



University of Groningen

Social footprints

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Document Version Publisher's PDF, also known as Version of record

Publication date: 2008

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA): McElroy, M. (2008). Social footprints: measuring the social sustainability performance of organizations. Thetford Center.

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CHAPTER 6

CONCLUSION AND DISCUSSION

6.1 INTRODUCTION

This chapter is organized into two main sections. The first section (Research conclusions) contains a summary of our answers to the research questions initially raised in Chapter 1 (see Section 1.4). The second section (Closing discussion) contains a summary and discussion of several key issues and implications raised by the Social Footprint Method, and a final subsection on where we think the method should go from here, insofar as its further development and use is concerned. We begin with our summary of research findings.

6.2 RESEARCH CONCLUSIONS

This thesis was motivated by our general dissatisfaction with the state of the art in available tools and methods to measure the social sustainability performance of organizations. In our view, no such instruments exist of a satisfactory kind. Thus, we set out to close this gap by creating a new social sustainability performance measurement tool called the Social Footprint Method (SFM). The research issues we addressed along the way were driven by the following major questions, as earlier noted in Chapter 1:

- 1. Are there any organizational sustainability measurement and reporting methods that actually (or purport to) measure and report sustainability performance in a literal (i.e., context-based) way?
 - If so, in what sense do they measure and report sustainability performance?
 - What are the key principles or assumptions behind such methods?
 - What are the key differences between the methods (with respect to scope and validity), and can it be argued that some methods are more effective than others?

- What are the explicit or implicit epistemologies behind such methods?
- 2. If literal methods exist, do they measure social sustainability performance?
 - If so, which ones and how do they work?
- 3. If existing, literal methods do not address social sustainability performance, can the measurement principles they rely on in other domains be applied to the social domain?
 - If so, how would the resulting tool or method work, and what sort of measurement model would it entail?
 - What would its advantages and disadvantages be over other competing approaches?

The results of our research, relative to the key questions listed above, are as follows:

1. Are there any organizational sustainability measurement and reporting methods that actually (or purport to) measure and report sustainability performance in a literal (i.e., context-based) way?

In general, we find that leading tools and methods used to measure and report sustainability performance in organizations today (e.g., the Global Reporting Initiative, or GRI) fail to function as advertised, and do not measure and report sustainability performance in any meaningful way. This is because of their failure to take what GRI itself refers to as *sustainability context* into account when such methods are used, and in the preparation of related reports. In our terms, GRI, in practice, is a numerator-only scheme (see Chapter 3), and therein lies its weakness.

Not all sustainability measurement and reporting tools, however, suffer from a failure to take sustainability context into account. The Ecological Footprint Method (EFM), for example, explicitly takes such context into account, and thereby makes it possible to measure and report the sustainability of human collectives in a literal way. In our terms, the EFM is a full-quotient scheme, and therein lies its strength.

For purposes of the remainder of this section, then, we will confine ourselves to a discussion and comparison of GRI and the EFM as the two leading, and most emblematic, illustrations of mainstream sustainability measurement and reporting methods in use today.

As already noted above, GRI, in practice, fails to measure and report sustainability performance at all, thanks to the lack of context (or what we conceive of as denominators) in its measurements. Here we hasten to acknowledge, once again, that the GRI standard does, in fact, recommend that sustainability context be included in related reports; however, we have never seen a GRI report with such context included, including GRI's own report of its own sustainability performance. The inclusion of such context in GRI reports appears to be a standard that is universally ignored.

The EFM, by contrast, is structured in such a way as to always include context. Thus, the ecological sustainability performance of an organization or human collective is determined by comparing its ecological impacts on the capacity of related ecosystems to withstand them, according to their (the ecosystems') limits. It is the limits of such ecosystems that constitutes the relevant context in the case of the EFM, and they are always taken into account, and never ignored.

- What are the key principles or assumptions behind such methods?

In the case of the EFM, the key principles behind its measurements include the following:

- The ecological sustainability of human activity is a function of its impacts on the carrying capacity of natural capital. Thus, the EFM relies on the capital theory approach (CTA) to sustainability (see Section 3.4);
- Impacts that exceed the carrying capacity of natural capital (i.e., if universalized) are regarded as unsustainable (see Section 3.5.3.2);
- The carrying capacity of natural capital is defined in terms consistent with Daly's principles of sustainability (see Section 3.4.1).

For its part, GRI is committed to the Triple Bottom Line as a general organizing principle for sustainability measurement and reporting, and also to the inclusion of sustainability context in related assessments. As already noted above, however, GRI reports rarely, if ever, include such context, and the standard itself offers no guidelines, such as Daly's principles or principles of any other kind, that can be used to operationalize context in practice. - What are the key differences between the methods (with respect to scope and validity), and can it be argued that some methods are more effective than others?

There are two key differences between the EFM and GRI that relate to scope and validity. In terms of scope, the EFM is limited to measures of ecological sustainability only, whereas GRI addresses all three 'bottom lines' - social, economic, and ecological.

In terms of validity, the EFM is arguably more valid - as far as it goes - inasmuch as it more fully reflects the content domain of ecological sustainability (i.e., it takes ecological context and related limits fully and explicitly into account). GRI, on the other hand, although broader in scope, fails to take sustainability context of any kind into account, despite its explicit recommendations to the contrary. At the very least, it fails to do so by not providing executable principles and guidelines for *how* to include context, and by leaving it (context) out in the specification of its metrics. Anyone who adheres to GRI's metrics will, therefore, necessarily leave context out of their report, not in.

- What are the explicit or implicit epistemologies behind such methods?

In Chapter 2, we relied on a distinction between theories of truth, legitimacy, and related theories of evaluation to distinguish between competing epistemologies. Here we can do the same thing as we compare GRI with the EFM.

Both GRI and the EFM are arguably grounded in realist epistemologies, according to which they are metaphysically committed to the proposition that the world is real and exists. Their challenge, however, is how to describe it (the world) - accurately - with particular regard to the sustainability of organizational activities and their impacts on vital capitals, and also with respect to what such impacts ought to be.

Since neither GRI nor the EFM explicitly state their theory of truth, we must rely on inferences for insight. Here, we at first thought it safe to assume that both methods subscribe to a correspondence theory of truth, since it is the essential purpose of both methods to produce statements that make descriptive assertions about the sustainability of an organization's impacts in the (real) world. GRI, however, introduces a complication in its formulation, according to which its outlook seems decidedly relativistic. While at first GRI seems fully committed to a

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capital-based view of *sustainability context* (GRI, 2006, p. 13), it concludes its discussion of the subject with the following statement (Ibid.):

"The organization's own sustainability and business strategy provides the context in which to discuss performance."

Thus, rather than relying on the status of vital capitals in the world as a basis for measuring and reporting sustainability - which, incidentally, the triple bottom line principle to which GRI subscribes would suggest (Elkington, 1998, Chapter 4) - GRI seems to rely, instead, on the content of organizational strategies for context. This is very much akin to the explicitly justificationist approach taken by Nonaka and Takeuchi in their own epistemology (see Section 2.2.3.1.3), according to which truth or legitimacy is a function of conformance to management dictates (i.e., to what corporate strategies and their authoritative authors call for, notwithstanding the state of the world). Here, for example, is one GRI statement to that effect (GRI, 2006, p. 4):

"Transparency about the sustainability of organizational activities is of interest to a diverse range of stakeholders, including business, labor, non-governmental organizations, investors, accountancy, and others. This is why GRI has relied on the collaboration of a large network of experts from all of these stakeholder groups in consensus-seeking consultations. These consultations, together with practical experience, have continuously improved the Reporting Framework since GRI's founding in 1997. This multi-stakeholder approach to learning has given the Reporting Framework the widespread credibility it enjoys with a range of stakeholder groups."

While all of that may be true, it has nevertheless produced a method that, on the one hand, calls for consideration of *sustainability context* in the preparation of sustainability reports, and on the other hand, abandons it in favor of relativism. Indeed, if according to GRI, all sustainability reports should ultimately be grounded in the context of corporate strategies, then the same behaviors in two organizations could be judged as sustainable in one case, and unsustainable in the other, merely because the content of their respective strategies might differ. In a world that is real and which is the same for all of us, this simply won't do. GRI's relativism, therefore, arguably disqualifies it as a tool for measuring sustainability performance in the world, where absolute impacts on vital capitals can affect

the sufficiency of their flows for human well-being. Indeed, the varying content of corporate strategies, here and there, is irrelevant.

In the EFM, by contrast, we find no such epistemological contradictions. While the quality or fidelity of the claims it produces can always be questioned, there is no trace whatsoever (in the EFM) of the kind of epistemological relativism we see in GRI. Instead, the correspondence theory of truth and legitimacy seems to hold sway, as it *should* in a world that is real. Moreover, whereas GRI explicitly relies on consensus and the authority of experts to construct its measurement model, the EFM is openly fallibilist and non-authoritarian in its outlook (Wackernagel and Rees, 1996, p. 18):

"Not knowing something with certainty should not deter us from taking action or counter-action."

• • • • •

"In short, we may not know exactly how nature works, but by using fundamental laws and known relationships, we can calculate useful (under) estimates of human demands."

In sum, we think we can safely conclude that GRI is:

- confused, and confusing, about its own theory of truth,
- is justificationist in its theory of evaluation, since it relies on an appeal to the authority of experts, consensus, and managers, and
- ultimately fails to take capital-based sustainability context into account, notwithstanding its advice to the contrary.

The EFM, by contrast, also relies on a realist epistemology, while holding to a correspondence theory of truth (and legitimacy), and a fallibilist theory of evaluation. This particular combination is one that we ultimately felt should be preserved and upheld, as we attempted to reverse-engineer and adapt the EFM to the social context.

2. If literal methods exist, do they measure social sustainability performance?

The only *literal* sustainability measurement and reporting tool we know of is the EFM. It is literal, by our definition, because it is full-quotient in form, and always, therefore, measures performance against standards of performance, or a-

gainst context. Still, the EFM does not measure social sustainability performance, only ecological performance.

- If so, which ones and how do they work?

Again, we know of no social sustainability measurement and reporting tools or methods that are literal, by our definition, or full-quotient in form.

3. If existing, literal methods do not address social sustainability performance, can the measurement principles they rely on in other domains be applied to the social domain?

Again, the only literal sustainability measurement and reporting tool or method we are aware of is the EFM. The remaining two subquestions below are answered in that light.

- If so, how would the resulting tool or method work, and what sort of measurement model would it entail?

Referring to our response to question 1b above, we have shown that it is possible to apply the principles relied upon for literal ecological sustainability measurement and reporting to the social domain. Our thinking is as follows:

- The social sustainability of human activity can be determined as a function of its impacts on the carrying capacity of anthro capital (i.e., human, social, and constructed capitals). Thus, just as the EFM relies on the capital theory approach (CTA) to sustainability, so can a Social Footprint Method (SFM) do so, as well (see Section 3.4.3);
- Impacts that fail to produce and/or maintain the carrying capacity of anthro capital (i.e., if universalized) as required to ensure human well-being are regarded as unsustainable (see Section 3.5.3.3);
- The carrying capacity of anthro capital is defined in terms consistent with notions of human well-being and the role that anthro capital plays in ensuring it (see Sections 1.1.1.1 and 3.4.3.2).

On the basis of the above, we can say that the general principles involved in measuring and reporting the ecological sustainability performance of an organizational can be applied - with some important modifications - to the assessment of social performance. The primary differences are

- the need to replace natural capital with anthro capital, and

the need to reverse the logic of sustainability from not exceeding the carrying capacity of natural capital, in the ecological case, to not failing to produce and/or maintain required levels of anthro capital in the social case.

The latter difference arises from the fact that whereas natural is not anthropogenic, anthro capital is. Sustainability performance norms must be reoriented, accordingly.

- What would its advantages and disadvantages be over other competing approaches?

The advantages of such a method would include the following:

- The social sustainability performance of an organization could be expressed in terms of its proportionate impacts on vital anthro capital, relative to what its proportionate impacts ought to be;
- The normative impacts of an organization on vital capital could be grounded in the normative duties and responsibilities of its workers, whose personal individual moral responsibilities arguably attach to their actions and behaviors in the workplace, and which are not absolved or negated by it (the workplace) in any way;
- The behaviors and impacts of organizations on the status of vital capital in the world could therefore be seen as arising from the performance of joint acts on the part of the individuals who work for them, and in their name;
- The real social sustainability performance of an organization could be measured and reported in non-relativistic terms, with sustainability context fully included, and with the proportionate degree of organizational responsibility for producing and/or maintaining vital capital appropriately (and quantitatively) taken into account;
- The anthropogenic nature of human, social, and constructed capitals, versus the non-anthropogenic nature of natural capital, could be highlighted and reinforced, as a basis for measuring and reporting the social sustainability performance of organizations. Here, the principle of maintaining capitals at levels sufficient in quality and supply to ensure human well-being could be better understood, recognizing that doing so in some cases (i.e., the ecological ones) might mean decreasing demand, while in others (i.e., the social and economic ones) might mean increasing supply;

- The triple bottom line concept could, for the first time, be fully operationalized in a way that is true to the capital basis of the concept (Elkington, 1998, Chapter 4), by filling in the missing pieces not already provided by other, analogous, capital-based ecological tools, such as the EFM.

The disadvantages of such a method and model would include the following:

- The normative aspect of the model is highly controversial, since many believe that values and claims about the good, the right, and the beautiful, or the way the world ought to be, are entirely relative and subjective. Overcoming this objection with an argument that suggests that value claims can, in fact, be objective, and that there can be a correspondence between such claims and *the way the world ought to be* could prove to be intractably problematic in the end;
- The core concept of anthro capital, upon which the SFM rests, is also highly controversial, with many competing definitions in use for human, social, and constructed capitals, and just as many disputes over whether such constructs can be measured at all. This, too, is a highly controversial subject, the lack of consensus for which could hinder the adoption and effectiveness of the method;
- Strictly speaking, the method (i.e., the SFM) is a design specification or template for social sustainability measurement models; it is not a measurement model or instrument that can be used without further development. In order to use the SFM, therefore, specific indicators must be defined and applied in ways prescribed by the model (i.e., in the form of quotient-based instruments). The subject of indicators, however, is also highly controversial and is plagued with disagreements over which ones can do a proper job of measuring the status of vital capitals, human wellbeing, etc. This is particularly true in the case of the SFM, since the object of its focus is a largely intangible one: organizational impacts on the quality and sufficiency of anthro capital for human well-being. Thus, even if we can get people to agree on the other issues noted above, we will still be left with choices to be made on which specific indicators to employ. This, too, could have a dragging effect on the adoption of the method;
- Compared to numerator-only methods, such as GRI, the method we describe here is more difficult to apply, since the denominators it entails require data or information usually not maintained by organizations (e.g., poverty rates in the world and the status of other human and social conditions), and also the choice and declaration of specific moral philosophies

or policies that can be used to help specify the type and extent of duties or obligations have to help meet the needs of others. Most organizations are simply not used to doing such things, and the need to do so as a requirement for using the method could therefore serve as another barrier to it its adoption.

6.3 CLOSING DISCUSSION

6.3.1 Issues and implications

We would indeed be remiss if, in concluding our thesis, we did not attempt to at least acknowledge and respond to certain key issues and implications raised by what we have said and done here. What follows below, then, are eight brief acknowledgments of, and responses to, important issues evoked by the Social Footprint Method (SFM).

6.3.1.1 The poverty of GRI

Perhaps the most striking implication of the SFM is the extent to which it shows how leading sustainability measurement and reporting standards in the world, especially GRI, utterly fail to do the one thing they purport to do - which is make it possible to measure, report, and understand the sustainability performance of an organization. And even though it is true that the GRI standard does advocate for the inclusion of sustainability context in related reports, it:

- 1. fails to provide guidelines for how to do so,
- 2. fails to do so itself in its own reports,
- 3. fails to enforce the standard in other organizations' reports as a consequence of its metrics, and
- 4. fails to adequately explain such context in normative terms, thereby encouraging sustainability programs and practices of a largely supererogatory kind.

Thus, the GRI standard as a policy for guiding organizational sustainability measurement and reporting in the world is a failure of the most profound kind.

6.3.1.2 Eco-efficiency, 'green', and social sustainability

Similarly revealed by the SFM is the inadequacy of what most organizations are doing today relative to improving their sustainability performance, beginning with their ecological impacts. Thanks, in part, to GRI and its metrics, so-called eco-efficiency and 'green' initiatives lack context, and merely translate into ongoing attempts to lessen impacts on the environment, as if lessened impacts necessarily translate into 'more sustainable this year than last'. They do not. As McDonough and Braungart (1998) point out, "Relying on eco-efficiency to save the environment will in fact do the opposite - it will let industry finish off every-thing quietly, persistently, and completely." Unless an organization's use of natural resources is equal to or below its proportionate share of what its levels of use ought to be - and not just less this year than last, while being above in both cases - its operations will be unsustainable. And to the extent that 'green' usually means eco-efficient, which it does, 'green' is therefore unsustainable, too. The hypocrisy here is palpable.

To makes things worse, none of this even begins to address the fact that social considerations are virtually missing from corporate sustainability programs defined mainly in terms of eco-efficiency or 'green' initiatives; or that even when they are included, they tend to suffer from the same missing denominator disease. To simply list an inventory of philanthropic contributions made to a local community or program is not to measure and report on an organization's social sustainability performance in any meaningful sense. How could it be? There are no standards of performance involved. Thus, most of what passes for social sustainability reporting, like eco-efficiency and 'green' initiatives, is virtually devoid of context, and thereby leaves the question of sustainability performance wide open. By contrast, the Social Footprint Method explicitly includes context - *always* - and is arguably, therefore, the first and most literal social sustainability measurement and reporting tool to appear in the CSM arena.

6.3.1.3 Duties and social contracts

The epistemological approach taken in this thesis not only suggests that we should think of sustainability measurement and reporting as a knowledge production process, but also that the sustainability performance of an organization should be assessed against normative duties and obligations of some kind. We earlier raised the subject of social contract theory in our discussion of John Rawls' philosophy (see Section 3.6.2.3), but we think this topic requires much more emphasis and thought on a going forward basis, as the SFM comes into wider use, which we expect it will. Indeed, the very choice of which areas of impact (or AOIs) to focus on when measuring the social sustainability performance of an organization depends, we think, on the identification of duties or obligations owed by an organization to its stakeholders. Where, if not in a social contract of some kind, should the specification of such duties and obligations be found? It is for this reason that we think implicit social contracts between organizations and the societies in which they operate should be made explicit, so as to make social sustainability measurement and reporting more meaningful and less ad hoc.

Here it is perhaps worth commenting, as well, on the Porter and Kramer (2006) approach for choosing AOIs earlier discussed in Section 4.6.1.2.2 above. In effect, their approach is the antithesis of the social contract approach. What they argue for, instead, is the choosing of AOIs on a purely self-serving, instrumental, and profit-driven basis. In cases where enhancing social conditions in the world also happen to serve the financial performance of organizations, they suggest that related choices of AOIs for management, measurement, and reporting should be made, accordingly - but only in those cases. None of that entails social contract theory in any respect, nor is it predicated on any sense of duty or obligation owed to stakeholders. In effect, the Porter and Kramer approach is morally neutral - with the exception of the value they place on increasing shareholder wealth.

6.3.1.4 Shareholder primacy versus sustainability

According to widespread anecdotes, the notorious American bank robber, Willie Sutton (1901-1980), once said, when asked why he robbed banks, "Because that's where the money is." By the same token, if asked why organizations should be expected to contribute towards the production and upkeep of social

well-being, we could essentially give the same answer - especially in light of the steps society takes to make doing business, and the building of personal wealth, possible in a capitalistic system.

A company's resources, however, are always limited, and it usually owes its primary allegiance to its shareholders, as opposed to its other stakeholders. How much of a company's wealth or resources, then, should be contributed towards general social well-being, as opposed to its shareholders' profits, especially in cases where it cannot meet its proportionate 'burden share' of producing and/or maintaining the quality or supply of anthro capitals in the world, or where shareholder expectations (i.e., Wall Street) are high?

This is indeed a tough question, and we have no ready answer for it. Still, it is not inconceivable to us that standards or norms for contributions could be developed. One thing must happen beforehand, however, in order for such progress to be made. Namely, the legal doctrine of *shareholder primacy* so often found in corporate law - especially in the U.S., but often not elsewhere - should be abandoned. Greenfield (2006) puts this idea as follows (p. 28):

"September 11 should remind us of the importance of building connections, of reaching out to build community. Unfortunately, the aftermath of the tragedies indicates that corporations may be more interested in allowing the few who already have a great deal to amass even more wealth. Perhaps we would want to use the government to create bonds among us, to encourage discussion, to facilitate the sharing of power. Corporate law can be an important part of this process, but only if shareholder primacy is abandoned. If we did so, we could experience the beginning of a new history for corporate law."

Here we note, with interest, the attempts now being made in the U.S. to overturn shareholder primacy by an organization called B Lab (www.bcorporation.net), which is assisting individual corporations, one at a time, with the revision of their bylaws to enable them to engage in social development, rehabilitation, and philanthropy, without running into opposition from their own shareholders. We think this is a step in the right direction, and will only serve to make the SFM more relevant and effective as more organizations take steps to redefine themselves in these terms.

6.3.1.5 Philosophical foundations

Turning to the philosophical side of the SFM, we presented some epistemological and moral positions of importance to the SFM in Chapters 2 and 3. In response, one could reasonably ask if the perspectives we laid out are mandatory or discretionary, insofar as the viability and use of the SFM is concerned. To answer this query, let us unpack the question and break it down into three parts:

- 1. metaphysics,
- 2. epistemology, and
- 3. moral philosophy.

In terms of metaphysics, we are clearly committed to realism, or to the proposition that the world is real and exists. Everything that follows in terms of the other two areas of philosophy is predicated on this view. This, we suspect, is the least controversial of our positions, but it does indeed lie behind the SFM as a nondiscretionary element of our design.

Next, our earlier discussion of epistemology differentiated between theories of truth (for facts), legitimacy (for values), and evaluation (for knowledge claim evaluation), and we put forward our preferences in all three cases. Regarding truth and legitimacy, we offered the correspondence theory as our solution, relying on Hall (see Section 2.3.3), in particular, to help navigate the especially treacherous waters of value claims and value theory. Popper's theory of objective knowledge was also very helpful here (see Section 2.2.3.2). Similarly, we advocated for Popper's fallibilist theory of evaluation (i.e., Critical Rationalism) as a means for testing and evaluating competing claims against one another in the search for truth/legitimacy, and in the related construction of sustainability quotients.

Regarding the epistemological issues, in general, we must admit that while we would prefer to apply the method on the basis of the Popper/Hall philosophies we identified, they are in no way necessary as preconditions for the use of the SFM. A user could just as well subscribe to pragmatism as a theory of truth or legitimacy, and justificationism and coherence (theory) as a basis for knowledge claim evaluation, and still be able to use the SFM. In such cases, however, we would simply contend that the results obtained from the use of the SFM would be less reliable, thanks to the dubious nature of the epistemologies involved. Good people can disagree on such things.

With regard to moral philosophy, things here are much more fluid and flexible, we think. We cited, Kutz, Kant, and Rawls in our own discussion of the subject, but there are certainly many more competing moral philosophies to consider as a

but there are certainly many more competing moral philosophies to consider as a basis for determining what an organization's duties are to its stakeholders and society. Here we envision such alternatives coming into play as an organization tries to understand and articulate its own social contract with society. From our standpoint, the answers they provide are merely variables in the SFM.

6.3.1.6 The significance of anthro capital

The purpose of sustainability reporting, in general, is to support the process of planning for action in cases where human impacts on vital capital may be unsustainable, or are becoming so. The courses of action available to us, however, vary dramatically in the case of anthro versus natural capital. In the case of the latter, unsustainable performance means that human activity is exceeding the carrying capacity of capital, and must therefore be mitigated in some way. Our only course is to moderate or somehow change our activities, such that their effects on natural capital are less severe. We see how difficult this is to do every day now, as we constantly struggle to cope with the limits of the atmosphere to absorb our greenhouse gas emissions, or to live within the earth's diminishing capacity to satisfy our needs for fresh water.

Not so for anthro capital, however. There, things are entirely different. Whereas we cannot simply produce the reservoirs of natural capital needed to support a growing human population, we arguably can do so in the case of anthro capital. This, of course, is because anthro capital is anthropogenic. Given the will and the resources required to do so, we can almost always produce more of it. This is especially true in today's world, thanks to the enormous resources held by weal-thy individuals and corporations.

What the SFM shows us, then, is that organizations can have beneficial impacts on human and social conditions in the world that are simply not possible - or are less possible - on the ecological side of the coin. Whereas we very often do not have the know-how, technology, or opportunity to mitigate our environmental impacts in the world, we absolutely do have the resources required to improve human and social conditions in places where they are deficient. In a very real sense, the Social Footprint Method shows us the way, by making the connections between:

- 1. organizations with resources,
- 2. potentially deficient social conditions in the world, and
- 3. the important role that vital (anthro) capitals play in ensuring human well-being.

To be sure, the SFM is a powerful new measurement model, but our improved understanding of the beneficial effects organizations can have on the sufficiency of vital (anthro) capitals is no less significant.

6.3.1.7 The vocabulary of 'capital'

Some scholars might be critical of our decision to continue, and extend, the use of the term 'capital' in the field of sustainability, as compared to the field of economics, per se, from whence it came. Notwithstanding the argument that the field of sustainability is, in fact, part and parcel of economics, we think such criticisms tend to ignore the important sense of the term that is so vital to our thesis (i.e., that capital is a resource, or stock, that generates valuable flows of some kind). While we covered this definition of the term adequately in Chapter 3, we suspect the criticisms will persist. And so here we only wish to stress, again, that there is nothing in our use of the term that should be construed as gratuitous, or an attempt to bask, somehow, in the 'halo effect' of economics by misappropriating one of its terms. To the contrary, our use of the term is entirely genuine.

Others have confronted this issue before. In their remarks on Schultz's (1961) seminal use of the term 'human capital', Ostrom and Ahn (2003) had this to say on the same topic (p. xxv):

"[...] we call attention to the way the concept of capital itself is transformed when human capital is considered. The concept of human capital is today accepted. In the early stage of its development, the use of capital referring to knowledge and skills embedded in humans was heavily criticized.

Exactly the same thing is happening now with regard to the use of the concept of capital in 'social capital'. One does not wish to arbitrarily modify such a foundational concept as 'capital'. It is also counterproductive, however, to assume that the concept of capital has a fixed set of innate meanings. As knowledge grows, the denotation and connotation of a core scientific concept may change in a direction that is not purely whimsical. Conceptual development may well be productive in helping scholars understand more phenomena using a core set of conceptual tools."

We wholly agree with this statement, and are content to adhere to, and defend, our own use of the term 'anthro capital' in this thesis, under the same line of reasoning.

6.3.1.8 People feet

One of the more controversial aspects of the SFM, perhaps, is the manner in which we allocate what we call 'burden shares' to organizations, when computing sustainability performance on matters (or areas of impact, or AOIs) that involve society, in general, as the 'responsible population' for addressing the social conditions involved. Here we have taken the position that organizations are merely surrogates for the individuals who work for them, and that such allocations ought to be made, therefore, to the same individuals in accordance with their size, or number. In this regard, we think of the denominators in our quotients as being reflective of personal responsibilities, not organizational ones. This is quite intentional.

But it is also quite contrary to other, competing methods for measuring and reporting the social sustainability performance of organizations. Some make allocations on the basis of revenue, or other units of measurement that, so far as we are concerned, make no sense at all (How, after all, can we hold an inanimate, monetary unit 'responsible' for performance?). Others, including GRI, sidestep the issue completely by treating the organization as a monolithic actor, whose allocations are presumed to be the same each year, despite the fact that:

- 1. the organization may change in size and composition over time, and is never, therefore, the same agent or actor from one year to the next, and
- 2. organizations are imaginary constructions of ours, and cannot, therefore or *should* not be treated as if they are real people with real moral duties and obligations.

Still, GRI persists, as if the problems cited above (in Section 6.3.1.1) were insignificant or immaterial, thereby reducing the credibility of mainstream corporate sustainability reporting standards even further.

It is precisely the resolution of this problem that the People Foot metric we propose brings to the table. Here again, the SFM is advancing the science of sustainability in ways heretofore unseen, but desperately needed, so as to help make sense of how organizations with enormous resources can make helpful, but fair and proportionate, contributions towards improving human well-being on earth. If the collective sustainability performance of humans on earth is to improve, people must be willing to take responsibility for their actions in the workplace, instead of being lulled into thinking that they are somehow insulated from the effects of their actions by the corporations they work for.

It is workers, therefore, who must be invested with a greater sense of personal responsibility, and who must also, therefore, be encouraged to hold their own organizations responsible for their collective acts. But without something akin to the People Foot metric to work with, this would not be possible - and has not been possible - in a morally systematic and logically consistent way. If the SFM does nothing but succeed in raising workers' awareness and interest in the sustainability of their own joint actions - or inactions, for that matter - thanks to this simple innovation, our work will have been a great success.

6.3.2 Future directions

At this time, we see three important areas of future research for the SFM, the pursuit of which will help to enhance its value and quicken its adoption:

- 1. Instrumentation and indices,
- 2. Creating standard data sets for denominators,
- 3. Applying SFM metrics to socially responsible investing.

The first area of research for the SFM is the need to develop instrumentation and related indices of indicators that organizations interested in using the method can employ, without having to develop such things, themselves. Again, as a design specification or template for measuring the social sustainability performance of an organization, the SFM is not a finalized measurement model, and must be ap-

plied to specific areas of anthro capital before it can be used as such (see Appendix B).

In general, we envision one or more indices of representative indicators that would cover all three types of anthro capitals, in both an internal and external context (again, see Appendix B). This would significantly reduce the number of discrete areas that an organization would have to focus on, or measure, and at the same time would result in a set of standardized indicators that would make crossorganizational comparisons and benchmarking possible. This particular area of future research for the SFM is especially urgent, in our view, since the lack of such instrumentation and indices, and the absence of related standards, arguably inhibits its near-term or initial adoption and use.

The second area of research would logically follow the first, in the sense that the instrumentation and indices developed for the SFM would ultimately need to be grounded in real data about actual human and social conditions in the world - and continuously so, on an updated basis. For example, if an index developed as a result of the first research initiative included the need to report an organization's net contributions to alleviating poverty in the world, relative to what its contributions ought to be (i.e., relative to what the value of its denominator should be), the per capita level of such (normative) contributions would have to be known beforehand. Otherwise, the proportionate, normative levels of impacts for individual organizations could not be determined as a basis for setting the value of denominators.

Ideally, then, there would be a centralized or shared source for such data that all users of the SFM could turn to for up-to-date information about such things, much in the same way that the use of the Ecological Footprint Method is supported by the Global Footprint Network (www.footprintnetwork.org), and the databases it maintains regarding the status of natural capital in the world. That way, users of the SFM would not have to independently research the corresponding status of anthro capital in the world every time they set out to use the method.

The third area of research has enormous potential. Here we envision an application of the SFM in the institutional investment arena - although individual investors would benefit as well. At the present time, there is a plethora of so-called socially responsible investment (SRI) funds in the financial markets; these funds consist of portfolios of organizations selected for their purported sustainability, according to one set of criteria or another. Like GRI, however, most if not all of the underlying metrics and indicators used to assemble and organize such portfolios are based on measures that arguably tell us little, if anything, about the real sustainability performance of the companies involved. This is because they are numerator-only schemes that are completely devoid of sustainability context.

What the SRI market desperately needs, therefore, is a more rigorous basis for assessing and ranking the true sustainability performance of publicly-traded companies. What is needed, in particular, is an index for doing so (i.e., a goal of our first research initiative), data standards for applying the index (the goal of our second initiative), and a research effort aimed at applying the standardized index to the analysis of publicly-traded companies on a continuing basis (our third initiative). This would result in what would arguably be the world's first bona fide sustainability index for business, the results of which could be used as a basis for making related investment decisions around the world.

The effect of such an SRI application of the SFM, of course, would be a better understanding of how companies are actually performing on a CTA-based scale. Not only would investors interested in owning shares of higher-scoring or sustainable companies be able to make more informed decisions, companies themselves would have access to the same data and would be motivated, in light of it, to improve their own performance. Over time, with this kind of market force or logic in play, the aggregated performance of whole industries and economies around the world could be pushed significantly in the direction of sustainability an effect that today's dominant measurement models, such as GDP, have no chance of having, thanks to their systematic disregard for human impacts on, and need for, vital capitals.