disclosure is made in the interest of the public and common good, and not in the interest of one stakeholder or another. I begin by proposing a format of disclosure that will bring the measurement of nonfinancial value back into the orbit of financial measurement.

### **A pragmatic approach to transparency: the value-added statement for nature**

In describing various issues that affect both financial and nonfinancial disclosure, I have followed a similar path to that explored by the evolution of various disclosure initiatives. I began with financial disclosure and its focus on the perspective of shareholder, which informs a form of disclosure described in Table 1. I then recalled approaches that broaden that focus to recognize other stakeholders' perspectives, with the resulting value-added practice of disclosure, as exemplified in Table 2. This move resulted in a first attempt at recognizing the societal impact of financial matters, as the value-added statement is not only an instrument for macroeconomic planning (as it is the case in national accounting) but also a platform for exploring the social implications of the production and distribution of value.

Not by chance, value-added was adopted by many recovery initiatives in Italy, Japan, Spain and the UK after the end of Second World War, as it constituted a platform for informing decisions on how to produce value (e.g. with revenues generated through services, manufacturing or infrastructure), where to produce value (e.g. in developed or under-

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developed areas) and who benefited from its distribution (e.g. shareholders; workers; the State, through taxation; or the firm, as the locus where this mediation took place, through retained earnings). The logic of value-added is not alien to financial reporting. In Italy, proposals for a *Bilancio Sociale* (a social financial report) were popular in the 1980s when the same attention to the approach to value measurement gained traction in the UK before the emergence of a neo-liberal ideology under Mrs. Thatcher's government (McLeay, 1983; Vermiglio, 1984). The IV EU directive and subsequent IAS 1 still allowed the classification of Income Statement items by nature to allow the calculation of the production and distribution of value-added logic. National accounts are still calculated with this logic, some corporations under State influence (e.g. IRI) produced value-added plans and budgets (Quattrone *et al.*, 2014; Monfardini *et al.*, 2021; Quattrone *et al.*, 2021), and various Latin American corporations are currently experimenting with it to account for social and environmental issues (see Perera Aldama and Zicari, 2012).

Societal issues of inequality and income distribution could be immediately made visible and therefore manageable through value-added accounts. But can the value-added logic be adjusted to account for environmental issues as well? This is what I explore in the next section, beginning with practices.

#### *Changing practices of disclosure: the value-added statement for nature*

Think of a classroom. Depending on its layout, pupils and teachers would have different social interaction, and knowledge would be generated in different ways. With desks in rows and pupils facing the teacher, the layout would embed the idea that knowledge is to be transferred from teacher to pupil. In a Harvard-style lecture theatre, the amphitheater shape would allow students to interact, coordinated by a lecturer. Here the empty space of the semicircle symbolizes the ambiguity of the case study to be debated. Knowledge emerges from questioning, scrutiny and debate. Different kinds of spatial arrangements generate different kinds of social interaction and different approaches to knowing. I introduce this description because an account, a report and a dashboard are not different; their design will shape the kind of interaction that various stakeholders have. Lines make a difference (Ingold, 2007; Suzuki, 2018).

I therefore propose a small but significant change to the structure of the value-added statement. As shown in Table 3 propose to add a line in the area of the distribution of value: a Provision for Nature, which will constitute a related Fund for Nature in the Balance sheet.

This is a small but important addition, and it shows how practices of disclosure are not neutral in what, how and why we disclose (it also relates to matters of perspective and institutional arrangements, as discussed in the next section). This addition would not alter the current measurement of financial values but would immediately draw attention to the way we humans relate to Nature. In a value-added statement, we account for the consumption of production factors. We use labor and capital, for instance, and we remunerate them through salaries and dividends and interest. We also consume (and destroy) natural resources, and we account for this destruction by measuring the consumption of raw materials, energy and the like. The problem is that we do not remunerate Nature, as Nature has no one who can speak on its behalf. That is a task that we have to pose to ourselves. The addition of a Provision for Nature in the Value-Added for Nature Income Statement (VAN) would achieve this first key result—forcing all stakeholders to pay serious attention to how we relate our corporate activity to the only stakeholder who does not have a voice: Nature. At the end of the financial year, workers, shareholders, the state and providers of financial resources should ask themselves two questions: “How much do we want to give back to Nature? How much are we willing to sacrifice from our own return to reconstitute those natural resources, the

**Table 3.**  
The value-added  
statement for  
nature (VAN)

<b>Revenues</b>	+
Cost of production and services	+
Value added by operating activities	+
Interest received	+
Dividends received	+
<b>Wealth created</b>	=
Distributed as follows:	
Employees (through salaries, wages and benefits)	-
Providers of interest bearing capital (through interest)	-
Nature (through provisions to a fund for nature)	-
The State (for services through tax payments)	-
The Firm (through retained earnings)	-
Shareholders (through dividends)	-
<b>Wealth distributed (= to wealth created)</b>	=

consumption of which has allowed the creation of value from which we benefit?” We consume wood, copper and the like, but no one asks us to pay attention to what we can do to reconstitute that natural capital or to compensate Nature for the irremediable loss of unrenewable resources. A small line would make an incredible shift in perspective, as I explore in the next section. It would have agency (as noted by Sullivan and Harris, 2017, in relation to non-financial measures) but from within the financial statements, thus internalizing the externalities that normally a reduction to complex financial measures implies and respond to those calls for a serious integration between financial and non-financial measures (Unermann *et al.*, 2018). Equally, the establishment of a Fund for Nature in the Balance Sheet will generate a debate on its use by the management who will have to be accountable to stakeholders in the general assembly [3].

*Changing the perspective of disclosure: on making common good transparent*

A minuscule addition to a conventional (and currently used, albeit in small numbers) income statement could provide a disclosure revolution—a revolution in perspective and focus. First, it would recognize Nature as another key stakeholder, just as workers are recognized in German companies and shareholders in US corporations, and just as the State is recognized more broadly. It will use disclosure to make users reflect on the inevitable trade-offs that one faces when dealing with the production and distribution of nature and internalize the externalities that currently are treated as non-financial issues to be measured. Second, such a small change recognizes that such issues as social justice and sustainability cannot be reduced to objective measures. Rather they require stakeholders to use judgment when making decisions about them, which will provide procedures for exploring the kind of *rationality* that needs to be used when we destroy, produce and distribute value issues. It will make no assumptions about right or wrong, but will offer concrete practices to elicit preferences and to prompt judgment (see, instead, the approach to carbon emissions with given quotas). What is sustainable in a developed, Western country may differ from what is deemed sustainable in a developing country, where the approach may include exploration

and innovation to, say, sustainability, given the lack of path dependencies. Third, this statement will make it clear that pursuing specific and individual interests (those of each individual stakeholder) requires the need to recognize the interests of others. It implies an understanding of common good as a dynamic and contested, continuously *de*-fined category, which must be questioned and scrutinized through practices of disclosure that are designed coherently with a notion of transparency that recognizes the continuous shift of perspective and focus [4].

A great deal of ink has been dedicated recently to re-defining corporate purpose, the debate on Freedman's statement about the purpose of the corporation being the recent example. The VAN will put common good center stage and provide concrete practices not only to assess the kind of societies in which we want to live (something which the conventional value-added statement already allows) but also the kind of relationships we collectively want to have with Nature and Mother Earth.

Finally, the VAN, in addition to representation and mediation as underlying aims of disclosure (as in Tables 1 and 2), will recognize that disclosure is meant to influence behavior and decision-making. The moment one realizes that one does not provide for the consumption of natural resources, the statement acts as a mirror from which to speculate on the kind of selves we are and have become. By seriously integrating financial and nonfinancial disclosure, not only the corporation, but the whole range of stakeholders will have to justify how they have related to Nature: Are they simply predators or are they conscious inhabitants of Planet Earth, aware of the limitedness and preciousness of its resources? The level of the provision could even be zero, but this will have reputational effects.

The VAN is therefore a pragmatic solution for recognizing that when we measure financial and nonfinancial values, we need to consider not only the existence of multiple *perspectives* (those of the various stakeholders, now including Nature) but also that these perspectives change and cannot be crystallized in centralized *de*-finitions that ignore the ambiguity of the notion of value, of sustainability and of the multiplicity of continuously changing and vested stakeholder interests. Acknowledging this shift in perspective remains a futile public relations exercise if not accompanied by coherent practices of disclosure. The VAN is a step in that direction, a step toward the recognition that this ambiguity makes the SDGs imperatives so appealing and powerful. We should safeguard rather than denying ambiguity, building on this appeal rather than pretending that things can be easily rendered transparent through simple measures. Transparency and disclosure require the establishment of tensions between opposite and contrasting interests—tensions that create a space for scrutiny, negotiation and final mediation. Governing disclosure and transparency must change too.

*Changing the institutional arrangements of disclosure: reports as diffused forms of governing transparency*

When I was at Oxford, I once invited the late Mr. Saccomanni, former Director General of the Bank of Italy and then Ministry of Finance in the Italian Government, to give a talk at Italian Studies at Oxford, a center I had co-founded. He gave me a ride in his car to the venue. On that brief journey, I shared my puzzlement in discovering, while studying the Parmalat scandal, that the Bank of Italy is owned by the very banks that it should control. I asked him whether, to assure the correct functioning of financial markets, an arrangement similar to that of the UK would not have been better, with control exercised by its central and independent authority (the FSA at that time). He looked at me like a good father looks at his naïve kid venturing into the complicacies of the financial world for the first time. To paraphrase Mr. Saccomanni, he told me that if such an agency existed in Italy, it would be easy to bribe the director and the board and control the whole system. There is a different approach in Italy—a diffused ownership of the bank, so that each player can check on the others. To my surprise,

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he told me that the US Federal Reserve works in the same way. The problem that Italy now has, he explained, is that because of the belief in the market as a governance mechanism and the need for scale when operating at a global level, the Italian banking sector and financial industry is now concentrating too much, threatening the independence of the Bank and the effectiveness of its controls. Paradoxically, I would argue, a diffused ownership that denied independency delivered a much more effective governance than would a naïve belief in independence. Independence, like transparency, is an impossible dream. For those dreams to become real, they require the right institutional arrangements and a great deal of work (Lawrence *et al.*, 2003).

So what kind of institutional arrangements will make disclosure of financial and nonfinancial measures effective? Mr. Saccomanni's wisdom would suggest a diffused form of governing transparency. Rather than reinforcing central authorities and standard bodies and relying on supposedly independent auditors, would it not be better to reinforce the competition for truth in the disclosure arena? This step would require a stronger voice from the workforce; a stronger voice from the State, in the form of collecting taxes for the benefit of taxpayers; and a stronger voice representing Nature, to check on the behavior of corporations and shareholders. It would also require that auditors have a stronger voice.

A parallel with the judiciary system may help (Kleinman *et al.*, 2012). In that system, we have lawyers, who serve the interest of the client; prosecutors, who pursue the interest of the public; and judges, who exercise wise choice in the interest of society. In audit and disclosure, we have only lawyers who are paid by the client, but who should serve the public interest? Why not recreate the tension between the prosecution and the defense in the auditing system as well, with a judge to guarantee the interest of the public? Without going to the extremes of nationalizing the audit industry and away from the useless separation between consulting and auditing business for the Big 4, one could think of a public agency, which collects fees from auditees and assigns auditing jobs to the auditors, finally eliminating the biggest elephant in the auditing room—the conflict of interest between auditee and auditor. Some readers may be smiling and deem that change impossible and impracticable. But look at Switzerland. The Swiss Financial Market Supervisory Authority (FINMA) works in a similar way, walking the talk of independence.

The space where this competition can happen is the VAN, which would become not only a space for disclosure but also an arena for governing the fight for transparency, for defining values and determining what counts. It would become a participatory space (Brown and Dillard, 2015) where finally various stakeholders could engage in a dialogue (Gray *et al.*, 1997) and accounting practices could be both constraining and emancipatory. In a model of disclosure that moves away from a capital market discourse on transparency and from an understanding of communication as push rather than pull, we need such arenas and spaces of negotiation, where facts and news are scrutinized, and compromises are achieved. This is not a search for truth. Truth does not exist, but if it did exist, one could not stretch it too far. Every way of seeing is a way of not seeing. A denial of that interplay implies falsity. Beyond the false dichotomy between true and fake news, we need good old effective checks and balances.

*In medio stat virtus* (virtue lies in the just middle, neither too much or too little), as the Romans taught us. This is the key for a new social contract in which inequality and the relationship between humans and Nature are explicitly posed at the crux of the destruction, production and distribution of financial and nonfinancial values. This is the only way in which corporations can retain their license to operate and regain legitimacy, and it is a precondition for developing competitive advantages. Balance and balance sheets are the key to wisdom (Kaye, 2014). They are also the key to retaining the license and regaining needed legitimacy to operate in economies and societies: a lesson that we have forgotten, but one that is valid now more than ever.

## Notes

1. The link between calls for transparency and disclosure and the efficient market hypothesis is well established in the literature. A lot of work, since [Tinker et al. \(1982\)](#), has been done to illustrate how the market efficiency hypothesis is often taken for granted in when setting accounting standards to the point of influencing policy even in unexpected regulatory regimes (see [Bewley et al., 2018](#), in relation to the diffusion of fair value accounting in China). Although beyond the scope of this paper, similar work needs to be done in relation to two other taken-for-granted and unquestioned drivers of corporate disclosure: comparability and materiality. I am grateful to one of the referees to raise this issue.
2. The literature on social and environmental accounting is vast and even venturing briefly into it would deviate this paper from its main aim of illustrating the need for modifying the income statement and the balance sheet to give voice to nature. The recent publication of the *Routledge Handbook of Environmental Accounting* ([Bebbington et al., 2021](#)) has done an excellent and much better job than I could do within the space constrain of this paper. In that companion, see particularly, [O'Dwyer \(2021\)](#), which is a nice addition to the classic [Gray \(2010\)](#). See also, the review of papers published in *Accounting, Auditing and Accountability Journal* by [Owen \(2007\)](#) and then the special issue edited by [Russell et al. \(2017\)](#). The piece by [O'Dwyer and Unerman \(2016\)](#) in the 40th Anniversary of *Accounting, Organizations and Society* is also a classic reference.
3. The provision for nature may also be conceived of as an instrument to constitute a public fund, then acquiring the status of taxation. However, I fear that this would generate a kind of tick-box mentality where the devolution of, say, 3% of revenues to the cause of saving Nature, would clear our conscience but not act as a reflexive exercise of participative governance ([Brown and Dillard, 2015](#), see also Ostrom's notion of "polycentric governance"; [Ostrom, 2009](#)). I am very grateful to one of the reviewers to make me reflect on this point and point me to Ostrom's work.
4. As we note in a working paper ([Quattrone et al., 2021](#)), the Italian Catholic elite, when facing the risk of having Italy assimilated to either a corporate capitalist or socialist country at the end of the Second World War, defined, as a moral principle to orientate individual and social behavior, the "common good" as those conditions that allowed the pursuit of individuals' interests'. In this circular reference, pursuing the common good would inevitably pose the need to balance various and different individual interests.

## References

- Archel, P., Husillos, J., Larrinaga, C. and Spence, C. (2009), "Social disclosure, legitimacy theory and the role of the state", *Accounting, Auditing & Accountability Journal*, Vol. 22 No. 8, pp. 1284-1307.
- Baxter, W. (1981), "Accounting standards - boon or curse?", *Accounting and Business Research (Winter)*, Vol. 12 No. 45, pp. 3-10.
- Bebbington, J., Larrinaga, C. and Moneva, J.M. (2008), "Corporate social reporting and reputation risk management", *Accounting, Auditing & Accountability Journal*, Vol. 21 No. 3, pp. 337-361.
- Bebbington, J., Larrinaga, C., O'Dwyer, B. and Thomson, I. (2021), *Routledge Handbook of Environmental Accounting*, Routledge, London.
- Bewley, K., Graham, C. and Peng, S. (2018), "The winding road to fair value accounting in China: a social movement analysis", *Accounting, Auditing & Accountability Journal*, Vol. 31 No. 4, pp. 1257-1285.
- Brown, J. and Dillard, J. (2015), "Dialogic accountings for stakeholders: on opening up and closing down participatory governance", *Journal of Management Studies*, Vol. 52 No. 7, pp. 961-985.
- Burchell, S., Clubb, C., Hopwood, A., Hughes, S. and Nahapiet, J. (1980), "The roles of accounting in organizations and society", *Accounting, Organizations and Society*, Vol. 5 No. 1, pp. 5-27.
- Callon, M. and Muniesa, F. (2005), "Economic markets as calculative collective devices", *Organization Studies*, Vol. 26 No. 8, pp. 2229-1250.

- Capolino, G., Massaro, F. and Panerai, P. (2004), *La Grande Truffa*, Classe Editori, Milano.
- Carruthers, B.G. and Espeland, W.N. (1991), "Accounting for rationality: double-entry bookkeeping and the rhetoric of economic rationality", *American Journal of Sociology*, Vol. 97 No. 1, pp. 31-69.
- Cho, C.H. and Patten, D.M. (2007), "The role of environmental disclosures as tools of legitimacy: a research note", *Accounting, Organizations and Society*, Vol. 32 Nos 7-8, pp. 639-647.
- Cho, C.H., Laine, M., Roberts, R.W. and Rodrigue, M. (2015), "Organized hypocrite, organizational façades, and sustainability reporting", *Accounting, Organizations and Society*, Vol. 40, pp. 78-94.
- Cornelissen, J.P., Durand, R., Fiss, P.C., Lammers, J.C. and Vaara, E. (2015), "Putting communication front and center in institutional theory and analysis", *Academy of Management Review*, Vol. 40, pp. 10-27.
- Davie, S.S.K. (2000), "The significance of ambiguity in accounting and everyday life: the self-perpetuation of accounting", *Critical Perspectives on Accounting*, Vol. 11, pp. 311-334.
- Davis, G.F. (2016), *The Vanishing American Corporation: Navigating the Hazards of a New Economy*, Berrett-Koehler Publishing, Oakland, CA.
- Davison, J. (2008), "Rhetoric, repetition, reporting and the 'dot.com' era: words, pictures, intangibles", *Accounting, Auditing & Accountability Journal*, Vol. 21 No. 6, pp. 791-826.
- Deegan, C. (2019), "Legitimacy theory: despite its enduring popularity and contribution, time is right for a necessary makeover", *Accounting, Auditing & Accountability Journal*, Vol. 32 No. 8, pp. 2307-2309.
- Eco, U. (2014), *Astrologia e magia nel Rinascimento. Teorie, pratiche, condanne*, Atti del Convegno, Forlì.
- Flori, L. (1636), *Trattato del modo di tenere il libro doppio domestico con suo esemplare composto dal P. Lodovico Flori della Compagnia di Gesù per uso delle case e dei collegi della medesima Compagnia nel Regno di Sicilia*, Decio Cirillo, Preface, Palermo.
- Gallhofer, S. and Haslam, J. (1996), "Accounting/art and the emancipatory project: some reflections", *Accounting, Auditing & Accountability Journal*, Vol. 9 No. 5, pp. 23-44.
- Gray, R. (2010), "Is accounting for sustainability actually accounting for sustainability. . . and how would we know? An exploration of narratives of organisations and the planet", *Accounting, Organizations and Society*, Vol. 35, pp. 47-62.
- Gray, R., Day, C., Owen, D., Evans, R. and Zadek, S. (1997), "Struggling with the praxis of social accounting. Stakeholders, accountability, audits and procedures", *Accounting, Auditing & Accountability Journal*, Vol. 10 No. 3, pp. 325-364.
- Hines, R.D. (1988), "Financial accounting: in communicating reality, we construct reality", *Accounting, Organization and Society*, Vol. 13 No. 3, pp. 251-261.
- Hoskin, K. (1995), "The viewing self and the world we view: beyond the perspectival illusion", *Organization*, Vol. 2 No. 1, pp. 141-162, doi: [10.1177/135050849521007](https://doi.org/10.1177/135050849521007).
- Ingold, T. (2007), *Lines a Brief History*, Routledge, London.
- Kaye, J. (2014), *A History of Balance 1250–1375. The Emergence of a New Model of Equilibrium and its Impact on Thought*, Cambridge University Press, Cambridge.
- Kleinman, G., Anandarajan, A. and Palmon, D. (2012), "Who's to judge? Understanding issues of auditor independence versus judicial independence", *Accounting, Economics, and Law: A Convivium*, Vol. 2 No. 1, doi: [10.1515/2152-2820.1042](https://doi.org/10.1515/2152-2820.1042).
- Kornberger, M., Pflueger, D. and Mouritsen, J. (2017), "Evaluative infrastructures: accounting for platform organization", *Accounting, Organizations and Society*, Vol. 60, pp. 79-95.
- Latour, B. (1988), "The politics of explanations: an alternative", in Woolgar, S. (Ed.), *Knowledge and Reflexivity. New Frontiers in the Sociology of Knowledge*, Sage Publications, London, p. 173.
- Lawrence, T., Suddaby, B. and Roy, L.B. (Eds) (2003), *Institutional Work: Actors and Agency in Institutional Studies of Organizations*, Oxford University Press, Oxford.

- Lipari, C. (1993), "Note in tema di fattori produttivi e valore aggiunto aziendale", *Scritti in onore di Carlo Masini*, Tomo III, Milano.
- Liu Bolin Studio (2000), available at: <https://liubolinstudio.com/liubolin/> (accessed 28 December 2020).
- Macintosh, N.B. and Quattrone, P. (2010), *Management Accounting and Control Systems. An Organizational and Sociological Approach*, Wiley, New York, NY.
- McLeay, S. (1983), "Value added: a comparative study", *Accounting, Organizations and Society*, Vol. 8 No. 1, pp. 31-56, doi: [10.1016/0361-3682\(83\)90013-2](https://doi.org/10.1016/0361-3682(83)90013-2).
- Meyer, J.W. (1986), "Social environments and organizational accounting", *Accounting, Organizations and Society*, Vol. 11 Nos 4-5, pp. 345-356.
- Monfardini, P., Quattrone, P. and Ruggiero, P. (2021), "Exploring the middle way: the Istituto per la Ricostruzione Industriale (IRI) in between corporate capitalism and planned economy (1948–1973)", *Research in the Sociology of Organizations*, Vol. 78, pp. 77-96.
- Ostrom, E. (2009), "Beyond markets and states: polycentric governance of complex economic systems, nobel prize lecture", available at: [https://www.nobelprize.org/uploads/2018/06/ostrom\\_lecture.pdf](https://www.nobelprize.org/uploads/2018/06/ostrom_lecture.pdf) (accessed 22 July 2021).
- Owen, D. (2007), "Chronicles of wasted time? A personal reflection on the current state of and future prospects for, social and environmental accounting research", *Accounting, Auditing & Accountability Journal*, Vol. 21 No. 2, p. 2008.
- O'Dwyer, B. (2021), "Theorising environmental accounting and reporting", in Bebbington, J., Larrinaga, C., O'Dwyer, B. and Thomson, I. (Eds), *Routledge Handbook of Environmental Accounting*, Routledge, London.
- O'Dwyer, B. and Unerman, J. (2016), "Fostering rigour in accounting for social sustainability", *Accounting, Organizations and Society*, Vol. 49, pp. 32-40.
- Perera Aldama, L. and Zicari, A. (2012), "Value-added reporting as a tool for sustainability: a Latin American experience", *Corporate Governance*, Vol. 12 No. 4, pp. 485-498.
- Porter, T. (1995), *Trust in Numbers. The Pursuit of Objectivity in Science and Public Life*, Princeton University Press, Princeton.
- Power, M. (1997), *The Audit Society: Rituals of Verification*, Oxford University Press, Oxford.
- Puyou, F.R. and Quattrone, P. (2018), "The visual and material dimensions of legitimacy: accounting and the search for *Socie-ties*", *Organization Studies*, Vol. 39 Nos 5-6, pp. 721-746.
- Quattrone, P. (2015), "Governing social orders, unfolding rationality, and Jesuit accounting practices: a procedural approach to institutional logics", *Administrative Science Quarterly*, Vol. 20, pp. 1-35.
- Quattrone, P. (2017), "Embracing ambiguity in management controls and decision-making processes: on how to design data visualizations to prompt judgment", *Accounting and Business Research*, Vol. 47 No. 5, pp. 588-612.
- Quattrone, P., Monfardini, P. and Ruggiero, P. (2014), "Le pratiche di programmazione e controllo nel Gruppo IRI: tra contesti organizzativi, politica economica e cambiamenti globali", in Russolillo, F. (Ed.), *Storia dell'IRI*, Vol. 5, Laterza, Bari, pp. 747-796.
- Quattrone, P., Monfardini, P. and Ruggiero, P. (2021), "Accounting for com-promesso: common good, collective institutional commitment, and the generative power of ambiguous quantifications at the Istituto per la Ricostruzione Industriale (1943–1973)", Working Paper.
- Ranalli, F. (2004), *Sulla capacità informativa delle strutture di bilancio*, CEDAM, Bologna.
- Strathern, M. (2000), "The tyranny of transparency", *British Educational Research Journal*, Vol. 26 No. 3, pp. 309-321.
- Sullivan, S. and Hannis, M. (2017), "'Mathematics maybe, but not money': on balance sheets, numbers and nature in ecological accounting", *Accounting, Auditing & Accountability Journal*, Vol. 30 No. 7, pp. 1459-1480.

- Suzuki, T. (2018), "Adjusting short-term profit maximization behavior by one additional line: India's CSR accounting revolution", *Scientific Trend*, Vol. 23 No. 6, pp. 52-55.
- Tinker, A.M., Merino, B.D. and Neimark, M. (1982), "The normative origins of positive theories: ideology and accounting thought", *Accounting, Organizations and Society*, Vol. 7 No. 2, pp. 167-200.
- Unermann, G., Bebbington, J. and O'Dwyer, B. (2018), "Corporate reporting and accounting for externalities", *Accounting and Business Research*, Vol. 48 No. 5, pp. 497-522.
- Vermiglio, F. (1984), *Il "bilancio sociale" nel quadro evolutivo del sistema di imprese*, Grapho Editor, Messina.

**Corresponding author**

Paolo Quattrone can be contacted at: [paolo.quattrone@manchester.ac.uk](mailto:paolo.quattrone@manchester.ac.uk)