Any indicator system requires a conceptual framework to guide its purpose, the selection of indicators and the kind of information needed. Using the framework presented in the Introduction to this volume, the present chapter proposes the development of an integrated sequence of indicators and their presentation around the notion of ‘indicator suites’. These suites display information on selected facets of the relationships between cultures and globalization. In developing this integrated indicator system, we address questions like: How can we identify the most important indicators across a range of audiences, users and purposes, and why? What are the priorities in terms of data coverage, data collection, information needs as well as methodological developments in the field? How can we collect, analyze and present data in effective, efficient and user-friendly ways?

Objectives and characteristics

The purpose of the indicator system is to offer an empirical portrait of certain key dimensions of the relationships between cultures and globalization. By implication, the system would neither try to achieve a comprehensive accounting of culture as such, nor seek to report on all aspects of cultural developments and policies that might be relevant for national as well as international purposes. Generally speaking, cultural indicators that refer primarily to national frameworks or that have no major theoretical or policy relevance for the culture–globalization nexus would be beyond the scope of what we are trying to measure, and will therefore receive little attention. For example, data on theater and film production by country are less important than their transnational content, share and distribution; even though obtaining the latter data assumes the availability of the former. In other words, the proposed system does not aim to become a generic indicator system for the elaboration of cultural statistics (nor does it seek to replace any existing systems). Rather, what we have in mind is a specialized system focused on a substantive core: the relationship between globalization and culture.

At the same time, the approach here is informed by work on cultural indicators research that addresses either basic methodological and data issues (Bonet 2004; Duxbury 2003; European Union 2000; Fukuda-Parr 2001; Glade 2003; Goldstone 1998; Matarasso 2001; Schuster 2002) or questions of policy relevance (Kleberg 2003; Wiesand 2002; Wyszomirski 1998). Against this background as well as the overall conceptual framework presented in the Introduction, the indicator system should aim for the following characteristics (Deutsch 1963; Anheier 2004):

- **Parsimony**, i.e., the aim to ‘achieve most with least’;
- **Significance**, i.e., focus on the truly critical aspects of a phenomenon and its relationships;
- **Combinatorial richness**, i.e., the range of hypotheses that can be tested with the system and related to this, Organizing power, i.e., the ability to bring in and integrate new aspects;
- **Theoretical fruitfulness**, i.e., the extent to which the system allows theory development; and
- **Policy relevance**, i.e., the extent to which the system is useful and of interest to policy-makers.

Challenges

The relationships between globalization and culture are too abstract and multifaceted for direct observation, and need to be broken down into dimensions and sub-dimensions. In other words, we need to make the relationships ‘operational’ and prepare them for measurement purposes. In doing so, we face a number of critical challenges. It is important to address these issues at the onset. They are the following: the unit of analysis, the aggregation problem, indicator selection, data
coverage, and normative aspects. For each challenge, we propose a solution or at least a general approach on how to address it for the purposes of this volume.

What is the appropriate unit of analysis? Even though we have become accustomed to think of countries or nation states as the basic unit of analysis in international statistics and for purposes of comparative research, there are severe shortcomings to their use for studying phenomena related to globalization. For one, the implied reification of countries as actors sui generis in a transnational cultural space can be very misleading. For example, the United States does not ‘act’, its institutions, organizations, communities and citizens do. These lower level units of analysis – and not aggregate units such as country – enact and create culture, and make up much of the relationship between globalization and culture. It is US corporations like Microsoft or the Disney Corporation, organizations like Greenpeace or Amnesty International, missionary societies, immigrant groups, art museums, artists, activists, CEOs or academics that are frequently the relevant actors. Of course, the nation state as represented by government and governmental policies plays an important role, as do the EU, the WTO or the World Bank, but the nation-state cannot be the single focus of our attention as the primary unit of analysis.

For measurement purposes, it seems best to focus on identifiable elements that ‘carry’ the essential characteristics that are of interest to us. In addition, we need to put these units in the context of related phenomena such as economic globalization global civil society, and the international rule of law.

How can the aggregation problem be solved? The excessive use of the nation-state as the unit of analysis in international statistics creates what methodologists call the aggregation problem and with it a potential for ecological fallacies. Most international data on culture are nation-based, which implies at least potentially a mismatch between the unit of observation (for example, organizations) and the de facto unit of analysis (country). For example, statistics indicate that the great majority of films shown in countries like the UK or Germany are from the United States (i.e., Hollywood, and hence part of the United States cultural output), yet they neglect the fact that the corporations financing, producing and distributing the movies are multinational corporations that are ‘resident’ in several countries and with shareholders and stakeholders in perhaps even more. If the globalization of culture is qualitatively different from national and international units of analysis, then it can’t simply be the additive score of nation-based observations.

The problem behind the misattribution of data to units is primarily one of prevailing practices whereby data are aggregated and reported at national levels, and cannot be disaggregated and reconstituted at the supra-national level. This is the consequence of scholte’s (1999) and Beck’s (2001) ‘methodological nationalism’ that plagues the social sciences. In some cases, however, the country cannot be avoided as the unit of analysis, and in others it may well be the appropriate unit, for example with respect to international legal issues or to trade barriers.

Generally, the approach taken in this volume is to avoid taking the country as the primary reporting unit whenever data on more appropriate units are available. For example, rather than reporting only on how many book titles a country publishes per year, we would also focus on the share of the global book market held by various multinational publishing corporations; or what titles or genres are the most diffused transnationally. In the case of movies or music titles, we would look for studios, labels and corporations and report share of global output and penetration.

Clearly, given the still-limited development and availability of cultural indicators that are comparable cross-nationally, we would not be able to follow a uniform strategy, and the general approach is to develop more specific indicator-data suites around appropriate units of analysis. By indicator-data suite, we mean the range of data needed to describe the characteristics of a selected indicator. For example, for measuring the globalization of book publishing, we would use the total market share of transnational publishing houses as one indicator. The characteristics of interest would be book titles, sales, etc.; and indicators to be reported (and which can be calculated once we have the data available) would be concentration and diffusion measures. In this case, we would use organizations as the unit of analysis; in others it could be products and artifacts (e.g., books); and in others people, as in the globally most widely printed/sold/read authors in particular genres.
What actual indicators and measures are best suited for portraying the central dimensions of the relationship between cultures and globalization? Obviously, these measures range from cultural to economic, political, and social indicators, and may even involve more qualitative assessments of issues such as human rights, conflicts, and global governance. To answer the question, we need to examine available approaches and indicators, and select those that are closest to the intended meaning of the concepts involved, i.e., the conceptual framework (see below). Whenever possible, we will be guided by theoretical approaches around specific topics or issues. For example, a number of theories have been proposed to understand individual identity, and we can mine such theories when selecting indicators, and refer back to them.

What is the data coverage and availability? Much of the data needed to report on the relationship between cultures and globalization may not be readily available or not exist at all. Moreover, parts of the data may be qualitative and even involve value judgements of one kind or another. As in the case of indicators, we need to explore a broad range of potential data sources. In some cases, however, appropriate data can be found, although with limited country coverage and other aspects that reduce comparability. Thus, for each indicator-data suite selected, we conducted a detailed analysis of data coverage, quality and periodicity. We will update this search on an annual basis in the hopes that over time, data coverage will become more comprehensive and data quality improved.

Is culture essentially a normative concept? Even if culture is often seen and treated as a value-free concept in academic discourse, or as largely neutral for creative expression among arts circle, it carries profound normative implications for others that range from fears about a ‘clash of civilizations’ (Huntington 1996), to expectations of a more humane, inclusive world and the possibility of an ethical consensus (Küng 1998). Not surprisingly, the aspirations and the norms these positions imply are contested, and the indicator system proposed here would do well to accommodate data on the normative interpretations and implications of the relationships between cultures and globalization without favoring one over the other.

How can we achieve policy relevance? Social science data tend to be somewhat removed from the information requirements of policy-makers. At best, they need ‘translation’ into policy terms, and at worst, they are frequently out of date (even when only 2–3 years old) and incomplete. In response, and in the medium to long term, we propose a system of scenario planning around cultural issues. This will involve an information-gathering process that relies on a global network of experts who serve as ‘listening posts’ and report on ongoing developments in the field of culture and globalization, as part of a systematic and coordinated survey.

**Different approaches**

These challenges, and we could add others as well, are formidable, to be sure, and some may question the utility and feasibility of an indicator and data system on cultures and globalization altogether. Fortunately, however, a variety of approaches have been proposed that are useful for our purposes and from which we can learn and draw critical lessons.

First, the UNDP approach in the *Human Development Report* (2000) was to select indicators and data around the Human Development Index based on a specific definition of development. Development was defined as extending choices to permit the kind of life that people wish to lead. This definition was broken down into components or dimensions of ability to make choices: leading a long and healthy life; being knowledgeable; enjoying a decent standard of living; enjoying personal security; participating in the life of the community; enjoying the respect of others. In a next step, indicators were selected such as life expectancy, literacy rates, per capita income, etc. Finally, under the umbrella of Monitoring Human Development, the indicators were integrated in a sequence of tables organized around a conceptual framework of what human development means:

*Enlarging people's choices:*

- Human Development Index
- To lead a long and healthy life:
  - Statistics on Demographic trends
  - Statistics on Commitment to health: resources, access and services
  - Statistics on Water, sanitation and nutritional status
• Statistics on Leading global health crises and risks
• Statistics on Survival: progress and setbacks

To acquire knowledge:
• Statistics on Commitment to education: public spending
• Statistics on Literacy and enrollment
• Statistics on Technology: diffusion and creation

To have access to the resources needed for a decent standard of living:
• Statistics on Economic performance
• Statistics on Inequality in income/consumption
• Statistics on Structure of trade
• Statistics on Rich country responsibilities: aid, debt relief and trade
• Statistics on Flows of aid, private capital and debt
• Statistics on Priorities in public spending
• Statistics on Unemployment

While preserving it for future generations:
• Statistics on Energy and the environment

Protecting personal security:
• Statistics on Refugees and armaments
• Statistics on Victims of crime

And achieving equality of men and women:
• Statistics on Gender-related development index

Second, on Our Creative Diversity (1996), the World Commission on Culture and Development linked culture and development by stating that development is ‘the opportunity to choose a full and satisfying, valuable and valued way of living together, the flourishing of human existence in all its forms and as a whole’. It also set a standard for evaluating progress around the following key tenets:
• Cultural freedom of both the community and the individual
• Respect for pluralism
• Recognition that culture is dynamic but evolving
• Ethos of universal human rights

UNESCO subsequently translated these tenets into six areas (UNESCO/UNRISD, 1997; UNESCO, 1998):
• Global ethics: observance of human rights and the rule of law
• Cultural vitality: media, literacy, preservation, etc.
• Cultural diversity: access, participation, equity
• Participation in creative activity: participation of groups in creative activities
• Access to culture: do groups have access to creativity of others?
• Cultural conviviality: concern with diversity and respect of others

In contrast to UNDP’s Human Development approach, the above six areas are clearly less ‘clean’ conceptually and some overlap exists among them. Not surprisingly, therefore, the actual tables presented in UNESCO’s World Culture Report 1998 and 2000 do not appear to follow the operationalization of the six areas. Instead, the Report lists six rather different topics:
Statistics on Cultural Activities:
• Newspapers and books
• Libraries and cultural papers
• Radio and television
• Cinema and film
• Recorded music

Statistics on Cultural Practices and Heritage:
• Leading languages
• Leading religions
• National festivals
• Folk and religious festivals
• Most visited cultural site
• Most visited natural site
• World heritage sites

Statistics on Ratifications:
• Cultural and labor conventions
• Human rights conventions
Statistics on Cultural Trade and Communication Trends:

- Trends in cultural trade
- Distribution of cultural trade by type
- Tourism flows
- Communication

Statistics on Translations:

- Translations of books
- Translators
- Most frequently translated language

Statistics on Cultural Context:

- Education
- Tertiary education abroad
- Human capital
- Demographic and health
- Economic
- Social security
- Environment and biodiversity

The result was that the link between culture and development as postulated by the World Commission was not in fact fully explored because the conceptual framework and the empirical level of indicators and data did not match. Moreover, the distinctions between activities, practices, trade and communication and translations remained unclear and made the selection and grouping of indicators appear somewhat arbitrary.

Third, a different path has been taken by authors such as Mercer (2002: 60–1), who have proposed more systematic indicator sets:

- Cultural Vitality, Diversity and Conviviality
  i.e., Statistics measuring the health and sustainability of the cultural economy, and the ways in which the circulation and diversity of cultural resources and experiences can contribute to quality of life
- Cultural Access, Participation and Consumption
  i.e., Statistics measuring opportunities for and constraints to active cultural engagement
- Culture, Lifestyle and Identity
  i.e., Statistics evaluating the extent to which cultural resources and capital are used to constitute specific lifestyles and identities
- Culture, Ethics, Governance and Conduct
  i.e., Statistics evaluating the extent to which cultural resources and capital can contribute to and shape forms of behavior by both individuals and collectivities.

These indicator sets have then been related to the economic concept of the value production chain, as follows:

- Creation: the conditions and capacity for creation and innovation of values in both material and immaterial forms
- Production and reproduction: the transformation of values into tangible and intangible forms
- Promotion and knowledge: activities and capacities to gain wider use and acceptance for the produced and disseminated value and product
- Dissemination and circulation: the mechanisms, processes and institutions that put values and products into public and private domains
- Consumption and use: the processes and capacities for the use and consumption of values and products.

Finally, they were put in a matrix form to reveal distinct indicator sets presented in Table 1.

While there is much to be commended about this approach, it has two major weaknesses for our purpose: first, the comprehensive nature of the indicator matrix leaves the wider question of 'why' and 'for what purpose' unanswered. In this sense, the indicator matrix is more like a statistical framework that can be put to different uses rather than an indicator and data system that flows from a conceptual framework serving a specified purpose. Second, most of the data needed for the indicators suggested by Mercer (2002: 156–63) are simply not available for most countries, requiring therefore a major data collection effort that is well beyond the capacities of the initiators of this series.

There are, of course, important ways in which the framework proposed here differs from what Mercer, UNDP and UNESCO have achieved. First, it is not about culture as such but about the relationships between cultures and globalization; second, it is much less about countries or nation-states as the primary and near-exclusive units of analysis. The parsimony of the UNDP approach is to be commended, as is the comprehensiveness of Mercer's
indicator matrix. Our search, therefore, is for a compromise between parsimony and comprehensiveness, despite the paucity of available, comparable and high-quality data.

**Assumptions**

Like the approach underlying UNDP’s Human Development Index (UNDP 2000), measuring the relationship between globalization and culture must rest on the premise of parsimony and emphasize a select number of indicators that can be operationalized, are measurable, and have a reasonable degree of data availability. This approach implies that highly complex and demanding models may at present be of little use, as many indicators cannot be observed and as data are often not readily available; moreover, complex models cab be difficult to communicate to diverse audiences. Specifically, we proceed from six assumptions or premises:

**Assumption 1** Rather than trying to fill in data on a wide range of cultural aspects for as many countries as possible (as UNESCO tried to do), or for as many indicator matrices for as many countries as possible (as Mercer’s approach would lead us to pursue), we suggest that such tasks would be futile due to the seriousness of the data problems involved and the extraordinary amount of time and resources it would take to solve them. Instead, we proceed from the assumption that only a different approach could offer a realistic way forward – an approach along the lines of the indicator suites proposed below.

**Assumption 2** Any measurement of the relationship between cultures and globalization will be simpler and less perfect than the richness, variety, and complexity of what it tries to measure. As analytic and operational concepts, globalization and culture as well as the relationship between them must necessarily abstract from historical and current variations in their development, and disregard significant cultural, political, and social differences. The information presented in the indicator and data system aims to provide the essential characteristics of the relationship and its context.

**Assumption 3** The relationship between cultures and globalization is a multifaceted, emerging as well as changing phenomenon that is different in different parts of the world, hence the indicator and data system must take account of this essential characteristic. In particular, some indicators may be less ‘global’ in their meaning and relevance than others. Put differently, not all indicators will be globalization pure; some will address international and transnational phenomena that can be limited

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**Table 1** Indicator sets and value stages

<table>
<thead>
<tr>
<th>Value stages/Indicator sets</th>
<th>Creation</th>
<th>Production</th>
<th>Promotion and Knowledge</th>
<th>Dissemination and Circulation</th>
<th>Use and Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitality, diversity, conviviality</td>
<td>Indicator set</td>
<td>Indicator set</td>
<td>Indicator set</td>
<td>Indicator set</td>
<td>Indicator set</td>
</tr>
<tr>
<td>Cultural access, participation consumption</td>
<td>Indicator set</td>
<td>Indicator set</td>
<td>Indicator set</td>
<td>Indicator set</td>
<td>Indicator set</td>
</tr>
<tr>
<td>Lifestyle and identity</td>
<td>Indicator set</td>
<td>Indicator set</td>
<td>Indicator set</td>
<td>Indicator set</td>
<td>Indicator set</td>
</tr>
<tr>
<td>Ethics, governance, conducte</td>
<td>Indicator set</td>
<td>Indicator set</td>
<td>Indicator set</td>
<td>Indicator set</td>
<td>Indicator set</td>
</tr>
</tbody>
</table>
to regions of the world that are not necessarily contiguous geographically, such as diaspora communities or transnational professions.

**Assumption 4** As the essence of the relationship between cultures and globalization may vary with theoretical approach, disciplinary outlook, or policy-related interests, the indicator and data systems should be based on an open conceptual framework that emphasizes various aspects and takes account of different dimensions and orientations. For example, economists might emphasize intellectual property rights and cultural flows as critical factors, whereas sociologists would point to cultural value patterns and changes as focal areas of interest, and political scientists might focus on aspects of global governance and transnational interest groups.

**Assumption 5** The operationalization and measurement of the relationship between cultures and globalization has a strategic-development dimension. We view the current profiles of the relationship as an evolving system that can be perfected over time. Feedback received from the social services and policy communities will help improve the data situation over time so that future editions of the Yearbook can build on each other. In other words, the proposed system is an evolving one that makes use of available information to the greatest extent possible.

**Assumption 6** We no longer assume that ‘country’ is the performed unit of analysis. Other units, be they organizations, communities, networks, products, artifacts or events are important as well and may indeed emerge as units more appropriate to the task – For example: leading procedures of cultural products by corporation rather than country; copyright and patent holders by firm rather than country; globally relevant books, movies, TV series, stage productions, papers, websites, museums, paintings, sites, events, etc; cities with high concentrations of cultural productions, etc.

### Focus and framework

For our purpose, ‘culture’ in the broad sense refers to the social construction, articulation and reception of meaning. It involves value systems, forms of creation, enactment, presentation and preservation as well as symbols, artifacts and objects. This definition includes ‘culture’ in the narrow sense as the creation, presentation, preservation, and appreciation of work of art. Figure 1 puts the focus of the indicator and data systems on the relationship between globalization and culture.

This relationship exists in a context that is both analytical and factual: It is analytical because cultural globalization does not exist in isolation from other globalization processes; a book or movie is a cultural, economic and legal entity at the same time. What the analytic focus on the culture does is emphasize some aspects of globalization over others it treats as contextual. The context is factual in the sense that other globalization processes are taking place, which may differ in strengths, scope, and implications. What the factual focus achieves is to bring in empirical facts from these other globalization processes as they relate to culture. For example, international trade laws may not be written with a focus on cultural matters, but the former certainly influence the latter.

Specifically, we have three contextual patterns and processes in mind: first, economic globalization in terms of trade and the rise of integrated, transnational productions and distribution systems dominated by large transnational corporations and financial markets; second, a transnational, and increasingly global, civil society has emerged more fully since the end of the Cold War, facilitated by the rise of international nongovernmental organizations, activist networks, and civil value patterns; and third, the ‘thickening’ of the international rule of law has continued as well, although unevenly and with persistent enforcement problems and nationalist interpretations of global governance.

We have already suggested that we can think of culture in many ways: as a system of artistic endeavors and realm of creativity; as a social system of meaning and values; as an economic system of production, distribution and consumption; and as a political system of position of power and influence (Figure 1). Each ‘lens’ or systemic view is equally valid and likely brings up different questions, leading to different insights and implications.

The relationship between cultures and globalization is not only multifaceted from a systemic perspective. Each systemic view brings different units of analysis and flows into consideration. These can be transnational and domestic, individuals, organizations, or professions as well as institutional patterns, communities, and societies, including nation states (Figure 1). These units and flows are often connected,
leading to consequences. For example, the rise of the Internet brought wide access to online news, which in turn has changed the business model of the newspaper industry, the role of journalism with the increased popularity of blogs etc.

Table 2 presents the implementation of the framework. It shows the context of globalization, and the four systemic views (social aspects of culture; economic aspects of culture; culture as a system of sites, events and flows; and culture as a political system). Each 'lens' is broken down into major components and sub-components that make up individual indicator suites. For example, the social aspects of culture are broken down into values and institutions, knowledge, and practices and heritage. In turn, values are further refined in terms of identities (individual and collective), economic social, political values religious values and institutions, and gender. The result is an integrated, thematic hierarchy of indicators on the relationship between culture and globalization, and contextualized in relation to other globalization processes and patterns.
## Table 2  Indicator Suite Matrix

<table>
<thead>
<tr>
<th>The context of Cultural Globalization</th>
<th>Economic globalization</th>
<th>Global civil society</th>
<th>Political &amp; legal globalization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trade flows, TNC's</td>
<td>Extensity and intensity</td>
<td>International organisations rule of law and treaties</td>
</tr>
<tr>
<td>Social Aspects of culture as system of meaning, values and practices</td>
<td>Values and institutions</td>
<td>Knowledge</td>
<td>Heritage and Practices</td>
</tr>
<tr>
<td></td>
<td>Identities</td>
<td>Creation</td>
<td>- Heritage preservation &amp; destruction</td>
</tr>
<tr>
<td></td>
<td>Economics</td>
<td>Dissemination</td>
<td>- Environment</td>
</tr>
<tr>
<td></td>
<td>Social</td>
<td>Storage</td>
<td>- Participation</td>
</tr>
<tr>
<td></td>
<td>Political</td>
<td>Innovation and protection</td>
<td>- Sports</td>
</tr>
<tr>
<td></td>
<td>Religious</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Religious Institutions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culture as economic system of production, distribution and consumption</td>
<td>Economy</td>
<td>Professions</td>
<td>Corporations and organization</td>
</tr>
<tr>
<td></td>
<td>Industries</td>
<td>Artistic and cultural industries</td>
<td>- Transnational cultural corporations</td>
</tr>
<tr>
<td></td>
<td>Global arts market</td>
<td></td>
<td>- Cultural INGOs and Foundations</td>
</tr>
<tr>
<td></td>
<td>Cultural Consumptions &amp; Expenditures</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trade in goods and services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culture as system of communication and movements</td>
<td>Global cities and events</td>
<td>Communication and media</td>
<td>Movements and communities</td>
</tr>
<tr>
<td></td>
<td>Global cities</td>
<td>Languages</td>
<td>- Transportation-Airports</td>
</tr>
<tr>
<td></td>
<td>Symbolic sites and significant cities</td>
<td>Print Media</td>
<td>- Tourism</td>
</tr>
<tr>
<td></td>
<td>Global events</td>
<td>Books</td>
<td>- Migration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Music</td>
<td>- Refugees &amp; asylum seekers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Movies</td>
<td>- Transnational communities</td>
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<tr>
<td></td>
<td></td>
<td>TV &amp; Radio</td>
<td>- Transnational social/cultural movements</td>
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<td></td>
<td></td>
<td>TV &amp; Online News</td>
<td></td>
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<td></td>
<td></td>
<td>Internet</td>
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<tr>
<td></td>
<td></td>
<td>Blogs</td>
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<tr>
<td></td>
<td></td>
<td>Telephones</td>
<td></td>
</tr>
<tr>
<td>Culture as a political system</td>
<td>Regulatory frameworks</td>
<td>Policy</td>
<td>Conflict and cooperation</td>
</tr>
<tr>
<td></td>
<td>International regulatory frameworks and agencies</td>
<td>Cultural diplomacy organizations and coalitions</td>
<td>- Current conflicts and tensions</td>
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<tr>
<td></td>
<td>International standards</td>
<td></td>
<td>- Terrorism</td>
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<td></td>
<td></td>
<td></td>
<td>- Conflict resolution and UN Peacekeeping</td>
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<td></td>
<td></td>
<td></td>
<td>- Human rights</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>- Arms &amp; military</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Transnational crime, corruption</td>
</tr>
</tbody>
</table>
How to develop and present indicator suites

The notion of indicator suites is informed by Tufte's (1997; 2001) groundbreaking approach to the visual display of quantitative information, and the use of graphics in suggesting interpretations. In a departure from conventional approaches to indicators, we would neither seek to list data for indicators by country, nor strive to have a uniform layout for indicators in tabular fashion; rather we would use indicator suites and show indicator characteristics by units of analysis that seem appropriate for the purpose at hand, even if the presentation will be different across indicator suites.

The basic idea behind the notion of indicator suites is that indicators of different units of analysis, and even with incomplete data, can still be brought together in a thematic (and not in primarily statistical) way, and generate insights about relevant aspects of the relationships between culture and globalization. What combines, and perhaps even unites, indicators to a suite is not some statistical rationale but a conceptual, qualitative one. For example, indicators of cultural tourism in terms of demand and spending, or destinations and travel patterns across the world, involve different units of analysis and time-frames, and may well vary in data converge and quality. Hence from a statistical perspective, it would be difficult to combine these multiple indicators into one or even two.

Yet conceptually, this limitation can be virtue: using separate indicators that capture different characteristics of phenomenon such as cultural tourism or global arts markets may nonetheless allow for a qualitatively fuller presentation, description, and interpretation. Knowledge of the complexity of cultural phenomena and the paucity of comparable data leads us to search for, and embrace, diversity in measurements (i.e., indicators), and aim for cohesion in presentation and suggested interpretations (i.e., indicator suites).

In methodological terms, therefore, we are using (mostly) quantitative information in a (mostly) qualitative way. Indicator suites are a compromise in the sense that they take the patchy and incomplete state of quantitative cultural indicators are given, at least for the medium term, and refuse to accept the interpretative limitation this state imposes on analysis. In other words, indicator suites make do with what is empirically available, and suggest a ‘story line’ that is presented to diverse audiences.

The development of indicator suites is an iterative, almost hermeneutic process, as shown in Figure 2. It begins with the identification of a theme or topic, for example, communication and media. Bringing in previous indicator work on this topic, this is broken down into various dimensions such as print media, books, blogs, news and online news, music, movies, TV, radio, phones, and Internet. In each case, the questions become: What do we want to know about this topic in the context of culture and globalization, and why? And, what are some of the key policy implications and issues the data could suggest of illuminate?

For example, for the dimensions TV and online News, it was important to learn how the viewer number and patterns of major global news outlets differ amongst each other, and what this suggests for information policy. These outlets collect, prepare and disseminate news for millions of viewers; if we include via wire services, this adds many more listeners and readers. Therefore these outlets have a major impact on global awareness and information availability as well as access. This required a look at online news consumptions and audience profiles for each of the major outlets.

As the last example suggests, once we have conceptual and policy-related justification for a topic, an initial operationalization (news consumption, audience profile, etc.) leads to a search for possible indicators and data, with a continued process of data evaluation, incorporating data sets, and preparing them for analysis (see Figure 2). This intermediary product is an initial indicator suite that is then assessed in terms of parsimony, significance, combinatorial richness, organizing power, theoretical fruitfulness, and policy relevance. For example, the indicator suite for 'book' suite includes four major dimensions or subtopics:

- Annual number of books published by language and region
- The largest book markets by volume and market value
- The market share, subsidiaries and holdings of major publishers in different region
- The number of book publishers by country.

We arrived at the relatively small number of indicators in an iterative fashion by examining alternative indicators, measures and data suggested in...
Figure 2  Developing Indicator Suites


IFACCA (2005) offers a useful and comprehensive overview of the state of the art in the field of cultural indicators. See Pignataro (2003), Brown and Corbett (1997), and Adams et al. (2004) on similar sets of criteria that are more geared towards indicator assessments.
previous work on the subject or presented by agencies such as UNESCO's Institute of Statistics. Taken together, this parsimonious set of indicators pointed to what seems significant in the context of culture and globalization: the rise of large publishing corporations in the context of changing technologies and business models. It allowed us to relate changes in the book industry to the Internet suite, the print media suite as well as others. In other words, it helped gain organizing power and combinational richness for interpretative purposes.

The data for the indicator suite on the Internet is different, of course, and offers indicators or broadband subscribers, growth in Internet usage across world regions, and the distribution of public wireless access points, among others. The suite on global arts markets includes data on major auction houses, art dealers and galleries, data on leading artists, etc. The indicator suites combine structural and flow measures, and make use of maps, charts and figures rather than long and complex tabular presentations. The various elements of such indicatory suites are graphically presented on double page spreads, with text pointing to major findings, showing connections, suggesting interpretations, and providing further references and source material.

Of course, given the pioneering nature of this exercise, meeting the standards of parsimony, significance, combinational richness, organizing power, theoretical fruitfulness, and policy relevance is our medium- to long-term goal, and can barely be achieved in a first attempt such as the one presented here. We are aware of some of the major gaps in the indicator system. Among the most serious omissions are: indicator suites on human sexuality, food, fashion, design, architecture, performing arts and theater companies etc. Only lack of resources and time has prevented us from covering these topics in this edition of the series and we are set to expand coverage in future volumes. Moreover, for those topics covered that year, it is important to keep in mind that the assessment and development of indicator suites is an open-ended process. It typically involves two, three and often more ‘cycles’ of interaction topic identification and justification, indicator review and selection, data collection and analysis, and suite construction.

In terms of data gathering, we did not collect original data, and relied on secondary data exclusively. Virtually all of the data collected for the indicator suites presented here come from the great wealth and variety of online data sources available on the Internet. Of course, we are well aware that while much information is increasingly available online, much other useful information is not. The Internet, perhaps less so than more conventional data repositories, is biased in the information available and retrievable. Like others who have worked in the field of cultural indicators, we were frequently frustrated by the lack of data outside the developed world. We hope to improve the coverage of non-Western sources and data in future volumes.

Conclusion

An integrated display of indicator suites together with narrative description and analysis is meant to provide an overview of the main dimensions and contours of culture in both the broad and the narrow sense of the world. The list of indicator suites and indicators, including their operationalization and justifications, is not fixed and will certainly develop and improve over time, and in consultation with international and national statistical offices as well as experts in the field. We hope to garner encouragement and constructive criticism as our work continues and as we seek to perfect what is presently little more than an initial attempt to come to terms with one of the most vexing of data problems in the social sciences.

Each edition of this series includes only a portion of the full range of the indicators and data used in constructing indicator suites, with additional material available to readers on a dedicated website. Finally, as each volume takes a particular thematic focus (e.g., cultural conflicts; the cultural economy, the arts and creativity etc), we will place a special focus on indicator suites that highlight the dimensions and trends of particular relevance to that year’s topic. In this edition, the focus on cultural conflicts, including terrorism, and the cleavage structures and ‘fault lines’ involved.
REFERENCE


