16 Translational Futures

Notes on Ecology and Translation from the COVID-19 Crisis

Marta Arnaldi

In a Region of Unlikeness

I would like to preface this chapter with an invitation to enter the "region of unlikeness", a space in which, in the words of Antonio Damasio (2017, 99), "each of us, each cell in us, and every other cell [coexist as if we] were part of one single, gigantic, supertentacular organism, the one and only organism that began 3.8 billion years ago and still keeps going". Such a region exists thanks to the capacity of living organisms, including humans, animals and plants, to regulate their own internal environment whilst also responding to external stimuli, thus being at once autonomous and dependent upon one another. These subtle processes of life regulation, also referred to as homeostasis, guarantee dynamics of self-protection and exchange between the self and the other, the familiar and the foreign, and enable not just the survival of species but also their flourishing. Damasio pushes this vision further when he states that homeostasis, far from being simply a biochemical process, is a complex form of communication mediated by culturally inflected perceptions and emotions. The many dimensions of culture—arts, philosophical enquiry, religious beliefs, justice, economical institutions, technology and, crucially, science—require "feeling a situation of actual or anticipated homeostatic decline (for example, pain, suffering, dire need, threat, loss) or of potential homeostatic benefit (for example, a rewarding outcome)" (57). Damasio adds that "it is not possible to imagine the origin of the responses that became medicine or any of the principal artistic manifestations outside an affective [interpersonal] context" (399). Through the prism of interconnectedness, we come to realise that "the sick patient, the abandoned lover, the wounded warrior, and the troubadour in love were able to feel"—feeling being not just an inward experience but also the need to engage with, and respond to, alterity (399). In its material (the body) and immaterial (culture, emotions) forms, life is preserved and regulated by means of homeostatic communication, interspecies relation, and boundary crossing (see Arnaldi 2022). As I shall argue in this chapter, diversity—a key feature of our biological and cultural lives—ensures healthy, sustainable interactions across linguistic, cultural, biological and

DOI: 10.4324/9781003267843-19

disciplinary ecosystems, both at times of crisis and beyond. In this sense, translation as a "body of ideas and set of practices" can be seen as an instrument of life conservation and the furthering of life in that it enables us to communicate across realms of difference, where preservation is at risk and multiplicity challenged (Cronin 2017, 1).

COVID-19: Towards a Translational Response

I conceive of the region of unlikeness as a "translation zone" (Apter 2006), one in which we can cultivate biological and cultural diversity on the one hand, and explore notions of translation in new, ecological ways on the other. The terms *translation* and *ecology* are used here in a broad, relational sense which recognises the "fundamental interdependence of all phenomena and the fact that, as individuals and societies, we are all embedded in (and ultimately dependent on) the cyclical processes of nature" (Capra and Luisi 2014, 12). Translation and ecology are similarly preoccupied with questions of human, non-human and interspecies connectivity (and vulnerability) in ways that transcend mainstream understandings of linguistic, cultural and biological borders. Just as ecology is not simply about "global warming, recycling and solar power" (Morton 2010, 2), translation is a capacious concept that is not to be limited to practices of interlinguistic communication and cultural exchange. Some branches of environmental studies and translation studies have explored ecology's and translation's contributions to our ways of knowing (epistemology) and interpreting (hermeneutics) the complexity of life, especially in the light of the interdisciplinary intersections between the humanities and science (e.g. Capra 2021; Robinson 2017; Marais 2019). Yet, apart from Michael Cronin's (2017) pioneering definition of the translation–ecology nexus, translation's and ecology's theoretical configurations have surprisingly been kept apart, the two disciplines having produced parallel but largely unconnected systems of thought.

By building upon a recent body of studies that has stressed the epistemic fertility of both ecology (Morton 2010) and translation (Engebretsen et al. 2020), this chapter singles out ecology's and translation's intersecting meanings to bring them to the point of convergence. It asks what impact the semantic collision of these seemingly distant terms may have on scholarship and policy in the context of the current coronavirus pandemic, thus bringing under a unified lens some of the interrelated, translational aspects, and consequences, of the COVID-19 crisis as explored in this volume. "COVID-19 interconnectedness", which has been defined as a problematic conflation of health inequity, environmental injustice, economic insecurity and collective trauma (Watson et al. 2020), is examined here not simply as a fitting case study of translational communication across spheres of difference (biological, cultural, linguistic etc.). The coronavirus experience—multifactorial by nature—offers a theoretical paradigm to study the "translationality" or "translation-ness" of phenomena in that it points

vividly to the intersections of ecocriticism, public health and translation (Marais 2019, 7). Its composite fabric challenges the disciplinary divisions that have led to sectorial understandings of the world. Having started as a medical emergency (an outbreak of pneumonia of unknown origin), in a specific place (the city of Wuhan in the Hubei province of China) and at a definite time (December 2019), the coronavirus disease mutated into an ongoing economic, environmental and racial crisis of global concern, one that triggered chains of mutually implicated issues that are as epistemological as they are epidemiological (Arnaldi, Engebretsen and Forsdick 2022). To a large extent, the COVID-19 crisis is one of perception in that it requires us, on the one hand, to seek a radical shift in our thinking and values, and, on the other, to overcome the outdated, unsustainable worldviews to which scientific, social and political institutions have so far subscribed (Capra and Luisi 2014, xi).

Placed at the end of this volume's translational investigations into the coronavirus crisis, this chapter serves as an invitation to reflect upon and operate this shift. It intends to analyse translation's ecological possibilities (or, if one prefers, ecology's translational tenets) in three distinct yet intertwined problem areas connected with, and elicited by, the COVID-19 crisis. These areas are health, the environment and ethnicity. I propose that translation theory, especially its most radical branches (translational medical humanities, eco-translation and the sociology of translation, especially actor-network theory), can be used as an interdisciplinary, cross-epistemic tool to examine, tackle and respond to the multilayered crisis we are living through. An honest and committed evaluation of the potential and limits of translation theory—in its broad, ecological sense—can help us (1) untangle the complexities of this crisis and (2) build a healthier, sustainable and more just society in which we respect the human as well as the non-human Other. I suggest that an ecology of translation may provide us with paradigms of crisis management, interdisciplinary thinking and hospitality, which—while yet to be placed under the same lens of scrutiny—can show us ways out of the coronavirus impasse. These paradigms epitomise what I call deep translation, that is a translational method of approaching and reimagining complex societal issues, integrating disciplinary perspectives, and generating new knowledge.

This chapter consists of three parts. First, I outline the reasons why I see translation and ecology as comparable discourses. Second, I introduce the concept of deep translation as an ecological construct. Finally, I offer some reflections on the uses and limitations of deep translation across the three problem areas outlined. I am conscious that these preliminary considerations require further research before suggesting viable solutions and answers; yet, I hope that they may at least raise questions that challenge our way of conceiving of, and separating, policy and research, the humanities and science, the relative and the objective during and after the coronavirus crisis.

Tradosphere: The Proximity of Ecology and Translation

Translation theory and ecological thinking tackle, in similar ways, the question of communication across realms of difference. To date, the most accomplished study of the linkage between translation and ecology is Michael Cronin's *Eco-Translation: Translation and Ecology in the Age of the Anthropocene* (2017), by which the present study is profoundly inspired. By drawing upon Michel Serres's intuition that "all forms of being have in common that they receive, process, store and emit information", Cronin comes to the conclusion that "exploring what is held in common becomes a strategy of survival" (2017, 69–70). He demonstrates that "the age of the Anthropocene is of necessity a Translation Age as it requires all the skills translators can master to restore a degree of intelligibility to our damaged ecosystems"; in this age, Cronin adds, translation helps us make sense of the different forms of communication "implied by the multiple connections between the organic and the inorganic" (5, 7). Yet, translation's and ecology's attempts at engaging with multiplicity do not entail an "annihilation of difference" (5). Just as translation is key to the understanding and disclosure of the world, a core value of ecophilosophy is "to make humans alive to the sheer diversity of the living and the non-living" (7). The result of Cronin's eco-translational vision is a new understanding of the world in which we find ourselves living. We coexist "always and everywhere in what might be termed a tradosphere", which Cronin defines as "the sum of all translation systems on the planet, all the ways in which information circulates between living and non-living organisms and is translated into a language or a code that can be processed or understood by the receiving entity" (71). Cronin goes on to suggest that "in communicating with others, in trying to understand what it is an organism or non-sentient object is expressing, the point is not anthropomorphic projection but communication across and in the full knowledge of radical difference" (71). From this viewpoint, translation serves the purposes of ecological as well as linguistic and cultural survival. In translation, all entities—not only texts—coexist in ways that acknowledge not just uniqueness, individuality and the past, but also states of reproduction, replication and multiplicity, the necessity of relationality, as well as the promise of an afterlife, which we may call the future.

In *A (Bio)Semiotic Theory of Translation: The Emergence of Social-Cultural Reality*, Kobus Marais builds on Cronin's argument to challenge translation studies to an "ecological awareness" (2019, 118). He contends that translation, rather than simply aiming at transferring meaning across languages and cultures, is itself concerned with the production of meaning, the creation of culture, and the evolution of the natural world. Translation, "the process that creates relationships between existing meanings [or semiotic systems], thereby creating new meanings [and semiotic systems]", is a form of relational semiology, i.e. a way of communicating across different ecosystems (123). Marais specifies that "all

living organisms participate in this process of translating meaning", thus confronting the anthropocentric, "lingual bias" that has vexed translation studies since its beginnings (125). Marais' intervention, which is deeply informed by complexity theory, brings a further layer of conceptualisation to my eco-translational investigation of the COVID-19 crisis (Marais and Meylaerts 2019; Capra and Luisi 2014). It is this line of thought that I explore and extend here.

A second aspect of what I call the translation–ecology proximity is their commitment to deal with margins (Bhabha 1994). This explains the flourishing of radical, unorthodox disciplines connected with these fields, from ecofeminism (Mies et al. 2014) to postcolonial translation (Bassnett and Trivedi 1999). These fields encourage a perspectival shift from the centre to the peripheries and from the conventional to the innovative, thus challenging our worldviews and ways of producing knowledge. Again, what these different approaches have in common is a similar preoccupation with, and understanding of, identity as a fluid construct, one that is subjected to the changes of the self as much as to the encounter with the Other. A translational existence is, by nature, ecological, feminist, postcolonial and posthuman in that it implies the many interactions with the multiple others that coexist on this planet (and beyond), including those interactions that happen outside the remit of a common, understandable language (see Braidotti 2013). Since the encounter with alterity can often represent a risk, as immunology teaches us, the self may end up segregating itself rather than opening up to the Other, with the result that vulnerable groups, such as women, migrants, children, the sick, the animals and so on, are marginalised further and further. Ecology and translation offer ways of rethinking diversity in complex terms, since encountering the human and non-human Other presents us not just with the thrill of life's multiple patterns but also with potential forms of discrimination, xenophobia, lack of consideration and risks.

Planetary interconnectedness reveals the third manner in which the translational and the ecological imaginations intersect. I refer here to the idea of system. In *The Systems View of Life: A Unifying Vision* (2014), Fritjof Capra and Pier Luigi Luisi describe two competing models of practising science and seeing the world: the mechanistic and the holistic. Even though contemporary science still oscillates between these two worldviews, an agreement has been reached on the basis that the universe is not a "machine composed of elementary building blocks" which can be examined, recomposed and/or fixed through linear processes or by means of a purely quantitative logic (mechanistic worldview) (2014, xi). New emphasis has been placed on qualitative notions of "complexity, networks, and patterns of organization", the material world (to which our bodies belong) being a "network of inseparable patterns of relationships" as well as a "living, self-regulating system" (xi). This conception of life implies a kind of relational thinking—"thinking in terms of relationships, patterns and contexts"—which is known as

"systemic thinking", "systems thinking" or, to use Capra and Luisi's definition, "the systems view of life" (2014, xii).

In outlining this worldview, Capra and Luisi wish for an epistemic shift in our perceptions, thinking and values. The model they propose does not dismiss the quantitative and the sectorial but rather aspires to strike a "dynamic, [homeostatic] balance" between self-assertion and integration, analysis and synthesis, the linear and the nonlinear, competition and cooperation, quantity and quality, and domination and partnership (13). By following a remarkably similar agenda, the sociology of translation, especially actor-network theory (Callon and Latour 1981) and polysystem theory (Even-Zohar 1990), describes the relational nature of all phenomena, from interpersonal interactions to the production and circulation of literature, and from political negotiations to the evolution of socio-cultural life. In actor-network theory, "the actor does not refer to an individual agent, but rather to an entity whose existence depends upon their network of alliances within a shifting, heterogenous and expansive relational field" (Barry 2013, 414). From this perspective, translation always implies modification in that "the identity of an actor necessarily mutates as it enters into, or is enrolled and mobilised into, a field of relations with other entities" (414). It also implies the exercise of power since the spectres of dominance and hierarchy always loom when two or more entities enter into contact with one another. As actor-network theorists Michel Callon and Bruno Latour put it, translation refers to "all the negotiations, intrigues, calculations, acts of persuasion and violence, thanks to which an actor or force takes, or causes to be conferred on itself, authority to speak or act on behalf of another act or force" (1981, 279). Translation studies scholars, including Kobus Marais (2019) and Maria Tymoczko (2019), have recently investigated the implications of an "epistemology of complexity" for translation practice and theory (Marais and Meylaerts 2019, 3). According to Marais and Meylaerts, "translation studies' models can deal with parts and wholes, but they cannot deal with complexity and paradox" (3). They go on, saying that

> analysis should be focused not on parts but on the relationships and connections between parts and between parts and wholes. … This new kind of science, which is able to study both relationships and things, should thus also be able to synthesise and not only to analyse.
>
> (10)

This attentiveness towards dynamics of interaction, integration, domination and exchange is key to both translation's and ecology's theoretical imageries, as I have suggested here.

The fourth point of convergence between the translational and the ecological is the shared, interdisciplinary design aimed at addressing societal issues in a holistic fashion. Just as environmental studies combines views from the physical sciences, economics, the humanities and the social sciences

to tackle these issues (e.g., Oberg 2011), translation studies does so by integrating principles from domains such as comparative literature, linguistics, history, philology, philosophy, sociology, computer science, psychology and medicine. Translation and ecology are not the only interdisciplines concerned with the well-being of the individual and the planet. However, quite distinctively, they consider this well-being from a single, unified perspective. Translationally and ecologically inflected paradigms, in policy as well as in research, offer deep, comprehensive and functional modes of reflection and action when it comes to the handling of complex, multi-layered crises.

Deep Translation

I have not used the adjective *deep* accidentally. The expression *deep ecology*, which refers to a concept that is as well-established as it is contested, was coined by the Norwegian philosopher Arne Naess in his 1973 article "The Shallow and the Deep, Long-Range Ecology Movements". In it, Naess makes a distinction between shallow and deep ecology with the aim of capturing the intricate network of interdependencies between organic and inorganic life (see Devall and Sessions 1985). Whereas shallow ecology is human-centred and biologically construed, deep ecology "does not separate humans—or anything else—from the natural environment", in an attempt to view humans (including their culture and values, not just their physiology) "as just one particular strand in the web of life" (Capra and Luisi 2014, 12). Naess's definition of deep ecology put forward a holistic vision of nature as culture, and vice versa, which was to complement contemporary views within ecophilosophy (e.g., Bhaskar, Naess and Høyer 2012), translation studies (Marais and Meylaerts 2019) and systems thinking (Capra and Luisi 2014). At the same time, when taken to its extremes, the concept of deep ecology has elicited the development of ecofundamentalist attitudes (Hannesson 2014) whereby interspecies relatedness has become a discourse of debasement (humans having lost their humanity) rather than a form of justice (see Cronin 2017, 74–75). Even though this chapter makes use of deep ecology's holistic meaning and, equally, a discussion on this concept's problematic reception falls outside the scope of this study, it is important to acknowledge the multiple uses of this expression, its problematic reception as well as its limitations, in line with the sense of complexity sought in this chapter.

By coining the expression *deep translation*, I introduce a way of conceiving of translation that parallels, complements and extends Naess's distinction between shallow and deep ecology. Far from referring exclusively to the linguistic and cultural transfer of meaning from one language and culture to other languages and cultures, deep translation is a novel epistemology emerging from the cross-fertilisation of the many subfields composing translation studies: translational medical humanities, eco-translation, the sociology of translation, the history of translation, postcolonial translation studies,

translation and gender, translation and migration, translation and ethics, and translation and emotions (also known as the psychology of translation). The translational energy released as a result of this disciplinary crossing is more than the sum of each subfield's energetic contribution. This epistemic configuration is also ignited by contact with the related disciplines of comparative literature, emergency linguistics, and knowledge translation, which interact with, and inform, the majority of the subfields mentioned above (see, for example, the interplay at work between eco-translation and disaster linguistics in crisis communication). Deep translation's design and purposes evoke those of deep ecology in that they converge in the offering of sustainable, post-anthropocentric solutions to the complex challenges of today's society. Concurrently, deep translation contributes to the emergence of a complex, non-linear culture that "subverts traditional binary oppositions such as universal/particular, local/global, mind/body, as well as source/target, original/translation, monolingual/multilingual", in the spirit of radicality and futurity that have animated this volume (Marais and Meylaerts 2019, 8).

As suggested by Kobus Marais's theoretical resetting of translation, this is not the first attempt at devising a holistic understanding of translation as a science-humanities interdiscipline aimed at the analysis of complex systems. From 2017 to 2020, a group of researchers led by Eivind Engebretsen and John Ødemark, based at the University of Oslo, worked on a project exploring notions of translation from the humanities and medical sciences in a genealogical, comparative and theoretical fashion. This groundbreaking project, named *The Body in Translation: Historicising and Reinventing Medical Humanities and Knowledge Translation*, laid the foundations for translational medical humanities as a cross-disciplinary field (Engebretsen et al. 2020).[1] Whereas this programme of investigation had a firm medical focus, Cronin's eco-translational programme interpolates concepts of translation from the humanities and environmental studies, thus creating channels of dialogue across the humanities, the natural sciences and the social sciences, including economics (Cronin 2017). Another translational field, the psychology of translation examines the psycho-physical involvement of the translator in their practice (Hubscher-Davidson 2017), but so far it has not regarded translation as a psycho-physical discipline in its own right, one that would allow us to study body–mind interactions comparatively and transversally. This path of enquiry has been partly explored in literary and critical feminist studies by Clive Scott (2015) and Julia Kristeva (1987) respectively, but it has received scant attention outside these domains. Equally, insights from emergency linguistics have shown us further important ways of understanding translation's science-humanities dimensions, especially in relation to the ethical issues linked to the comprehension and dissemination of vital information at times of crisis (O'Brien and Federici 2019; O'Mathuna and Hunt 2020). Yet, an ecological reading of the precious and risky diversity of human and non-human languages is still missing within this field.

Deep translation aspires to co-express and mobilise translation's many meanings in order to attain ecological goals. This ecological agenda, I argue, is inherent to any translational venture that is preoccupied with forms of coexistence, communication and circulation of meaning across realms of difference. Deep translation is at once a new mode of conceiving of translation and of thinking translationally in research and policy that, both within and outside scenarios of crisis, address the interactions among, and damage of, multiple, related ecosystems. My theoretical design complements Marais's in that it provides and performs a conceptual confluence amongst different translational subfields, thus revealing comparative patterns within, and across, translational imaginaries that have hitherto remained separate. Marais has introduced categories for defining his biosemiotic theory of translation; however, an integration of translation studies' many agendas, and an interrogation of its potential benefits for improving our understanding of complex realities, are yet to be attempted. With the aim of addressing this need, in the next section I adopt a deep translational approach to discuss the intersection of health, environmental and racial issues emerged from the coronavirus crisis.

COVID-19: The Disease of Translation

The coronavirus crisis has proven to be a disease of translation. I explored this idea in a co-authored article (Arnaldi, Engebretsen and Forsdick 2022) which devised a translational medical humanities framework to address some of the translational challenges brought about by the current global health emergency. The translational aspects discussed include the necessity of interpreting information for multilingual populations and the need to translate laboratory research into a vaccine and medicines for patients. We considered translation: (1) as multilingual and multicultural practice that is central to medical, social, cultural and political responses to the pandemic; and (2) as medical concept and practice, translational medicine being the efficient and effective translation of scientific findings relevant to human disease into knowledge that benefits patients (a process itself known as "knowledge translation"). We proposed that translation is an instrument of epidemiological enquiry, one that is apt to capture the biocultural dimensions of pandemics in ways that would have the potential to inform public health interventions significantly. Here I take this theoretical frame to the next level, that of deep translation, a perspective that comprises, but is not limited to, translational medical humanities paradigms.

A deep translational lens allows us to examine the medical and the environmental conjunctly. As has been pointed out (Akhtar 2021, 6),

> A new study by researchers at the University of Cambridge suggests that climate change may have played a role in coronavirus pandemic. "Increases in temperature, sunlight and carbon dioxide, which affect

> the growth of plants and trees, have shifted the makeup of vegetation in southern China, turning tropical shrubland into tropical savannah and deciduous woodland. This type of forest, the authors contend, is more suitable to bat species …"

Some studies imply that increased air pollution may lead to an increase in COVID-19 intensity (Akhtar 2021, 9), whilst climate change alone has been called "the largest human health threat by public health, medical, and health care organisations across the globe" (Harvie and Guarneri 2020, 206). In this scenario, "emotional, spiritual and mental health impacts are also recognised effects associated with climate change and can include trauma, fear, fatalism and loss of loved ones, livelihoods, social support, identity, and a sense of control" (206).

There exists a tight and delicate connection between our well-being and that of the planet; when this connection and the homeostatic setup on which it is based are threatened, living and non-living organisms alike become fellow sufferers, despite the ontological, biological and cultural differences that distinguish them. As Karen Thornber (2020, 4) puts it,

> alleviating the suffering associated with adverse health conditions, involves not only developing new medical treatments …; it also requires fundamentally changing how people treat themselves, one another, and the planet, everything from how we interact with our loved ones and strangers alike, within families, health care settings, and well beyond, to the types of leaders and policies we support and for whom and what we advocate.

Tee Guidotti has explained the nexus between the environment and health through the notion of sustainability, which he defines as a form of stewardship. Health, he states, "describes a state of well-being and well-functioning that also combines the sense of being whole and can be applied to individuals and to populations"; similarly, sustainability is a "concept that embraces environmental protection and includes stewardship so that resources are available equitably and to future generations" (2015, 1). Therefore,

> health and sustainability go together not because they are linked in an obvious or physical way—so that improvement in one automatically means improvement in the other—but because health protection and enhancement, on the one hand, and sustainability and environmental protection, on the other, are driven by similar values of care, tolerance, and mutual understanding (1).

These are translational values in that they shift the focus from the self to the other. Through the combination of paradigms from translational medical humanities, eco-translation, translation and emotions, the sociology of

translation, and translation and ethics, deep translation can help us analyse coronavirus disease's environmental causes and impacts on the one hand, and, on the other, the social, psychological and ethical implications of climate-change–induced illnesses.

COVID-19 is a disease of translation and of our relation with alterity also because it has affected minority ethnic groups, migrants, the elderly and other vulnerable bodies disproportionally. It has revealed that the medical and the ecological are inseparable from the cultural, the linguistic and the racial, if we understand ethnicity as "a complex entity composed of genetic make-up, social constructs, cultural identity, and behavioural patterns [which] interplay with virus spread through cultural, behavioural, and societal differences including lower socioeconomic status, health-seeking behaviour, and intergenerational cohabitation" (Pareerk et al. 2020, 1421–1422). According to data collected by Public Health England, "minority ethnic groups were between two and four times more likely to die because of COVID-19 compared with those from a White ethnic background"; moreover, a UK-wide survey showed that Black and Black British respondents had the highest rate of vaccine hesitancy (71.8%) (Kadambari and Vaderslott 2021, 1204–1205). Even though "the reasons for vaccine hesitancy are complex, multifactorial, and vary according to age, sex, and ethnic group", the fact that communication has only been delivered in one language (English in the UK) has amplified anxieties, reduced confidence in COVID-19 vaccines and resulted in a chain of misinformation (Kadambari and Vaderslott 2021, 1205).

The grip of the coronavirus disease on vulnerable people is not limited to the UK; on a global scale, it has become apparent, for example, in the inequality of vaccine distribution. "With much of the world's vaccine production and distribution capacity reserved by wealthier nations, impoverished countries stand to face devastating financial, social, and health-related impacts" (Oehler and Vega 2021, 1). Furthermore, the outbreak of the coronavirus pandemic has coincided with an increase in xenophobic episodes, begun with US president Donald Trump's definition of the virus as a foreign enemy and culminating in the killing of African American citizen George Floyd at the hands of a white police officer in Minneapolis, on 25 May 2020.[2] Manish Pareek et al. have concluded that "if ethnicity is found to be associated with adverse COVID-19 outcomes, this must directly, and urgently inform public health interventions globally" (2020, 1422).

Translation theory can provide paradigms of hospitality through which we can relate to otherness in all its forms, ethnic, cultural and biological, thus diminishing the xenophobic aspects of this crisis. Notions of translation invite us to step into the "region of unlikeness", abandon anthropocentric and/or Anglocentric views, and start thinking, living and making decisions ecologically and translationally, both for ourselves and with (not just for) the Other. A deep translational approach allows us to corroborate ethically and culturally inflected notions of translation from the humanities

and social sciences with advanced research in epidemiology and environmental studies.

This vision, however, does not come without limitations, in particular: (1) the realisation that the proposal for a public health protocol lies beyond the possibilities of this chapter (rather, it is something to be developed collaboratively through space and time); and (2) the idea that a deep translational agenda offers a framework for thinking actively, radically and innovatively about the coronavirus crisis by outlining the horizon of complexity, rather than by providing explanations of, and/or solutions for, this complexity.

And yet, as suggested by Kirsten Ostherr, leader of the "Translational Humanities for Public Health" project and fellow contributor to this book, the humanities—which are key to the construct of deep translation—can be an essential part of the pandemic response "through front-line, immediate translational work" (2020).[3] Ostherr mentions how, for instance:

> scholars in Asian American studies can identify and document xenophobia, and they can disseminate those findings in real time to legal advocates. Media scholars can draw on their knowledge of contagion films to alert health organisations to harmful visual iconographies and suggest alternatives. Literary scholars can identify how narratives are being used to spread misinformation, and they can advise health communicators how to create compelling counternarratives to challenge the fictions of conspiracy theorists.
>
> (2020)

Scholars in translation studies, I would add, can show us ways of interlacing apparently unrelated discourses of incommunicability, misinformation, misunderstanding, public health failure, science distrust, loneliness and isolation, and collective trauma. The disciplines mentioned here inform the fields of eco-translation and translational medical humanities insofar as they contribute to the understanding and solving of this multifactorial crisis, a crisis that, as I demonstrated throughout, cannot be solved by means of simply biomedical, linear and mechanistic models.

Finally, as a corollary, the coronavirus crisis makes us aware of a further translational disfunction—that is, the difficulty of communicating scholarly work to a broader public, a challenge that is shared by the humanities and science alike. Deep translation helps us reimagine the audiences of our work in ways that have the potential to impact "debates, right now [as well as in future] about what to do" (Ostherr 2020). We should not just reconsider the uses and potential of translation; we should also nourish the culture of translational knowledge that emerges from the interstices amongst different systems of thought. From these regions of unlikeness, a new profundity and a new perception can take form.

Translational Futures

I have drawn a comparison between notions of translation and ecology to suggest that they share a similar theoretical setup as well as analogous, ethical preoccupations: namely, the need for communicating across spheres of difference. By understanding translation in ecological terms, or, if one prefers, by looking at ecology from a translational angle, I hope to have seeded the idea for a translational epistemology based upon sustainable concepts of, and approaches to, ecology, complexity and holism. This theoretical construct, which I have called deep translation, is likely to offer alternative mental habits and courses of action that could help us target and overcome the coronavirus crisis, as well as other multifactorial crises that may occur in future.

Deep translation is built upon and provides the conceptual energy that is necessary to cross boundaries (biological, cultural, disciplinary), manage relationality and negotiate alterity when we are least ready, capable and/or willing to do so. Yet, despite its theoretical setup, it is not a merely conceptual effort. As it includes perspectives from the psychology of translation, and through its sustained dialogue with the natural and medical sciences, deep translation reveals the embodied dimension of translation as a lived and living experience, namely as something that we both are and do.[4] Translation is psycho-physical in that it takes place within our body (the process whereby RNA is used to produce protein is known as translation); it impacts, and transforms, the way we operate, respond to stimuli, and feel (Damasio 2017); it helps us afford change; and, by foregrounding otherness in its many forms, it changes our perception of the self and the world. As Marais puts it, "scholars of translation can study all semiotic [psycho-physical] process, comparing translations ranging from DNA processes through animal interaction and human politics and power, to dreams and other flights of fantasy" (Marais 2019, 5) alongside bleak realistic realisations, such as acts of concealment, silencing, miscommunication and misdirection (Italiano 2020, 1). Despite being still initial and tentative, my definition of deep translation aspires to encompass translation's composite and sometimes contradictory agenda in the conviction that complexity—not just of reality but also of thinking—is a viable route to take in both policy and research. This route, I contend, aligns scholarly speculation with lived experience, thus pointing to novel, translational signposts and sustainable destinations in the roadmaps that lead to our future. In no way do I want to suggest that deep translation is merely a theoretical construction that we ought to realise or achieve; such an idea would leave us with no sense of agency, thus suffocating the diversity of voices that I have auspicated here. Rather, deep translation can help us understand our—and other species'—translational existence as we inhabit, and respond to, the many environments that make up our mental and bodily life. It is about complexity and plurality rather than univocity and persuasion.

The chapter is an exploratory attempt at outlining this broad-spectrum, translational imagination. More work is required in order to test deep

translation's applicability to medical, environmental and policy-related scenarios. What I hope to have achieved in these pages is a vivid appraisal of translation's epistemic function. In *The Ecological Thought* (2010), a book exploring the same function within an ecological context, Timothy Morton has captured the translational, inter- and cross-species nature of flourishing and suffering in this way:

> [Ecology] has to do with love, loss, despair, and compassion. It has to do with depression and psychosis. It has to do with capitalism and with what might exist after capitalism. It has to do with amazement, open-mindedness, and wonder. It has to do with doubt, confusion, and scepticism. … It has to do with race, class, and gender. … It has to do with ideas of self and the weird paradoxes of subjectivity. It has to do with society. It has to do with coexistence.
>
> (Morton 2010, 2)

I cannot think of a more precise and evocative portrayal to describe the deep translational agenda envisioned here. The imagery of translation theory is a common denominator that encapsulates and meets the reasons of knowledge, action, ethics, fiction and science, and it does so in ways that have the potential to enhance sustainability and advocate for futurity. Translational thinking can be a signature of care, that is a non-linear, non-vertical and non-normative space in which we are allowed to disrupt narratives of (epistemic) power and, in doing so, welcome alternatives, welcome alterity. We depend on translation for survival (Walkowitz 2015, 11). In translation, literature, but also, we ourselves, as humans and non-human beings, have a past as well as a future. Within this complex, fluctuating horizon, the post-pandemic future that we are willing to build and that we are trying to envisage resembles, perhaps, the translational present that we are already inhabiting. We cannot and maybe should not "colonise", as in master, dominate and fix, the time-space of this crisis. What we are asked to do is to actively and responsibly host, engage with and respond to the pandemic of languages—medical, environmental, cultural and so on—that COVID-19 has presented us with. In doing so, we become aware of, and start to honour, our translational, embodied existence as a way of knowing, communicating and living across a variety of complex ecosystems. SARS-CoV-2 is the disease that we are urged to translate.

Acknowledgements

The work presented in this chapter was made possible thanks to a Research Fellowship at the Centre for Sustainable Healthcare Education, University of Oslo. I am deeply grateful to Eivind Engebretsen and John Ødermark for their continuous support. Their bold vision of translation has enlarged, challenged and radically inspired my limited horizon.

Notes

1 https://www.med.uio.no/helsam/english/research/projects/body-in-translation/
2 See Donald Trump's words delivered as part of his Oval Office Address on 11 March 2020: "This is the most aggressive and comprehensive effort to confront a foreign virus in modern history". For a discussion of the linkage between epidemics and xenophobia see Gilman 2021.
3 https://transhumhealth.rice.edu
4 I thank Steven Wilson for helping me reflect on two crucial points: the embodied nature of translation and its implications on the subject's agency.

References

Akhtar, Rais, ed. 2021. *Coronavirus (COVID-19) Outbreaks, Environment and Human Behaviour: International Case Studies*. Cham: Springer.

Apter, Emily. 2006. *The Translation Zone: A New Comparative Literature*. Princeton: Princeton University Press.

Arnaldi, Marta. 2022. "Contagious Otherness: Translating Communicable Diseases in the Modern Italian and Francophone Novel." *Open Library of Humanities*. https://doi.org/10.16995/OLH.4714.

Arnaldi, Marta, Eivind Engebretsen, and Charles Forsdick. 2022. "Translating COVID-19: From Contagion to Containment." *Journal of Medical Humanities*. https://doi.org/10.1007/s10912-022-09742-5

Barry, Andrew. 2013. "The Translation Zone: Between Actor-Network Theory and International Relations." *Millennium: Journal of International Studies* 41, no. 3: 413–429.

Bassnett, Susan and Harish Trivedi, eds. 1999. *Post-Colonial Translation: Theory and Practice*. London: Routledge.

Bhabha, Homi. 1994. *The Location of Culture*. London: Routledge.

Bhaskar, Roy, Petter Naess, and Karl Georg Høyer, eds. 2012. *Ecophilosophy in a World of Crisis: Critical Realism and the Nordic Contributions*. London: Routledge.

Braidotti, Rosi. 2013. *The Posthuman*. Cambridge: Polity Press.

Callon, Michael and Bruno Latour. 1981. "Unscrewing the Big Leviathan: How Actors Macrostructure Reality and How Sociologists Help Them Do So." In *Advances in Social Theories and Methodology*, edited by Karin Knorr-Cetina and Aaron Cicourel, 227–303. London: Routledge.

Capra, Fritjof. 2021. *Patterns of Connections: Essential Essays from Five Decades*. Albuquerque: University of New Mexico Press.

Capra, Fritjof, and Pierluigi Luisi. 2014. *The Systems View of Life: A Unifying Vision*. Cambridge: Cambridge University Press.

Cronin, Michael. 2017. *Eco-Translation: Translation and Ecology in the Age of the Anthropocene*. London: Routledge.

Damasio, Antonio. 2017. *The Strange Order of Things: Life, Feeling, and the Making of Cultures*. New York: Pantheon Books.

Devall, Bill and George Sessions. 1985. *Deep Ecology*. Salt Lake City: GM Smith.

Engebretsen, Eivind, Gina Henrichsen, and John Ødemark. 2020. "Towards a Translational Medical Humanities: Introducing the Cultural Crossing of Care." *Medical Humanities* 46, no. 2: e2. https://doi.org/10.1136/medhum-2019-011751

Even-Zohar, Itamar. 1990. "Polysystem Studies." *Poetics Today* 11: 1–268.
Gilman, Sander. 2021. "Placing the Blame for COVID-19 in and on Ultra-Orthodox Communities." *Modern Judaism* 41, no. 1: 1–30.
Guidotti, Tee. 2015. *Health and Sustainability: An Introduction*. Oxford: Oxford University Press.
Hannesson, Rögnvaldur. 2014. *Ecofundamentalism: A Critique of Extreme Environmentalism*. Lanham: Lexington Books.
Harvie, Jamie and Erminia Guarneri. 2020. "Healthy People, Healthy Planet: Holistic Thinking". In *Health of People, Health of Planet and Our Responsibility: Climate Change, Air Pollution and Health*, edited by Wael Al-Delaimy, Veerabhadran Ramanathan and Marcelo Sánchez Sorondo, 205–221. Cham: Springer Open.
Hubscher-Davidson, Séverine. 2017. *Translation and Emotion: A Psychological Perspective*. London: Routledge.
Italiano, Federico, ed. 2020. *The Dark Side of Translation*. London: Routledge.
Kadambari, Seilesh and Samantha Vaderslott. 2021. "Lessons about COVID-19 Vaccine Hesitancy among Minority Ethnic People in the UK." *Lancet Infectious Diseases* 21, no. 9: 1204–1206.
Kristeva, Julia. 1987. *Soleil noir: Dépression et mélancholie*. Paris: Gallimard.
Marais, Kobus. 2019. *A (Bio)Semiotic Theory of Translation: The Emergence of Social-Cultural Reality*. London: Routledge.
Marais, Kobus and Reine Meylaerts, eds. 2019. *Complexity Thinking in Translation Studies: Methodological Considerations*. London: Routledge.
Mies, Maria, Vandana Shiva, and Ariel Salleh. 2014. *Ecofeminism*. London: Zed Books.
Morton, Timothy. 2010. *The Ecological Thought*. Cambridge: Harvard University Press.
Naess, Arne. 1973. "The Shallow and the Deep, Long-Range Ecology Movements." *Inquiry*, 16, no. 1–4: 95–100.
O'Brien, Sharon, and Federico Federici. 2019. "Crisis Translation: Considering Language Needs in Multilingual Disaster Settings." *Disaster Prevention & Management* 29, no. 2: 129–143.
O'Mathuna, Dónal, and Matthew Hunt. 2020. "Ethics and Crisis Translation: Insights from Paul Ricoeur." *Disaster Prevention & Management* 29, no. 2: 175–186.
Oberg, Gunilla. 2011. *Interdisciplinary Environmental Studies: A Primer*. Chichester: Wiley Blackwell.
Oehler, Richard and Vivian Vega. 2021. "Conquering COVID: How Global Vaccine Inequality Risks Prolonging the Pandemic." *Open Forum Infectious Diseases* 8, no. 10: ofab443. https://doi.org/10.1093/ofid/ofab443
Ostherr, Kirsten. 2020. "Humanities as Essential Services." *Inside Higher Ed*, 21 May https://www.insidehighered.com/views/2020/05/21/how-humanities-can-be-part-front-line-response-pandemic-opinion
Pareerk, Manish, et al. 2020. "Ethnicity and COVID-19: An Urgent Public Health Research Priority." *Lancet* 395: 1421–1422.
Robinson, Douglas. 2017. *Translationality: Essays in the Translational-Medical Humanities*. New York: Routledge.
Scott, Clive. 2015. "Translating the Nineteenth Century: A Poetics of Eco-Translation". *Dix-Neuf* 19, no. 3: 285–302.

Thornber, Karen. 2020. *Global Healing: Literature, Advocacy, Care*. Leiden: Brill Rodopi.

Tymoczko, Maria. 2019. "Translation as Organized Complexity: Implications for Translation Theory." In *Complexity Thinking in Translation Studies: Methodological Considerations*, edited by Kobus Marais and Reine Meylaerts, 238–258. London: Routledge.

Walkowitz, Rebecca. 2015. *Born Translated: The Contemporary Novel in an Age of World Literature*. New York: Columbia University Press.

Watson, Marlene, et al. 2020. "COVID-19 Interconnectedness: Health Inequality, the Climate Crisis, and Collective Trauma." *Family Process* 59, no. 3: 832–846.

Taylor & Francis
Taylor & Francis Group
http://taylorandfrancis.com