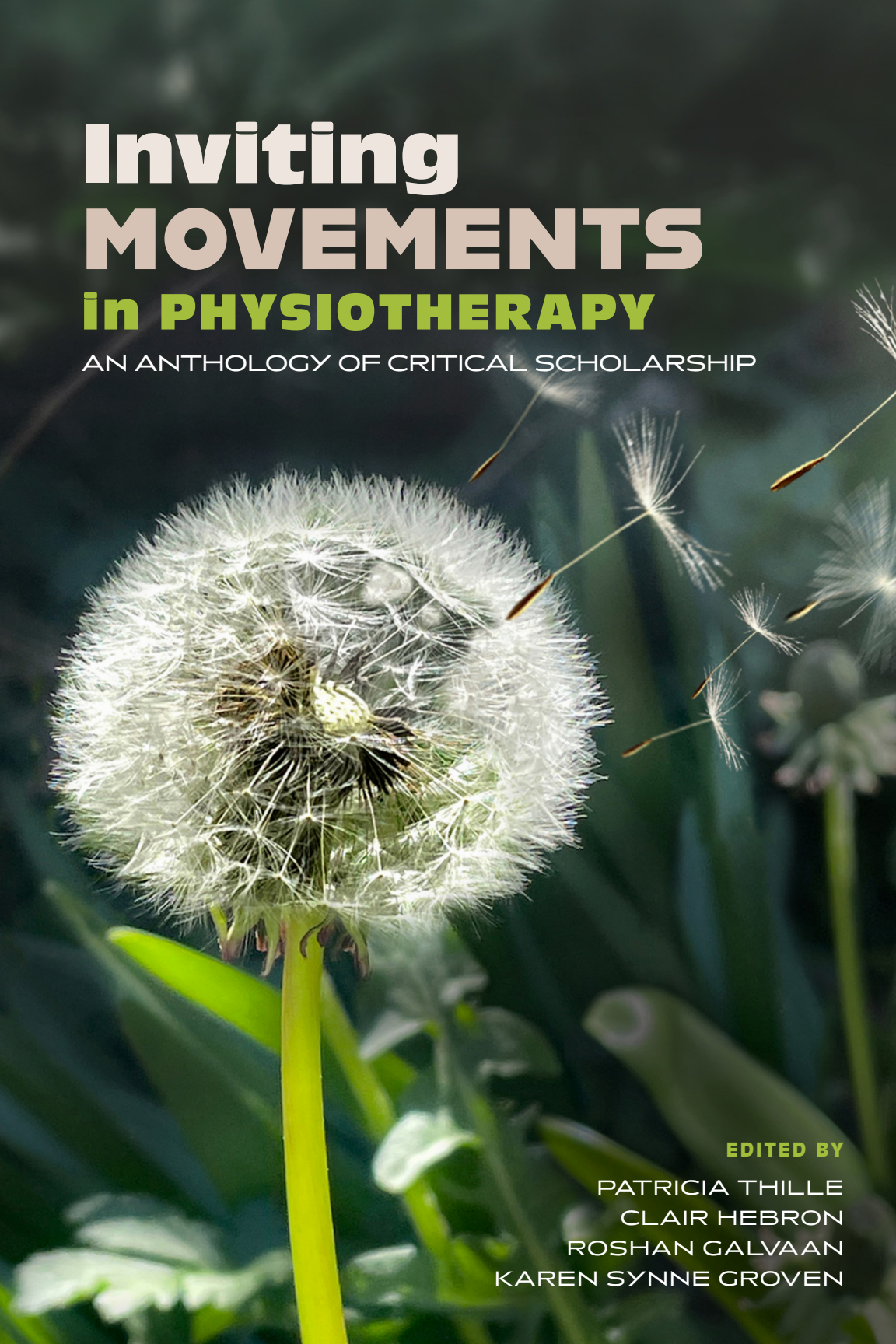
Inviting
MOVEMENTS
in PHYSIOTHERAPY
AN ANTHOLOGY OF CRITICAL SCHOLARSHIP
EDITED BY
PATRICIA THILLE
CLAIR HEBRON
ROSHAN GALVAAN
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Inviting movements in physiotherapy: An anthology of critical scholarship
Edited by Patricia Thille, Clair Hebron, Roshan Galvaan, and Karen Synne Groven

Co-published by Critical Physiotherapy Network and the College of Rehabilitation Sciences, University of Manitoba.

Produced with the support of University of Manitoba Libraries. Digital edition available at https://escholarship.umanitoba.ca/projects/imip.

ISBN 978-1-987830-17-0 (ebook)
ISBN 978-1-987830-18-7 (PDF)
DOI: https://doi.org/10.82231/S8HA-YK54

Typesetting and Design by Jess Koroscil
Cover Design and Photo by Bruce Williams

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A note on editorial and peer review processes

INVITING MOVEMENTS IN PHYSIOTHERAPY: AN ANTHOLOGY OF CRITICAL SCHOLARSHIP IS THE THIRD COLLECTION CREATED BY THE CRITICAL PHYSIOTHERAPY NETWORK.

For *Inviting movements in physiotherapy,* the editorial team chose movement as our core metaphor, circulating the call through the network. We invited new movements within critical physiotherapy itself, explicitly sharing our interest in critical scholarship in various forms, including empirical studies, personal essays, arts-based reflections, and contributions that enhance pluriversal and reflexive dialogues about ways of knowing, understanding, and practising physiotherapy. From the outset, we were committed to publishing an open access book, in keeping with the ethos of the Critical Physiotherapy Network.

The editors reviewed all abstracts, selecting those most aligned with the call and commitments of the Critical Physiotherapy Network. Authors submitted their first drafts of book chapters between June 2023 and February 2024.

We opted for a type of open peer review process known as "open-identities," where authors and reviewers are known to each other. In our case, as is used by some established publishers of academic anthologies, the chapters were peer reviewed by two of the four editors.

To enhance peer review consistency, the full editorial team reviewed one chapter individually, then met to discuss our reviews, discussing important dimensions for close attention that align with the collective vision for the book. From that co-review process, we developed a series of questions to guide

our reviews; these echoed common questions we used as peer reviewers in journals, but also ensured thematic consistency of the chapters to *movement*, the core metaphor of the book.

Two editors then peer reviewed each chapter. We selected reviewers based on alignment of expertise and avoiding review of close colleagues' work. One editor in each pair assembled the feedback into a cohesive whole and communicated with authors to support revisions. Like the process of publishing a peer-reviewed journal article, authors revised and resubmitted their chapters, working through cycles of peer review and revisions until the final version.

The one exception is the introductory chapter. To peer review the introduction, we sought two open identity peer reviewers: one a senior scholar in the field who had not submitted to the book (Barbara Gibson); the second a senior scholar with a chapter in the book (Judith Lane), but with whom the editors have not otherwise collaborated.

Inviting Movements in Physiotherapy

AN INTRODUCTION

PATRICIA THILLE, ROSHAN GALVAAN,
KAREN SYNNE GROVEN, AND CLAIR HEBRON

"Physiotherapy, as a material practice, ought to be understood as more than a mere economic exchange of services, technical knowledge and skills: it involves working on, with, for, around and through bodies that encounter, interact with and touch each other, move and are moved physically, psychologically, socially, culturally, biopolitically and emotionally." (Rajala, 2018, p. 58)

Our anthology of critical physiotherapy writing invites thinking that starts from a deceptively simple question: *What happens when we explore movement in physiotherapy?* Our professional identity hinges on promoting movements of certain kinds. The idea of "therapeutic exercise" sits at the core of our profession and we promote ourselves as "movement experts" (Sahrmann, 2020). We consider physical movement of people's bodies through space, of air into lungs and blood through vessels, among others. Within physiotherapy, as Gibson (2016) highlights, our nuanced vocabularies and practices targeting movement produce multiple physical, social, and existential effects, many of which are unrecognized within the profession.

Movement far exceeds physiotherapy's framing of it. Physical movements are continuous, and can be choreographed and trained or creative, meandering and exploratory. Some physical movements are valorised, while others framed as deficiency (Gibson, 2014; Gibson, 2016), though these can be

understood otherwise (Breedt & and Barlott, 2025; Gibson et al., 2025; Nicholls & Vieira, 2023). Metaphorically, movements can be social mobilisations within communities to fight for change, while being moved conveys an intense emotional experience. The title of our anthology, *Inviting movements in physiotherapy,* explores this broader sense of movement, thinking with metaphors from both within our profession—hypo and hypermobility, for example—and from other terrains to make sense of the present and explore opportunities for the future.

What does it mean to invite movements? This collection of physiotherapy scholarship, the third anthology of the Critical Physiotherapy Network,[1] continues the tradition of being "a positive force for an otherwise physiotherapy." Ten years into its existence, critical physiotherapy continues:

1. "Actively exploring the world beyond the current boundaries of physiotherapy practice and thought;
2. Challenging physiotherapy to critically examine its position on alterity and otherness, abnormality, deviance, difference and disability;
3. Recognising and problematising power asymmetries inherent in physiotherapy practice, particularly where they marginalise some groups at the expense of others;
4. Developing a culture and appreciation for the exploration of all views that deviate from conventional thought and practice in physiotherapy;
5. Actively embracing ideas that promote thinking against the grain/challenging in physiotherapy;
6. Being open to a plurality of ideas, practices, objects, systems and structures that challenge contemporary physiotherapy practice and thought;
7. Promoting critically informed thinking, encouraging ideas from diverse disciplines uncommon in mainstream physiotherapy, including anthropology, the arts, cultural studies, critical theory, education, geography, historiography, quantum physics, humanities, linguistics, philosophy, politics, sociology and others; and

8. Providing a space for ideas that promote a more positive, diverse and inclusive future for the profession" (Critical Physiotherapy Network, 2015-2024; Nicholls et al., 2023).

We, the editors, are health professionals, educators, and researchers with therapy backgrounds—three physiotherapists and one occupational therapist. In *Inviting Movements in Physiotherapy*, we assembled a collection that spans critical, post-structuralist, de-colonial, humanist, and post-humanist perspectives. There are tensions here which we do not seek to tame or settle. Instead, this anthology provides a space for a range of interventions on physiotherapy, unsettling taken-for-granted assumptions and practices in different ways. We are critical scholars analysing the present and offering visions for the future rooted in a commitment to openness and a tolerance for uncertainty.

Committing to openness: Embracing the dialogical

Critical physiotherapy is best understood as critical physiotherapies—a multiplicity (Mol, 2003). Thinking with the musical composition sense of movement, our field's scholarship can stand alone, but also belongs to a larger whole. Critical scholarship resists a singular, authoritative definition (Kincheloe et al., 2018). Instead, critical scholarship is a series of movements, based on the appreciation that:

- All thought is historically and socially situated and shaped by power relations—including what we think of as "facts."
- Language is not fixed or stable. Its change is often mediated by capitalism as it is practiced via production and consumption.
- Language is core to how we develop a sense of ourselves and our subjectivity.
- Within any society, certain groups are privileged and others oppressed, though the groups in these positions vary across societies. Oppression is most effective when those deemed subordinate "accept their social status as natural, necessary, or inevitable."
- Oppressions (and privileges) are multiple and often interconnect; focusing only on one can erase connections.
- Mainstream research practices often maintain capitalism and reproduce systems of oppression, including racism, sexism,

> poverty, ableism, heteronormativity, among others (Kincheloe et al., 2018, p. 237).

Criticality requires an openness that refuses simplicities or domination. Critical thinkers remain humble in the incompleteness of knowledge and theory and open to the possibility of new directions. Scholars use different terms to describe this. Bahktin—a Russian scholar who wrote literary criticism as coded social theory and criticism of Stalin—called this openness the *dialogical* (Bakhtin, 1984). Bakhtin's dialogical exists in contrast to the monological, an authoritative voice which asserts itself as the only valid perspective. The dialogical appreciates that there is no single authority, no final voice to which we defer. Feminist scholar Donna Haraway referred to the authoritative account as a "god-trick," wherein one claims an all-knowingness, which is an impossible objectivity (Haraway, 1988). A monological, authoritative voice dominates, sometimes to the point of violence to other voices. When authoritative, monological voices dominate, other forms of knowledge suffer in various ways. In physiotherapy, for example, our authoritative normalisation of walking leads to a repression of creative mobilities such as crawling (Gibson, 2016; Gibson & and Teachman, 2012). The monological can take much more repressive forms, which feminist postcolonial scholar Gayatri C. Spivak called *epistemic violence,* wherein Western ways of thinking and doing are imposed, suppressing and denigrating local knowledges and traditions as unintelligible (Rosalind, 2010).

Over the past decade, as summarized by Nicholls et al. (2023), critical physiotherapy scholarship has grown into a professional subfield, one that routinely engages phenomenological, critical, post-structuralist, and post-humanist theories among others. The roots of critical physiotherapy, they suggest, start in resistance to physiotherapy's unquestioned alignment with Western biomedicine, including unsettling the core theorisations of bodies as machines (further described by Nicholls & Gibson, 2010; Nicholls & Vieira, 2023), and of "normality" as an ideal (see also Breedt & and Barlott, 2025; Gibson, 2016). Critical physiotherapy is in a continual process of becoming, expanding, including beyond those terrains reviewed by Nicholls and colleagues (2023). Several contributions assembled here strengthen a new direction in critical physiotherapy: a growing critique of colonialism as it is enacted through physiotherapy education and practice (Lurch et al., 2023; Mtima-Jere et al., 2024).

We invite readers to explore this book with a dialogical commitment to think anew about how to liberate physiotherapy from dominating, monological approaches to practice and scholarship. A deeper understanding is possible by learning from a range of examples and perspectives; variation helps us better attune to the range of possibilities in the situations we find ourselves in (Flyvbjerg, 2006).

The move to pluriversality: Tolerating uncertainty

In this anthology of critical physiotherapy scholarship, we invite movement away from the idea of *uni*versality, embracing instead pluriversality (González García, 2006). Pluriversality is an epistemic and political delinking from modernity/coloniality, wherein beliefs based on Western scientific knowledge are framed as the universal. Pluriversality brings into existence other ethics and politics by foregrounding "other epistemologies, other principles of knowledge and understanding" (Mignolo & Walsh, 2018, p. 5). Diverse feminist (Mama, 2020) and Indigenous (Ndlovu, 2014) epistemologies amongst other knowledge systems are centred, thus situating Western, eurocentric knowledge as one way of knowing amongst others. The goal is not to replace one authoritative account with another, with all the problems that follow. On the contrary, criticality and pluriversality invite new ways of thinking as we wrestle and delink from knowledge production entangled with the colonial matrix of power.

The regulatory devices that maintain the colonial matrix of power are largely epistemic, but also economic and ontological (Mignolo & Walsh, 2018). Similar to Haraway's "god-trick," Mignolo and Walsh (2018, p. 139) elaborate that the "Western Christian version of humanity, complemented by secular de-Goding narratives of science, economic progress, political democracy, and lately globalisation" created a field of representation, a set of rhetorics and global designs that maintains the colonial matrix of power. They argue this field of representation rests on three pillars, namely race, sex, and nature that operate as the "axes" around which domination was organised and legitimated during colonisation (Mignolo & Walsh, 2018, p. 153). To this, we echo critical disability scholars who argue ableism and its manifestations are also central to coloniality (Hutcheon & Lashewicz, 2020). Arising from these axes are uncontested colonial hierarchies of domination that keep humans at different levels of subordination. This matrix of power,

with its logic rooted in colonialism, conceals itself from the spatio-temporal determinants from which knowledge is created. It obscures that these determinants include conceptualisations of time, space, histories, amongst others, that were themselves re-constituted to serve the colonial matrix of power. While obscuring the ingrained and enduring presence of coloniality, knowledge produced purports to be universal. Pluriversality questions the position of universally accepted professional knowledge, including that upon which physiotherapy relies, that emerged during modernity/coloniality as singular truth.

Embracing and building a tolerance for uncertainty steps into the discomfort of unlearning the taken-for-granted acceptance of universal knowledge in and of physiotherapy. It involves an openness towards what de Sousa Santos refers to as "ecologies of knowledges" that come to constitute pluriversality (de Sousa Santos, 2007). Doing this involves reflecting on aspects of knowledge production we may overlook, asking ourselves: "when, why, how and what for did the concepts come into being?" (Mignolo & Walsh, 2018, p. 171). The chapters that follow invite us to pursue avenues for engaging with pluriversality as physiotherapy moves to knowing and being otherwise.

Introduction to the Chapters

In a dialogical spirit and a pluriversal commitment, we deliberately do not take up the God-like position to offer "solutions" in any stabilised sense. Indeed, across the book, authors take issue with the assumptions that physiotherapists' roles are to "fix problems." What we offer are different possibilities for physiotherapy otherwise, as authors grapple with the present and imagined futures. Each chapter can stand alone, though many different connections can be made across them. We chose the following sections: Being moved by experience and voice; Relinquishing stability and risking movement; Rupturing movements and radical imaginations.

The contributions in Part 1, *Being moved by experience and voice,* address a muted perspective in physiotherapy: first-person narrative accounts of experiencing physiotherapy as therapists and as persons engaging in physical therapies. But it is far more than just therapist and/or patient identities that shape these narrative explorations of physiotherapy, as the variety of chapters highlight.

How to begin to take migration seriously in the profession of physiotherapy? Jeffrey Andrion's *"I didn't come to work in a coffee shop": The untold stories of transnational physiotherapists in Canada* builds from the experiences and voices of physiotherapists who trained outside of the country—including his own—who migrated or migrated back to Canada to work. Andrion draws our attention to migration as a form of movement, one vastly under-considered in the profession despite physiotherapy's history of early practitioners migrating out of England, and over time, around the globe, bringing with them Western knowledge and practices that interrupted or otherwise interfered with local therapies. Applying critical labour migration theories, Andrion explores how physiotherapists' professional identities are shaped by colonialism, globalisation, and racial capitalism in the context of migration to work in Canada. Highlighting how de-professionalisation, racialisation, and othering occur, Andrion issues a wake-up call for physiotherapy to critically examine the present in hopes for a better future.

How to resist physiotherapy's colonising foundation? *Ukuyankaza kuyi-Nkululeko, Movement is freedom: Journeying towards autoethnography as a transformative qualitative research methodology,* by Mahitsonge Nomusa Ntinga and colleagues, is a creative autoethnography that explores decolonising physiotherapy. Weaving her Indigenous isiZulu language into letters to her younger self—who she names Himore, a physiotherapist-in-training—Ntinga reclaims her cultural identity and voice alongside her identities as physiotherapist and academic within a profession that seeks to erase her Blackness, Indigeneity, and feminism. The result is a moving autoethnographic account highlighting the beauty of her culture and identity. It is also a call for movement in a profession that erases cultural identity to embrace Western epistemologies, values, beliefs, and hierarchies. The chapter creates new freedoms of movement, showing how autoethnography can be a methodological vehicle to support this.

How can phenomenology help us shift physiotherapy? Using auto-phenomenology, Clair Hebron reflects on her experiences in *Unbelonging: The experience of being-in-society whilst living with frozen shoulder*. As a physiotherapist and educator with a grasp of phenomenological theories, Hebron reflects on the changes in her interactions and identity that her frozen shoulder brought, including a strong exercise-based identity which many physiotherapists share. Hebron glides between her rich stories of her own

experiences and her phenomenological interpretation of them, sharing what is often unarticulated about how lives can change when bodies do. Hebron offers an evocative, knowing account of the *unhomelikeness* of frozen shoulder to spark meaningful dialogue within physiotherapy about our identities and personal investments that shape how we practice.

The second part of the book, *Relinquishing stability and risking movement,* charts new movements in physiotherapy. These movements relinquish old forms of stability and control, showing different ways to enact and embody new directions, with one chapter showing the opposite, of how multiplicity is reduced to a singularity. Education features prominently, including experiments—purposeful or naturally occurring—that spur new forms of learning and being.

What do we lose when we seek to normalise physical movements? Sarah Schwab-Farrell and colleagues' *Destabilising the norm: A critical experimental approach to move physiotherapy beyond movement "normalisation"* highlight the Global North construction of normality as good, which has vast socio-political impacts. In physiotherapy, "normality as good" is assumed in everyday practices, such as the work to "normalise" people's bodily movements after having a stroke. Using critical theory with experimental research—which they call "critical experimental studies"—they found that standard physiotherapy practice emphasising normalisation may have unintended and negative functional movement consequences, including a reduced capacity for movement adaptation after a stroke. The authors argue for a physiotherapy that hews less to "the norm" and instead reorients physiotherapy "active affordances": active, creative, improvisational, embodied explorations that make performance of everyday tasks possible for disabled people.

How does participation in solidarity movements for justice impact physiotherapists? In *"The impact of the occupation remains with us": Movements of minor education during political mobilisation of physiotherapy students at a federal university in southern Brazil,* physiotherapy academics Daniela Lagranha, Adriane Vieira, and Alex Branco Fraga share impacts of a student movement called Ocupa ESEFID. Brazilian university students organised against constitutional changes, budget constraints, and inequities impacting access to higher education. The students occupied their university campus for two months, disrupted established hierarchies in campus life, organised systems of collective care, led on-campus political activities, and collaborated

with other organizations in their communities who were also fighting constitutional changes. Thinking with the major and minor education concepts introduced by the Brazilian pedagogue Silvio Gallo, the authors detail how the participating physiotherapy students became part of a broader resistance that fought for collective understandings of health, better integration of identity and anti-oppression in the classroom, and commitments to combat violence, harassment, and discrimination affecting students. Though the occupation ended with the successful passage of constitutional changes, the students' minor education shifted their career plans and strengthened curricular attention to topics that the students' movement raised as underdeveloped, including "access to physiotherapy services in Brazil, the health of the black population, the health of systematically oppressed people, experiences of transgender people in an academic environment, emotional suffering among physiotherapy students, and health of outsourced workers."

How to move toward equity and social justice in health professions? Patty Thille, Zoe Leyland, and Liz Harvey share how critical theory and pedagogy can create spaces for new dialogues in *Disrupting the ongoing flow of weight stigma in physiotherapy: The value of critical reflection.* Collecting data before, during, and after a workshop introducing Canadian physiotherapists to patients' concerns about contemporary physiotherapy practice, as well as theories of stigma and weight stigma, the workshop walked through strategies to address anti-fatness and pro-thinness in physiotherapy. Orienting to Boler and Zembylas's pedagogy of discomfort and an aim to spark critical reflection as theorised by Kinsella, the workshop used arts-informed strategies to make the familiar strange and created room for vulnerability and exploration. The chapter highlights the importance of participants' grappling with past harms as part of the path toward new possibilities.

Who belongs in physiotherapy? This is the core question Cathy Bulley and colleagues raise in *Belonging and identity in physiotherapy.* Applying Habermas's concepts of human interests to the hidden curriculum in physiotherapy, the authors explore factors that have and continue to contribute to the profession's limited attention to issues of rights, self-determination, and justice. They trace how the privileging of the technical and practical co-exists with a de-emphasis of the critical domain in physiotherapy. Working through the example of professional identity—specifically, ideas about the ideal physiotherapist as a "white, fit, young, slim, cis-gendered and able-bodied

person"—Bulley and co-authors highlight the necessity of critical examination of professional socialisation, and who it excludes. The further a student is from "the norm," the more it fosters unbelonging, experienced as acculturation stress and identity dissonance. The authors conclude sharing possible directions, including taking up a multi-cultural understanding of identity, and a commitment to supporting belonging through reflexivity and humility.

How are otherwise physiotherapies undermined? This is the question that Dahl-Michelsen and colleagues interrogate in *Power dynamics of knowledge in physiotherapy education: The case of Mensendieck.* The chapter traces the co-existence of two different movement traditions guiding Norwegian physiotherapy education: the Mensendieck and the Oslo School. Applying Foucault's concept of the dispositif, the authors unwrap changes over time that led, eventually, to the closure of the Mensendieck school. The privileging of abstract knowledge in the form of a quantitative "evidence-base" combined with an emphasis on cost-efficiencies in post-secondary educational institutions created a knowledge/power dynamic, one that led to the loss of an already existing otherwise physiotherapy. The chapter functions, in part, as a cautionary tale about the desire for universality in physiotherapy.

Part 3, *Rupturing movements and radical imaginations*, invites bigger leaps into new terrain. Each chapter actively embraces the unfinishedness that is the dialogical and pluriversal.

How might arts-based experiments help physiotherapy escape its current terrain? Shirley Chubb and Clair Hebron, fine arts and physiotherapy academics respectively, envision new ways to unsettle and explore physiotherapy in *Art as a deterritorialising vehicle for a nomadic physiotherapy.* Coming from disciplines that address the physical body in different ways, the authors engage with new materialist theories and creative practices to share how transdisciplinarity can spark movement toward otherwise physiotherapies. Using low back pain—a common, fluctuating, and often medically unexplained problem—as their core example, they imagine possibilities for nomadic and rhizomatic physiotherapies. By moving to new places and making new connections, existing hierarchies in physiotherapy (such as therapist/patient) begin to break down. This allows for uncertain, generative engagements among humans and non-humans. The movement metaphors in Deleuze and Guattari's theories—nomadic, rhizomatic—make "deterritorialisation" possible. New relations

and entanglements, bring into being new realities, demonstrated through their Posthuman Walking Project.

Is physiotherapy stuck in dressage metaphors of walking? Tobba Sudmann drifts through different theoretical terrains in *Walking, mobility, and movement in physiotherapy.* She starts her meandering in physiotherapy, where walking is something to be normalised, akin to dressage training for horses. Such an orientation is more than just individualistic; it erases difference and blocks the creative possibilities of "horsing around." Thinking with philosophers, sociologists, geographers, Sudmann highlights how walking is also a meaningful social practice, one which can be liberatory, creative, trust-generating, alienating, or oppressive. Wandering into the social world, Sudmann challenges physiotherapy to consider walking and other movements as communicative forms, and to travel toward less disciplinary forms.

What could a turn to post-humanism do to our profession's understanding of therapy? David Nicholls, Matthew Low, and Filip Maric explore this question in *The possibilities for a posthuman physiotherapy.* Building from the theories of Deleuze, the authors question the growing interest in humanism as a guiding theory for physiotherapy. While Western humanism moves beyond body-as-machine, it carries with it ideas of the ideal human, rife with hierarchical ideas about superiority and inferiority that have justified colonisation, patriarchy, genocide, ecological devastation and more. Reviewing some aspects of Deleuze's and other post-humanist theories, the authors "open therapy up to the more-than-human, and allow for a much broader view of who or what could be considered therapeutic." Through this theoretical lens, the authors highlight how therapy is not just done or experienced by humans, and how physiotherapy's emphasis on humans alone reduces creativity and freedom of movement. The chapter raises critical questions, including what the political future of physiotherapy as a profession can be if we work from a posthuman understanding of therapy. Such questions, they argue, are necessary to grapple with, given the enormous shifts in our world since the stabilisation of physiotherapy's professional scope.

Is it possible to start writing the story of movement for physiotherapy beyond economic benefit and instrumentality? In the final chapter, Anna Ilona Rajala and Timo Uotinen explore this in *"The constant fear of ceasing to move": Deconstructing movement in physiotherapy*. They examine the silences, erasures, and de-emphasis in physiotherapy's understanding of movement.

Mobilising Derrida, the authors deconstruct the concept of movement within a specialised practice of Finnish psychophysical physiotherapy. They expose the binaries that create meaning in this practice, such as human/animal, where each defined as not-the-other, and within which a hierarchy exists. Deconstructive reading makes the binaries and hierarchies more obvious, and experiments with possible reconstructions and/or decomposition. In doing so, new spaces and possibilities open. Refusing a conclusion, the chapter offers a call for ongoing unsettling in our understandings of movement.

This refusal to conclude, to offer a finalised account, is a movement we echo as editors. Critical physiotherapy is continually in a process of becoming, a movement still in progress. This anthology both contributes to, and invites more, critical movements within physiotherapy.

Notes

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ABSTRACT:

Physiotherapists' claim as the movement experts is reflected in the profession's academic curricula and advocacy works. As movement experts, physiotherapists explore and exploit human motion where the mantra "movement is medicine" becomes a rallying cry. However, while this clinical aspect of our identity is important, focusing only on the biological and clinical (un) intentionally leaves less room to examine the other forms of movement that shape our identity as a profession. For instance, migration as a form of movement has not been examined by the profession. While the number of transnational physiotherapists (TNPs) in Canada is growing, we know little about their lived experiences as contemporary investigations only examine the experiences of universities in delivering bridging programs. Using a critical labour-migration studies framework, this chapter examines the movement of TNP identities as physiotherapists migrate to or re-enter Canada. The main thesis of this chapter is to suggest that such movements are occurring because their identities have dual-head "origins" in capitalism and post-colonial legacy and the "insertion" of such identities to the Canadian social and professional fabric is facilitated by globalization.

CHAPTER 1

I didn't come to work in a coffee shop

THE UNTOLD STORIES OF TRANSNATIONAL PHYSIOTHERAPISTS IN CANADA

JEFFREY JOHN ANDRION

The transnational physiotherapist

In this chapter I present the stories of immigrant physiotherapists who live and work in the Greater Toronto Area in Ontario, Canada. These stories were shared as part of a doctoral study (Andrion, 2022) where the five integration stages and six identities of transnational physiotherapists (TNPs) emerged. At the outset and first introduced somewhere else (Andrion, 2022), I use the term "TNPs" to refer to individuals who obtained their physiotherapy degrees outside of Canada. Table 1 summarizes the demographic information of all the study participants. By definition, TNPs also include individuals who were born or raised in Canada but decided to study abroad. In my study, I examined how TNPs integrate in Toronto and the neighbouring cities where their stories of resilience and hope have often been eclipsed by injustices, including how being called "foreign trained" or "internationally educated" created the Othering within the Canadian physiotherapy community. Thus, and beyond the demonstrated transnational activities between their home countries and Canada that they take part in, such as sending financial remittances or exercising the right to suffrage (Andrion, 2022), I coined the term "transnational physiotherapist" to promote a more inclusive space within the physiotherapy profession that is a sharp departure from how this cohort has been historically referred to.

Aside from their personal stories of hope and despair, my study also revealed the impact that the "terrible triad" of globalization, capitalism, and postcolonial legacy have on the career trajectories of TNPs.[1] These triad forces were the invisible yet powerful elements that moved their racialized bodies from being the "Proud Newcomers" to becoming the "Humbled Aspirants" or the "Defeated" souls (Andrion, 2022). This movement of TNP identities in Canada is the focus of this chapter. Embedding the participants' voices, the main thesis of this chapter is to suggest that the changed identities of TNPs have dual head "origin" in colonialism and racial capitalism and the (attempted) "insertion" of such identities to the Canadian social and professional fabric is facilitated by globalization.

My identity as a transnational physiotherapist

My identity as a transnational physiotherapist—and as a human being—was formed in the southernmost tip of the Philippines in a place called Davao City. As a fourth generation Davaoeño, my ancestors who were from the north became settlers in a land that was originally occupied and enjoyed by eleven indigenous tribal groups for centuries. At the same time, and as a former colonizee, my identity has also been shaped by the 428 years of combined colonial rule by Spain, Japan, and the United States (Herrera, 2015). Thus, oppression and resistance were terms that I grew up being familiar with. As a result of colonial rule, and as I started practicing as a physiotherapist, I also began questioning why the traditional ways of healing in my country have never been incorporated in my chosen profession. This questioning, alongside my keen interest in anti-oppressive pedagogies, led me to the social sciences.

I conceptualized and used to conduct an annual workshop called "Airport Experience" at the University of Toronto's Ontario Internationally Educated Physical Therapy Bridging Program where participants (my students) were given the opportunity to reflect on their lived experiences as immigrant physiotherapists in Canada. Surrounded by flags that represented their home countries, they shared heartbreaking stories of separation from loved ones and the enduring pain of trying to find themselves again. The Airport Experience was also an opportunity for them to understand how their physical movement within that workshop reflected the physical and professional spaces that they occupied within the Canadian physiotherapy (PT) profession. Their "movement" within that workshop sparked my interest in how this concept can be

reexamined within the profession. Specifically, I began to take an interest in both the visible and invisible forces that shape the lives of immigrant physiotherapists in Canada. My analysis led me to a new concept of movement that was beyond what I have been taught in the classroom and clinical settings.

Movement and physiotherapy

Physiotherapists have long positioned themselves as movement experts. Beginning with physiotherapy curricula that teach how movement impacts the functioning of the human body, such expertise is reflected in proposed movement theories, including the "movement continuum" (Cott, et.al., 1995) or the critical value placed on movement in the practice of the profession (Sahrmann, 2022). Moreover, professional associations such as the American Physical Therapy Association (APTA, 2015) advocate for using the "movement system" to demonstrate how the interactions of the body systems ultimately create physical movement. At the same time, the importance of movement to the physiotherapy profession paved the way for the development of various clinical subspecialties within professional associations. As movement experts, physiotherapists explore and exploit human motion where the mantra "movement is medicine" becomes a rallying cry. However, the movement system as the core foundation of the profession has recently been examined and questioned (Joyce, et.al., 2023). Other critical perspectives on movement have also emerged, drawn from philosophy (Nicholls & Vieira, 2021) and critical disability studies (Gibson & Teachman, 2012), that interrogate the centrality of movement in physiotherapy.

With its professional distinction critiqued by scholars in the past (e.g., Gibson et.al., 2010), centering movement in physiotherapy is perhaps an attempt by the profession to de-fragment its blurred identity. Alternatively, using the social science lens to examine the physiotherapy identity is a welcome opportunity to discover the other ways of inquiry and knowing. Indeed, having a narrow focus on the biological and medical markers of movement ("movement as medicine") leaves less room for one to broadly examine and interpret the other forms of movement that shape our identity as a profession. For instance, how does migration—the movement of people—shape the physiotherapy profession and the identities of TNPs? What are the kinds of "action potentials" that trigger this migration? And how do the larger and often hegemonic systemic forces ultimately influence this movement? To this end, why are the change of identities as

a consequence of migration (and therefore movement) most pronounced among racialized physiotherapists who were educated outside of Canada?

At its infancy, physiotherapy in North America was established through the transnational movement of practitioners to and from the United Kingdom. The North American physiotherapy profession's identity emerged during World War I as a response to the needs of both injured soldiers and patients afflicted with poliomyelitis (Pagliarulo, 2007). With the profession's close affinity with medicine, physiotherapy started to gain status as a profession within the Canadian health care setting and raised three important points. First, the importance of being recognized by physicians (and therefore the hegemony of medicine) was paramount to attain professional status. Second, while some of the early physiotherapy interventions have been used by Indigenous people for thousands of years, their acceptance as a form of clinical treatment was only "validated" after they were used in Western settings. Third, and most importantly, the Canadian physiotherapy profession was built on the grounds of race, class, and gender where white women from high economic and social standing became the standard bearers of professional privilege and power.

In North America, while the geographical movement of the physiotherapy pioneers signaled the birth of a new rehabilitation profession, little is known about the early migration of racialized physiotherapists to Canada. What can be inferred is the fact that the change in the historically racist nature of Canadian immigration policies (Cho, 2018; Okawa, 2018) opened the door for racialized immigrants to enter the country through the "points system." Introduced in 1967, this new method to assess potential immigrants allowed for "the removal of racial or national barriers in immigrant selection…[and] facilitated immigration from Asia, Africa and other non-traditional sources that historically were restricted to enter Canada" (Government of Canada, 2022). Indeed, white immigrants from Europe in the1960s were slowly replaced by new Canadian residents with professional degrees from the non-traditional source countries (i.e., low and middle income) such as China, India, and the Philippines. To date, the Canadian government plans to increase the number of new permanent residents to 500,000 by 2026 (Government of Canada, 2023), surpassing its original record of 431,645 in 2022 (Government of Canada, 2023).

The consistent growth of the immigrant population in Canada is also reflected in the ten-year increase in the number of TNPs who registered with the College of Physiotherapists of Ontario. For instance, the number

ALIAS	COUNTRY OF ORIGIN	NUMBER OF MCQ ATTEMPTS	NUMBER OF OSCE ATTEMPTS	WORK STATUS IN ONTARIO AT TIME OF STUDY
Emily	Colombia	Passed on 1st attempt	Passed on 2nd attempt	Licensed PT
Jordon	Colombia	Passed on 4th attempt[a]	Passed on 2nd attempt	Licensed PT
Marcus	Philippines	Passed on 2nd attempt	Still preparing for OSCE	PTA
Lauren	Middle East	Passed on 1st attempt	Passed on 2nd attempt	Licensed PT
Jasmine	Middle East	Passed on 3rd attempt	Passed on 3rd attempt	Licensed PT
Abby	Philippines	Failed on 3rd attempt, did not try again[b]	Did not attempt	PTA
Lisa	Philippines	Passed on 1st attempt	Passed on 1st attempt	Licensed PT
Drake	Philippines	Passed on 1st attempt	Passedon1st attempt	Licensed PT
Mia	Philippines	Failed on first attempt, did not try again	Did not attempt	Nanny

ALIAS	COUNTRY OF ORIGIN	NUMBER OF MCQ ATTEMPTS	NUMBER OF OSCE ATTEMPTS	WORK STATUS IN ONTARIO AT TIME OF STUDY
Alayna	Philippines	Failed on 3rd attempt, exhausted exam eligibility[c]	No longer eligible to take OSCE	Housekeeper
Alexander	Philippines	Failed 1st attempt, preparing for 2nd attempt	(Still completing MCQ)	PTA
CJ	Philippines	Passed on 2nd attempt	Passed on 2nd attempt	Licensed PT
Alyssa	South America	Passed on 1st attempt	Passed on 1st attempt	Licensed PT
Jane	Philippines	Passed on 1st attempt	Passed on 2nd attempt	Licensed PT
Jeremy	Philippines	Passed on 1st attempt	Exhausted exam eligibility – failed on 3 attempts[c]	PTA
Kate	USA	Passed on 1st attempt	Passed on 1st attempt	Licensed PT
Christofer[d]	Canada	Passed on 1st attempt	Passed on 1st attempt	Licensed PT

ALIAS	COUNTRY OF ORIGIN	NUMBER OF MCQ ATTEMPTS	NUMBER OF OSCE ATTEMPTS	WORK STATUS IN ONTARIO AT TIME OF STUDY
Jake[e]	Canada	Passed on 1st attempt	Passed on 1st attempt	Licensed PT
Mario	Italy	Passed on 1st attempt	Passed on 1st attempt	Licensed PT

a. Jordon took his examinations when the original five-attempt policy was still in place.

b. While she attempted her exams under the original five-attempt policy, Abby decided not to continue taking the exam.

c. Under the revised three-attempt only policy.

d. Born in Canada and completed PT studies in the US.

e. Grew up in Canada and completed PT studies in Ireland.

of registered TNP practitioners in 2022–2023 was 32.6 percent (College of Physiotherapists of Ontario, 2023) compared to 21.2 percent in 2014–2015 (College of Physiotherapists of Ontario, 2015).[2] But while the population of immigrant physiotherapists in this particular province is growing, literature has been scant as to how the identities of this cohort change during the process of emigration or re-entry into the country. Problematizing the conditions and environments where the lived experiences of TNPs occur is critical as it might provide clues to the systemic inequities that shape their identities and is a phenomenon that is only beginning to be explored (Andrion, 2022). Particularly, establishing how globalization, capitalism, and colonial legacy impact the lives of TNPs in Canada is important for a country that welcomes thousands of immigrants each year. Contemporary investigations in the area of TNP migration are descriptive in nature and only describe their demographics (Cornwall, et.al., 2016), how universities deliver "bridging" programmes for TNPs (e.g., Greig, et.al., 2013), or how TNPs perform in

national PT examinations (Miller, et.al., 2010). An important observation to note among these studies is the centrality of the deficiency model in professional integration whereby the onus lies on the individual to address such deficiencies. Consequently, possessing cultural capitals (Friesen, 2011) such as having "foreign" PT education would require some "bridge" education to make their prior PT education "Canadian equivalent."

Examining the ways in which the dominance of Western thought has impacted PT education, policy, and practice globally, this chapter is an attempt to expose the impact that the "terrible triad" have on the wider discourse around identity politics, citizenship, and inclusion. While these forces influence the identity of various professions such as nursing (Dorri, et.al., 2020), they have not been investigated thoroughly in physiotherapy and how they have influenced the lived experiences of TNPs living in Canada. As such, this only reinforces the long-standing dogma in physiotherapy where movement is reduced at the biological, bedside, or clinical levels. By using the critical physiotherapy labour-migration framework, I analyze the effect that power and privilege have on TNPs in securing a tight border around the Canadian physiotherapy profession. In this border, the immigrant identity has become a liability that othered TNPs within the Canadian physiotherapy profession. While not exclusive on TNPs, contemporary discourses around power, privilege, and oppression within the physiotherapy profession revolve around the experiences of racialized bodies (Black, Indigenous, and people of colour) (e.g., Vazir and colleagues (2019). Similarly, the work of Matthews and colleagues (2023) challenges the current efforts around equity, diversity, and inclusion within the American physiotherapy profession.

Social justice research: Grounded theory and labour-migration in Canada

Social justice research is central to the Charmazian grounded theory (Charmaz, 2011), the research method used in my study. Using the Charmazian technique was important in generating a theory that explained the integration process of TNPs. Following the principles of grounded theory data collection and analysis such as theoretical sampling and theoretical saturation, nineteen TNPs participated in the intensive interview that took place within the Greater Toronto Area in Ontario, Canada. Of the nineteen participants who were interviewed for the study, fifteen were born and raised in

a low-income setting, with twelve emigrating from Asia. Further, thirteen participants were already working as registered physiotherapists in Ontario at the time of the interview. For negative case analysis, three North America-born/raised TNPs were also interviewed, one of whom was of Asian descent. For fear of repercussions, three requested anonymity of their countries of origin (Middle East and South America). The list of participants in this study can be found at the end of this chapter.

My study on TNPs eventually gave rise to a lens that I call "critical physiotherapy labour-migration studies," an area that appears to be unexplored in the physiotherapy profession. In critical labour-migration studies, how racialized physiotherapy labourers are othered within the profession is emphasized. In this lens, I examine the impact that the triad forces of globalization, capitalism, and postcolonial legacy have on the migration of racialized physiotherapy bodies to high-income countries. Consequently, the dash in this framework (labour-migration) is maintained and intentionally included to demonstrate the nuances, complexities, and dialectic relationship that take place between labor and migration.

Physiotherapy, immigrants, and professional identities

Globally, the identities of immigrant physiotherapists outside of North America have been shaped by the socio-cultural and political contexts of both the sending and receiving countries. On the positive side, Kyle and Kuisma (2013) note how "overseas trained" physiotherapists in the United Kingdom reported their professional growth after migrating to the country. At the same time, the emigration of Nigerian and Indian physiotherapists, respectively, contributed to their feeling of higher professional prestige, aside from receiving better pay and working in ideal conditions (Oyeyemi, et.al., 2012; Grafton and Gordon (2019). On the other hand, how physiotherapists undergo a professional identity crisis post-emigration and career change has been observed by Remenick and Shackar (2003). In their study, they noted how immigrant Russian physicians turned physiotherapists in Israel reflected and questioned their professional identities in the country. Similarly, a study in Saudi Arabia demonstrates how non-Saudi physiotherapists reported discrimination where the majority of the respondents expressed their desire to eventually go back to their home countries (Alghadir, et.al., 2020). There are also ongoing calls to decolonize physiotherapy

education where central to the debate is how the dominance of Western pedagogy in the profession has caused the loss of traditional healing practices in former colonies (Cobbing, 2021; Mtima-Jere, et.al, 2023.).

Outside of the physiotherapy profession, studying the change of identities among immigrant professionals in Canada is not a new phenomenon. In a study on Canadian immigrant engineers, for example, Friesen (2016) argues how regulatory barriers resulted in a professional assimilation attitude assumed by this cohort. In occupational therapy, Mullhollland and colleagues (2013) offer a linear, three-part career trajectory among occupational therapists trained outside of Canada. This linear trajectory has also been suggested by Sochan and Singh (2007) among internationally trained nurses. Moreover, the change in professional identity has also been noted among medical students (Frost & Regehr, 2023) and novice teachers (Pillen, et.al., 2013).

Neocolonial practices, globalization, and racializing TNPs

The experiences of immigrant PTs in Ontario

From a colonial lens, it can be argued how colonization and the rise of capitalism have secured the expansion of the physiotherapy profession across the globe. For instance, historical accounts point to the involvement of American physiotherapists in the Philippines after World War I (Vogel, n.d.) or during World War II (Veterans History Museum, 2021). As neocolonial practices and globalization expanded, Western-based education dominated physiotherapy practice globally where the colonial influence of American education continues to be felt. In my study, this observation was recalled most especially by the participants who emigrated to Canada from former colonies. For instance, Drake, a study participant, remembered how the physiotherapy education system in the Philippines was Western-centric where they "learn[ed] from North American authors." In the same manner, Lauren, a physiotherapist participant from the Middle East felt that the practice of physiotherapy in her home country has been "very influenced by American style."

According to Lodigiani (2020), globalization has been a critical factor in the perpetuation of (neo)colonialism that has further contributed to global inequity. Similarly, Mignolo (2002) reminds us that:

> The expansion of Western capitalism implied the expansion of Western epistemology in all its ramifications, from the

> instrumental reason that went along with capitalism and the industrial revolution, to the theories of the state, to the criticism of both capitalism and the state.

In relation to this, the potent influence and effect of colonialism and the impact of poverty in their home countries have pushed TNPs to migrate to the Global North, notably the United States and Canada. As recalled by Drake, "the goal of my classmates back in high school . . . they want[ed] to pick physiotherapy . . . not to work in the Philippines, but to work in the US." In my study, the desire to migrate to North America was strongly evident among Asian TNPs, notably among Filipinos, with emigration primarily triggered by their desire to financially support their families. At the same time, how the English language has been a facilitator of globalization was an important factor in the movement and shaping of TNP identities. Jordon, a Black Colombian TNP, argued that learning English in a predominantly Spanish-speaking country "opens doors . . . there are always things happening in developed countries and that's mostly in English." But despite the promising future offered by emigration, however, the identities of TNPs were also marred by confusion and guilt, as recalled by Emily, also a Colombian TNP: "I feel guilty about leaving Colombia because I feel that Colombia invested a lot in me. Like I received all my education there."

How poverty pushed the participants to change their identities from being professionals ("Proud Newcomers") to mere blue-collar workers ("Humbled Aspirant") was also notable in my study (Andrion, 2022). This observation was most glaring among TNPs from former colonies such as the Philippines. Several Filipino TNPs changed their original identities from physiotherapy professionals in their home country to becoming domestic workers internationally, as in the case of Alayna, a registered physiotherapist in the Philippines and a former nanny in Hong Kong, who wondered: "Why is the Filipino government allowing other professionals to get out of the country and work as nannies in Hong Kong?" At the same time, the goal of "making it" in a high-income country meant that they also had to adopt the "Humbled Aspirant" identity multiple times as they worked as nannies in different countries (cross-country workers) despite having physiotherapy degrees. This was the experience of Mia, also from the Philippines, who had the ultimate goal of being able to practice physiotherapy in Canada: "There's no [*sic*] much job for us to stay in the Philippines. So, we thought of going to Hong Kong and then

coming to Canada [as nannies], maybe we'll have a better life here in Canada." Evidently, the movement of TNP identities and the process of de-professionalization begins long before they migrate to their host countries and are largely driven by their respective country's long history of colonial rule and the resultant cyclical poverty and economic inequity, among others (OHCHR, 2022).

The importance of teaching physiotherapy from an anti-colonial lens also emerged in my study. While the majority of the participants were trained according to Western physiotherapy epistemology, it appears that culturally they were unprepared for the realities when they started working as physiotherapists in the North American health care environment. Particularly, they experienced shock as they worked in certain Canadian settings, such as nursing homes, where they noted the professional and cultural differences: "I wasn't familiar with this one because we didn't have nursing home in [*sic*] back home (Lauren from the Middle East)." At the same time, the insights of CJ, a Philippine-educated TNP, is even more telling: "at first actually it's very depressing because it's my first time seeing all the old people [in nursing homes] just staring at the glasses and expecting somebody to visit them." Thus, given the dominance of Western pedagogy in former colonies and given the differences in cultural expectations vis-à-vis physiotherapy clinical practice, "a deep, philosophical shift in the way we approach our teaching [physical therapy in former colonies]" (Cobbing, 2021) may be needed.

Processes of othering TNPs

While the impact of colonialism and globalization have been critical to the emigration of TNPs, their cultural capitals played a significant role when they arrived in Canada. Their accents, ways of dressing, command of the English language, and most importantly their academic PT credentials were seen as insignificant capitals and became roadblocks to practising physiotherapy. These barriers were exacerbated by various regulatory and professional restrictions imposed on them. Recalling his experience, Jordon noted that "they made sure that you always feel like a foreigner. It's like—it doesn't matter how successful you are, you become, it's like oh, but remember they're not from here. You are from elsewhere." Another TNP from South America, Alyssa, recalled the day that she was accused of stealing jobs: "And she [a colleague] looks at me and says, so you came here to steal Canadian jobs?" Moreover, the idea of being a foreigner, particularly having a heavy,

non-North American accent was not only perceived as a liability by Lauren from the Middle East, but also a form of dislike, despite her whiteness:

> . . . and I have kind of a white complexion but when I talk . . . all of a sudden, [they] ask me oh where are you from? All of a sudden, when I talk about [name of home country]. . . . You know it's kind of—I just understand they don't like [my home country].

Aside from their experiences of perceived discrimination, the career trajectories of TNPs continued to go downhill after they migrated to Canada. Particularly, the physiotherapy education and work experience that they obtained from their home countries not only became liabilities, but also valueless. For instance, nine of the thirteen registered Ontario physiotherapists interviewed in my study noted the perceived inferiority of their credentials by colleagues and potential employers. On the other hand, the study participants from Canada and the US (negative case analysis), all registered physiotherapists, identified networking as the only barrier to their integration. The dismay in credential recognition was felt even more by TNPs like Alexander from the Philippines who described how his credentials were seen as "garbage":

> And those experiences that you have is just purely garbage. I think that's the concept of, you know, like putting the barrier there. Like throwing away all the experiences that the immigrants had prior to moving in Canada is unacceptable.

Indeed, and whether they were already working as registered physiotherapists or physiotherapy assistants, the TNPs' struggle to reclaim their identities as "physiotherapists" was exacerbated by bureaucracy and perceived discrimination. To this end, working in survival jobs for some was the only way for them to make both ends meet. Marcus from the Philippines thought that "for me, even though I don't like the job, for example, dishwashing of course. It helps me to earn a little money for that and then it gives, it gives me an opportunity to find another job because other establishments is [*sic*] finding if you have Canadian experience." Made illegal by the Government of Ontario in 2021 (Ontario Human Rights Commission, n.d.], the so-called "Canadian experience" was previously required by some Canadian employers as a requirement prior to hiring new immigrants.

Neoliberalist systems of physiotherapy practice

While the impact that neoliberalism has on the Canadian health care system has raised ethical concerns (Church, et.al., 2018), this topic has never been fully investigated within the Canadian physiotherapy profession vis-à-vis critical labour-migration studies. Particularly, how neoliberal principles directly impact TNPs in terms of job security and professional reputation has never been explored. And yet, based on the stories of the study participants, working in for-profit agencies that provide services in public settings offered both shame and precariousness. While the resistance to work in survival jobs was strong for some TNPs, this attitude failed for others in the face of government policies that privatized public services, as in the case of TNPs already working in the field of rehabilitation. Aside from the risk of their agencies losing contracts from other competitors, these contract TNPs were also working as self-employed individuals with no work benefits. In other words, the commodification of Canadian public health services equated to job insecurity among TNPs. Consequently, having precarious work caused TNPs to question their own identities as professionals, as noted by Lisa, a Filipina TNP:

> I, I didn't like the self-employed contract position because in the—the positions that the foreign trained physiotherapists were getting, at that time were contract positions in the nursing home, and I didn't like that. Because like, in the nursing home, they were, they like, we didn't have a good reputation, like they think that physiotherapists were just—because they were paying us on a per patient basis. So, the perception was we just keep get—we, we just keep seeing patients as fast as we could because we want to earn a lot of money.

The precarity of employment also meant that they were always on the lookout for the next available job. Drake, a TNP from the Philippines, recalls that:

> After losing my job in Canada many times, once was because physio stopped being covered by the government in retirement homes and I was working in a retirement home, so I lost my job there. And the next time was because the company that I was working for, in long-term care, was sold, so we lost the contract right there and I lost my job again.

As a result of their precarious work, seeking employment in public hospitals became a coveted prize by TNPs but was also felt to be reserved only for the local Canadian physiotherapy graduates as argued by Alyssa:

> And I think if this was a race, they would be far, far ahead of us anyways, just from completing that education here. From like, just think about if you were the manager of the hospital in the physio program and if you were gonna hire somebody for a fulltime position, will you hire an internationally trained student?

Shaped by historical processes, movement as analyzed within a critical PT labour-migration studies reveals the powerful and complex web of social institutions that have relegated the Brown and Black TNP bodies as racialized commodities. Consequently, how the triad oppressive forces contribute to changing the identities of TNPs reveals both the continued perpetuation of systemic inequities within the PT profession and the ways in which TNPs have attempted to resist these forces.

Identity and resistance

Resistance among immigrant physiotherapists in Canada has been critical in maintaining their professional identities, including the refusal to work in blue-collar jobs. This was especially true for Jasmine from the Middle East:

> I don't want to work in coffee shop, because I'm [a] physiotherapist. I didn't want to come here to work in a coffee shop and then just, like, make a living. Otherwise, I was thinking, if I wouldn't get my license I would go back to [name of Middle East country], because my goal was to be physiotherapist. I didn't come to work in coffee shop.

The resistance and the struggle to reclaim their professional title as "physiotherapists" became even more relevant to TNPs who exhausted their exam eligibility. As the concept of movement in the physiotherapy profession has been so focused on the clinical, the lived experiences of immigrant physiotherapists in Canada continues to be a silent topic where their important stories of resilience and enduring hope remain untold.

Due to a policy change at the time of the study, all exam candidates (locals and TNPs alike) were only given three attempts to pass the national

physiotherapy examination.[3] Once the number of attempts has been exhausted, candidates were no longer eligible to re-take the exam and would never have the chance to call themselves "physiotherapists" in Canada.[4] Whether exhausting exam eligibility in the written or oral components of the examination, these TNPs found themselves at the same place where they were when they first started working in Canada (i.e., "Humbled Aspirants"). For the TNP cross-country sojourners, the pain of losing their professional identity after exhausting exam eligibility bore the marks of pain and frustration. Alayna, a Filipina TNP who entered Canada under the "Live-In Caregiver Program," completed a Canadian bridging program, and exhausted her chances on the written exam, only had this to say: "I just feel like I needed a me-time, that long to process the demise of your career. I feel like it is like the death of something you work hard for, because there's no—you cannot revive this anymore, right? You cannot—you cannot." She further adds: "I mean I'm not ready to give up, but they [examining body] already gave up on you." In Alayna's case, her identity changed from being the "Proud Newcomer" to becoming "The Defeated" (Andrion, 2022). But the idea of not being able to ever practice physiotherapy in Canada opens a bigger debate for Jeremy from the Philippines who also exhausted his exam eligibility. Specifically, he wondered why racialized TNPs have been invited to apply to Canada in the first place:

> . . . it's like why would immigration consider physiotherapy as one of the categories for skilled workers and then once you get here, they don't even support that category by giving you more choices or by giving you more chances. It's like I feel that the immigration, at this point, is like trying to get skilled workers on particular areas where the country need [*sic*] it most, which is aptly right, however, it lacks the support that it should give to these skilled workers once they get here.

Indeed, how these racialized bodies ended up working in low-skilled blue-collar jobs in Canada reflect what Robinson (2008) calls "racial capitalism" whereby bodies from low-income countries are used to render services in jobs that local workers in the Global North would shun away from. In the case of TNPs, their Brown and Black bodies have been relegated to work in highly precarious jobs such as contract workers in nursing homes or in very low paying jobs such as cleaning houses. In other words, the

effects of bringing the physiotherapy profession to the global South (Dados & Connell, 2012) has conveniently produced racialized bodies that have now become important commodities in the Global North. This problem in turn has created an alarming trend whereby TNPs have become de-professionalized or second-class physiotherapists in a country that supposedly welcomed them as professionals. More to the point, unless the physiotherapy profession confronts and attempts to dismantle the powerful and oppressive social structures that were built according to Eurocentric ideals, then TNPs living in the Global North will remain oppressed and silenced individuals whose ways of life will continue to be shaped by the influence of globalization, capitalism, and colonial legacy.

Conclusion

From the foregoing, the terrible triad of globalization, capitalism, and colonial legacy have all connived to offer TNPs an environment in Canada where the processes of de-professionalization, racialization, and Othering continue to flourish. As the physiotherapy profession continues to discover its own identity, this chapter is an attempt to provide another avenue of such discovery. With the extreme shortage of health care professionals globally (Agyeman-Manu, et.al., 2023) and with the perceived benefits of working in the Global North, it is anticipated that more TNPs will be migrating from the low- to high-income settings. Beyond just describing their journey and the services provided to them in host countries, it is hoped that the continued influx of TNPs in Canada and elsewhere becomes a wake-up call for the physiotherapy profession to critically examine the impact that the "terrible triad" have on the lives of TNPs. Consequently, the profession should seriously consider mainstreaming the social sciences to further equip students and practitioners with the necessary sociological tools to reimagine and interrogate social phenomena. Through this chapter, it is hoped that that critical physiotherapy labour-migration lens has been helpful in examining movement. While TNPs born outside of Canada are already lost in the maze of bureaucracy, intolerance, and unacceptance, it is even much more surprising to know that even TNPs like Jake who was raised in Ontario also find how "physio is a mystery. The industry is a mystery to me." Indeed, it is hoped that it won't take another 100 years before the profession will embrace the broader meaning of movement within physiotherapy.

Notes

1 In clinical practice, terrible triad or unhappy triad often refers to the simultaneous injury to the medical meniscus, anterior cruciate ligament, and medial meniscus.

2 "Internationally Educated Physical Therapists" (IEPTs) is the term commonly used in Canada.

3 Prior to this, exam candidates were given up to five attempts to pass the written or oral components of the Canadian physiotherapy licensure examinations.

4 At this point, evaluating the clinical skills of candidates has become the responsibility of each Canadian provincial physiotherapy regulatory body. The written component remains to be administered at a national level.

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ABSTRACT:

Ukuyankaza kuyi-Nkululeko is isiZulu, meaning 'movement is freedom'. This chapter describes how the transformative nature of autoethnography as a qualitative research methodology contributed to my reclamation of my African Indigenous identity. I draw on my experiences, using personal letters to an inquisitive blackgirl, Himore. The purpose of this chapter is to draw on the lessons learnt, original thoughts evoked, and my experiences marked by a critical event in my professional identity formation and my PhD journey. Using my Indigenous language within the title of this chapter is a disruptive act of reclaiming my cultural identity and voice. It also signals my efforts to move towards decolonizing research and speaking out as a previously silenced people. The freedom is described as I moved out of the chains of societal conditioning that denies my authentic self as a critical Indigenous womanist, physiotherapist, and decolonial academic in South Africa. Ukuyankaza kuyi-Nkululeko emerges using autoethnography as I account for and expose power, hegemonic issues, prejudice, dominance, politics, and privilege so that subjugated voices and epistemologies can be heard. Movement that requires the deliberate shift from the singular representation of an Indigenous person's identity towards acknowledging that our very existence as a complex collective is legitimate.

CHAPTER 2

Ukuyankaza kuyi-Nkululeko, Movement is freedom

JOURNEYING TOWARDS AUTOETHNOGRAPHY AS A TRANSFORMATIVE QUALITATIVE RESEARCH METHODOLOGY

MAHITSONGE NOMUSA NTINGA, HARSHA KATHARD, FILIP MARIC, KRISTEN ABRAHAMS, AND SEYI LADELE AMOSUN

Indlela eya ekhaya idlulah engozini,
The way home passes a dangerous terrain

(Isihlabelelo sama-Nazaretha no. 40: iNkosi iLanga YasekuPhakameni, J. G. Shembe)

Ngokukhulu ukuzithoba, Ngiyanibingelela bathandwa. Thokozani. Izithakazelo zabantu abadala abahlambulukile abaka-Ma-nabaka-Baba zibafanele, Makwande eMakhosini!

In the language of the colonizer, as a Shangaan/Zulu woman of African Indigenous heritage from the native land of Azania (colonial name: South Africa), I introduce myself as a seeker of truth, a womanist, decolonial, critical theory-based PhD candidate in Health Sciences Education at the University of Cape Town. In Azania we recognize a person (uMuntu) as the sum representative of their ancestral heritage, spirituality, cultural traditions, and community. In the waters and land of Nuwbia/Alkebulan (colonial name: Africa), our identity is deeply rooted in our relational connection to mother nature, each other (past, and continuous-present selves), embedded within

our rich Indigenous languages.[1] I would like to humbly acknowledge my ancestors first with the honour, respect, and dignity that they so deserve, Realeboha boDlakama! As I push forward with this emancipatory work, I do so with a localized critical awareness of the economic, physical, and psychological condition of the disenfranchised Black and Coloured Indigenous woman of my land.[2] The colonial powers use of English language to frame the identity of Black and Coloured as a separate people was intended to harm by othering or further dividing Indigenous communities. This framing of the Indigenous community identity is according to the Language Policy of Statistics South Africa regulatory framework which is still based on the terms set by the racially segregated apartheid government of 1950 (www.statssa.gov.za). The Black and Coloured Indigenous people are related brothers and sisters of one mother—Azania—these are all the descendants of Black ancestry (Adhikari & Adhikari, 2009).

Historical deprivation stands in contrast with my current position of privilege as an academic scholar that allows me the audacity to question reality and to be writing the words that you are reading. In preparation for my PhD research study, which focuses on Black and Coloured Indigenous people's physiotherapy professional identity formation (PIF), I came across autoethnography as a methodology of keen interest to me.

I came to appreciate that autoethnography is more than scholarly engagement; it is a revolutionary form of criticism of the relationship between dominance and power in social and cultural inquiry when combined with localized critical Indigenous theory.[3] Autoethnography chose me as its medium to move the physiotherapy profession around the planet into a newfound freedom. To move in Western spaces of society requires the shifting of personal values to consciencely define, own, and understand the reality whilst representing my authentic Indigenous self. This means not just the ability to move but using self-knowledge in grasping how to move and grappling with what and when to move. I envisioned myself writing personal letters to a younger self, named Himore, who is in the second year of her physiotherapy undergraduate degree. Each section will begin with a series of personal letters to a blackgirl, Himore, that serve to enlighten her on possible challenges and offer her an enormous paradigm shift to becoming a co-creator of knowledge.[4] These are followed by critical literature and theoretical

discussions directed towards readers and persons who identify with the plight of Indigenous peoples' identity globally.

Where are we stuck and hypomobile in physiotherapy?

Sawubona (We see you) Himore,

The African identity is grounded in the interconnectedness of the spiritual with the natural, physical, and encompassing realm of our ancestors. Ancestral intelligence stems from your bloodline, your inherently natural gifts that are bestowed upon you by your linage. The African identity is intimately relational to nature—African metaphysical cosmology—and is based on collective kinship of the spiritual and physical community with nature. This means that your physical features were deliberate, intentionally designed and nothing to be ashamed of. Consider positively that the darkness of your skin, the spiraling coil of your hair and the broad base of your nose are universally acceptable qualities that are inherently beautiful and are an expression of the intelligence of the Umdali/Umfihlakalo (Creator). Your Indigenous language is a key part of that ancestral intelligence—a medium of expressing your authentic self and connection to the vibrational frequency of nature and the cosmos.

Biomedicine research is what informs the knowledge that is taught in the health sciences and physiotherapy curriculum. The representation of western knowledge systems as superior, modern, and intelligent versus the portrayal of Indigenous knowledge systems as inferior, demonic, and barbaric is due to the Western, scientific, reductionist, abstract world of biomedicine research (Mubangizi, 2015). Positivism is based on rationalism that emphasizes that knowledge needs to be quantifiable, observable, measurable and is based on presumption of neutrality in its reasoning because it reduces information into numbers. But positivism fails to realise that human subjectivity/bias is continuously present in all observable phenomena thus failing in its deception of being neutral or void of bias. Interpretivism is a research paradigm that analyses findings is based on the reality that there are multiple contributors to knowledge such as the culture, norms, language and belief system that informs the subjective truth of that society. Positivist research that informs the health science education knowledge is what contributes to a physiotherapy profession that is exclusionary, stuck, and hypomobile. This comparison between Western knowledge and my Indigenous knowledge left

me cycling between constant mode of assimilation of Western attributes or disconnected from my authentic self or with a debilitating state of imposter syndrome. This disconnection was not easy, and I often interpreted it as a silent violence steaming inside me. My intuition and cultural identity were very much a great part of who I am and my gift from my ancestors, but a Western framed professional identity made this "separation" from myself mandatory. Alternative research methodologies allow for richness in differences and play a key role in diversifying knowledge production. My concerns that keeping my Indigenous identity, my emotions, talents and vulnerabilities separate from my physiotherapy professional identity were validated by how damaging, counterintuitive, counterproductive, disconnection from self was a working act against my self-esteem. The most dangerous African person today is a colonized African who is not-self-aware of his mentacidal state.[5] That colonized African brother/sister would chop off their own arm and sew on white man's arm instead because of the inert belief the new arm is superior to their original arm (Fanon, 1952). I write to you Himore to appeal to you to begin to view your original African Indigenous self as adequate and enough. There is no longer a need to play a role in this play called life—that the colonizer wrote and taught you to enslave you. Due to my well-taught perception of being presumed incompetent, I have spent most of my physiotherapy career trying to keep my Indigenous identity, culture, and vulnerabilities separate and external from this physiotherapy professional identity. I urge you to walk on this career path as though you have every right to be here, in an openly subjective way. By being open to and using alternative research methodologies such as autoethnography, to reclaim your authentic African Indigenous identity, and courageously standing up to this giant called Western professional identity. Qina, Sterkte![6]

> Research is what informs the continued practices of each profession. Western knowledge is what informs what is taught in the physiotherapy curriculum and has been legitimized by colonial and capitalistic governors of professions which is higher education institutions (Nicholls & Cheek, 2003).

A profession is a field of labour that requires specific knowledge, skills, and training and which is a qualification that allows the person to be employed.

Higher education institutions are the producers, holders, amplifiers, and gate keepers of this specific knowledge.

Professional identity is the roles, values, practices, and ethical standards accepted by a profession. The collective professional identity in physiotherapy values objectivity, coherence, clinical skills, and Western ethics, similar to the knowledge system in which the origins of the professions emanate (Hammond et al., 2019). There are unique negotiations that African physiotherapists experience to develop their individual professional identity. The portrayal of Indigenous persons, within medicine/physiotherapy research is problematic because it is informed by colonial and Western value systems. As outsiders from these Indigenous communities, colonialists tasked themselves with framing Indigenous peoples' identities, often through a deficit lens, as a problem to be solved, where a solution comes from the outsider. This is the epitome of the perpetuation of the Western colonial agenda (Sheperd et. al., 1993; Lurch et al., 2023).

Indigenous knowledge systems are an alternative form of knowledge because they subscribe to completely different sets of value systems compared to the West. That is, African Indigenous people value community kinship, nature, spirituality, traditions, rituals, and rhythm. We attach meaning to all life events—symbolised with often artistic expression through folklore, idioms, poetry, parables, song, dance, beadwork, and art motifs. Ubuntu is what govern our values of relationality, reciprocity, a communal purpose, and meaning to work (Mubangizi & Kaya, 2015).

A constant negotiation with the dominant discourse of physiotherapy education is required for an African Indigenous person to thrive in the higher education environment. The historically predatory nature of collecting research data from Indigenous communities without being part of the communities is rooted in the extractionist ways of coloniality and isolating ways of positivism. Euro-American research practices paraded positivist knowledge as privileged, as the epitome of intelligence and todays superior knowledge (Ndlovu-Gatsheni 2013; Nicholls, 2017). Interpretivist research does not stand as the singular representation of truth because interpretivism is based on the differences that exist in human perception and subjectivity, allowing for realistically diverse interpretation, critical reflection, and acknowledgement of human bias (Gemma, 2018). Womanism is a branch of feminism that considers how power influences race, gender, class, and

sexuality, and how these factors impact relationships where feminine roles in the family and community are at the centre (DeLoach &Young, 2014). However, feminism only considers the patriarchal power relations between white women and men mostly without the acknowledgement of how racism, privilege, and coloniality assigned the subhuman status to Black women, dispossessing them of their femineity. As an African Indigenous woman, the current physiotherapy professional identity has omitted me or failed to represent me in our profession.

The perfect physiotherapy professional identity crisis storm: Grasping how to move

Sawubona (We see you) Himore,

I have often reminisced about youth, the wide-eyed naivety, so eager to learn and clammy, soft, hands so eager to prove that they can do the work. During my formalised schooling and especially during my physiotherapy undergraduate years, I found myself learning to silence my inner South African Indigenous voice and embody the new Western voice of being an educated diagnostician. Monolingual and Westernized schooling problematizes the use of our Indigenous language by only prioritising English modes of teaching, assessments whilst dismissing the richness of my African Indigenous language which is endowed with the African value system of my people. After years of being torn away from my true cultural identity, by the social conditioning done by Western education, it is typical of vulnerable women such as us, to have an inner identity crisis, a debilitating imposter syndrome, in the process of trying to discover where we fit in society. Western scientists, as agents of colonial power, extracted, appropriated, commodified, and distributed knowledge from experiments conducted on Indigenous populations in the name of science (Bishop, 2005). We either become these Western scientists ourselves or we use this education to liberate Indigenous people out of their current dispossessed status back into harmonious, non-materialistic ways of being.

If we see ourselves through the colonizer's eyes, we will always be lacking, but if we see ourselves through our ancestral eyes, of unconditional acceptance, we will view ourselves as enough. Himore, you need to know that you are enough. The colonizer assigns value to that which he can exploit, use as cheap labour, and use as a ploy to further deceive the masses that the

capitalistic system is not in fact a system that is actively against nature-life. The toxic individualism imposed on you as an innocent blackgirl forever striving to embody an acceptable English twang, a capitalistic identity, and white women–based standards of beauty. Carrying the heavy burden of English is no measure of intelligence. Himore, the fact that we still have a monolingual education system that problematizes our Indigenous languages is absurd. Your ability to be your true African Indigenous self as your birthright was taken from you before you knew its worth. Azania, with all its rich lingual and cultural diversity, has nothing to show for it; we should be leaders in language innovation that eases communication across our eleven official languages. Ancient Indigenous South African languages that have been deemed unofficial must be researched, reconstructed, and re-taught to the Africans first peoples. !Khwattu, my Coloured brothers and sisters, our Indigenous languages are the communicative umbilical cord to our ancestral intelligence.[7]

Professional identity formation is the process of how the primary self evolves into the secondary self to embody professional values, attributes, and behaviours (Lammers, 2015; Batac, 2022). Health sciences professions are endowed with Western, positivist research that leave many Indigenous persons feeling compelled to embody the Euro-American, Western, professional identity norms and expectations to succeed in these professions. Alternative research methodologies such as autoethnography allow for freedom of expression by demanding emotional depth and positioning of the self, while accounting for biases and providing alternative ways to showcase knowledge. Black and Coloured Indigenous physiotherapists negotiate socialization by thinking, acting, speaking, and conducting themselves within a Westernised physiotherapist's professional identity.

In my experience, the first and second years of physiotherapy undergraduate training in South Africa (SA) are when African students learn to leave their ideals of being an African and a healer behind when forced to embody becoming a technician acting over the human body. Students delve deep into the Latin language discourse of anatomy, pathology, theory, and practical content of musculoskeletal, cardio-pulmonary, paediatrics, and women's health physiotherapy (Allum, 2013). This is when students learn the limitations of their range of movement in physiotherapy—who they can be and who they cannot be because the language of physiotherapy is indoctrination,

isolating, and an educational tool of domination. The first two years of most undergraduate physiotherapy's training globally are when students are given their first exposure to theoretical knowledge and practical foundations of physiotherapy, and to clinical sites, where students get to interact with the assessment protocols and have dialogues with real patients. The first two years have all the ingredients for what I would like to call "the perfect professional identity crisis storm". It's in these years that students take authority over the human body as the instrument through which they are learning to exert themselves onto their patients. According to my African Indigenous knowledge system, there needs to be harmony between the spirit, soul, mind, and body. This holistic approach of Indigenous ways towards healing is based on instinctual reverence of the spiritual origins of the Creator of human beings; it stands in conflict with the material body–based, machine-like approach of biomedicine, thus giving rise to the perfect identity storm (Knop, 2015).

Grappling with what and when to move using autoethnography

Thinking blackgirl, Himore!

Written word is the conquest engine and commanding mechanism of the colonization of human thought (Modiri, 2018). The silence, focus, and self-casting required for reading uses my own inner voice against me. Studying through reading is how I was forced to take in Western knowledge so that I can become a professional. I believe this is what makes Western education such powerful tools to relay a dominant message to society. Becoming a professional means agreeing to the colonizer's value system and their lies told about Indigenous peoples—which are a mental prison, an invisible wall of chains that keep the mind shackled, keeping me from being true and authentic to myself.

Alternative ways to conduct research and to answer complex questions is what informs other forms of knowledge. We need to use alternative research methodologies to move the profession forward. After years of getting the emotion out of my professional identity, autoethnography has made it possible for me to read, study, and write with emotion. There is no way that the cold, rigid scientific biomedicine version of me could assert itself on me any longer. A softer, kinder, more vulnerable, sentient, decolonized version of me must be conjured from the depths of my African spirituality informed

identity. I am using alternative forms of knowledge production to reclaim my freedom, my humanity. I am writing about what it is to discover my African identity, what it's like to be living among dominant Western identity, by learning when to insert myself into their literature, their books, in their media. We, Black and Coloured Indigenous people of Azania (SA), will open their eyes, together, by returning the title of humanity to all peoples. Because the truth is that they might be one of us, in some way battling with their own "othering", stuck in anguish in a system they can no longer sustain. We will take back our place in humanity, awaken humanity (A-bantu), assist humanity to track the root causes of their mental, spiritual, and physical dysfunction. When we move? The answer, Himore is now. Phambili![8]

Autoethnography is a qualitative research methodology that uses life experience as a rich data source by embracing the subjective nature of being human. This research methodology is non-conventional when used in health sciences education because it aligns with idea that there can be varying answers to a single research question (Adams et al., 2015). The recognition of how dominance, emotions, perceptions, and culture inform the "self" in auto-ethnographic participation are some of the key ingredients to how autoethnography may inform a critical, decolonial, and interpretivist worldview. Autoethnographic researchers write about themselves, their communities, their cultures and therefore cannot be neutral or objective in research, nor can they avoid being vulnerable (Poulos, 2021). We move forward by placing the "uMuntu"- into research., When "aBantu"- are participants in the research then we can have first-hand accounts that fully describe, understand, and give real-life applications of our authenticity and vulnerability. Our vulnerability is often caused by our perception of inadequacy meaning we need to embrace our personhood-informed humanness, our emotional, subjectivity, bias, and sentient nature of "abantu". Currently, there is little research honouring vulnerability in Indigenous physiotherapists, or our patients—research directed towards Indigenous people in academic spaces lack deliberate intention to delve deep into the pertinent issues of the lack of belonging, self-expression, confidence, and autonomy that Indigenous people experience in the current health-care system (Ramugondo et al., 2017).

Moving to autoethnography requires that we expose how subservience plays out in the face of dominance of multiple intersecting identities, specifically in terms of ethnicity, race, gender, age, ethnicity, class, and ableism

which inform the human perception of the experiences in this world (Keskin, 2021). The "auto" speaks to how the self, perceives in describing personal experiences using autobiography and personal narrative in story, memoir-like style. In so doing, even autoethnography perpetuates Western views of the individual as singular, clearly defined person in contrast to Indigenous methodologies that view a person as the sum representation of his ancestral heritage, bloodline, language, land, and connection with community and nature. The self for Indigenous people is not individualistic in primordial form but relational, communal and is connected with ancestral spirituality, an immaterial harmony with the land in which they rest, and "enoughness " in the use and sustaining of natural resources (Babbitt & Lachney, 2021).[9] Community begins in the individual's ancestral spirits as the initial self-expression of Ubuntu that the each native individual inherits in the family unit. This relationship permeates through into the immediate, extended family, clan, and community in collaboration with the physical realm.

The "ethno" in autoethnography stands for "culture". Without the acknowledgement of the researcher's cultural identity, the researcher cannot be reflexively involved in the critique of hegemony within knowledge production. It is the recognition that culture plays a pivotal role in human identity and how this frames our perception of the world. In *The art of autoethnography*, Adams, Holman, and Jones (2015) describe cultural experiences, communal expectations, social beliefs, values, and practices as constructs of human identity. The autoethnographic researcher is required to be a member to the unique cultural group, should embody the member perspectives to call attention to the group's plight, and should shed light on complexities and phenomena that are specific to it by using evocative, thick descriptions of the cultural experiences. The "ethno" part of autoethnography is one that speaks to the core of my African Indigenous values because our culture is pivotal to our identity, and the ongoing intellectual separation from our culture has been on the colonial monotheistic agenda since inception. Our African culture is maximalist and polytheistic in nature. The maximalism is grounded in the regenerative capabilities of the sun, soil, and water in nature and multiplicity of spiritual gifts that are assigned to each person before birth guided by diverse divinities, Deities, Orishas/iZithunwa.

The "graphy" in autoethnography speaks to the practical collecting of memories which may be done by using art artifacts, poetry, written

transcription of oral conversations, and personal reflective letters. The work of autoethnographers is the descriptive writing and rewriting of the past, to articulate past harms, microaggressions, and epiphanies by creating stories of a truthful, subjective written record for others geared towards a particular audience (Bochner and Ellis 2016, p91). Apprenticeship and storytelling are major parts of educating the young African, a means of community building activity among adults and means of relaying important principals to live by during rites of passage or marriage.

"Narrative privilege" means that the power naturally belongs to the person narrating a story. This power has long belonged to the Western societies while Indigenous people have not had the necessary courage, authority and exposure to higher education systems to tell or document their lived experiences by standing up and choosing how to be represented in the telling of their own story (Bochner, 2012). Autoethnography together with critical Indigenous methodologies allows Indigenous communities to own their "narrative privilege", choose how we define success and how to tell the stories of our ancestors, or define our current lives and how we want to be represented in the future (Poulos, 2013). There is a crisis in representation and a singular narrative privilege crises in the Western dominated health sciences knowledge bases. Autoethnography may be used to counter this underrepresentation or the limitation in current research of specific populations or to highlight the unique day-to-day human experiences. Autoethnography has been used to magnify and describe in detail the knowledge that the researcher, who is the participant, possess as members of the specific population group.

The researcher being a participant removes the epistemic, extractionist nature of positivist research methodologies. Bias is the way human beings view the world either with prejudice or distortion due to their preconceived ideas and social conditioning. When the researcher is the participant in the study, her bias is reflexively accounted for, as in all autoethnographic work—reality is subjective, bias is welcome, and is already happening in all research methodologies (Anderson et al., 2019). Subjectivity is the individual lens through which we each view ourselves in relation to the world around us. Autoethnography values the self-awareness and accountability that the researcher assigns to their bias rather than the denial or refuting of this bias. Having bias is a human trait and the lack of accounting for one's biases is the biggest blind spot of positivist research today. Using my Indigenous language

is a means to attempt to position myself and to encourage the reader to see life and societal issues from my perspective just as the continued use of English has a medium of education has influenced the world population to see the issues keenly from the Western, colonizers perspective. My Indigenous language is the one part of my identity that the colonizer has no authority, where his standards have no jurisdiction, and his gaze is obsolete. Woe to those who have embodied the oppressor's language as their own. Awake, my Africa!

How can we improve our mobility in physiotherapy? Decoloniality, critical theory and Indigenous research methodologies

Curious blackgirl, Himore

I have had to learn to become my true self again and unlearn toxic individuality, unlearn entrenched competition with others. We need to form partnerships with Indigenous communities and reconnection with our culture and traditions. The separation from my true self, my community, and from my culture is no longer tolerable.

I resist the trivialization and marginalization of African Indigenous identity, knowledge, and scholars that is perpetuated by the Western ideologies underlining health sciences education. The internal validation that comes from possessing pride in our cultural identity, rituals, traditions, and community values should form an internal shield that protects you from life's storms. This is the first time that I could embrace my culture's love for other people without any of the shame. We, as African people, need to identify with our culture of Ubuntu, in a way that edifies, affirms, educates, and potentially liberates our people. We must take pride and ownership in speaking, writing, and preserving our Indigenous languages in all spaces whilst leaving a rich narrative inheritance for future generations of our people. Alternative research methodologies such as autoethnography is how we create other forms of knowledge, such as our rich ancestral intelligence, African cultural heritage, connection to our Indigenous communities, and the soil in which they rest. We can expose the elitist Western ideologies that are working against society's well-being, and in which the mental health decline is an omen of decivilization. I beseech you blackgirl to school yourself in African ontology, cosmology, Pan-Africanism, Black consciousness, African philosophy,

intersectionality, Black radical feminism, womanism and Wu-Sabat because in these you will find the hidden intelligence of your elders.

Decolonization of the physiotherapy curriculum is our way out of the professional identity storm. Decolonial theory informed methodologies are defiant to those research practices that perpetuate Western power by adding to the understanding of the underlying assumptions, motivations and values that inform colonial research practices (Peters et.al,2024; Fishman & McLaren, 2005, p.33). Indigenous theory informed alternative research methodologies are better positioned to be relational in that they require that the researcher locates themselves within the context of the communities from which the Indigenous knowledge is centered. This stood out for me as a major gap in health sciences education research in the African context. "Movement" is self-autonomous drive to progressively maneuver out of the deficit based Western gaze, by telling our stories ourselves and by contributing to the rebuilding of Indigenous societies into mental liberation and restoration. Collaboratively writing our stories is a validating act of reclaiming our African identity (Pelias, 2022). The requirements of success in the media are defined within Western standards of individual success obtained via an insatiable appetite for wealth colliding head-on with over-working, and over-consumption, isolating people into physical and mental health degradation. We run the risk that our Black and Coloured children will think that the only way to achieve success is to model Western values and abandon their own Indigenous value systems to be "successful". Critical theory claims that information always contains an ideological dimension, whether it is quantitative or qualitative research methodologies that are being used. Critical theory alone failed to address how Indigenous civilizations and their epistemologies were positions of resistance and empowerment unless contextualised to the local level (Norman et al., 2014). The disconnect from our ancestral heritage, our communities, Indigenous culture, traditional healing, and Indigenous languages are how colonial hegemony was achieved. This is how we found ourselves isolated, subjugated, disconnected from our authentic selves. This ongoing disconnection from each other, disconnected from our cultural values, is made evident by the current mental, physical, and planetary health crises of the Indigenous peoples of our generation (Berry, 2022; Obioha & Nyaphis, 2018).

Movement to build strength: Knowing who we are, being co-creators of knowledge using African renaissance theory

Truth seeking blackgirl, Himore

I will be speaking using "we" and "us" in reference to all those who identify with the plight of Indigenous people globally. History and research told from a colonial perspective was a deliberate means to ensure that we lowly esteemed our own African value systems. Our ancestors were portrayed as barbaric, demonic, which made us orphans without a positive self-identity. Undermining of African intelligence was a colonial tool used for the mentacide of the Black African descendants, so we could comply to be forever colonial slaves. The perceived shadow of self-incompetence is that which follows you into the competency-based physiotherapy curriculum (Shumba & Tekian, 2024). Ubuntu demands the relational inclusion of other human beings into our worlds. As physiotherapists, this means being advocates of this harmonizing movement into Indigenous peoples' freedom into movement into collective consciousness. Building strength can be achieved through building mutually beneficial relationships, partnerships, and collaborations with like-minded peers. Movement done together, Ngo Buntu, Himore, is how we build strength. Therefore, do not isolate yourself. Form and nurture relationships such that you become co-constructors, co-creators, co-restorers of African knowledge. This will require courage to foster unity, community and harmony wherever you go because Western spaces favour silos, isolation, competition, and toxic individualism. Surround yourself with like-minded people. There is a resilient power of living life surrounded by your peers rather than at going through life alone. Sankofa! Masibabaneni!

Collaborative autoethnography is when a group of participants co-construct a narrative by sharing their life experiences together. Collaborative autoethnography is a type of autoethnography that most resembles my African Indigenous values of reciprocity, relational kinship, and participation. Individuality is a Western construct that is in contradiction to African Indigenous perspectives that are steeped in connectivity and community as their foundation (Mencher, 1947). Individuality is a western and colonial value system which esteems the self; my Indigenous identity values Ubuntu, which stands for "we are made human by the combined humanity of those beings around us" (Mokhachane, 2023). In collaborative autoethnography, multiple participants embark on a

storytelling journey of their combined lived experiences to draw attention to the complexities to their experience. The reason why collaborative autoethnography is preferred is because of my Indigenous values of kinship between community members, reciprocal spoken word. Stigmatized people find ways to cope and adapt to the stigmatization. This is traceable through the collective recounting of daily experiences, daily reactions to prejudice, and ways to overcome difficulties and learn resilience and coping strategies (Goffman, 1963). As an example of collaborative autoethnography, Boylorn traces microagressions and celebrates the ways of life and resilience of rural Black women in southern small towns in the United States of America by retelling their experiences through triumphant stories (Boylorn, 2016).

According to Cabral's radical theory, Africans returning to African Indigenous knowledge systems, cultures, traditions as their "original form of knowledge" would ensure the deliberate promotion and embodiment of African values and languages. This would symbolise for African Indigenous people the ultimate "returning back to their true authentic identity of unity", which is the undoing the colonial, racist ideals that Africans should be divided and isolated at all costs. (Cabral, 1972a). African Renaissance theory is a restorative theory that aims to rehumanize, unite, and reimagine African Indigenous communities' pride and undo decades of inferiorization (Ndlovu-Gatsheni, 2019). African Renaissance theory questions the origins of "poverty" as quantified by the west and the redefining of capitalistic-influenced atrocities that are claimed to plague the African continent. African Renaissance theory advocates for the decolonization, re-Africanization, unification, and liberation of Black and Coloured African Indigenous people and to replace Western norms and health systems with a more just, sustainable, and equitable health-care systems (Rabaka, 2020; Rabaka, 2022).

How do we influence flexibility of movement in physiotherapy such that all peoples can move to their optimum capacity as active participants of society and not merely subjects whose level of competence is queried in order to be controlled?

Critical and courageous blackgirl, Himore.

The reasons there is a shortage of Indigenous academics who are in active creation of alternate knowledge in the Global South is we have a low regard for the things we should hold most dear (Myser, 2015). Our horrid

colonial/apartheid past has given us an inferiority complex that is reinforced by self-abasement that we bestow on our cultural identity.

Being orphaned from our ancestors resulted in the deliberate replication of the colonizer's ways and the decolonized curriculum cannot materialise without radical self-love of the African identity (Cobbing, 2021). In intellectual combat the need to acquire knowledge of self becomes an emergency because if you don't know who your true African identity is, you will run the risk of being taught what others prefer you to be. A self-aware, self-knowledgeable, and spiritually conscious person cannot be controlled. In a compelling quote that explains the disfunction that comes from our history and culture being taught to us by our oppressor, Dr. John Henrik Clark states that "To control a people you must first control what they think about themselves". He further iterates that once a person is made to be ashamed of themselves, their history, and their culture, you no longer need chains to hold them. The freedom to move will come from finding out who you truly are (Person-Lynn & Snipes, 2014).

The Black critical feminist theorist autoethnographer Dr. R. Boylorn has stated that "being at home within yourself as an impressionable blackgirl" requires the fully realized acknowledgment of the intersecting cultural identities that make up who we are (Boylorn, 2017). If we are at peace within and at home within ourselves, we can begin to influence greater freedom movement in physiotherapy. We need to do the inner work of self-re-construction, unite collaboratively with others, and speaking for ourselves. Autoethnography is how we influence freedom of movement in physiotherapy. Autoethnography gives us the agency to write our own research firmly grounded in Ubuntu value system of relation-based community. African Indigenous persons past and present, need to unite to influence future, self-determinate perspectives. Collaboration is how we claim back the narrative privilege that has been occupied by the colonizer, to be included in physiotherapy, society, and the world according to our terms. This the movement into freedom where the cultural, personal, and professional combine into symphony of "enoughness" and oneness of Black and Coloured Indigenous people of Azania. Ukuyankaza kuyi-Nkululeko.

Before white universities make us the "natives of nowhere", I quote from the great Zulu Sanusi or Imboni (high priest) Baba Vusamazulu Credo Mutwa:

> In me flows the blood of two of the most ancient races of Africa-and also of mankind-the Bantu and the Bushmen. . . .[10] OH! My

> indolent and gullible Africa—the superior aliens glibly talk of bringing the 'light of civilization' to your shores. And yet the only civilization they can bring is one infected with physical, moral, and spiritual decay. The 'light' they hold forth is the violent flare of the hydrogen bomb. There is much talk of raising your living standards. But the end of this is to turn Africa into a vast ndali market for the mass rubbish that is manufactured. You are given more so that they can take more from you. (Credo Mutwa, 1998, p. 691)

Imboni Mutwa further explains: The sons and daughters of Africa must let the world know that we can well do without their wayward, life-constricting concept of civilization if it means that we have to throw our own culture, beliefs, and way of life overboard. Why must we be turned into soulless zombie or emotionless robots (p. 692).

The great Sanusi concludes by declaring:

> Rather use your newly won uhuru to lift your subjects from the gutter of starvation. Appoint scientists to do research into your nations past. Rather than playing soldiers, concentrate your energies on trying to buy back the thousands of antiques the foreigners have stolen from your countries and which are now housed in museums all over the world. Nourish and save for posterity, the store of knowledge your forefathers have left for you. The challenge to every Bantu is to bring about a glittering Renaissance of the cultures and the arts of Africa. Put your histories down on paper. There is much that you can do that will be of supreme value to your own people and the future generations." (Kumalo, 2018; Credo Mutwa, 1998, p. 693)

Knowledge-able blackgirl, Himore

We are those researchers; we are those co-creators of knowledge! We are no longer the subjects but melanated participants in research. We are the healers and awakeners of our people. We are restoring dignity to our ancestral intelligence and cultural heritage. Our people are finding the meaning and purpose to life. Let toxic individuality that is the brainchild of capitalism devour the original looters of the planet's resources so that we may go back

to our art of living, as the original civilizers and intercessors of this planet. Where work and money are adjuncts to human identity, mere playthings in the shadow of a far greater, purposeful African Indigenous identity. That, at the core of who we are, is within the rich inheritance in our collective memory. We are reclaiming our power so that we can address unhealthy education practices, poisoning our thoughts against us. We are taking back our narrative privilege, inner pride in our Indigenous, cultural identity in order to give us the mental space to be sober-minded and introspective, and heal Indigenous peoples, their family patterns, and address the traumas. We are healing from a toxic colonial psychology. We will re-form healthy relationships within ourselves and rebuild healthy community relationships externally. We will be courageous to reinstate our African tribal councils, African traditional leadership pathways, dignify our African traditional healers and well-being practices so that we may live in harmony within, with each other, mother nature, and the greater ancestral family. We will finally possess the knowledge of self, stripped away by decades of lies. We may rediscover our gifts given to us by our ancestors so that we may live holistic and balanced lives, as 'enoughness' Black and Coloured people of Azania.

Grand rising-children of the Sun! Phakamani Sizwe esiTsundu!
NginiThanda nonke emakhaya-Ngiyabonga— Makwande!

Notes

1 Nuwbia/Alkebulan meaning mother of mankind/humanity or the origin of all life or garden of Eden or cradle if humankind.

2 Coloured Person is a person of mixed race comprising of African or European or Asian ancestry officially defined into law by the apartheid South African government of 1950 and still persist today.

3 Critical Indigenous theory focuses on how coloniality, dominance, racism impact the sovereignty of the Indigenous people to assert themselves in their own complex identities, coupled with the self-determination to identify, solve their life issues and prevention of neo-colonial subjugation.

4 Black girl. The words are joined as single word "blackgirl" due to the multiple identities when joined form intersecting systems of oppression that collectively shape Black women's' health and well-being. Singular representation is the coupled brutality of living experiences of Black women in a white male/patriarchal dominant/favouring world.

5 Menticide is the systematic prolonged efforts taken to undermine and destroy a person thinking capacity, values and beliefs such as miseducation, restricting access to education by using language, interrogation and intimidation tactics to murder the mind of an individual into submission/compliance. The systematic wrecking, intentional sabotage of a person's conscience mind, brainwashing/conditioning a person's psyche against themselves.

6 Qina is Isizulu means literally to harden or strengthen. Sterkte is Afrikaans term means to strengthen or to be strong.

7 !Khwattu meaning 'waterhole' in the /Xam Bushmen language. The language and cultural embassy of San Khoi of Southern Africa.

8 Phambili is isiZulu is meaning forward, meant to express moving forward despite the resistance.

9 Materialism is Agonists to materialism i.e. that physical matter is not the fundamental substance in nature. Immaterialism includes the unseen world, mental thoughts and consciousness. Enoughness is the condition or state of Indigenous world view in which all are related as kin, including non-human in with non-being superior or inferior to nature. It is associated with being in a calm state of adequacy, sufficiency and balance.

10 Mutwa is the Zulu word meaning Bushman which is the name that San-Khoi Indigenous people self-identified. Imboni Mutwas' great grandfather was a Bushman medicine man, and his surname Mutwa, is the Zulu word for Bushman.

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ABSTRACT:

This auto-phenomenology (hermeneutic) account seeks to explore my first-person experiences of a discrete phenomenon; the experience of shoulder pain and restricted range of movement. I aim to move away from modernist biomedical descriptions and instead, reclaim my existential experience. Taking a lifeworld perspective, I explore the meaning of the world as I subjectively experienced it whilst living with frozen shoulder. I reflect on how a change in my shoulder movement changed my movement in time and space and my sense of being-in-society. Drawing on the work of Talcott Parsons, Susan Sontag, Elaine Scarry and Arthur Frank, I reflect on my sense of unbelonging in relation to the sick role; how my explanations were delegitimized and my search for a socially accepted diagnosis; being a physiotherapist and my changing sense of self and identity. I ask how honouring knowledge from qualitative, post-qualitative research and sociology might offer an otherwise physiotherapy which engenders embodied relational understanding.

CHAPTER 3

Unbelonging

THE EXPERIENCE OF BEING-IN-SOCIETY WHILST LIVING WITH FROZEN SHOULDER

CLAIR HEBRON

Introduction

Frozen shoulder, also referred to as adhesive capsulitis, is a condition which is characterised by severe pain, disturbed sleep, marked stiffness, and associated loss of function (King & Hebron, 2022). Frozen shoulder is a clinical diagnosis based on the painful restriction of active and passive movement in at least two planes of movement, one of which is external rotation (Neviaser & Neviaser, 1987). It is a complex condition and while the exact cause is not fully understood, histological and immunocytochemical analysis of biopsies taken during arthroscopic release surgery suggests the pathology includes a chronic inflammatory response with fibroblastic proliferation (Hand et al., 2007). However, the certainty of fibrosis being a major contributor to the reduced range of movement in all cases has been questioned, since a proportion of persons with frozen shoulder have large increases in range of movement when anaesthetised (Hollman, 2018). Hollman (2018) attributed this to muscle guarding and cognitive and emotional factors. Other factors that may contribute include hormonal imbalances, autoimmune disorders, and certain medical conditions such as diabetes and thyroid disorders with higher prevalence reported in these populations (Cohen et al., 2020; Dyer et al., 2023; Schiefer et al., 2017; Zreik et al., 2016). There are also higher rates in women, and persons over the age of forty (Hand et al., 2008; Kingston et al., 2018). It is considered a self-limiting condition (Struyf & Meeus, 2014).

Frozen shoulder has classically been described as progressing through three different phases (painful, frozen and thawing) each lasting several months with natural resolution expected to occur within eighteen months to two years (Reeves, 1975). More recently this classical description has been challenged and although frozen shoulder will improve over time, it is recognised that resolution may not be complete and can take several years, with some patients experiencing ongoing pain and limited range of motion (Hand et al., 2008; Le et al., 2017; Wong et al., 2017). Treatment approaches include both conservative and surgical options, but no single intervention demonstrates superior results. Early structured physiotherapy, manipulation under anaesthesia, and arthroscopic capsular release were found to have comparable outcomes for shoulder pain and function at twelve months (Rangan et al., 2020). Similar outcomes were also reported when comparing intra-articular corticosteroid injections and physiotherapy (Blanchard et al., 2009; Sun et al., 2015; Wang et al., 2017). It is possible that multimodal approaches result in better outcomes; for example, combined physiotherapy and corticosteroid injections provide greater improvement than physiotherapy alone (Carette et al., 2003) and a combination of hydrodilatation and corticosteroid injection has been shown to improve pain-free range of motion compared with corticosteroid injection alone (Catapano et al., 2018).

These above modernist[1] biomedical descriptions of physiological mechanisms, anatomical structures, symptoms and treatment effectiveness dominate the medical and physiotherapy literature and professional discourse. This knowledge privileges objective and measurable aspects of conditions like 'adhesive capsulitis'. While this is valuable for diagnosis and intervention planning, it marginalises the subjective, lived experiences of individuals with frozen shoulder and neglects the emotional, psychosocial, and intersubjective dimensions of the condition. Incorporating an experiential voice enriches the understanding by capturing the nuanced aspects of living with frozen shoulder.

Only three qualitative studies have explored the experience of living with frozen shoulder and as illustrated here, use participants' quotes to illuminate their findings (Jones et al, 2013; King & Hebron 2022; Lyne, et al., 2022). Common to all studies were descriptions of the loss of sleep, independence and sense of self. All highlighted the severity of the pain, described as "dropping me to my knees" (King & Hebron 2022, p.6) or by the evocative quote:

"You see the Western movies [where] they forge the steel and . . . plunge it into the cold water . . . that's what it feels like, hot, molten lava encapsulated by metal, dragging your shoulder down" (Lyne et al., 2022, p. 3). The experience of healthcare was characterised by delays in access and diagnosis and at times dehumanising communication. Treatment experiences varied with corticosteroid injections providing considerable relief for some, in contrast to the pain of exercise and manual treatments. As one patient describes the experience:

> I done eight weeks of physio and it never got easier, it got harder, and I kept saying to the physios, "the manoeuvres you're asking me to do, it's worsening. You're asking me to do these stretches and these exercise, I can't do them." To have to wait a week to tell someone that and to let them actually witness you trying to do it and then tell you to try again next week and the following weeks and the following week. (King & Hebron, 2022, p. 8; emphasis added)

The experience as a whole was encompassed in the description "living with uncertainty and being in no-man's land" (King & Hebron, 2022, p. 1):

> How am I going to work, how am I going to operate? you wanna know what is it? What's causing it? Why it is happening and what are the repercussions going to be? Where is it going to end up? I feel in no man's land. (King & Hebron, 2022, p. 9).

Two of these studies used a phenomenological approach in which the researchers interpreted participants' descriptions (King & Hebron 2022; Lyne et al., 2022). An alternative approach is auto-phenomenology, which uses evocative insights grounded in my own experiences. For example, Finlay (2012) uses auto-phenomenology to convey the *unhomelikeness*[2] of living with a complex shoulder fracture. This *auto*-phenomenological chapter aims to similarly use my first-person reflections to provide further insights into my experience of living with frozen shoulder.

Methodology and methods

Phenomenology originated in the late-nineteenth and early twentieth centuries as a philosophical movement, with the work of philosophers such as Edmund Husserl and Franz Brentano. It is concerned with the quality and

nature of the human lifeworld and highlights the first-person perspective as the basis of all knowledge. Husserl focused on the description and analysis of conscious experiences as lived by individuals, seeking to uncover the fundamental structures of consciousness (Giorgi, 2009). Husserlian phenomenology emphasises the importance of intentionality, the act of consciousness directed towards objects, and employs the epoché[3] to isolate and study phenomena independently of their existence in the external world (Giorgi, 2009). Martin Heidegger studied under Edmund Husserl at the University of Freiburg in the early twentieth century. His interpretive (hermeneutic) phenomenological tradition shifts from the Husserlian, epistemological line of inquiry, to the realm of ontology and the hermeneutics of "being" (Laverty, 2003). Heidegger (1962) understood the social world in which we live in terms of *Dasein*, or *being-in-the-world*, a view of human beings engaged within a world of people, relationships, and things that brings about meaning.

An interpretive (hermeneutic) phenomenological research methodology seeks to understand and interpret the lived experience of individuals through a detailed exploration of the phenomena they live through (van Manen, 2007). Involving in-depth investigation and analysis, a phenomenological approach emphasizes the importance of context and the subjective interpretations of participants. Adopting a dialectical approach that involves a constant interplay between understanding and interpretation, this methodology aims to uncover the underlying meanings, themes, and perspectives that individuals experience, shedding light on the complex interplay between the self and the world (Finlay, 2011; Smith et al., 2009). A phenomenological approach accepts that it is through our subjectivity that we experience the world, and that our view of the world is always perspectival. Most phenomenological research includes small numbers of participants to enable thick (rich) descriptions and prolonged engagement with the data. Some studies use an ideographic approach focusing on individual experience and can focus on a single case to illuminate particularly evocative experiences (Finlay, 2011, p. 196). In this study, I took an auto-phenomenological approach to explore my (Clair's) view of the world and the meaning of my personal experience of frozen shoulder.

There is a long tradition of autobiographical research approaches involving the researcher actively engaging in introspective and reflexive exploration

of their own lived experiences, culture, and identity to generate rich qualitative data, offering unique insights into personal narratives and social contexts. Autoethnographic approaches aim to explore how the experience of living within a culture is meaningful (Gorichanaz, 2017; Sparks, 2020). In contrast, auto-phenomenology involves an introspective examination of one's own lived experience of a discrete phenomenon and seeks to identify the subjective meanings and interpretations of those experiences. By focusing on the first-person perspective, auto-phenomenology enables researchers to capture the complexity and richness that can create new insights and meanings (Finlay, 2012). In the context of physiotherapy and movement, auto-phenomenology involves the exploration and understanding of a person's own subjective experiences, perceptions, and interpretations of their own bodies, movements, and physical conditions. It aims to uncover the rich and often unarticulated insights they have about their bodily experiences and how they relate to their health and wellbeing. Auto-phenomenological research can uncover implicit knowledge, emotional responses, and personal meanings associated with physical sensations or limitations. This type of knowledge provides a more holistic understanding of the patient's condition, beyond what subjective and physical assessments might reveal. This auto-phenomenological (hermeneutic) account seeks to move away from modernist medical descriptions to explore my first-person experiences as a middle aged, female, academic and (until recently) clinical physiotherapist, with experience of qualitative and post qualitative research.

Both walking/running and writing were used as method. Much of the analysis occurred when walking and running in nature, along the south downs in the UK, often with views of the sea. Philosophers have long discussed the relationship between thinking and walking, with many believing that walking can facilitate and enhance cognitive processes. Jean-Jacques Rousseau stated:

> Never could I do anything when placed at a table, pen in hand; it must be walking among the rocks, or in the woods' (Rousseau, 2001, p. 55). 'Walking animates and enlivens my spirits; I can hardly think when in a state of inactivity; my body must be exercised to make my judgment active. (Rousseau, 2001, p. 77)

Similarly, Nietzche stated, "only thoughts that come by walking have any value" (Nietzsche, 1889 p. 10). When walking I took myself back to moments

that were meaningful to me in relation to living with frozen shoulder. I stayed with these moments, dwelling and asking myself why they were meaningful. I kept a reflexive diary of my frozen shoulder experiences, which I read and reread. When analysing my experiences, I adopted the phenomenological attitude, a position of wonder, in which I was ready to be surprised. What was most unexpected was how surprised I was when I found hidden meanings. As I walked or ran my mind frequently wandered back to a particular conversation. I took these data earworms as subconscious signs of significant meaning (Mitchell & Clark, 2021) and they prompted me to take time to interrogate their underlying meaning. Writing and interpretation are deeply intertwined (Richardson & St Pierre, 2005) and thus I used writing and rewriting to delve deeper and develop a richer understanding of my experiences. This process required me to repeatedly return to and finely craft the text, reminiscent of an artist creating art (van Manen, 2016, p. 131). I deliberately used evocative and poetic writing to engender embodied relational understanding (Todres, 2008).

As a physiotherapy academic and researcher with experience in phenomenology, I looked at my experience through both disciplinary and philosophical lenses. Taking a lifeworld perspective, I first explored the meaning of the world as I subjectively experienced it. I explored my embodiment, my intersubjective experiences, and how time and space presented themselves differently to me whilst living through the phenomenon. As I started to see deeper meaning in my experiences and how they were related to my being-in-society, their resonance with sociological and political concepts became more apparent. Built on the foundation of more traditional phenomenology, this discussion draws on more recent critical phenomenology to examine ways in which social, political, and cultural factors hide, shape, and influence human experience (Roberge, 2011; Salamon, 2018; Zurin, 2021). Drawing on critical theory, originating from Frankfurt School philosophers such as Max Horkheimer and Theodor Adorno, critical phenomenology recognises that human consciousness and experience are not isolated from the broader socio-political context but are deeply embedded in it.

Because this study was a study of self, rather than a scientific enquiry, ethical approval was not sought (Ellis & Bochner, 2000). Unlike autoethnographic work, it was centred on my experiences and did not include observations of a wider community. However, I was mindful of ethical issues

and reflected on aspects of privacy and consent during writing, adopting strategies to protect identities and change places. Although the focus remained with my experiences, it also involved others; I anonymised references except for one to my husband who took the time to read this text. When asked if he would prefer it to be removed, he felt that to do so would be to sterilise my account and remove important meaning. My account offers my interpretations and is influenced by van Manen's (2014) philological, vocative writing methods[4] reflected in the changing tone of the consequent text.

Findings

My experience of shoulder pain started gradually. The changes were subtle, and I pushed them away. Initially it was in the gym that these changes crept in. I had to ask for help from others who lifted the bar onto my back so that I could squat using weight that helped me to retain my exercise and strength identity. As my shoulder movement became more restricted, I resorted to holding weights in my hands. Upper limb work became increasingly restricted, but I carried on lifting weights through whatever shoulder range I had. The mirrors at the front of the class reflected a somewhat humiliating scene of others moving their arms above their heads with free abandon where mine barely left my sides. "Anything is better than nothing," I told myself. But after two years of four visits a week without having broken a sweat and facing an extortionate annual renewal fee, I was defeated. When I told others, some who are physiotherapists, of my challenges in the gym, they offered a barrage of *helpful* alternatives. I felt my irritation rise at their assumption that I hadn't already thought of these things for myself. I nodded in agreement, rather than enter another game of BUT tennis,[5] as I explained why these options won't work for me. I still ran every day; across the downs and in the forest, amongst the trees, with the birds and my dog, and although this enabled me to maintain my exercise identity, I feared my strength identity had gone for good.

I had a strong exercise identity before becoming a physiotherapist and wonder if this was one of the things that drew me to the profession. This identity was reinforced, underlined, and made bold by my professional training and socialisation, including physiotherapy mantras such as "you can't go wrong getting strong." My experiences of shoulder pain and reduced movement started to invade this identity and I began to better understand the

experience of being othered. I felt the sense of judgement that must also be experienced by some persons receiving physiotherapy care, when they are confronted by these mantras. My areas of academic interest meant I was already theoretically sensitive to the strength of our profession's discourse around what it is to be a healthy person which dictates that persons are fit and slim. These expectations and the rhetoric of our society's dominant health and fitness culture were now becoming personally meaningful and provided me with more insight into how persons who don't adhere to the expectation of our culture's 'healthy lifestyle' may feel.

I suspect many physiotherapists are aware of the power of words and mantras, but are they aware of how this discourse others those who do not adhere to this for a range of reasons? If aware, are they attempting to shame others into exercising? Do they acknowledge that there are those with conditions that may respond less favourably to exercise (Lima et al., 2017), those who can't afford to access gymnasiums, or whose mood is so low that getting started is perceived as an unsurmountable mountain? I hear the clinician's voice: "BUT you can use pacing," "BUT you can use body weight," "BUT it will make you feel better." BUT what about persons who just don't want to?

The eroding sense of myself as a healthy person was also the start of my changing perception of time. Before shoulder pain, although chronologically middle aged, the changes in my body had been gradual and expected. This was different. I started to become weak and lose my independence and had to ask for help. I needed help with dressing and simple daily tasks such as opening jars. I recalled research using grip strength as a measure of health and my sense of self as a fit and healthy person was battered as the sense of aging hit me hard. I think back to the time that none of my teenagers were available to help me take off my bra, so I went to my husband's office in the garden, where he was happy to help. But then there was the "walk of shame" back to the house, holding my clothing against my chest to retain my modesty. Not that anybody could see, but I felt the tears prick the backs of my eyes, as I experienced a sense of exposure and humiliation. This was not me.

The loss of sleep was pervading, and I felt my resilience dissolving. Lying down was excruciating and I mostly slept upright, supported by pillows. I felt lonely as I listened to the sounds outside. The late-night chatter of those leaving the local pub faded, replaced by silence interrupted by the occasional call of foxes. Each hour seemed to last forever, until I heard the world outside

start to wake. The meaning of the bedroom space was disrupted; where previously it encapsulated a sense of connection and intimacy, the bedroom now became a place of loneliness and isolation. My carefully constructed wall of pillows supported my shoulders but separated me physically and thus also emotionally from my most significant other. My husband referred to my pillow organisation ritual as "constructing a barrier." It felt to me like it was a barrier between him and me. I lay awake at night next to the person I loved most yet experienced loneliness. During the day my vigilance related to shoulder movement interrupted our established routines of holding each other, touching, of expressing our continued connectedness to one another. For me this was temporary, as when the pain subsided, the barrier was deconstructed allowing a return to our routines of being with one another. But what about others whose physical body prevents them from connecting with their loved ones more permanently? The fear of drifting apart, of disconnecting illuminates the inseparability of mind and body. My body is my access to the world and my relationship with others. I am my body.

My family and I belong to a club. Membership of this club was related to a sporting activity which required moving heavy objects and using your arms to raise your body. Club members were used to seeing me fully involved in these activities and every time I visited with my family, I felt interrogated about why I wasn't taking part. I'd explain that "I've got bad shoulders" but this explanation wasn't well received by anyone and further questions related to the specific cause nearly always followed. I found myself testing out a series of diagnostic labels to find out which one was credible. For some, frozen shoulder seemed to land well, but for others this was met with quizzed looks and raised eyebrows, next I tried the more scientific term "adhesive capsulitis." For some this seemed acceptable and for others it resulted in more quizzical looks until provided alongside a concurrent tissue-based explanation. For one person, what seemed to legitimise my symptoms was explaining that it was the same as the condition experienced by another member of our club (a younger man). I felt relieved that the interrogation had stopped and that I had some vicarious credibility, but also dissonance as I wondered why he was somehow more credible than me. As Elaine Scarry (1985, p. 7) said, "to have pain is to have certainty, to hear about somebody in pain is to have doubt." These experiences meant that the power of a diagnostic label had new meaning for me. I hadn't previously appreciated how important this was

to one's relationship with others, and for me these others weren't my significant others, they were in wider society. I didn't feel the need for a label, but others needed me to have one. It has made me rethink how diagnostic labels might be used in practice, a discussion that is beautifully articulated by John Launer (2017), whose discussion of labels, ironically, uses frozen shoulder as an example. The interrogation I experienced and having to navigate a label that retained my credibility, led to a profound sense of unbelonging which led to me retreat and leave the club.

Others asked about prognosis "when will it get better?" or "Isn't it better yet?" (accompanied by an elevated tone of voice and a raised eyebrow). I would explain that the natural history of this condition meant it was unlikely to get better anytime soon. "It will take a year or two," I would say with a shrug of acceptance. The look of astonishment this was met with was extraordinary. Was this disbelief in the fact that something might take so long to get better, or at my acceptance? These inquisitions resonated with Arthur Frank's (2013) descriptions of sickness being socially acceptable for short periods. It seemed that, for me, time was running out alongside sympathy and belief. I sensed from others it was time to return to my normal roles, and by failing to do so in the appropriate time I was displaying deviant behaviour and thus was experiencing social judgement. These experiences of others doubting my story resonate with the concept of epistemic injustice[6] (Fricker, 2007) and furthered my sense of unbelonging.

The sense of questioning and doubt that I perceived from others dominated my social interactions. When their questioning wasn't explicit, I searched for more implicit signs in their body language and expression, and it was almost always there. I looked for it in my family too, my husband and three teenage children, did they doubt the authenticity of my experience? Again, and again I scrutinised their reactions, I watched their eyes when the "drop me to my knees" pain caused me to shout out dramatically. I never saw the doubt or questioning from my immediate family and this sense of certainty in the trust and belief they afforded me provided me with a safe haven.

One day during a chance encounter, I exchanged social updates with an acquaintance who works as a General Practitioner. I mentioned having frozen shoulder, "Oh . . . that's surprising you're not the frozen shoulder type" they exclaimed. I was a bit taken aback, wondering what that type

was. I ruminated on my mixed emotions. I was secretly pleased not to be "that type," but equally incredulous of the stereotyping that is associated with some conditions. I wanted to ask about "the type," but have learnt to think twice before asking curious questions, having had conversations like this in the past that often don't land well. I wasn't brave enough to challenge this and as I walked away, I questioned whether my lack of action had perpetuated their beliefs. What about my role as an activist for others seeking care?

My intersubjective experiences were also interspersed with thoughtful acts, of persons enquiring about my progress. Often these were the same persons week on week, were they expecting a miraculous cure within seven days? Or was it a sense of care or compassion? Even though I perceived these repeated enquiries as well meaning, they reminded me of my ill body and relegated me to the Kingdom of the Sick: Susan Sontag (1978) illuminated illness using a metaphor of travel, and the notion of dual citizenship, in which we are citizens of two kingdoms, the sick and the well. Sooner or later we will, at least for a while, become citizens of the other kingdom. Again, my family seemed to know what I needed, although I don't remember expressing this to them explicitly. They seemed to understand that I needed them to pay little attention to my shoulder or changing function; thus, allowing me to retain a sense of my "self" at home, and of belonging to the Kingdom of the Well.

I had a procedure (a shoulder distension) ten days before I was due to go on a dinghy sailing holiday with my husband and youngest child. I had resigned myself to the fact that, when on holiday, I was going to have to watch them from the beach. I wanted to be on the water, but this would involve passing the tiller from one hand to the other behind my back and when capsized reaching up to the centre board to flip the boat upright. For me the procedure was miraculous as it reduced the pain greatly and I gained just enough movement to be able to sail (and to sleep). This was the first holiday without our older boys, and, having three children in less than three years, individual time spent with each child was precious. This wasn't about how the sailing was meaningful to me, but what it means to my daughter. Sailing is my daughter's most meaningful activity; her "home" is not one of bricks and mortar, it is the sea. Watching the joy on her face when she sails is a vicarious experience and taking part in her joy alongside her is breathtakingly beautiful. Being an observer on the beach would not have held the same meaning.

My academic physiotherapy lens led to a reluctance to undergo the shoulder distention procedure, as I had a strong belief that natural history would resolve my symptoms over time. Moreover, there was limited evidence of its effectiveness and mechanistically it didn't make much sense to me, so I didn't think it would help. However, through the lens of sleep loss, limited function and low mood, I saw this as a low-risk procedure and felt I had nothing to lose. The procedure reduced the pain enough for me to sleep lying down for the first time in months. I still needed my pillow barrier, but things seem better after a night's sleep. My range of movement also improved slightly. The effects only seemed to last about five months, and I wondered where my improvement would lie in population data: Where would I sit if I had been included in a randomised controlled trial investigating the effects of the shoulder distention procedure and would the study include measurements that were meaningful to me? At six-month follow-up there would have been a good chance that the control group would, on average, have had a better outcome than me and I might have been one of the participants who reduced the average (mean) improvement in the treatment group. Would beneficial outcomes lasting less than six months be considered low value? For me five months of sleep and one sailing holiday with a daughter who would soon be leaving home made this an incredibly valuable treatment. This was not low-value care. It was priceless.

Discussion

Unbelonging and the sick role

My overriding experience of living with frozen shoulder was a sense of unbelonging in my social world. Belonging has been defined as feeling valued and respected in the context of relationships which are built on shared experiences beliefs and characteristics (Mahar et al 2013). My sense of unbelonging was meaningfully related to the judgment I perceived when failing to fulfil my social roles over a prolonged period. These experiences resonate with the concept of the sick role, a theory developed by sociologist Talcott Parsons in the mid-twentieth century to explain social roles and expectations surrounding illness and health (Parsons, 1951). Parsons emphasised the role of norms and values in shaping individual behaviour, suggesting that individuals conform to societal expectations due to internalised cultural values. In Parsons's view, social control is crucial for the smooth

functioning and equilibrium of society, ensuring that individuals adhere to shared norms and contribute to the maintenance of social order. According to this theory, when a person is sick, they are granted a *temporary exemption* from their normal social roles and responsibilities. This exemption comes with expectations to seek medical care and *comply* with medical professionals in order to facilitate their recovery and return to their roles and responsibilities as soon as possible. For Parsons, illness is a threat to social structure and economic productivity. He theorizes social control is one of a doctor's (and physiotherapist's) roles, is insofar as their work includes ensuring individuals fulfil their responsibilities. This includes being wary of patients enjoying the secondary gains of illness and repressing *deviant* behaviour and more permanent dependency. Living with frozen shoulder did not impact significantly on my employment. I did not require a doctor to authorise sick leave or a *temporary exemption* from my roles and responsibilities at work. Thus, for me this social control came from being-in-society.

In my sporting context the sense of unbelonging caused me to retreat as I felt as though my legitimacy was being questioned and judgements were being made about whether my behaviour was *deviant*. There are two models of illness within Parsons's (1951) concept of the sick role: an incapacity model related to one's ability to perform tasks in which they have been socialised, and a *deviance model* which views illness as a form of avoidance behaviour. Both models assume that persons are motivated to withdraw from social obligations (Gerhardt, 1978). Did others like Parsons assume that I was motivated to withdraw from taking part? Were interrogations related to the length of time it was taking to recover assessing my commitment to get better and whether it was time for temporary *role exemption* to be revoked? It appeared that in making this assessment the label/diagnosis associated with my complaint was significant, further resonating with the sick role, insofar as a diagnosis enables exemptions to be applied.

Diagnosis and legitimacy

Not all diagnoses are equal; they can stigmatise or legitimise (Jutel, 2019). A diagnosis can influence self-esteem and identity (Jutel, 2019). Questions related to my diagnosis were ubiquitous and often it was the same persons who initiated this dialogue on different occasions. I will never know those persons' intentions in questioning my diagnosis, but the sociology of diagnosis both as a process and label can provide possible insights. When the

process of diagnosis demonstrates pathology, it legitimises a person's experience and creates order from chaos. Conversely, those with contested or no diagnosis can exist in a liminal state without a way to understand, fix or accept their situation leading to distress and stigmatisation (Jutel, 2023; Nettleton, 2006). Pathoanatomically, unexplained symptoms also create challenges for health professionals. For example, when there is perceived discord between scan findings and symptoms medical professionals (including physiotherapists) are uncomfortable navigating uncertainty and its emotional affects (Costa et al 2022; Myburgh et al., 2021). The process of diagnosis was not something that my thoughts wondered back to; what was meaningful to me was the diagnostic label and the personal attributes associated with it.

The "you're not the type" comment from a GP acquaintance implied stereotyping. This illuminates one way in which diagnostic labels, or at least the discourse related to them do work. This rhetoric can become an accepted and rarely challenged part of every dialogue. Susan Sontag, in her work *Illness as metaphor* (1978), charts the history and challenges the 'concocted' stereotypes for those presenting with certain diseases. She illuminates how contrasting metaphors for tuberculosis and cancer have changed over time. Tuberculosis in popular mythology was perceived to be a disease of poverty, deprivation, sensitivity, creativity and excessive passion. In contrast, cancer was seen as a disease of affluence, excess, boredom (ennui), sloth and repressed passion. Stereotyping patients is also evident in physiotherapy, for example when related to culture (Lee et al., 2006), body weight (Setchell, 2015) and "good," "difficult," "heart sink" (Daykin & Richardson, 2004) or "problem" patients (Thomson, 2000). For me it was in social contexts that a label was meaningful as it contributed to my sense of unbelonging and in this regard my experience resonates with the concept of social diagnosis (Brown et al., 2011; Jutel, 2019).

Social diagnosis is a concept that recognises that diagnosis goes beyond the clinic and is a profoundly social act which reflects society, its values, how it makes sense of illness and disease and maintains social order (Jutel, 2019). At times I felt like a fly on the wall, as though I was observing my social interactions, watching as others questioned me in ways that I perceived to be judging whether this was a legitimate condition. I found myself navigating a label that might be socially credible and am curious how this plays out

in physiotherapy settings. An otherwise physiotherapy may view diagnosis as socially constructed, relational and changeable (Brown et al., 2011; Lund et al., 2020) and, as discussed by John Launer (2017), may provide opportunities to explore with persons how they might develop a socially acceptable narrative which will help them navigate their world.

Illness dramas and identity

My story of navigating a socially acceptable diagnosis, alongside interactions with others and my changing sense of self resonates with Arthur Frank's five dramas of illness (Frank, 2007). Frank's *drama of meaning* flows through this chapter and is illuminated in my story. The genesis drama represents persons making sense of how their illness came to be. Some, for example, form a biological narrative whilst others may attribute it to God. In Frank's stories of his own cancer diagnosis, he describes being clear on his genesis drama stating cancer "just happens" (Frank, 2007). Echoing my experiences, for Frank the drama of genesis was in resisting others imposing their genesis on him (Frank, 2007). Another of Frank's dramas, the *drama of emotion* work draws on the work of Arlie Hochschild (1979) and Erving Goffman (1959). Goffman (1959) understands the self as a fostered impression maintained by others and one's own defensive practices. The impressions of others and my own defensive behaviours reverberated through my experiences. The *drama of self* was evident as I navigated what Bury (1982) describes as biographic disruption, a notion I experienced as I created plans for a new future and a new me. This meant confronting my sense of self in relation to age and ageing and re-evaluating the value I placed on being strong. Frank's *drama of fear* and loss includes the loss of capability, loss of a pain free life or life as it was planned, fear of surgery and fear of recurrence. Frank (2007) claims fears multiply in silence and that naming and discussing these fears makes them liveable.

For me, the loss was of my identity as a healthy person, loss of my exercise and strength identity. Living with frozen shoulder had rendered me to the *Kingdom of the Sick* (Sontag, 1978). I wondered how much of my identity was related to being a physiotherapist and what that meant for persons seeking physiotherapy care. I feel sure that my exercise identity was reinforced by socialisation within my profession. Professional socialisation refers to the process by which individuals learn values, attitudes, and behaviours associated with their profession. It is in part handed down by educators to students who

seek to conform and reproduce those that precede them (Ajjawi & Higgs, 2008). Preceding this, Foucault, (1995, p. 138–169) claimed that power in medical settings produces disciplined bodies that in turn go on to discipline other bodies. This discipline was apparent in the BUT tennis I played as physiotherapist peers suggested ways I could continue in the gym, and also resonates with research exploring physiotherapy as a disciplinary profession (Praestegaard et al., 2015). There was also a sense of my own self-discipline insofar as my strength identity was othering and restricting movement in my emerging identity. An otherwise physiotherapy may be sensitive to a more flexible sense of identity and facilitate persons seeking care to navigate movement in their identity as they learn to live with changes in their health.

Values in physiotherapy

With recent shifts in emphasis moving from treating infectious to "lifestyle diseases" and associated health promotion agendas like the Making Every Contact Count Agenda in the UK (Public Health England, 2016), comes discourse related to economic cost and impact on the labour market. This enables judgement and discipline, and physiotherapists can be seen to act for the state in this regard (Nicholls, 2022). In contemporary Western culture, this is further compounded by the obsession with health and fitness (Galvin, 2002) where health *"approaches sacred status"* (Cheek, 2008, p. 974). In these advanced liberal societies health and illness are matters of personal responsibility, whereby it is individual's *duty* to display healthy behaviours in order to be considered a *good citizen* and individual (Galvin, 2002). Physiotherapists' discourse suggests that their perspectives align with neoliberal agendas insofar as they talk of "good" patients who were proactive and self-reliant, in contrast to "difficult" patients who were passive (Daykin & Richardson, 2004). Studies also illuminate how physiotherapists stigmatise individuals who are not seen as *good citizens*, for example those who are labelled as overweight and obese (Jones & Forhan, 2021; Setchell et al., 2014; Setchell et al., 2016). This neoliberal emphasis on individual responsibility can lead to a focus on individual behaviour change rather than addressing social, structural and environmental factors that shape health outcomes (Lupton, 2013). The economic influences on physiotherapy practice further resonated with my experiences of treatment.

Despite my experience of a beneficial "priceless" outcome from the shoulder distention procedure, its effects only lasted a few months. If others in a clinical trial have similar results, it may have been considered low-value care. Low-value healthcare refers to the use of medical tests, diagnoses, and treatments that provide patients with little to no benefit or cause harm. The suggestion is that money spent on these treatments would be best spent elsewhere (Traeger et al., 2017). Initiatives such as Choosing Wisely emphasise physiotherapists' responsibility as gatekeepers who protect the purse strings of healthcare often using powerful disciplinary discourse such as: *"physiotherapy associations are not the only associations* guilty *of poorly targeted recommendations"* and *"more involvement is needed if physiotherapy is to be viewed as a profession* taking the fight *against overuse seriously"* (Kharel et al., 2021, p. 1; emphasis added). Such focus on efficiency, productivity, and individual responsibility can lead to a dehumanising approach that could be counterbalanced by a physiotherapy practice which takes a more nuanced and sociologically informed perspective on illness by highlighting the experiences of marginalized populations. Frank's (2007) illness narratives draw attention to the broader social and political factors that shape health outcomes and illuminate the role of physiotherapists in advocating for policy change and social justice. In my experience there is movement towards a broader physiotherapy curriculum, but the freedom of this movement is restricted by multiple structural factors both within and outside the academy (such as the modular system, focus on metrics and regulatory body requirements). As physiotherapy education moves forwards, engaging with sociological theories and art may create a deterritorialised physiotherapy education (see Chapter 9). Detaching from traditional structures and embracing diverse knowledge sources aims to encourages physiotherapists to become not only technically proficient but socially conscious, emotional intelligent, self-aware, and non-judgemental.

At home I didn't feel any sense of judgment. The belief my family communicated helped me retain a sense of belonging and mostly this was my safe haven. However, there were moments when the disruption in being with my husband led to a sense of isolation. Togetherness-isolation can be considered as a spectrum between connectedness and separation from our sense of belonging with others. With illness, our everyday social connections can be disrupted, creating a sense of separation from feelings of belonging (Todres

et al., 2009). In healthcare settings procedure and protocols can either exacerbate or mitigate a sense of isolation (Todres et al., 2009), and I am curious how movement in the profession towards an otherwise physiotherapy practice can facilitate persons to connect with their loved ones, retain a sense of belonging, and find a liveable future.

Using an auto-phenomenological approach I explored my interpretations of my experience at this point in time. These interpretations are not fixed or exhausted but remain ready for new interpretations. The importance of auto-phenomenology in physiotherapy lies in its potential to inform person-centred interventions. By understanding and incorporating the meaning of persons' subjective experiences, physiotherapists can collaborate with persons and individualise treatment to align with their meaningful goals, preferences, and unique challenges. This approach fosters embodied relational understanding ultimately enhancing physiotherapy by addressing the person's needs in a comprehensive and individualised manner.

I used a phenomenological lens to explore the meaning of my experiences. Other lenses may have resonated with other theories providing different insights. For example, in this account, I touch on Frank's losses in relation to sense of self. I could instead have drawn on the concepts of Gilles Deleuze who considered the *self* to be an illusion created by enlightenment rationality. Instead, he proposed that individuals are continually being reformed through a process of flows, intensities and desires, and rather than "being" are continually "becoming"[7] (Deleuze & Guattari, 2020, p.7).

Common in scientific research, including physiotherapy academic literature, are sections on the implications of practice and conclusions where researchers summarise how their findings can be helpful in developing practice. Any such conclusion I might make would be limited by my interpretation and thrownness[8] and would draw this chapter to a close. I have chosen not to provide such closure, as there remains much to reflect on in relation to current healthcare discourse, culture, and structures. I wonder whether we as a profession could be prompted to reflect on how our social and cultural identities impact the perceived appropriateness of exercise and persons willingness to participate (Pentecost & Taket, 2011). I am curious how our ways of being exacerbating social, institutional and political inequalities? I ask readers to seek intersubjective, embodied, relational understanding with persons receiving their care, to reflect on and bridle[9] their own assumptions

and biases, questioning the healthcare structures that limit their ability to do so, and advocate for change towards a system that fosters epistemic and social justice. I hope that readers will take time to consider these findings in relation to their context and persons seeking their care, and I would be delighted if, like me, when you walk or run or sit in nature, you revisit these findings and consider how they have resonance for you.

Notes

1 modernist refers to the adoption of methodologies, theories, and paradigms that emphasise empirical observation, mathematical formalism, and the pursuit of objective, universal knowledge.

2 Heidegger's concept of unheimlichkeit (unhomelikeness) refers to an unsettled feeling or breakdown in familiarity.

3 A shift in attitude in which past knowledge and presuppositions are bracketed (Giorgi, 2009, p. 91).

4 van Manen's philological and vocative writing methods involve a reflective and linguistic approach that explores the nuanced meanings of lived experiences and addresses the reader directly, aiming to evoke a deeper engagement with the subject matter.

5 Referring to a conversation between persons in which their responses to one another go back and forward and repeatedly start with 'but', signifying resistance to or rejection of the others experience or perspective.

6 Epistemic injustice refers to situations where people are unfairly treated in their capacity as knowers, manifesting through testimonial injustice, where credibility is denied based on prejudice, and hermeneutical injustice, which occurs when experiences are marginalized due to a lack of shared understanding. It highlights the impact of power dynamics and societal biases on the distribution of knowledge and recognition.

7 For interested readers in Chapter 9 I and my colleague visual artist Dr Shirley Chubb explore concepts of identity and belonging from the different philosophical perspective of a Deleuzian ontology of immanence.

8 Martin Heidegger's concept that we are thrown / born into a specific culture in a specific moment in history.

9 Bridling, as described by Dahlberg et al. (2008), is the deliberate act of slowing down and reflecting on the process of understanding, involving continuous

self-investigation and questioning of presumptions; it fosters heightened self-awareness to be more attentive to the investigated phenomenon, encouraging openness to new possibilities and a conscious dwelling in the realm of not knowing.

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ABSTRACT:

In this chapter, we explore the concept of "normality" in physiotherapy theory and practice. We engage with postmodern critical theory and Deleuzian and Foucauldian philosophy to consider (1) how "normality" is largely rooted in socio-political structures and a Global North association with "good," and (2) the extent to which the physiotherapy profession often works against the efforts of individuals with disability to find and make viable alternative movement possibilities for everyday task performance. Through a critical experimental approach, we summarize evidence from a prior study of the short-term movement consequences of physiotherapists operating under a "normalising" mindset for people post-stroke. The results of the study suggest that the intent to "normalise" movement may have unintended and negative functional movement consequences, including a reduced capacity for movement adaptation post-stroke. The chapter concludes with a proposition to further "destabilise the norm" in physiotherapy by considering how physiotherapists can focus on attunement and the development of capacity for meaningful activities, a process called "niche construction." By emphasizing critical theory in combination with supporting empirical evidence—an approach we refer to as a "critical experimental approach"—this chapter seeks to mobilise alternative perspectives and consider the promotion of adaptive movement diversity over "normality."

CHAPTER 4

Destabilising the norm

A CRITICAL EXPERIMENTAL APPROACH TO MOVE PHYSIOTHERAPY BEYOND MOVEMENT "NORMALISATION"

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Normality is a paved road: It's comfortable to walk, but no flowers grow.
— Vincent van Gogh

"Normality" is a core concept underlying physiotherapy. This concept is expressed in the everyday practices of physiotherapists who often aim to identify and minimize movement deviations in people with disability from the norms defined by non-disabled people.[1] The unstated assumption of this practice is that non-disabled people have "correct" or "normal" bodies that express "correct" and "normal" movements, believed to be the basis for successful activity and social participation (Gibson, 2016; Guccione et al., 2019; Imrie, 2000; Shogan, 1998). The undesirable consequence is that diversity in movement expression may often be interpreted as error requiring intervention. An example of this style of practice is the provision of physical support or assistance by a physiotherapist to people with disability triggered not by need or safety concerns, but by the mere observation of movement differences from idealized "norms." For instance, if a person with stroke demonstrates more postural sway than a non-disabled comparator, physiotherapists will commonly intervene via physical assistance to reduce sway ("stabilise").

In this chapter, we examine the underpinnings of the practice of physiotherapist assistance for movement "normalisation" by emphasizing critical

social theory and considering how critical theory can move physiotherapy beyond the concept of "normality." Specifically, we engage with postmodern critical theory (Gibson, 2016; Nixon et al., 2017) and Deleuzian (Deleuze, 1994; Deleuze & Guattari, 1988; Stephens et al., 2015) and Foucauldian (Foucault, 2013; Tremain, 2006) philosophy to consider (1) how "normality" is largely rooted in socio-political structures and a Global North association with "good," and (2) the extent to which the physiotherapy profession often works against the efforts of individuals with disability to find and make viable alternative (yet effective) movement possibilities for performance of their everyday tasks, and consequently, prevents physiotherapists from embracing movement diversity in their practice.

The chapter extends on the existing body of literature critical of normalisation tendencies in the profession (e.g., Gibson, 2016; Nicholls, 2017; Nicholls & Gibson, 2010) by proposing new strategies to "destabilise the norm." Specifically, we recognise that biomedicine remains dominant in physiotherapy, and, thus, clinical practice (and the empirical work that supports it) continues to be strongly influenced by normalisation tendencies (Gibson, 2016; Nicholls, 2012, 2017, 2022). This unfortunate scenario reveals the need for new strategies to "destabilise" the use of non-disabled norms as a guiding principle for physiotherapy practice and to catalyse a new model of practice—a model that leverages the movement diversity expressed by people with disability to promote the achievement of their therapeutic goals. In terms of a new strategy, we promote what we refer to as a "critical experimental approach," that is, an approach that aims to test hypotheses derived from theoretical, critical analysis of physiotherapy practices. If these hypotheses are confirmed, this approach will offer empirical evidence in support of important theoretical critiques. Additionally, results might give expression to new theoretical concepts to support the transformation of clinical practice. We expect this critical experimental approach to be particularly effective for physiotherapists (especially those in Western countries) who favour evidence-based practice—making use of the best available scientific evidence, moderated by recipient of care preferences—to make clinical decisions (Sackett, 1997; Vaz et al., 2017). Because evidence-based practice is so engrained in physiotherapy culture (Nicholls, 2012), many physiotherapists are hesitant or resistant to readily uptake critical theory. Empirical evidence from a critical experimental approach might also facilitate engagement with

critical theory by physiotherapists for whom exposure to philosophy and the liberal arts was not part of their education (Blanton et al., 2020; Schwab, Andrade, et al., 2023). While research evidence must always be evaluated through the prism of theory (Vaz et al., 2017), it can be difficult for many clinicians to merge and intertwine the viewpoints and critically evaluate the philosophical underpinnings of the evidence that informs their practice because the biomedical view is so well-entrenched (Nicholls, 2012).

To exemplify the critical experimental approach, we summarize the results of our own empirical work carefully designed through the lens of critical theory to examine the impact of physiotherapist postural assistance to minimize postural sway (a practice aimed to "normalise" postural control) on the movement strategies developed by individuals with stroke to perform an upper-limb task. The results of that study showed that physiotherapist postural assistance is detrimental to functionally effective motor adaption. Specifically, assistance prevents individuals with stroke from organizing their increased body sway in ways that facilitate task performance. Results are interpreted in light of the well-established critique of normalisation tendencies. We also show how the results give expression to a new theoretical concept—*activist affordance*—an important expansion on the affordance concept from ecological psychology coined by a disability scholar, Arseli Dokumaci (Dokumaci, 2016, 2017, 2020, 2023), to capture the active, creative, embodied work that people with disability must do to create enabling conditions for themselves in a world that is often insensitive to their bodies and skill sets—a process we refer to as "niche construction" (Dokumaci, 2023; Silva & Schwab, 2024). This concept not only challenges the norm but also reveals new principles to guide the design of physiotherapy interventions. Rather than focusing on "normalising movement," physiotherapy practice can support people with disability in this creative, embodied-embedded process of niche construction. A physiotherapy practice aligned with this principle would catalyse interventions to assist individuals with disability to (1) enhance their attunement to and control over the movement repertoire that defines their lived bodies—however limited or different; and (2) support their attempt to leverage this movement repertoire in the service of their functional goals (however they define them).

By challenging the physiotherapy concept of "normality"—theoretically, philosophically, and empirically—this chapter aims to mobilise alternative

perspectives on disabled movement and consider the promotion of adaptive movement diversity over "normality."

Normality: A pervasive clinical assumption

The earliest roots of "normality" in physiotherapy can be traced to the seventeenth-century mechanistic hypothesis proposed by Descartes. According to the mechanistic hypothesis, all physical processes—including the body and human movement—can be reduced and explained in mechanical terms (Martínez-Pernía et al., 2017; Reed, 1982). The goal is to identify *mechanisms*—structures consisting of a set of critical component parts that have specific functions (functions that are invariant over changing contexts) and that are arranged in a way to achieve some outcome of interest (Bechtel & Abrahamsen, 2005). The mechanistic style of explanation involves breaking down a system into its simplest functional components (reductionism) and, in the biological sciences, localizing the components in terms of concrete anatomical structures. When movement is reduced to mechanical terms, it is presumed that complexity can arise from simplicity. That is, context-independent anatomical components are assumed to linearly sum to produce higher-order functional behaviours like movement (Turvey, 1986).

Much of the contemporary emphasis placed on "normality" is entrenched in socio-political structures (Gibson, 2016) and a Global North association between "normal" and "good" (Davis, 2016; Grue & Heiberg, 2006). "Normal" largely became associated with "good" due to shifting interpretations of statistical averages and the rise of the eugenics movement in the early twentieth century—which aimed to "improve humans so that deviations from the norm diminish" (Davis, 2016, p. 3; Grue & Heiberg, 2006).

While most physiotherapists would certainly reject the views described in the previous paragraph, "normality" retains its stronghold in their professional practice—"normal" range of motion, "normal" tone, "normal" strength, etc. Physiotherapists often attempt to "correct" body structure and function impairments to promote an idealized "normal" movement pattern (Cavanaugh et al., 2017; Gibson, 2016). In doing so, they may unknowingly limit a recipient of care's movement possibilities by placing a narrow focus on "normalisation" of impaired body structures and functions (Gibson, 2016). This practice is principally consistent with medical models of disability which emphasize the etiological factors that lead to context-independent

pathological processes and largely de-emphasize the multifactorial nature of disability (Marks, 1997; Schwab & Silva, 2023). One paradigmatic clinical example of physiotherapists striving for "normality" can be seen in the provision of physical assistance to people with disability triggered not by need or safety concerns, but by the simple observation of movement differences from idealized "norms." For instance, if a person with stroke demonstrates more postural sway while standing than a non-disabled comparator, physiotherapists will commonly intervene via physical assistance to reduce sway even in the absence of any overt threat to safety.

There are several underlying and taken-for-granted assumptions implicitly grounding this practice: (a) Functional movement performance can be reduced to simpler component parts (e.g., individual joint movement patterns) that are either "correct" or "incorrect," regardless of context, consistent with medical models of disability (Grosz, 2018; Harbourne & Stergiou, 2009; Martínez-Pernía et al., 2017; Nicholls, 2022; Nicholls & Gibson, 2010; van Dijk et al., 2017); (b) individuals without disability consistently demonstrate an idealized "correct" or "normal" way of moving (Gibson, 2016; Guccione et al., 2019; Imrie, 2000; Shogan, 1998); and (c) variation from that "correct" benchmark (e.g., increased postural sway) is what causes functional deficits and thus represents error requiring correction (i.e., "normalisation") (Gibson, 2016; Higgs, 2001; Nicholls, 2017, 2022) through physiotherapist assistance. Thus, the decision to provide physical assistance in this situation to reduce postural sway in the absence of threats to balance is fundamentally motivated by a desire to create "normal" movement, even if this is not explicitly acknowledged or known.

The impact of "normality" on people with disability

Dominant ways of thinking about disability and physiotherapy have long been guided by non-disabled "experts" on disability who determine what is and is not a "good" outcome, often relegating people with disability to a peripheral role. Although the profession of physiotherapy has explicitly acknowledged the importance of valuing disability as diversity (Roush & Sharby, 2011), the pervasive and implicit presence of "normality" as a guiding principle for interventions and assessments prevents expression of this value in physiotherapy practice (Schwab & Silva, 2023). For instance, research by Feldner et al. (2022) suggests that many physiotherapy assistants

are aversive ableists. Aversive ableism (Friedman, 2018) refers to people who are progressive and well-intentioned, but they engage in implicitly biased thoughts or actions characterized by assumptions that "normal" bodies/minds are the ideal and subsequent differential treatment of people with actual or presumed non-typical functioning (Feldner et al., 2022). Aversive ableists have low explicit prejudice, but high implicit prejudice toward people with disability. The underlying assumption of "normality" present in everyday clinical physiotherapy practice likely contributes to these implicit ableist attitudes held by physiotherapists and physiotherapy assistants (Schwab & Silva, 2023).

An exclusive focus on performing a task "correctly" (i.e., functionalistic attitude) on the part of the physiotherapist can preclude the development of alternative movement strategies for a person with disability (Toro & Martiny, 2020). When physiotherapists assume this perspective, even with the best of intentions, the person with disability can become a "specimen" to fix, and the physiotherapist becomes an expert for restoration and recovery (Nicholls & Nicholls, 2020). These client-therapist roles (with a functionalistic attitude from the physiotherapist) can contribute to unfavourable and awkward social interactions (as well as unfavourable outcomes) for the person with disability (Toro & Martiny, 2020).

The definition of disability as a departure from "normal" as defined by society and health professionals can reinforce negative self-perceptions that often accompany disability, like objectification of the body (Kitzmüller et al., 2013). Individuals with Friedreich's Ataxia, for instance, have reported that they often try to move in a way that is "normal" so that they are able to "fit in." In doing so, they express that this can limit the exploration of and discovery of diverse and adaptable movement patterns that work for them and can subsequently increase cognitive performance monitoring (Schwab, et al., 2022), which is known to adversely impact motor performance (Schmader et al., 2008).

Critical theory to destabilise the norm in physiotherapy

Engagement with postmodern critical theory and Deleuzian and Foucauldian philosophy provides insights that can act to challenge the assumptions of "normality" underlying physiotherapy. Postmodern critical theory combines critical approaches and postmodernism, both of which express

scepticism and distrust toward modern social and cultural values, to challenge prevailing ideas in Western science (Foucault, 2013; Gibson, 2016). In terms of the concept of "normality," postmodern critical theory posits that "normality" fails to recognize intersecting concerns like social justice, patriarchy, and prejudice—which are especially prevalent concerns in the Global North (Yoshida, 2018). When intersecting concerns are ignored, diverse movement patterns can be artificially pathologized (Schwab, et al., 2022). As one example from feminist philosophy, Young (1980) argued that the often-restricted movement patterns of women and girls (i.e., "throwing like a girl") are due to "self-objectification" attributable to the sexual objectification and socialization imposed by Western culture. A deviation from "normality" in this case is not pathological; it is related to the intersection of multiple contextual factors (Schwab, et al., 2022). In large part, the Global North determines how health and disability are defined, and elite groups (e.g., non-disabled) are given the power in society to establish what constitutes a "norm" (Nicholls, 2022).

Consistent with postmodern critical theory, Foucauldian philosophy challenges the concept of "normality." Foucault argued that many taken-for-granted medical practices, like "normality," were developed for clinicians to attain social power (Monaghan & Gabe, 2022). A "medical gaze" governs and decides what is to become of a passive and silent object of knowledge (i.e., the recipient of care) (Foucault, 2013; Rendell, 2004). "Normalisation" plays a critical role in disability, and Foucault presented disability as a social-political construct rather than a biological fact. "Normality" was perceived by Foucault as a way to identify people to make them governable. Governmental practices divide people with disability from others to produce an illusion of impairment (i.e., illusion of inherent lack or deficit) which provides justification for regulation and the establishment of a variety of institutions to protect society from "abnormal" persons (Grue & Heiberg, 2006; Tremain, 2006).

Like Foucault, Deleuze also emphasized the role of social context in shaping ideas about "normality." Deleuze argued that the body, disability, and environment are not in a persistent state, but rather "becoming"—constantly changing in relationship with each other (Deleuze & Guattari, 1988; Stephens et al., 2015). By focusing on "becoming," the lived experience of disability can be considered in response to social norms, physical access, and cultural norms which may fundamentally alter, enhance, or

limit movement solutions (Stephens et al., 2015). Accordingly, there is an opportunity for physiotherapists to promote and enhance the viability of alternative movement possibilities and embrace movement differences in people with disability (Deleuze, 1994; Gibson et al., 2020; Nicholls, 2022). Movement differences can be viewed as creative strategies, rather than as mistakes (Gard et al., 2020). For physiotherapists, this can be considered with respect to how we often suppress movement differences. When differences are suppressed, individuals' movement possibilities are also suppressed—in an already "shrunken" world of movement possibilities (Dokumaci, 2023).

Additional support for the theoretical and philosophical views on "normality" and disability previously presented can be found in the basic motor control literature which indicates that even highly skilled performers (e.g., athletes, craftsmen) demonstrate movement patterns that are both variable and task-specific (Biryukova et al., 2015; Gray, 2020; Hristovski et al., 2011; Orth et al., 2017). *This variation is an expression of flexibility* (Ranganathan et al., 2020; Stergiou et al., 2006; Stergiou & Decker, 2011) and can be functional, rather than simply reflecting random error (Riley & Turvey, 2002) believed to arise from noisy sensorimotor processes (Faisal et al., 2008). Even when explicit task demands remain constant, multiple repetitions of a movement exhibit varying patterns (Bernstein, 1967; Scholz & Schöner, 1999). Intra-individual movement variation allows for the selection of a movement strategy to fit a given context and consistently meet the demands of a task goal (Davids et al., 2003; Hadders-Algra, 2010; Latash et al., 2002; Levac et al., 2019; Scholz & Schöner, 1999). Further, there is commonly inter-individual variability found between highly skilled performers within the same discipline (e.g., in athletics), providing additional evidence to suggest that one repeatable, "correct" way of moving may not exist (Gray, 2021).

In light of this contemporary understanding of motor control, movement variations in people with disability compared to non-disabled people may not necessarily represent error. Rather, these movement variations often reflect their creative strategies to perform everyday tasks under the unique disability-related constraints they are exposed to (Guccione et al., 2019; Stergiou & Decker, 2011). Consistent with the ideas of Deleuze and Foucault, "atypical" movement patterns found in people with disability may actually reflect adaptability, and interventions designed to "correct" these patterns can interfere

with adaptability for functional task performance (Fonseca et al., 2001; Latash & Anson, 1996; Rahlin et al., 2019; Schwab, Andrade, et al., 2023; Schwab, et al., 2022).

A critical experimental approach to complement critical theory: Consequences of "rehabbing to a norm" after stroke

Despite theoretical evidence of the incongruency of "normalisation" in physiotherapy practice identified by critical rehabilitation scholars and motor control theory, clinical practice still remains heavily guided by non-disabled norms (Gibson, 2016; Nicholls, 2012, 2017, 2022). Changing this scenario may require a new strategy—one that connects more directly with the training of physiotherapists. We propose a strategy that leverages physiotherapist training in the use of empirical evidence to guide practice. Importantly, however, the approach we propose aims to test hypotheses derived from theoretical, critical analysis of clinical practices. This approach—which we refer to as a "critical experimental approach"—offers empirical evidence in support of important theoretical critiques (e.g., normality) and gives expression to new theoretical concepts to support the transformation of clinical practice (e.g., niche construction). In this section, we exemplify the critical experimental approach to specifically challenge the earlier discussed clinical example of therapists often striving for "normality" by providing physical assistance to reduce standing postural sway in individuals post-stroke in the absence of overt threats to safety. Clinically, this can be observed by a therapist using a gait belt to "steady" or "stabilise" an individual with disability during standing when there is no threat to safety, but rather, because there is a deviation from a non-disabled comparator (i.e., from what is considered "normal" sway). We briefly summarize the results of this study (Schwab-Farrell et al., 2024) as an example of how the critical experimental approach can complement theory and transform physiotherapy practice. The hypothesis for this study was derived from critical social theory and motor control theory: Unnecessary physiotherapist assistance during practice will limit movement adaptation post-stroke.

The study evaluated individuals' standing postural sway during the concurrent learning of an upper-limb precision aiming task. Ethical approval was obtained for the study by the University of Cincinnati Institutional Review Board. One group of participants ("assistance group") received therapist

assistance during a practice period aimed to minimize postural sway (when there was no threat to safety; increased sway was considered as an error requiring correction via assistance), and one group of participants ("no-assistance group") did not receive therapist assistance (and were therefore free to explore diverse movement possibilities). Upper-limb task performance and postural sway were measured before and after the practice period (with neither group receiving assistance during testing) to determine the impact of physiotherapist assistance with a "normalising" mindset on the functional motor task performance and motor control patterns of people with chronic stroke.

Following practice, all participants showed improvements in upper-limb functional task performance (i.e., increased accuracy) using the paretic upper limb irrespective of physiotherapist assistance provided during practice. Accordingly, a therapist operating with an explicitly "normalising" mindset during practice did not generate more functional task outcomes for people post-stroke compared to allowing individuals to explore alternative movement strategies and find what works for them. For postural sway patterns, individuals in the no-assistance group demonstrated adaptive, task-sensitive (as opposed to biomechanically "normal") postural sway patterns (Schwab, Mayr et al., 2023) after practice, consistent with the idea that postural control can be modulated to facilitate the performance of supra-postural tasks (Riccio & Stoffregen, 1988). The assistance group, however, showed no change in postural sway patterns after practice with therapist assistance. The patterns of movement shown by the assistance group suggested a reduced capacity for movement adaptation post-stroke.

When individuals were free to explore creative movement solutions during the practice period rather than focusing on "normal" movement (i.e., no-assistance group), they were able to demonstrate functional upper-limb task performance with adaptable underlying postural control patterns. The assistance group, however, demonstrated an underlying pattern of movement suggesting more limited adaptability to changing contextual demands. Thus, this study provides empirical support, through a basic motor control paradigm, to suggest that the intent to "normalise" movement through physiotherapist assistance may have unintended and negative movement consequences for people with disability. Empirical studies informed by critical theory, like the one discussed in this section, can be useful to "evidence-based" clinicians in seeing how the philosophies underlying their practice

manifest and can potentially be detrimental. Additional studies using the critical experimental approach may further help to narrow the gap between critical physiotherapy scholars and more biomedically trained researchers, merge theory and research evidence, and facilitate evidence being appraised through the lens of critical theory.

It is important to note that research design is generally consistent with positivist approaches, which are somewhat at odds with critical theory (Nicholls, 2012). However, generating research evidence through the lens of critical theory, as was done in this study, can help to narrow the divide between exclusively evidence-based clinicians and those who more readily integrate theory into their practice by providing an empirical basis to ground theoretical and philosophical claims. Resolving the tension between theory-based and evidence-based clinicians may facilitate the translation of the issues surrounding "normalisation" into practice.

A new perspective for destabilising the norm: Activist affordances and niche construction

The results of the previously discussed study are consistent with critical social theory and Deleuzian and Foucauldian philosophy, demonstrating empirically negative consequences of everyday physiotherapy practices that emphasize "normality." In the no-assistance group, movement differences were embraced, rather than suppressed. Most importantly, the movement strategies employed—though different from non-disabled norms— were sensitive to the demands of the task and ultimately made functional performance possible and more accurate compared to baseline. These results give expression to a new theoretical concept—*activist affordance* (Dokumaci, 2016, 2017, 2020, 2023), to capture the active, creative, embodied work that people with disability use to make performance of daily tasks possible under prevailing circumstances.

Dokumaci's work acknowledges that many of the challenges experienced by people with disability are the result of living in a world that often does not readily complement their bodily capabilities and skills. Importantly, Dokumaci's work also captures "how disabled people improvise more habitable worlds" by using their bodily performances to create new, previously unimagined *affordances* (i.e., opportunities for action given an individual-environment fit; Gibson, 1977) out of the available material features of

the environment (Dokumaci, 2023; Silva & Schwab, 2024). Affordances are "activist" because they are a product of creative, deliberate, and often effortful action. Activist affordances emerge because people with disability cannot exploit the usual (i.e., canonical) functionalities of environmental features. The term highlights the agency of people with disability as *bodies in action*, as they "make up" and "make real" conditions for goal achievement that were previously unavailable by simply "making do with" what is available (Dokumaci, 2023; Silva & Schwab, 2024). The concept of activist affordances recognizes that the body does play a critical role in the disability experience. However, the concept also recognizes that physiotherapy should not "normalise" the body, nor should it take a completely "hands-off" approach. Rather, physiotherapists can aim to extend the longevity and functional effectiveness of the alternative strategies that people with disability use to "make up" and "make real" conditions for goal achievement.

The guiding principle for physiotherapy we propose to "destabilise the norm" is to support people with disability in a creative process of "niche construction." Clinical practice aligned with this principle would be defined by interventions designed to assist individuals with disability (1) enhance their attunement and control over the capacities that define their lived bodies; and (2) develop and maintain the capacities required to achieve their functional goals. The nature of interventions will vary depending on the goals and needs of the recipient of care and on their evolving experience as bodies in action. We must first understand how they have been actualizing the affordances that support their activity and collaboratively determine how to facilitate that performance.

Hutzler (2007) provides an illustrative example of a training approach from adapted physical activity that aligns with the principles of niche construction that can guide a shift in physiotherapy practice. In the example, a teenager with hemiplegic cerebral palsy (CP) had the goal of practicing swimming as a sport. The coach analysed the teenager's swim stroke and noticed that the paretic arm created drag and was limiting his speed. Rather than trying to "normalise" the arm movements and preserve "standard stroke patterns," the coach guided the teenager to experiment with a different stroke pattern altogether: resting the paretic arm near the chest, allowing the opposite arm to develop full speed; breathing with a full body roll on the longitudinal axis, increasing the length of the stroke. The creative, adaptable

movements that were discovered accomplished a reduction in drag that a "normal stroke" could not have accomplished. The teenager with CP, with the guidance of his coach, made the water "afford" him the opportunity to swim at a fast pace. The goal to swim competitively was achieved through a better individual-environment fit, not bodily "normalisation."

In adapted physical activity, "alternative" ways of moving are accommodated and celebrated and encouraged as the achievements that they are. A similar attitude toward activist affordances in the context of everyday activities is critical for physiotherapy to reach its full potential in supporting the creative movement solutions of people with disability. In maintaining standing balance, for instance, physiotherapists may help recipients of care tune to the context of the task, and in combination with individual capacities, collaboratively determine the best strategy to achieve a functional goal (e.g., "channel" increased postural variability and guide to more "noise-tolerant" solutions; Levac et al., 2019), rather than stifling postural sway because it deviates from what non-disabled people do to perform the same functional task. That is, in this model of practice, physiotherapists are charged with improving the *fit* between an individual and their environment, rather than "normalising" (Silva & Schwab, 2024; Vaz et al., 2017). It is important to note that the model of practice illuminated by the concept of activist affordances respects insights from people with disability about what they believe physiotherapy could do for them (Bezmez, 2016; Clifton, 2014; Moll & Cott, 2013; Papadimitriou, 2008). Importantly, it emphasizes agency rather than autonomy and focuses on attunement and development of capacity for meaningful activities rather than "normalisation."

A critical point about activist affordances must be emphasized prior to conclusion: There is a physical, cognitive, and emotional cost for people with disability associated with utilizing affordances that are not readily available in an environment that caters to non-disabled individuals. The concept of activist affordances is not intended to negate this acknowledgement, nor should it negate the social responsibility to transform the environment in ways to improve its sensitivity to the diverse embodiments of people with disability. Rather, activist affordances centrally place people with disability in this process of transformation by bringing to bear the vision of people with disability for what the environment could offer them, and in doing so, reveals more accessible futures for themselves (Dokumaci, 2023; Silva & Schwab, 2024).

Concluding remarks

In this chapter, we aimed to mobilise alternative perspectives on disabled movement and consider the promotion of adaptive movement diversity over "normality." We provided philosophical, theoretical, and a critical experimental approach to support a shift from the "normal" and "abnormal" binary prevalent in physiotherapy, underscoring that the historical construction of "normality" is arbitrary.

Innovative models of disability are emerging that may catalyse this shift in clinical reasoning as well as foster more positive disability identities, including the promotion of agency by applying principles of activist affordances. The Ecological-Enactive Model of Disability (Toro et al., 2020), for example, provides an alternative to viewing movement as either "normal" or "abnormal." Rather, physiotherapists can evaluate movement on a continuum of adaptability and promote the exploration of diverse movement solutions by allowing individuals with disability to try out what is possible (Schwab, et al., 2022; Toro et al., 2020). This model of disability aligns with our proposition for a physiotherapy practice guided by principles of activist affordances and niche construction. Deviations from norms do not always require intervention, and interventions should not necessarily be aimed at "normalisation" (Gibson, 2016).

Fundamentally, people live in a "multiplicity of norms" (Nicholls, 2022, p. 161). New constraints are placed on the movement system following injury, illness, or disability (Schwab et al., 2021; Stergiou et al., 2006), and physiotherapists are tasked with working with individuals, given those new constraints, to explore diverse movement solutions, even if those solutions may sometimes appear as deviations from idealized norms. Those novel, seemingly "atypical" solutions may actually promote functional, adaptable, and task-sensitive performance and exploit existing action capabilities (Fonseca et al., 2001, 2004; Holt et al., 1996; Rahlin et al., 2019; Schwab, et al., 2022; van Emmerik & van Wegen, 2002; Winter, 1995) and should not necessarily be stifled.

A full-scale "destabilisation of normality" in physiotherapy will require additional empirical support (using a critical experimental approach) as well as an embrace of a multidisciplinary perspective—one that more readily integrates physiotherapy with disability justice, disability studies, philosophy, and the social sciences.

Notes

1 Individuals within the disability community have varied preferences about person-first and identity-first language, including differences in the language they use to describe themselves and the language they prefer to be used to describe them (Andrews et al., 2022). Individual disability language preferences should always be supported. In this chapter, we chose to use person-first language, as we are writing about disability broadly. However, it is important for readers to be aware that disability language is continuously evolving and specific to the individual. For instance, an increasing number of people prefer identity-first language because it allows them to express disability pride (Andrews et al., 2022). Throughout this chapter, we use the term "non-disabled" to refer to a person or a group of people who are the opposite of disabled. This terminology is consistent with calls from people with disability and disability scholars to remove reference to ability (e.g., "able-bodied") in terminology and simply describe who is or is not disabled (Wright, 2022).

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ABSTRACT:

In 2016, undergraduate students at Universidade Federal do Rio Grande do Sul (UFRGS) occupied the premises of the Olympic Campus in protest to a constitutional amendment proposing a maximum spending limit on primary expenses for all government levels over the next twenty years. This movement, known as Ocupa ESEFID, prevented classes, research, and community service activities for forty-seven days. In this essay, drawing inspiration from the major and minor education concepts introduced by the Brazilian pedagogue Silvio Gallo, we examine a compilation of physiotherapy's student reports related to that historical context. Originally produced for the first author's doctoral thesis, these reports are complemented by recollections from the other two authors, who are also professors at the institution. To contextualize the physiotherapy programme at UFRGS and the tensions surrounding training in the field, we provide insights from the history of physiotherapy in Brazil. Finally, we underscore the outcome of the Ocupa ESEFID movement, coinciding with the approval of the controversial amendment to the Brazilian Constitution by the Federal Senate. This essay highlights the interplay between major and minor education, allowing us to comprehend, through contrast, the significant impact of this unique event on physiotherapy training at UFRGS.

CHAPTER 5

"The impact of the occupation remains with us"

MOVEMENTS OF MINOR EDUCATION DURING POLITICAL MOBILISATION OF PHYSIOTHERAPY STUDENTS AT A FEDERAL UNIVERSITY IN SOUTHERN BRAZIL

DANIELA MEIRELLES LAGRANHA, ADRIANE VIEIRA, AND ALEX BRANCO FRAGA

Para quem aprende a olhar de soslaio e deslizar, gingar pelas frestas de um pensamento que não se pretende grande, mas que reconhece que todo o pequeno é que arranca a unha colonial que endurece o nosso pensamento e a nossa maneira de buscar jeitos próprios de caminhar.

— Wanderson Flor do Nascimento

Introduction

On 26 October 2016, Physiotherapy, Physical Education and Dance undergraduate students at Universidade Federal do Rio Grande do Sul (UFRGS) occupied the premises of the Olympic Campus, which houses the School of Physical Education, Physiotherapy and Dance (ESEFID). For forty-seven days, they prevented classes, research, and community service activities from taking place in a movement that came to be known as Ocupa ESEFID.[1] Like the Chilean Winter protests and the Fees Must Fall movement in South Africa,[2] the Brazilian movement was intended for a group of students to take a stance against budget constraints and inequities that would have

an impact on access to higher education. Ocupa ESEFID had its focus on the approval of a Proposed Amendment to the Brazilian Constitution by Brazil's Federal Senate (PEC).

The Ocupa ESEFID students not only used the facilities and the surrounding grounds for demonstrations but effectively began to run the campus activities for almost two months without any resistance from the faculty administration. They introduced a form of self-management on campus and remained camped during a period marked by mobilization that involved discussions about academic training and debates on political changes in Brazil's public education and health care. In addition to the debates, the students spent their days preparing meals and organising workshops, conversation circles, open classes, film debates, and cultural events. They held daily assemblies to decide on their actions as a student collective and held public demonstrations in the city together with other organizations.

The year 2016 was turbulent in Brazil and we underwent yet another major political crisis.[3] One of the critical points of that crisis was the impeachment of President Dilma Rousseff, which removed the Workers' Party (PT) from the Federal Government. Rousseff was elected for a second term in 2014[4] by a thin margin over the second most-voted candidate whose electoral platform was based on neoliberal premises. In 2015, the government had to tackle a severe economic crisis. On the political front, it faced a series of corruption charges linked to the state-owned oil company Petrobras. In this context, the impeachment process was triggered by charges of fiscal manoeuvres, which President Rousseff would have used to give a false sense of economic stability based on "creative accounting."[5]

After taking office in August 2016, Vice President Michel Temer introduced a series of neoliberal reforms, including changes to the Constitution. One of these changes aimed to limit government spending by proposing an amendment to the Constitution, allegedly to tackle the growing public debt relative to Gross Domestic Product (GDP). The amendment, known as PEC 241, proposed a new tax system aimed at setting a maximum spending limit on primary expenses for all levels of government for the next twenty years (Marquetti et al., 2020).

The second-round vote for PEC 241 in the Chamber of Deputies on 25 September 2016 was the trigger for the Ocupa ESEFID movement. The academic community had been following the progress of those PEC

procedures and holding debates on the Olympic Campus, with the engagement of professors and students. These debates reflected on ways for the university to speak out against its approval. Sensitized by the debates circulating on campus, in a September 26 assembly, the students voted to occupy the Olympic Campus facilities against the will of a considerable number of professors and even some fellow students.

Ocupa ESEFID intended to join other movements underway in Brazil to express disagreement with the constitutional amendment approved in the Chamber of Deputies and pressure senators to vote against it—it was renamed PEC 55 in the Federal Senate—and thus prevent it from being signed into law by the President. It is important to highlight that the right to accessible healthcare and education, guaranteed in the 1988 Constitution, was won amid the transition from Brazil's military dictatorship to democracy, after years of struggle and political mobilization of social movements, labour unions, and ecclesiastical grassroots communities (Paim, 2013). Therefore, the approval of PEC 55 in the Federal Senate would be a setback to the achievements materialized in the 1988 Constitution, particularly concerning the constitutional article related to education and health as a right for all citizens and as a duty of the State (Vieira & Benevides, 2016; Mariano, 2017).

The collection of student reports and the consequences of their experiences in that historical context—originally produced for the first author's doctoral thesis (Lagranha, 2023)—together with the recollections of the other authors, who are ESEFID professors, led us to write about the power of the Ocupa ESEFID movement from the point of view of students and professors of the physiotherapy undergraduate programme. First, we introduce Silvio Gallo's (2008) notion of major and minor education to understand the emergence of the movement of deterritorialization of major education as well as collective practices, in this case, as an attempt to break with the potential consequences of PEC 55. Next, we provide elements from the history of physiotherapy in Brazil to contextualize our physiotherapy programme and the respective tensions regarding the views on training in the area. Then we highlight minor education essays produced by students and professors of the programme during that short period of occupation of the Olympic Campus. Finally, we emphasize the outcome of the Ocupa ESEFID movement in December 2016, when PEC 55 was approved by the Federal Senate, highlighting the dynamics between major and minor education that allowed

us, by contrast, to understand the power of that unique event on physiotherapy training at UFRGS.

Major and minor education in analytical structuring

In Deleuze e a Educação, Brazilian pedagogue and philosopher Silvio Gallo (2008) proposed the concepts of major and minor education to discuss the multiple dimensions involved in educational processes. Based on the view of major literature and minor literature put forward by Gilles Deleuze and Felix Guattari, drawing from the work of Franz Kafka, Gallo (2008) proposes to think about education in rhizomatic terms,[6] as something that spreads in the depths of everyday life, reverberating a political activism that is not centred on a commanding voice (Gallo, 2002).

From this perspective, Gallo (2002; 2008) defines major education as the bits of knowledge that structure the educational system, which are consolidated in curriculum documents and embedded in the management of educational policies. Major education, therefore, guides the training process by pre-defining the paths that will lead each and every student to the profile intended for them and avoiding any deviations from the path paved by pedagogical laws, guidelines, norms, and models. As Gallo writes, "major education is that of the great maps and projects" (Gallo, 2002, p. 173).

The concept of major education in the work of Silvio Gallo (2002) gains more specific outlines and becomes clearer when compared to the concept of minor education. The latter is understood as a movement of subversion that seeks to move further away from the totalitarian prescription of major education, placing it under suspicion, resisting its norms, destabilising control mechanisms, and requesting other spaces and actions to exist. Minor education focuses on the student's unique experiences, considering interrelations, reciprocity, and ruptures that emerge in the training process, without imposing a single model or form (Martins & Gallo, 2018). Gallo helps us understand that there are other realities and modes for becoming who we are that go beyond those established and advocated by major education. He describes "minor education" as "an act of rebellion and resistance. Rebellion against established flows, and resistance to imposed policies" (Gallo, 2002, p. 173).

It is important to consider the historical moment when analysing the paths of undergraduate students, as this element allows them to envision unique paths that have not been taken before. For Gallo (2008), "today, it is more important

to focus on building the present every day rather than simply announcing the future" (p. 59), which leads to a less prophetic and more activist relationship with the collective educational process. In this process, the emphasis is not on achieving predetermined goals for a better future, but rather on a continuous project with no specific subject or endpoint (Gallo, 2002).

Finally, the rhizomatic model proposed by Gallo (2008) to reflect on education is centred on this conceptual pair that exposes these two dimensions, which intersect and clash all the time: (a) institutional training with its clues drawn in advance and (b) the routes produced by students who "insist" in opening alternative paths when moving between the cracks of that totalizing education model.

Physiotherapy on Brazil's major education map

Physiotherapy training in Brazil, more specifically its inclusion into the major education map, has some interesting peculiarities for the approach we propose in this chapter. One of them is that only in the 1950s did an educational proposal emerge to provide people who worked as physiotherapy technicians with vocational training. Those were times of economic growth and urban development as well as expanding industrialization. Concern about the increase in the number of people with sequelae from polio, work accidents, and World War II were arguments that, amid greater investment in the healthcare sector, contributed to the emergence of rehabilitation services in Brazil, which had not been highly valued in a very restricted healthcare network (Oliveira, 2002). Resident doctors working abroad brought positive experiences regarding the work of physiotherapists in hospitals and began to demand more inclusion of these professionals in healthcare services (Oliveira, 2002).

During that period, Universidade de São Paulo's National Rehabilitation Institute stood out for its coordinated work and partnership with the Pan American Health Organization, the World Health Organization, and the World Confederation for Physical Therapy. It was a pilot rehabilitation centre in Latin America and served as a reference for the first vocational school curricula and, later, for degrees in physiotherapy (Marques & Sanches, 1994).

Another institution that played a role in organizing the profession in Brazil was the Brazilian Charitable Rehabilitation Association in Rio de Janeiro, whose curriculum was based on the Physical Therapy Program of

Columbia University (Barros, 2008). In 1959, the Brazilian Physiotherapy Association emerged as a result of the interest in regulating the profession and in a better political organization of physiotherapy technicians working in healthcare services, as well as professionals involved in training courses (Barros, 2008; Marques & Sanches, 1994).

While the 1950s were dedicated to creating programmes to provide quality training for people to work as "physiotherapy technicians," the 1960s saw an effort towards recognizing and expanding the profession. In 1964, a campaign carried out by the Brazilian Physiotherapy Association and doctors to expand the profession led to the approval of a minimum curriculum for physiotherapy vocational programmes by the Ministry of Education (Barros, 2008).

The 1964 basic curriculum was defined by a committee including five doctors and established the bases and guidelines for the operation of physiotherapy vocational programmes in Brazil as well as the process necessary for their official recognition (Oliveira, 2002; Barros, 2008). In October 1969, with five official programmes recognized in the country and pressure on the government from members of the Brazilian Physiotherapy Association, the profession was recognized by Executive Order 938 as a higher education activity (Oliveira, 2002; Teixeira et al., 2017). Therefore, the profession was organized amid a military coup that resulted in two decades of political turmoil and massive censorship in Brazil. Starting in 1964, the military dictatorship only began to lose strength in the early 1980s, in a period of redemocratization surrounded by an economic crisis and uncontrolled inflation (Kinzo, 2001).

Despite the official recognition of the profession in 1969, the Federal Council of Physiotherapy and Occupational Therapy was not created until 1978. After this process of organizing the profession, the Federal Council of Physiotherapy and Occupational Therapy,[7] in collaboration with the Brazilian Physiotherapy Association, drafted a proposal expanding the minimum curriculum for the degree[8] in physiotherapy and submitted it to the Federal Council of Education in 1982.

The new minimum curriculum proposed more robust training for physiotherapists, changing the duration of the course from three to four years and organizing the curriculum into four cycles: Biological, General Training, Pre-professional, and Professional (Resolução nº 4, 1983). In the face of curricular changes and the inclusion of sociology, anthropology, psychology, and ethics courses in the second cycle, aiming for a more comprehensive

education, the priority continued to be centred on technical subjects. Therefore, the discussions facilitated by the second cycle tended to have limited integration with the content and practices of the Pre-Professional and Professional cycles (Oliveira, 2002).

During the same period, the process of dismantling the military dictatorship opened space for Brazilian civil society to start debating points for a new Constitution. Among the historical facts relevant to proposing changes in the health sector on a national level, we highlight the creation of the Brazilian Public Health Association (Osmo & Schraiber, 2015) in 1979 and the Eighth National Health Conference in 1986 (Paim, 2013). It was a time when many leaders mobilized and several Brazilian intellectuals engaged in proposing a broad healthcare system that would guarantee access to services for the entire Brazilian population (Osmo & Schraiber, 2015).

Two years after the Eighth National Health Conference, the 1988 Constitution was promulgated and established access to education and healthcare as rights of all Brazilian citizens and a duty of the State. In 1990, the Sistema Único de Saúde[9] was regulated and established Universalization, Equality, and Integrality as its basic guidelines[10] (Lei nº 8.080, 1990; Paim, 2013).

As for health professionals, after Sistema Único de Saúde was regulated, the curriculum had to be updated to provide training under the new theoretical perspectives and discussions outlined in the 1980s. In the early 2000s, the Ministry of Education, working with the Ministry of Health and professional associations, set the National Curricular Guidelines for professional training in fourteen healthcare areas (Costa et al., 2018). The National Curricular Guidelines for the degree in physiotherapy were approved in 2002 (Resolução CNE/CES 4, 2002) and included demands from social movements that emerged during the country's redemocratization period, with support from the recently created Brazilian Association of Physiotherapy Education[11] in 1999 (Rocha, 2014).

In a sense, the discussions that led to the proposal of the National Curricular Guidelines for physiotherapy programmes focused on more flexible routes for training in the area. Activist professors and professionals engaged in the new discussions about healthcare in Brazil in the 1980s shared values that went beyond those traditionally recognized as defining physiotherapists' identity in the country (Rocha et al., 2010). Therefore,

they were involved in a movement consistent with the characteristics of "minor education."

The National Curricular Guidelines advanced and started playing a role in major education, outlining a curricular organization based on an expanded health concept, setting the need for generalist, humanist, critical and reflexive training that would enable students to work at all levels of healthcare according to the bioethical, moral and cultural principles of individuals and communities. In addition to the already recognized work of physiotherapy in rehabilitation, training encouraged professionals to work in the prevention, promotion, and protection of health, both at an individual and collective level, as well as recognizing the interactions between health and political, social, economic, environmental and cultural issues (Bertoncello & Pivetta, 2015). The National Curricular Guidelines also established that the degree in physiotherapy should last at least five years. It should be active in the Sistema Único de Saúde management and services and focus on scientific development, in addition to investing in continued and permanent education (Resolução CNE/CES 4, 2002).

Despite all the briefly described achievements of these fifty years of physiotherapy professionalization in Brazil, with great progress in the offer of degrees, a national curriculum that proposed an expanded vision of health, and increasing demand for professionals in the health labour market, there has been no significant inclusion of physiotherapists in public primary care and outpatient services or in other sectors of the healthcare field that encouraged innovation in therapeutic approaches. The market kept absorbing only private services, focusing on areas of medical specialization and the hospital network. Consistent with this reality, training and professional work followed the rules of the private healthcare system and remained linked mainly to a neoliberal vision of healthcare, contributing to the maintenance of training centred on technical and mechanical competencies. Thus, despite the attempt to create change following the promulgation of the 2002 National Curricular Guidelines, they resulted in small curriculum adaptations rather than substantial changes in the vision of health and the training of new professionals (Oliveira, 2012; Rocha et al, 2010).

Professional policy forums promoted by the Federal Council of Physiotherapy and Occupational Therapy with the participation of Brazilian Association of Physiotherapy Education in 2005-2006 (Rocha, 2014)—when

the administration of President Luís Inácio Lula da Silva of the Workers' Party (PT) was resuming social investment policies—questioned this reality and organized actions to create physiotherapy undergraduate programmes at public federal universities in the country, enabling greater critical and scientific development as well as free access to training in physiotherapy

The establishment of physiotherapy undergraduate programme at Universidade Federal do Rio Grande do Sul

In the first decade of the twenty-first century, after a period marked by the undermining of public educational institutions in the 1990s, there was a resumption of government investment in Brazilian federal universities. At the beginning of the first term of President Luís Inácio Lula da Silva (PT) in 2003, the federal government created the Programme to Support Restructuring and Expansion Plans of Federal Universities.[12] The aim was to increase student's access to and retention in higher education. The programme envisaged the physical, academic, and pedagogical expansion of the federal network by 2012.

In 2008, as a part of national inclusion policies, UFRGS implemented admission quotas for public school students and self-declared black students. This played a significant role in shaping the profile of the University's students. In the following years, these quotas were expanded to include Indigenous groups and people with disabilities. This achievement was the result of social struggles in Brazil and the left-wing government of that period.[13]

The Pedagogical Project for the Physiotherapy Bachelor's Degree at UFRGS was also developed during the resumption of large-scale public investments in federal universities in Brazil. It drew inspiration from the discussions in the professional policy forums promoted by Brazilian Association of Physiotherapy Education, the leading educational association in the area. The project was designed based on the 2002 National Curricular Guidelines and the doctrinal principles of the Sistema Único de Saúde. It was approved in 2008 and implemented the following year, as well as a curriculum structure that emphasized public policies, education and health promotion, and dialogue with the area of Collective Health. The idea was to strengthen the work of physiotherapists in public health services.

The physiotherapy programme at UFRGS has undergone two changes to its pedagogical project since its establishment in 2009. These changes

included adjustments to the workload, nature, and prerequisites of the subjects offered, alongside other modifications. Compared to faculties linked to private institutions, the pedagogical project developed at UFRGS was considered innovative and unique by most faculty members. However, some professors were not entirely convinced of the effectiveness of the new curriculum due to their preference for traditional teaching methods. Disagreements among faculty grew over time and led to further changes in the curriculum, favouring a more conservative approach.

Ocupa ESEFID: A collective political body beyond the conventional space of university classes

The Ocupa ESEFID movement changed the daily life of the campus as it shifted the traditional focus on major education to the trial of a minor education that materialized in student mobilization against the approval of a Proposed Amendment to the Constitution that would reduce investment in public policies related to healthcare and education. Students engaged in this movement were fully aware that reducing investments in such important areas would later result in their loss of other rights already achieved, such as the quota system for admission to free-of-fee public universities for historically excluded students—a system responsible for the access of many who were participating in Ocupa ESEFID. Therefore, those students had the exact understanding of the economic and social value of educational and healthcare policies that were threatened by lack of public funding (Lagranha, 2023).

In addition to this specific dimension, the students were engaged in an educational proposal that focused on the collective, because, despite all internal resistance, the physiotherapy programme at UFRGS had been created based on the assumptions of Collective Health, which presupposed training more focused on defending the principles of the Sistema Único de Saúde, including universalization of access to healthcare with heavy government investment in its maintenance and expansion. This would be strongly affected if PEC 55 were to be approved.

The context of occupation—and it could not be otherwise—not only mobilized emerging spaces for learning beyond the classroom but also reversed the campus' operating logic, with students taking over institutional decisions during that period. This new configuration of space during the occupation caused other types of knowledge to circulate inside and outside

classrooms, allowing students to establish some form of rhizomatic activism without a single commanding voice and involving all participants in decision-making from the simplest everyday aspects of the occupation to the most complex ones related to the direction to be taken by the movement. At the end of each day, students would sit in a circle to discuss several issues: what had to be purchased for the next day's meals; who would respond to professors' demands for access to their rooms to get materials; an agenda of activities to add knowledge during their time commanding the campus; making banners for the following day's demonstrations in the city centre.

Negotiating with campus management, suspending classes, and obstructing research and community activities resulted in several difficult situations to be managed by the group of students responsible for the occupation. The subversion of ESEFID's control, even for a good cause and during a brief period, generated a strong counter-resistance movement, as it inverted the logic of decision-making hierarchies in that academic unit. The professors were divided between those who supported and collaborated with the movement, even holding activities with students, helping to purchase supplies and calling for respect for the students' struggle at professors' meetings during the occupation, and those who considered the initiative ineffective—or unreasonable—as it affected their work routines in their offices and classrooms. Students' views were also not unanimous. Some were supportive but did not want to get involved; others opposed it categorically and were outraged by the movement led by their colleagues; and, finally, some—certainly a minority—dedicated themselves body and soul to the activities of the occupation in the hope of reversing a harmful situation for the entire Brazilian population.

In this context of political division, an opportunity opened for the latter group of students to move through the space of full-time activism. They became a collective political body, a brave, resistant minority that gained ground, within its limits, as a driving force for change. The emergence of that student activism expanded an understanding, until then little discussed in the physiotherapy programme, that preparing for healthcare work takes more than teaching and learning the therapeutic act. Through their movement, students learned that quality action demands engagement with public spheres where institutional and governmental policy disputes take place (Nicholls & Vieira, 2023). Ocupa ESEFID enabled encounters between students that allowed them to discuss professional choices, career paths in physiotherapy,

and possibilities for expanding the field of activity. Ocupa ESEFID, therefore, ended up constituting a space for change and challenge, facilitating the emergence of bodies that had not felt represented in major education so far.

It is interesting to note that even the professors who defended the assumptions on which the Pedagogical Project for the Physiotherapy Bachelor's Degree was based—not by chance the same ones who supported the students' political struggle during Ocupa ESEFID—had not realized the absence of an extremely relevant debate for education in a profession that deals with bodies in movement: identity issues. Somewhat disappointed, these professors began to realize that the questions raised by the occupation movement had not been incorporated into classroom debates—an indication that the body-as-a-machine perspective (Nicholls & Gibson, 2010) still prevailed in the curriculum.

The trials at minor education produced by some students during the occupation gave visibility to bodies so far invisible within the conventional space of university classes. Given the context of the demands, some students reported that the movement had been very welcoming towards those who wanted to address issues related to the low representation of Black, transgender, gay, and feminist bodies so far virtually invisible to major education. Providing opportunities for debate on these topics, allowing ways of existing so far uncommon in that training space, and especially welcoming reports of experiences from students directly affected by the corresponding prejudices made some of those students feel acknowledged and valued as persons and as professionals in training changed the daily life of the campus (Lagranha, 2023).

On 13 December 2016, contrary to the wishes of students and professors engaged in Ocupa ESEFID as well as many other resistance struggles in Brazilian territory, Proposed Amendment to the Constitution 55/2016 (PEC 55), which conditioned the increase in public spending on variations in inflation, was approved by the Senate on a 53 to 16 second-round vote. After the vote, which enabled the promulgation of Constitutional Amendment 95 on December 15 of the same year, it was no longer possible to sustain the space of resistance and creativity that had occupied the Olympic Campus for almost fifty days. After many changes, uncommon constructions and the establishment of something new in the university's daily life, it was time to negotiate a return to the routine of classes and other academic activities.

A feeling of failure was mixed with relief at the end of the process. Despite all the positive experiences of that period, there was also exhaustion after

so many days spent away from home and sustaining resilience under pressure from professors, fellow students, and the community that opposed the Occupation. However, it is important to highlight the power of a new type of experience at the University, particularly in the 'publish-or-perish' era[14] where knowledge is often reduced to its economic functions and education is treated as a commodity. Along with posting a video on Facebook, on December 22, 2016, the students demonstrated some of this power when they wrote:

This video features some of the best moments from the 47 days of our occupation. Despite facing daily struggles and working tirelessly, there were times when we felt hopeless in the face of the challenges. However, the moments of unity and companionship stood out. In a society that often promotes disunity and lack of self-awareness, we learned to observe, listen, and connect with one another. Our bodies and our most sensitive parts became instruments for fighting and struggling. Today, we are stronger because we are more united! The impact of the occupation remains with us (Resiste ESEFID, 2016).

As a result of negotiations to end Ocupa ESEFID, the students won a place to be used as headquarters for student unions at the physiotherapy and dance programmes, so they could meet and manage their activities within the Olympic Campus. The negotiations also included non-criminalization—whether civil, administrative, or academic—of all UFRGS's students who participated in the occupation movement, a new academic calendar resuming in-person activities immediately after the end of the 2017 entrance exam, and the possibility to cancel enrolments again without any harm to students.

As for the physiotherapy programme, there was greater engagement from students and professors who followed the movement to reinforce the relevance of education and Collective Health as a reference, and the need to promote discussions on sexual orientation, gender identity, racism, and diversity in the classroom, as well as actions to combat violence, harassment, and discrimination that affect students, especially those who enter the university under the quota system. We also witnessed the emergence of coursework topics that were unusual in the physiotherapy programme such as access to physiotherapy services in Brazil, the health of the black population, the health of systematically oppressed people, experiences of transgender people in an academic environment, emotional suffering among physiotherapy students, and health of outsourced workers. In the professional trajectory

of the students who experienced that period, we also saw increased interest in working in public health departments in retirement homes and primary healthcare services.

Conclusions

In the wake of the Ocupa ESEFID movement, an ultraconservative wave against which students had rebelled gained ground in Brazil. There was an escalation of successive movements that led to the expansion and strengthening of a neoliberal necropolitical vision,[15] culminating in the election of President Jair Messias Bolsonaro at the end of 2018. Added to this, we had the emergence of the SARS-CoV-2 pandemic amid an already weakened economy led by a government that deliberately denied science, spread disinformation, and dismantled public policies in all sectors, especially in the areas of education and health. More specifically, the strengthening of a more technical training project centred on individual entrepreneurship of health professionals frustrated expectations of greater inclusion of physiotherapists at different levels and sectors of the Sistema Único de Saúde, as proposed by the 2002 National Curricular Guidelines. In the face of so many adverse developments, we could think that the occupation movement would have been in vain, a collective effort that came to succumb to, or even encourage, a counter-resistance movement that gained even more momentum in the period immediately after Ocupa ESEFID.

Yet in 2023, seven years after the impeachment of President Dilma Rousseff, Luiz Inácio Lula da Silva (PT) surprisingly became President of Brazil for the third time. One of his first measures, approved by Congress still during the transition period, was the end of the Spending Cap established by Constitutional Amendment 95 of 2016. That led to a new framework of fiscal rules with greater flexibility for investments in healthcare and education.

In a more promising macropolitical scenario, the tendency is to think that a physiotherapy training project based on the assumptions of humanization in healthcare, and comprehensive attention to people, aligned with the defence of the principles of the Sistema Único de Saúde, would naturally return to the route of major education and include more space for engaged students and professors to try their paths. However, within the dynamics of contrasts generated by the subversive movement characteristic of minor education, there is no way to establish a direct causal relationship between

micro and macro events, no matter how aligned—or misaligned—one and the other seem to be within a certain political spectrum. There is no possible control over how collectives interconnect in the process of resistance and counter-resistance to a given event. Therefore, there is no way to guarantee the future. As Gallo and Monteiro (2020) point out:

The current political situation in Brazil—and many other parts of the planet—places us before a chaotic world that tends to defeat us and make us depressed in the face of the future, which seems fleeting to us but aimed at strengthening a more multiple and democratic society (Gallo & Monteiro, 2020, p. 188).

When the students decided to start the occupation movement in October 2016, their aim was not to secure their future, but rather to resist the erosion of collective values in the present. Despite simultaneous solidarity events organized by other groups in different parts of the country,[16] they took risks in the form of creative activism, explored the potential of the moment, and produced a unique collective event at the Olympic Campus of UFRGS. However, as powerful as that event was, there is no way to measure the effects of Ocupa ESEFID on the professional training of the students involved. Processes of such nature analysed from the perspective of minor education do not claim to function as a model of resistance for the students' movement nor to leave any type of material legacy, since their power lies, as Gallo (2002) states, in maintaining its minority character and its ability to sustain a movement of resistance to the policies imposed.

While the subversive and creative energy that "occupied" ESEFID in 2016 no longer shines as brightly, we notice that it has not entirely dissipated. Despite the prevailing political scenario, it is crucial to reflect on how open and attentive we still are to the sparks that have the potential to rekindle the flame of change and once again "occupy" the Olympic Campus.

Notes

1 The English translation would be Occupy ESEFID.

2 Student mobilizations that have become emblematic in the 21st century occurred in different parts of the world in schools and universities. Notable instances include the High School Penguin Revolution in Chile in May 2006, the Chilean Winter in August 2011 (Caliban, 2012), the Fees Must Fall

movement in South Africa in October 2015 (Hodes, 2016), and the Primavera Secundarista in Brazil in November 2015 (Groppo et al., 2023; Miller, 2023). Despite variations in the specific demands of secondary and university students in these protests, a common thread among them was the shared discontent and opposition among young citizens to conforming to neoliberal measures. These measures were observed to generate inequalities in access to and financing of quality education in countries historically marked by social disparities.

3 It's crucial to note that the crisis began during President Dilma Rousseff's first term with the 2013 protests, which showed dissatisfaction with the Federal Government from several groups (Moraes et al., 2015; Snider, 2017; Purdy, 2019).

4 Dilma Rousseff's re-election, in addition to the two terms of President Luiz Inácio Lula da Silva in office, kept the Workers' Party (PT) in power for 14 years—a unique event in Brazil's political history.

5 In August 2023, Brazilian Justice acquitted former President Rousseff and ended the case of the alleged 'creative accounting' (https://www.bbc.com/portuguese/articles/cn37z5v89d4o).

6 Gallo (2008) refers to Deleuze and Guattari's notion of rhizome to reflect on the issues of curriculum and educational organization as production of multiplicities in educational processes, opposing the arboreal, Cartesian and hierarchical perspective that sees education with a single axis when organizing knowledge.

7 The Federal Council of Physiotherapy and Occupational Therapy (COFFITO) plays the constitutional role of standardizing and exercising ethical, scientific, and social control over the professions of physiotherapists and occupational therapists. The institutional website is available at <https://www.coffito.gov.br/nsite/?page_id=9>.

8 Since the official recognition of Physiotherapy as a profession in 1969, Brazil has seen a significant increase in undergraduate programmes: from 48 in 1991 to 632 in 2017 (Rocha et al., 2010; Matsumura et al, 2020).

9 The Sistema Único de Saúde, translated as Unified Health System in English, ensures free healthcare at all levels for the entire Brazilian population. It was regulated in 1990, following the promulgation of the 1988 Constitution (Paim et al, 2011).

10 It is worth noting that in 1985, after the end of the military regime, left wing political forces mobilized to ensure rights in the 1988 Constituent Assembly and to regulate the Sistema Único de Saúde in 1990. However, Brazil found itself under neoliberal governments during the Fernando Collor de Mello (1990-1994) and Fernando Henrique Cardoso (1994-2002) administrations. Their policies slowed down the necessary process of change and investment to expand healthcare and education for the population (Sallum Jr., 2003).

11 The Brazilian Association of Physiotherapy Education (ABENFISIO) gathers professors, students, professionals as well as other organizations and people interested in creating policies and guidelines for Physiotherapy training in Brazil (Rocha et al., 2010). The institutional website is available at <https://www.abenfisio.com.br/>

12 Despite the need to expand free-of-fee public universities to promote social justice, the program was highly criticized due to the lack of budgetary compensation, which compromised the quality of the infrastructure and the functions to be performed by the institutions and made teaching precarious (Léda & Mancebo, 2009).

13 The first programme was implemented in the 2008 university admission test when 30% of places in each school were reserved for two types of candidates: public school students and self-declared black students. Schooling was the basis, and from then on there was also the possibility of declaring oneself black, with 15% of places reserved for students who combined both factors. When Federal Law 2711—the so-called Quota Act—was signed into law in 2012, it established that all federal universities should have admission quotas. At UFRGS, the percentage of those places was 50% and there was an increase in criteria to include self-declared mixed-race and indigenous students, totalling eight criteria, with some combined factors. From 2018 on, something new emerged: quotas for people with disabilities, according to the law signed in December 2016 (Law 13409). See it at https://www.ufrgs.br/humanista/2018/10/20/10-anos-cotas-universidade/

14 To learn more about the implication of the publish-or-perish era in Brazil, see 'For a Public Sociology of Sport in the Americas: An Editorial Call on Behalf of a Socially Engaged Scholarship on Sport and Physical Education' (Donnelly et al., 2014).

15 The idea is based on two interconnected concepts, namely necropolitics and necrocapitalism. Necropolitics, introduced by Achille Mbembe in 2003, refers to a type of political violence that is based on State racism and the power to determine who deserves to live and who deserves to die. Necrocapitalism is a term coined by James Tyner (2019) drawing from Mbembe's work, where capitalism determines one's susceptibility to death based on social status and vulnerability. It turns the premature death of vulnerable bodies into a means of generating profits for the wealthy (Jesus, 2020).

16 For more information on other student movements during that period, you can refer to the article #OcupaEscola: Media Activism and the Movement for Public Education in Brazil (Sousa & Canavarro, 2018). This article analyses the presence of these movements on Facebook and YouTube between 2015 and 2016 using a cross-method approach that correlates video-activism narratives with network analysis.

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ABSTRACT:

Multiple studies have found physiotherapists hold weight stigmatizing attitudes, but few explore weight stigmatization in physiotherapy practice or movement toward anti-stigmatizing practices. Doing so involves re-evaluation of worldviews and daily practices which reproduce injustice, involving cognitive and emotional forms of movement. We aimed to (a) explore physiotherapists' understandings about the existence of, and ways to disrupt, weight stigmatization in practice, and (b) evaluate the workshop that aimed to spur movement toward anti-stigmatizing practice. We generated qualitative data before, during, and after a workshop informed by critical theory about weight stigma in clinical practice for physiotherapists and trainees. Critical reflection was the primary pedagogical guide, which we attempted to spur through activities to make the familiar strange, and support dialogical engagement. Evaluation involved exploring cognitive and emotional movements over time. The workshop's pedagogy successfully fostered critical reflection for most, spurring challenging emotions wherein participants grappled with complicity in reproducing weight stigma. Few knew practice-based strategies to disrupt weight stigma. Most moved through difficulties, demonstrating openness to learning. Based on our and other justice-oriented studies, we argue for the use of critical pedagogical strategies to unsettle the ongoing flow of injustice and to support movement toward justice in physiotherapy.

CHAPTER 6

Disrupting the ongoing flow of weight stigma in physiotherapy

THE VALUE OF CRITICAL REFLECTION

PATRICIA THILLE, ZOE A. LEYLAND, AND LIZ HARVEY

Dear physiotherapists

We often move through our days, our patients, our careers, doing things as we have always done them, as we were taught. We flow ever onwards, accepting the status quo, like a river running smoothly over rocks. We often want to ignore the push and pull of the current underneath, hoping for calm waters. But how can one really understand the river if one just appreciates its flow? Interrupting the movement of this metaphorical river, churning it, disturbing that which has long been done, is how we frame this chapter. We argue this is necessary to deal with injustices created by the established flows in our profession.

The need to disrupt stigma in physiotherapy: Weight stigma as examplar

High quality clinical practice requires attention to the human dimensions of health care (Wieringa et al., 2017). Nicholls & Gibson (2010) suggest that "physiotherapists . . . are perfectly placed to take advantage of people's growing need for more person- and-community-centred approaches to rehabilitation" (p. 504) but are limited in doing so due to a restricted

worldview, focused more on bodies than people. We agree, adding that person- and community-centered approaches require therapists disrupt the ongoing flow of societal stigmas that can be reproduced through clinical activities. There are signs that physiotherapists hold weight-stigmatizing beliefs (Awotidebe & Phillips, 2009; Jones & Forhan, 2021; Setchell et al., 2014; Elboim-Gabyzon et al., 2020; Wise et al., 2014; Sack et al., 2009; Setchell et al., 2016; Groven & Heggen, 2016), which we seek to disrupt. In this chapter, we will introduce weight stigma and theoretical assumptions shaping our work to disrupt it, before sharing our approach and findings from our attempt to do so with practising physiotherapists in 2020.

Stigma starts from a societal belief that a particular characteristic or history discredits or taints a person (Link & Phelan, 2001). This is because "the stigma or mark is seen as something in the person rather than a designation or tag those others affix to the person" (Link & Phelan, 2001, p. 366). Link and Phelan (2001) theorise stigma as the result of a co-occurrence of the following: labelling of people into groups based on some form of difference; attaching negative personality stereotypes to certain groups with a shared characteristic; constructing the group as Other, as separate from "us," and as a threat to society; generating widespread status loss and discrimination. For this to occur, powerful institutions (e.g., media, health care, education, justice system) reproduce the stigmatizing stereotypes and Othering through policies, architecture, media representations, and more (Link & Phelan, 2001). What is stigmatised in a given society reflects cultural norms and values (Phelan et al., 2008). Thus, we should understand stigmatization as a social process that plays out in everyday activities, including in institutions like health care (Meisenbach, 2010).

In Western societies, bodily fatness and thinness are interpreted as reflecting personality characteristics of willpower, motivation, and knowledge (Lupton, 2018). Pro-thin and anti-fat stereotypes are reinforced in media, in education, and in health care (Puhl & Heuer, 2009; Lupton, 2018). These stereotypes are based on long-standing but scientifically falsified ideas about body weight and composition that overemphasise the impact of "lifestyle" factors (Brown et al., 2016), focus on diet and physical activity to the exclusion of other determinants of both weight and health (Thille et al., 2017; Medvedyuk et al., 2018), and imply that all bodies can be made thin by "healthy lifestyles" and "taking personal responsibility" (Mayes, 2016). This

collection of persistent cultural beliefs underpin fat stigma and create harms (Mayes, 2016), which are increasingly recognised as a problem (Tomiyama et al., 2018). For example, a Public Health Agency of Canada (2019) report highlights how stigma changes life trajectories and is a fundamental cause of population health inequities. Health professionals are often called upon to provide care to prevent or reduce bodily fatness, and in doing so they may stigmatise patients and reproduce inaccurate beliefs about weight, resulting in a poorer quality of health care (Phelan et al., 2015). To date, the minimal research about weight stigma in physiotherapy establishes that pro-thin/anti-fat biases are common (Awotidebe & Phillips, 2009; Jones & Forhan, 2021; Setchell et al., 2014; Elboim-Gabyzon et al., 2020; Wise et al., 2014; Sack et al., 2009; Setchell et al., 2016; Groven & Heggen, 2016). Our team's (Webber et al., 2022) recent study found mainly neutral to positive fat acceptance attitudes in a 2019 Canadian sample of physiotherapists. Regardless, measures of attitudes do not directly predict skill or knowledge about how to interrupt stigmatizing language, interactions, and structural manifestations of anti-fatness and pro-thinness in the "real world"—in this case, in the practice of physiotherapy.

Currently, there is little published that explores how weight stigma occurs in physiotherapy practice, and only two studies attempting to disrupt it. One pilot had promising but minimally described outcomes (Setchell et al., 2017); the second was a workshop intervention study that did not work well (Jones & Forhan, 2021) and thus offers little guidance to design interventions to disrupt weight stigma in physiotherapy. The first of two reviews of "weight bias reduction" interventions—a frame which considers only psychological outcomes—found limited evidence of effect on health care professionals' biases across the range of studies (Alberga et al, 2016). The second, more recent review found weight-neutral and human-rights affirming strategies were most promising (Talumaa et al, 2022). Note the emphasis of these reviews on the intrapersonal—meaning, working at the individual level on beliefs or attitudes. In clinical practice, however, the interpersonal and structural enactments of stigma also worsen outcomes (Phelan et al, 2015). Interpersonal enactments involve two or more people, such as in a clinical appointment, while structural enactments of stigma occur through institutions and in some way target stigmatized groups (Cook et al, 2014).

To improve care, we need to develop better methods to support clinicians to detect and disrupt weight stigma. This requires exploring how anti-fatness and pro-thinness are embedded in everyday clinical activities and clinical environments. To return to the river metaphor, these everyday activities are the flow, the status quo, that moves ever forward. While manifestations of weight stigma overlap among health professions, future strategies to unsettle anti-fatness/pro-thinness can also address profession-specific forms of thinking and acting that are barriers.

We designed a qualitative follow-up study to our earlier quantitative one (Webber et al., 2022), aiming to explore physiotherapists' understandings about the existence of, and ways to disrupt, weight-stigmatizing actions in professional practice. We wished to see how and if physiotherapists were prepared to interrupt the metaphorical flow. We sought to learn what might make disrupting weight stigma challenging in physiotherapy practice. In parallel, we evaluated how well our chosen presentation method facilitated reflective or defensive responses from physiotherapists and physiotherapy trainees, as both are possible in social justice-oriented education (Boler & Zembylas, 2003). We did this via data collection before, during, and after virtual workshops for physiotherapists and trainees. The workshop aimed to foster critical reflection to help the participants explore weight stigma and physiotherapy practice. Critical reflection involves confronting power dynamics and critically questioning taken-for-granted "truths" and attitudes (Kinsella et al., 2012) "that may distort and dehumanise relationships and interaction in medical care" (Kumagai & Wear, 2014, p. 974).

Break the rhythm that excludes thinking[1]

Physiotherapy often proposes that clinical knowledge is objective and neutral. Thinking with Haraway (1988) among others, we understand neutrality and objectivity as impossibilities. Haraway argues there is no "view from nowhere" or god-like knowledge held by humans which the terms objectivity or neutrality imply. There is no escaping or transcending our cultures. Instead, we should understand all knowledge as *situated knowledge* (Haraway, 1988), reflecting the cultural communities in which it is constructed. For example, evidence-based practice, based on statistical ways of knowing, carries with it a whole host of culturally based assumptions about what constitutes a good outcome. But the idea of a "good outcome" must be decided

by someone, by some chosen criteria; there is no neutrality here. In practice, treatments can create both goods and bads, in terms of new demands or difficulties (Mol, 2008).

One aspect of the *situated knowledge* of physiotherapy is that it "privilege[s] a mechanistic view of the body at the expense of 'other' views" (Nicholls & Gibson, 2010, p. 503). This, Nicholls and Gibson (2010) argue, limits physiotherapists' ability to account for other facets of embodiment, which would instead orient clinicians toward the whole person rather than a reductionist and singular view of the body. We extend their argument to include stigma. Consistent with other normalizing and disciplinary practices in rehabilitation (Gibson, 2016; Praestegaard et al, 2015), physiotherapists have been trained in biomedical framings of body size which "prescribe the 'proper' weight and size of bodies and define certain bodies—including fat bodies—as pathological and others as normal" (Lupton, 2018, p. 21). Interrupting the normalizing ongoing flow and drawing attention to injustices that create different embodied experiences might both help disrupt weight stigma.

Learning about social injustices can elicit a range of emotions, including frustration and defensiveness, and create resistance (Boler & Zembylas, 2003). Discomfort is to be expected through activities where "educators and students . . . engage in critical thinking and explore the multitude of habits, relations of power, knowledge, and ethics" (Boler & Zembylas, 2003, p. 106). This discomfort churns the metaphorical waters, causing turmoil in the flow of the status quo that is pro-thinness and anti-fatness. Given our interest, we turned to the concept of *critical reflection* to inform workshop pedagogy (Kinsella et al, 2012; Kumagia & Wear, 2014; Ng et al, 2019). Critical reflection educational activities can help learners connect new ideas to their prior experience and knowledge, as well as reinterpret past events and beliefs.

We relied on two pedagogical strategies to foster critical re-examination of everyday practices. The first is to *make the familiar strange*. As Kumagai and Wear write, "By forcing us to reconsider familiar ideas, situations, and relationships in new and different ways, this process of alienation and estrangement frees thought and reflection to pursue entirely new avenues of questioning and discovery" (Kumagai & Wear, 2014, p. 976). This creates a distance that can reduce defensiveness. The second strategy we mobilised is *dialogical engagement*. Theorist Mikhail Bakhtin (1984) describes "the dialogical as that which resists closure or finalization—that is, not monological"

(Thille et al., 2018, p. 870). Like Haraway's refusal of the "god trick," dialogical forms of engagement disrupt voices that claim authoritative knowledge. Instead, when engaging dialogically, a person recognises the limits of their perception and knowledge, fostering uncertainty and humility. When a person does not believe they know the truth in any complete sense, they can resist the idea that their perspective is right or complete:

A dialogue taps into each individual's affective, experiential, and identity reserves in an exploration of the thoughts, feelings, and lived experiences of the participants. The intention of this dialogue is the very act of exploration itself, as well as the discovery of new ways of seeing and understanding oneself, others, and the world (Kumagai & Naidu, 2015, p. 284).

How we sought to learn about physiotherapists' understandings of weight stigma

We aimed to (a) explore physiotherapists' understandings about the existence of, and ways to disrupt, weight stigmatization in practice, and (b) evaluate the workshop design that aimed to spur movement toward anti-oppressive practice. We generated qualitative data before, during, and after a virtual workshop about weight stigma in clinical practice for physiotherapists and physiotherapy trainees. Critical reflection was the primary pedagogical guide, which we sought to foster using activities to "make the familiar strange," and support "dialogical engagement." Analytically, we explored cognitive and emotional movements over time.

Virtual workshop

After very brief introductions, we shared a nine-minute video titled "The Gallery." We created the video in 2020 with a public advisory board critical of weight stigma in health care and familiar with physiotherapy as patients. "The Gallery" was the result of eight hours the group spent together. The video layers auditory stories and comments over purposefully chosen images to share the group's key messages about weight stigma, with the aim of "enhanc[ing] understanding through the communication of subjective realities or personal truths that can occur only through works of art" (Barone, 2008, p. 2). Arts-informed approaches are not geared towards finding an objective truth. Instead, they "promote profound reconsideration of the commonsensical, the orthodox, the clichéd, and the stereotypical" (Barone,

2008, p. 3)—or what we in this study have called the metaphorical flow. Starting with this video introduced former patients' points of views without the usual power dynamics of clinician-patient. We anticipated the video would help make the familiar strange for those unfamiliar with such perspectives and initiate dialogical engagement in the workshop by introducing voices counter to physiotherapists' perspectives.

Following the video, participants reflected silently about their emotions and thoughts. To help physiotherapists name their emotions, we shared the Feelings Wheel, an adaptation of Wilcox's (1982) earlier version (Calm, n.d.). This image organises emotions around a circle, clustering together different emotions around one of seven core emotions (happy, surprised, sad, angry, disgusted, bad, or fearful). We expected "The Gallery" would unsettle participants and hoped this early moment of pause would help them engage. If they wished, participants shared their responses anonymously via an online whiteboard that did not show answers to other workshop attendees.

We then shared two brief presentations. The first shared a conceptual introduction to stigma and weight stigma. The second shared results from our recent study of fat acceptance attitudes held by local physiotherapists and trainees (Webber et al., 2022). The brief presentations were purposefully didactic, introducing content before opening discussion, allowing people to react to content without being visible to others. We did so in hopes to reduce defensiveness, as well as to focus a brief discussion facilitated by the workshop lead, inviting questions and comments of what they found meaningful, confusing, or challenging.

The final segment shared strategies to disrupt anti-fatness and pro-thinness in clinical practice, focusing on the interpersonal and structural levels. Assessment, advising, goal setting, and treatment were each addressed in turn, as well as physical and visual environment changes for the setting, and strategies to identify and address self-stigmatization by patients. We closed the workshop with another reflection round, including the Feelings Wheel prompt and a series of questions that invited feedback on the workshop and asked what participants were committing to change in their own practice.

The physiotherapists who joined workshops

Recruitment occurred via multiple channels in November 2020, including emails circulated by the professional licensure body to all licensed student and practicing physiotherapists within the province and a listserv reaching all registered master of physiotherapy (MPT) students at the University of

Manitoba. A provincial physiotherapy advocacy organization shared the invitation via their newsletter and social media. Patricia and Liz shared the invitation via social media.

Nineteen participants attended the virtual workshop at one of four different sessions. Twelve completed the additional pre- and post-workshop reflection process (KWL). One physiotherapy student attended; the rest were practicing physiotherapists working in health care and education sectors. All but one were women. We did not collect cultural background or other demographics from participants.

Ethics/consent

The University of Manitoba's Health Research Ethics Board approved the study. Recruitment materials explicitly noted the research aspect of the workshop, including audio-recording of discussions and anonymous digital whiteboard comments. We gave a twenty-five dollar honorarium to those who completed additional pre- and post-workshop reflections.

The data we created via the virtual workshops

We used multiple methods to generate data to create a longitudinal dataset and enhance privacy: (1) pre- and post-workshop reflections, structured in the Know/Want to Know/Learned format (Ogle, 1986); (2) anonymous reflections and feedback, collected via a digital whiteboard (Mural™) during and immediately after the workshop; and (3) short discussions within the workshops.

First, the Know/Want to Know/Learned (KWL) reflection asked physiotherapists and trainees to participate in an optional written reflection activity. KWLs ask learners to share what they *already know* (K) and what they *want to know* (W) about the topic prior to an educational event, initiating reflection (Ogle, 1986). These were written as part of registration. Upon completion of the workshop, we emailed questions inviting attendees to share what they *learned* (L) through the workshop, which were then added to their earlier KW answers. Second, twice during the workshop, we invited anonymous reflections and feedback via a digital whiteboard, described above. Finally, we timed the group discussion to follow most, but not all, of the workshop content. Structured as a learning activity, the workshop attendees had approximately fifteen minutes to discuss the content of the workshop to that point. We audio-recorded, then transcribed the discussions.

How we analyzed the data generated

If successful, our workshop data would show signs of critical reflection in the form of recognizing new uncertainties and imagined possibilities for practice, as well as showing points that create resistance, tension, or defensiveness. Both have the potential to highlight profession-specific possibilities and concerns that could be addressed in future anti–weight stigma education. During analysis, Patricia and Zoe utilized multiple and iterative methods to enhance our interpretation, including immersive data readings, iterations of coding, summarizing KWL content by participant, analytic writing, and analytic conversations. We considered each KWL as showing the trajectory of different participants, which allowed comparison both within and across participants. Coding iterations included:

1. Organizing the data chronologically (pre-workshop; early workshop; late workshop; after the workshop).
2. Generative coding, which helps researchers open up ideas by interacting with the data iteratively, exploring potential lines of abstraction and conceptualization via coding and writing analytic memos in parallel (Eakin & Gladstone, 2020).
3. Some theoretically informed codes, particularly to identify defensive or other monological engagements in the workshop, characterised by Boler & Zembylas (2003) as alternative arguments to defend status quo.

As we worked with the data, we considered common patterns, outliers, and data that was personally striking, treating each as starting points for interpretation and reflexivity (Eakin & Gladstone, 2020).

Who we are

Qualitative research recognises that the researchers shape the results, and so, reflexivity is valued (Tracy, 2010). Patricia is a physiotherapist with a PhD in sociology. She is a straight-sized, white Canadian settler woman. Her interest in weight stigma in health care spans over two decades, first sparked when working as a physiotherapist and learning about feminist approaches to health and the body. Zoe is a health professions education scholar who is a white, cis-gender woman and settler of Canada. She takes an embodied approach to weight stigma given her own size and the health care inequities

she has endured. Liz is a physiotherapist, physiotherapy educator, and PhD candidate. She is a white, cis-gender woman who lives in a bigger body. Both Patricia and Liz approach their work with the goal of critical allyship (Nixon, 2019).

Patricia was the lead investigator on the project. Liz designed and led the public advisory group and co-developed the workshop and data collection design, with Patricia's support. Zoe joined the project after data collection, analysing the data generated with Patricia, which Liz reviewed.

How to provide good care that recognizes and disrupts weight stigma?

How to provide good care that recognises and disrupts weight stigma? This was the focus of the workshop, but also an animating question of participants throughout. Most entered the workshop recognizing that weight stigma is a problem to be addressed. Opening it up for deeper exploration also created new problems for them to navigate. Throughout the ninety-minute workshop, we found participants grappled with this question and these problems from two perspectives: how it applies to their practice, and to their own personal experiences, including with family and friends.

We start our findings where they did: sharing the problems participants recognised prior to the workshop. We then show the evolution of their understandings during and after the workshop, before highlighting particular topics that arose that may have relevance for the field of physiotherapy as it works to disrupt weight stigma in practice.

Quotes from participants are italicized. We mark direct quotes by the source of data they came from. K, W, or L refer to the pre- and post-workshop reflections, with participant number included. Mid-workshop discussion (D) and anonymous comments on the Mural™ digital whiteboard (M) are followed by a number, representing the workshop they attended.

Pre-workshop: Wanting to learn how to help

Most participants shared general but limited information when asked, "What do you already know about weight stigma?" Many mentioned having no formal knowledge and/or stated merely that they recognise weight stigma exists within physiotherapy. For example:

> *Anecdotally I can speculate that it could include bias assessment of an individuals' health and overall activity engagement as based on a visual inspection of their body and weight status.* (P20–K)

A few participants wrote a more sophisticated understanding that stigma is driven by stereotypes, where personality characteristics are ascribed to people based on their body type. For example:

> *Stereotypes about someone's health and/or character based only on their weight (example: lazy, uninformed) that may or may not lead to discriminatory behaviour against the overweight person (may make us treat them unfairly).* (P23-K)

> *Weight stigma to me, means that there is a perception around what a person should weigh and what they should look like and if they do not fall within that domain that society classifies as "normal" or "ideal" then individuals will tend to scrutinize them and there is also a belief system attached to the stigma such as they are lazy and unmotivated, etc.* (P16–K)

Fewer still were comments showing that a participant understood how anti-fat bias could result in stigmatizing physiotherapy care:

> *There are physiotherapists that have the perception that certain conditions occur because a person is overweight and will discuss that as the "cause" to the patient meanwhile leaving out other viable reasons as to why the condition or injury occurred. An example that I hear often is osteoarthritis in the knees, a lot of physiotherapists will attribute it to the patient being overweight and recommending they try to lose weight, which I feel like there's a lot of other ways around making them feel better and actually getting better rather than bluntly telling a patient they need to lose weight.* (P16–K)

Two participants also suggested physiotherapists themselves are subject to thinness and/or fitness-related expectations, sharing different ideas about why that might matter. One suggested that pro-thin biases are embedded in expectations about physiotherapists:

> *There is a societal expectation that physiotherapists should be of a smaller, more fit body type. 'Practice what you preach' related to physical health and fitness. That by being physically active, you should naturally have less fat.* (P22–K)

The other suggested that the fitness orientation of the profession may result in stronger biases:

> *Physiotherapists are often associated with being active and fit and so may be more likely to have developed negative stereotypes against people who are overweight. Weight stigma is not included as a strong component of physiotherapy education.* (P23-K)

What physiotherapists wanted to know varied from vague to specific, similarly displaying a range of depth of understandings of weight stigma in practice. In their responses, many shared their concern about how to care well for patients. For example:

> *I'm very uncomfortable talking about weight to patients because I truly don't think the weight of a person matters, there's more to health than that, but is that the wrong perspective to have and am I potentially creating a disservice to my patients by not talking about it? If we need to talk about weight, what is the best way to do that?* (P16-W)

> *I would like to learn the extent of weight bias in physiotherapy. I would like to learn strategies to recognize and overcome weight bias for care provision.* (P19–W)

Some responses seemed to highlight a lack of understanding of weight stigma as a societal problem. For example, one participant wanted to know:

> *In a world where obesity rates are rising, are we doing a disservice to patients by not talking about weight as a way to combat the weight stigma? How should we approach this?* (P22–W)

This question implies the solution to weight stigma may be reduced body weight, a strategy that does not disrupt fat stigma at structural or interpersonal levels and implies weight reduction is desirable and possible.

In these pre-workshop questions, two participants spoke to the issue from a more personal perspective, of people experiencing weight stigma. One clearly highlighted how physiotherapists themselves are not a homogenous group, sharing information about her own experience with an eating disorder, and body fat gain during recovery.

Engaging in the workshop: Creating new problems and uncertainties

Confronting patients' experiences in a new way

Entering the workshop, the physiotherapists and students recognised the limits of their knowledge, including how weight stigma might influence care. Then, the workshop itself posed problems for practice that participants had to work through. The Gallery confronted participants with the voices of past physiotherapy clients speaking directly about problems they have faced in clinical care, and the need for change. The private reflections shared anonymously after the video highlighted the emotional aspect to social justice learning predicted by Boler and Zembylas (2003). The most common emotions named were sad (n=5), followed by frustration/frustrated (n=4). Two or three participants added disappointed, embarrassed, guilty, nervous, and vulnerable. These emotions are mostly located in the "sad" and "angry" quadrants of the Feelings Wheel image (Calm, n.d.).

Reflecting on prior fault

In the more open-ended question posed for private reflection after "The Gallery," many shared variations of "Have I done this?" For example:

> *It made me wonder if I have been guilty of treating people differently based on their size.* (M2)

> *After watching the gallery, I am thinking how I as a practicing physiotherapist enter in discussion with patients and how they perceive that discussion. I query about if the patients feel like they are free to express their thoughts, concerns, and fears as these too could all be barriers to their healthcare journey.* (M1)

> *I hope I have never unintentionally made anyone feel the way they explained they feel.* (M4)

The question of prior fault repeated later in the workshop, when participants had a chance to discuss and ask questions in relation to the content presented to that point.

> *I struggle a lot with, like I know I want to help, and I know I don't want to make any inappropriate comments inadvertently 'cause sometimes you know how you say things but then you come across not the way you want them to come across? Um so I guess that was one of my fears, like what if I'm trying to help the situation, but I might actually be hindering the situation?* (D3)

Over the course of the workshop, our data suggests many were actively grappling with their culpability in the reproduction of anti-fatness, and the impact on those they were to help. The exception was a participant who acknowledged having stigmatised prior patients on the basis of weight but took issue with "being judged" by patients:

> *I was a little frustrated and perplexed by the initial video . . . I almost felt frus—, well frustrated and angry 'cause I thought . . . they're judging me as a health professional, whereas my job is to try and make them the best that they could be . . . .., I mean I know I've, I've stigmatised people, but in my professional life I've en— y'know always endeavoured to help people, whatever. But if they aren't willing to help themselves, whether they're fat or thin or whatever the case may be, you can't help them, which gets into the, y'know, health behaviour change type of component. So I think I better shut up there (laugh).* (D4)

Based on this comment, "The Gallery" did not spark a dialogical form of questioning and uncertainty about past action. Instead, this participant dismissed her own stigmatizing actions and deflected attention from the potential impact on others. Instead, she portrayed those who do not take her help, offered on her terms, as those who "aren't willing to help themselves." We interpret this as a defensive action.

Grappling with how best to care: Discomfort and uncertainty

Throughout the workshop, most participants expressed uncertainty about how to address and disrupt weight stigma in practice. They made sense

of these issues in differing ways, and with varying levels of openness or defensiveness.

Many participants continued to explore how best to care for people in the face of weight stigma. Prior to the final presentation that shared possible actions, some predicted strategies that would help lessen stigma, including ensuring equipment used is suitable for a range of body sizes and weight, improving seating options to fit different bodies, ensuring careful and purposeful selection of images, and utilizing better communication approaches.

Two, however, responded more defensively, including the participant who made the earlier comment that she had "always endeavoured to help people." She framed her concern as a challenge to the content, in opposition to the possibility of disrupting weight stigma:

> *I'm gonna just counter and just challenge you with one little thing is that . . . we also have to look at the health care workers health and safety too. And I have seen many therapists um probably in the last five or ten years where you have to look for your own safety while you're trying to get someone moving and y'know where you're looking at three or four therapists trying to help a patient and you know you have to be cognizant of your own health and safety as an employee as well as trying to mobilise someone and those are those are the tougher conversations I think and the tougher things to kind of work around because y'know how do you do that? How do you set a patient up to safely move? How do you do and say okay we've got four people here to try and get you up and I mean, we're doing that to try to be safe for you but also to be safe for ourselves because we don't want to put ourselves in a situation where we're going to hurt ourselves.* (D4)

Her comment implies that occupational safety is somehow counter to disrupting weight stigma. However, this points out a concern that future anti-stigma education could address—physical safety with transfers and similar activities.

The other participant shared a story of an Indigenous woman with a larger body who expressed anger after the participant approached the woman in a public place to share program information. Instead of reflecting on or

questioning what she had done, she spoke in a way that deflected blame onto the other woman:

> *I'm white and I'm thin so I guess I had two strikes against me. I sat down at the table with her and just started chatting with her, I just told her what our program was and you know, would she be interested in coming and joining us for you know to try some exercises or something. And she got so mad at me, she just started yelling at me and she said "what would you know about or something what would you know about being fat or something" she said and "how dare you suggest that I need to exercise? People that are thin like you know nothing of what it's like." . . . I'd never been attacked like that before, um for being thin . . . I wanted to say something helpful but I was really afraid that at that point, whatever I said was not going to be interpreted as helpful.* (D3)

Post-workshop: Evolving understandings of weight stigma

Immediately after the workshop, participants shared anonymous reflections and feedback. This included another question about emotions. The most common emotions, each stated by two or three participants, were optimistic, surprised, and interested. These emotions are mostly located within the "happy" quadrant of the Feelings Wheel, a shift from earlier responses.

While such positive emotions might imply an over-confidence or a form of premature closure for the participants, the responses to the other post-workshop questions showed a growing sophistication of their understanding of weight stigma, with uncertainty still an undercurrent. We interpret this as success, given one important facet of critical reflection is increasing tolerance for uncertainty and fostering humility. Looking to future practice, many participants' reflections after the workshop highlighted an openness to try new things, and more confidence in terms of what to try. Their responses continued to build on the animating question of the workshop: how to care well for people in the face of weight stigma?

> *Curious in exploring the different strategies explained and not being scared or awkward if a patient brings up the "weight talk" with me . . . it has always been a conversation I avoid and don't*

> *feel comfortable in having because I truly don't think weight equals health but explaining how losing weight is not a behaviour and how self-kindness is important reinforced that I'm potentially already on the right track on trying to reduce weight stigma.* (M4)

Others highlighted more conceptual knowledge gained, and a better appreciation for patients' perspectives:

> *I learned about the labels and stereotypes that create the cycle of stigma. I learned about the Health at Every Size™ model and its principles of weight inclusivity, respectful care, and life-enhancing movement (among others). While I am still unclear about the exact nature of the link between elevated body weight and certain health issues, I am more open to the idea that people can be healthy at a wide range of body sizes. I was reminded that in many ways we are not in control of our body weight and that higher body weight is not a reflection of poor health choices or lack of motivation, effort, or health resources.* (P15–L)

> *Weight stigma can have a negative effect on our patients right through their treatment course. It can start from them not even making an appointment because of the fear/anxiety of having these biases affect their care.* (P22–L)

And some displayed a new ability to perceive situations as stigmatizing:

> *The presentation at the beginning with the voice overs made me realise how something as simple as not having a chair big enough for someone to sit in could lead to negative feelings and which could result in an overall negative interaction with physiotherapy and the healthcare system. I know in one of my clinical placements I debated using the parallel bars with a patient, but my CI and I weren't sure if she would fit as they weren't adjustable width wise so to spare her any humiliation or negative feelings, we decided not to use them for her exercises. It made me realise afterwards that this patient was receiving a lower standard of care just because of her size. This presentation reinforced the importance of having appropriate equipment for all shapes and sizes.* (P8–L)

Several engaged with the topic through their personal, non-clinical experiences, or that of their family and friends. Some spoke of their children's experiences as teens and young adults, or their own. The clinical and the personal could entwine, one informing the other:

> *Although I would think that I accept all body sizes, I don't accept mine, so does that make me "authentic" in dealing with patients? I have been working in a 'medical model' and so what I think is maybe that weight is not the risk factor for heart attack, but maybe it is the health behaviour. It makes me question previous studies and wonder if they teased this apart or simply based their conclusions on BMI. What if we teased apart "health behaviour" and "weight" as weight is based on so many aspects, medication, genetics, exercise, how you build muscle (some stay lean whereas others seem to bulk). Is weight due to muscle, or fat? Is weight due to unhealthy eating or not? Do they have any health risks or conditions due to their weight? Is the weight due to factors they can or cannot control? Are any of these correlated? . . . I learned how complex the idea of "weight" is.* (P13-L)

To further exemplify this growth, we looked at each participants' KWL individually. Across the set, we saw longer and much more robust responses in the post-workshop reflections than prior. For example, consider the trajectory of one participant, who had shared only a brief, basic understanding before the workshop about the existence of weight stigma:

> *Nothing concrete. I would assume physiotherapists are not as far removed from the norm in regard to having weight stigma towards others as we would like to think. I would also guess that physiotherapists experience it more than some as we are supposed to be the exercise professions.* (P17–K)

Pre-workshop, they asked,

> *Is it an actual "risk" to not receiving optimal care?* (P17-W)

After the workshop, they shared that some previously held ideas have been disrupted, made strange:

> *I have not thought of "go lose weight" as essentially being as helpful an instruction as "go lower your blood pressure"* (P17–L). [As well, I] *had never thought about the concept of weight stigma being something internal that patients can have towards themselves. I've seen the behaviour of that in real life, so it is helpful to able to recognise it as weight stigma so it can be approached through that knowledge and lens when talking. Bring treatment back to behaviours and remind people that weight is multifactorial.* (P17–L)

This example, like many others, displayed a newer appreciation of the issue as it presents in physiotherapy practice.

What makes disrupting weight stigma hard in physiotherapy: Participants' ideas

In the post-workshop questions, participants shared their ideas about what might make addressing weight stigma difficult within physiotherapy practice. Most common was that disrupting the simplistic "weight = health" belief could be difficult; they thought it is a core belief held by many physiotherapists. Some described how the "weight = health" belief is currently embedded in clinical practice recommendations, that guide physiotherapists to tell people to make their bodies "lose weight," or how uncommon it would be to interpret a person as "healthy" if their body had visible body fat. Next most common: the participants thought that physiotherapists may struggle to shift from weight/outcomes focus to a lifestyle/behaviour change support focus in care.

> Otherwise, there was less consistency. Some comments highlighted a lack of knowledge about health coaching/self-management support strategies, getting enough physiotherapists to be willing to "*face your bias and prejudice*" (P7-L) or "*unlearn what we feel that we know as truth*" (P19-L). Another mentioned the magnitude that disrupting anti-fatness and pro-thinness would involve: "*there is no simple change of one item. Instead, it is a shift of physical environment (equipment, space, uniforms), a shift to technologies, a shift of mindset, a shift of intellectual mindset and practice application*" (P22–L). However

difficult, participants affirmed the importance of the topic to physiotherapy, some emphasizing the need for integration into curriculum.

The cognitive and emotional work of disrupting stigma

We sought to explore physiotherapists' existing understandings of weight stigma and what might make disrupting weight stigma challenging in clinical practice. Given the topic, physiotherapists who attended may be those with more pre-existing awareness of weight stigma or be early adopters on social justice topics. Overall, we found that participants started from varying understandings of weight stigma, but few knew strategies to disrupt weight stigma in practice. In our river metaphor, few knew how exactly to unsettle the waters and interrupt the flow of the status quo. This is notable; our earlier study (Webber et al., 2022) found that, on average, physiotherapists in this same province displayed mainly neutral to positive fat acceptance attitudes. Yet attitudes do not predict action—or, as we found, even an understanding of what actions will help.

After the workshop, participants noted two ideas that they anticipated would make disrupting anti-fatness and pro-thinness difficult. The first, a simple "weight = health" formulation, is a core assumption that underpins weight stigma in our society that treats health as a moral good (Lupton, 2018; Mayes, 2016). In the workshop, we challenged this assumption, pointing to the many problematic assumptions and clinical actions that can follow if bodily thinness is automatically assumed to mark good health, and bodily fatness the reverse. This simplistic formulation ignores that thinness and weight reduction can be signs of eating disorders, depression, or cancer, among other problems. It also reduces health to a single physical measure, and a flawed one: BMI categories are poor proxies for cardiometabolic health (Phillips, 2013; Wang et al., 2015).

The formulation of "Thinness = health" underpinned an unsuccessful, brief educational study with physiotherapists on this topic (Forhan & Jones, 2021). While stating they were attempting to answer a call by Groven and Heggen (2018) and Setchell et al., (2017) to better understand "the interactional, psychological, sociocultural and political aspects of stigma" (Jones & Forhan, 2021, p2), Jones and Forhan focused their workshop on "obesity,"

a medical frame for body size which the authors described to participants as a risk factor for poor health. In Western cultures, where healthiness takes on moral overtones (Lupton, 2018; Mayes, 2016), education that aims to disrupt stigma is likely to fail if it reinforces one of the underpinning drivers of the particular stigma. This is an identified problem with pairing a biomedical obesity frame with weight stigma reduction (Brady & Beausoleil, 2017; Thille, 2018; Bombak et al., 2022; Talumaa et al, 2022).

A second issue physiotherapists identified after the workshop was the switch from focusing on health outcomes to health behaviours. Given physical activity promotion is a core physiotherapy activity, we assumed that physiotherapists had pre-existing knowledge of the clinical skills associated with support of patient behaviour change and self-management. Supporting self-management involves focusing on feasible actions the person values and coaching skill development in goal setting and problem solving (Lorig & Holman, 2003). Our assumption was misguided; this approach was unfamiliar to many. In retrospect, this was perhaps predictable. Several studies have found physiotherapists lack knowledge and skills with self-management support strategies (Espiritu et al., 2020; Kongsted et al., 2019; Button et al., 2018; Brewer et al., 2021). Perhaps even more concerning, Gardner and colleagues (2018) found physiotherapists did not recognise that they lacked this training or skill. This appears to be a gap that impacts physiotherapists' abilities to enact non-stigmatizing care, as well as a finding with broader implications for quality of care.

In addition to the challenges physiotherapists identified, our project highlights one more: as predicted, learning to disrupt weight stigma is not just cognitive work, but emotional and embodied as well. Physiotherapists were actively grappling with the implications of the workshop, facing the realization that they had, or possibly had, stigmatised former patients. Boler and Zembylas (2003) predict this emotional work in social justice education, which "recognizes and problematizes the deeply embedded emotional dimensions that frame and shape daily habits, routines, and unconscious complicity with hegemony" (Boler & Zembylas, 2003) p. 117). The workshop was successful in navigating the emotional aspects of learning for most participants, allowing for personal acknowledgement of emotions as part of the process.

The workshop also brought up the issue of power differentials. Link and Phelan (2001) argue "the role of power in stigma is frequently overlooked because in many instances power differences are so taken for granted as to seem unproblematic" (p. 375). We understood that unsettling anti-fatness means also disrupting pro-thinness (Nixon, 2019). Power can reflect professional status, but also be expressed through embodied forms, including thinness. By inviting physiotherapists to reflect on these issues and drawing attention to how bodies of physiotherapists and patients can shape interactions, we found this design helped unsettle professional views about what constitutes "good care." For example, participants questioned following guidelines that encourage recommending weight loss as an intervention for different conditions, given the potential for stigmatizing patients (among other problems).

Our study was limited by using a single workshop for participants. While we maximised the data we could create with this design, we anticipate future studies using a longitudinal design and more participatory interventions (e.g. Setchell et al, 2017) will yield additional insights about what, in particular, makes disrupting the anti-fatness and pro-thinness of Western cultures difficult in physiotherapy as well as other professions. Like all qualitative studies, the transferability of our findings is limited to where such cultural influences are similar (Tracy, 2010). Due to our sample being predominantly women, we were unable to consider gender-based variations among participants. And while people seeking physiotherapy services may not share the same Western cultural pro-thinness/anti-fatness references to body size and composition, we limited attention to intercultural differences in beliefs to that of the fat acceptance movement/culture, which is only one of many potentially different possibilities in beliefs about bodies. Strengths of our study include our analytic consideration of variation within the data, which allows us to draw out more of a range of possible responses, and the theoretical and pedagogical orientations of this study. The use of critical reflection via making the familiar strange and dialogical elements allowed physiotherapists to begin to metabolise what this topic means in their professional and personal lives, and the additional theoretical concepts supported a nuanced analysis.

Critical reflection and the creation of emancipatory knowledge

Critical reflection was the tool we used to help physiotherapists to churn the flow of the "river" of status quo, to disrupt the way weight stigmatization manifests in physiotherapy care. Change is the goal of critical reflection – and not just any change: "Critical reflection can . . . produce emancipatory knowledge, as it aims to transform rather than perpetuate perspective and power relations" (Ng et al., 2019, p. 1123). To achieve the vision of person-centered and community-centered care that addresses the human dimensions of illness and injury, the physiotherapy profession needs to disrupt different stigmas that manifest in practice. Our study highlights the value of social theories and critical pedagogies to facilitate critical reflection; by the end of the workshop, the participants were able to identify some gaps in their knowledge and skills, commonly held beliefs in physiotherapy that exacerbate weight stigma, and many possible actions. Our critical reflection-oriented workshop fostered humility in most, while keeping participants focused on the question of how best to provide care.

Future research could explore other critical pedagogical strategies, as well as longitudinal educational or knowledge exchange designs, to deepen our understanding of how to disrupt anti-fatness and pro-thinness in physiotherapy and other clinical practice. In particular, future work can build on other existing critical pedagogies, particularly through engaging in growing field of fat pedagogies (Cameron & Russell, 2016; Cameron & Watkins, 2018).

Notes

1 A quote from fiction written by David Foster Wallace, highlighted by fiction writer Zadie Smith as an aspiration for her writing; see https://millionsmillions.tumblr.com/post/32337897514/litbeat-zadie-smiths-sentences

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ABSTRACT:

Focusing on diversity and belonging through the lens of Habermas's three interests, this chapter makes the case for pluriversality in the physiotherapy profession. We argue that in physiotherapy the Technical and Practical interests are dominant with the Critical interest being largely neglected. This lack of the Critical interest has resulted in a lack of movement and fixed ideas dominated by a Western, eurocentric narrative. We explore various factors that have contributed and continue to contribute to the implicit and fixed patterns of expectation and behaviour within the profession. Historically, the physiotherapy profession has been shaped by the need for professional credibility and respectability. This led to the development of a stereotypical physiotherapy identity which may other those who do not feel aligned with this image. The hidden curriculum, in which tacit knowledge and skills are constructed, is also thought to play an important role. The hidden curriculum perpetuates norms and expectations which can lead to the suppression of personal identity and emotional distress. We also then discuss some practical actions to facilitate evolution of our professional identity to embrace difference, enabling meaningful movement, and ultimately, flourishing.

CHAPTER 7

Belonging and identity in physiotherapy

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Introduction

This chapter focuses on the exploration of movement within physiotherapy toward greater professional diversity. We begin with a historical exploration of the physiotherapy profession, and the role of identity in shaping contemporary physiotherapy practice. We go on to argue that for many people who are entering and progressing within the profession, there is a lack of alignment between their sense of identity and perceptions of how a physiotherapist is supposed to look, behave, and talk. Anticipation of a white, fit, young, slim, cis-gendered, and able-bodied person in a physiotherapy uniform may have the impact of othering people who wish to enter the profession and do not feel they embody this image, as well as those who seek care. We believe that this "model" physiotherapist has historical roots and is conveyed in subtle ways in both the explicit (formal) and implicit (hidden) curricula. Lack of alignment with this stereotypical image may lead to feelings of disconnection from the physiotherapy community, impacting negatively on success in formal education and career progression.

In the text "Knowledge and Human interests," Habermas discusses the development of the modern natural and human sciences. This work identifies three "human interests" (Habermas, 1971) which later inspired Mezirow's transformative learning theory (Mezirow, 1991). He conceptualised human

interests as technical, practical and critical, using these concepts to "represent the essential ways in which human beings perceive realities, what realities human beings choose to emphasize, and why realities exist as they are" (Liu and Yin, 2022, p. 7). In brief, the "Technical interest" prioritises technical information such as generalisable facts (Liu & Yin, 2022) and aligns with the epistemological viewpoint of Positivism (Crotty, 1998). Habermas's "Practical interest" focuses on communication within social groups and understanding construction of meanings and interactions within the social world (Liu & Yin 2022). Contextual understanding is sought, demonstrating alignment with a Constructivist epistemological viewpoint (Crotty, 1998). Finally, the "Critical interest" has an emancipatory emphasis, with critical reflection on rights and responsibilities from the perspective of social justice. There is a focus on self-determination and self-reflection to enable individual freedom and the importance of uncovering unjust situations to support liberation of others (Liu & Yin, 2022). This aligns clearly with critical theory (Crotty, 1998).

Liu and Yin (2022) argue that a profession should explore its identity using all three Human interests, as each has both limitations and contributions. We propose that the Critical interest has been particularly neglected in physiotherapy and that this has implications when considering ideas around professional identity and belonging within the physiotherapy profession. Research and reflection using the Critical interest lens will support analysis of how a disproportionate focus on the Technical interest within physiotherapy, and to some degree on the Practical interest, may support a professional context that perpetuates injustices.

We, therefore, focus on the Critical interest in our analysis of ways in which the hidden and informal curricula can lead to feelings of being othered and how a lack of belonging impacts the ambition of the profession to be more inclusive. The process of conscientisation around identity has led us to imagine a different future where we take action: moving away from implicit and fixed patterns of expectation and behaviour, towards a more inclusive physiotherapy profession where pluriversality is embraced. Considering the emphasis of this book, we use a metaphorical idea of movement and rehabilitation to realise the full potential and currently untapped transgressive movements of the "physiotherapy body."

Development of physiotherapy as a distinct profession and implications for the dominant demographic

The roots of Western physiotherapy lie with the development of massage as a specialism within nursing. Hammond (2013) has provided a valuable analysis of the development of physiotherapy as a profession. Responding to negative comments about the legitimacy of their work, early physical therapists grouped together to describe and delineate their roles. In the UK, four nurses established the Society of Trained Masseuses, which later became the Chartered Society of Physiotherapy in 1920, focusing on "massage, medical Gymnastic, Electrotherapy and Kindred subjects" (CSP, 2024). Drawing on several key sources Hammond (2013) identified the Society's objective to develop a professional identity necessarily aligned with that of the medical profession to achieve status and autonomy (Wicksteed, 1948; Barclay, 1994; Jones and Jenkins, 2006; Wiles and Barnard, 2001). In their article: "Dismantling the master's house: new ways of knowing for equity and social justice in health professions education," Paton et al. (2020) go on to explain that much of the knowledge which underpins health professions education derives from the Enlightenment thinkers of Western Europe, with a focus on dualistic thinking and an objective stance as influencing knowledge creation. Such knowledge has power and the person with access to it is therefore privileged. Many health professions have grown from this canon of thought, claiming a superior position based on their foundation in "science." Specific methods are seen as producing neutral, objective and valid "truths," described by Paton et al. (2020) as "zero point epistemology" (p.1109). This influences education's focus on positivist and rationalist ideologies, which perpetuates injustices—both testimonial, where the words of some are judged to be less worthy, and hermeneutic, where shared understanding cannot be reached due to people having different knowledge bases. Such injustices are manifested within the construction of healthcare practice as rooted in beliefs that only certain forms of knowing and producing knowledge are valid. Paton et al. (2020) argue that this is so embedded within health professions that it is not questioned. This is supported by Ng et al. (2020, p. 9) in their analysis of health professions education, also advocating for greater attention to the Critical interest. They argue that "instrumental and practical knowledge are bound to the existing knowledge structures that created them and, thus, are not capable of imagining a new

(transformative) reality . . . To avoid perpetuating problems for particular people—we also need to seek emancipatory knowledge." Without this, we accept the status quo.

When considering teacher identity, Liu and Yin (2022) suggest that a Technical interest is demonstrated where research focuses on controlling and measuring effectiveness. They argue that this approach often supports survival of a profession as the intention is to demonstrate value and achievement of expectations. When exploring the development of physiotherapy, it is apparent that this Technical interest has dominated (Hammond, 2013). As the medical profession was so rooted in positivism and the (bio)medical model, it is unsurprising therefore that this focus has also been dominant within physiotherapy, and that research into physiotherapy practice has most commonly aimed at developing propositional knowledge, reflecting a Technical interest (Hammond, 2013).

More recently, a growing recognition of the need to promote people's involvement in their own care and in adopting behaviours that promote health and wellness has led to a shift of emphasis away from a (bio)medical model towards a more biopsychosocial perspective (Hammond, 2013; Schiff and Winch, 2018). Awareness of the importance and nature of person-centred care is growing, with recognition of the need to share power within the therapeutic relationship (McCormack et al., 2021). These changes reflect movement from a physiotherapy identity as "Treater" to one of "Empowerer" (Lindquist et al, 2006). There is also increasing use of perspectives drawn from the Critical interest, for example, within growing discussion about enactivist and phenomenological perspectives of health that explore the importance of what matters to the person in distinguishing between flourishing versus suffering (Svenaeus, 2022). This illustrates some overlap between the Practical and Critical interests, which cannot always be fully delineated.

While shifting emphasis towards a more biopsychosocial approach has been recognised within the formal curriculum, some aspects of our historical roots carry forward in less obvious ways. Hammond (2013) argues that physiotherapy remains more reactive than proactive, tending to define itself in relation to its interventions and evidence-based practice rather than its "broader sense of purpose and values" (Hammond, 2013; p. 20). He also makes the connection with the Critical/emancipatory interest (Habermas, 1971), advocating for greater critical reflection relating to our professional

identity. Although the work of the Critical Physiotherapy Network has advanced this discussion (Nicholls et al., 2021; Gibson et al., 2018), there is much work to be done.

There are numerous benefits from greater analysis of who we are as a profession and as professionals. Liu and Yin (2022) explain that the way in which teachers perceive themselves, and the way others perceive them, greatly influences their professional experience and development. They describe it as dynamic and subject to multiple influences over time, such as culture and ideology, while inextricably linked with one's personal biography, or self (Liu and Yin, 2022). Internal identity development is intertwined with "imposed" external identity, for example, from the general public and from regulatory bodies. They argue that while some writers believe professional identity must be viewed as a demonstration of adherence to stated norms, regulation which is important for credibility, can undermine agency and empowerment needed to progress the profession. It is also likely that the evolving needs of society will not be considered within these historical norms. The considerations of professional identity described by Liu and Yin (2022) in relation to teacher identity resonate strongly when reflecting on identity of health professionals, including physiotherapy. Like teachers, physiotherapists contend with the perceptions of others while developing their own sense of identity as professionals. They are encouraged to progress their scope of practice, making use of personal agency, while also being subject to strong regulatory influence in relation to professional roles and responsibilities (Hammond, 2013; Warren and Braithwaite, 2020). Research that develops a profession's identity using predominantly Technical and Practical interests misses the value of enabling critical reflection on one's place in and contribution to society in a more emancipatory way. As authors, the Critical interest freed us to investigate a norm in physiotherapy that we see as aged scar tissue, that protects old patterns, limits new movement, and restricts the potential of physiotherapy and physiotherapists to flourish.

The traditional "model" physiotherapist and their influence on belonging

Recently we have begun to engage in a critical reflection of the influences on our own sense of belonging within physiotherapy (Lane et al, 2022; Jagadamma et al., 2023). For example, we have all experienced situations

where students have conveyed to us that they don't feel they fit in their student cohort, on placement, in the profession—for reasons relating to their body shape, ethnicity, sexuality, gender, and so on. We discussed our perceptions of the model physiotherapist and what they might look like. These discussions raised two questions:

1. If belonging in physiotherapy demands that the individual assimilates into white middle-class culture, is the resistance to increasing diversity and inclusivity therefore insurmountable?
2. How do we move towards an enabling Critical and emancipatory interest in our profession?

Despite commitments to increasing diversity and inclusion in physiotherapy (World Physiotherapy, 2019; CSP, 2021) the profession currently fails to reflect sociocultural diversity around the world (Cobbing, 2021; Matthews, 2021). The stereotype of the physiotherapist as a white, fit, slim, middle-class, cis-gendered, woman (or man) (Yeowell, 2013; Bell, 2023) is supported by the UK Health and Care Professions Council diversity data (HCPC, 2021), which shows UK physiotherapists are more likely to be white, privately educated, and heterosexual than other healthcare professions. International data shows similar trends with an over-representation of white people in physiotherapy and enduring Western influences on physiotherapy education (Cobbing, 2021; Matthews et al., 2021). Paton et al. (2020) argue that the foundations of health professions have historically been based on the work and beliefs of a few white, European men. This historical Eurocentric white hegemony may also explain the perception that physiotherapy is "infused with whiteness."

Despite the greater likelihood of women feeling a sense of belonging in physiotherapy, gendered issues remain. Stenberg et al. (2022) recognised the need for developing research into what it is like to be a physiotherapist at the intersection of multiple disadvantages. Coined by Crenshaw (1989), intersectionality recognises the multiplying burdens created by intersecting systems of oppression, such as gender, class, ethnicity, (dis)ability, sexuality, and age. While white women may feel a sense of belonging within physiotherapy, this is less likely to be the case for women who are not seen as white, or who have other protected characteristics. In their exploration of power and privilege in physiotherapy from an African perspective, Lurch et al., (2023) identify the

lack of representation of marginalised communities within the profession. They maintain that intersectionality of disadvantages within these communities makes it harder to enter and flourish in the profession.

Building a more diverse workforce, however, depends not only on attracting students from more diverse backgrounds into education, it also requires the workforce retains graduates. In the UK, more than half of respondents were planning to leave their job in the next year (Martin et al., 2023). Women and people from Black Caribbean, Black African, and Asian backgrounds were significantly more likely to experience discrimination and more likely to leave. Vazir et al. (2019) explored experiences of racism among twelve qualified physiotherapists in Canada. Physiotherapy was seen as "infused with whiteness" and racism was experienced at institutional and interpersonal levels, and influenced by personal characteristics such as their accent and where they qualified as a physiotherapist. In the US, Naidoo (2020) reported that physiotherapy students from minority ethnic backgrounds scored lower on measures of belonging and connectedness and higher on scores of alienation than their white peers. Self-doubt was a key feature in both studies. As Hale (2004, p.12) notes, "it is one thing to admit students [and] faculty [members] into programs of higher education . . . it is quite another to 'accept' them into a warming climate of inclusivity." Matthews et al. (2021) go on to comment that the physiotherapy profession has become stuck, with a failure to progress in the face of ongoing health and social inequities. Our failure to meaningfully address equality and inclusion may be, in some part, influenced by the fact that the physiotherapy professional identity does not align with traditional images conjured by the term "racist," which has led to a failure to recognise the systemic racism that infects our profession.

Studies into identity of physiotherapists suggest that pre-registration education is a highly formative time in relation to the development of professional identity. Students are socialised into the expected ways of thinking, feeling and behaving (Hammond 2013; Rapazzo Seagrave and Gough, 2022) by educators who are naïve to white ideology and its impacts, as described by Picower (2009) in relation to school educators. Although Hammond found that people then evolved in their sense of professional identity as their careers progressed, this pre-registration socialisation provides a starting point. Interestingly, socialisation into the profession is seen as a journey to acquiring professional identity, although there is some criticism about whether this

identity is fluid enough to enable response to rapid change and uncertainty (Barradell, Peseta & Barrie 2021; Hammond 2013; Lindquist et al. 2006).

Christmas and Cribb (2017) suggest that development of physiotherapy professional identity is complex, not only emerging from professional and regulatory standards, but including a social dimension which allows for alignment with a wider community, and a sense of communal validation. We use education and personal modelling to socialise students into becoming the kind of professional that we feel meets professional expectations. Whilst educational programmes have a responsibility to ensure that graduates have developed the ability to demonstrate professionalism in practice (World Physiotherapy, 2021), there is no clear definition of how physiotherapy professional identity is formed. Rapazzo, Seagrave and Gough (2022) suggest professional identity formation therefore remains heavily influenced by the hidden curriculum.

In the UK, physiotherapists are expected to adhere to standards defined by the regulatory and professional bodies. Professional conduct is described using expected behaviours and attitudes. These include the desire to provide a service for others while maintaining moral and ethical codes of practice, a focus on excellence and on empowering others, and awareness of scope of practice (CSP, 2019). The CSP also defines professional competence in the way knowledge, skills, values, behaviours, and attributes are synthesised for professional practice. Aguilar et al. (2012) highlight that these values are strongly influenced by the surrounding culture and its impacts on society, institutions and policies. This is, therefore, influenced by the majority view. Yet we accept, in a relatively unquestioning way, that students should be socialised to a way of being described by the white, neurotypical, able-bodied, and heterosexual majority.

It is interesting when reading about professional identity that "socialisation" is used to describe a process of supporting students and professionals to conform to a specific set of ways of thinking and being in the world. This is frequently used in a relatively uncritical way as an unacknowledged hegemonic socialisation process that serves medical aims and neoliberal goals. Graham and Moir (2022) argue that the current focus on belonging in a higher education context does little to promote inclusivity and may instead increase the pressure on students to assimilate into the dominant culture. They go on to suggest that the dominant culture in our universities is associated with

neoliberalism and many of the social and health inequalities we are seeking to challenge. Snell et al. (2020) describe the process of socialisation into a professional identity as a merging of one's own culture with that of one's profession, involving internalisation of stated roles, values, and attitudes. Looking at the process of socialisation in this way necessitates greater criticality. The potential for abuse of this process appears immense when reflecting more deeply on the elements of it. Firstly, what are the appropriate values and attitudes? Who has the right to decide which are appropriate? How does this internalisation happen, and what is lost in this process? Volpe et al. (2019) argue that much of the research on professional identity formation in the helping professions fails to consider the influence of gender identity, race, socio-economic status, sexual orientation, and age. It is therefore crucial that we analyse the sources of, and influences on, the delineation of what comprises appropriate knowledge, skills, values, behaviours, and attitudes. We must give much greater thought to the pressure to conform in order to belong within the profession. What could we achieve with a more flexible and diverse workforce? Breaking down the adhesions reflected in hegemonic influences on our professional identity will give greater freedom of movement and expression.

Lack of belonging and acculturation stress

"Belonging" and "othering" are terms that have gained popularity not just within academic discourses, but in policies relating to equality and diversity such as the Chartered Society of Physiotherapy's equality, diversity, and belonging strategy (CSP 2021). While there are different explanations of belonging in difference contexts, we adopt the following definition by Chin (2019), with reference to the work of Ignatieff (1993):

> To belong is to feel natural and unthreatened in a group. It is to understand and be understandable to other members of that group; to be able to recognize and be recognized within. In this sense, belonging is both a status, something held, and a practice, the ability to navigate the symbols, ideas and institutions of a group (Chin, 2019, p.10).

Initially, feelings of belonging are likely to affect the success of students who feel less belonging and whether they enter the profession at all. It may be that, for some students, the degree to which they feel they belong

relates to their experiences of feeling important and respected within the higher education context (Anderman & Freeman, 2004; Volpe et al., 2019). For physiotherapy students, however, the nature of their programme and experiences of practice settings within it means they are exposed to their profession from the start, alongside similar experiences of feeling important and respected in those settings—or not. Students with a greater sense of belonging have been found to have higher engagement, grades, acceptance and, well-being outcomes (Osterman, 2000; Furrer & Skinner, 2003; Pittman & Richmond, 2007; Freeman et al., 2007; Hagerty et al., 1996). Glass and Westmont (2014) found increased academic success and cross-cultural interaction with a greater sense of belonging in international students.

These differences in outcomes and experience are unsurprising when one considers the impacts of such feelings of being an outsider. Slaten et al. (2016) carried out a qualitative study with eleven Asian international students at a large US university. They found numerous themes contributing to the degree of belonging experienced by participants. One related to "acculturation" and "acculturative stress." They defined this as relating to the gradual adoption by the student of norms and values of the host culture. They found acculturative stress where students described "social, academic and emotional hardships connected to their international status and in relation to the host cultural norms" (p. 394). This was also linked with experiences of discrimination, which, along with other factors, contributed to a lack of belonging. While this study focused on international students, it is likely that there will be some degree of acculturation stress for students from marginalized backgrounds, whether they have come from another country to study physiotherapy or not.

As we argued earlier, much of the knowledge that forms the physiotherapy curriculum maintains a predominant Technical human interest with explorations into Practical human interest, but rarely ventures into the Critical human Interest. While this may not be the only factor contributing to othering, the lack of Critical interest in the discourse limits the ability of learners and educators to challenge the unvoiced expectations propagated unintentionally that lead to othering. Therefore, what have we identified in our initial analysis of physiotherapy curriculum that may contribute to this experience? Where are the adhesions that require mobilisation?

Challenging the "model" physiotherapist in the formal and hidden curricula

Some may argue that people will always feel variable amounts of belonging in different circumstances in their lives. This is very likely—people are multifaceted. It does appear, however, that we go to great efforts to tell people they should work to belong within physiotherapy—so much so that we attempt to actively assimilate people into the profession. This suggests a degree of hypocrisy if we then say that it doesn't matter if some people do not feel that they belong. Perceptions of the ideal university student (Koutsouris et al., 2019), which are very much aligned with our previous description of the model physiotherapist, have significant consequences for the non-traditional student and their sense of belonging in higher education. This takes us to the explicit (formal) and implicit (hidden) curriculum.

Concepts of curriculum are complex and contentious (O'Connor, 2022) with no clear consensus on a definition. Hicks (2018) explains that definitions of curricula differ depending on the stakeholder involved and expresses a preference for a definition from the UK Higher Education Academy. This describes curriculum in relation to "(1) What is being learnt; (2) Why it is being learnt; (3) How it is being learnt; (4) When and where it is being learnt; and (5) the demonstration that learning is taking place" (HEA, 2007, cited in Hicks, 2018). These aspects of the curriculum are usually planned and made explicit in materials made available to students. They differ from implicit learning, which is commonly referred to as hidden curriculum. For the purpose of this chapter, we adopt the term "hidden curriculum." This includes learning that Hafferty (1998, p404) defined as happening through informal curriculum, which happens through casual and inter-personal teaching that is "unscripted" and "ad-hoc." It also encompasses unspoken influences that are propagated through the culture and practices of the organisation. Koutsouris et al. (2019) suggest that the hidden curriculum focuses more on what students are expected to "be" rather than what they "do" (p. 132). This can leave some students less equipped for higher education, impacting negatively on their well-being, sense of belonging, and success.

Some students may intuitively identify and copy behaviours that fit with the norm that is being promoted, while others may find it harder to identify the salient features of the stimulus to copy, or have less to copy (Koutsouris et al., 2019). Some students may feel further away from this norm, in relation

to their way of thinking, talking, the way they look or feel—creating identity dissonance (Costello, 2005, as cited in Monrouxe, 2010). This may be a painful experience, whether or not they understand the source of their discomfort—and may persist beyond graduation (Volpe et al., 2019). Within health professional education, the hidden curriculum has been shown to have a negative impact on the development of professional identity. Brown et al. (2020) found that many medical students felt that a hidden curriculum, typically defined by white men, tended to negatively impact on their sense of self and subsequent behaviours. They highlight that the impact of the hidden curriculum discourages students from expressing identities that do not fit the norm and in this way further propagates discrimination. The effect of the hidden curriculum began even before entering medical school through a process known as anticipatory socialisation (Harvill, 1981, as cited in Burford, 2012). This process describes how preconceived notions about a profession may influence later behaviours. It is not a step too far to therefore hypothesise that these preconceived notions may also influence recruitment and retention of healthcare professionals (Burford, 2012).

The hidden curriculum has also been shown to influence the professional identity of physiotherapy students through "organisational systems, workplace cultures, power dynamics and professional behaviours" (Barradell, 2017, p. 443). It has been argued that physiotherapy education includes learning both the implicit and explicit practices of a physiotherapist, reflecting the accepted and established ways of knowing and doing (Barradell, 2023). Through professional socialisation, the physiotherapy student learns about these accepted norms and their place in the profession. A heuristic phenomenological study of eleven students and two new graduates identified themes that illustrated four different ways of developing physiotherapy identity: passenger, tourist, resident, and citizen (Barradell, 2023). Passengers mimic what they see in order to graduate "like" a physiotherapist rather than to be a physiotherapist, while tourists are seen as "outsiders looking in." The resident has more confidence and competence, with greater sense of the bigger picture. Finally, the citizen is confident with uncertainty and has greater agency and adaptability within professional boundaries. The experiences of students of colour and those who feel othered seem aligned with the tourist, whilst it could be argued that a sense of belonging requires one to be either a resident or citizen. Cassidy et al. (2020) interviewed eight recent UK physiotherapy

graduates about what they found important in relation to their success. Graduates believed learning was more successful when highly social, with interactions that led to feelings of belonging. They also felt that committing to their future physiotherapy identity was supportive. The researchers concluded that a sense of belonging was supported by a better ability to align with accepted norms and practices, which increased the likelihood of success. In contrast, feeling othered because a student's social and cultural practices did not conform to these norms led to an increased risk of early withdrawal from the programme. It may be much harder for a student or recent graduate to move from tourist to citizen when there are fewer easy wins in relation to alignment with the accepted norms and practices of physiotherapy. Explicit and hidden curricula form a socialization process that may be alienating.

Despite greater rhetoric within physiotherapy about embracing diversity and expression of more holistic ways of thinking, dissonance remains (Reivonen et al., 2021). There is much to learn from other ways of thinking about the profession.

Imagining and working for a different future through reflective forward motion

We have described a profession which is struggling to break from implicit and fixed patterns of expectation and behaviour. These functional limitations prevent physiotherapy from meaningful progress on the challenges facing healthcare.

Chin (2019) explores political belonging using ideas around "differentiated unity" as enabling a form of multicultural belonging. Instead of diverse citizens being bonded based on some shared experience or characteristics, a more pluralist citizenship better supports equity. People have various identities which are "multiple, overlapping and interrelated" and these should be allowed for, with different ways of belonging rather than aspirations of uniformity. In this pluralist citizenship, belonging is discursive; it is an active and iterative process of negotiating what belonging means, while acknowledging and respecting difference and finding ways of identifying with one another. In other words, the basis for belonging is democratically decided and reconstructed over time. This requires recognition of the need for the dialogue—and needs ongoing reflexivity and humility. This discursive process of negotiating belonging should be carried out at all levels and must

involve people from different marginalised communities at each of these levels. Considering these in pre-registration education and profession, we propose some practical actions:

1. Reflect on existing canons of knowledge

"As educators, we teach what we believe. If we haven't examined those incoming socialized, dominant ideologies around race, then we're going to reproduce those in our curriculum" (Anderson, 2021).

Nicholls (2022) refers to the emphasis of Western societies on the value of autonomy, independence, speed, and efficiency to produce purposeful movement and productive function. Challenging physiotherapy to return to simpler, more compassionate, sustainable and inclusive values demands that we reflect on what we know to be 'true' of our profession.

Considering the impacts of epistemic oppression on accepted canons of knowledge within the profession, physiotherapy should explore the views relevant to our practice that have been othered and discounted (Jagadamma, Lane and Culpan, 2023). For example, Lurch et al., (2023, p. 3), advocate for the exploration of African philosophies such as Ubuntu and Seriti when conceptualising health and healthcare. Ubuntu is defined as the "idea that a person is a person through other people" (Lurch et al., 2023, p. 3), which means that from a healthcare perspective a person should not be considered independent of the community to which they belong. Such considerations impact on how health and healthcare services are provided. This is just one example; there are many other Indigenous canons of knowledge of health and healthcare that have been suppressed by colonialism, which can be explored for the benefit of all.

Focusing on the role of education, we must cultivate different ways of belonging. Academics who explore views that have been oppressed and othered will be better placed to support all students. Students who thrive are more likely to succeed and become citizens of their profession, with agency and greater likelihood of influencing and leading positive change. Paton et al. (2020) put responsibility firmly on those involved in contributing to the professional knowledge base and structuring and delivering health professions education programmes. Dismantling the power dynamic requires listening to and learning from students about their experiences of inequity, incorporating this into learning for those involved in health professions education and ensuring that dominant ideologies are discussed and questioned in

educational research. Paton and colleagues (2020) argue that too many policies and practices erase differences by declaring equality and inclusivity; however, it is necessary to embrace difference and accept the discomfort required for learning. It is important to create opportunities and learning spaces that enable both tutors and students to challenge their assumptions, biases, and language.

2. Make the implicit explicit

Brown et al. (2020) identified the damage caused by the hidden curriculum to the development of professional identity; there is no simple or easy fix for this problem, however. It is impossible to fully elucidate all tacit knowledge related to the development of healthcare professionals and further work is needed to acknowledge and prioritise those aspects of the hidden curriculum that would most benefit from being made explicit. Similar to working with people living with long term conditions or chronic pain, we propose that we sit together to share in dialogue, listening for what is said and unsaid. The physiotherapy profession needs to recognise where our resistance to move toward a more pluralistic citizenship arises from. Creating brave spaces for difficult conversations, as described by Arao and Clemens (2013), will be a step forward in support of recognising resistance to change and stimulating growth.

Barradell (2021) proposes the concept of stewardship through which a more critical consciousness of "what matters" to physiotherapy can be raised. Through stewardship, the assumptions which form the foundations of physiotherapy, and their historical legacy, can be explored. Understanding the history of the profession is an important step to building a better understanding of the past and how it contributes to professional identity and a sense of belonging (Madsen, 2016). Exposing these unsaid rules within a profession allows students and practitioners to think more critically about its development, which empowers change (Professional Standards Authority, 2016). Challenging these implicit assumptions however requires conscientisation and disruptive thinking. Barradell (2021) calls upon educators to lead the way in building such cognitive disequilibrium and to reimagine university curricula if we are to adapt to the changing needs of individual and communities.

3. Review the role of professional regulation

In physiotherapy, early professional regulation arose out of the desire for credibility and respectability. Focusing on the Technical interest and defining professionalism, it could be argued that this need for respectability, along with the "body-as-machine" thinking of the time, not only saw the patient as a body to fix but also detached the sensual human from the professional. These powerful norms encouraged removal of the individual from the professional and contributed to the emergence of the model physiotherapist that we still see today.

It has been argued that being part of a community of practice provides validation of one's professional identity (Warren and Braithwaite, 2020) and fosters a sense of belonging for those who fit those norms. For those who seek communal validation, professional regulation has a substantial role to play in development of professional identity. For those who do not fit the norm and who have a more individualist approach to practice, however, professional regulation may, at best, have limited influence on practice; and, at worst, contribute to identity suppression and dissonance (Brown et al., 2020). Given the statement: "the most effective protection against poor practice is the individual practitioner" (Secretary of State for Health, 2011), perhaps it is time to reflect further on the role of professional regulation. Is professional regulation still required, and if so, how can it to allow for movement and flexibility in professional identity?

We have argued that belonging and identity in physiotherapy are strongly shaped by the presence of norms which have been propagated by the hidden curriculum and professional regulation. Contemporary drivers of healthcare practice, such as hybrid roles, overlapping boundaries, and increased use of technology, provide new opportunities to see the physiotherapy identity differently. Allowing for a pluriverse of professional identities will encourage diversity and bring much needed innovative and entrepreneurial thinking to the profession.

Conclusion

Just as a damaged joint resists movement to prevent further damage, resistance to change is self-protective of professional standards and ways of understanding our practice. We have challenged these norms and call for a new model of physiotherapy. This will need new ways of sharing practices

of compassion and vulnerability for a different way of seeing physiotherapy (Nicholls, 2021).

Drawing upon Habermas has helped us to understand that we need more than our current two interests and must build on the third, Critical interest. Its use will enable us to broaden our perspectives and to develop the knowledge and language necessary for us to address issues of belonging and identity. We need to take on and grow our collective investment in the third interest, developing awareness of our blind spots and building shared language for making visible the invisible.

We have shown that professional identity formation and a sense of belonging are strongly interlinked and influenced by the informal or hidden curriculum. Although we are influenced in this by people who are not physiotherapists, it is inevitable that people within our profession impact heavily on how we see our professional identity. Renegotiating the terms of belonging is critical for attracting and retaining a more diverse physiotherapy workforce. Instead of limiting movement, how much better to develop a pluralist physiotherapy citizenship? A vibrant future awaits, stimulated by conversations about how our professional identity can evolve to embrace difference, enabling meaningful movement, and ultimately, flourishing.

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ABSTRACT:

Over the years, various theorized movement systems have impacted the development of physiotherapy. In Norway, Mensendieck developed into an otherwise physiotherapy program. The existence of the Mensendieck program has been debated ever since its inception, but it managed to survive for decades, until 2019, when the program no longer was offered as a standalone option. In the Mensendieck program, personal experience combined with guiding movement was essential. Students were trained to perform exercises in the Mensendieck system and leading their own movement group was part of their physiotherapist training. The learning process was organized in a hermeneutic manner through the learning principle of spiral wherein learners revisit earlier learning over time. In higher education healthcare programs, the evidence-based practice model (EBPM) has become paramount in recent decades and the curricula are expected to be designed accordingly. In this chapter, we explore the emphasized knowledge in the Mensendieck program in relation to the power dynamics of knowledge embedded in the EBPM. Through a Foucauldian lens, we show how Mensendieck embodied an "otherwise" form of physiotherapy that needed to be marginalised within conventional physiotherapy thinking to maintain existing power/knowledge structures, professional subjectivities, and practice truths.

CHAPTER 8

Power dynamics of knowledge in physiotherapy education

THE CASE OF MENSENDIECK

TONE DAHL-MICHELSEN, DAVE NICHOLLS, JAN MESSEL, AND KAREN SYNNE GROVEN

The Mensendieck program: An otherwise physiotherapy

In line with this anthology's interrogations and transformative explorations of motion/movement within physiotherapy, this chapter will thematize the profession's tendency to move in conventional directions. In doing so, movements in more unconventional directions are resisted. Arguing this, we contextualize our interrogation in the closure of a movement system within Norwegian physiotherapy—a movement system which was practice-near and practiced the ideal of individualised care. Indeed, in this chapter we argue that the Mensendieck program embodied an "otherwise" form of physiotherapy that needed to be marginalised within conventional physiotherapy thinking to maintaining power/knowledge structures, professional subjectivities, and practice truth.

The core knowledge domain in physiotherapy is bodily movement (World Physiotherapy, 2021). During the history of physiotherapy, several movement systems have impacted the profession (e.g., Ling, Kendall, McKenzie, Kaltenborn, and Bobath systems). The influence of some of these systems, for example, the Ling system, has been elaborated on in the literature (Melnic,

2016; Moffat, 2012; Ottosson, 2005, 2010, 2016; Thornquist & Kalman, 2017), whereas other systems such as the Mensendieck system have been explored to a lesser extent. What is striking is that in Norway, Mensendieck not only influenced but developed into their own brand of physiotherapy. The Mensendieck program was established in 1927, and its existence has been debated ever since. For more than ninety years, it survived as an otherwise physiotherapy program until 2019, when the program was no longer offered and closed down.

The conventional physiotherapy program and the Mensendieck program

The oldest conventional physiotherapy program in Norway was established in 1897. This mainstream physiotherapy program was located at Oslo Ortopediske Institutt. The Mensendieck program started in 1927 under the name Norsk Mensendieckskole A/S [Norwegian Mensendieck School A/S] and was approved as a program educating medical gymnasts in 1937. Both programs struggled to be acknowledged by the medical profession and the government and faced financial challenges to their survival. The conventional program has been state-run since 1967 and the Mensendieck program has been state-run since 1978 (Haugen, 1997).

In 1992, both programs moved to Campus Bislet and in 1994, they became part of the newly established Oslo University College. This was a result of the structural reform of University Colleges in Norway merging ninety-eight university colleges into twenty-six. Since that time, organizational and economic concerns increasingly fuelled arguments for offering only one physiotherapy program in Oslo. Mensendieck proponents resisted these arguments fearing that their unique knowledge forms and professional identity would eventually disappear (Halvorsen, 2009; Haugen, 1997; Messel, 2022).

In the following years, there were heated debates and the Mensendieck program recurringly had to justify their existence as an otherwise physiotherapy program. In particular, they felt pressured into documenting the scientific results of their approach. Indeed, there was a repetitive argument that Mensendieck could not prove the effect of their movement system. As a program emphasizing experience-based knowledge, this emphasis on evidence was a challenge in several ways. As argued by historian Jan Messel, the Oslo program started to prioritize the academic education of their staff at a much

earlier point than the Mensendieck (Messel, 2022). In the Mensendieck program, clinical expertise and prioritizing teaching were considered most important. Even though they used professors in medicine to teach anatomy, physiology, and pathology, the majority of teachers who had their main positions in the program did not have academic training beyond their physiotherapy degree. Consequently, there was little research documenting Mensendieck's approaches in physiotherapy. However, this gradually changed during the 1990s (e.g., Rigault 1989; Soukup, 1997; Soukup et al., 1999; Haugstad, 2000) and research on the different aspects of the Mensendieck approach continued during the 2000s (e.g., Haldorsen, 2006; Haugstad et al., 2006a, 2006b; Dahl-Michelsen, 2007; Haugstad, 2008; Halvorsen, 2009; Haugstad et al., 2011; Fougner & Kordahl, 2012; Fougner & Haugstad, 2015; Kordahl & Fougner, 2017; Kaarbø et al., 2018; Danielsen et al., 2019; Haugstad et al., 2019). The academic competence of the Mensendieck teachers increased rapidly and ironically, discontinuing the Mensendieck program occurred when teachers were competent researchers and thus able to describe and document the various effects and the significance of the Mensendieck system as a movement approach.

There were also heated media debates regarding the decision to offer only one physiotherapy program, some of them published in the journal *Fysioterapeuten* and the Norwegian newspaper for higher education and research, *Khrono*. For example, there was a call to identify and explore more systematically what Mensendieck-based physiotherapy could offer. Additionally, others argued the profession risked losing valuable knowledge for physiotherapy (Rugseth, as cited in Hovden, 2017).

The (former) Head of Studies at the Department of Physiotherapy and the (former) Dean of the Faculty of Health Sciences at Oslo Metropolitan University, however, attributed the need for one program and one curriculum to the political reform of National Curriculum Regulations for Norwegian Health and Welfare Education (RETHOS) (Bentzen, 2017; Jamtvedt, as cited in Hovden, 2017). The reform aims to make health and welfare education more future-oriented and able to adapt to the rapid change in the related services (Government.no, 2019).

Finally, debates regarding judicial matters were raised in the media, through headings such as "Close down of Mensendieck" and "Mensendieck cannot be saved." These fuelled disputes about whether the Mensendieck

program was protected by a resolution from the Norwegian Parliament (1979), stating that when the state took over the responsibility there was a premise that the program should keep its individuality. Clinicians participated in this debate, arguing for the need to preserve Mensendieck as an otherwise physiotherapy. Ingrid Ness, owner of Storo and Nydalen Mensendieck Physiotherapy (founded in 1991), argued that the Norwegian Physiotherapist Association (NPA) had let the Mensendieck program down by not supporting their efforts to remain a separate program as an otherwise program. Drawing on more than thirty years of clinical experience, Ness emphasized that it was not too late to reverse the process:

> I am doing this on a daily basis with several Mensendieck groups and know that it works for the patients. . . . So, it is paramount that they stop the merging process, a process that has actually stranded, and they need to reconsider it. We can perfectly well have two physiotherapy programs in Norway. (Næss, as cited in Hovden, 2018)

But the leadership at the university argued that a board resolution was only valid until a new one was approved and that the process of merging the two programs and developing one common curriculum would continue as planned. As the (former) dean of the Faculty of Health Sciences emphasized: "We have one bachelor program in physiotherapy consisting of two branches of study: the branch of physiotherapy and the branch of mensendieck. We have started to develop *one common* curriculum for the bachelor study in physiotherapy" (Jamtvedt, as cited in Fimland, 2017, our emphasis).

There are different opinions or ways of expressing what happened: a merging or a closedown? Nevertheless, students were enrolled in either the branch of physiotherapy or the branch of Mensendieck until 2019, where only one physiotherapy program was offered. In this chapter, we take a historical glance at knowledge forms embedded in the Mensendieck program before the merging in 2019. Through a Foucauldian lens, we explore how knowledge forms and power dynamics were embedded in the decision to offer one common physiotherapy program in Norway.

Organisation of chapter and positioning of authors

Our chapter is organized as follows: After the introduction, we present our theoretical approach. Theoretically, a Foucauldian lens is in use and in the chapter, we draw on the concept of an "otherwise" physiotherapy as an important filter which we apply to consider the power/knowledge dynamics at play. Next, we present the basic ideas of the Mensendieck system and take a closer look at the knowledge forms that have been emphasized in the Mensendieck program in Norway. Thereafter, we turn to the evidence-based practice model (EBPM) and the power dynamics of knowledge embedded in it. In our discussion, we explore how knowledge forms and power dynamics were embedded in the process where the Mensendieck program no longer was offered in 2019.

As authors, we are all familiar with the Mensendieck program/education, although from different backgrounds. The first and the last author (TDM and KSG) are both educated from the Mensendieck program (1995), and previously, have been teachers in the program (for more than ten years). As scholars and professors, we have published on the Mensendieck education, also together with the second and third authors (DN and JM). Professor DN led the Critical Physiotherapy Network (CPN) for more than ten years, and he is one of the driving forces in critical thinking, including physiotherapy education. The third author, scholar, and research professor JM is a historian who has published on physiotherapy education in Norway. In his critically praised book *Profesjonsutdanninger i sentrum: Fra jordmorutdanning til OsloMet 1818–2018* (*Professional education at the centre: From midwifery to OsloMet 1818–2018*)) (Messel, 2022), he examines the relationship between the Oslo School and the Mensendieck School. As educators and scholars, we have been discussing physiotherapy education for years. All authors also share an interest in knowledge and the position of different knowledge forms in higher education and professional practice.

Power dynamics of knowledge: A Foucauldian lens

Since the middle of the twentieth century, any discussion of what constitutes knowledge in higher education and professional practice has had to consider how certain forms of knowledge take precedence over others, whose voice is heard and whose marginalized, and what relations of power make these dynamics possible. Continental philosophy, and particularly

the writings of Michel Foucault, have been pivotal here. Foucault inverted the classical Enlightenment belief in the sovereign autonomy of "man," arguing instead that human subjectivity, embodiment, knowledge, and experiences were the achievement or effect of power systems that shaped and determined who we were and the choices available to us. As Foucault put it, "There is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations" (Foucault, 1977b, p. 27).

According to Foucault, "individuals" were never free from the mediating effects of myriad circulating discourses:

> In short, it is not the activity of the subject of knowledge that produces a corpus of knowledge, useful or resistant to power, but power-knowledge, the processes and struggles that traverse it and of which it is made up, that determines the forms and possible domains of knowledge (Foucault, 1977b, p. 28)

Power produces subjectivity—or what we might otherwise call "identity"—but its greatest role is in its ability to control the conditions that govern what can be seen to be the truth in any specific context. It is the ability of biomedicine, for instance, to define what constitutes the truth of health and illness, for instance, that affords doctors so much power and shapes every aspect of medicine. Crucially for Foucault then, power is not a negative force—as is often seen in critical theory, which often portrays power as oppressive and top-down—but a deeply positive and omnipresent force (Foucault, 1998) that comes from everywhere and produces myriad social effects: "In fact, power produces; it produces reality; it produces domains of objects and rituals of truth" (Foucault, 1977b, p. 194). Power achieves its mediating effects through what Foucault called a "dispositif." A dispositif is an apparatus, assemblage, or network of relations between a heterogeneous ensemble of discourses, institutions, laws, and regulations, practices, conventions, beliefs, and propositions. This apparatus is strategic, morphing in response to specific social needs or problems. It works to maintain certain conditions of power/knowledge and can be used to explain how conditions shift over time (Foucault, 1977, in Gordon, 1980).

In this chapter, a Foucauldian lens on power helps us examine how the evidence-based practice model (EBPM) has become enfolded into the

apparatuses (dispositif) of contemporary higher healthcare education, including physiotherapy. In doing so, we can unwrap how power/knowledge dynamics embedded in the model have come to shape how knowledge is valued in today's physiotherapy programs.

To bring this dispositif into relief and make its operations more transparent, we contrast the kinds of EBPM now prevalent in physiotherapy with the concept of "physiotherapy otherwise." This concept was developed over a decade ago to provide tools to think beyond the conventional boundaries of contemporary professional practice. Physiotherapy otherwise embraces several critical principles, including:

- A desire to explore philosophies, theories, and ideas that have been seen historically as beyond the boundaries of physiotherapy, especially those that go beyond the idea of the body as a machine.
- An openness to critical, diverse, inclusive, and pluralistic understandings of the body, health and illness, lived experience, movement, function, alterity and difference, therapy, rehabilitation, and so on.
- A commitment to thinking "against" conventional modes of practice and theory building, to encourage greater innovation and creativity.

The basic ideas of the Mensendieck system

Bess Mensendieck (1861–1957) was both artistically and medically educated. In the early 1900s, she established Mensendieck as a unique movement system in terms of health promotion. She positioned herself as a health reformer acknowledging physical activity as essential (Dahl-Michelsen 2007; Dahl-Michelsen et al., 2021; De la Roi-frey, 2005; Haugen, 1997; Rigault, 1989; Veder, 2010, 2011; Wulfsberg, 1982). Physical activity, she argued, should be targeted to the movement of everyday life and entail specific movements founded on a scientific base. As a health reformer, she underscored the significance of good movement habits in terms of improving posture, breathing, and physical function (Mensendieck, 1937).

The Mensendieck system was formed on varied inspirational resources. First, in terms of movement, biomechanics was fundamental, and she argued that useful movement was based on scientific ground. Second, movement

should be graceful, an inspiration drawn from her training with the dancer Genevieve Stebbins, who was an American performer of the Delsarte system (a movement system of expression). Further, a central idea that Bess Mensendieck included in her movement system was that the entire body should be trained: "it included all body parts, and the exercises were performed without any apparatus" (Mensendieck, 1906, p. 12). Both the inspiration of training the whole body and graceful movement were inspired by Stebbins. The idea of grace in movement also lined with her inspiration from the body in ancient Greece, with significant muscle contours (Dahl-Michelsen, 2007). She was also inspired by the Swedish Ling gymnastic system where correcting body alignment was essential. The approach of the Ling gymnastics was military, where participants were organized in rows and trained to "stand to attention"; this practice was taken up in the Mensendieck system (Dahl-Michelsen, 2007). Finally, Duchenne de Bolougne's study of electrical neurology (Mensendieck, 1906, 1954) inspired Mensendieck's ideas of the brain instructing muscles to respond in a similar vein as an electrical stimulus. These insights paved the way for principles of very precise and detailed instruction of movement to be performed, telling where the movement should take place (on the level of the joint), and what muscles to perform the movement (Klemmetsen & Rugseth, 2005).

The American historian Robin Veder (2011) has explored the Mensendieck system, pinpointing how it is a visual practice where three main components are core: demonstration and imitation, inspection and appreciation, and kinaestethic visualization. Veder also points to how Bess Mensendieck's ideas still are part of dance, sport, and physical culture programs. Thereby, Mensendieck's reform pedagogy and the significance of professionalized teacher training have made a profound impact on dance and physical education (Veder, 2011). During the 1920s and 1930s, Bess Mensendieck established several training schools in Europe and the United States (Dahl-Michelsen et al., 2021; Veder, 2011). Aagot Normann, who had trained and worked with Bess Mensendieck, returned to Norway in 1918 and started developing a Mensendieck education. This program, the Mensendieck School, was through several steps approved as a physiotherapy education program (Wulfsberg, 1982).

The emphasized knowledge and the hermeneutic spiral in the three-year curricula/program

In 1974, the Mensendieck program (established in 1927) was formally and fully acknowledged as a physiotherapy program/education in Norway, and from then on students graduating from the program were physiotherapists, as were students from the conventional physiotherapy program (established in 1897). This recognition of Mensendieck as a physiotherapy program was a positive turning point in terms of professional status. However, it also required modifications, including adding electrotherapy and massage to the curriculum (Halvorsen, 2009; Haugen, 1997). In this way, the unique Mensendieck approach was expanded to include some common aspects of physiotherapy. The program continued to develop the pedagogical approach of Mensendieck as an integrated part of the physiotherapy training (Messel, 2022). In particular, emphasis was increasingly put on teaching and guiding Mensendieck students through three main dimensions, namely "about, in, and through, the body." The idea was that exercises that students knew in their bodies were deeply learned, whereas exercises that they had not experienced in their bodies would be understood superficially (Halvorsen, 2009).

The learning process was organized in a hermeneutic manner through the principle of a spiral of learning (Halvorsen, 2009). First, students were to learn the various Mensendieck exercises through group sessions in Mensendieck gymnastics daily. In these sessions, students learned the Mensendieck approach, "in and through" their bodies, by performing the exercises and reflecting on their experiences. The learning process also entailed knowledge "about" the body through theoretical principles of weight bearing, stability, and mobility. Theory was thus an integrated part of the learning process. However, this theoretical knowledge base was different from the one emphasized as researched-based knowledge in the EBPM, where proven effect is the essence. The theoretical emphasis in the spiral learning process was integrated into the teaching of exercises. For example, the aim (theoretical foundation) of each exercise was emphasized by the teacher, pinpointing its relevance in terms of people's needs in everyday lives. In a similar vein, the teacher provided a short outline of the exercise preparing students on how to perform it (Halvorsen, 2009: Klemmetsen & Rugseth, 2005). Second, the students had sessions in instructions/guidance. These sessions aimed

to provide students with personal experiences in teaching the Mensendieck exercises to others. Hence, students started working in groups of four to six students, teaching each other the exercises and providing one another with feedback on the performance. Next, they conducted exercise programs based on different given patient cases. They solved the patient cases by organizing their group work, outside the classroom, and they uploaded their suggestions for exercise programs on a digital learning platform. They followed a template and assessed other students' suggestions for the given case. They assessed the exercises chosen, the order of the exercises, and the reasoning. Also, they practiced the guidance of the exercises before the lessons/classes. In the sessions, they performed their chosen program, and co-students gave feedback. The teacher led the sessions and guided their discussions aiming for students to learn clinical reasoning.

Learning about, in, and through the body through various cases, settings, and situations, students' learning process took the form of a spiral as they increasingly gained more insight into the Mensendieck approach and its relevance in terms of health promotion and individual aspirations and needs (Halvorsen, 2009). The spiral took another loop as the first-year students also had their own "pupil." This pupil should be someone who was not familiar with the Mensendieck system so that students were trained to teach the exercises in a somewhat realistic situation for their future practice. This work included a basic functional examination of their "pupil," which also included the aims/motivation of their pupil. Based on the examination, the student prepared an exercise program and instructed/guided this program, consisting of ten separate lessons each lasting for one hour (Halvorsen, 2009). The work was assessed and supervised. Early on, the supervision was provided by the teachers in the program. However, in the early 2000s, this changed so that second-year students supervised first-year students in the work with their pupils, and then followed different organized sessions with discussions led by the students, in which the teacher also participated.

The spiral of learning about, in, and through the body then was forwarded in yet another loop when students moved on to organize their own Mensendieck group during the final year. This entailed two students leading their group conducting functional assessments of each participant, including the participant's perspective on their body and health, and what their personal needs were (Halvorsen, 2009). Usually, each group consisted

of six to ten participants with various needs and preferences, so students were expected to plan sessions so that exercise could be performed by everyone in the group albeit somewhat adjusted in cases where this was deemed necessary. Some of the groups, however, were organized around specific areas, such as long-term back pain or arthrosis. Health promotion was the main focus of these group sessions, as well as developing competence as group instructors. Regularly, teachers supervised students during their group sessions followed by guidance and reflection on various matters. Hence, the three dimensions of learning about, in, and through the body acquired new dimensions as students increasingly learned how to lead their own Mensendieck group, including challenges and possibilities.

From the mid-2000s onwards, the spiral of learning about, in, and through the body also integrated movement practices from other traditions, such as yoga, running, dancing, and so on. Comparing and contrasting such practices to Mensendieck exercising, students were stimulated to critically reflect through group discussions, logbook writing, and plenary sessions.

Finally, the spiral principle of learning was integrated into exams. Students delivered a portfolio, where they presented their group, including the results of the functional examination and the personal needs of their participants, the most used Mensendieck exercises, and the exercise program for the exam. Students assessed their learning process and wrote theoretical assignments on phenomena that they had worked particularly on during the year, for example, stability and balance. This assignment focused on using theoretical models and references from research. Documenting students' learning about the body using theoretical models and explanations is in line with how theory has been used in the Mensendieck program from its beginning. Whereas the use of references from research in students' assignments is an adaption to using research-based knowledge as understood in the EBPM. In Mensendieck, for example, students explain the relevance of exercises of balance by referring to research studies documenting the effect of balance training on different health conditions. As part of their exam, students also demonstrated a session of teaching their group participants, after which they were examined about this performance and their portfolio. The exam finalized the principle of the spiral of learning the Mensendieck exercises and approach about, in, and through the body.

The power–knowledge dynamics of EBPM

The evidence-based practice model (EBPM) was introduced in medicine and health care in the 1990s. Since its introduction, there have been debates about the EBPM regarding the intended meaning of what practicing evidence-based entails. The model has been criticized for lack of clarity (Anjum et al., 2020; Dahl-Michelsen et al., 2021; Grimen, 2009; Heggen & Engebretsen, 2009; Hofmejier, 2014; Wieringa et al., 2017; Wieringa et al., 2018a, 2018b). Early on, when the model was introduced by Sackett (1996), research-based knowledge framed the "best, current" knowledge as that from systematic reviews of randomized controlled trials, and where these are absent, randomized controlled trials alone. This hierarchal understanding of evidence is known as the evidence hierarchy/pyramid where knowledge/evidence from systematic reviews of randomized controlled trials is at the top. Second follows knowledge/evidence from randomized controlled trials alone, followed by knowledge from cohort studies, case-control studies, cross-sectional surveys, and case reports in this given order (Greenhalgh, 2019). Notably, positivism/post-positivism has been the driving force for the EBPM. Although one can say that different paradigms exist, the pyramid (hierarchy) is still embedded in a positivistic ontology.

The narrow interpretation of research-based knowledge (in the pyramid) has been and still is debated (Dahl-Michelsen et al., 2021; Goldenberg, 2006; Mengshoel, 2023; Mykhalovskiy & Weir, 2004). Some argue that today's EBPM relates to a broad understanding of research, including both quantitative and qualitative research (Jamtvedt et al., 2015). Others, such as the Norwegian physiotherapist and professor emerita Mengshoel (2023), argue that a broad understanding of knowledge in the EBPM is not the case; there is still a hierarchy of knowledge embedded in the model. She agrees with the need to include knowledge from both quantitative and qualitative research. According to Mengshoel, knowledge from quantitative studies can benefit physiotherapy practice regarding the processes of disease, prognosis, examination methods, and treatment effects. Qualitative studies can strengthen physiotherapy practice concerning personal experiences of disease, health and practice, clinical uncertainty, cooperation, social cultures, reflexivity, and clinical judgment (Mengshoel, 2023). Mengshoel's point is that in today's EBPM, where the pyramid is promoted, some knowledge forms are considered more paramount than others. Consequently, there is a hidden power dynamic in the

model giving priority to knowledge that can be captured through numbers and measurable outcomes (Grimen, 2009; Mengshoel, 2023).

Tacit and more experience-based knowledge that is not easily articulated and documented is not given the same emphasis, a concern also raised by the Norwegian philosopher Harald Grimen. Grimen (2009) pointed out that there are conflicting logics in the understanding of the EBPM. On the one hand, there is an idyllic understanding; the circular model, where there is no hierarchy, and the different forms of knowledge are considered equal. This equality is illustrated through the three circles (research-based knowledge, experience-based knowledge, and user-based knowledge and user involvement), being the same size, signalizing harmony between the circles. On the other hand, there is a hierarchy where certain types of evidence are given priority among the different forms of knowledge. As Grimen (2009) puts it:

> What is the point of the circular model if the evidence hierarchy is given priority? And if the circular model is given priority - or if the two different logics are to be considered equal - what is the point of the evidence hierarchy? (p. 214, our translation).

In other words, the implicit power dynamics of the EBPM can pose challenges for professional practices in which experience-based and tacit knowledge have been in the foreground, including the Mensendieck program. As Foucault (1977b) showed, power's cardinal function is to produce the knowledge and truths that constitute our reality and our "selves." The most effective forms of power achieve this without noise or controversy, but by appealing to conventional beliefs about what is common sense and reasonable (concepts that are themselves the products of existing power/knowledge relations) (Foucault, 1977b). Power achieves its ends, despite the ever-present possibility of resistance succeeding, when we come to take for granted some knowledge as more valuable than others. EBPM is a paradigm case of this, becoming a central tenet of contemporary biomedicine, defining how we now believe medicine should be thought of and practiced, and creating a raft of subject positions for those who are evidence-based practitioners (in this case, "conventional" physiotherapists) and those who are not (Mensendieck practitioners).

The knowledge forms in the Mensendieck program versus the knowledge forms in the EBPM

The Mensendieck program included the knowledge forms of the EBPM. However, whereas the EBPM emphasizes research-based knowledge, the Mensendieck program emphasized experience-based and personal knowledge. Further the knowledge dimensions - about, in, and through the body - resonate with research-based, experience-based, and personal knowledge, as established knowledge forms in the EBPM.

In terms of the pedagogical spiral approach, the two latter dimensions in and through the body were emphasized as paramount in developing students' critical awareness and sensitivity. Indeed, critical awareness and sensitivity were regarded as essential knowledge forms in terms of approaching patients as individuals in various settings and contexts. In other words, the patient-centered focus was at the fore, implying that clinical sensitivity and expertise were in the foreground, whereas research-based knowledge was not given the same emphasis. Implicit in this focus was a concern that research-based knowledge emphasizing measurable results (on a population level) was not necessarily easy to implement as to individual patient's needs and challenges. Knowledge forms emphasizing experience and tacit knowledge, on the other hand, were essential in clinical practice, however, not acknowledged as equal knowledge forms in the EBPM- thinking.

The EBPM hierarchy is increasingly challenged considering the call for personalized medicine in health care, and the call for health professionals to practice in accordance with asking the patient the question "What matters to you" (Olsen et al., 2020). Putting the patient at the center was an approach embedded in the Mensendieck system from the start. As pointed out by Aagot Normann, the Mensendieck approach was based on solid knowledge, where the starting point always is the human as an individual. If you are not able to establish contact with your patient, and establish trust, then it will not work (Normann in Wulfsberg, 1982, p.33).

Although there is a call for emphasizing experience-based and personal knowledge (Olsen et al., 2020), forms emphasized in Mensendieck, still there is a tendency for these knowledge forms to be restricted by the focus on measurable and quantitative knowledge (Mengshoel, 2023). Thus, the power dynamics of the EBPM boils down to a hierarchy of knowledge that does not account for how good practice needs to include both human and

cultural processes, examination, and treatment methods (Mengshoel & Feiring, 2020). This means that all three knowledge forms are necessary to provide "best practices" for patients, and that the power dynamics of knowledge must be ongoing and balancing: through a Foucauldian lens, this calls for accounting for how the power relations constitute a field of knowledge, presupposing and constituting at the same time (Foucault, 1977b). Further, and in line with Foucault (1998), implicit power dynamics embedded in the EBPM are relevant to understanding why the Mensendieck program, representing an otherwise physiotherapy program, was eventually no longer offered as a separate and otherwise program.

Controversies about no longer offering the Mensendieck program

Although the Mensendieck program was threatened since its inception, it survived for a considerably long period. During its history, the women who ran the education, as well as the Mensendieck association, successfully protected the existence of Mensendieck as an otherwise physiotherapy program, using the political system to do so (Wulfsberg, 1982). To survive all those decades, the Mensendieck program adapted when it needed to (or when they were forced to). For example, before 1974, they included both massage and electrotherapy to get authorization as a program for educating physiotherapists (Haugen, 1997; Messel, 2022; Wulfsberg, 1982). Also, from a political angle, we see how the societal context plays a role. For example, when the Mensendieck program received state support in 1967, the Parliament was concerned that the school would close, and maintaining a sufficient number of educated physiotherapists was important because of the increase in occupational diseases and the need for industrial rehabilitation. This situation resulted in state support for both the Oslo School and the Mensendieck School. Rivalry between the two programs varies in accordance with the market situation, which is evident in several periods during history (Haugen, 1997; Wulfsberg, 1982). Indeed, when the market conditions were good, there was more harmony between the two programs and associations, and vice versa, when the work market tightened, the view of one another as rivals became more prominent (Haugen, 1997).

In retrospect, we consider the move of both programs to Bislet, becoming part of the Oslo University College in 1994, to be a significant "game

changer" because the contextual framing enhanced the pressure to offer only one program/education. This pressure was not least due to economic reasons, and over a long period of twenty-five years, the pressure seemingly increased when the economic conditions for maintaining two different physiotherapy programs weakened. The fact that the two had co-existed for twenty-five years after moving into Oslo University College highlights the strong ability and will of the proponents of the Mensendieck program/education to fight for this program/education.

In higher education, including physiotherapy, political trends and knowledge dynamics run in waves, and some discourses become more prominent in times than others. In understanding why the Mensendieck program, representing an otherwise physiotherapy, ceased to be offered from 2019, we find that power dynamics of knowledge shed light on why this happened. The dominating role that the EBPM has played for the last ten years is significant here. We argue that the ordinary physiotherapy program was better able to fit into this discourse and had a tacit advantage when discussions about offering only one program once again became the agenda.

Also, at the time of the decision to no longer offer the Mensendieck program, the discourse of "bigger is better" was prominent in higher education in Norway (Norge Kunnskapsdepartementet, 2014–2015). The political reform—the structural reform—resulted in mergers of many different universities and university colleges on a large scale not seen before in Norway. We argue that against this backdrop, the larger the better political rhetoric paved the way for the decision to offer only one physiotherapy program.

Whereas Mensendieck first and foremost emphasized a prophylactic approach, ordinary physiotherapy focuses on treatments (Haugen, 1997; Halvorsen, 2009). In the final round of discussions about the situation of no longer offering the Mensendieck program, there was a call for research as a way forward, pinpointing how physiotherapy—and the practices in the programs—to a very little extent, have been scrutinized through research. We argue that, at a minimum, one should have paid attention and seen if there was something to be learned from the Mensendieck program (Rugseth, as cited in Hovden, 2017).

"Learning about, in, and through the body" was a popular slogan in the Mensendieck program. Interpreting this slogan, learning about the body has traditionally been seen as theory, but today, it emphasizes research-based knowledge. In contrast, "in and through the body" represent a bodily- and

practice-near approach, where own and co-students' bodies are learning subjects and objects. Indeed, meeting and working with patients are considered a legitimate learning technique for physiotherapy students. Although learning "in and through" the body has been particularly emphasized and related to the Mensendieck system, such a learning approach might be considered to resonate well with how other physiotherapy programs have paid attention to a bodily and practical approach to learning in physiotherapy.

Regarding knowledge dynamics, this approach to knowledge in higher education, focusing on practical knowledge, has in later years been challenged by a more intensive focus on research, often called the academic drift in higher education (Messel, 2021). This shift toward research can be regarded as a threat, and in physiotherapy this threat reflects a worry that the profession is moving away from core competencies in handling bodies at the practical/embodied level (Engelsrud et al., 2018; Langaas & Middelthon, 2020; Nicholls, 2018; Mengshoel, 2023; Thornquist, 2022). Such concerns imply that experience-based and personal knowledge, considered core components in physiotherapy, do not get sufficient attention in today's physiotherapy curriculum. Using a Foucauldian lens, we see how certain forms of knowledge have taken precedence over others, though change is always possible.

There is little doubt that the social conditions shaping what is now thinkable and doable in physiotherapy are shifting and EBPM is becoming firmly established within physiotherapy's dispositif. Much is changing in physiotherapy, not only in terms of the profession's educational and professional institutions, but also its laws and regulations, values and beliefs, conventions and relations with service users, professional colleagues, funders and legislators. Foucault's idea of the dispositif speaks to the heterogeneous apparatuses, assemblages, and networks of relations that hold these various connecting, and sometimes competing, material practices in place. What we have seen with the rise of EBPM concerns us, because the knowledge forms and the embodied knowledges emphasized in the Mensendieck program risk being lost or diluted by an overly dogmatic view of evidence, objectivity and detachment. But as power dynamics, according to Foucault, are open-ended, this can also always be otherwise (Foucault, 1977b). Against this background, we hope that the core dimensions of the Mensendieck approach—about, in, and through the body—will be acknowledged and reconsidered in future programs in physiotherapy.

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ABSTRACT:

This chapter proposes the need for redefined, transdisciplinary approaches to art and health education and research. We question physiotherapy education which continues to privilege biomedical knowledge and marginalises cultural, philosophical, and sociological perspectives. Drawing on Deleuze and Guattari, we propose a nomadic practice and advocate education, practice and research that creates lines of flight which break through the control of discipline, context or methodology, and consequent outcomes.

We explore how transdisciplinary education can use the creative approaches of art to create a counterculture that draws on aspects of new materialism to consider how art can offer opportunities to explore movement and non- interactions. We illuminate what this might make possible within physiotherapy and advocate moving towards a nomadic therapeutic practice that is becoming.

The chapter recognises how emerging transdisciplinary research can prioritise approaches that embrace the unexpected and highlight examples of the human and non-human as co-generators of knowledge. In advocating creative process as an alternative to territorialized physiotherapy practices enclosed within disciplinary criteria, we suggest communicable forms of knowledge in new, more productive forms.

CHAPTER 9

Art as a deterritorialising vehicle for a nomadic physiotherapy

SHIRLEY CHUBB AND CLAIR HEBRON

Introduction

The process of collaboration that led to this chapter has included four or more years of discussion, and the consequent development of awareness and association gained by considering, sharing, and applying our individual knowledge. Shirley is a visual artist, and Clair is a physiotherapist. We are both academics with experience in qualitative and post-research and are interested in how theory and discourse work across disciplinary boundaries to enable new modes of thinking and practice. Through this process, we have come to recognise points of convergence alongside points of dissonance, where the understanding of common theoretical territories has revealed different applications in our distinct disciplines. This process has become rhizomatic,[1] with an absence of implied hierarchy that has negated the sense of authority that can so often haunt *inter*disciplinary thinking. In contrast, lengthy discussions have evolved organically, moving between philosophical, sociological, and practical references, sharing imagery, links, and experiential examples leading to an enhanced awareness of the agency of truly *trans*disciplinary[2] thinking. Key to this process has been our common

interest in the implications of posthumanism. As Rosi Braidotti observes in her book *The posthuman*, "we need to learn to think differently about ourselves," to see what might be a "predicament as an opportunity" and to think "critically and creatively about who and what we are actually in the process of becoming" (Braidotti, 2013, p. 10). Having come from two disciplines traditionally rooted in the awareness and representation of the body, we have sought to reconsider and recalibrate the body within the non-human. In being aware of the body, we simultaneously consider what that body is within, its socioeconomic and cultural environment and location and its physical status, awareness, and receptivity. We also decentre the body, by asking what non-human phenomena act upon it, and what renewed awareness might be made from this.

Within the chapter we provide an overview of pertinent elements of relevant discourse within physiotherapy and the arts. These outline how our perspective of shared thinking achieved a state of equilibrium and grew to challenge the contrasting stances that can be seen to distance creative practice and the health sciences. We suggest that by moving our perspective on these debates, we can reveal points of commonality, and the potential for synchronised forms of knowledge production that benefit from the interstitial, shared space of understanding enabled by the posthuman perspective. We then draw on the work of Deleuze and Guattari (2009; 2020) and aspects of new materialism to consider the process of becoming a physiotherapist within higher education in the United Kingdom and consider what forces have evolved that block or potentially enable nomadic thinking in this learning environment. Additionally, we discuss how adopting a collaborative transdisciplinary approach to the liminal space between physiotherapy and creative practice, embraces ideas of nomadism, leading to a range of research, that from the outset adopted receptivity as a model for enquiry. We ask how the process of transdisciplinary collaboration can create lines of flight and prompt us to think otherwise. Our aim is to consider how transdisciplinarity can move us towards an otherwise physiotherapy, one which challenges accepted and authorised ways of thinking and doing. We share links to art, which for us exemplify alternative readings of the body as processes of collaboration with its own interiority and other human and nonhuman forces (Bennett, 2010, p. 21). We hope that your curiosity is piqued as you follow these links and take time to dwell on their alternative readings of what we

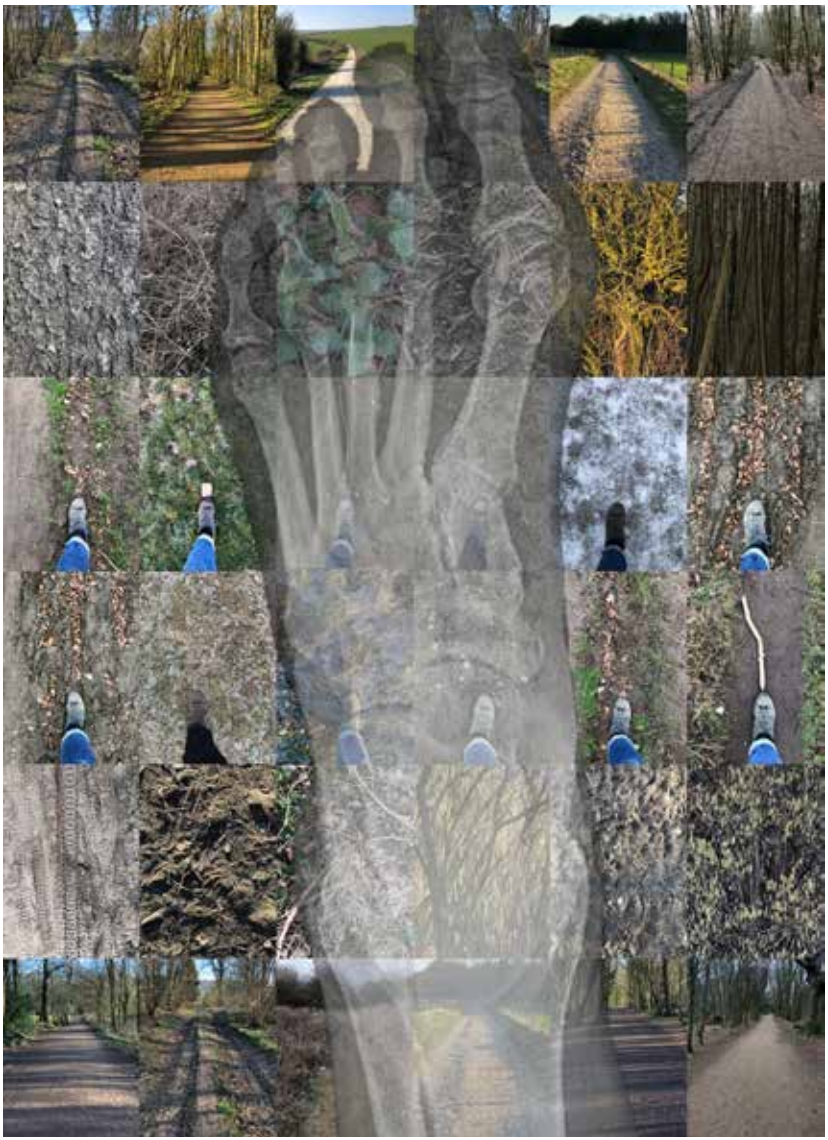

Figure 1. Shirley Chubb, *Metatarsal Walks 1* (2021), composite digital photograph.

think we understand about ourselves. Finally, we share how our involvement in initiating the Posthuman Walking Project (PWP)[3] put these approaches into practice by reshaping methodological norms to accept findings with a sense of radical openness.

Physiotherapy in motion

Health and thus healthcare awareness has shifted in recent years as the these environments begin to perceive and encompass the human in relation to its non-human environment. Early medicine was focused on curing specific diseases, such as diphtheria and tuberculosis, whereas today this is overshadowed by preventing and managing "lifestyle diseases," thus promoting the need to look beyond what the body is, and towards what a body does. Yet arguably the greatest burden to care comes from so called "medically unexplained conditions" with one such condition, low back pain, being the biggest cause of years lived with disability worldwide (GBD 2021 Low Back Pain Collaborators, 2023).

The recognition that rather than being static, definable, "closed" entities, health conditions may be in a state of flux as humans interact, respond and correspond with their environment, suggests the need for an equivalent recalibration in physiotherapy as a profession that recognises and is able to manage the complexities of contemporary society. Although there has been some movement in discourse with a focus on the biopsychosocial model, conceptualisation of this remains reductive and practice is predominantly biomedical (Nicholls & Gibson, 2010; Mescouto et al., 2022). Physiotherapists acknowledge the need to address psychosocial aspects, but question whether it is in their scope of practice (Singla et al., 2015; van Dijk et al., 2023; Zangoni & Thomson, 2017). So, while we argue about what are culturally "professionally permitted techniques" we lose sight of the person and their interactions with their environment (see Figure 1).

No wonder physiotherapists struggle to manage complexity and uncertainty and fail to fully acknowledge the structural barriers to health or see themselves as activists. We argue that for the profession to evolve, education, research, and practice need to be in flight, moving rhizomatically, making new connections that acknowledge, in Braidotti's terms, a posthuman "becoming" by establishing relations "on at least three levels: to one's self, to others and to the world" (Braidotti, 2019a, p. 45).

We are entering what is sometimes termed the post-professional era (Nicholls, 2022, p. 178), which doesn't mean that the health professions will disappear, but that they will need to be responsive, creative, and innovative in order to decentre professional hegemony and meet the needs of the changing context in which they work. Deleuze and Guattari's (2020) concept of nomadism is a way of thinking and being that challenges traditional ideas of identity, subjectivity, and power (Braidotti, 2012). It triggers the potential for transdisciplinary teaching that creates lines of flight, prompting disruptive yet generative outcomes that break down assumed hierarchies of knowledge and power between "patient," "clinician," and "circumstance." This will require physiotherapists to be responsive and radically open to new becomings.

Becoming a physiotherapist

Discourse in physiotherapy education includes attention to professional identity formation and professional socialisation and refers to the process by which individuals learn values, attitudes, and behaviours associated with their profession (Lindquist et al., 2006). Identity theory adopts a sociological and psychological approach that seeks to explain the formation and development of individual characteristics. It posits that individuals develop a sense of self and identity through social interaction and the roles they occupy in society (Stets & Burke, 2000). Overall, identity theory seeks to explain how individuals come to define themselves and their place in the world. This discourse largely draws on concepts of identity from transcendental philosophy, whereby identity is conceived as a somewhat static system of thought, and contemporary discourse in physiotherapy continues to territorialise physiotherapy identity as something to be maintained (Chartered Society of Physiotherapy, 2021). However, research has shown that physiotherapists' identity is dynamic, ongoing, and influenced by a range of factors, including their personal experiences, values, and motives and the social and cultural context in which they practice (Hammond et al., 2016). In contrast, for artists, individual identity is the mode of expression, creating a unique creative space where identity formation is defined by the mode, skills, scale, or working/exhibiting context of their resulting practice.

A point of commonality for the authors[4] is a shared interest in Deleuze and Guattari's rejection of traditional notions of fixed identity that emphasize stability, coherence, and individuality, arguing that these do not accurately

reflect the complex and dynamic nature of human existence. Instead, they propose a nomadic view of identity that is fluid, constantly changing, and shaped by external forces, emphasizing movement, multiplicity, and interconnectedness as a rhizomatic process where multiplicities have neither subject nor object (Deleuze & Guattari, 2020). Deleuze and Guattari suggest that individuals are continually being reformed through flows of forces, intensity, and desires. In this context, the nomadic subject is characterised by a willingness to embrace uncertainty and ambiguity, skills which are essential in contemporary physiotherapy practice and often the modus operandi of an artist's process of engagement with materials, display, and reception. However, in physiotherapy, current educational philosophy based in static concepts of identity is arguably problematic, manifesting identities handed down by educators to students who seek to conform and reproduce those that precede them. Indeed, learners may seek out a sense of preformed professional identity and the prescribed ways of practicing that it suggests.

Deleuze and Guattari (2020) reject hierarchy, and what they term:

> The various forms of education or 'normalization' imposed upon an individual consist in making him or her change points of subjectification, always moving towards a higher, nobler one in closer conformity with the supposed ideal. Then from the point of subjectification issues a subject of enunciation, as a function of a mental reality determined by that point. Then from the subject of enunciation issues a subject of the statement, in other words, a subject bound to statements in conformity with a dominant reality. (p. 150)

Counter to looking for ways of *being* a physiotherapist we argue that physiotherapy educators, students and practitioners should consider what *becoming* a physiotherapist could look like, and how this might differ from the identity handed down to them. Thus, rather than trying to emulate educators and senior colleagues, this perspective challenges traditional ideas of identity based on categories such as class, race, gender, and for students, educators, and all physiotherapists instead emphasizes the importance of fluidity, adaptability, and diverse approaches for physiotherapy students, academics, and clinicians. Barad (2007) defines this as a process of "intra-activity," where "relations of exteriority, connectivity, and exclusion are reconfigured,"

creating "dynamic topological reconfigurings/entanglements/relationalities/(re)articulations of the world" (Barad, 2007, p. 141).Our suggestion is that a recalibration of the educational philosophy of physiotherapy to a model that embraces posthuman notions of identity and becoming could create an otherwise physiotherapy. It offers identity in motion, constantly changing and responsive to landscapes of care.[5] This might better prepare physiotherapists for the challenge, complexity, and uncertainty involved in navigating contemporary practice (e.g., Costa et al., 2023; Roitenberg & Shoshana, 2021).

Art as a deterritorialising flow of forces to a becoming physiotherapy

We propose that adopting some of the uncertainty embraced in arts practice can be used as a catalyst for questioning physiotherapy identities and a means to challenge conventional thinking about who we are and how we define ourselves. Our suggestion reflects Deleuze and Guattari's (2020) view that

> art is never an end in itself; it is only a tool for blazing life lines, in other words, all of those real becomings that are not produced only *in* art, and all of those active escapes that do not consist in fleeing *into* art, taking refuge in art, and all of those positive deterritorializations that never reterritorialize on art, but instead sweep it away with them toward the realms of the asignifying, asubjective, and faceless. (p. 219, emphasis in original)

We suggest that a physiotherapy otherwise would cast off the shackles of physical priorities and engage in becoming (immanently[6]), a process in motion. Considering how depictions of the body in art address evolving and increasingly conflicting notions of perfection and reality may be of significance here. Reflecting discourse surrounding the politics and theory of looking at, particularly, the female body (Berger, 2008; Butler, 1990; Laing & Wilson, 2020), contemporary art breaks moulds, seeks new paradigms, and challenges perceived skills and notions of value by embracing different realities and ways of investigating the physical and cultural body. The work of artists such as Jenny Saville (Contemporary Art Issue, 2022); Lucien Freud (2024); Mona Hatoum (n.d.); Ghada Amer (n.d.), and many more, encapsulate gendered, ageing, sociological bodies, that challenge unrealistic or

promoted "norms" through explorative visual representations of what it is to "be" within the world.

Key to this process of becoming, is the understanding of change and flux as an intrinsic part of the learning process, be that in terms of the development of material skills or the expression of conceptual thinking. The artist's review of work considers what is successful, whilst also recognising that failure and its impact on consequent production is not finite, but rather a process of review where makers respond to the reply of materials or context in order to hone the particularity of any generated work. Within art practice failure is, whilst sometimes frustrating, not seen as negative; rather, it is an interstitial space where understanding between the maker and the materials creates a co-dependent bond. A space where, as Agnes Martin suggests:

> There will be moving ahead and discoveries made every day. There will be great disappointments and failures in trying to express them. An artist is one that can fail and fail and still go on. (Glimcher, 2015, p. 81).

This process of intra-action undertaken in what Arne Glimcher describes as Martin's pursuit of "pure emotion" (Tate, 2015, 2:44), in turn reflects Sontag's (1964) call for responses to creativity that are against interpretation. For artists, recognition and reflection enable the impulse to follow unexpected avenues of thinking and making, often suggested by the response of materials or the shifting circumstance of making (see Figure 2). These recalibrations manifest a rhizomatic approach to learning from and with the material process, be that actual, that is, in terms of manipulating matter; or circumstantial, responding to the circumstance or context underpinning a creative outcome.

The history of art, broadly speaking, includes adaptations and responses to the development of technologies that have enabled artists to investigate how "tools" (be they objects, technologies or materials) enable new questions and forms of communication. Artists quickly challenged how these technologies might be applied, recognising the disjunct between reality and software capable of creating virtual bodies that can reform, reshape and recontextualise themselves within created digital worlds, for instance, in the context of gaming. Artists such as Don Ritter (Aesthetic Machinery, n.d.) responded by calling for interactive uses where "the entire body—and not just the index finger—must be involved in the interactive and aesthetic experience"

Figure 2. Shirley Chubb, *Four Erosions and Four Feathers* (2021), composite digital photograph.

and how the social situation surrounding these experiences was also significant. (Ritter in Wilson, 2003, p. 739). In recent years, digital technologies have offered the opportunity to bridge disciplines, with artists such as Bill Viola (n.d.), Semiconductor (n.d.), Gary Hill (n.d.) and Charlotte Prodger (Tate, n.d.) responding to and transforming data to create liminal worlds that interpret bodies and the worlds they correspond with in new ways. In these hands, art becomes a multivalent phenomenon that questions its own reality and suggests a continuum that moves away from the individual, reflecting Haraway's (2016) sympoiesis as a process that recognises the interplay of "complex, dynamic, responsive, situated, historical systems" of "making with" and "worlding with" (Haraway, 2016, p. 58). With these examples in mind, we argue that the communicative potential of art in educational settings has a deterritorialising affect[7] that could support the reframing of physiotherapy paradigms.

Transdisciplinary education

Adopting a transdisciplinary approach recognises the specific language of disciplines whilst allowing the possibility of reviewing shared phenomena from different positions. It relies on researchers and practitioners working with and learning from each other to reconsider subject specific assumptions

and values afresh (Burnard et al., 2022). Within an educational context this approach affords the possibility of identities of difference moving beyond the essentially hierarchical strata of arboreal restrictions (Doel, 1996). This approach also unblocks the potential of a rhizomatic approach to physiotherapy, where connections with different networks and new possibilities explore the entanglement of material and discursive realities and recognise the validity of human/nonhuman encounters. This was exemplified when we (the authors) visited a Magdalena Abakanowicz exhibition (Tate, 2023) at a key stage in developing our collaborative thinking. Abakanowicz used organic materials such as hemp, sisal, and horsehair to create large woven sculptures, understanding the fibre from which they were made as "the fibre from which all living organisms are built, the tissue of the plants, leaves and ourselves," as awareness that began to resonate with the emerging Posthuman Walking Project (PWP). Growing up in a manor house deep in the Polish forest, Abakanowicz saw her work as articulating the "inexplicable forces" and "deep powers that dwelled in the foods and lakes that belonged to my parents," and used materials to "create atmosphere or provoke emotion" (Coxon & Jacob, 2022, p. 72). This recognition of how the use of materials intrinsic to, and formed within, a site can communicate more than a record of place reveals the enhanced awareness that pluriversal thinking can offer. At a crucial stage in the development of our thinking, Abakanowicz's insight illuminated the affect of art as a form of deterritorialization that can free repressive fixations by enabling flows of awareness that were not previously recognised as significant.

Thus, we advocate a transdisciplinary approach to education moving beyond disciplinary perspectives through a process of real-world investigations that are conscious, receptive, and open to non-human actants in the formation of identity. We suggest that exploring transdisciplinary or pluriversal educational views may help students and physiotherapists to embrace the complexity of a changing world and changing practice, as is evident within the visual arts, providing opportunities to think more nomadically.

Within visual and other creative practices, recent developments have seen significant shifts for many artists, whose practice has become a means to produce new knowledge through the physical manifestation of issues of cultural identity, site specificity, and community. Some outcomes have become less about product and more about the process of becoming that is

manifested through engaging with communities, contexts, or encounters, with Miwon Kwon (2004) recognising that an issue or debate can itself be the site of enquiry. In recent years this process has been reframed as socially engaged practice where, by taking collaborative or participatory approaches, persons or communities become the medium or material of co-creative activity which is itself the output. In this creative genre, for artists such as Assemble (n.d.), Rikrit Tiravanija (David Zwirner, n.d.-b), Francis Alys (David Zwirner, n.d.-a) and project art works (2025), the process of making is the artwork. We see the potential of these approaches in encouraging physiotherapists to consider whether their practice might also become less about product and more about the learning acquired from the process of encounter and consequent becoming.

We are not suggesting that physiotherapy students "do" art. Nor are the artists cited above suggested as examples of what "to do" in this transdisciplinary educational space. Instead, we consider how adopting the approach of generative disruption (Galvann, 2021), that they suggest, can inform transdisciplinary education and what it might offer to physiotherapy students. Art offers examples that disturb assumed or entrenched positions, and we acknowledge that this can create challenges for physiotherapy students, as can be seen in educational programmes that include creative methods within which some students questioned the relevance of art in becoming a physiotherapist (Caeiro et al 2014; Fougner & Kordahl, 2012), stating "we are supposed to become physiotherapists not artists" (Fougner & Kordahl, 2012, p. 17). In response, we propose that transdisciplinary approaches to physiotherapy education, where students and educators alike are obliged to engage with the discomfort of questioning their sense of self in relation to non-human actants, can be enabling, reflecting Haraway's (2016) edict that

> Staying with the trouble requires learning to be truly present, not as a vanishing pivot between awful or edenic pasts and apocalyptic or salvific futures, but as mortal critters entwined in myriad unfinished configurations of places, times, matters, meanings. (p. 1).

Deleuze and Guattari (2020) underpin the liminality implied by this approach by offering the notion of nomadic thinking. The nomadic state defines the agency of deterritorialised thinking that can exist between

primitive or "stateless" thought and civilised or "despotic" thought (Buchanan, 2010, p. 345).[8] This definition creates space for creative thinking that is at the limit of freedom, existing outside established hierarchical categorisations, and in a state of perpetual flux. The concept comes with consequences as it functions virtually, at the limits, turning the nomadic thinker into what Deleuze and Guattari call a "war machine" (2020, pp. 409–92). On a direct collision course with the forms of institutionalised thought that one could associate with the state apparatus, nomadic thinking results in struggle and resistance, and comes with risk as there is no guarantee as to what will come from it (Adkins, 2015, p. 31). However, becoming comfortable with disruption might help physiotherapists to negotiate the uncertainties of clinical practice, including navigating structural drivers such as "guidelines" (Copeland, 2020); evidence-based practice and managing persons with "uncertain diagnoses"[9] (Costa et al., 2023; Roitenberg & Shoshana, 2021). Instead, physiotherapy might develop a less static practice which, aligning with the approach of artists, is centred around disruption and uncertainty and is yet to become known.

We argue that education that includes thinking with different perspectives—in Deleuze and Guattari"s (2020) terms, other "machines," can create a deterritorialising flow of different ideas between persons, enabling a counterculture that breaks free from the status quo into multivalent rhizomatic identities that benefit from being in a state of flow or motion (see Figure 3). This rhizomatic approach would allow physiotherapy practice to reflect changing sociocultural landscapes and "ceaselessly establish connections between semiotic chains, organisations of power, and circumstances relative to the arts, sciences and social struggles" (2020, p. 6).

What then are the blocks to educational rhizomes? Driven by positivism and funding that preferentially supports research predicated on defined metrics that often reflect established paradigms,[10] can lead to students pursuing grades over learning and educators designing systematised learning patterns and criteria as predefined, territorialised forms of education. Although not entirely liberated from the strictures of module patterns and credit-based learning, some visual art programs offer catalysts for exploring visual assemblages of health, emotion, community and the environment which could transform physiotherapy training to become more than medical. From within the canon, Nicholls and Gibson (2010) have explored how inter

Figure 3. Shirley Chubb, *Five Walks* (2021), composite digital photograph.

or transdisciplinary physiotherapy education can explore the body in new ways that move beyond humanistic and anthropocentric thinking. In Deleuze and Guattarian (2020) terms this offers physiotherapy students (machines) new lines of flight out of the institution to reimagine learning in new and productive ways. As Barad (2007) and Haraway (2016) suggest, this approach requires developing the ability or capacity to respond, to become response-able to the socio-political climate and ethical and moral dilemmas of practice.

In this transdisciplinary space learners and educators and persons with lived experience can collectively explore concepts, invent approaches, and create new assemblages[11] that demonstrate a range of analytic practices of thought, creativity and intervention that are immanent to a physiotherapy that is becoming. As framed by Braidotti (2019b) this reassessment of being is not about becoming anything, rather it celebrates approaches that are compassionate, interrelational and collective, providing a mode of thinking that permeates our work on the Posthuman Walking Project.

The Posthuman Walking Project

An ontology of immanence[6] above has implications for research, reflecting St. Pierre's call for a resistance to the conventions of the academy in relation to research methodologies, calling for difference and recognising that "we don't have to understand everything to do something" (St. Pierre, 2023, p.24). Similarly, Lury (2020) recognises the problem space of co-constructed transdisciplinary methodologies as an opportunity to advance understandings of placemaking, boundaries of care, inequity and human/nonhuman interactions, where the not-knowing of art practice meets the conventions of physiotherapy.

In this critical context, as researchers we came to understand the value of actively exploring the potential of unanswered or unanticipated questions emerging from earlier research,[12] leading to formation of new approaches to enquiry in the Posthuman Walking Project (PWP). A collaboration of transdisciplinary academics and partners walking with persistent pain in five different countries, the PWP explores the assemblage and multiplicity of walking with pain in diverse landscapes. As part of the project, the authors and partner walker Fe Stevens, an artist with experience of living with persistent pain, undertook a sequence of walks in the South Downs, UK. Our initial rural walk took place in the summer of 2023 and lasted for

around an hour, moving up and down hill paths through enclosed and open terrain with occasional expansive views and encounters with flora, fauna and a wind turbine site. The walk generated a range of photographic images, mobile phone video, and audio data, as we, at times, simultaneously captured three different views of the same points of attention. Coming together to receive and respond to our environment, we came to recognise the landscape itself as the fourth partner in the encounter, shaping the non-human play of wind snatching at our conversation and drawing our attention to movement and stillness. Throughout the walk, the landscape provided multiple points of focus that contextualised and shaped our discussion, enabling comparison and the recall of shared experiences that levelled the relationship between researcher and partner walker into a wholly mutual experience. Ingold uses the coming together of copper and tin in the creation of bronze as a metaphor that chimed with our experience of landscape, suggesting that

> if we enter into a relationship, does that not bring into existence something new that is neither you nor I, but into which we have [all] yielded something of our respective selves. (Ingold, 2015, p. 15–16).

From the outset the PWP has involved persons living with persistent pain as partner walkers who join with academics in discussing the nomadic nature of the project. Recognising the landscape as an active partner, rather than the surface where our encounters took place, manifests Jane Bennett's concept of noticing as a mechanism to free up our awareness of human and non-human relationships at any given point. In her book *Vibrant matter*, Bennett (2010, p. 4) recalls the impact of encountering apparently random items caught in a storm drain:

> one large men's black plastic work glove
> one dense mat of oak pollen
> one unblemished dead rat
> one white plastic bottle cap
> one smooth stick of wood

This encounter is recognised as the prompt that shifts Bennett from seeing this apparent detritus as something to ignore, to conversely acknowledging it as "stuff that commanded attention in its own right, as existents in

excess of their association with human meanings" (Bennett, 2010, p. 4). They continue to observe that "in this assemblage, objects appeared as things, that is, as vivid entities not entirely reducible to the contexts in which (human) subjects set them" (Bennett, 2010, p. 5).

In our first walks our awareness of the active agency of the landscape was heightened by our partner-walker, who narrated the role the landscape played in her recovery from a serious work-based injury eighteen years earlier. For Fe, the non-human entities embedded in and resulting from the landscape, were key to her gradual recovery. Shifting annual weather patterns, flora and fauna offered active points of engagement that enabled her to become a part of the landscape, rather than a self-aware entity walking on the land. As in Bennett's exemplar above, she showed an acute awareness of detail alongside the sweeping grandeur of the South Downs, where the mundane was as significant as the spectacular.

We share with you here our early reflections of this walk, moving rhizomatically between Fe's words (in italics) and our interpretations.

"*While living with pain, I learnt a different way of walking, of enjoying nature. My appreciation of what I see is so different*." For Fe, walking built up slowly over time with frequent pauses, these pauses allowed her to connect with her environment and to notice, while walking she paused to watch the butterflies to ask herself questions about what they were doing as they emerged from the tree. Initially, these pauses were enforced by pain, but they seemed to offer something new and authentic, which she was keen to retain. "*When people stopped to talk to me that was the highlight of my day, conversely others commented or huffed when I got in their way*." Fe further conveyed a changed sense of time and patience, of waiting for others to walk past, of taking time to say hello. "*I don't need to rush to get past*." This contrasted with Fe's discussion of walking in urban environments; in the city centre, when enforced pauses due to crowds were not at a time chosen by her experience and response to pain, but as staccato pauses that jarred against the rhythm of her bodily movements.

The wind turbine loomed ahead and above with its throbbing blades: "*it feels like a heartbeat*," she said putting her hand to her chest. "*Not everybody likes wind turbines, but for me they connect me with the wind. I notice their stillness and become aware of the lack of wind. It's good that it's windy today so you can feel it*."

Figure 4. Fe Stevens, *Film #1*, Video Still 1, *Posthuman Walking Project* (2023), composite video.

She talked of the attention that pain demanded. As she walked her attention was drawn to many things, to the insects and the sound of the birds and the wind and movement of trees and grasses. An electricity box, the style and the design of the adjacent dog gate, the dew pond, teeming with different forms of life. Implicit in Fe's words and actions was that being alert to the jostling of people in the city, created an alertness to pain and a guarding that didn't allow free connection with her surroundings. She pointed out a protruding tree route in cheerful tones, there was no sense of threat of this as an obstacle or hazard. As the route inclined, she mentioned feeling her heart rate increasing, of being connected to her body. She remembered back to how much harder this once was, but conveyed a sense of this being alright, as it was part of taking one step at a time.

We saw few other persons during the walk, one in the distance passing without interaction and one with a small child (possibly a grandchild) passing in the other direction. We acknowledged him briefly but were absorbed in our task. Fe talked of never being alone on a walk; of never feeling lonely. She described talking both to herself and out loud as she walked, and of talking to the animals and insects alongside. "*Hello you*," she said to a bee

Figure 5. Fe Stevens, *Film #1*, Video Still 2, *Posthuman Walking Project* (2023), composite video.

and a bloodsucker. "*Look there's a green one and a red one on the same flower*." "*I take things away with me*," she said.

Later along the road verge she noted some twig like weeds, once green, now turned rust. "It makes me think of autumn . . . we're not through summer yet." "I'll put them straight into a vase on the table and admire them, then at some point, I'll use them to start the fire." There was an openness to change in her dialogue. A sense of comfort in the moving of seasons and of one thing becoming another, from green to rust to flame.

What is evident in Fe's account is that, for her, the landscape is central to the experience of walking. While walking she reflects on her experience of pain in relation to healthcare interactions, but fleetingly in relation to walking itself. The affect of the natural landscape created lines of flight and played a central role in helping her to navigate the changing cadence of her life. In her account the birds and insects were central to a nomadic sense of becoming. Less central but still dominant were the "inanimate objects," the electricity box, the stile, the dew pond. For Fe, the wind turbine, had agency in and of itself in the sense that it connected her more deeply with the elements. Human interaction was peripheral, with fleeting encounters, never more than a glance or a "hello." Yet there was companionship in nature.

Conversations with insects were detailed and full of wonder, and thus Fe never felt lonely or alone.

Concluding remarks

We have explored how art might act as a deterritorialising vehicle for a nomadic physiotherapy. By putting the posthuman concepts of Deleuze and Guattari and new materialist theory to work we propose that pluriversal education can deterritorialise static concepts of physiotherapy identity and create movement towards an otherwise physiotherapy, one which is constantly in motion, exploring new lines of flight, and continuously becoming. The increasingly apparent assemblage underpinning the PWP has manifested landscapes, partner walkers and researchers as equal, co-dependent collaborators. This indicates an emerging immanence where the possibility of a physiotherapy otherwise which moves rhizomatically away from the boundaries of tools, techniques, or clinic walls. An otherwise physiotherapy would be responsive and comfortable with uncertainty and complexity. It would move towards engagement with a world of human and nonhuman actors in which becoming can be realised.

Acknowledgements

The authors would like to acknowledge the contribution to our thinking from the current team involved in the Posthuman Walking Project: Toby Bain, Department of Creative Industries, University of Chichester, Chichester, UK; Norma Bautista and PWP, Walker Partner, Manila, Philippines; Neil Bryant, Department of Creative Industries, University of Chichester, Chichester, UK; Prof. Valentin C. Dones, Department of Physical Therapy, University of Santo Tomas, Philippines; Lena Gudd, Artist Researcher and PWP Walker Partner, Tromsø, Norway; Prof. Roger Kerry, Faculty of Medicine and Health Sciences, University of Nottingham, UK; Asst. Prof. Donald Manlapaz, Department of Physical Therapy, University of Santo Tomas, Philippines; Asst. Prof. Filip Maric, Department of Health and Care Sciences, UiT The Arctic University of Norway, Tromsø; Prof. Emerita Ann Moore, School of Sport and Health Sciences University of Brighton, UK; Prof. David Nicholls, School of Clinical Sciences, Auckland University of Technology, New Zealand; Jeni Ross, Administrator, Yoga instructor and

PWP Walker Partner, Winnipeg, Canada; Natalie Sharratt, Physiotherapy Student and PWP Walker Partner, Nottingham, UK; Dr. Jonathan Skinner, Department of Hospitality and Events, University of Surrey, UK; Fe Stevens, Artist Designer and PWP Walker Partner, Brighton, UK; Charlotte Taanevig, Department of Health and Care Sciences, UiT The Arctic University of Norway, Tromsø, Norway; and Associate Prof. Patty Thille, College of Rehabilitation Sciences, University of Manitoba, Canada.

Notes

1 We use this term drawing on Deleuze and Guattari's concept of the rhizome as a network that connects any point to any other point and allows for multiple, non-hierarchical entry and exit points.

2 Transdisciplinary scholarship transcends traditional boundaries and embraces pluriversal perspectives (i.e., those that represent different worldviews).

3 Funded by the Landscape Research Group (2024), the Posthuman Walking Project (n.d.) is a transdisciplinary collaboration of researchers from five countries exploring walking with pain in varied cultures and geographies.

4 One which prompted ongoing discussion and a widening process of debate and exchange that in itself prompted further co-created avenues of research.

5 Milligan and Wiles (2010, p. 736) suggest that in "The complex social, embodied and organizational spatialities that emerge from and through relationships of care, landscapes of care open up spaces that enable us to unpack how differing bodies of geographical work might be thought of in relationship to each other."

6 St. Pierre (2019, p. 4) suggests that "In an ontology of immanence one becomes less interested in what is and more interested in what might be and what is coming into being."

7 Here we adopt Deleuze and Guattari's (2020) definition of affect as "an ability for a body to affect and be affected." (2020, xv)

8 For more on deterritorialization see Deleuze and Guattari's *Anti Oedipus* (2009).

9 In cases of uncertain diagnoses, providing an accurate explanation for the person's condition is not possible.

10 Such as the National Student Survey, an annual UK survey that gathers student opinion on courses.

11 Deleuze and Guattari (2020) present the idea of the assemblage as a dynamic and fluid configuration of interconnected components that come together to form a developmental whole.

12 For example, the Wellcome Trust funded Significant Walks, (n.d.) project, whilst defining an innovative synthesised approach to simultaneously gathering and adapting qualitative and quantitative data, subsequently led to questions as to how to move beyond embodiment to capture human/nonhuman interactions.

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ABSTRACT:

This chapter offers a wandering inquiry into how mainstream physiotherapy and physiotherapists have used ideas about walking as a normative imperative reinforcing social control over movement and mobility rather than using our knowledge about movement to support creativity and emancipation. Normal walking in physiotherapy is "walk-for-a-cause" as transport and competition, rather than "walk-for-the-purpose-of-its-own" as non-competitive mobility or wandering, which also includes being walked. By applying Ervin Goffman's sociology of everyday living and social interaction, the chapters unfold walking and mobility as a presentation of self, communication, and negotiation. In real-time interaction, we give off uncontrollable and controllable signs which facilitate or hinder communication—and may even display micro-aggressions. By approaching movement, mobility and walking as communication and interaction, physiotherapy's "normal movement" emerges as discipline and dressage, which can be amended or exchanged with a movement for its own sake. Physiotherapists are knowledgeable in movement science. However, we can move towards roles as bricoleurs by amending this knowledge with philosophers', artists', sociologists', or geographers' understanding of wandering and wanderlust. Psychogeography merges these approaches and is offered as a toolkit for playing with and enlarging the knowledge of movement, mobility and walking in physiotherapy.

CHAPTER 10

Walking, mobility, and movement in physiotherapy

TOBBA SUDMANN

Walking, in particular, drifting or strolling, is already–with the speed culture of our time–a kind of resistance...a very immediate method for unfolding stories (Alÿs, 2023).

Come take a walk with me!

During my training and education in physiotherapy in the 1980s, we were taught to observe and analyze movement and detect, describe, and subsequently correct abnormal movement. As students, the assumed existence of "normal movement" made it possible to uncover "abnormal movement." This was exciting as a theoretical drill at the clinic but did not match actual movements in real-life social situations. Advancing from basic physiotherapy education to further education in Bobath therapy underscored the importance of movement analysis and the necessity to critically assess and compare the observed movement of patients with the then-golden standard of normal movement. Being the oldest daughter of an orthopedic surgeon, my father constantly reminded me that the real mystery is not why some persons have an asymmetric walk or differences in leg length but how it is possible to walk symmetrically and have the same length of both legs. For him, variation was "normal," and symmetry was a mystery ("abnormal"). When

becoming a physiotherapist, this advice was double-edged; if I could not detect and correct abnormal movement, what would the aim of therapy be?

I hereby invite you to walk with me into walking and mobility in physiotherapy. During our walk, I will show you how "mainstream" physiotherapy and physiotherapists have used ideas about walking as a normative imperative reinforcing social control over movement and mobility rather than using our knowledge about movement to support creativity and emancipation (Delgado-Ortiz et al., 2023; Poteko & Doupona, 2022, 2023).

The Northern hemisphere versions of physiotherapy, as a discipline and a practice, are still encapsulated in a naive and normative understanding of movement, where walking and mobility is a generic capacity that can be assessed, amended, or corrected—without considering walking and mobility as social ordering and stratification, or as concerted collective enactments in motion (Bell & Cook, 2021; Goffman, 1972a, 1972b; Ryave & Schenkein, 1974). When physiotherapists use "normal" walking only as an aim of treatment or outcome measure, we risk reinforcing ideas about how and why one should walk, and we might add barriers to many persons' everyday living and social participation (Davis et al., 2004; Gibson & Teachman, 2012; Hammell, 2023). Walking is essential for sensuousness and recuperation and for disconnection and re-connection with self, others, and the environment. As such, walking includes being walked and being moved when independent two-feet walking is out of range. Being mounted on a horse or using wheelchairs or slow scooters for mobility resonates with some perspectives on walking.

A range of disciplines studies walking and wanderlust. Human geographers have focused on walking, pointing out the micro-politics of the body and the normative policing of movement, which produces (im-)mobility (Sheller, 2018). Sociologists show how the policing of bodies can be seen as interaction and communication (Goffman, 1983) and as microaggressions and oppression (Sue, 2010).

The development of the argument in this essay is Goffmanian. Although he never described his research methodology, anecdotes tell us that he used all available sources to learn how human social life is played out and negotiated; for example, social interaction and communication in everyday life, public life, healthcare, gaming, theatre, and advertising. When he prepared his last keynote speech, he coined this "the interaction order," which means the standard "rules" of sociality, which will be described in detail below.

According to anecdotal evidence, Goffman tested his ideas while evolving them by trying out "improper moves" to study the effects on interaction and communication. Deliberate disturbances of social order have been further developed as a research method by human geographers. Contemporary psychogeography is well suited for exploring new and unknown territories and deliberately trying to disrupt the social matrix of the topic under investigation (Coverley, 2012a, 2012b; Pink et al., 2010), resembling a Goffmanian approach. Psychogeography is a purposeful drift aiming at de-familiarising the well-known and facilitating new perceptions of time, place, environment, and persons. Exploring the "range of motion" of walking and mobility in physiotherapy by drifting can amend movement and mobility as a signifying and meaningful social practice (Crawford, 2006) and reframe health as something that takes shape among diverse living entities in motion (Bell & Cook, 2021, p. 98).

Disciplining or liberating movements?

The scandal of education is that every time you teach something, you deprive a [student] of the pleasure and benefit of discovery (Papert, n.d.).

Education programs and treatment approaches are cultural artifacts; they are always historically situated, and their knowledge platforms change slowly. What is learned is based on much older knowledge and practice at any point in history. Physiotherapy education and practice are subject to the same situatedness. A definition of physical therapy is available within the series of political statements from the World Confederation of Physical Therapy, WCPT (now World Physiotherapy). I will focus my reading of the WCPT policy statement (2019) on four key points:

> (1) Physical therapy is services provided by physical therapists to individuals and populations to develop, maintain and restore maximum movement and functional ability throughout the lifespan. The service is provided in circumstances where movement and function are threatened by ageing, injury, pain, diseases, disorders, conditions and/or environmental factors and with the understanding that functional movement is central to what it means to be healthy. (p. 1)

> (2) Physical therapists are concerned with identifying and maximizing quality of life and movement potential within the spheres of promotion, prevention, treatment/intervention, and rehabilitation. These spheres encompass physical, psychological, emotional, and social wellbeing. (p. 1)
>
> (3) Movement is an essential element of health and wellbeing and is dependent upon the integrated, coordinated function of the human body at a number of levels. Movement is purposeful and is affected by internal and external factors. Physical therapy is directed towards the movement needs and potential of individuals and populations. (p. 3)
>
> (4) An integral part of physical therapy is interaction between the physical therapist and the patient/client/family or caregiver to develop a mutual understanding of their needs. This kind of interaction is necessary to change positively the body awareness and movement behaviours that may promote health and wellbeing. (p. 4)
>
> *(World Confederation for Physical Therapy, 2019. Number points added by the author.)*

A critical reading of the WCPT definition, that is, applying an analytical perspective to disrupt and challenge the taken-for-granted or status quo, facilitates the detection of implicit bias or injustice (Kincheloe et al., 2018). Taking pains to make walking and mobility unfamiliar in physiotherapy is done through psychogeography and Goffman's "improper moves" to facilitate new understanding.

In point (1) of the WCPT definition, movement is positioned as the crux of physiotherapy, and an able-bodied persona is the ideal. Threats to this persona's abilities to move seem to arise mainly from the body, although environmental conditions are mentioned. Furthermore, individual health and functional movement seem intrinsically connected, leaving little room for non-functional or "abnormal" movements. There is no explicit reference to movement or health as something more than individual assets, for example, as a social practice and collective resource, as agency, or as interaction and appropriation of accessible resources (Crawford, 2006; Huber et al.,

2011). Health as a phenomenon being shaped in relation to all things living and moving, and in relation to contextual conditions, is not made explicit (Bambra, 2022; Bell & Cook, 2021; O'Neill et al., 2014). Point (1) applies maximum ability as a goal, as in competitive sports, which might not be relevant for everyone –patients or physiotherapists.

Point (2) furthers the idea about maximization, implicitly stating that if the body is normalized to its maximum capacity, this will contribute to maximizing quality of life. The flip side of this statement risks placing disability or "abnormal" capacities for movement as contributors to a lower quality of life. This argument revolves around an unanimated individual, stripped of social and material context—and from deliberating on quality of life. For many, quality of life is not related to maximized capacities for mobility; instead, it is dependent on having basic needs met, on safety, on social relations, or the environmental consequences of the triple crisis of climate changes, refugees and migration, and urbanization (Sheller, 2018).

Point (3) states that purposeful movement results from the human body's normal function, i.e., an analysis of movement within a normative frame of reference. There seems to be little leeway for un-purposeful, unintentional, uncontrolled, or non-muscular movements. According to this section, physiotherapists' contributions to meet movement needs and potential are based on their work with an individual body.

The last point, (4), states the necessity of interaction to affect and change the person's movement habits or capacity. Again, notice the absences. There is no reference to barriers to movement other than the body itself or reference to material, social or cultural facilitators. Movement is changed by introspection (body awareness) and discipline (behaviour) rather than focusing on health as the ability to forget the body and being able to turn attention and actions towards the social and material context (Gadamer, 1996; Svenaeus, 2000). The WCPT definition neither includes the larger social and material context for everyday living and moving nor states that physiotherapists should contribute to reductions of inequities in health or support or enact advocacy to better people's living conditions and the possibility for a mobile everyday life.

In my reading, the WCPT definition focuses on unanimated bodies dislocated from social and material contexts, where significant differences among us, such as ethnicity, age, gender, socioeconomic status and abilities, are ignored (O'Neill et al., 2014). Considering the significant impact of the

International Classification of Functioning, Disability and Health, ICF, on the theoretical body of knowledge in physiotherapy, this is conspicuous. The ICF offers a framework for contextualisation that challenges an individualistic, atomic understanding of human movement and lifeworld (Moran et al., 2020; Rosenbaum & Gorter, 2012; World Health Organisation, 2002).

My critical appreciation of the WCPT/WP definition also uncovers cardinal features of physiotherapy that can embed animated, situated, living persons, that is, movement and interaction for change. Therapy can incorporate treatment objectives in real-life situations, experiment with creative mobility and walking, and introduce strategies for negotiating movements in public—specifically, contribute to liberation and emancipation through movement. Educational programs and professional bodies offer society predictability, guarantee professional quality, and protect students and professionals against competing interests or quacks. However, by safeguarding professional jurisdiction, I argue that the body of knowledge in physiotherapy favours discipline rather than liberating bodily movements. Walking is an eminent case to illustrate this.

What is walking?

The walker Søren Kierkegaard alludes to the wide-ranging value of walking in the quote below:

> Above all, do not lose your desire to walk. Every day, I walk myself into a state of well-being and walk away from every illness. I have walked myself into my best thoughts, and I know of no thought so burdensome that one cannot walk away from it. But by sitting still, the more one sits still, the closer one comes to feeling ill. Thus, if one just keeps on walking, everything will be all right.[1]

As many writers have done, Kierkegaard highly valued his ability to move by walking. In Gros's (2014) *Philosophy of Walking,* well-known writers, including Nietzsche, Rimbaud, Rousseau, and Thoreau, share their longing for and deep sorrow for the lost ability to walk. Being able to ambulate—to move freely by foot, bicycle, motorized transport, or wheelchair—is intimately connected to identity, health, quality of life, social interaction, and civic participation. The philosophers' narratives on walking are reminders

about privileges; some have resources to move despite bodily restrictions, whereas others get trapped in their bodies and contexts.

Walking is obviously movement, and it is mobility. As such, it is of great interest to physiotherapists to delve into the clinical approaches to mobility, such as walking. According to the world's first professor of clinical gait analysis in the UK, Richard Baker, when assessing or measuring walking as gait, an agreed-upon terminology should be used (Baker, 2013). These concepts are well known to physiotherapists and describe the movements of joints as flexion, extension, rotation, abduction, and adduction. The pelvic movements are defined as tilt and rotation, and movements of the body or the joints are described as movements in space, specifically, in the frontal, sagittal (coronal) and transverse anatomical plane. Additionally, muscle tone is observed and described as neurological signs of spasticity or flaccidity, and joint angles are described as varus or valgus (Baker, 2013). The methodology, concepts, and measurements for clinical gait analysis and assessment of walking in a clinical setting are applicable when an understanding of bodily barriers to mobility or discomfort or pain related to mobility is needed. However, the clinical approach to walking does not capture the personal, social, collective, communicative, material, or contextual aspects of mobility as walking. Nor does it include persons who cannot be mobile by foot—but still refers to "walking" as a generic term for ambulation.

In contrast, Macauley (2000) asks us to remember that there are many possible forms of movement by foot. His short list includes the ramble (e.g., wandering in a specific locale), goal-directed walks (e.g., to the corner store), the walkabout (e.g., in the outback), the stroll (e.g., along the beach), the saunter (e.g., in a park), wilding (e.g., in the woods), circuit walks (e.g., through museums or malls), the *derive* (e.g., a politically-engaged walk), and *flânerie* (e.g., an aesthetically-informed walk through the city)(Macauley, 2000). Lorimer's texts about a person who walks remind us that the person cannot be separated from the movement, introducing concepts like a walk-event, a walker-person, and a walking-act, that is, a practice (Lorimer, 2011). Walking is movement and mobility for a purpose or its own sake. Walking or walk-like movements, such as tics, cramps, sleep-walk, or even falls, may be unintentional. Walk-mobility is performing bodies in material and social space –a situated collective enactment (Goffman, 1972b; Ryave & Schenkein, 1974).

Reading across health-related, philosophical, sociological, and geographical literature on walking, a common denominator is the construction of walking as identity and health and as mobility and action. Movements are always situated in time, place, and space, whether the literature refers to walking or other forms of ambulation. Henceforth, walking is done in response to and negotiating with living and material contexts. It is also a concerted collective action. Henceforth, subjecting physiotherapists' mainstream understanding of walking to a critical appreciation can uncover unintended disciplining approaches and untapped resources for liberation.

Competitive walk—disciplined movement and discourses of "us"

Walking—or rather gait—in physiotherapy can be viewed as dressage, competitive walking, intentional movement, or walking-for-a-cause. As a clinician, I expect to observe that ailments, impairments, discomfort, or disability influence walking. Walking may also be affected by sleep deprivation, depression, emotional arousal, medication side effects, thirst, or hunger. Walking style, speed, or pattern is affected by the shoes the walker is wearing (e.g., too small, too big, high-heeled, heavy), clothing (e.g., restricted movements), the surface beneath the shoes (e.g., tarmac, sand, gravel, grass, mud, water, ice) and the surroundings (e.g., light, weather, traffic, materiality, moving or still context, sounds). This is everyday knowledge for all mobile people.

This illustrates the aim of the ICF (World Health Organisation, 2002)—that the functional capacity detected in an ideal environment (e.g., a clinic) by no means equals how that capacity can be used in a real-time living environment or what it takes to be able to move outside a standard clinical setting. Physiotherapy is based on movement analysis in standardized settings, and we regularly teach our patients correct, "normal," and efficient movement patterns within these contexts. To my knowledge, few non-human animals (besides horses) are subject to the same standardized learning environment, being taught and evaluated following predefined movement patterns. The equestrian dressage refines and choreographs movements that horses may apply in natural and varied environments, in addition to teaching movement patterns that humans find beautiful to watch but which are of little use to a free-roaming horse. Dressage is a highly appreciated equestrian sport worldwide, even though it exposes horses to significant health risks. One

might ask if physiotherapists expose humans to the same risks by our dressage instruction.

According to Middleton et al. (2015), "walking speed (WS) is a valid, reliable, sensitive measure appropriate for assessing and monitoring functional status and overall health in a wide range of populations." Researchers have established a covariation between gait speed, non-communicable diseases, and life expectancy (Stanaway et al., 2011). Gait speed can be measured in almost any setting, and the context's characteristics should be considered when interpreting the results and comparing them with the walker's habitual gait speed in a clinical or familiar setting. However, these researchers are unanimous that if we observe changes in gait pattern or gait speed, there will always be a need for thorough assessments and consideration to uncover the reason(s) for this change. Middleton et al. (2015) suggest that gait speed should be recognized as the sixth vital sign, together with blood pressure, heart rate, temperature, respiratory rate, and blood oxygen. As with the first five vital signs, changes in gait speed must be followed up with clinical assessment. As walkers, we might discover changes in gait speed ourselves, mainly while walking with others. Human and non-human animals walk for various purposes, including a wide range of competitions based on walking. Marching, trail-walking, trekking, hiking, hill-wandering, yomping, peak-bagging, pacing, speeding, or walking for display of merits are a few examples. This form of walking mobility is pre-planned, methodical, disciplined, responsible, orderly, and linear—as in dressage. It creates a "sense of community" of the walking "us."

Anecdotal evidence, personal observation and hearsay report that horses in posh stables and dressage arenas lose some of their courage and balance in uneven terrain and are often scared to enter pastures or natural environments to roam freely. Their functional and intentional capacities have been restrained to the point they experience a "fear of moving"—just like humans who have a meagre movement repertoire or never walk on uneven ground or in staircases. Animals and horses exposed to changing, uneven and unpredictable surroundings enlarge their movement repertoires and ability to manage new challenges.

Animal welfare organizations/agencies have introduced the right for horses to be horses, for example, to roam freely with a herd. Equestrian training and dressage subsequently must include play and "horsing around." Elite human athletes are moving in the same direction—to increase capacity in

a discipline (e.g., football, running, or ski jumping), one must widen one's capacities and creativity in mobility, not restrain it. How well does physiotherapy account for this?

Non-competitive walk—creative mobility and discourses of "them"

A journey implies a destination, so many miles to be consumed, while a walk is its measure, complete at every point (Alÿs, 2023).

To inquire into the disciplining and liberating intersection of movement and interaction and change in physiotherapy, I suggest we revisit an argument by the Norwegian sociologist Per Solvang a few decades ago. He aimed to discuss the applicability of discourse perspectives on disability (Solvang, 2000) by analyzing three discourses: (1) normality/deviance represents questions about rehabilitation and integration, (2) equality/ inequality represents the struggle for economic welfare and equal rights, and (3) us/them represents a valuing of disability as a basis for identity formation and as a question of ethnicity.

The different discourses position people with disabilities differently (e.g., poliomyelitis/polio, club foot, or sensory impairments). Polio, foot anomalies, or lack of vision or hearing will invariably affect mobility and walking. The three different discourses show how differences in the framing of disability also affect mobility and walking.

Solving argues that the normality/deviance discourse is embedded in movement analyses and gait measurement. When deviance from the agreed-upon normative point of reference is detected, the means to correct the deviance are rehabilitation (e.g., surgery or braces) and prevention (e.g., polio vaccination). Actions taken to correct or eliminate the "problem" underscores the importance of normality. Normality is a driver for developing new treatment modalities and technologies, giving citizens in welfare states access to polio prevention and treatment, surgical correction of club feet, and surgical correction or amendment of sensory impairments. The normality/deviance discourse is easily observed if we acknowledge how humans move, talk, walk, dress, produce sounds, occupy space, or withdraw from space, affecting our assessment of them. The difference between the normative and the deviant emerges when we consider whether this person is well known, reminds us

about someone we know, or someone or something we have heard about, or whether the apparition or demeanour imparts distrust and malevolence. Human and non-human animals get weary when unknown movements or apparitions appear—strangeness may be interpreted as deviance or a threat.

Solvang traced how the equality/inequality discourse emerged due to activism by people who experienced barriers toward social participation or unequal access to public services or common goods. Those concerned have used collective action to call attention to injustice and structural violence due to ethnicity, disability, gender, or age. The welfare states (or insurance companies) demand that efforts be made to rehabilitate and normalize deviance and offer monetary compensation if normality is out of range. In affluent welfare states such as Scandinavia, compensations may include assistive technology, ambient technology, personal equipment such as braces or wheelchairs, e-health services, monetary compensations, personal assistance, or disability benefits. The aim of compensation for deviance or "handicaps," like in golfing, is to place all participants on equal footing. However, the flip side of compensatory means is that the recipient is constructed as a client and person who cannot take care of themselves or participate without extra measures taken. The implicit bias is that the recipient still is "deviant."

Lastly, Solvang suggests that the us/them discourse can be seen as a protest or subversion of the normality and equality discourses. The creation of "them" depends on the othering of those perceived as different from "us." By turning the tables on "deviance," it is possible to embrace stigma, celebrate differences, and appreciate the experiences gained from marginal positions. Embracing stigma can be interpreted as celebrating social disruptions and subversive mobility. Disability scholars have shown how expertise by experience can add value to how we frame functioning, impairment, and disability, as in ICF. Moran et al. (2020) and Rosenbaum and Gorter (2012) demonstrate how the ICF framework can be moulded due to knowledge gained from those concerned (Moran et al., 2020; Rosenbaum & Gorter, 2012).

Furthermore, the us/them discourse is a communicative and action-oriented practice. Political activism and critical research have shown how structural, material, cultural or symbolic barriers make people mobile or im-mobile (Cresswell & Merriman, 2011; Gibson & Teachman, 2012; Hammell, 2023; Sheller, 2018). Demands for inclusive environments, universal design, equal access to green parks or seafronts, public rights of access, and

freedom to roam are examples of operationalization of mobility and spatial justice that follow the subversion of stigma.

The three discourses of disability intersect in everyday life. Judging by the demand for health services, the public expects access to medical treatment (from deviance to normality) and compensatory means (monetary compensation for disability/inequality). Furthermore, communities of interest (e.g., patient organizations and Deaf communities) also insist on the embedded value of variation across humanity (celebrating difference).

By acknowledging these three discourses in physiotherapy, our efforts to understand, support, and develop strategies for movement and interaction need to change. Walking for its own or sociality and sociability necessitates different concepts than those available in gait analysis, for example, walking-for-art, sauntering, ambling, strolling, plodding, promenading, wandering, roaming, potter about, cruising, toddling. These concepts belong to the us/them discourse and beg a discussion of mobility and walking as a presentation of self, communication, and interaction.

Mobile communication and interaction

The Canadian sociologist Erving Goffman (1922–82) provided an array of perspectives that physiotherapists can use to fill in the gaps in traditional movement analysis and to challenge taken-for-granted normative and disciplinary bias in mainstream physiotherapy. Goffman studied human interaction all his life, building his argument through studies of sheep and their keepers and herders at the Shetland Islands, studies of gamblers, studies of filmmakers and actors, and studies of mundane human interaction and movements in public and institutional spheres. His studies aimed to unravel the least parts and the most extensive whole of everyday living, based on which he developed the interaction order sui generis (Goffman, 1983). By combining insights from ethology (studies of animal behaviour) with his studies of humans, he offered an analysis and description of how social interaction plays out in everyday life. Goffman observed that movements and what he called "micro signs" were decisive for social interaction. In all his studies, Goffman introduced new concepts to explain his arguments, concepts we were cautioned to view as scaffolds that are to be dismantled later. Before he died in 1982, he summarized his contribution to the

sociology of everyday living in his seminal paper "The interaction order" (Goffman, 1983).

The interaction order is a phrase that speaks to how human and non-human animals use movement as signs to impart trust and interest and how human and non-human animals assess each other's movements to evaluate whether the other(s) can be trusted. Goffman's (1983) analysis of the interaction order was a major contributor to bringing the physical body to the front in sociology, which earned him a reputation as "The sociologist of the body" (Frank, 1990; Turner, 2001). For physiotherapists, adding knowledge from ethology (studies of animal behaviour) and the sociology of the body will broaden our theoretical platform and add new methods to our practical toolbox—that is, increase our "range of motion."

The titles of Goffman's books[2] refer to social interaction, how people move and use their bodies in public and private spaces, and how the differences between them always have a bearing on social interaction. How, why, and when these differences matter is an issue for negotiations in real-time social interaction and for interpretation for researchers of everyday life. Goffman was invited to give a presidential address to the American Sociology Association in 1982, the year he died from cancer. His address summarised his contribution to the sociology of everyday life, refusing to locate this as micro or macro sociology, stating "The interaction order" (1983) as the significant issue in any sociological study of humans in their natural environment—their everyday living within those contexts people happened to be situated. Goffman's vocabulary for describing socio-cultural demeanour and communication can be appropriated in the assessment of walking.

Giving signs off—unintentional communication

Physiotherapist's assessments and evaluation of walking and mobility are dominated by observation by eye, often followed by detailed assessments of the body—for example, muscles, joints, co-ordination—either manually or using technology (e.g., force platforms). The results (or signs) are scored and evaluated using agreed-upon standards of normal movements.

To use Goffman (1959/1990) in physiotherapy, human beings can be seen as "sign vehicles" or carriers of abundant information about themselves, their intentions, the situation and the context. Those present interpret these signs considering the expected style and demeanour of the place and situation. Accordingly, a physiotherapist probably interprets movement signs

differently from a photographer. Goffman differentiates between signs given *off* (an unintentional form of communication) and signs *given* (an intentional form of communication). We *give off* signs that are difficult to control or redesign, such as age, skin colour, height, width, weight, visual disability, assistive technology (e.g., wheelchair, walking stick, crutches), some tattoos, assistive technology such as glasses or hearing aids, or tics and sounds (e.g., Tourette's). Psychotropic drugs and psychopharmaceutic medications have distinct side effects that are near impossible to hide, such as slow gait with little variability and expressionless face, as have steroid-based medication that might create flashes or "moon-faces." Physiotherapists usually detect, analyze, and document these signs without considering situational or cultural bias.

Dog owners know that dogs get alerted when they observe strange movements (unfamiliar gait patterns), and horse riders know that horses may freak out and bolt at the sight of an umbrella. Human animals tend to do the same—we observe and evaluate whether this or the other is safe. What is considered safe and morally trustworthy is culturally specific (Goffman, 1983). Women's ways of walking have been used as justification for sexual assault—"the walk was intentionally inviting." Walking is both intentionally designed to fit into or subvert cultural expectations, that is, given as signs, and it *gives off* signs the audience compares to common lore and idioms; for example, stereotypes about persons as age, gender, disability, or props (e.g., a cane or wheelchair). When in the presence of others (face-to-face or virtual), our figure and demeanour will be assessed and evaluated within available frameworks, including physiotherapy.

Keen observers of gait can identify visual impairments by watching walking. People who have not been subject to oral and visual explicit and implicit corrections of gait and walking, such as those with visual impairments, and who rely on the interpretation of contextual clues and exercise flexibility and creativity in relation to their environment, give *off* different signs in walking compared to people without visual impairments (Dos Santos et al., 2022; Hallemans et al., 2010). It is beyond the scope of this essay to further discuss why this is so. However, such observations should prompt curiosity and creativity in students or therapists of movement and mobility.

Giving signs—intentional communication

Some of the information we *give* is predesigned and self-chosen, such as clothing, hairdo, makeup, jewellery, walking style, tone of voice, talking, and

the use of space (Goffman, 1959/1990, 1983). Religious codes for dressing can be observed in orthodox Jews, the Amish or within Islamic cultures, for example. Secular cultures pay heed to fashion and evaluate demeanour and deference in relation to brand, spending and performance (Goffman, 1979). The signs we give and the signs we give off demand an audience. Interaction results from the audience's response and the ongoing negotiations to create a situational definition. The situation comes off in Goffmanian terms when we agree upon what's going on. Examples of "coming off" are fluent pedestrian traffic, where we observe each other to give way to those in a hurry, or our micro-interactions with others to ask, often without speaking, if they can give way for us. Negotiations about what's going on are done by words, gestures, micro-movements (movement of eyes, eyebrows, fingers, feet), props (bags, canes) or other movements (turning the head, shifting weight between feet). The signs given and given off are received and interpreted by the audience (one or many) and constantly refined to create the impression one wishes to impart as a collaborative task. When we agree upon who we might be in this situation, the situation may come off—and we can pursue a coffee break or move smoothly past each other in a pedestrian crossing. The passing of strangers without making visible the ongoing negotiations was framed as "polite in-attentiveness" by Asplund (1987).

Communication and interaction by movements involve signing, giving signs, and giving *off* signs. The pre- or replanned, methodical, disciplined, responsible, orderly, linear walk, marching, parading, or walk-for-a-cause tell and show a different story than walk-for-the-purpose-of-its-own, walk-for-art, sauntering, ambling, strolling, plodding, promenading, wandering, roaming, potter about, cruising, toddling, and walking for sociality and sociability. The walker might be seen as an aimless idler, a loafer, or a city stroller. The walker-person(s) might walk leisurely, enjoy a task-unrelated walk, or just sense and perceive self or surroundings. The walk-event might be to wander about without paying much attention to the surroundings, enjoying mind-wandering or the spirituality of walking (Usher, 2020). The mere presence of this vocabulary to describe ambulation and movement by foot illustrates how movement is never neutral—it is always already embedded in a socio-cultural and material context.

Real-time interaction

For Goffman (1979), this intricate and ongoing negotiation and evaluation of persons with whom we interact necessitates access to templates or idioms; we depend on a common lore of knowledge about "things that look the same" and how to evaluate them. When the observed figure is at odds with all available templates, it may prompt curiosity or fear. Characteristics with low social value and prestige or otherwise discredited may be referred to as stigma or stereotypes, a parallel way of describing idioms.

Micro signs are used to ease social interaction, discrimination, marginalization, and policing of movements. The recent review by Pring et al. (2025) and Malli et al.'s (2019) phenomenological analysis of personal experience with persistent tic disorders such as Tourette's syndrome show how persons who behave "disorderly" are stigmatized, isolated and discriminated against. Davis et al.'s (2004) paper "In motion, out of place" is an eminent example of how persons with Tourette's syndrome are believed to disturb the social order in public spaces with their uncontrolled or unexpected movements and sounds, making the title a poignant paraphrase on Mary Douglas' famous notion that "Dirt is matter out of place (Davis et al., 2004; Douglas, 2002).

When persons with Tourette's syndrome give off signs by movements or sounds that are believed to disturb public order, or they experience reduced access to some social arenas, this is seldom brought across in plain words. Derald Wing Sue, professor of psychology and education, has taken Goffman's analysis of the interaction order to the next level and explored how microaggressions are part and parcel of social and cultural control, disciplining, discrimination and marginalization (Sue, 2010). Micro-aggression is signs *we* deliberately *give* or *give off* to communicate dislike, oppression, or discrimination against people who deliberately *give* signs or involuntary *give off* signs we do not appreciate or accept (Malli et al., 2019; Pring et al., 2025). Sue (2010) explores microaggression along three strands: micro-assault, micro-insult, and micro-invalidation. Micro-assaults are small but significant physical signs such as bumping into when passing, pretending to grab a cup of coffee but dropping it and blaming the other, destroying other persons' things or props, or bumping into a person and throwing derogative comments on their walk or appearance.

Micro-insults are often given as compliments, for example, telling a person with a prosthetic leg, "Your walk is very nice." This implies a comparative

gaze, where the prosthetic leg is compared to a living leg, and the observer uncovers an expectation about a deviant walking pattern. People with disabilities often get comments which are intended as compliments; however, these comments reproduce a normative understanding of normality and deviance. The third form of micro-aggression is subtle but conscious: micro-invalidations. Turning a blind eye or slightly raising an eyebrow, for example, is used to make a statement or utterance invalid. Ignoring an attempt to join a group or conversation can be done subtly by a micro-turn of the body, making the request or argument invalid or insulting. These strategies are well-known in studies of bullying (Sue, 2010) but are less appreciated as part of everyday interaction and communication. Only a few scholars have addressed micro-aggression in physiotherapy, focusing on challenges faced by black or LGBTQIA+ students (Bakouetila-Martin et al., 2023; Primeau et al., 2023). To my knowledge, micro-aggressions have not been addressed as communication, movement, and mobility in physiotherapy.

For Goffman, the situations described by Sue as microaggressions lead to alienation from interaction (Goffman, 1957, 1967/1982). Communicative signs we *give* or give *off* are either credited (positive), discredited (negative) or coupled with stigma and prejudices. People are, by covert, subtle or visible signs and micro-movements, excluded from social interaction and participation and may experience bullying, discrimination, or marginalization due to how signs they *give* or give *off* are appreciated by their audience. In Goffman, an audience is any person(s) in perceptive distance, such as face-to-face interaction, or present-day communities, such as an online virtual audience.

Movement, mobility and walking always have a personal signature, which makes it easy to disappear or appear in a crowd. Personal movement styles tend to be persistent throughout life. Any movement is part and parcel of a situated presentation of self and situated social interaction; it's a suggestion or an argument in an ongoing negotiation on "What's going on?" Some movements are a form of exercising agency and negotiations about possibilities for doing, being or becoming the person one wants to be, as well as about barriers and facilitators to social interaction and participation. Humans constitute their interactions moment-by-moment, and as physiotherapists know all too well, interactions are vital for creating, keeping, and sharing sources for health (Crawford, 2006).

When physiotherapists assess, advise or teach people how to move, we are well advised to think about movement as a form of communication—not just as a vehicle for purposeful transfer from one location to another. We are also well advised to consider our gaze, micro-movements, and comments—especially those intended to be positive but can be experienced as derogative or disciplinary. Micro-aggression, such as invalidation and insults, are key features of alienation from interaction, dressage, and discipline, and they slip into negotiations about normal mobility and walking.

Keep moving: From dressage to bricolage in physiotherapy

I have mulled over normal and abnormal walking and movement for decades, and by appropriating ideas and practices from the arts, applied drama, social sciences, and the humanities, I have enjoyed many strange encounters with the familiarity of physiotherapy theory and practice.

We learn how to walk, stand, sit, and move within different material contexts, and we learn the various social codes and meanings of movement. We know by heart which movements are recognized as socially unacceptable and where we are allowed and not allowed to roam freely. We are sometimes subversive and use this knowledge to provoke or protest by displaying socially unacceptable movements or to entertain, as caricatured in Monty Python's comedy sketch "The Ministries of Silly Walks."[3] John Cleese demonstrates the importance of orderly walking to us by moving "out of place," just like drag queens and kings, and advertisements can show us how we perform gender (Goffman, 1979; West & Zimmerman, 1987, 2009). Goffman's students, West and Zimmerman, added a valuable dimension to the interaction order by showing how gender affects performance (i.e., communication and signing). Viewing movements and signs as socio-cultural and context-specific performance applies equally to age and ethnicity, which should be considered in any movement analysis in physiotherapy.

The Monty Python comedy sketch on walking also shows us the vast varieties and capacities for human movement and the possibilities for disrupting and subverting gait as dressage. To be able to appreciate gait and walking in physiotherapy critically, psychogeography was appropriated in this essay, mainly due to psychogeography's experimenting with drifting and standing still to elicit social reactions and responses resembling Goffman's improper moves. They inquired into rules and regulations for appropriation of place

and space and made problematic social injustice and policing of movement, occupation of space and placemaking.

Physiotherapy practice and theory may incorporate such an experimental methodology. Still, they could also consider critical ethnography and bricolage as alternative methodologies for creating strange encounters with the familiar (e.g., the normative ideas about walking). Critical ethnography and bricolage are methods developed for righting social injustices and detecting, exploiting and applying resources that can be made available for improving the well-being and justice for all (Cook, 2005; Hagues, 2021; Madison, 2011). If we accept that health is the result of social interactions and the use of available resources and contextual conditions (Crawford, 2006; Huber et al., 2011), that is, something more than individual biomarkers, physiotherapists can use an amalgam of movement science, applied drama, the arts, or social sciences to facilitate movements and mobility in ways other than dressage. This eclectic approach is recommended when a critical approach towards a pressing issue is warranted.

Following Kincheloe et al. (2018), these inter- and cross-disciplinary theoretical moves have been referred to as bricolage, which they see as a key innovation in strengthening criticality. They suggest that critical research allows the researcher to become a participant and the participant a researcher (Kincheloe et al., 2018). Critical inquiries via bricolage into conditions for movement and mobility enable patients and therapists to play different roles while aiming for change (therapeutic outcome) (Thille et al., 2020). Or, in a Goffmanian understanding, this experimentation helps when aiming for a more expansive repertoire of performances.

In his book, *The Enigma of health*, Gadamer (1996) stated that health is the possibility of forgetting one's body and a feeling of being at home in one's own body. When the body quietly resides in the background, we can direct our attention and actions toward our social and material context. When the body is ill at ease, the feeling of being at home shifts towards uncanniness or homelessness (Gadamer, 1996; Svenaeus, 2000). Homelessness draws our attention and intentionality inwards, to the extent that one risks being excluded from sociality and participation.

I propose that movement and interaction are available means to offer a less disciplined and confined approach to prevention, assessment, treatment, or rehabilitation in physiotherapy (i.e., assisting and facilitating bodily

homecoming). Change is based on new understandings, which for Gadamer evolves as an event of play, a practical and cognitive experience of being played "hither and tither, to and fro," in a dialogical movement where communication may be without words (Vilhauer, 2009, 2013). Philosophers and scholars who have followed Gadamer's footsteps emphasize how strange encounters with the familiar create new knowledge (Coverley, 2012a, 2012b; Ramsden, 2017; Shalom, 2019). The common denominator is that being moved literally or metaphorically facilitates change and may relieve the body of sensations of uncanniness and homelessness. Furthermore, when one can be self-forgetful or feel at home in one's body, encounters with alterity, strangeness or otherness increase the range of motion and facilitate creativity and emancipatory movement strategies (Hamlin, 2015). Bricoleurs, amongst others, show us how movement, mobility, and walking may be play for all.

Notes

1 Søren Kierkegaard, in a letter to his favourite niece, Henriette Lund, in 1847, https://tolstoytherapy.com/kierkegaard-on-how-if-one-just-keeps-on/ (accessed 9 October 2023)

2 *Presentation of self in everyday life* (1959), *Behaviour in public places* (1963), *Stigma: Notes on the management of spoiled identity* (1963), *Interaction rituals: Essays on face-to-face-behaviour* (1967), *Strategic interaction* (1969), *Encounters: Two studies in the sociology of interaction* (1972), *Relations in public: Microstudies of the public order* (1972), *Gender advertisements: Studies in the anthropology of visual communication* (1979).

3 The Ministries of silly walks https://en.wikipedia.org/wiki/The_Ministry_of_Silly_Walks Accessed 9th October 2023

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ABSTRACT:

This chapter offers a radically revised concept of therapy. Therapy is a concept that lies at the heart of what it means to be a physiotherapist, so it seems surprising that the profession has never defined what the therapy in its name actually means. In recent years, physiotherapists have been looking for new ways to express an expanded idea of their profession, but these have concentrated on more humanistic forms of practice. Here we take a different, post-human approach, understanding therapy as a universal process common to all entities. We begin by critiquing the paradoxes and inconsistencies evident in physiotherapy's present understanding of therapy and then contrast this with an approach drawn from the writings of Gilles Deleuze. We conclude that therapy is a much more inclusive and complex phenomenon than the profession has previously understood, and suggest it has the potential to radically transform the physical therapies in the future.

CHAPTER 11

The possibilities for a posthuman physiotherapy

DAVID A. NICHOLLS, MATTHEW LOW, AND FILIP MARIC

Background

For the longest time, concepts like touch, movement, function, and rehabilitation have been welded so tightly onto the heart of physiotherapy's professional identity that they have formed an iron nucleus that has been highly resistant to change. In the broadest sense, rehabilitation means the same to the profession today as it did after World War I; therapeutic touch still means effleurage, petrissage and tapotement; and movement is still confined to the biomechanical human body. But perhaps the word "therapy" is the paradigm case of this stability. Therapy gives the profession half its name, and the term still means the treatment, healing, repair, and rehabilitation of illness and injury, just as it did when it came into popular use in the mid-1800s. But is this adequate for physiotherapy or health professional practice more widely today? It is our contention that the stability of concepts like touch, movement and therapy have undoubtedly given physiotherapists a sense of security, but they have also stifled the growth and development of the physical therapies[1] and made it hard for the profession to adapt to the changing nature of health and healthcare.

In this chapter we want to show that contrary to the image put forward by the profession, a concept like "therapy" is anything but fixed, stable, or immutable. We want to show that therapy is infinitely more complex, dynamic, and liminal than we have allowed for in the past. To do this, we

begin by critiquing the deep anthropocentrism, or person-centredness, inherent in the profession's approaches to therapy, before looking at the recent posthuman "turn" in philosophy and social theory. We explore some of the key ideas embodied by posthumanism before imagining how these might inform a new kind of physiotherapy. Our point in doing this is to show just how radical and lively concepts like therapy can be and, in doing so, open the possibilities for much more mobile, responsive, and liminal forms of physiotherapy.

Introduction

How should we understand how the concept of therapy works currently in physiotherapy, then? To begin with, we suggest that one of the most fundamental and yet perhaps fundamentally mistaken assumptions about (physio)therapy is that it is performed *for* people *by* people. It is fundamental because the image of a human therapist assessing and treating a human client/patient appears throughout the profession's many curricula, legal statutes, journal articles, textbooks, and promotional media. The human therapist-patient dyad has been one of the defining features of physiotherapy's professional identity. But is this a true, fair, or accurate representation of "real" physiotherapy?

While it might be seductive to think of physiotherapy as fundamentally humanistic, there is clearly more to the nature of physical therapy than person-centred care. Consider this simple case study, for example, that could be extrapolated to almost any physiotherapy encounter: In a high dependency unit, a physiotherapist, Alex, manually hyperinflates a patient's collapsed and consolidated lung segment. In this scenario, where exactly does the therapy "reside"? Is Alex the therapeutic agent, or is it the air pressure, the alveolar tissue, the material making up the Ambu bag, or all of them combined that does the "work" of therapy? Is the therapeutic effect entirely of Alex's making? Or perhaps therapy is merely an expression of what the patient feels. If so, can there be any therapy performed if Mika, the patient, is unconscious? When can we say Alex's therapy begins? Is it with the first thrust of air, in the planning 10 minutes ago, or in Alex's prior training and experience? And if Mika's recovery takes weeks, when can we say Alex's treatment ended? Additionally, we should ask if therapy is always meant to be "good"? What if we must hurt or damage one thing (a tissue, a belief, a physical capacity, or

a personal relationship, for instance), to make something else better? Can therapy actually be "bad"? What about death? Can death be therapeutic if it ultimately brings about a new healing/recovery? (Afterall, isn't the death of tissues a natural part of the healing process?). What these confounding arguments suggest is that the therapeutic part of physio*therapy* is more complex than the profession has previously acknowledged.

It is our contention that physiotherapists have always implicitly understood this, but that the full implications of this understanding have never been realised. We know that physiotherapists have always seen therapy as more-than-human because they have always centred their practice on the biochemical and neurophysiological processes responsible for healing; on the many technical, electro-physical and manipulative modalities used in practice; and the socio-political healthcare context in which physiotherapy resides; none of which are entirely reducible to "personhood." At the same time physiotherapy has also been increasingly criticised for its long history of *de*-humanising practices: of over-emphasising pathological anatomy at the expense of human experience; of organising itself around body regions (musculoskeletal, neurological, and cardiorespiratory physiotherapy, for instance) and valorising this biological reductionism in its professional expertise and specialisation structures; of objectifying people as "the stroke patient" and "the problem shoulder"; of normalising ability and stigmatising disability; and of ignoring social determinants of health.[2] So, on the one hand physiotherapists call therapy an act of treatment, healing, repair, and rehabilitation of illness and injury performed by one person on another but, at the same time, the profession holds within itself a latent understanding of therapy as much more than this: as something more inclusive, more nuanced and complex.

In recent years there has been something of a humanist turn in physiotherapy, with the growing focus on person-centred care, psychologically informed practice, and the growth of qualitative/interpretive research (Mudge et al., 2013; Melin et al., 2019; Ahlsen et al., 2020; Beales et al., 2020; Cosgrove and Hebron, 2021). This turn has given much greater credibility to our client's/patient's subjective lived experience; something that was often ignored in older, more paternalistic, objectivist forms of physiotherapy. But it has done little to expand our understanding of therapy beyond human behaviour, cognition, and (inter)subjective human experience (Nicholls et al 2023).

And somewhat ironically, just as physiotherapy has embraced its humanistic side, humanism itself has begun to lose its appeal (Nealon, 2021).

In recent years, a growing body of cultural, historical, philosophical, political, and social theory has turned a critical eye on the humanism that has dominated Western thinking since the Enlightenment.[3] The Enlightenment created the idea that human beings were autonomous sovereign entities and, by virtue of their conscious self-awareness and cortical complexity, apex social actors, sitting above animals, plants and inanimate "things" in the great chain of being. And it is this human hubris that has come in for such strong criticism in recent years, not least because of the impending climate catastrophe, and our history of colonisation, genocide, patriarchy, and perennial warfare (Irigaray and Marder, 2016; Morton, 2018). So, physiotherapy's turn towards the human makes sense in the evolution of the profession beyond its traditional affinity with seeing the body-as-machine, but it is also somewhat out of step with a cultural Zeitgeist that now sees anthropocentrism as increasingly problematic.

Some humanists have countered that the answer to these criticisms is to strive for better, more sensitive, and attuned people: humans with more empathy and relational understanding; greater equality or personal freedom; stronger government or open markets; less greed and more sharing. And these sentiments can be seen clearly in some of the recent physiotherapy literature (Hutting et al, 2022; Miciak & Rossettini, 2022; Øien & Dragesund, 2022; Rodríguez-Nogueira et al, 2022). But all these approaches also retain the human in the centre of the frame, and we believe this will ultimately prove inadequate to explain the full nature of the "therapy" at the heart of our practice. As the example above hinted, there is clearly more going on in therapy than can be explained in humanistic terms. Fortunately, physiotherapists aren't the first to look beyond the human for more inclusive interpretations of therapeutic theory and practice, and recent years have seen an enormous groundswell of interest in posthuman philosophy.

Posthumanism

Over the last 30 years, posthumanism has become perhaps the largest field in contemporary theory and philosophy. Posthumanism is less about the "death" or complete removal of the human from philosophy, than a concerted attempt to de-centre human identity, freedom, health, rights, and

traditional concepts of human *being*, and focus instead on the agency of *all* things, entities, objects and forms.

Posthumanism has many strands and several different "schools," including critical posthumanism (CPH), feminist new materialism (FNM), actor network theory (ANT), and object-oriented ontology (OOO) (Latour, 1999; Barad, 2007; Bennett, 2009; Grusin, 2015; Harman, 2018). These approaches variously emphasise human intersectional entanglements with the more-than-human and the capacity for entities to affect and be affected by others (CPH and FNM); human-non-human social networks operating symmetrically across a dynamic and fully flat ontology (ANT); and entirely realist ontologies that explore the way objects always do more than we can know (OOO).[4]

Perhaps the philosopher most associated with posthumanism though is Gilles Deleuze. Deleuze (1925–1995) was a French continental philosopher and contemporary of Foucault, de Beauvoir, Derrida, Merleau-Ponty and Sartre. Deleuze's work is widely considered the most thoroughly articulated philosophy of posthumanism, expressing concepts as diverse as time and duration; how entities assemble, form, and decay; the nature of creation, immanence and becoming; images and movement; difference and repetition; virtual intensities and affect; sedimentation and lines of flight; logic and sense; memory and nihilism; plurality and univocity. How can we mobilise Deleuze, then, to rethink the nature of therapy?

Key features of a Deleuzian post-human analysis

Deleuze's writings are often perplexing and his philosophies complex, and we can do scant justice to their breadth here. But there are perhaps four key principles we can use in thinking about the nature of (physio)therapy.

Emphasising the more-than-human rather than human exceptionalism

This is arguably the first principle of posthumanism. Along with others, Deleuze offered an "intense and harsh critique of classical philosophical understandings of the human as separate from nature and other beings, and of the human as superior to other beings in virtue of possessing reason" (Daigle & McDonald, 2023).

This critique has, at times, been directed at some surprising centres of power, including the "Catholic Church, [in] corporate pan-humanism, belligerent military interventionism and UN humanitarianism" (Braidotti, 2019).

But we have also seen it "in the progressive Left, where the legacy of socialist humanism provides the tools to re-work anxiety into political rage" (ibid). It would be wrong then to think that posthumanism was only concerned with the modern, Western, science-based narrative of the autonomous sovereign human. It would be perhaps more accurate to say that it was acutely sensitive to narratives that promote *any* ideas of an endangered human being, and any ethic that privileges human flourishing.

Rather than attempting to make better humans, as many critical, cultural, emancipatory, existential, humanistic, medical, person-centred, and relational approaches do, Deleuze's concern is to develop a philosophy of thought, life and abundant creativity, and the endless repetition of difference in all things, animate or inanimate, imagined or real, actual or virtual. He asks, "what of the nonhuman or the inhuman exceeds man? What forces run through humans to connect them to animals and plants, to incipient brains, to milieus and atmospheres, to geographical and historical events" (Roffe & Stark, 2015, pp. 18-19). In other words, "what forces make the human exceed itself?" (Ibid).

Becoming not being

Nothing in man — not even his body — is sufficiently stable to serve as the basis for self-recognition or for understanding other men (Foucault, 1977).

Identity and being are concepts that are so ubiquitous in Western thinking that it can be hard to imagine a philosophy working in any other way. But Deleuzian posthumanism attempts to do exactly this, by "fractur[ing] the assumed coherence of the world" (Brown, 2020). Posthumanism critiques all the places where "being" is taken-for-granted, and many of these areas form the very backbone of our work in healthcare. Be it in science, with its concern for taxonomy and diagnostic clarity; in phenomenology with its concern for the human (inter)subjective "entanglements with the nonhuman" (Roffe & Stark, 2015, p. 19) and human being-in-the-world; or in social theory with its socially constructed identities based on ability, ethnicity, gender, and social class.

"Being" imposes a temporal and spatial stability on things. And yet, this stability is illusory. In Deleuzian posthumanism, being tells us nothing about the boundless, relentless, and unfathomable creativity (ontogenesis); that is at work in the cosmos: a process that expresses the endless repetition of

creativity through difference rather than sameness; through ongoing becoming rather than static being;

> It's not a question of being this or that sort of human, but of becoming inhuman, of a universal animal becoming—not seeing yourself as some dumb animal, but unravelling your body's human organization, exploring this or that zone of bodily intensity, with everyone discovering their own particular zones, and the groups, populations, species that inhabit them (Deleuze & Guattari, 1987, p. 11).

Immanence not transcendence

In a similar way to "being," transcendentalism penetrates modern thought so deeply that it is both hard to see and hard to imagine otherwise. Transcendentalism refers to the belief that this life, this world is merely an imperfect substitute for a higher "realm," a deeper truth, or more perfect reality. Many religions, ancient and Indigenous cultures suggest that god(s), mythical deities, or malign fates govern life on earth; that there is some other form of other place where people go when they die. Enlightenment science called this superstition, but only succeeded in replacing one form of transcendentalism with another when it argued that there were mind-independent truths and natural laws governing the universe. Plato thought that there were ideal "forms" of everything we experienced in the world — us included — that were merely images of the realm of truth. Some argue that there are "universal" moral values, or social structures like class, gender, and race pre-determining people's lived experience.

So much of our understanding of health and illness has been built on the belief that we learn through a process of resemblance, in which we make sense of our experiences by comparing the present against a "deeper" taxonomy held in memory. We have come to believe that we build our world view based on the similarities we see with the things we already know. But Deleuze challenged this belief, arguing that this represented a transcendental and dogmatic image of thought — a challenge we will return to later.

Deleuzian posthumanism rejects the idea that there is something or somewhere else to which life points, emphasising immanence instead, in which nothing ever has to go "outside" to fully realise itself. Deleuze was not alone in this belief. Bergson used the concept of immanence to revolutionise our

understanding of time. Leibniz used immanence to refer to the most basic entity—the monad—that required nothing beyond itself to exist. Nietzsche spoke of life as a will to exist for its own sake, beyond all moral and religious justifications. And Spinoza saw "god" in all things, always immanent to nature.

Creation not discovery

While humanistic modern healthcare pursues ever greater forms of discovery (with its transcendent beliefs in universal laws and the search for natural truths that exist "out there" beyond our current understanding), post-humanists argue that we are being increasingly locked in the nihilism of instrumental reason. Modern humanism is a mindset that is already prepared to make sense of what it sees. But this is not what creates the "new" or explains the sheer, relentless, inexhaustible superabundance of the universe. It is the shock of the new, the violence of becoming, the danger inherent in surplus that is the engine of the cosmos. As Deleuze says, we are inside a thunderstorm, not a watercolour painting (Deleuze, 1993).

Creation, here, carries two related meanings. Firstly, it refers to the ongoing "deterritorialisation" of being that is the motor of creation; the constant repetition of genesis borne of difference; the endless movement, rupture, splitting, encountering, affecting, coupling, and decaying that accounts for the sheer profundity of life. Here, creation is a process, and hence why posthumanism is often considered a process philosophy. But creation also makes "things"; not just physical objects, but real or imagined people, places, concepts and ideas, banks and computer software, social structures like racism, the Catholic Church, and hope for a better future. There is a constant process of movement and becoming which results in the creation of entities. These entities, though, are only ever thought of as temporary sedimentations in the endless flow of becoming—like folds in a bedsheet or eddies in a constantly flowing stream—and are always subject to more movement and endless deterritorialisation.

With these broad analytical guides in place, let us tackle the question of what we mean by the word "therapy"; not, of course, what therapy *is* — because that would imply it has a static being or identity — but in the true Deleuzian sense, what therapy *does*.

The complex nature of therapy

How might the question of the nature of therapy be reconsidered in the light of posthuman theory? To return, first, to the etymology of the word "therapy" itself, the modern meaning of the term has its origins in Latin, Greek, and modern French, and can be traced to the 5th and 4th centuries BCE and the writings of Hippocrates. Hippocrates used the term "therapeia" to describe various forms of medical treatment, including physical therapies like massage, hydrotherapy, exercise, and diet. It is almost universally understood to be an intentional act performed by one person towards another with the goal of restoration, repair, or rehabilitation.

But here we immediately run into problems because, in the first instance, the definition assumes one person acting with therapeutic intention towards another. But therapy cannot *only* reside in the intention of the therapist because the therapist can never be sure that what they intended will necessarily be therapeutic for the other. And neither can therapy reside *only* in the perception of the patient/client because they may be un-conscious (as in the case study earlier) or unaware of therapeutic bodily processes below the level of conscious awareness (oxygen transport or motor neuron activation, for instance). So, even if we decide that therapy can only be under human control, we will still need a vast new vocabulary to explain all the infinite micro- and macro-therapeutic "events" taking place throughout the cosmos—a task that our human hubris has, to date, allowed us to largely ignore. However, if we eliminate the need for human conscious intention—whatever that may be—to be present for therapy to exist, we open therapy up to the more-than-human, and allow for a much broader view of who or what could be considered therapeutic. We allow for oxygen molecules, gas transport pathways, and air pressure to be therapeutic "actants" in the same way we think of carbon monoxide and air pollution as harmful.

It follows from this that if we allow an oxygen molecule to be therapeutic, should we call it a therapist? If not because we, again, want to reserve this particular noun for purely human actors, what term should we use for the former? (More to the point, what part of "me" *is* the therapist anyway, given that 60% of my body mass *is* oxygen, and we have already established that therapy cannot only reside in my conscious thought). In truth, we instinctively know that other entities can be therapeutic. Early morning sunshine can be therapeutic, so can a pet, a glass of wine, and a walk in the park.

And these things are not merely therapeutic *for us*. Apes relax by sunbathing, for instance, and sunlight triggers photosynthesis, which is therapy for plants as well as being the engine for life on earth. But there is also growing evidence of intentional acts of therapy in the more-than-human world — acts that were once only attributed to humans. Ants have been shown to care for ill or injured workers, bacteria and fungi show conspecies care by excreting toxins to protect others from threats, and plants heal tissue wounds and filter pollutants.

So, therapy cannot be said to lie in human conscious intention or perception, but neither is it necessarily a *purposeful* act because sometimes *not* doing something can be therapeutic. Equally, it is impossible to identify a specific moment when therapy can be said to begin and end. Sometimes therapy occurs at the speed of an atomic reaction, sometimes it operates over millennia. And, in terms of scale, therapy can be contained to the interaction between two sub-atomic particles, or it can envelop entire galaxies. The question of intention and purpose in therapy also needs thinking about. What *causes* therapy to begin or decay, or what influences the cast of actors enveloped in therapy, is unknown. But it *must* have some degree of intention built into it because without some therapeutic "purpose" we would be unable to differentiate a "therapeutic" moment from the myriad random collisions occurring endlessly throughout the cosmic.

Given the complexities of therapy, physiotherapy's historical affinity with the body-as-machine, and the profession's limited engagement with complex philosophy, it is perhaps understandable that physiotherapists might now struggle with the kind of vastly expanded idea of therapy being promoted here. But Deleuze again offers us a solution in his alternative to our conventional, dogmatic ways of thinking. Deleuze believed that the way we think about problems like the nature of therapy has laboured under a misconception for centuries, relying too much on concepts like identity, resemblance, and representation. In simple terms, scientific thinking encourages us to make sense of the world by comparing our experiences against pre-existing categories, taxonomies, and knowledge frameworks. These are largely implicit and unreflective sense-making processes based on pre-established schema or constellation of suppositions. They form a kind of intellectual orthodoxy that pre-conditions the possibilities and limits of thought, setting boundaries on what is reasonable and unreasoned, true, and false. Ergo, we have a

mistaken understanding of therapy because we have been labouring under a dogmatic image of thought.

And although these systems have become deeply entrenched in Western science — and more so, perhaps, in areas like healthcare, which must repeatedly assert its normative thinking in the face of human relational complexity — their origins date as far back as the writings of Greek philosopher Aristotle, who divided the world into identity categories such as genera, species, and individuals.

Therapy and the shock of thought

The dogmatic image of thought has led to two fundamental problems for Deleuze. The first is that it misrepresents the "real" nature of thought. In representational thought, nothing surprises us: everything we experience is made to fit some pre-digested, pre-existing category or taxonomy; "we engage with the placid recognizable world on our own account" (Roffe, 2020, p. 182). And yet, as Deleuze shows, we are constantly being surprised by our contact with the world. Indeed, it is the *shock* of events that forces us to think. For Deleuze, thought is an act of trespass, violence, strangeness, and enmity; an absolute necessity (Deleuze, 1993, p. 139). As Jon Roffe puts it;

> Not only is it not natural to think, the fact that we think about anything at all is only the result of having encountered something in sensation — something that is entirely alien to us, and certainly to our everyday recognition-based knowledge of the world — that forces us to think (Roffe, 2020, p. 183).

The shock that provokes thought is a germinal force that can come from anything: the scent of a particular perfume, the swerve of a bike in front of your car, or the chill of cold damp grass on an autumn morning. But the shock is not only a human sensation, but something experienced by all entities. A tiny ripple of flux in a magnetic field may mean nothing to "us" but it may be a profound shock to a circulating electrical charge. And this shock provokes "thought" in the particle, just as a spoiled chicken dinner does to us.

Deleuze also believed that our dogmatic image of thought encouraged us to compare our experiences to a catalogue of pre-existing identities. Thought in this way becomes entirely representational and falls back into

transcendentalism because the identities we compare our experiences with, exist in some kind of idealised form, "out there" beyond our immediate reach.

The second problem with the dogmatic image of thought is that the belief in representational thought failed entirely to explain how new things emerged. It could not explain how the cosmos had become quite so profuse and diverse. The dogmatic image of thought subordinated *difference* to *identity*;

> Representation fails to capture the affirmed world of difference. Representation has only a single centre, unique and receding perspective, and in consequence, a false depth. It mediates everything but mobilises and moves nothing (Deleuze, 1993, pp. 55–56).

To compare the two different ideas of thought, then, the classical western scientific view of thought asserts that our common-sense beliefs and opinions (doxa) are given a quasi-formalised basis in philosophy, and these establish implicit norms about the nature of thinking itself, which become the basis for how we encounter the world (Anjum, Copeland and Rocca, 2020). Deleuze, by contrast, argues that it is a shock that forces an entity to think (more on this below). But thought here is not an "event," like a point on a line, but a process: an endless opening to difference. Thus, thought is not about identifying what something "is" (its "being") but an act of nomadic deterritorialization; breaking free, becoming. But how can we relate these ideas of shock, difference, and becoming to therapy?

Bringing these various threads together, from the absence of a clear definition of what therapy means in physiotherapy; the profession's increasing humanism, and the concurrent turn away from humanism in philosophy; to the way Deleuze's writings show how complex therapy really is, our contention here is that physiotherapy has laboured too long under a dogmatic image of thought, and that we have a mistaken view of what therapy "is" based on a fixed, static, anthropocentric idea that does not represent reality. Our contention is that therapy is a distinctive, creative process, present in all entities—real and imagined, alive and dead—that can be best understood as a response to the shock of thought.

The shock of thought is Deleuze's expanded idea of the "consciousness" of all things. It is the moment when an entity encounters another and opens the possibility to the creation of something new. The shock of thought is a

crucial concept for Deleuze because it provides a way to break free from the anthropocentric idea that conscious thought only exists in humans. Deleuze argues instead that thought occurs whenever an entity—any entity—is "shocked" into responding. Thought, for Deleuze, is not the act of dogmatically following convention, or mere *human* consciousness—however we might conceive it (Berger, 2024)—but rather a trait common to all entities. The universe exists as an endless process of interaction between entities. Sub-atomic particles collide, people read book chapters, leaves shimmer in the wind . . . but not all interactions lead to new things. In fact, as Quentin Meillassoux has suggested, the fact that we have a universe at all, with all its fully formed animals, vegetables, and minerals is remarkable (Meillassoux et al., 2017). So, our contention here is that if entities respond to the shock of interaction by opening to movement, change, and the becoming of something new—however fleetingly the new entity persists—then this constitutes a therapeutic act.

Posthuman physiotherapy

This more-than-human ubiquity of therapeutic acts, or, therapy, sounds like a radical idea, but in day-to-day physiotherapy practice, we are used to responding to shocks of thought. Indeed, all therapy, to some extent, is a response to shocks (problems, challenges, disruptions, emerging possibilities, and so on). A client presents with acute low back pain, for instance, or an arthritic knee starts to respond to treatment; a neonate has a sudden drop in PaO2, an elderly client begins to have falls, a young newly paralysed girl begins to gain more use in her thumb and forefinger. . . . Every moment of every therapeutic encounter presents a change in state and the creation of new therapeutic possibilities.

In some ways we are not saying anything particularly radical here, then. Therapy is response to change. But what is perhaps radical—at least in the context of contemporary physiotherapy—is our contention that these shocks extend as much to oxygen molecules and articular cartilage, as they do to people's feelings of pain or fears of losing independence, or social systems like healthcare. But we would go further still because all of these are still fundamentally human entities. Our argument is that therapy is absolutely *not* confined merely to human affairs, but is present everywhere, all of the time. It is not just us humans that are therapeutic, but so are animals, plants, soil,

the wind, clouds, ideas, fictional story characters, fungal rhizomes, pollen, electromagnetic waves, baseball caps, facet joints, earthquakes, photographs of interior makeovers, bird flight, and so on, and so on.

This is because therapy is not the *property* of an entity, but a process that runs through all things, just like time, death, decay, birth and growth. Without therapy, entities throughout the cosmos would randomly collide with one another and never resolve into anything one might call a thing. There would be no water molecules, trees, or spider's webs, and we humans certainly would not exist. Therapy is the process by which entities resolve their collisions with other things into new entities. It is the way new things come into being; a process that can explain why we have mountains, sea birds and football matches, and not just randomly orbiting blobs of matter. Therapy, then, is no more nor less than creation at work.

Therapy is a "*positive*" process—in the sense that it creates new things—but this does not mean that it is inherently moral. Therapy can produce nuclear waste, violence and death just as much as it can produce "*nice*" things. The presence of therapy in itself does not imply moral virtue. The moral virtue comes in when entities *mobilise* therapy for specific ends, like treating patients with low back pain, or rebuilding the soil after forest fire (notice again that many entities need to collaborate here in the therapeutic work).

Our argument then is physiotherapists need a more inclusive, philosophically robust understanding of what therapy does, and Deleuze's concepts provide some compelling responses. Based on Deleuze's writings we suggest that therapy:

- Is a vast, universal process dispersed across the cosmos, involving all entities, not limited to humans
- Is directional and specific, meaning that it is not just the accidental collision between entities but a specific response to a shock of thought
- A real material process, not something that exists only in (human) language; nor just (human) symbols or signs
- Ongoing and relentless and can never be said to be achieved or concluded, although it can be harnessed by entities at times for specific purposes
- Morally neutral and unrelated to (human) virtue[5]

Perhaps it is coincidence, perhaps not, but many of Deleuze's concepts resonate strongly with conventional physiotherapy. Some have suggested, for instance, that his entire philosophy is a philosophy of aberrant *movement* (Lapoujade, 2017). Others emphasise his reference to machines as the basic working "unit" in the cosmos (Kleinherenbrink, 2018). Deleuze writes about smooth and striated space, co-opting the language of muscles, and his work is an ongoing revision to ideas about time and space. There are also parallels between physiotherapy concepts and Deleuzian terms like lines of flight, flux and flow. But in all cases, as we have attempted to do here with the concept of therapy, Deleuze radically reimagines what these ideas mean and applies them to a much more diverse and inclusive cosmology. The question arises then, could physiotherapists do this? Could physiotherapy expand its current understanding of therapy in a Deleuzian way? And if so, what would it mean for the profession?

Clearly, physiotherapists are looking for new ways to think about what therapy is and does. The repeated calls for the profession to become more holistic, biopsychosocial, critical, environmentally active, person-centred, qualitative, enactive, focused on care rather than cure, psychologically informed, intellectually curious and so on, are evidence of this. These moves suggest that the profession has laboured under a dogmatic image of thought for too long, and academics, practitioners and teachers are becoming increasingly aware of it. Our everyday practice is suffering, the scope of our research is suffering, and our ability to make a meaningful contribution to the world is too. That does not mean, however, that the transition to a new ontology of practice can just *happen*.

Any radical departure from customary practice in physiotherapy would have to make sense in the present and offer an attractive image for the profession's future. We run into problems, however, if we believe that we should revise our understanding of therapy in order to *rehabilitate the profession*. This should not be our goal. As we have argued elsewhere, our goal should be to nurture the physical therapies and make them available to everyone, not just those that can benefit from our ministrations (Nicholls 2022). But this raises a number of problems both philosophical, political and practical.

Philosophically speaking, elevating therapy to a cosmic process involving all entities runs the risk of being so totalising that it is difficult to see where therapy actually ends; what therapy does *not* do. An unlimited therapy could

easily become a proxy for life itself. So, a definition of a new therapy would need to be grand enough to account for what is really going on in the world, but not so grand as to be indistinguishable from other foundational concepts. We hope, therefore, that the bullet point list above goes some way to qualifying the limits of this new notion of therapy.

Speaking politically, a revised concept of therapy asks those within the profession to consider how much more diverse and inclusive physiotherapists want to become. Recent years have already seen the profession expand into areas like cognitive and behavioural psychology, public health and qualitative research, so there is clearly an appetite for growth. But the kind of radical revision being proposed here adds an order of magnitude to the profession's recent reform project. We know from experience that resistance can increase strength and that there is virtue in constraint induced movement, but if we turn these practical approaches back on our profession, how much freedom should we give to the revision of our core professional concepts? How much constraint would be appropriate to expand the profession's scope, but not too much? These are political questions, to some extent, and somewhat beyond the scope of this chapter. But our contention is that any attempt to think politically about the future for the profession must begin with a clear and robust understanding of what therapy does. So, our purpose in writing this chapter was to prepare the ground for a compelling idea for a new concept of therapy, such that political questions about what this might mean for the physical therapies can follow.

From a practical point of view, a revised idea of therapy might open present and future physiotherapy in a number of ways. Firstly, we would no longer need to restrict our professional focus to only humanistic forms of therapy; we could become the primary advocates for therapy in all its forms: human and non-human. The same would follow for other pivotal physiotherapeutic concepts like activity, balance, movement and touch (see Nicholls, 2022 for a recent analysis of how physiotherapists might think about touch differently). Movement, like therapy, is another fundamental feature of life: a concept well known to authors, biologists, cinematographers, musicians, sculptors and myriad others, but it is a field that has been restricted in physiotherapy since the profession's inception. But why shouldn't physiotherapists become the experts in movement—not just mechanical movements of the body—but in every sense of the word (just as they could become the advocates for *all*

forms of therapy)? There is no reason why our therapy could not become a practice grounded in engineering movement, diagnosing and removing barriers to creativity and growth. This might work in a variety of different ways. For instance, if we think about rain falling in the desert, we know that it can bring life. It is likely that most people could conceive of this as a therapeutic act. But does it remain therapeutic if the rain keeps falling? If there is too much rain and there are flash floods, death and destruction follow. It follows then that, as with any form of therapy, there comes a point when an entity no longer opens the possibility of new creation, and begins to close, restrict and reduce future creativity. Our role might be in mediating this process and finding opportunities to amplify creativity and restrict constraint.

A reader might reasonably argue that this goes too far: that physiotherapy has nothing to do with rainfall in the desert, and that our area of jurisdiction should remain within the boundary of the human body. Except that, as we argued at the beginning of the chapter, physiotherapy *never was* only concerned with the physical body. We have always been manipulators of inorganic compounds and ideas, social engineers and mobilisers of all kinds of movements, directors of electromagnetic waves and human-nonhuman connections. Given this, the claim that physiotherapy has always been about "people" is misleading. So why shouldn't physiotherapists talk about rainfall in the desert? What is there about physiotherapy that precludes such an expanded view?

An expanded, Deleuzian view of therapy also provides other opportunities for future physiotherapy. For instance, it could give the profession a clearer critical purchase; one centred on maximising therapy and movement as a social force. So many of the problems we now face in the world—be they local or global—derive from some people's desire to restrict the movement of others. In many ways, the story of human flourishing over the last 10,000 years has been the story of the appropriation, colonisation and enslavement of the many (natural resources, plants, animals, other human beings) in the interests of the few. And while this selective flourishing has benefited some, it is also responsible for so much suffering and has brought us to a global climatic and humanitarian catastrophe. To see this process through the lens of therapy and movement would give physiotherapists a unique opportunity to argue for the "rightness" of some cultural, political and social positions and decisions over others. Simply put, we could become advocates for any

approach that opens entities to greater therapy and movement, and resist moves that close them off. And thirdly, we might recognise that there is a much bigger consortium of therapeutic agents at play in the world than we have given credit to in the past. It is not only us, the educated and registered physiotherapists, that are doing the work of physical therapy. Besides all the other human acts of therapy being done every day, the world we live in is the direct product of a billion acts of unacknowledged therapy. A one square metre section of soil probably has as many therapeutic acts and actors in it as there are stars in the galaxy. We cannot claim that oxygen, ice, touch and osmosis are therapeutic only when we deploy them, when they are doing so much therapeutic work beyond our conscious awareness. Increasing our therapeutic allies, then, would have a profound effect on our appreciation for how central therapy is in the life of the planet (which might also assuage some of those who are concerned about the end of the physical therapies).

Arguing for a vastly expanded view of therapy is not, of course, arguing that *all* physiotherapists should be so pluralistic, only that physiotherapy should not preclude the idea simply because of a dogmatic image of thought and corresponding practice. At the same time, we are not advocating for an anything goes, laissez faire view of therapy or suggesting that therapy can be anything we want it to be. Quite the opposite in fact. We are arguing for a much more philosophically rigorous and systematic ontology of therapy than we have ever had before. And it is our belief that Deleuze offers just such a philosophy, one that can resonate strongly with the past, present and future of the profession.

Closing words

There are a number of reasons why we should consider such a seismic shift in the nature of physiotherapy, some of which are external and some internal. Externally, whether through the rise of AI and social media, a fracturing international political consensus, a growing unease with conventional moral values, or existential threats like climate change, the concepts that Western healthcare, and physiotherapy in particular, have been based on have been radically transformed in recent years. Either through the growing criticism of our latent anthropocentrism, our stigmatisation of non-normative personhood, our reductive beliefs about the nature of health and illness, or our scepticism towards technocracy, our beliefs about the nature of health and

the purpose of healthcare have shifted dramatically in recent years. Under such strained conditions, the possibility for a new understanding of therapy feels tantalising because if we can think therapy differently, we may be able to practice therapy differently.

At the start of the chapter, we suggested that physiotherapy being done *by* people *for* people is perhaps one of the most transparent and obvious things one can say about the profession. In recent years, there have been a growing number of calls from within and without physiotherapy to expand the profession's reach beyond its traditional affinity with the body-as-machine. And while we have seen a flowering of critical and existential scholarship over the last decade, almost all the literature has moved towards a new, even greater humanism. There have been calls for physiotherapy to become more person-centred, more (inter)subjective and relational, more embodied, more concerned with the conditions people are born into and live with against their will, more psychosocial. But at the centre of all these claims remains the idea of a sovereign, autonomous, indivisible human being.

In this chapter, we have attempted to resist this trend and think about what a Deleuzian posthuman concept of therapy might offer the profession. We have tried to take apart the concept of therapy and ask whether our conventional understanding of practice is too narrow and too limited by its person-centeredness. Our argument is that physiotherapists now need to radically revise the meaning we give to therapy.

How to do this and how to escape centuries of transcendental humanist thought will not be a small undertaking, however. Fortunately, there is precedent, and we have seen in recent years the emergence of a strong and growing body of work in the field of posthumanism. Pre-eminent here is Gilles Deleuze, whose radical philosophy of becoming and difference offers shocking possibilities for new thought in and around the physical therapies.

One might imagine that the physiotherapy literature might be awash with works on the nature of therapy, given that therapy makes up half of the profession's name. But this is not the case. Our hope in this chapter is to offer an opening corrective to this and stimulate debate within the profession about how (physio)therapy might be otherwise. Our goal here is not to map out how future physiotherapy might be practised as such, but to open a space for innovative future thinking about therapy and show that, perhaps, the physical therapies were always much deeper and wider than we had acknowledged.

Acknowledgements

The authors would like to thank the two reviewers and Professor Barbara Gibson for their comments on earlier drafts of this chapter.

Notes

1 As elsewhere (Nicholls 2022), we purposefully distinguish the *profession* of physiotherapy from the *practices* of the physical therapies. In this sense, massage, exercise, tissue manipulation, electrotherapy and so on can be seen as physical therapies that exist within physiotherapy but also outside it.

2 See Nicholls et al., 2023 for a comprehensive review of these criticisms.

3 See, for example, Jeffrey Nealon's *Plant theory* (2016), Raymond Guess's *Changing the subject* (Guess 2017), Manuel DeLanda and Graham Harman's *The rise of realism* (DeLand and Harman 2017), Philip Goff's *Galileo's error* (Goff 2019), and Thomas Lemke's *The government of things* (Lemke 2021).

4 For a review of the major ideas and schools of posthumanism and a full reading list, see https://paradoxa.substack.com/p/posthumanism-compendium.

5 We're aware that in writing this list we have gone against our own advice and tried to define what therapy "is." We have done this here, however, only to "identify the object of our negation," in the traditional Tibetan Buddhist sense of the term (Garfield and Thakchöe, 2010). This approach is a common first step in continental philosophy when an attempt is made to break with the conventions of a dogmatic image of thought.

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ABSTRACT:

Physiotherapy is fundamentally based on and mediated by movement, but how "movement" is understood must be challenged. Movement is often understood instrumentally in physiotherapy. Drawing on the work of the French philosopher Jacques Derrida, by deconstructing movement in physiotherapy, we aim to foreground such movement that mainstream conceptions of physiotherapeutic movement silence, ignore, or take less seriously. We perform our deconstructive reading of movement through texts generated with Finnish psychophysical physiotherapists about the meanings they give to movement, on the one hand, and staying still, on the other. We focus on dichotomies and hierarchies in the texts and seek to overturn and reinscribe them, and to begin re-writing the story of movement for physiotherapy. One such counter-writing we suggest, but which will remain to be written, is economic: How do we overcome a prevailing capitalocentric mode of thinking that mediates movement?

CHAPTER 12

"The constant fear of ceasing to move"

DECONSTRUCTING MOVEMENT IN PHYSIOTHERAPY

ANNA ILONA RAJALA AND TIMO UOTINEN

The beginning of writing

Physiotherapy is fundamentally mediated by movement. Its aims and means are based upon analysing and using movement to restore movement and promote movement for population health. Movement is essential to the well-being of both individuals and societies. For example, in addition to improving individual well-being and functioning, promoting population health through discouraging inactivity and promoting exercise in different populations saves healthcare expenses and is thereby economically beneficial for societies (e.g., Middleton, 2017). This is undoubtedly important and, perhaps unsurprisingly, this economic argument is often used to justify physiotherapy's continued existence also in clinical research literature.

The argument could be termed "capitalocentric" (Gibson-Graham, 1996; 2006). Capitalocentrism is a term popularised by J. K. Gibson-Graham (a joint pen name of Julie Graham and Katherine Gibson) in their 1996 book *The end of capitalism (as we knew it)*. It describes how all economic activities—this would also include clinical work in most economies—are represented, valued, and devalued through capitalism, whether as same as capitalism, as its opposites, as complementary to it, or as contained within it (Gibson-Graham, 1996, p. 41). Gibson-Graham describe capitalocentrism as "a

dominant economic discourse that distributes positive value to those activities associated with capitalist economic activity however defined", which then necessarily assigns lesser value to all other distributive processes and discourses (Gibson-Graham, 2006, p. 56). Destabilising the social, cultural, ideological, and economic dominance (or hegemony) of capitalocentric thinking—and destabilise it we must, if we are to recognise and acknowledge past, existing, and future diverse economic practices beyond market-based global capitalism—demands different and diversified economic representations and narratives (Gibson-Graham, 1996, p. 41; 2006, p. 56).

Movement is not merely biomechanically or capitalocentrically important in an instrumental sense and, as physiotherapists are often acutely aware in real clinical situations, the "benefit" gained from physiotherapeutic movement does not result from a simple and linear "problem-movement-benefit[profit]" intervention. We wish to challenge any such fixed and immobile understandings of what movement might mean and ponder deeper the relationship of physiotherapy and movement. We are interested in how movement is given meaning in physiotherapy beyond economic instrumental reason or capitalocentric thinking (Gibson-Graham, 1996; 2006). There is more to movement than meets the eye, and this "more" is wherein counternarratives and counter-representations for capitalocentrism can be sought: in the silenced and unsaid, the unseen and unheard, that which is overshadowed by mainstream/ed knowledges.

We argue that physiotherapy knowledge is constructed through differentiated relationships between words and concepts. For example, mobility is given meaning through being differentiated from immobility, inactivity, stiffness, and so on—but its meaning can also be infinitely deferred, differentiation after differentiation, and so it never refers as itself to itself. Deconstructive reading focuses on such differentiation and deferral, and therefore we aim to deconstruct "movement" with the help of the French philosopher Jacques Derrida. We illustrate our reading with the help of texts generated with eleven Finnish psychophysical physiotherapists through an online form.

In Finland, psychophysical physiotherapy is characterised as an approach to physiotherapy based on experiential learning and an ethos of encountering and interacting with the person at the clinic as an undivided embodied whole and of acknowledging the interrelations between consciousness, embodiment, and society (Rajala & Uotinen, 2026). It is a diverse multimethod approach

rather than one specific set of tools, and it is often utilised in mental health contexts in which being still can be as physiotherapeutic as movement (e.g., in eating disorders, anxiety disorders, PTSD) but it can be integrated as an approach to all physiotherapy. The Finnish Association for Psychophysical Physiotherapy recommends that physiotherapists can specialise in psychophysical physiotherapy only after at least two years of post-qualification clinical experience. Specialisation requires at least 30 ECTS (one ECTS point equals to 27 hours of study) of higher-education studies in psychophysical physiotherapy and other related physiotherapy methods and frameworks. It is also recommended that psychophysical physiotherapists engage in personal and continuing embodied reflective process to be able to approach physiotherapy from a psychophysical point of view. (PSYFY, 2023.)

We approached the generated texts through Derridean deconstructive reading. Deconstruction is not a method, and our approach is not a method either, although deconstruction has been employed in healthcare research in a more methodological manner (e.g., Whitehead, 2010). Neither is it a theory in any traditional sense, as Bradley (2008, p. 4) notes, as it does not offer a general set of rules to be applied to particular cases. According to Derrida, language as a system of signs has meaning only because signs are differentiated from each other, because of *différance*. In semiotics, a sign is a unit that communicates a meaning, and it is composed of a signifier and a signified. A signifier can be a word, an image, or a facial expression, any material thing that can signify. Signified is the concept to which a signifier refers. For example, the word "plinth" is a sign which consists of the word plinth (the signifier) and the concept of a padded plane used in different care professions such as physiotherapy and massage (the signified, differentiated from, e.g., plinths on which statues stand).

Derrida points out that the meaning of something being signified never resolves into a complete and total meaning. Rather, the meaning of the signified is always postponed—both differentiated and deferred, hence the French neologism *différance*—as the definition of any sign can be indefinitely differentiated and deferred to other signs. Moreover, Derrida (1981, p. 41) argues that the differentiated and opposed signs do not co-exist peacefully, but one tends to have an upper hand of the other. This is especially the case with binaries and dichotomies because they always exist in a hierarchical, even violent relationship. While such oppositions will always exist, Derrida (1981,

p. 41) argues further that they need to be deconstructed; not to neutralise them or jump beyond them, but rather to expose them. Deconstruction is to overturn and reinscribe such hierarchies and it always takes place within texts being read, rather than applied from the outside (Derrida, 1981, p. 42; Bradley, 2008, p. 4).

One of our starting points was to think about "movement" and other such signs that denote something active, and hence also often something perhaps more desired and positive than their putative dichotomous halves—also in an economic and capitalocentric sense. Often, it seems, such signs are indeed dichotomous, and they largely mediate physiotherapy. However, the body is never completely motionless, and its motionlessness is not the simple opposite of the moving musculoskeletal body either. Both its movement and motionlessness are neural, visceral, and on the microbial sense even more-than-human. Bodies are constantly more-than movement and stillness. By drawing attention to dichotomies, such as movement/stillness, moving/standing still, mobile/immobile, and motion/motionlessness, we may start to accept physiotherapy as diverse, movement as ambiguous, and bodies as blurred, porous, leaky, and boundless (cf. Shildrick, 1997). Herein lies, we argue, also a possible opening into deconstructing movement mediated by the prevailing economic mode of thinking that Gibson-Graham (1996) argue is deeply, although not irreversibly, ingrained with capitalocentrism: is it possible to start writing the story of movement for physiotherapy beyond economic benefit and instrumentality?

We begin by explaining more closely Derrida's thinking. We then introduce the textual material generated with physiotherapists that illustrates our deconstructive reading. As the texts have been written originally in Finnish, our writing is constantly negotiating with interpretation and transmission of meaning, and especially translation which, according to Gayatri Charkravorty Spivak (2000, p. 398), "is the most intimate act of reading." In the penultimate section, we further discuss deconstruction, an otherwise reading of movement, which leads us to return briefly on capitalocentrism. Finally, in the spirit of *différance*, instead of concluding this chapter, we argue that deconstruction points toward a need for a continuing analysis—a movement of its own kind.

On Derrida and deconstruction

Jacques Derrida's philosophy has been tremendously influential, as Bradley (2008, p. 2) notes, in "almost every academic discipline from art history to zoology." Derrida's diverse oeuvre has touched upon themes such as art and architecture, literature, linguistics, politics, international relations, psychoanalysis, theology, technology, the media, and witnessing and testimony (Bradley, 2008, p. 2). Derrida's work is notoriously difficult to outline because he did not have a philosophical system, nor did he form a comprehensive theory or methodology during his intellectual career that spanned hundreds of essays, more than forty books, and numerous presentations. His 1967 book *De la grammatologie* (trans. *Of grammatology*, 1976) is a good example of this. The title of the opening chapter, "The end of the book and the beginning of writing," highlights Derrida's insistence that this was not meant to be a complete and finished book, a monograph, or a treatise, but an essay: a try, a testing out (Gaston & MacLachlan, 2011, p. xvii). Derrida links completeness, as Gaston and MacLachlan (2011, p. xvii) note, to G. F. W. Hegel's philosophical system, which attempted to be complete, exhaustive, and encyclopaedic. It had, out of its own internal teleological necessity, reached an end of history in which consciousness gains absolute knowledge. Nothing of this sort can be found in Derrida's oeuvre.

Derrida does not offer any definition for deconstruction, and so we will not attempt a definition either. Derrida's thinking is associated with poststructuralism, an intellectual movement inaugurated in the 1960s in various influential criticisms of structuralism, including those by Derrida. However, deconstruction is not synonymous with poststructuralism. Derrida himself rejected the prefix, or any label for that matter. Deconstruction is, for Derrida (1988, p. 3), an "anti-structuralist gesture" because the point is not to get beyond, past, or after structuralism. Rather, "structures were to be undone, decomposed, desedimented" (Derrida, 1988, p. 3). At the same time, deconstruction is also a "structuralist gesture" because it "assumed a certain need for the structuralist problematic" (Derrida, 1988, p. 3). If we take for example the history of western philosophy, which Derrida argues to be deeply logocentric—meaning, that words and language express some external reality—its deconstruction does not involve a destruction of this history. Derrida set out to deconstruct logocentrism, most notably advanced by Rousseau and Hegel, not to claim that the history of philosophy is not logocentric—it most

certainly is—but rather that it can also be "re-constructed otherwise" (Bradley, 2008, p. 47), or "undone, decomposed, desedimented" (Derrida, 1988, p. 3).

Niall Lucy (2004, p. 11) argues that "in a sense [deconstruction] is impossibly difficult to define". The impossibility, Lucy (2004) continues,

> has less to do with the adoption of a position or the assertion of a choice on deconstruction's part than with the impossibility of every 'is' as such. Deconstruction begins, as it were, from a refusal of the authority or determining power of every 'is', or simply from a refusal of authority in general. While such refusal may indeed count as a position, it is not the case that deconstruction holds this as a sort of 'preference'. (p. 11)

It is, therefore, not possible to say that deconstruction "is" one thing or another. Perhaps one of the difficulties of attempting a definition is that deconstruction is not, as stated above, a theory or a method in any conventional sense, nor should it, according to Derrida (1988, p. 3), be transformed into one. That would suggest a procedure, a decision of how to proceed and what is to be found (Beardsworth, 1996, p. 4). Deconstruction is not something one can "take" or "adopt" and then "apply"—philosophy rarely is "applicable" in any straightforward sense, because that would be to deny the subjectivity and interpretation of the one engaging in philosophical analysis. Rather, to proceed thinking with Derrida demands deep and sustained immersion into his writing.

The challenge is: how do we communicate in such a short space something that escapes definition? For the purposes of this chapter, it is useful to be familiar with a set of Derrida's ideas that help to explain deconstruction: text, writing, and *différance*. For Derrida, text is not merely words typed or written on different media. While it is also that, text is in a broader sense something constructed, something made (Lucy, 2004, p. 143). As Lucy (2004, p. 143) argues, this twist to understanding text has two consequences in Derrida's work: first, everything is text and there is "no outside-text" (Derrida, 1976, p. 158); and second, because everything is text, there is no such thing as representation or imitation of some real existence or presence, but presence is rather an effect of textuality (Lucy, 2004, p. 143). This does not mean that reality is just language, and that relativism is inescapable. That there is no outside-text means, writes Derrida (1988), that there is nothing outside

context, and everything is context, whether it is discursive, historical, political, embodied, or anything else:

> One of the definitions of what is called deconstruction would be the effort to take this limitless context into account, to pay the sharpest and broadest attention possible to context, and thus to an incessant movement of recontextualization. (p. 136)

Writing, the second Derridean idea relevant for our chapter, means similarly more than just the act of writing words and sentences. Derrida argues in *Of grammatology* (1976) that speech has been valorised above writing as the more representative of mental experience, while written words are thought to be representative of speech. Writing is thus doubly removed from one's original thoughts. Deconstructing this hierarchy, Derrida conveys a notion of arche-writing, meaning generalised writing that precedes speech and actual writing and without which neither would be possible. This writing in general sense is an infinite process of referral of signs to other signs that differentiate and defer meaning, never arriving at a final meaning of a sign that refers only to itself. This brings us to *différance*, which Derrida describes as "the systematic play of differences, of traces of differences, of the spacing by means of which elements are related to each other" (Derrida, 1981, p. 27). *Différance* refers to this differentiation and deferral in which meaning is both generated and infinitely postponed.

Deconstruction demands close reading of text/s. This reading "consists of an undoing/preserving that produces ceaseless reversal, reinscription, and oscillation of hierarchical terms" (Atkins, 1983, pp. 5–6). Deconstructive reading does not limit itself, as Derrida (1982, p. 329) argues, by immediately neutralising a hierarchical opposition, but proceeds first to overturn it: "it must, by means of a double gesture, a double science, a double writing, practise an overturning of the classical opposition, and a general displacement of the system." The "double science" means, however, that overturning is not enough, but the reversal of the hierarchy must again be displaced (Derrida, 1981, pp. 41–42; see also Atkins, 1983, p. 21). Overturning and then displacing hierarchical binaries is to open up all the other spaces that the binary closes off (cf. Caputo, 1997, p. 104). Therefore, deconstructive reading does not seek to find definitive meaning. It rather seeks to cast doubt upon any possibility of interpretations that would fix meanings, and instead traces

multiplication of possible meanings, which undo themselves as we try to tie them up (Drabble, Stringer & Hahn, 2007). Deconstruction seeks to find openings to read otherwise: while keeping with the original text and reading it first classically to contextualise and to lay grounds, a second deconstructive reading follows, which explores the tensions and loose threads in the text to find what is omitted, forgotten, excluded, expelled, marginalised, dismissed, ignored, scorned, slighted, taken too lightly, waved off, not taken seriously enough (Caputo, 1997, pp. 76, 79).

Deconstructing movement

While our reading is philosophically embedded rather than social scientific or qualitative, we wanted to engage with clinicians and their understandings of the matter at hand, both to have a concrete text to work on and to challenge our own possible biases concerning movement. So, we generated pseudonymous texts with Finnish psychophysical physiotherapists through an online questionnaire in summer 2023. We chose this group of physiotherapists because we thought, perhaps demonstrating one of our own biases, that they might hold a more embodied and hence richer, even more philosophical understanding of movement. We shared the questionnaire in a Facebook group for Finnish psychophysical physiotherapists consisting of over 1,000 members. The form was open between July 9 and August 31, 2023. The only requirement to answer the questionnaire was that the respondent must be a qualified physiotherapist who works within a psychophysical framework. No other background questions were asked. The form consisted of one warm-up multiple choice question and two open questions in relation to clinical practice: the first about the meaning of movement (or moving, mobility, motion, etc.) and the second about the meaning of motionlessness (or stillness, standing still, pausing, halting, calming down, winding down, etc.). In the fourth and final question, we asked the respondents to add anything they thought we should have asked them.

Altogether twelve physiotherapists responded to the call and the average response time was 27 minutes and 30 seconds. One respondent declined the use of their responses for research purposes. The remaining eleven participants wrote under self-chosen pseudonyms, which we are also using in this chapter. While re-pseudonymization of a self-chosen pseudonym is a common practice in qualitative research and it is believed to be for the protection

of participants, we decided to respect the self-chosen pseudonyms because researcher-assigned pseudonyms are also increasingly recognised as problematic and possibly coercive (e.g., Itzik & Walsh, 2023; Lahman et al., 2015; Tilley & Woodthorpe, 2011).

We chose to organise the texts in a more structuralised manner to be able to engage in close deconstructive reading. Therefore, our first so-called classical reading, the one that contextualises and lays grounds, was then simultaneously a beginning and an end of a thematic analysis, and a beginning of writing (or deconstruction). To organise the texts, we generated five themes, or central organising concepts, following the first five steps of Braun and Clarke's (2006, p. 87) thematic analysis: familiarising ourselves with the material; generating initial codes; collating codes into potential themes; reviewing themes; and defining and naming themes. The five themes we generated through this process describe the conceptions of respondents concerning movement and stillness. The themes are (1) beyond mere medicine; (2) balance; (3) expressiveness; (4) body consciousness; and (5) mutual reflexive practice.

While thematic analysis aims at generating distinctive themes (Braun & Clarke, 2006), we maintain that drawing clear boundaries between themes would be artificial and even violent to the texts. Therefore, our intention was never to follow through the thematic analysis beyond naming themes to organise the texts—or what we consider as our first classical reading. It would be contradictory to any Derridean approach to think that whatever writing we may generate "represents" anything. Instead, we returned to Derrida and the second deconstructive close reading—the double science of overturning and displacement that seeks to find openings to read otherwise—to follow through the rest of our analysis or reading/writing. Our second deconstructive reading meant for us a deep immersion into the generated texts we had now organised thematically. In practice, we focused on finding and flagging binaries both in the texts and in our own analysis and interpretation, and what may have been left unsaid and unwritten. Was there something omitted, forgotten, hidden, excluded, marginalised? What kinds of openings would the overturning and reinscribing of hierarchies create?

Our reading/writing is also intertwined with translation and contextualisation. For example, the Finnish noun *liike* has multiple possible English translations: movement, motion, and mobility, and also business, enterprise,

shop, and political or religious movement. Similarly, the derivative verb *liikkua* means to move and to exercise but it also holds connotations of spatiality: to transfer from one place to another, to shift into or out of place. In addition, there are a few possible antonyms for *liike* and *liikkua*, and each have different possible translations and connotations, which would sometimes necessitate inventing terms that do not exist in the English language: *liikkumattomuus* (noun: un-moveability, a state of not moving, stillness, not engaging-ness in regular exercise, non-movingness), *liikkumaton* (noun: still-being, not-moving), *pysähtyminen* (noun: stoppage, a state of becoming to stand still), *pysähtyä* (verb: to cease moving, to stop, to come to a state of realisation that one needs to perhaps take a break, coming to a standstill), and so on. There are also many contextual, metaphorical, and visual words that are almost untranslatable. Hence, our deconstructive reading is a conversation with the texts written by physiotherapists, but also a negotiation between translation, transmission, and interpretation. Therefore, we unavoidably generate meaning as we translate, interpret, and seek to transmit the intentions of our respondents.

Beyond mere medicine

Despite Finnish psychophysical physiotherapy being oriented towards a holistic and embodied understanding of movement, the more biomedical or "traditional" (see Aittokallio & Rajala, 2020) understanding of movement is also present in the texts generated with physiotherapists. In other words, holistic and biomedical physiotherapy are not necessarily mutually exclusive polar opposites. For example, aiming towards more biomechanically optimal movement can help in relieving pain and thereby influence mental wellbeing. As a respondent, under the pseudonym Margit, writes: "As a physiotherapist, movement, moving and especially supporting [the client's] prerequisites to move are central." It is one of the core tasks and aims for physiotherapy "to help movement continue on," writes Miimuli, while accounting for individual skills, barriers, and readiness. Being able to move is crucial for being active outside one's home, staying socially active, and participating in society.

Movement was expressed in the texts to be any movement from shoulder flexion to walking, rolling around, using a wheelchair, or exercising. However, movement was more than musculoskeletal moving: it is "motor

and autonomic, basic motor skills, movement of muscles and joints, [movement of] the nervous system, movement of all internal organs and then letting go. Movement and letting go are medicine" (KH). Or, as another respondent, Magee2023, writes, "movement is for me more than medicine, it is the prerequisite of action, health and thinking." On one hand, movement is seen biomechanically, how the biological mechanisms generate forces in the body or how external forces act on the body. For the respondent KH, "the body's movement towards wished-for biomechanics moderates pain [thus] influencing the psyche in many ways." Optimal biomechanics of movement, or at least striving towards it, serve as "medicine" for both body and mind, a traditional view of the healthcare prerogative of physiotherapists. Movement is contrasted here to "letting go" or relenting, a release of the tension brought on by the movement—but this relenting is in itself a form of movement, consciously letting the body resume its more passive activities. Moreover, there is a need in physiotherapy for distinguishing better between "ceasing to move and standing still that are useful from physical inactivity and associated health risks" (KMV).

Yet, on the other hand, as Magee2023 pointed out above, movement goes beyond mere "medicine": it is crucial for embodied being, as it is the "prerequisite of action, health and thinking." It should be noted that here movement is not meant to be an ableist notion focusing on ambulatory movement but indeed the meaning is more general, verging on a human universal. Indeed, the same respondent emphasises that it need not be just active, as "movement is present in [their] work in the client's inborn autonomous movement or passive assisted movement" (Magee2023). The term "inborn" (from the Finnish *sisäsyntyinen*, internally born) is an important qualifier. The respondent KMV elaborates on it at length:

> I contend that each body has an inborn need and will to move that is not fostered by traditional health education or alarming people with health risks. Improving body image and the relationship with one's body would strongly promote the gospel of movement and embodiment, as long as we as healthcare professionals would bravely venture forth from our biomechanical point of view towards experientiality and comprehensiveness!

Movement is a part of humanity, so let us promote humanity, not just movement. (KMV) Movement is seen as a part of a body's nature, also "a part of humanity." This explicit challenge to the biomechanical tradition builds on the "natural," "inborn need and will to move." In this view, the relationship we have with our bodies is not taken for granted but as something that can be developed, movement being the medium for this development. Experientiality and a more "comprehensive" view of the human strives to broaden the therapeutic process challenging the pinpointed instrumental accuracy of movement as mere medicine.

However, as much of physiotherapy's focus is on rehabilitation, regaining movement is also central. Accordingly, for the respondent NN movement is "the training of lost mobility and retraining movement in order to regain mobility and functionality. It is regaining daily activity and increasing independence. Autonomy in movement is a privilege." This sentiment is echoed by Kesäheinä for whom movement makes independence possible. Independence coincides with autonomy in giving the subject more control over their everyday life. Moreover, for Margit "movement and moving appears as a goal-oriented activity." In these cases (independence, autonomy, goal-orientatedness), movement is tied to subjectivity and their ability in a general sense.

It is this subjectivity wherein particularly psychophysical physiotherapy sees the complicating factor for movement, namely the subject themself. Therapy will not work if the client/patient/rehabilitee (all these terms are commonly used in the Finnish language to refer to the person at physiotherapy clinic) subject is not onboard. Although movement is "physiologically activity that exceeds the level of the resting metabolic rate," as Margit defines it, "it is important to understand that movement and mobility are strongly tied to psychological and social motives and that movement and mobility can be supported by mental things." Margit also writes that movement can be supported without visible movement: through discussions, thinking, and realisations. The key is empowering the client/patient/rehabilitee subject and motivating them. Kesäheinä notes that educating and giving information is important in physiotherapy, which are both tied to movement. Though traditionally, the role of the physiotherapist is a more practical, qualitative one: "Moving is presented as a certain quality of movement, which can be examined and changed if needed" (Magee2023). But again, the client/patient/rehabilitee subject and their motivation are at the centre as Margit explains:

"It is important to support and strengthen the prerequisites for movement and moving about, to support motivation, to think about possible barriers and how to lower them. If we don't consider these things, there can be movement in therapy, but the will to move on one's own may remain thin."

In movement, there is a clear tension between the traditional biomechanical approach and the more comprehensive one. Both the physiotherapy community and employers, as well as service purchasers, as the respondent Pft describes, are centred around therapeutic exercise and movement therapy: "the meaning of embodiment in physiotherapy is still understood superficially and the challenges of measurability as well as difficulties to present this topic in a chart, keep this important point of view [of embodiment] in darkness." The respondents emphasized quality over quantity of movement, despite external pressure to help people with the sole aim that they can keep performing.

Balance

Movement is central in physiotherapy, but how it is understood can be re-written. As the respondent Hanskimari writes, physiotherapists get the impression already in physiotherapy education that what matters is "movement and movement." Psychophysical physiotherapy, however, has made the respondent stop and think more about the client's point of view and this has directed thinking more towards a "less is more" approach. Here, movement is not necessarily in a "more movement/less movement" hierarchy because the body is never really still, and movement is not equal to mere musculoskeletal movement. This view was shared among the respondents: "There is movement all the time; breathing is movement, blood circulation is movement etc. Even small things and acts can already improve self-efficacy" (Hanskimari). Movement and moving about can be calming or activating, as OV writes, and movement "can be so small that one cannot see it from the outside [while] moving about is something that is seen." Movement and moving can mean multiple things, as KMV writes:

> Movement is any movement at any direction in the body from breathing to the beating of the heart. Moving is potentially slightly more "active", but still a very broad concept, which I use

> in my clinic to mean everything that happens when the body is moved, e.g., getting up from the bed. (KMV)

Here, KMV understands movement also spatially, both with and within the moving body. The biomechanical understanding of the locomotor system and its movement on different planes of motion is opened towards the visceral which is also sensed differently: some movement is seen and some, like the beating of the heart, is interoceptively felt and can be listened to.

Movement is also relational between bodies, rather than simply observed through the senses: "I think that, for example, breathing itself is already movement and movement always happens in physiotherapy as bodies adapt to and mirror each other" (Pft). The body consciousness of the physiotherapist is emphasized in psychophysical physiotherapy. As Pft continues, "at best, the physiotherapist is conscious about their own body's being and therewith guides the client through mirroring, for example, to regulate mental alertness." This can happen through concrete means and exercises and, at times, through wordless working together—a "wordless inter-regulation" (Pft). Different people at the clinic need different kinds of guidance and movement because "movement and moving change with life situation and personal resources" (OV). Some need more and some less movement, some need winding down, some activation, or being present, some need more cognitive information and some more embodied exercises—but never should it be an externally forced performance. As KMV writes, with some of their clients, "ceasing to move and not moving can be a prevailing, frozen state of being, that is when through acceptance we seek to wake the body up towards movement again."

In addition to the visceral, not moving is moving also in the very act of ceasing to move; stopping and ceasing are not opposites to moving, but they are also moving. This overturning of moving/not-moving as simple opposites is demonstrated in a passage written by the respondent Pft: "I think that also stopping to move is a movement—as one stops moving, for example the body's porousness and expansion and contraction/deflation become more consciously visible." There is no necessary hierarchy between moving and not moving. While they can "counterbalance" each other, as KMV puts it, stopping movement and being still "are sometimes necessary to be able to reach a deeper contact to oneself and others" (KMV). It is important "to balance movement, pausing, moving, and becoming to stand still" (OV). Balance is a dynamic idea: as things can be in (near) perfect balance, balance also tips

and things go off balance. KMV expresses this through the idea of regulation: "As a physiotherapy professional, being still and coming to stand still mean as much to me as movement and moving; the balance of embodied experience is born in the balance between regulation of coming to stand still/being still and movement/moving" (KMV). Being still and coming to stand still are also skills that can be learned in physiotherapy. They are, as KMV writes, "very meaningful skills that many of my clients, for one reason or another, have forgotten or pushed aside." Similarly, Kesäheinä writes that moving "brings physical and spiritual well-being and is therefore an important 'means' to take care of oneself. Ceasing movement is the same phenomenon, resting brings well-being. In other words, with these a suitable balance is important."

Balance calls for the physiotherapists to work with the person at the clinic in a comprehensive manner, to see the bigger picture. Many of Mimuli's patients, for example, have problems with sleeping because their resting and recovering have been disturbed in some way in their everyday life. This affects everything, such as:

> having strength to manage everyday life, day rhythm and possibly cooking, eating (getting enough energy). If eating rhythm has been disturbed, one has no strength because of lack in energy sources. All aforementioned affect moving. One has no will and/or opportunity to move except what is necessary. In other words, the basic blocks = sleeping / eating / moving must be put into balance. (Miimuli)

Proceeding in such situations must, again, happen incrementally. The physiotherapist is there to help with matters related to movement and mobility and, if needed, to refer the person forward to other professionals if physiotherapy is not the thing that is going to help at this moment. The important thing is to help the client/patient/rehabilitee to pay attention to "the big picture we are dealing with" but also that they feel "they are being understood in a comprehensive manner" (Miimuli).

Expressiveness

In the texts, movement was also described as something with which both physiotherapists and clients/patients/rehabilitees use to express themselves and their embodiment. Our bodies are no less than our way into the world:

> To me as a professional, life is movement and sensing and listening to my own body is my perspective towards the world. Without this constantly deepening experientiality, I couldn't do this challenging work, in which it is essential to maintain always 50% of attention in one's own embodiment/body-mind. (Pft)

Bodies are expressive and they are both instruments and media of expression. "Movement is present in my work," as Magee2023 writes, "as the human rhythm to breathe, speak, and use one's body in conversation." This expressiveness was not understood as something external to physiotherapy, or an add-on to physiotherapeutic movement, but rather as something intrinsic to the practice. Mere being, as Pft puts it, is "continuous movement that expresses our selfhood." Expressiveness is something inseparable from physiotherapy practice. As much as physiotherapists use manual skills, active and passive movement, and therapeutic exercise, they also use conversation, silence, self-reflection, and self-expression. Conversation may create a safer space and safety in one's own body. Conversation and communication are also (in) movement.

Movement and moving, as Pft writes, "are for the client a means to get closer to their own experiences, emotions and needs" while ceasing to move or being still is "more conscious exercise, for example, to get rid of the constant externally visible compulsion to be active." When contrasting movement and ceasing to move in this manner, movement can become a way to express oneself:

> Through movement, it may be easier to express something for which we do not have words or, for example, when words are not the most suitable form of expression for you, or the theme [of expression] is not even on the level of conscious thinking. (Pft)

Movement as "inborn", as something intrinsic to subjectivity, is therefore central to self-expression. As such, however, it might not always be possible to rationalise, instrumentalise, or put it to words. Body has a language of its own that is often untranslatable. As Vicki Kirby (1997, p. 56) writes, "the body itself [is] a scene of writing, subject to a sentence that is never quite legible, because to read it is to write it, again, yet differently." Even in biomedically mediated physiotherapy, rather than objectively observing

the body through biomedical science, physiotherapists are subjective interpreters between the often-incomprehensible body and biomedicine, and they are re-reading and re-writing the body, again. In addition to itself being expression and experientiality, guided movement and moving and exercise in physiotherapy can offer a site for expression and experientiality. As Pft writes, it offers "loosening up [colloquial *irrottelua*, which can also mean partying or relaxing, even dancing, especially in opposition to the everyday working life], space, freedom, safety, a place to encounter challenging emotions or a place to practice coping in challenging situations."

Body consciousness

Body consciousness is a concept widely used in Finnish psychophysical physiotherapy and it was present in the responses. Movement and moving are, in KMV's view, means to observe body consciousness and connectivity: "Movement and moving signify to me, as a physiotherapy professional, being upon body-experience and exploring the feeling of self-efficacy. In physiotherapy, movement and moving are a means to create connection to one's own [body] and the other's body through different sensory channels, increasing body consciousness." The phrase "being upon body-experience" is difficult to translate from the Finnish *äärellä olemista*, with the latter word denoting "being" and the former being often translated as "at," "by" or "near," used in "sitting at the table" (*istua pöydän ääreen*) or "being by the sea" (*olla meren äärellä*). However, while a table has clear dimensions for a human, the sea does not. There is a connotation of boundlessness or infinity, the Finnish *ääretön*, literally "without bounds." *Äärі-* is also used with political or religious identities to denote extremism. Although translating *äärellä* to "upon" does not hold the same connotations, the abstractedness of "upon" in contrast to "on" does communicate some of the dialectical otherness of "body-experience," something that is at once familiar but unknown.

Similarly, "exploring the feeling of self-efficacy" is a difficult phrase, particularly due to the word self-efficacy from the Finnish *minäpystyvyys*. This term comes from the Canadian-American psychologist Albert Bandura and his 1977 book *Social learning theory*. The "feeling of self-efficacy" describes the individual's belief in their ability to produce the expected outcomes in a certain situation (Bandura, 1977, p. 79–80). This psychological idea is tied to physiology in KMV's text and links to the subject's abilities discussed

above. Nevertheless, the emphasis is on movement creating a stronger bond with our bodies, in advancing body consciousness. The same respondent elaborates further:

> Movement and moving about may be therapeutic given than they include some sort of conscious presence and a level of remaining in one's window of tolerance. Movement and moving about are therapeutic when they are performed through trust in and respect towards one's body, in flexible co-operation. Movement and moving about are therapeutic when the body and the person who lives in it are the subjective experiencer of movement/moving, not its objective target. (KMV)

Movement becomes therapeutic when the client/patient/rehabilitee subject is, in a sense, activated through the support of the therapist. In this therapeutic situation stillness becomes important as Magee2023 notes: "In interaction, movement is a sustained target of attention, as well as being still." For body consciousness, the ceasing of movement is qualitatively important: "Stopping to move offers an opportunity to listen to body-messages, although some can also succeed in this while moving. At times, one needs to come to a state of being still to clarify thoughts, to calm mental alertness and to just be present to oneself" (Margit).

The contrast of movement with stillness brings a stronger cognitive focus on the embodied being: "Connecting body and mind by actively sensing and observing, surrendering, and releasing, have a psychological and physiological effect by efficiently calming down the body and the mind" (KH). Noticing movement consciously makes it therapeutic, as Magee2023 writes, which means that "movement is recognised, it is marvelled at and examined." Through conscious noticing, Magee2023 continues, "movement of which quality is, say, tense and withdrawn, is transformed into flowing movement—that is therapeutic for the client, even something that wakes up deep emotions. Free movement—free cognition." The link between the mind and the body is reflected in the dialectic of movement and stillness, in how they mutually constitute each other. Psychophysical physiotherapy, in the respondents' view, challenges biomechanics in the mind and body connection: there is not one without the other. This is what is meant by embodied being, by body consciousness.

However, it is also important not to forget the physio in the room with regards to body consciousness: "Being still/stopping to move may need to be accompanied by touch, which must be done in a very sensitive manner accounting for the entire situation. Special concentration and sensing the situation is required of the physiotherapist, as well as good interaction to gain the patient's trust" (Miimuli). The facilitating manner of the physiotherapist is important but easily forgotten or set aside when discussing body consciousness. Although the exploration of body consciousness happens individually, the social aspect is crucial for better practice.

Body consciousness cannot be performed in a forced manner. It demands conscious focus and reflection and learning: "With my psychophysical clientele, movement and moving about have usually been in a bit too large of a role, for example, in the form of compulsory exercising, and rest, calming down, and stopping are not given space in the body, mind, or life. Therefore, in our work, we often focus on setting ourselves upon the body [*kehon äärelle asettumiseen*] and learning to observe experience instead of performing sports or therapeutic exercise" (KMV). Therapy is social activity and in the advancement of body consciousness the physiotherapist works as a guide and a partner in the process (cf. Aittokallio & Rajala, 2020). After all, body consciousness is still a skill, as Minä writes: "From a physical perspective, a static position may be an active effort. Relaxation and being static are challenges to many clients. They often need to be learned." Learning and social support are crucial in the "stillness part" of movement. NN expresses this also in terms of both learning about oneself and trusting the other, underlining learning as being inherently social: "Letting go of rushing, encountering oneself, an opportunity to evolve. Giving oneself up to be supported [*antautuminen kannateltavaksi*, the latter word connoting support by being carried or held]."

Stillness looks to be a more difficult activity than moving. The difficulty seeps into the descriptive language of the respondents: "Being still and stopping moving, as concepts, mean to be at peace, to rest, to be in a state of not-knowing, ripening [*kypsyttelyä*, metaphoric], letting go and stewing [*hauduttelua*, metaphoric]" (KMV). The practice of stopping, of stillness, is infused with words and metaphors of activity that contain a slowly evolving process as with "ripening" and "stewing." There is no immediate pay off to this practice, which partially explains the difficulty. Pft highlights the delicacy of this practice: "I understand ceasing to move as a more conscious

exercise, which can be for many a useful step towards a state of being and submission. As we are still practicing something, staying still strengthens our ability to sense our bodies and to reflect the meanings of these sensations." The process of being still is rife with dialectical thinking, how activity and passivity are mutually co-constituted. Kesäheinä emphasises the importance of this body conscious practice: "Coming to a standstill brings people closer to their own body and mind, feelings, and thoughts. Coming to stand still can mean knowing and recognising the messages of one's body and one's thoughts and feelings. Stopping for a moment to be with one's own needs is vital and it should be taught to everyone."

Mutual reflexive practice

Almost all of the respondents emphasised the importance of physiotherapists also practicing reflexively those exercises they use in their practice with clients/patients/rehabilitees. Mutual reflexive practice in both movement and stillness is elemental in physiotherapy: it is a means "to learn about the rehabilitee (examining) or to work together (rehabilitation), to express oneself (to the client) to explore and learn oneself (comprehensive knowing of oneself), a channel to express feeling, thoughts, etc." (Minä). This mutuality of practicing is reciprocal and reflexive. The physiotherapist must enter into the process of embodied learning to be able to reflect the embodied being and needs of the person at their clinic, and this happens through exploring and reflecting one's own body and movement prior to doing so with the client/patient/rehabilitee. The client is also invited to explore reflexively different kinds of ways of being and moving together with the physiotherapist. The embodied experiential learning of the physiotherapist and the client/patient/rehabilitee are "shorter and longer very therapeutic moments, moments that speak to both clients and to me," as OV describes them, and they are very eye-opening and helpful in moving towards therapeutic goals:

> During these moments something very authentic often emerges. Like an experience that I am never still or in a standstill, or that I am always stagnant, somehow completely stopped. From these realisations it is possible to move forward to a practice that would be in this moment the most meaningful thing for functioning. (OV)

In such moments, goals are discussed together: "Sometimes the patient is able to name the goals with ease, sometimes pondering the goals together is needed" (Miimuli). What makes mutual movement therapeutic, as Margit writes, "is when we advance incrementally towards aims that have been set in mutual understanding." Moving incrementally, step by step, towards these mutually set goals can also clarify the goals along the way. It is also important, Miimuli writes, "to actively involve [*osallistaa*, to make someone a responsible part of something] the patient in the whole physiotherapy process. When the goals have been set together from the point of view of the patient's everyday living, they become better motivated and committed to therapy." Practicing physiotherapy through one's own body in this reflexive manner brings bodies, in a sense, closer to each other in movement, which undermines hierarchies in embodied knowledges between the physiotherapist and the client/patient/rehabilitee.

The respondents also emphasized the importance of adjusting movement and moving according to each individual needs and abilities. With some, movement can be stronger or gentler, with others more active, or guided through therapeutic touch, or just observing breathing and grounding. As OV describes, in their clinical practice, "we explore space, being, and breathing with the client through movement and moving around." Through moving,

> the client has the opportunity to get experiences that can inspire to try some new way to move, to produce movement, to pause, to stop, to let go, and to stay and listen to the body's internal movement. Through movement and moving about, both I and my clients have realised things that have produced new ways of acting, which have fitted better for the present moment. . . . To me, movement and moving about are life in me and in the other, also in-between us. (OV)

Mutuality is about listening to oneself and the other, and while mutuality can have a goal, it also produces some unexpected effects. Realising things that produce new ways of acting implies creativity much needed in physiotherapy, as Kesäheinä puts it, and an ability to be surprised, which is something that can render physiotherapy reparative (cf. Sedgwick, 2003).

Mutual reflexivity often demands time and space to stop and listen, to pause and to be present in reciprocal interaction: "Pausing is a precondition

for having space for being present, which is needed in each encounter with a client. Pausing is the skill to focus in the moment. Staying still and stopping is a prerequisite for to be able to encounter the client in one's own work" (Magee2023). For Miimuli, stopping to listen means "a valuing, listening presence. I pause to listen what my patient is telling me. I observe the patient during their story." To stop and listen, without rushing, is essential in hearing the client/patient/rehabilitee and proceeding in physiotherapy from their standpoint:

> How wonderful it is to be present without rushing, to pause and breathe. To listen what the other has on their heart and to notice how grateful they are when someone listens, and one doesn't need to immediately perform all sorts of things even if they have come to physiotherapy. We go forth with the client considering their starting point and their resources. (Hanskimari)

Listening opens up space for wondering and curiosity in interview situations, in addition to using, for example, questionnaires and measurements to gain something "more concrete" (OV) with which to demonstrate changes during physiotherapy. As Miimuli writes, "among other things, openness and curiosity help when interviewing. One cannot and need not know everything. It is important to pick up things in the patient's story that they bring forth as meaningful for them." This requires what Rita Charon (2001, p. 1897) has called narrative competence, "the ability to acknowledge, absorb, interpret, and act on the stories and plights of others."

Encountering the other requires time, both to listen and to hear, but also to recover. Mutuality and being constantly present can be demanding for the physiotherapist, as well as the client/patient/rehabilitee, and time may be needed to recover and heal afterwards. Sometimes, "it is also good to receive professional support for reflecting thoughts/situation" (Miimuli). This is especially important in resource-constrained situations such as in marketized healthcare, and in societies in which activity is praised and inactivity demonised. In Pft's reflection, they experienced the concepts of standing still and coming to a standstill [*paikallaanolo*, *pysähtyminen*] as forced, because, while some people do need clear instructions on these matters, "as a physiotherapist, the theme of being still causes some frustration about the fact that our

work and the state of the whole society is so burdened because of the constant fear of ceasing to move" (Pft).

Reading movement otherwise

Movement is seen as a medicine for immobility from a dominantly biomedical perspective; but as nearly all the respondents marked, movement in its various guises (including stillness) is intrinsic to human beings, as active subjects in our own lives. However, movement requires balance: first, with stillness (movement's co-constitutive partner); and second, with everyday life, so that the embodied subject is not overwhelmed. After all, through the expressivity of dialectical movement (that which is also stillness) we learn about our embodied selves. The practice of body consciousness through this dialectical movement is not just a way of rehabilitation but of deeper self-knowledge. Crucial in this mutually reflexive practice is the physiotherapist as a guide and co-experiencer.

The respondents' texts are in themselves already deconstructing the dominant biomechanical approach to physiotherapy because they expand the concept of movement into a broader, dialectical conception. Movement in these texts recall Derrida's (1981) analysis of Plato's sense of writing as *pharmakon*, which in Ancient Greek can be understood both as a "cure" and a "poison". Rather than seeing movement as a cure and stillness as poison, the more comprehensive understanding of movement encompasses both senses. Therefore, like Plato's sense of writing for Derrida, the meaning of movement is inconclusive. It is dependent on the situation and context. However, this deconstruction does not seek to destroy the biomechanical approach. Biomechanical, biomedical, traditional, "uncritical"—call it what you will—physiotherapy is exactly why any "otherwise" physiotherapy exists. Instead of seeing these as hierarchical opposites, their deconstruction is an opening towards a greater challenge to any "otherwise" approach: it cannot ossify, stop moving, be set under rules, tied down. The more the "counterapproach" is established, the more it ought to refuse to be tied down—for its own sake.

Another curious Derridean echo comes from the practice of stillness, stopping, or pausing. In contrast to movement, as the respondents emphasised, the importance of stillness is deferred, only learnt afterwards and through a continuing process. Not only is stillness meaningfully different from movement, but their relationship is also emblematic of Derrida's *différance*. Stillness

offers space for listening and observing, always through the body whether through seeing, hearing, or touching or through moving, breathing, or standing still. Movement, similarly, is a reflexive practice of self-knowledge and body consciousness, which offers perspective into stillness. Movement and stillness are mutually constitutive, but not in a Hegelian, positive sense, in which we come to understand both of their meanings. Rather, the mutual constitution is also deferred and contextual, and their meaning can be glimpsed only momentarily.

In Derrida's reading of Hegel, as Horton (2023) points out, the body is neither the Cartesian objective *res extensa*, nor the subjective self; rather, the subjective/objective dichotomy is overturned "because my body is myself and other than myself" (Horton, 2023, p. 105). The texts by physiotherapist deconstruct the body in this manner, making it one thing and another at the same time, deconstructing dichotomies that are written upon it. It is both interior and exterior, musculoskeletal and visceral, active and passive, moving and still, moving while still, and still moving. Movement is before perception: there is always oozing, pumping, expanding, whooshing, forming, secreting—before we have to actively do anything about it. There is futurity (cf. Derrida, 2006) to movement: we are already going to the bathroom before we have to go, already moving before we intend to do so, always-already affected by the hormones our bodies are producing each moment, always teeming with microbial life making us loci of more-than-human movement. Never still, exactly because movement is "life in me and in the other, also in-between us" (OV), movement is always-already to-come (*à venir*) movement, and this is why movement and our bodies are strangers to us. Movement is my embodiment, my body is myself, but in its futurity and visceral interiority, and in its refusal to play along—exactly when we need physiotherapy—it is totally other (*tout autre*).

There is an undercurrent that haunts the texts. It is not explicitly named, yet it seems to be implied in the very reasons why movement as more-than-medicine is needed. Why do we need to re-learn stillness and get to know our embodied selves? Why is autonomous movement a privilege? Why have some people pushed aside the skill to be still? Why some suffer lack of recovery and disturbed sleep? Why do we long for having time? What else is it we fear if movement and activity cease than the very end of capitalism (as we knew it)? The call-back to capitalocentrism brings us also back to

our title. The compulsion to be active, the fear of ceasing to move, and most importantly time are tied with capitalocentric thinking as a value-maker. The economic connotations of *liike* (movement) appear less coincidental. The economy needs to keep moving and its movers (us) need to be kept in motion. Being in constant movement seems to eschew stopping and thinking. Thinking otherwise may challenge the economic hegemony—perhaps then we could focus on treating human beings instead of making do with what is economically affordable.

Epilogue

Epilogue translates roughly as speech attached to the end. Our reading, in the spirit of *différance*, is very uncomfortable for us to conclude. Conclusion, to us, connotes a routine section in a research paper, in which we finally tell the reader how they ought to have been reading all this all along. We wish to do nothing of this sort. Our intentions or personal histories, or our authorship, do not explain to the reader any definitive and ultimate meaning in this text. Following Roland Barthes' argument in his 1967 essay, The death of the author, we insist that the interpretation and afterlife of this text lies in "the birth of the reader" (Barthes, 1977, 148). Conclusion also connotates something that has come to a full or near full stop. In our view, deconstruction points toward a need for continuing analysis rather than towards ours having been exhaustive. So, our conclusion is deferred, but not in a standstill. Deferral means postponement, movement of its own kind, which demands, in the meanwhile, another kind of movement: reading, writing, critique, deconstruction. We hope that what we put in motion continues its movement, because if movement (as we knew it) is deconstructed, then physiotherapy cannot remain (still) the same either.

Acknowledgements

This research was made possible by the support of two Research Council of Finland funded projects at Tampere University, Assembling Postcapitalist International Political Economy (325976) and Shit Made Public: Politics of Faeces in Urban Spaces, Art, and Bioethics (350247), and the Health, Narrative and the Arts project (Kone Foundation, Jenny and Antti Wihuri Foundation) at The University of the Arts Helsinki, Theatre Academy. We

express our deepest gratitude to the physiotherapists who contributed to our writing call in summer 2023, Essi Nousu for her initial input, and Jenni Aittokallio for the numerous discussions that have shaped our thinking about Finnish psychophysical physiotherapy.

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Acknowledgements

We are indebted to all helped us make this book into a reality through their skilled support.

Glenn Bergen, the open access lead with eScholarship through the University of Manitoba Libraries, led us through each step of the open access publishing process, offering invaluable guidance throughout. He and Nicholas Lysecki from the University of Manitoba Libraries led the copy-editing and formatting of the chapters to ensure consistency, among other contributions to publish this book. As well, Mary Osunlusi at the University of Manitoba, Thabo Patrick Mbenenge at the University of Cape Town, and Jess Koroscil of Winnipeg all contributed to this anthology in behind-the-scenes ways.

We thank Bruce Williams, the photographer and conceptual designer for our book cover. Among other gifts shared with us, he generously allowed the dandelions at his home to go to seed in order to photograph the beautiful cover image.

And we extend thanks to Dr. Barbara Gibson, Professor Emerita of Physical Therapy at the University of Toronto, and Dr. Judith Lane, Senior Lecturer at Queen Margaret University, for their helpful peer review of the book's introductory chapter.

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