FROM THE EDITOR

International professional communication: An overview

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connexions • international professional communication journal addresses the effective and efficient communication of information related to the workplace and civic activity in and between any place in the world.

This communication is important because the world is increasingly interconnected, and communication, consequently, involves humans, institutions, and objects from, and related to different parts of the world. A recent event shows well how connected and interdependent people are upon each other, and with everything else on earth, and even beyond it. It also shows well how critical international professional communication is for us today. That event is the 2011 earthquake, tsunami, and nuclear power plant disaster in Japan, which I will briefly revisit in the next section of this editorial.

Envisioning the world today

On Friday, March 11, 2011, a 9.0 magnitude undersea earthquake occurred in the Pacific Ocean. It was recorded by deep ocean buoys and sensors, which sent the information, via satellite, to computers at the Japan Meteorological Agency. The computers analyzed the intensity of the quake, sent radio, television and cellphone alerts to the population in Japan, stopped trains, elevators and manufacturing facilities, and halted some of the country's energy and gas services, thus preventing the loss of countless human lives.¹

The movement of water that accompanied the quake transformed into a tsunami that broke along the northeastern coast of Japan. On land, the waves deactivated the emergency cooling system of the Fukushima Daiichi Nuclear Power Plant reactors, causing radioactive material to contaminate the atmosphere, soil, and ocean. The winds, however, blew most of the radioactive material toward the ocean, preventing numberless people from dieing.

These events destroyed human and animal life, property, belongings, and farmland, dismantled whole communities and lifestyles, and brought pain, suffering, and immediate and long-lasting health problems to the survivors. The disaster also brought a wave of support—in the form of food, water, shelter, medication, equipment, and emotional and psychological aid—for the survivors and workers from people throughout the world as they learned about the incidents via the news and social media networks.

The earthquake-tsunami-nuclear power plant incidents brought the country's water, power, telephone, and transport systems, as well as its businesses, industry, commerce, tourism, and sports to a halt. Decreased capacity to produce energy in the following months disrupted the production of goods in Japan and their export to other countries, disturbing the production, consumption and economies of countries across the globe.

Scientists, engineers and technicians from different countries tried to find solutions to the problems, having also identified significant gaps in seismological, nuclear, health, and crisis management knowledge and expertise.

The incidents impacted public and private discourses and concerns, bringing new factors to environmental debates across the world, including the debate on nuclear power safety, and the differences between rich, and poor and developing countries concerning energy needs and nuclear power.

They also impacted government, with the country's leader being asked to resign, and the government accused of withholding and covering up vital information, not heeding expert advice, ignoring the law, and promoting the nuclear status quo.

These events were recorded and communicated in writing, orally, visually, electronically, and nonverbally. They were registered and conveyed in different languages and writing systems. And they were transmitted in different parts of the world, for different parts of the world. They were seen, heard, read, analyzed, described and explained by and among experts from wide ranging fields, by and among semi-experts in the media, and by the general population across the world. They were also converted into numerous verbal and visual genres—articles,

blog posts, editorials, field notes, interviews, legislation, lessons, maps, photographs, podcasts, recommendations, reports, seismographs, text messages, timelines, videos—by writing, information design and other professionals, with the aid of an infinite number of tools and technologies.

Like so many other happenings around the world, these events bear witness that

- the world is an intricate network of complex natural elements, people, systems, and artifacts,
- the network is dynamic, and its elements interact, on a smaller or larger scale, in predictable and unpredictable ways, in a single place, or in various places of the world at the same time,
- the elements of the network have no relationships, value, and importance in themselves—they just exist; rather, it is we, humans, that connect and interpret them so as to understand the world and be able to act in it,
- international professional communication is essential for humans to be safe, interact with their environments, engage with their fellow human beings, make decisions, and take action.

These four broad elements point to the importance of having a dedicated forum for "researchers, practitioners, students and emerging scholars from diversified backgrounds, interests, and nationalities" (connexions)

to freely discuss issues related to communication in today's world. connexions • international professional communication journal is that forum. In fact, we need many such forums.

Addressing the world today

A significant number of peer-reviewed journals have been addressing international professional communication topics in themebased issues, regular articles, and with their own specific foci.

Over the past five years, there have been special issues on language, legal issues, learning, networking, localization, culture and health, and professional communication in international and global contexts. There have also been IPC-related articles on such topics as discourse (e.g., Mitra, 2013), environment, risk, and science communication (e.g., Thakadu, & Tau, 2012; Ding, 2009; ter Huurne, Griffin, & Gutteling, 2009), games (e.g., Sherlock, 2009), and visual communication (e.g., de Cossío, 2009). And the journals themselves focus on areas that are integral to IPC like specialized translation (JOSTRANS), and the specialized languages of professional communication and their translation (Terminology).

The extraordinary diversity of topics covered by existing publications suggests, however, that any topic in professional communication can be approached from the point of view of IPC.

Yet, in 1999, Lovitt wrote that "Understanding professional communication in a global economy represents a formidable challenge, insofar as it implies nothing less than a wholesale reconceptualization of our discipline" (p. 1). He added that "Relying on research from

allied disciplines ["such as intercultural communication and international business" (p. 2)] . . . may have undesirable consequences," and he highlighted "topics as translation, localization, document design, visual communication, contrastive rhetorics, comparative genre analyses, patterns of reading and processing information, and so on" as being "critically important" for IPC (pp. 6–7).

Fourteen years later, in a far more complex and interconnected world, I find myself asking what are the "critically important" topics for IPC? Are we still studying IPC from the perspective of "allied disciplines"? And how far are we into the task of creating a distinctive identity for IPC?

The above list of journals suggests that the identity of IPC is still in its initial stages, that there are considerable overlaps with intercultural, technical, business and other areas of professional communication, that IPC continues to depend on research from kindred fields, and that the critical topics for IPC are, perhaps, too broad.

connexions intends to refine and consolidate the field.

To achieve this, we needed to (1) analyze how professionals, academics, and students envision IPC, and (2) present findings in such a way that people from different professional, academic, and cultural backgrounds; speaking different languages with varying degrees of fluency; with different interests, preferences, abilities, ages; with different skills in handling technology; and who would be accessing the manuscript from different devices, and different parts of the world could easily understand the findings.

That was the rationale behind the call for papers for the first issue, and it is foundational for the next two sections of this editorial: one in which I chart IPC in a network map; the other, in which I point out the major connections between the topics. The map itself can be seen online at http://connexionsj.files.wordpress.com/2013/05/ipc-map_1-1.pdf; the following section explains its production.

Charting international professional communication

In this section, I explain the research methodology, present the current map of IPC, and describe its contents.

Methodology

To create the map, I loosely followed the process and rhetorical approach of Selfe and Selfe (2012) as they created the map of technical communication (I followed Selfe and Selfe *loosely* because we are creating different target visuals; whereas they created text clouds, I am creating a network graph).

Focusing question(s) and rhetorical context of the map. The map answers the following questions: (1) What major topics compose IPC, based on the contents of the papers published in this issue? (2) In what conceptual contexts do these topics occur?

The purpose of the map is to portray the major topics that emerge from the papers published in this inaugural issue, to do it in such a way that the map presents a comprehensive—though necessarily bounded—view of IPC, and to facilitate comprehension of the topics and the connections between them. The audience for the map is the intended

readership of *connexions*, i.e., "researchers, practitioners, students and emerging scholars from diversified backgrounds, interests, and nationalities" (*connexions*) that are related to and/or interested in IPC.

Data set, rules for structuring the terms and generating the map, and granularity of the map. The papers published in this issue provide the data set for the map. The papers include a preamble, 18 position papers, and 3 literature reviews. They were written by academics (16), students (2), practicing professionals (1), practicing professionals/academics (1), and practicing professionals/students (1). The authors are from Argentina (1), Canada (1), Germany (1), Ireland (1), Japan (1), Spain (1), United Kingdom (1), and United States (14). The occupations and countries the authors come from represent some of the diversity the journal is aiming for.

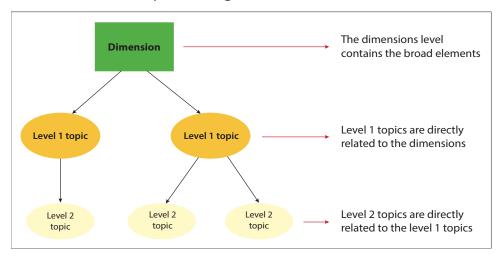
To determine the major topics that would make up the map, I

- (1) created an alphabetical list of the terms the authors had considered most relevant, i.e., the keywords, and noun phrases and verbs in the titles of the articles,
- (2) organized these terms under the four broad elements mentioned on page 4—i.e, that the world is a complex and dynamic network of elements with no intrinsic relationships, value, and importance, and that IPC is essential for human safety, interaction, engagement, decision-making, and action-taking—while bearing in mind the context in which the authors used the terms; this meant that some terms fit into multiple categories,

- (3) modified the four elements in view of the collection of terms, replacing, adding and subtracting where necessary—instead of "natural elements, people, systems, and artifacts," I organized the terms under the following five *dimensions*: environment, human, communication, technology, and artifacts,
- (4) read the papers for terms and phrases that were not in the titles and keywords, yet contributed to the desired comprehensive view of IPC, and associated them with the five dimensions, again keeping in mind the contexts in which they appeared in the papers,
- (5) reorganized the terms into two levels of more focused topics, level 1 directly related to the dimensions, and level 2 directly related to the level 1 topics (Figure 1),

Figure 1.

Illustration of IPC map levels organization



- (6) created a network graph in yEd Graph Editor, and color coded it as in Figure 1: the green rectangular nodes represent the dimensions, the orange nodes the level 1 terms, and the yellow nodes the level 2 topics. Next, I selected the program's organic layout to arrange the information, which is adequate for "undirected graphs" and representing "complex networks" (yWorks),
- (7) exported the graph as a JPG file, and recreated each dimension in Adobe Illustrator for easier integration in this article.

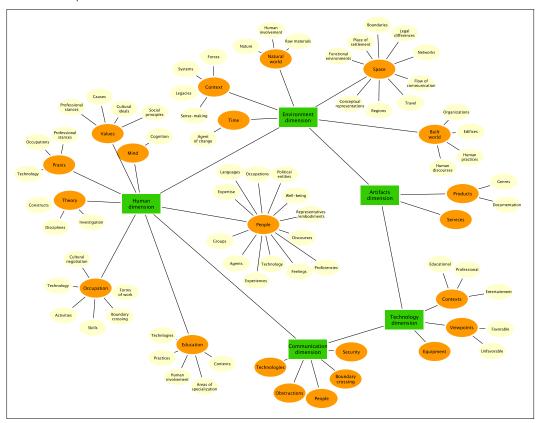
Presenting and describing the map. The full map, and each of its dimensions are presented in the next section. Because the topic names classify content (terms and parts of sentences) from different papers, the connection between the topics and the content may not be immediately apparent. To make the connections clear, I follow each topic with direct references to the papers and authors published in this volume of *connexions*.

The map

The map of IPC contains five intersecting *dimensions*—environment, human, communication, technology, and artifacts (Figures 3 to 7)—and a varying number of topics per dimension. You can view the full map on page 10, below. You may also view it in full size online at http://connexionsj.files.wordpress.com/2013/05/ipc-map_1-1.pdf

Figure 2.
International Professional Communication map

(Click on map to view it in full size)

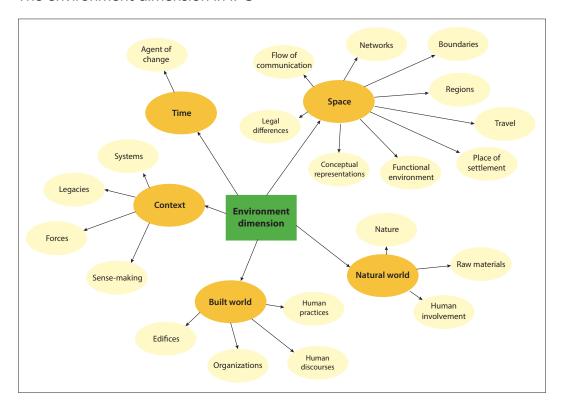


The environment dimension. The environment dimension of IPC (Figure 3, p. 12) comprises five topics: context, time, space, natural world, and built world.

Context. Agboka associates context with the "historical, legal, political, and economic" legacies and systems that continually shape human cultures and languages. For Fiola, context is the "market," or "labor market," a force that encroaches on the pedagogical mission of the

Figure 3.

The environment dimension in IPC



university and university professors. For Levi, on the other hand, context is the sense-making activity that librarians, archivists, and museum professionals perform, and which makes up for the incapacity of data-generating machines to build "connections and links . . . among disparate records that are often geographically dispersed, and in diverse formats."

Time. In Russell's prelude to this issue, time is portrayed as an *agent* of change. It brings about the "greater interconnectedness of international professional communication," particularly of "communication with

knowledge," as well as the internationalization/de-nationalization of the English language.

Space. Levi views space as *networks*, Brandt & Rice as *boundaries*—"borders and natural barriers" (Brandt & Rice). Other authors conceive of space as *regions* of the world. These can be geographic: continents, countries, cities, regions, territories, global, glocal, local (Arrizabalaga; Mattson; Muñoz Martín; Rice). They can also be geopolitical—"transnational," "international," "abroad" (Johnson-a; Rice)—or political-economic: "developed World," and "unenfranchised 'third' or even 'fourth world' nations" versus "industrialized nations (i.e., 'first' and 'second world' nations)" (Agboka; Tzanelli). Space is also a place of *travel* (Tzanelli).

Further, it is a place of settlement, e.g., "rural/urban kampongs (villages) (Mattson)." St. Amant relates space to conceptual representations—"flat earth model"—the flow of communication—"friction points"—and legal differences (St. Amant). Space is also a functional environment—as the "environments" that act as "transnational classrooms, a multidimensional public sphere accessible to people with Internet connection" (Tzanelli).

Natural world. The natural world is related to *nature*—ecological communities and "rainforest[s]" (Tzanelli)—and the *raw materials* that humans exploit: "rare earths," "thorium" (Mattson). The natural world is also a motive for *human involvement*—social and ethical concerns (Mattson), and political activism (Tzanelli).

Built world. The built world is directly related to edifices—"kampongs (villages)," "development spaces," "high-rises," "industrial complexes" (Mattson)—and the organizations that create and occupy them: educational (Fiola), corporate and business (Mattson; Varner), government (Mattson), and industrial (Agboka; Hopton).

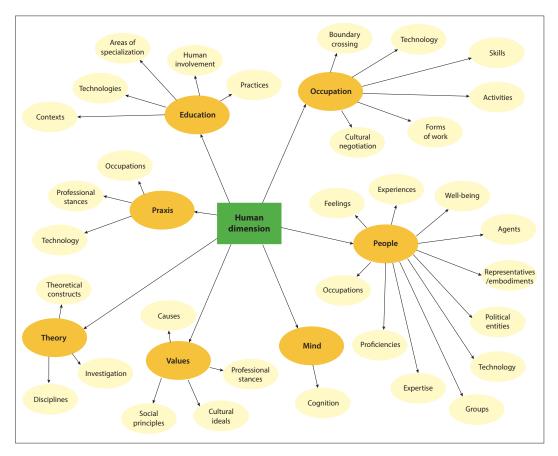
The built world is also associated with *human discourses* and *human practices*: Varner speaks of businesses as sites of intercultural misunderstanding that require "active negotiation by both sides," while Mattson portrays multinational corporations as sites of technocratic discourses and practices that override the syncretic values of local cultures to attain their own profit-making goals.

The human dimension. The human dimension (Figure 4, p. 15) figures prominently in IPC. It aggregates the interrelated topics of people, mind, values, theory, praxis, education, and occupation.

People. People are associated with *feelings* and *experiences*: "anger" (Mattson), "information needs" (Kely), "experience and emotional design" (Roy). They are also related to *language* and *discourses* (Muñoz Martín; Mattson). They are further connected to *well-being* and its absence: "health care" (Johnson-a), "epidemiological populations, medical conditions, and disease morphologies" (Brandt & Rice), "leukemia, still births, and severe mental disabilities" (Mattson).

People are envisioned as *agents* of information production and exchange (Byrne; Mason; Kelly), agents of change (Tzanelli; Walton)





and oppression (Mattson), and agents of progress and destruction (Tzanelli).

People represent/embody organizations (Varner), abstract forces (Fiola; Mattson) and disincarnate entities (Mattson). People are political entities: "groups with incomplete civic rights and restricted access to representational centers" (Tzanelli). And they are intricately related to technology: people use tools (Brandt & Rice; Mason), and exist alongside and as crucial complements to machines (Levi).

There are *groups* of people, based on gender (Mattson), languages (Russell), nationalities (Varner), ethnicities (Agboka), autochthony (Tzanelli), or role in professional interchanges (Johnson's "teams"; Brandt & Rice's "patients"; Byrne's "users").

People have different *occupatione* They are authors, scholars (Levi), instructors, trainers (Fiola), students (Johnson-a; Johnson-b) and professionals in training/"future professionals" (Arrizabalaga; Fiola), practicing professionals (Brandt & Rice; Hopton), "consultants" (Mason), "integrated writers (e.g., engineers, general managers, accountants, health technologists)" (Spinuzzi & Jakobs). People are also classified by their *proficiencies*—"skills" (Johnson-a)—and level of *expertise*—"specialists," and "non-specialists" or "non-expert[s]" (Fiola; Hogan).

Mind. The mind is the locus of *cognition*: Brandt & Rice speak of "divergent thinking," Agboka of "interrogating," Byrne of "reassessing," St. Amant of rethinking and "finding," Johnson-a of "problem-solving," Hogan of "constructivism," and Levi of "the way we conceptualize, interpret, and interact with our cultural heritage."

Values. Values are related to *causes* (Tzanelli; Walton), *social principles* (Agboka) and the *cultural ideals* of specific groups (Mattson). Values are also connected with *professional stances* (Hopton).

Theory. The authors speak about *theoretical constructs* such as theories (Hogan), models (Arrizabalaga; Rice; St. Amant), approaches (Roy), paradigm shifts (Agboka). They also refer to *investigation* (Byrne; Roy;

Spinuzzi & Jakobs).

Several authors speak about specific *disciplines*, their intersections, and characteristics (Durão; Hogan; Muñoz Martín; Roy; Varner).

Praxis. In IPC, praxis is related to *occupations* (Brandt & Rice), *professional stances*—ethics and a critical outlook (Hopton)—and the ability to use *technology* to communicate across geographical and cultural boundaries (Brandt & Rice).

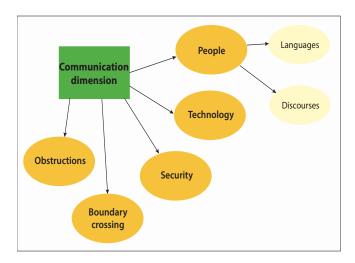
Education. The papers in this issue relate education to academic, professional, and international and cross-national *contexts* (Johnson-a; Johnson-b; Tzanelli; Rice). They associate education with different *areas* of specialization—medical communication, technical communication, translating (Rice; Muñoz Martín).

The authors also connect education to *technologies* (Johnson-b), and they view it as an arena for *human involvement*—to promote civic and political engagement (Walton; Tzanelli). They also speak about current educational *practices*, e.g., pedagogical methods, programs, curricula (Arrizabalaga; Muñoz Martín; Rice).

Occupation. In IPC, occupations are related to *boundary crossing*—of physical, time, national, and language borders (Brandt & Rice; Johnson-b). They are connected to *technology* (Levi; Mason). Occupations in IPC include *skills*, and *activities* that are specific to international contexts, such as translating (Fiola). They also encompass different *forms*

Figure 5.

The communication dimension in IPC



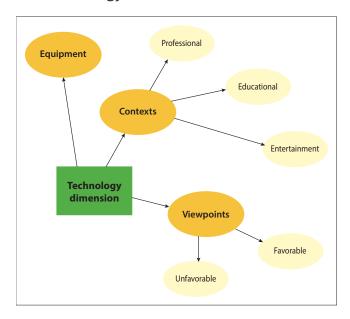
of work (Spinuzzi & Jakobs), and different processes of cultural negotiation (Varner).

The communication dimension. The communication dimension of IPC (Figure 5) is associated with *people* (Johnson-b; Varner), and their languages and discourses. It is also connected to *technology*, and *security* concerns (Brandt & Rice), *border crossings* (Spinuzzi & Jakobs), and specific types of *obstructions* (St. Amant's *friction points*).

The technology dimension. The technology dimension of IPC (Figure 6, p. 19) is connected to *equipment* (Levi; St. Amant), and *professional contexts*, *educational contexts*, and *entertainment contexts* (Brandt & Rice; Johnson-b).

Figure 6.

The technology dimension in IPC



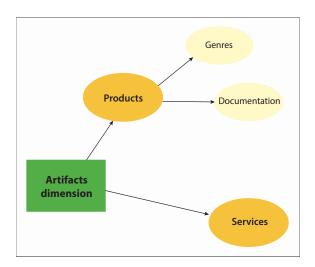
But technology is also related to different *viewpoints*. These can be *favorable*—for Mason, technology enables interaction, work, research and teaching, for Levi, it enables the "flow of information . . . in lightning speed"—or *unfavorable*: for Tzanelli, technology promotes narratives fraught with "ethical dilemmas," and Kelly associates it with problematic "intercultural exchanges."

The artifacts dimension. The artifacts dimension of IPC comprises products and services (Figure 7, p. 20).

Products. Products refer both to specific genres (Hogan; Johnson-b; Mason; Tzanelli) and to documentation in general: "texts"

Figure 7.

The artifacts dimension in IPC



(Spinuzzi & Jakobs), "genres" (Kelly; St. Amant), "technical documentation" (Hogan), "software documentation" (Hogan).

Services. Services are connected with various sectors: healthcare, entertainment, education, communication (Brandt & Rice; Tzanelli; Fiola; Spinuzzi & Jakobs).

Navigating international professional communication

This map of IPC attests to the complexity of the world we live in when, for instance, the topic of human involvement is connected to education and the natural world, and boundaries and boundary crossings are related to space, communication, and occupations.

But is the map answering the questions I formulated at the beginning of this editorial, taking the lead from Lovitt back in 1999?

In other words, are we any closer to knowing the "critically important" topics for IPC? Are we still studying IPC from the perspective of "allied disciplines"? And are we closer to creating a distinctive identity for IPC?

The answer to the first question is yes, we are closer to understanding the critical topics in IPC. They are the world as a place that needs to be traversed physically and virtually, yet which is also in peril. They are technologies as unique enablers of professional communication and entertainment; and as both ineradicable partners of our world, and potentially dangerous intruders in it. They are people whose concerns, desires and well-being are valued, who are morally bound as professionals and citizens, and who are the ultimate guarantors of efficient and effective professional communication. They are also education as a platform to prepare students and professionals to smoothly navigate this landscape. Topics like translating, skills, culture, legal issues, information design, collaboration, ITexts, and artifacts all latch onto these critical issues.

The answer to the second question is yes. We are still studying IPC from the perspective of allied disciplines, as the abundant references to technical communication, intercultural communication, and translation demonstrate.

The answer to the last question is also yes. We are, thanks to you, closer to creating a distinctive identity for IPC.

Welcome to *connexions*!

Acknowledgements

I wish to thank the many people and institutions that have contributed to the journal: the authors who answered the call for papers for this issue, eagerly went through the review process, and patiently waited to see their articles published; the current and previous members of the editorial board who believed in the project and so generously gave their time and expertise to it; the Department of Communication, Liberal Arts, Social Sciences at New Mexico Tech for housing the journal after I moved to the university; and Barbara Bonnekessen, Elizabeth Kramer-Simpson, Maggie Griffin Taylor, Rich Rice, and Roland Rowe for their meticulous and rigorous comments on this editorial.

I am indebted to Charles Kostelnick for sponsoring the year I spent as a research scholar at the Department of English, Iowa State University, immersing myself in professional communication and information design; and for speaking of *connexions* as though it were written in stone. I thank, too, Fundação para a Ciência e Tecnologia for the postdoctoral research grant (SFRH/BPD/43227/2008) that enabled me to lay the foundations for the journal, and João Ferreira Duarte and the Center for Comparative Studies of the University of Lisbon for generously welcoming the idea and providing a home for the journal until July 2012.

Notes

The 2011 earthquake, tsunami, and nuclear power plant disaster in Japan is not the focus of this paper. It is, rather, an example among others I could have chosen—like the *Deepwater Horizon* or the *Exxon Valdez* oil spills—to illustrate that the world is a network of objects, human and other animals, systems, etc., and that IPC is instrumental for the safety, engagement, and actions of humans, I do not cite individual sources in the text and the References section of this paper.

Instead, in the next paragraph I include the titles of the magazines, newspapers, and news agencies whose pages I visited, and from where I accessed the articles and multimedia artifacts I found relevant. I hyperlinked the titles of the periodicals and the special issue from *Nature* magazine, as well as the names of the newspapers and news agencies to the online resource.

The information for the first seven paragraphs of the "Envisioning the world today" section of this paper was collected from the following online sources: (1) *Nature* magazine's special issue on the "Japan earthquake and nuclear crisis," and (2) searching *Scientific American*, and *Science* magazines, as well as *Agence France-Presse*'s English edition, the *BBC*, *Inter Press Service* news agency, *Reuters*' US edition, and *The New York Times* for the expression "Japan 2011 earthquake, tsunami, nuclear power plant."

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