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Not for the Faint of Heart: Tasks of Climate Change Communication in the Context of Societal Transformation

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7.1 Introduction

Nearly two decades into the 21st century, climate communication research and practice have established themselves as a solid field of work. Numerous anthologies, encyclopedias, journals and practice-oriented clearinghouses are dedicated to building up the foundations of ‘best practices’ as well as expanding the scope and diversity of what climate change communication is all about (Pearce *et al.* 2015; Moser 2016; Nisbet 2017; Corner and Clarke 2014; Priest 2014). But it has not yet ventured into what communication of and for the transformative changes entailed in climate change might look like. This chapter aims to open that door.

As that field is maturing, climate scientists and policy-makers place before us increasingly stark realities with their own advances in understanding of the climate change challenge. It is increasingly clear that it is superbly ambitious to think that the world can reduce its collective greenhouse gas emissions to a level where global average temperature increases remain below or return to 2°C (or even less). Modern society would essentially require the energy-equivalent of a global “blood transfusion” in which fossil-fuel energy sources are replaced with non-greenhouse gas-emitting sources by about 80% by mid-century and completely by the end of the 21st century (IPCC 2014). Such numbers imply a fundamental rethinking and restructuring of the globalized economy, profound changes in people’s consumption thinking and behaviors, and the support from highly functional institutions to govern such an energy transition. Simultaneously, communities the world over would need to implement comparatively moderate amounts of adaptation to the climate change impacts expected with the 2°C degree of average warming (Field 2014).

Overshooting that 2°C goal appears equally challenging, as climate change-related changes and disruptions from ever-more violent extreme events cause greater and greater damage and consequently place greater demands on society with regard to adaptation. At the same time, one can assume that society would not merely stand by such a trend toward increasing losses from climatic disasters and insidious changes but would attempt to prevent worsening of the situation by implementing more radical emissions reductions. Given the growing interest in geoengineering in recent years (Pasztor *et al.* 2017; Rabitz 2016; National Research Council 2015; Markusson *et al.* 2014), it is also conceivable that demands to implement geoengineering schemes to try to protect against the undesirable consequences of climate change would grow in urgency. Together, simultaneously stepped-up adaptation, mitigation and geoengineering would result in an extremely demanding, complex situation for global policy-makers and for publics, markets and communicators everywhere.

Finally, whether arrived at by failure of institutions, by reinforcing feedback loops in the Earth system, or by other political, economic and cultural driving forces, the even more dangerous world in which global average temperatures are 3°C, 4°C, 5°C or even 6°C warmer than historically portends even more extensive climatic changes and widespread increases in the frequency and severity of climate extremes, resulting shifts in production sites, markets, and trade patterns, and massive migration of people from areas too challenging to eke out a living (or outright uninhabitable) to safer locations. Everywhere, society would be compelled to adapt. Yet in the unstable and continuously changing social, ecological, economic and physical environment, communities would struggle to make such adaptive changes with much predictive certainty. Living with cascading impacts and the second- and third-order consequences of adaptation, mitigation and geoengineering would create extraordinarily more complex and utterly different life circumstances than modern society is familiar with at present.

Each of these three scenarios makes clear that society stands at the brink of a transformative imperative, one that will only grow as it moves along any one of the three possible pathways (Table 7.1).

Table 7.1: The Transformation Imperative: Facing the Scope of the Challenge Before Us

To reach the goals of the Paris Accord: 2°C (or closer to 1.5°C)	To miss the goals of the Paris Accord: >2°C	To miss the goal of the Paris Accord significantly: >3-6°C
<ul style="list-style-type: none"> • The coming “blood transfusion” of modern society • Fundamental restructuring of the globalized economy • Profound changes in people’s consumption thinking and behavior • Extraordinary demands on functioning institutions • Adaptation to “moderate” climate changes 	<ul style="list-style-type: none"> • More extensive climate changes and catastrophes + emission reduction efforts + adaptation efforts + geoengineering • Unprecedented political, legal and military complexity 	<ul style="list-style-type: none"> • Extensive, deep climate changes & catastrophes • Global shift in markets and production sites • Massive migration of people • Attempts to adapt • Unpredictable consequences of climate change and of adaptation efforts in all areas and sectors of society

What does climate change communication research have to tell us about how to communicate the transformative imperative before us, and how to do so while being in it?

This chapter asks the question what tasks communication has if it aims to actively support and participate in the far-reaching societal transformations that can be expected from deep emissions cuts and adaptation to climate change. An important underlying premise here is that these mitigation and adaptation-related changes constitute not merely a complex technological

challenge, but a cultural one in the sense that the necessary changes will entail profound political, social, economic, financial, psychological, legal, institutional and environmental changes – all of which have foundational links to cultural worldviews, norms, beliefs, practices and artifacts. The challenges of such a transformation are not yet clear to most, and to some extent – at least as far as concrete events and problems are concerned – unpredictable. In this chapter, I will attempt to identify some of the associated challenges categorically, and thus circumscribe a set of tasks for communication. In principle, this is not only about motivating people to actively participate in the transformative changes underway, but also to support them in the psychological, social and cultural processes involved in fundamental (systemic, societal and environmental) change.

In Section 7.2, I will begin this exploration by a look at the existing literature on climate change communication and transformation. This section contextualizes the exploration that follows. Section 7.3 defines and characterizes the transformative change before us. And Section 7.4 – the heart of the chapter – then lays out 10 tasks that a transformative communication might take on. The final Section 7.5 summarizes and describes the work of transformative communication as cultural work, in which a society searches, reckons with, and redefines its course.

7.2 The Dearth of Scientific Understanding of Communication Amidst Societal Transformations

Writing this chapter began with a literature search, using the Web of Science citation system. The search employed the simple search terms (TI=communicat* AND transform* AND climat*), without date or publication type restrictions. It yielded a total of two results (Tàbara *et al.* 2017; Izdebski *et al.* 2016). Neither, however, addressed the question this chapter tries to address.

A less restrictive search (TI=communicat* AND transform*) yielded 851 citations, of which no more than a half dozen related to climate change-related issues such as energy, the environment or sustainability. The exercise did, however, enable a number of observations about the intersection of research interests in communication and its role in contributing to societal transformations on the one hand, and about research interests in transformation and its implications for communication on the other hand (Figure 7.1).

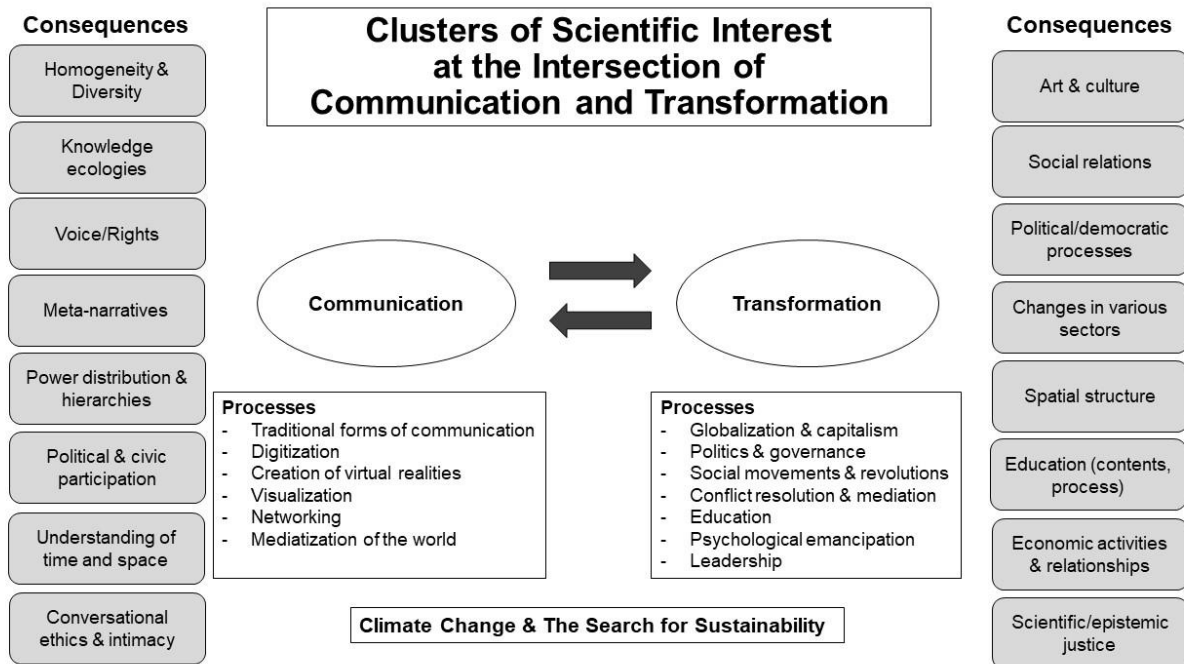


Figure 7.1 Clusters of Scientific Interest at the Intersection of Communication and Transformation (based on a Web of Science search, details described in text).

Among the papers that were most centrally focused on communication, key interests were in the roles and changes in traditional forms of communication, as well in modern changes in communication technologies such as digitization, the creation of virtual realities, powerful visualizations, internet networking, and the mediatization of the world. These papers then examined the transformative implications of these changes on society, including radical changes in the arts and culture, social relations, political processes (both positive and negative for democracy), spatial relationships and the experience of geographic distance. Others explored the implications for educational opportunities, processes and contents, economic relationships and processes, and the prospects of epistemic justice (all shown as topical clusters on the right-hand side of Figure 7.1).

By contrast, papers primarily focused on transformation examined transformational processes or transformative pathways such as globalization, capitalism, political and governance changes with far-reaching implications, social movements (including sometimes revolutionary movements), education and psychological emancipatory processes, the role of leadership, and conflict resolution and mediation. These papers intersected with communication in that they either explored the implications for communication or focused on the demands on communication, with a wide range of consequences for how a transforming and transformed society communicates. For example, many papers addressed the implications of transformation on the homogeneity or diversity of society and how this affects the ability to communicate. Others examined changing knowledge ecologies, and the changing landscape of “voice” and “rights”. Yet others focused on changing meta-narratives, changes in power relations, profound shifts in political and civic participation, people’s changing understanding of time and space, as well as changes in conversational ethics and the very idea of intimacy.

Overall, while clearly not exhaustive of what communication and transformation research addresses, this cursory review of the intersection of the two is revealing. The tenor of this broad body of work conveys a perpetual atmosphere of change, uncertainty and often insecurity, but also of possibilities of what might be or emerge and impossibilities, that is, of things lost, no longer tenable or viable. As such, the clusters of research interests do draw some very helpful outlines of what a climate change communication science and practice might need to embrace if it were to be of service to society going through profound change. For example, what are the possibilities of power (re)distribution as a result of profound climate change and associated policy changes? Which meta-narratives are empowering a livable future? How can art help open up the imagination of the possible? What does epistemic justice in the midst of an unprecedented societal transformation look like? It is notable, however, that as much as the field of climate change science has matured against a backdrop of worsening news from the climate science community, it has not much to offer in the way of well-established knowledge on how to communicate in a rapidly transforming world.

7.3 The Depth of Change Afoot and Yet to Come

The rapidly expanding literature on societal transformation in the context of climate change and other sustainability challenges offers many definitions of “transformation” that speak to the profundity of change involved, including changes in societal norms, narratives, structures, activities, identities, livelihoods and ways of being (Pichler *et al.* 2017; Few *et al.* 2017; Feola 2015; MCAlpine *et al.* 2015; O’Brien and Selboe 2015; Waddell *et al.* 2015; O’Brien 2012). Few, however, lay bare the experience of going through a transformative change (Berzonsky and Moser 2017).

I turn instead here to Ulrich Beck, who – in his last (posthumously published) book, *Metamorphosis of the World* (Beck 2016) – began to sketch some of the contours of living in a world of profound change. He in fact rejected the word ‘transformation’ to describe that world of change as he felt that (already overused) word did not sufficiently convey the radical and all-encompassing nature of the change that can be expected from climate change and other globalizing changes. Instead, he proposed the term ‘metamorphosis’, a word with deep etymological roots and cultural connotations (Textbox 7.1).

Textbox 7.1: Poetic Meditation on the Word ‘Transformation’

Transformation. Sea change. Seeing change. Shakespeare was the first to use the word “sea change” – a term already needed apparently in 1610. “The Tempest.” Sometimes it takes a storm... Because the shape of something really has to change. Interestingly enough a story, some say, about the struggle between rationality and magic. We may hope rationality will take us across, but is it big enough? Sometimes it may take violent intervention, sometimes innate forces that demand evolution from one state to another. Like the larva in a cocoon becoming butterfly. Metamorphosis. Change of form. From Morpheus – name of the god of dreams. Dreaming the “across, beyond” into being. To go beyond. To leave behind. To commit. Imagination. Endurance. Faith. Surrender. Loss. And novel gain.

S. Moser, Reflections on ‘transformation’, written for the Transformations conference, Oslo (June 2013)

Beck (2016) conceived of the profound changes ahead as “a radical transformation in which the old securities fall away and make place for something completely new” (p.3), as “an epochal change in worldview” (p.5), and as “something that happens; not a program” (p.18). Importantly, he viewed the coming metamorphosis as the logical consequence of the paradigms and systems that created climate change in the first place or, as he put it, “a global revolution of side effects [of the successes of modernity], that unfolds in the shadows of speechlessness” (p.29).

Without minimizing the immense suffering that climate change could bring, he surmised that the metamorphizing world would offer the possibility of emancipatory catastrophes (pp.115-118) by fundamentally challenging “our way of being in the world, thinking about the world, and imagining and doing politics” (p.20). In both the most nightmarish and most beneficial sense imaginable, he characterized the experience of going through a metamorphosis - at inconceivable speed - as one in which “what was utterly unthinkable yesterday, becomes possible and real today” (p.40).

It is in that profoundly transforming, metamorphizing world that communication will be tasked to offer motivation and direction, consolation and support, orientation and guidance. In the remainder of the text, I turn to these tasks and explore the possibilities of what a communication in support of and amidst a societal transformation may offer. To do so, I draw on the humanities and the thought leadership of public intellectuals – which, together, offer perceptive insights and touch a deeper note than mainstream social science.

7.4 The First Ten Tasks of (Climate) Communication Amidst a Societal Transformation

The list of ten tasks of a (climate) communication in support of and accompanying a societal transformation offered here emerged inductively from the synthesis of the literature cited below. Generally speaking, the ten categories are informed by common tasks expected of communication (for example, naming and framing; fostering constructive engagement), but also by a psychological and political reading of the transformation process itself (for example, deconstructing certainties, empathy). Finally, it is informed by the emerging needs I increasingly notice in communicating with North American and European audiences already experiencing, or awaking to the need for, profound change (for example, fostering hope, sense-making). While anecdotal evidence is emerging from across the world as to the profound challenges of transformative change at the frontlines of climate change, my own experience does not allow me to make any claims as to what those in lower-income, non-Westernized regions of the world might need or want from communication in their transformative contexts.

These caveats notwithstanding, the list of communicative tasks I offer below does not aim to be complete, nor is it to be viewed as a sequential or prioritized catalog of strategies. Rather, it is merely a conveniently round number of tasks to be fulfilled repeatedly in whatever sequence a particular situation demands (a quick overview is provided in Textbox 7.2). Each task is described in more detail below. For the purposes of this chapter, I call these tasks of a ‘transformative communication’.

Textbox 7.2: Ten Tasks of Communication Amidst a Societal Transformation – Overview

1. Naming and Framing the Depth, Scale, Nature and Outline of (Necessary) Change
2. Fostering the Transformative Imagination
3. Mirroring Change Empathetically
4. Distinguishing (and Deconstructing) Valuable (Un)Certainties
5. Orienting and Course-Correcting Toward the Difficult
6. Helping People Resist the Habit of Acquiescing to Going Numb
7. Sense- and Meaning-Making of Difficult Change through Story (not Facts)
8. Fostering Authentic and Radical Hope
9. Fostering Generative Engagement in Building Dignified Futures for All
10. Promoting and Actively Living a Public Love

A word should also be said about who the communicators and audiences of such communication might be. What is envisioned and explored here is quite different from more traditional forms of science communication or, more specifically, climate change communication or journalistic forms of communication. As I will argue later, the kind of communication proposed here is transformative work and itself transformational when compared to the often more formal and traditional forms and practices of communication in which someone is tasked with ‘communicating’ and someone else is positioned as ‘the audience’. In contrast to this, the communication envisioned here is often more dialogic, reciprocal and not primarily or necessarily educational or informative. Rather, it is a form of creating the future, opening up the space for a life worth having; it is social, psychological and cultural – and more often than not counter-cultural – in nature in that it questions, provokes, demands, gives, stops, listens, appreciates, reflects; it is self- and category-transcending and, as such, difficult work; it is actively embracing and grappling with deep change and, in doing so, courageous. While some may be gifted in this work, and many more inclined, it is not only carried out by a handful of specialized experts. It can and must be done by many. Some may become recognized as transformational leaders because of their skill in the work described below, but the radius of their influence may vary from a circle of friends to a company, from a township to a nation. To reach out, they may utilize any of the existing communication technologies, from the spoken and written word, to social and traditional media, and to others yet to be invented or rediscovered). But to succeed hinges more on the authenticity and integrity of those involved, and their courage and willingness to acknowledge not-knowing, than on the resources and means to reach the masses.

Transformative communication, as sketched out in the following (first) ten tasks, is thus not a luxury amidst, distraction from, or sideshow to, the material, practical work of transforming society to sustainability, but an essential part of that process. What might it entail?

7.4.1 Naming and Framing the Depth, Scale, Nature and Outline of (Necessary) Change

One critical early and probably never completed task of transformative communication is to name and frame the transformation before and around us. Something becomes more imaginable, more tangible, more doable if we can verbally “put our arms around” this amorphous and, in

many ways, unprecedented change. Many people from across a wide spectrum of societal arenas have begun to do so, and their reach needs to be expanded. There is no scientific evidence telling us which framings of a grand transformation are most resonant with most people. In fact, there is a risk, and some experiential evidence, that certain framings of transformative change evoke fear, such as widespread notions and popular interpretations of “collapse” and “apocalypse” (Diamond 2005; Pearson and Pearson 2012; Turner 2012; Scheffer 2016; Swyngedouw 2010; Foust and O’Shannon 2009; Hoggett 2011). They do so because they do not involve any desirable or enticing outcome or ‘ending’ of the transformative story.

There are alternative stories, however, that convey a narrative of necessary or inevitable decline followed by renaissance, or – as some would say – stories that follow the archetypal death-rebirth arc (Berzonsky and Moser 2017). Based largely on work done by depth psychologist Carol Berzonsky, we have a collection of various framings of that story (Berzonsky 2016). For example, the American Buddhist scholar and anti-nuclear activist, Joanna Macy, calls this transformation “The Great Turning”(Macy 2009); Australian depth psychologist, Sally Gillespie calls it a “descent in the time of climate change”(Gillespie 2009); philosopher and cultural historian, Rick Tarnas, believes this time is a “global rite of passage” (Tarnas 2001); similarly and echoing Beck, social historian, Barry Spector, examines this “mad” time of change through a mythological lens (Spector 2010); and the German climate scientists, Hans-Joachim Schellenhuber, while not framing the entire transformation, names modern society’s journey into unknown challenges, by pointing to the *terra quasi incognita* into which unmitigated climate change is hurling us (Schellenhuber 2009). The Danish anthropologist, Bjørn Thomassen, brings attention to that liminal time between the untenable present and the desired, but unknown future (Thomassen 2014). And American philosopher, Jonathan Lear, walks us through a radical transformation to describe how means, ends, and judgment and meaning-making about both transform in the course of fundamental change (Lear 2006).

These examples are not meant to be exhaustive. Rather, they are exemplary of the types of framings available that are capable of embracing the size and scope of the metamorphosis now underway. They also begin to outline the work of transformation, and as they are explored in greater depth, they provide a guard rail or mental map of that *terra quasi incognita*. Communicators can draw on them to help their audiences hold the immensity of what is unfolding without collapsing under its weight. Naming and framing it in this way is particularly crucial in the early stages of transformation when growing numbers of members of society experience the unease of profound change getting underway, but when many others still either deny or resist such change. As such, naming and framing the scope, scale and nature of transformative change is at once supportive and motivational, eye-opening and contributing to the changes underway.

7.4.2 Fostering the Transformative Imagination

One of the most difficult challenges for climate communicators has been to make the abstract and psychologically distant problem of climate change real and tangible in the here and now (Spence *et al.* 2012; McDonald *et al.* 2015; Jones *et al.* 2017). In my own work in communication and climate change adaptation with a wide variety of scientists and practitioners, I have found a persistent parallel difficulty, namely to imagine alternative futures, and in particular to dare to envision desirable futures, especially ones that break with current patterns of

living, being, land use and so on. Where communities have been able to envision and articulate a meaningful, worthy goal to work toward, energy is usually freed up to undertake the necessary hard work of moving toward it. Without an imagined worthwhile goal, little movement occurs – at least not prior to the moment when change becomes imposed by circumstance and thus inevitable.

There is a critical task for communicators and anyone facilitating public engagement related to climate change work to help individuals expand their horizons of what they think is possible. A variety of tools and processes are available to do so, ranging from visioning exercises (Ames 2001; Baker *et al.* 2017; Burch *et al.* 2013; Meadows 1994; Wiek and Iwaniec 2014), to scenario planning (Amer *et al.* 2013; Biggs *et al.* 2010; Marchais-Roubelat and Roubelat 2011; Ossewaarde 2017; Peterson *et al.* 2003; Tevis 2010), to raising “futures consciousness” (Sharpe 2013; Wilenius 2014; Kunseler *et al.* 2015; Adam and Groves 2011), to engaging all forms of art to free up imaginative powers and creativity (Raven 2017; Shein *et al.* 2015; Nurmis 2016), and more.

The work of the International Futures Forum may serve as a useful example of how the transformative imagination can be fostered. Sharpe (2013) suggests the work of imagination spans three horizons: (1) the current way of doing things; (2) the future/new way of doing things; and (3) the transition or transformation zone between them. Sharp and his colleagues offer facilitation approaches to engage each in depth, to explore, expand, and define transformative horizons. Their work also helps train the eye of participants on the edges (not the center) of society to identify and elevate innovative ideas.

Communicators can also help create dialogic forums in which those engaged discover not just each other’s preexisting ideas about what they think is possible (an important step, as different people have very different ideas about that), but they can be encouraged to push beyond those preexisting ideas to “the adjacent possible.” Both to motivate people to stretch beyond the familiar and comfortable and to anchor them through the difficulties involved in the often-lengthy transformative process, it is furthermore important to ground people in what they most deeply care about. These motivations are deeper than monetary gains, even deeper than status gains. They involve the deepest sources of meaning and they vary among individuals (love, spirituality, belonging, soul and so on). Making space and giving voice to these deeper human dimensions (through silence, listening, music, poetry, rituals, community, presence and other practices) helps to wake people up, motivate them, and support them in their processing of the losses and gains involved in deep change.

7.4.3 Mirroring Change Empathetically

A transformative communication must mirror the change that is occurring, explain the responses to that change, and enable people to participate in it constructively and effectively. What that means specifically cannot be detailed pro forma, given the multitude of situations, contexts and layers of transformation we may anticipate. (Although the framing and underlying understanding of transformation processes can provide critical guidance!) In any event, mirroring and explaining is not easy but will be aided if communication experts become allies and partners of transformation experts and actors. (Professionally, these worlds of expertise live rather side by side at present, leaving a gap of missed opportunities and mishaps between them!)

As a force of motivation and support through difficult times, transformative communication must gain far greater comfort with and fluency in the emotional experience of going through a transformative shift (Berzonsky and Moser 2017; Moser 2012; 2013; 2014). After all, deep change is – first and foremost – experienced and processed emotionally. There is fear, grief, anger, hope, resentment, regret, guilt, frustration and any number of other emotional responses as lives are as profoundly upended as Beck describes. Communication can help reflect back what these experiences are and, as such, support individuals’ reflexivity, processing and learning while countering tendencies of unguarded reactivity or a sense of overwhelm, hopelessness and apathy.

Importantly, communicators must expect traumatic experiences, especially among the poorer and marginalized groups of society. This includes those who are most directly exposed to climate change threats, have the least resources to protect themselves against them, or who cannot resiliently return to a prior status or even advance to a better situation (Bonanno 2004; Dominey-Howes 2015; Eriksen and Ditrich 2015; White 2015; Davidson 2016). This includes those who will lose their homes, their professional identities, or even their livelihoods in industries that will transform due to extensive mitigation and adaptation efforts.

Practically, this means that communicators must build their own capacities, and support others in building theirs, for dealing with strong emotions. The task is not to dramatize suffering or turn victims into exhibits, but – quite the opposite – to validate the emotional responses to change, explain how they are normal responses to extraordinary circumstances, and then to give space to people to support their processing of them, individually and together with others (Doppelt 2016). More than camera spotlights and news features, communicators of transformative change and those going through it (which may be one and the same) will need to create or seek out calm spaces and times for rejuvenation and healing.

7.4.4 Helping People Resist the Habit of Acquiescing to Going Numb

The American writer, Terry Tempest Williams, admitted once, “I cry every day, and not because I’m sad but because I feel.” She went on to explain, “I think in many ways that’s our most important task at this moment in time: to not avert our gaze, to not allow ourselves to be numb to the world. I think being numb is another form of suicide” (Williams 2014). She experienced it as “daunting” to witness countless “feeling” advocates for a better world to be heartbroken *and* continue to sing about the beauty of the world, all at once. Joanna Macy addresses just this heart-break of so many activists. Having dedicated decades of her life to offering a space for people to express their own and witness others’ feelings about the world so as to be reinvigorated in their dedication to the work of “The Great Turning,” she believes, “It is o.k. for our hearts to be broken over the world. What else are hearts for? There is great intelligence in that” (Macy 2016).

Communicators amidst a profound societal transformation must understand that while the world is breaking, hearts are breaking. People will be tempted to go numb to both, within themselves and in others, because experiencing or witnessing such deep emotion can be unbearable. This is why so many have written about apathy, numbness and “climate or disaster fatigue” (Kerr 2009: 926; see also Nordhaus and Shellenberger 2009; Cafaro 2005; Lertzman 2008; Slater 2008)). Moreover, when long-suppressed feelings are freed and old habits are broken, intense energies are being set free. Communicators increasingly acquainted with and better prepared for the emotional responses to (climate) change, can help to hold spaces for this release – a counter-

cultural act in service to transformation – and direct that emotional energy toward contributing constructively toward a safer and more desirable future (emotion as E-motion or energy-in-motion).

Importantly, because of the counter-cultural and powerful nature of working with intense emotions unleashed by transformative forces, communicators must help create safe spaces, foster curiosity rather than allow judgment, and create opportunities for people to connect so that they support each other throughout the process.

7.4.5 Distinguishing (and Deconstructing) Valuable (Un)certainities

Another way in which communicators can serve the transformation process constructively is to actively engage both certainties and uncertainties. The issue here is not, however, merely an extension of the long-standing interest in the (science and climate change) communication field of how to communicate uncertainties (Webster 2003; Patt and Dessai 2005; National Research Council 2016; Marx *et al.* 2007; Morgan *et al.* 2009; Pigeon and Fishhoff 2011). Rather, in the journey into *terra quasi incognita*, uncertainty is the fundamental condition for being, while alleged certainties can be a hinderance to reckoning with what was and fully exploring the possibilities of what may be.

Thus, a task of transformative communication is to foster curiosity rather than reinforce biases and simplistic answers. This may entail asking more and better questions, and giving fewer answers. It might well mean getting away from the widespread practice of “messaging”, and instead become far better at deep listening. Interestingly, asking questions and listening, and making room for not-knowing and silence, are not the traditional strongholds of the communication field (Moser 2016).

If Ulrich Beck is correct, the metamorphosis that has begun, and that climate change will accelerate, will force us to ask not just what we can do *against* climate change, but what climate change will do *to* (and maybe even *for*) us (2016:36-39). It will place pressures not only on our institutional structures, but on our ways of thinking, being and doing. As he argues, “the main source of climate pessimism lies in a generalized incapacity, and/or unwillingness, to rethink fundamental questions of social and political order in the age of global risks” (2016:37). Engaging these fundamental questions inevitably throws us into a place of “not-knowing.” It demands deep reckoning with what has long been problematic with the many dimensions of our socially, environmentally and economically unsustainable ways of being without having immediate, alternative answers.

Transformative communication must help hold a space for and facilitate these difficult conversations, rather than provide or propagate superficial or easy answers. The task is not to be agnostic, but to hold a critical stance toward any prematurely offered compass for moving forward, and to help people (re)learn how to critically examine the directions advanced by others.

7.4.6 Orienting and Course-Correcting Toward the Difficult

One certainty to live by was offered more than 100 years ago by the German poet, Rainer Maria Rilke, who said, “We know little, but that we must trust in what is difficult is a certainty that will

never abandon us”. In his seventh *Letter to a Young Poet*, written in 1904, he maintained, “Most people have (with the help of convention) oriented their solutions toward the easy, and often to the easiest of the easy, and yet it is clear, that we must trust in that which is difficult” (Rilke 2000).

What would this mean for communicators? It would, at the very least, demand that we model and stimulate (self-)reflection about our role and participation in the transforming world. It would further demand that we speak that which is uncomfortable to say and help make it possible for others to participate in difficult dialogues (Moser and Berzonsky 2015). It would mean to repeatedly bring the focus to that which is unjust, and put our finger on that which is at risk of staying invisible. We would also need to confront fabricated un-knowing about climate risks. We would need to listen for that which is un-said and help give voice to those who are silenced. And we would need to insist on deep, systemic solutions, not merely participate in the chorus that celebrates quick fixes and then turns away to more pleasant topics.

Between the tasks already laid out and the one added here, it becomes clear that transformative communication would need to engage in a constant balancing act of providing comfort and making people uncomfortable, of offering reprieve and causing trouble. It would need to be at the forefront of what Donna Haraway calls “staying with the trouble” (Haraway 2016) – a complex concept involving profound questioning, holding still in not-knowing and becoming practiced in undoing that which has brought us the present slate of existential threats (Moser and Berzonsky 2015).

7.4.7 Sense- and Meaning-Making of Difficult Change Through Story (not Facts)

The tasks proposed so far make clear that transformative (climate change) communication is not a special case of science communication; nor is it a special case of communicating with the media or advocacy or a hand-maiden to a well-designed behavior change program. All those forms and purposes of communication have their place and importance, but fail to meet the demands of a transformation process.

Rather, much of the task of transformative communication instead is sense- and meaning-making amidst a change that we cannot fully see, comprehend, or control and whose outcome is entirely unpredictable – at least from here. This is why many of those cited in the discussion on naming and framing (Section 4.1) draw on mythology and archetypes.

The American physician and writer, Rachel Remen, is one among many (Bontje and Slinger 2017; Brown 2017; Malone *et al.* 2017; Veland *et al.* 2018) who argues for the importance of story. Fully acknowledging the factual world, she says, “the facts are the bones of the story... [But] the important knowledge is passed through stories. It’s what holds a culture together. ... And so story, and not facts, are the way the world is made up” (Remen 2010).

Story is also the way to hold together a world that seems to (or actually does) disassemble. But what then are the stories needed amidst a transformation? Communicators might tell stories not about heroes who succeed in their conquest of others, but about protagonists of (self-)transformation; they might tell stories that delineate the search for or spread the word about known pathways of transformation (O’Neill *et al.* 2017; Werbeloff *et al.* 2016; Westley *et al.* 2011; Roggema *et al.* 2012; Dahle 2007; Kapoor 2007; Tippett 2016). Other stories people will need to hear and learn from are stories – and examples – of endings and renewal (Berzonsky and

Moser 2017), of difficulties overcome, of redemption, and positive, dignified, and just solutions. Importantly, as many will wish to tell stories of comparatively painless solutions, communication in support of transformative change must help discern whether these stories actually withstand scrutiny, and where not, to resist the salesmanship and course-correct toward the difficult, but possible, as Rilke suggests (Section 4.6).

7.4.8 Fostering Authentic and Radical Hope

The difficult, however, will have few takers if there is not also hope. In a world at once falling apart and reconstituting in ways we do not yet know, cannot see, or maybe do not like, heartbreak and despair, and resulting numbness, will be among the greatest challenges for climate change communicators. Already, American journalist, writer and public radio host, Krista Tippett, argues, “the discourse of our everyday lives tends toward despair” (Tippett 2016:4). Transformative changes – maybe to the better and possibly to the worse – will require us to hold the tension between what is and what could be, and from it generate a reliable, authentic hope (Lear 2006; Sharpe 2013; Stoknes 2015; Macy and Johnstone 2012; Solnit 2004; Bell 2009; Orr 2011; Ojala 2012; Hathaway 2017).

Echoing many recent writers on the topic, Tippett maintains that hope is “not feeling, but choice and practice, becoming spiritual muscle memory, to go through life as it is, not as we wish it to be” (2016:233). She suggests “hope is brokenhearted on the way to becoming wholehearted. Hope is a function of struggle” (2016:251). Clearly, such wisdom challenges the shaky promises of wishful thinking for happy endings and easy outcomes. Rather it suggests that transformative communication must set an expectation of difficulty to build up the willingness and capacity to be vulnerable. It suggests that communicators wishing to support transformative change must remind their audiences (and likely themselves) that hope is daily work, hard-won and probably never fully enshrined and protected against the specter of loss and seeming futility. Surely, it is not something “given” to others, once and for all, but more safely shored up in connection with others. It is in this daily struggle for hope that communicators will find more in the wisdom traditions and the humanities (for example, literature, theology, history) than in the vaults of social science research.

7.4.9 Fostering Generative Engagement in Building Dignified Futures for All

If authentic and radical hope equips us to face the world, then communicators must next play a role in enabling effective, constructive engagement in building a world in which we can live safe and dignified lives. To do so, we need each other. But how do we reach and engage each other constructively after years, decades, and sometimes lifetimes of being everything but unified behind a cause?

Being professionally dedicated to being in conversation with others no matter how large the distance to bridge, Tippett claims, “We hunger, and are ready, for a fresh language to meet each other” (2016:x). If that is true, what responsibility do communicators have in helping this fresh meeting to occur? What language do we choose to open doors and minds, rather than slam them shut? How do we weed out the subtle and not-so-subtle judgments in our writing and speeches to and about those who think differently about climate change and possible solutions? Clearly, we have made much progress understanding “denialists” and “climate skeptics” (Jacques *et al.* 2008;

Dunlap and McCright 2011; Norgaard 2011; Dunlap and Jaques 2013; Medimorec and Pennycook 2015; McCright *et al.* 2016), but – if we are honest – over the course of 20 years of climate change communication, positions have hardened; the gulf between opposing viewpoints is rarely if ever bridged. A transformative communication would need to help us heal those rifts. Or, as the philosopher, Kwame Anthony Appiah, once put it: help us “sidle up to difference” (Appiah 2011).

Maybe it is more important, however, to go beyond denialism and a focus on those who find it hard to embrace the climate change reality anyway. Transformative communication must find ways to touch people’s deep desire to want to be good. “Climate believers” or not, transformation will place large demands on all of us, and connecting with that deep motivation will help us remain committed to undertaking the necessary changes in the face of great difficulty. Communicators can also help people to step out of fear and into care for themselves and others as we move into growing difficulties and disruptions. And finally, transformative communication must foster risk readiness, i.e., a willingness to step not into careless action but instead out of the familiar and onto the transformative path. It must learn to convey – with conviction – that doing so is ennobling not because of the promise of success, but because of the pledge to the greater good. There is nothing easy about this, yet “we are made by that which could break us” (Tippett 2016:13).

7.4.10 Promoting and Actively Living a Public Love

None of this can be accomplished alone or from a place of adversity. In fact, (climate) communication itself must transform and review and correct any past communication that has hardened societal divisions. It must embody and model a communication that comes from a profound commitment to a *common* future. Promoting and actively embodying such a “public love” would mean communicating in a way that creates a community-of-solidarity, one that can face the challenges of transformation together.

Promoting and actively living such a public love would entail helping to define a species “I” and fostering constructive deliberation about the meaning of a collective “we.” Against the legacies of past adversities and systemic divisions, biases and injustices, this is an extraordinarily difficult task. Communicators would need to learn from any past experience of overcoming hardened divisions, not to wipe out difference – an impossible and undesirable goal – but to find grounds on which to stand shoulder to shoulder against unfavorable odds for survival and well-being. Living a public love would place those facing the greatest risks with the fewest means in the center of that community of solidarity. It would help community members to learn to go through transformation with an open hand, i.e., to approach each other from a stance of giving instead of taking; from a place of gifting instead of expecting. The transformation gearing up to engulf us demands – if we wish to survive it – that we engage in conversation and dialog instead of verbal or physical attacks; that we make lasting connections rather than launch persuasion campaigns; and that we work to embody in words and deeds that which we wish to become.

This task, maybe more than all others, may seem lofty and unspecific. And yet, we occasionally get to observe it when someone practices it. Such moments are notable and memorable for the rupture in cultural norms that they constitute. Typically, they begin or are made up of simply stopping whatever we have done to date. Stop talking and start listening; stop defending and start hearing; stop taking and start giving; stop pursuing and start holding still; stop striving for more

and start being with less or with loss; stop guarding the “I” and start making space for “more than I,” which over time may become “we.”

7.5 Conclusion: The (Counter-)Cultural Work of Transformation

The tasks outlined in this chapter tend to – and maybe should – make us uncomfortable. To start, they entail work that many climate change communicators are yet unfamiliar with and communication science does not give us great confidence in “best practices.” There are no theories to guide the way, there is no laboratory experimentation that could handle the complexity of transformative change. Communication studies have a history of not looking longitudinally at change processes and the role of communication within them (Moser 2016). And if as communication researchers we know little more than a non-researcher, then who are we? Who is a communication expert in a transformation?

Similarly, if there is little guidance from science, then where – as practicing communicators – do we begin? How do we launch a conversation about transformation when overwhelmed and faced with apathy? What compass do we go by and how do we hold all the tensions illustrated above and not become paralyzed along with our audiences? The main challenges are set out in Table 7.2.

Table 7.2: Challenges Posed by Transformation to Communication Research and Praxis

Communication Research	Communication Praxis
<ul style="list-style-type: none"> • No theories • No singularly responsible discipline • No experimentation • Isolating influential factors is feasible, but untenable • Little precedence with longitudinal studies of long-term change • Transformation may well happen faster than scientific progress • What kind of science? • Who is “an expert”? 	<ul style="list-style-type: none"> • Where are the opportunities for getting started if caught between day-to-day pressures and disinterest? • Where is the compass, where are the visions amidst increasing crises? • Need to fulfill the expectations of the past and of the future • To be a pioneer without much guidance from experience or science • Who then are the “managers,” the “guides,” and the leaders?

Maybe, the greatest discomfort, however, comes from the fact that – regardless of which role we hold – there will be no “transformation spectators” or “bystanders” in a rapidly transforming world. Given the global nature, rapidity and profundity that climate change and associated global changes to the land, life support systems, economic activities and so on it will bring to every part of the world (albeit in geographically contextualized ways), none of us will escape witnessing, experiencing and being impacted by these transformative changes. All of us will be implicated

and affected somehow, even if we simultaneously wish to study or practice communicating about them. This has important implications for research and practice.

First, whether we are researchers or practitioners, we must build our own capacities and skills to meet the psychological challenges associated with climate change and society's response to it. This is inward and interpersonal work, often essential so we can meet a challenging situation from deeper grounding and a more centered place of self-knowledge and ongoing reflexivity. Next, we must identify and tend opportunities – wherever they present themselves – for deeper engagement. A keynote address can become a dialogue; a classroom can become a meeting; a townhall can become a visioning exercise; a circle of strangers can become a council of elders; a heated debate can turn into abiding curiosity. We should not be experts in climate science or communication science first, but human first, and connect with others as human beings. Furthermore, we must realize that climate change is not the only force of transformation, and none of us will experience the future merely as a climate change-impacted future. Rather, the experience will be of multiple, coalescing transformations – climatic, social, economic, technological, environmental, cultural and more. Communicators interested in supporting the transformative work of society must be curious and seek to understand these connections rather than try to artificially isolate climate change from other types of changes. How do these coalescing changes and crises shape the understanding of those involved? How is the totality of changes constellated and experienced in people's lives? Where are the opportunities and openings when everything seems to close in on people?

We must recognize that in these kinds of coalescing transformations lies an opportunity to break out of the climate change trap. In lived reality, not everything is about climate change per se or foremost, but it is part of a lived reality that is dynamic, profound, disturbing, exhilarating and sometimes devastating. And, of course, therein also lies the challenge of rethinking our organizations' or professions' roles and missions. If we are not just *climate* communicators or *climate* scientists or *climate* activists, but members of a community undergoing complex transformations, then what is important? Who are we then? What do we most want, together? And thus, what is most needed of us now? To consider these questions deeply, and to reckon with the challenges such reflection will undoubtedly surface, is part of the work that communicators themselves must do.

Communication of and for societal transformation in the face of climatic and related global changes is thus an unprecedented challenge. It demands that we ask and be in dialogue about where we – as individuals, as communities, as a global “we” and as a species – are going and where we want or should be going. It thus requires that we grapple with how we got here, what cultural norms we have followed (and maybe still follow), what practices and interactions we have favored over alternatives, and whether the dominant norms and practices will get us safely to a sustainable future, for ourselves and all, human and non-human. At our best, we would initiate, facilitate, and take an active role in difficult, yet invigorating, dialogues about past, present and future, about direction, purpose, and meaning, about losses, gains and treasures to behold. We would help each other navigate the wild seas of questions, impatience, frustration and yearning – not because any of us have the answers, but because we are committed to the necessary work of transformation.

This chapter is all but the beginning of a conversation about this necessary work. Communicators, scientists, activists and other change agents must engage in it. This conversation and the first ten tasks of transformative communication presented here are not just part of, but at

the very heart of, the work society must undertake to navigate the metamorphosis now underway. Where it will lead is unknowable from here. Rather, as Ulrich Beck argued, “the emergence of a compass for the 21st century ... is the result of cultural work” (Beck 2016:118). A transformative communication is essential to discovering that compass.

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adaptation
apathy
apocalypse
archetype
certainty, -ies
climate change
climate extremes
collapse
communication
courage
cultural work
curiosity
denial
dialogue
emotion(s)
empathy
engagement
extreme events
fatigue
framing
future consciousness
geoengineering
greenhouse gas emission reductions
hope (radical, authentic)
hopelessness
imagination
impossibilities
insecurity
love
meaning(-making)
metamorphosis
(meta-)narrative
mirroring
mitigation
motivation
Paris Accord
possibility, -ies
reflexivity
story
transformation
transformative communication
transformative imperative
trauma
uncertainty, -ies

vision(-ing)
voice
worldview