Toward Interdisciplinary Investigations of Flow in Performance Studies

by

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ABSTRACT

To be in flow is typically described as a state where one becomes enmeshed with the performance of a task (Csikszentmihalyi xv). Flow has been extensively investigated and pioneered by the late Mihaly Robert Csikszentmihalyi in the field of positive psychology to optimize focus, presence, and pleasure. Explorations of flow extend far beyond Csikszentmihalyi's work and across various fields of clinical and sport psychology, dance studies, sociocultural kinesiology, sociology, as well as theatre and performance studies. In this study, ten professionals across various disciplines that connect to the phenomenon of flow or flow states were contacted to participate in short 20-minute interviews. The semi-structured interviews investigate the central question of how different disciplines conceptualize flow and seek to understand some of the underlying value assumptions embedded in how different fields evaluate the phenomenon. The qualitative interviews were then inductively coded to identify themes and critically investigate discipline-specific assumptions and values placed onto flow and how one enters a flow state in a variety of performance contexts. Following a nuanced interpretation of each interview, I evaluate the potential benefits and limitations of understanding interdisciplinary conceptualizations of flow from the lens of performance studies and a social constructivist paradigm.

PREFACE

This thesis is an original, unpublished, intellectual product of the author, Seairra Katherine Němeček. The research study, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Project Name "Toward Interdisciplinary Investigations of Flow in Performance Studies," No. Pro00137345, February 09, 2024.

DEDICATION

To Nora, who has ignited the passion and drive within me that seeks to understand different ways of experiencing the world. Thank you for grounding the part of my soul without which this project would not have been possible.

ACKNOWLEDGEMENTS

I would like to express my immense gratitude to the people who I interviewed over the course of this study: Gabe Dyck, Ricardo Eguren-Echaiz, Marek Komar, Jennifer Nikolai, Emily Noton, Alissa Overend, Kate Rozendaal, Geri Ruissen, Mattia Tagliarini, and Kathleen Weiss. Your generosity in each of the interviews and personal insights have been integral to the success and richness of this research. I would like to extend my gratitude to my co-supervisors, Donia Mounsef and Lin Snelling for their formative perspectives throughout multiple iterations of this project and their ongoing support. Additional thanks to Selena Couture and Piet Defraeye who have fundamentally illuminated perspectives of how I approach my work that have forever enriched my research practice.

I am immensely grateful for the guidance of Jim Denison, who has challenged my work in understanding athletic performance and introduced me to new epistemological frameworks. This thesis could not have been possible without him and is a product of his legacy as a kind, brilliant, and influential professor.

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INTRODUCTION

> While frequently positioned as fundamentally different from one another, sports and performance are genealogically linked across time and geography. Theatre and sports have historically flirted with one another along the boundary of aesthetics of difference. The origin stories of sport are very similar to those of theatre, rooted in ritual, in human behaviors like running and dancing and the joy of moving one's body. (Walsh 5)

As a woman who has engaged in a variety of athletic and artistic disciplines over the course of my life, there is nothing quite like the feeling of being completely immersed in a physical performance. In the introduction to *Sporting Performances: Politics and Play*, editor Shannon L. Walsh distills a comparison between the origins of sport and theatre, highlighting how art is often deemed as almost categorically antithetical to sporting competitions. Walsh suggests that the distinction between artistic and sporting performances should be troubled (2). It is precisely this troubling of the role of sport as art, and art as sport, that can be further understood through a single point of convergence: embodied experience. I have trained and performed as an athlete and dancer across Tkaronto/Toronto, Tiohtià:ke/Montréal, and presently on the land known as Amiskwaciwâskahikan/Edmonton. My interest in flow stems from a curiosity in performance which emerged quite early in my life: playing music, dance, performing in plays, swimming, basketball, softball, volleyball, cross country running, and many other activities. Later in my adolescence, I fell madly and entirely in love with the dynamic sport of rugby. My exposure to such an array of performance-related activities gravitated me toward understanding the joy and focus that I experienced in flow and flow states. In the early years of my undergraduate degree, I created theatre projects, developed work in contemporary and improvisational dance all while training in rugby at the varsity, club, and provincial level. The seed of this research project began

to take root with a central question to understand how my peers and I described, qualified, valued, and experienced the phenomenon of flow. At times, I termed the way I interpret the world as a sort of bilingual embodied code-switching between my dance brain and my rugby brain throughout various parts of my day. Upon conversing with fellow athlete-artists, I was interested in the shared experiences among those who possess a high level of skill across different fields of physical performance.

To be in flow is typically described as a state where one becomes enmeshed with the performance of a task. Flow has been extensively investigated and pioneered by the late Mihaly Robert Csikszentmihalyi in the field of positive psychology as a state that yields optimized focus, presence, and pleasure. Explorations of flow extend far beyond Csikszentmihalyi's work and across various fields of behavioural psychology, dance studies, sociocultural kinesiology, sociology, theatre, and performance studies. In this study, ten professionals across different fields connected to the phenomenon of flow or flow states were contacted to participate in short 20-minute semi-structured interviews which explore the central question of how different disciplines conceptualize flow in performance. The selection criteria for the study sought to create a discourse on how the phenomenon of flow can be understood in-relation to performance products and outcomes. Participant interviews were then inductively coded to critically investigate discipline-specific values and assumptions concerning flow states. I analyze the potential benefits and limitations of understanding both discipline-specific and interdisciplinary conceptualizations and evaluation metrics of flow in performance. This work seeks to identify the aspects of clinical and psychological groundings of flow that can be enriched by dance and performance studies conceptualizations of the same phenomenon and vice versa. Additionally, this research assumes that creating dialogues of interdisciplinary investigations of phenomena

can be used to foster empathy among fields with starkly different paradigms within which they investigate performance.

I offer a method to understand the phenomenon of flow through a structured conversation and discussion. In chapter 1, I engage with literature of various disciplines from which Csikszentmihalyi's flow dominates contemporary flow scholarship. I proceed to identify how each author's conceptualization of flow is informed by their disciplinary background. Various concepts in flow research are then brought into conversation with performance studies scholarship to identify intersections such as Anne Bogart and Marie Overlie's Viewpoints and Csikszentmihalyi's flow state. In chapter 2, I explore the role of power in-relation to the value of flow through the theories of Judith Butler, Pierre Bourdieu, René Girard, Gilles Deleuze, and Félix Guattari. Various contemporary scholars across performance, sport, and dance studies are integrated into this discourse. In chapter 3, I explore interviewees conceptions of flow through a conversation rooted in reflections of this study. This project is not only informed by my personal background, it becomes a living and ongoing practice of investigation to reflect upon and understand the voices of prolific figures in studies of flow in conversation with contemporary practitioners and scholars in fields of work involved with flow performance. This structure of situating each author, practitioner, and scholar in the greater context of their disciplinary background permeates each chapter of this thesis and is used as a means to distill the observations that arise from the qualitative interviews. All of the stories, perspectives, and anecdotes that were shared with me span across various conceptualizations of flow from different fields that share a common interest in performance.

This research intends to continue the scope of literature on flow, identify, and critically investigate some of the value assumptions that shift depending on how flow is understood and

evaluated across fields. A flow state, as per phenomenology in positive psychology, can be reached in a variety of task-oriented, competitive, and creative disciplines (Csikszentmihalyi xx). What piqued my particular interest are the similarities and differences in value, terminology, and methods across how specialists from various fields of performance speak about flow in their work. This project seeks to further illuminate how dance, theatre, and performance studies approaches can work alongside psychological conceptualizations of flow to create joint interdisciplinary discourses to understand flow in performance.

Chapter 1: Disciplinary Conceptualizations of Flow in Performance

The most widely accepted body of work that investigates the evaluation of flow states resides in the field of positive psychology, pioneered by the late Mihaly Csikszentmihalyi. Flow is conceptualized as a state of optimal functioning that is connected to the ideas of presence, focus, pleasure, immersion, and has been sought out as ideal for enhancing performance outcomes and joy (Jackson and Csikszentmihalyi 4). The prerequisites that can best optimize or facilitate one to enter a flow state have been studied and applied across behavioural and performance psychology, performance studies, sports studies, and other fields which possess a keen interest in optimal performance outcomes. Depending on the field or discipline, flow functions as both a means to achieving a particular desired outcome or a means to work towards an intangible ideal in the realm of performance. Throughout my time investigating a wide scope of flow literature, I was troubled by the large variance across how flow is analyzed which adheres to discipline-specific assumptions regarding desired outcomes. In order to optimize performance outcomes from particular athletes, the fundamental positivist psychology paradigm within which flow primarily resides fundamentally assumes that being in flow functions as a means to optimize desired outcomes. Although behavioural psychology accepts and understands the breadth and scope of work in attention, focus, pleasure, and task-orientation, I believe that understandings of flow extend far beyond this work due to my background as a multi-sport athlete and dancer. I am interested in bringing various conceptualizations of flow and flow states in conversation with each other to identify some underlying value assumptions that different fields have embedded in their conceptualizations of flow as a phenomenon.

My positionality as a multi-sport and multi-disciplinary athlete and artist has exposed me to a wide variety of contexts. Within various artistic and sporting contexts, being in a state of

flow can contribute to positive outcomes, yet at times can also be a hindrance to desired performance depending on the genre or structure of the discipline. Herein lies the primary line of investigation of this project: how do various disciplines conceptualize flow in performance, and how is flow useful and disruptive in various contexts? This project is not a criticism of the work pioneered in the field of positive psychology, but rather aims to open up a discourse regarding how the context-specific nature of optimal performance exists in the practice of various disciplines that disrupt or resist some of the assumptions asserted in flow psychology.

In this chapter, I investigate how flow is evaluated and measured, distinguish between different types of flow, highlight the role of the brain and neural correlates of flow, and investigate the primacy of play and its role in understanding the flow phenomenon. This chapter employs a survey method which delves into the literature of flow and how it is described and understood from different perspectives. This method brings presence to the different disciplines that conceptualize flow to engage in a conversation by placing their paradigms and positions beside one another. It is this interdisciplinary intersection where I expand upon the benefits, barriers, and efficacy of viewing the widely researched experience of flow across different fields.

Evaluation and Measurement of Flow

Arguably, the most important prerequisite to enter a state of flow is the notion of the challenge-skills balance (Jackson and Csikszentmihalyi 36). The flow model illustrates a relationship between the perceived skill and perceived difficulty of a task or activity.

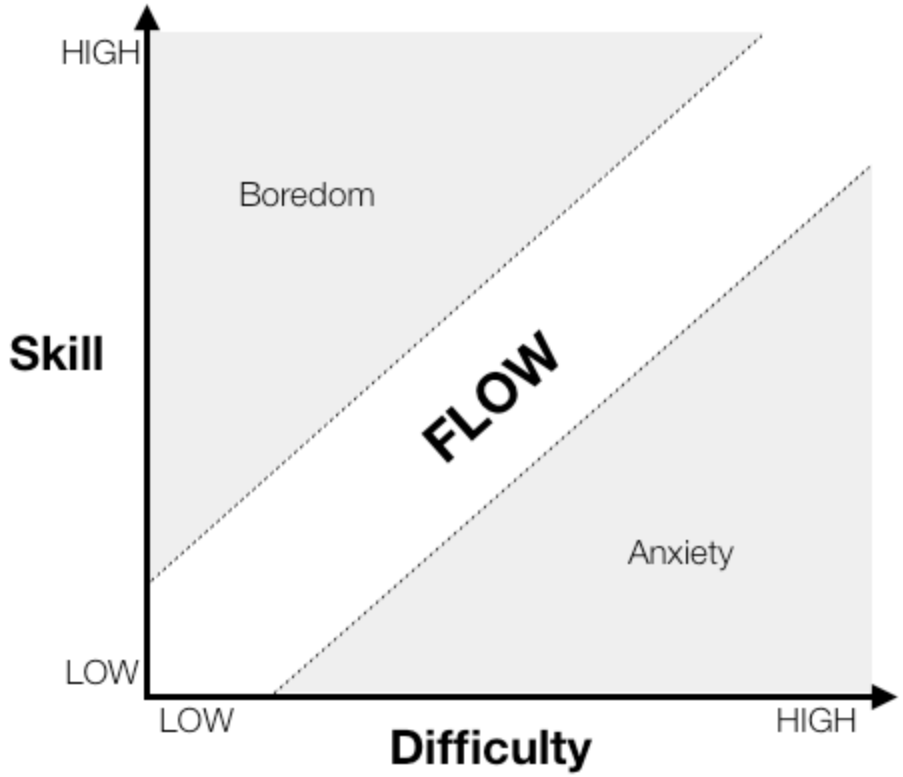

Figure 1. "Model of a flow state" (Jackson and Csikszentmihalyi).

Throughout the body of Csikszentmihalyi's work, he offers a comprehensive list of nine prerequisites to enter flow. In order to enter a state of flow there must be a perceived challenge-skills balance, action-awareness merging, clear goals, unambiguous feedback, concentration on the task at hand, sense of control, loss of self-consciousness, transformation of time, and an autotelic experience (Jackson and Csikszentmihalyi 16). If someone possesses low skills in an activity that is not challenging, the result is apathy. If the subject has high skills in an activity that is not challenging, the affective result is either feelings of relaxation or boredom. Conversely, if someone has low-level skills in an activity that is challenging, the result is anxiety. Thus, the state of flow is most conducive when an individual possesses both a high level of skill in a task that is also challenging enough for them to maintain concentration in the activity.

The disciplines of dance, theatre performance, and sport are unique and interesting chasms in which one can evaluate flow due to their dynamic and variable nature. Improvisational dance is a very different dynamic chasm in comparison to that of the heavily institutionalized genre of classical ballet. Similar to dance, in the realm of theatre performance, there is a clear distinction between developing a rehearsal process in order to achieve a desired outcome and the final product itself. This is not quite the same as the training process in-relation to the competition setting of a sporting game. In artistic physical disciplines, there are a plethora of techniques and exercises that have been developed to facilitate flow in a rehearsal space. The most noteworthy practices relevant for this study are Anne Bogart's developments from Marie Overlie's Viewpoints. For those who have experienced various theatre rehearsal exercises, especially movement-based embodiment practices that are used for developing group cohesion, the flow and gradual proficiency which occurs during the progression of this work is viscerally felt among the individual or the collective engaging in said work. In-relation to the psychological conception of flow, there must be a task or a goal, prompt, or task-oriented framework given to participants in order to facilitate flow (Jackson and Csikszentmihalyi 79).

It is easier to evaluate a state of flow during discrete task accomplishment because there is little likelihood for the task to be disrupted by unpredictable factors (Jackson and Csikszentmihalyi 46). Thus, dynamic settings contain more variables that are difficult to account for and measure when discerning whether or not someone has entered into a flow state. Flow theory also operates under the principle that individuals possess a certain degree of individual control over their own actions, which is desirable in order to facilitate a flow state (Csikszentmihalyi 231). The greater the dynamic nature of the setting, the more difficult it is to control all variables and external factors. "Sometimes the environment presents challenges that

are not planned but that require some adaptation for success to occur" (Jackson and Csikszentmihalyi 46). Jackson and Csikszentmihalyi hold the position that self-talk and performance interventions must have a positive orientation in order to facilitate flow. The critical issue is one's perception of the activity or task's difficulty and whether or not they believe that their capabilities are sufficient to achieve a particular goal or desired outcome (47).

As previously established, flow requires both high levels of perceived skills and challenges in order for one to enter a state of flow. It is noteworthy that flow is contingent upon one's own perception of the task's difficulty as well as their own personal capabilities rather than external metrics that are predetermined. It is common to describe the flow experience as seamless or effortless in its quality, yet in order for something to appear as easy, there must be years of experience and embodied practice where one has attained technical proficiency in order for them to enter a flow state. The current ecology of flow literature has spread its roots from Csikszentmihalyi's concepts and has been translated into multiple languages all over the world. Flow performance interventions have been adapted into athlete and dance programming and are integrated into a wide variety of studies in optimal performance. In all translations and amendments to measurements of optimal flow, there must be a balance between the performer's challenges and skills (Jackson and Csikszentmihalyi 36). Jackson and Csikszentmihalyi contend that the flow experience specific to the discipline of sport, requires "skills [which] need to keep pace with the opportunities for action the sport provides" (51). This observation is key in articulating that in order to maintain one's presence in a flow state, their perceived skills must be able to adjust to unpredictable factors that could disrupt or even further challenge the athlete or performer.

These prerequisites for flow have been developed and integrated into empirical evaluation questionnaires that rely on Likert-scale responses to be answered retrospectively upon a person's recent experience of being in flow. Csikszentmihalyi developed a series of what he termed Experience Sampling Methods (ESM) which include self-report questionnaires that are used to evaluate one's current state and the quality of their perceived experience at the time of recording. ESM aims to ''expos[e] regularities in the stream of consciousness, such as states of heightened happiness or self-awareness, extreme concentration experienced at work, and symptoms of illness" (Csikszentmihalyi 37). Experience Sampling Methods (ESM) to evaluate flow were developed by Csikszentmihalyi and Larson in 1987 "whereby multiple assessments of [one's] experience are recorded" (Jackson and Eklund 134). This sampling method allows for immediate feedback from participants to be collected.

"While the ESM has proven to be a popular method of assessing flow in daily life, it has yet to be embraced in physical activity settings, where researchers are often interested in discrete assessments and where disrupting performance during the activity is another obstacle to using the ESM approach" (Jackson and Eklund 134). The Flow State Scale (FSS) and the Dispositional Flow Scale (DFS) are the primary quantitative measures that are used to measure flow in settings of physical activity. They are measurement tools which are most prevalent in the discipline of sports psychology and implemented into training practices by mental performance consultants. The Flow State Scale (FSS) "measur[es] nine factors that are relevant to perceptions of one being fully engaged in their sport" (Luiselli and Reed 87). Susan Jackson later developed the Dispositional Flow Scale (DFS), which tests the trait component to flow through examining situational factors that influence individual levels of flow during competition (Carter et al. 21). Susan Jackson conceived of the DFS subsequent to the FSS with the help of Robert Eklund. The

DFS is more discipline-specific and takes into account differences among individuals and their subjective experience of flow. Carter et al. attest that:

> Research has confirmed the flow measures are cross-culturally valid tools to assess the construct of flow, and revisions from the first to second versions of the scales have increased the conceptual coherence to Csikszentmihalyi's original nine-factor conceptualization of flow while being tested on participants with expertise in a large range of sports and sporting activities. (22)

The FSS and DFS have since been shortened from their original long-form scale questionnaires into versions with the same degree of validity for assessing both dispositional and state flow: FSS-2 and DFS-2 (Jackson and Elkund 146). Researchers have shortened the "scales in the assessment of athletes who play a wide range of sports, as well as non-athletes" (Carter et al. 22). The FSS and DFS scales are generally accepted as an authentic and valid account for flow experiences in players/performers across various physical sporting disciplines, video games, dance, and other activities. It is noteworthy that for psychological evaluation, there have been a series of refinements in how flow is measured to account for cultural differences and a variety of contexts where one experiences flow or how the phenomenon can be articulated by individuals. Despite the adjustments that have been made to increase the specific measurement of flow, the universality of flow experiences in relation to optimal performance still lends itself as more applicable to select fields or activities over others.

In a comprehensive textbook which serves as a survey of sports psychology literature, the author and editor, Nicholas T. Gallucci, articulates the role of goals and objectives required for flow; they identify the connection between one's sense of achievement and their identity. Gallucci argues that a person's sense of accomplishment is additionally, inextricably linked to

their “network of supportive relationships” (41). The role of relationships and other human beings that contribute to someone’s sense of self is crucial to understanding the relational aspect of flow. The relational aspect of flow occurs not only within dynamic sporting or dance environments, but in moments of complete immersion in an activity where the fundamental root is the blurring between a person and the object or subject of their connection. The nature of object-subject relationships will further be elaborated upon in chapter 2 and brought in conversation with the interviews for this research in chapter 3.

Gallucci contends that achievement, life satisfaction, and flow are all correlated and makes a series of assertions regarding flow in sporting performances that do not account for the complexities of the phenomenon. The textbook as a mode of prescriptive literature aims to synthesize large and complicated concepts and draw out the most important takeaways to apply conceptually to a surface-level exploration of large psychological concepts that are applied to performance literature. In doing so, I argue that oversimplifications can also generalize phenomena through the process of removing case-by-case contexts and anomalies. Although for the purpose of a prescriptive text that operates in the context of sport science education, flow conceptually extends far beyond just the realm of sport.

Jackson and Csikszentmihalyi define flow as “a state of consciousness where one becomes totally absorbed in what one is doing, to the exclusion of all other thoughts and emotions.” Focus is central to flow, yet flow extends beyond just a state of focus and concentration and creates a “harmonious experience where mind and body are working together effortlessly, leaving the person feeling that something special has just occurred” (5). The positive relationship between flow and optimal performance is what reinforces Csikszentmihalyi’s ideas surrounding the phenomenon of flow as a means to achieve an ideal and strive towards

accomplishing a performance outcome (13). Although there is a depth of work which connects flow and optimal performance, part of the necessity that prompted Susan Jackson to develop the DFS arose out of the dispositional nature of flow that depends on a specific activity and context in which it is measured.

The ability to enter and disrupt a flow state is contingent upon a variety of factors that are context-specific. Some sports and disciplines tend to naturally facilitate flow states greater than others. Gallucci identifies that flow is a theory that operates under the Freudian hedonic principle which is "the assumption that people strive to maximize rewards or pleasure and minimize losses and pain" (43). He traces the roots of the hedonic principle which "dominated the understanding of human motivation from the time of the ancient Greeks to the twentieth century [and] is the basic motivational assumption in psychological theories as diverse as psychobiology, behavioural psychology, decision making, and social psychology" (Gallucci 23). Under the positivist paradigm within which flow research resides, there is this underlying assumption that optimal performance is always the ideal that is sought to be attained. Part of this assumption hinges on the autotelic component of flow which is thought to be "the end result of the other eight components of flow" (Jackson and Csikszentmihalyi 30). Gallucci elaborates on the autotelic nature of flow experiences that are enjoyable to athletes and places weight on the positive outcomes that this component has on sporting performances.

Although the enjoyability of flow experiences vary across contexts and activities, the autotelic component is what creates the joy or pleasure which justifies the act of rigorously training and striving to enter such a state of immersion. Jackson and Csikszentmihalyi have identified various expressions from athletes when referring to flow as "statements [that show] clearly that flow is both highly valued and extremely rewarding to those fortunate enough to

experience it" (30). The autotelic nature of flow, as evaluated from a neuroscientific perspective, is crucial to understanding the inherent rewarding value of doing an action for the sake of its rewarding nature. Csikszentmihalyi's conceptualization of flow cites the etymology of the autotelic component of flow which stems from the words auto (self) and telos (goal) (240). The autotelic nature of flow was fascinating to Csikszentmihalyi. He believed that the actions of a person in a state of flow have an inherently rewarding nature and are not contingent necessarily on the external reward of the product of the action (240). I illuminate and expand upon this observation in chapter 3 through understanding how the participants of this study engage with flow in their fields of expertise, and identify what specific metrics they believe contribute to how they understand or evaluate a performance.

Over decades, Csikszentmihalyi developed in-depth evaluation metrics that can generally qualify and discern whether or not a person is in a state of flow during the performance of a task or an activity. Positive psychology has quite a prescriptive means of investigating whether or not someone has entered a flow state, yet is based on holistic and abstract concepts. There is no shortage of work that investigates the correlation between flow and behavioural task performance outcomes. Flow can be evaluated not only retrospectively from the subjects who experience it, yet also from an external observer who has developed a significant degree of expertise in the field of which they are witnessing flow. What is then viewed as flow from the perspective of a witness is no longer the same construct or phenomenon that is being recorded by the individual as defined by Csikszentmihalyi–it becomes something else that is more affectively understood or perceived by those witnessing and collectively experiencing the moment.

Creative Flow

Creative flow can refer to many things: the feeling one experiences when engaging in a creative task with a sustained amount of focus and attention, being in a flow state amidst a creative process, creative problem solving, or observed creative engagement that moves seamlessly from one stage to the next. Creative flow is most widely accepted as an understanding of entering a flow state to produce optimal creative outputs or become enmeshed with the task at hand (Csikszentmihalyi 138). Creative flow can be both conceived of as a state that one enters while engaging in a creative activity or an act that enables the person to continue to move through a state of flow by means of creative problem-solving. “Since any scientific, artistic, or other creative effort depends on acquiring, recombining, or producing information, and since this process requires attention that is in limited supply, concentration must be the inevitable prerequisite of creative work” (Csikszentmihalyi 9). The role of concentration is pivotal to entering flow in creative work, just as it is in other activities (Gallucci 136). In order to understand conceptual differences across creative flow, there is a clear distinction between automatic processing, which occurs subconsciously, and controlled processing which is facilitated by constant awareness and efforts (Gallucci 136). The conscious component of cognitive processing is said to dissolve when one is in a complete state of flow as per the psychological construction of the phenomenon. It is the lack of self-consciousness, paired with high intrinsic motivation that makes an action or activity rewarding in itself. The autotelic nature of flow in creative environments seems to be more organic than in athletic or competitive environments that are preoccupied with performance outcomes. If a task is enjoyable for the sake of doing so, there are other associated benefits.

A study entitled “Qualitative Investigations of Flow Experience in Group Creativity” investigated experiences of flow in a group of six improvisational dancers (Lucznik et al.) As part of their survey of creative flow, they uncovered a general conclusion across “studies in fine art [which] found that artists who had intrinsic motivation and found their rewards in the making of art itself were more likely to maintain a creative practice in the long term” (Lucznik et al. 192). An intriguing observation from Lucznik et al.’s study on flow and group creativity in dancers is that “while reflecting on the benefits of being in flow, dancers commonly commented that it was a highly creative state when they could surprise themselves with unusual movement solutions” (202). When referring to movement solutions in a group setting, the progression of movement in a collaborative environment was further enabled by flow.

> The last response [from the dancers] reflected also the other characteristic of group flow: the potential of failure. Even if there are no explicit parameters of successful improvisations, dancers tend to judge their performance a lot. Improvisation, because of its nature, allows dancers to act on the edge of their abilities of creativity, performance technique and communication skills in the group. This keeps practice vivid and, for the most part, challenging over time. (Lucznik et al. 201)

The nature of improvisation in collaborative artistic environments almost charges a space with what I like to interpret is something analogous with Csikszentmihalyi’s idea of psychic energy (160). It is a feeling where one is engaged in an activity with a great deal of potential energy and endless possibilities. The observation in Lucznik et al.’s study that dancers needed both a competent degree of performance technique and communication skills among the group in order to contribute to the flow by increasing the challenging dimension of the activity aligns with the challenge-skills prerequisite for flow. The group mutually facilitated flow experiences among

participants due to each participant's collective skills and the mutually evolving construction of the challenge between the dancers that evolved over the course of their engagement with one another. The realm of athletic competition and dance are inherently designed to facilitate a flow state due to the increased challenge-skill relationship present in performances. To what degree is the potential for feedback present in creative or artistic settings that facilitate flow environments? Identifying whether or not flow is present depends on if the flow of movement is witnessed or the flow state is embodied by a performer. A witness cannot discern whether or not a performer is focused and present in a creative process or if they are in a state of flow.

Flow studies and dance studies have conducted extensive work in the role of collaboration and group work that can facilitate flow states. Various studies across genres of dance and other physical disciplines point to the benefit of collaboration in order to create and remain in a state of flow. As a dancer and multi-sport athlete who has engaged in various kinds of physical activities, performances, and competition settings, the structure or composition drastically affects my ability to enter, remain in, or exit a state of flow. I noticed upon retrospectively identifying performances in which I have been involved in flow, that my embodied experience alone or in-relation to others would drastically shift the target of my focus or immersion in a task.

Lucznik et al.'s study reported a similar observation that "dancers reported that entering and maintaining the flow state was easier while being in the group compared to being on their own; however, the quality of the group, familiarity with others and levels of trust also mattered" (199). The findings of the study attempt to distinguish factors that are positively linked with flow states in dance or whether or not they "are more generic to the process of group creativity." The structure of Lucznik et al.'s study begins with contextualizing flow as per Csikszentmihalyi and

his work on problem-solving. “Creative people develop strategies to ignore external distractions so that they may lose themselves in a creative process” (190). The phenomenon of being lost in a creative process is much different from that of a competitive framework or setting. Creative flow is also particularly interesting as creative flow is not exclusive to solely creative tasks or experiences. Creative flow and its connection to problem-solving can be experienced across any challenge that has either a complex solution or that is not immediately obvious. As part of the method of Lucznik et al.’s study, “dancers were asked how they experience flow, how it supports their creative practice, and how being in a group affects the flow experience” (191). Various interventions have been integrated into the preparation and planning phases prior to a performance in order to create an environment that supports the potential for performers, actors, or athletes to enter a state of flow (Gallucci 41).

Anne Bogart developed a pedagogy for theatre rehearsal processes, choreography, dramaturgy, and devised theatre that looks at the intersection of various subjective perspectives to which the practitioner can attune their attention: the summation of these perspectives serves as an extension of Marie Overlie’s “Six Viewpoints.” Bogart’s Viewpoints encompass Space, Shape, Time, Emotion, Movement and Story. The Viewpoints exist as nine separate perspectives that one can train their eye toward in practice: there are four Viewpoints of Time and five Viewpoints of Space. The Viewpoints of Time include: *tempo*, “the rate of speed at which movement occurs,” *duration*, “how long a movement or sequence of movements continues,” *kinesthetic response*, “a spontaneous reaction to motion which occurs outside you,” and *repetition*, “the repeating of something onstage” which includes both internal and external repetition (8-9). The Viewpoints of Space include: *shape*, “the contour or outline the body (or bodies) make in space,” *gesture*, which is a movement involving a part or parts of the body that

has a beginning, middle and end, *architecture*, "the physical environment in which you are working and how awareness of it affects movement," *spatial relationships*, "the distance between things onstage" including distances between bodies from each other and the architecture, and lastly, *topography*, which is defined as "the landscape, the floor pattern, the design [which is] create[d] in movement through space (Bogart and Landau 10-11).

In Bogart's work on Viewpoints, she cites an interesting parallel between Leo Tolstoy and baseball player, Chuck Knoblauch, from an article by Erica Goode in 2000. The analogy relates to an instruction that Tolstoy was given by his brother as a child: to stand in a corner until he stopped thinking about white bears. Apparently, Tolstoy spent quite a while in the corner and found it difficult to get the images out of his mind.

> Tolstoy's brush with obsession was trivial, but Knoblauch, who left a ball game in frustration Thursday night after his inability to make simple throws to first base resulted in three errors, has a lot more at stake. The problem Sports psychologists surmise yesterday is that an action that no doubt has instinctually performed thousands of times is suddenly the object of conscious thought. (Goode qtd in Bogart and Landau 207)

To be in flow in the context of theatrical traditions has vastly different connotations depending on if the flow is being experienced or observed. "The parallels between [the] philosophy of sports and that of Viewpoints are both astonishing and once you notice the similarities, they are very obvious. Both sporting disciplines and Viewpoints involve *play*, the kind of play young children engage–that of reacting to something that happens in a spontaneous fashion, without self-consciousness, judgment or hesitation" (Bogart and Landau 209). Bogart elaborates on the comparisons between Viewpoints and flow. She then cites similar conceptions of the phenomenon of flow that are induced by play across an array of literature, such as the idea of the

Oceanic state by Sigmund Freud. It is noteworthy that Bogart explicitly states that within the context of Viewpoints training, the goal is to enter the “In the Zone” state that is commonly experienced in sports.

Neural Elements of Flow

The fundamental basis of behavioural sports psychology investigates the relationship to behaviour and stimulus. Behaviours are most commonly conceptualized as what people say and do, which can be either overt or covert. Stimuli are classified as “the physical variables in one’s immediate surroundings that impinge on one’s sense receptors and that can affect one’s behaviour” (Luiselli and Reed 4). Behavioural psychology involves identifying target behaviours that can be improved, developing strategies with individuals that are based upon Pavlovian conditioning and operant conditioning methods and assumptions, and implementing them into practice where feedback is comprehensive and understood between all parties involved (Luiselli and Reed 5). The discipline of behavioural sports psychology inherently involves “many of the interventions with athletes have been developed by practitioners with a cognitive-behavioural orientation” which entails working with processes that are preoccupied with “believing, thinking, expecting, and perceiving” (Luiselli and Reed 7). Furthermore, in the realm of behavioural psychology, the FSS and DFS would fall under empirical methods for cognitive assessments (Luiselli and Reed 87).

The role of focus is integral to achieving desired performance outcomes. In the body of literature in behavioural psychology that deals with frameworks seeking to maximize optimal outcomes, concentration and confidence are two factors that have positive correlations to peak performance in competition settings (Luiselli and Reed 14). The role of concentration involves two separate sub-components that are required for concentration to occur. The first component

refers to an observational or focus-orientation where the performer of the activity is "put in contact with important cues for further responding." The second component occurs "following appropriate attending or focusing behaviour, [where] concentration refers to the extent to which particular cues exert effective stimulus control over skilled performance" (Luiselli and Reed 14). It is assumed that concentration paired with confidence in one's ability to execute a task will lead to peak performance; one cannot exist without the other in the majority of sporting contexts to achieve desired outcomes. "From a behavioural perspective, confidence is a term that is used to describe athletes who have performed well in recent practices and/or competitions and who show certain behaviour patterns that would be described collectively as illustrating the belief that they will perform well in an upcoming competition" (Luiselli and Reed 14).

Jackson and Csikszentmihalyi have extensively evaluated and studied the role of focus in sporting performances. They believe that the greater the discipline that the athlete has in-relation to staying focused on their task, the more likely they are to achieve desired results (79). The two flow researchers reference refocusing, using task goals, simplifying difficult or complex tasks, planning, and having contingency plans as beneficial strategies to mitigate breaking focus in competitive sport (144-16). There are also a variety of reappraisal techniques that can influence one's own concentration through the conscious redirection of their attention (118-19). "In some sports, performance is dictated by what others are doing, and it is critical to be aware of the big picture around you" (120). The dynamic and variable nature of competition is one of the most nearly impossible to control when studying flow. In the realm of understanding behaviours and reactions to stimuli, the common denominator across all realms of physical activity is understanding the consequences of behaviours that arise as a result of a stimulus (Luiselli and Reed 7).

Alameda et al. conducted a recent study in 2023 which identified that the phenomenon of flow has been widely analyzed in behavioural studies and behavioural psychology, yet few investigations have looked at the neural correlates that are associated with a flow state. The study entitled “The brain in flow: A systematic review on the neural basis of the flow state” served as a systematic review that critically engaged with and evaluated the current literature involving flow states and neural correlates. The study is very critical of the current state of methodologies for empirically evaluating the neural basis of flow. The team states that “eliciting and capturing the flow state [...] seem[s] rather elusive, even more so in controlled laboratory conditions (e.g., with an individual inside the functional magnetic resonance imaging–fMRI scanner). Nevertheless, researchers have attempted to investigate the neural basis of flow” (349). The attempt to investigate the neural basis of flow is an extension of two current hypotheses in flow and what constitutes the neural correlates of a flow state. The findings of the studies searching for the neural basis of flow have been traditionally framed along with two main theoretical accounts: the Transient Hypofrontality Hypothesis (THH) and the Synchronization Theory of Flow (STF) (Alameda et al. 349). THH as conceived by Arne Dietrich in 2004 believes that “flow state requires the support of implicit and automatic systems as well as the inhibition of most cognitive functions linked to prefrontal areas” of the brain. Conversely, STF as evaluated by Weber et. al in 2009 suggests that flow state arises from the synchronization of focused attention networks [...] together with the striatal reward networks, whose activation would allow the pleasurable component of flow state to rise.” A recent 2021 study conducted by Gold and Ciorciari conceptualized what they term as the Internal Model of Flow which provides an alternative theoretical framework from THH and STF where “internal models [are] formed in the cerebellum during the acquisition of cognitive or motor skills” (Alameda et al. 350). Due to the

variance across studies that have hypothesized the neural basis of flow states, one of the objectives of Alameda et al.'s study was to also find and interrogate the validity of the different theoretical underpinnings of potential neural correlates of flow states.

Alemeda et al.'s study, particularly selected papers that focused on participant subjects engaging with arithmetic tasks and playing video games with the most common demographic being university students. A few individual cases illustrated a musician engaging in improvisation, the mental imagery of table tennis players, and ultramarathon runners in both running and connected with another arithmetic task in dual task paradigm analysis (353). The method of Alameda et al.'s study underwent a rigorous selection process which ultimately based their inclusion criteria upon "studies that measured or manipulated flow state [...] and recorded associated brain activity with electroencephalography (EEGS), functional magnetic resonance (fMRI) or functional near-infrared spectroscopy (fNIRS) or manipulated brain activity with transcranial direct current stimulation (tDCS)" (348). What all of these measurement techniques have in common is that they can assess flow in laboratory-controlled settings. The study advocates for a shift in "the traditional experimental paradigm for inducing flow state through arithmetic tasks to more intrinsically motivating tasks such as video games or physical exercise." There are some flow activities and environments that are easier to control variables to measure flow with video gaming as an activity that "can be quite similar to a real situation, with low motor activity, high levels of enjoyment and immersion" (Alameda et al. 360). From a neuroanatomic perspective, the phenomenon of being in a flow state is linked to the activation of the reward center of the brain, the mesocorticolimbic circuit, and cortical areas of the brain that are involved in positive and negative reinforcement as well as motivational processes (349).

Alameda et al. despite conducting the first neurological study that evaluates neural correlates of a flow state across the existing literature found inconclusive results. Their findings stated:

> After scrutinizing the experimental paradigms implemented and their resulting findings, it is concluded that the extant evidence is sparse and inconclusive, with major methodological shortcomings that prevent us from drawing solid conclusions about the neural correlates of flow state. Nevertheless, these investigations were pioneering in the study of flow state from a neuroscientific perspective and their findings help speculate about the potential neural correlates of flow that future studies may confirm. (358)

In order to investigate interdisciplinary conceptualizations of flow, it is crucial to understand how the tools for evaluating flow shift depending on the research paradigm that informs the method for which the research is conducted. Understanding the neuroscientific aspects of a flow state further allow scientists and researchers to distinguish between different activations of brain activity during flow performance and the relationship between specific activities and perceived flow experiences.

There is also a distinction between flow in performance and the process of learning flow tends to be the process of entering a flow state when one is learning a new task or while acquiring knowledge in real time (Jinmin and Qi 1). The term learning flow is used in a systematic evaluation and meta-analysis between the relationship between learning flow and academic performance. The idea of learning flow serves as “a descriptor for students’ optimal engagement, wherein they relish the learning process, devoid of ennui or angst” (Jinmin and Qi 2). Learning flow is a subjective state paired with a task or series of actions that occur during the process of knowledge acquisition. “This harmonious state fosters profound self-awareness and self-regulation, culminating in immersive task execution and a distorted sense of time, typically

engendering positive educational outcomes" (Jinmin and Qi 2). The positive link to educational outcomes has been widely accepted and reinforced as the more a task is enjoyed, the more likely students are able to accomplish or improve upon their performance.

Jinmin and Qi's systematic review that interrogated the link between flow and academic performance did, however, conclude that there was a positive relationship. The study's inclusion criteria aggregated studies that adhered to the following four conditions:

> (1) The experimental group was used to enhance the learning flow; (2) only routine learning was conducted for students in the control group. Conventional learning refers to the teaching style; (3) clinical research or empirical research was carried out; and (4) the outcome indicators included at least one of the following: achievement test scores, mobile questionnaires, or scales. (2)

The positive educational outcomes that were linked with flow studies across the review were determined based upon quantitative metrics of academic performance. "Students with high learning flow levels tend to have better academic performance, but more high-quality literature and larger sample data are still needed to further verify this conclusion. (Jinmin and Qi 8). The common conclusion among studies linked a degree of the enjoyment of a task to positive academic performance.

The autotelic component of flow in Csikszentmihalyi's established body of work is also similar in principle to the idea of play, which is a form of creative liberation for those engaged in an activity. The nucleus accumbens, or most colloquially referred to as the reward centre of the brain has also been found to be activated in studies that found a positive correlation between game-based learning. "The results imply that potential advantages of game-based learning may indeed not only be grounded in its more rewarding, but also in its emotionally engaging nature"

(Greipl et al. 11). The intrinsic rewards system that is present in flow experiences holds a vital role in not only motivation but also in play motivation (Csikszentmihalyi 135). Although the neural basis of flow states cannot be defined conclusively, the element of play that is linked with flow experiences also activates the rewards centre of the brain and appears to be associated with positive life experiences.

The Possibility of Play

Play "allows us to do well things that express who we are, what we can do." Csikszentmihalyi believed that play was linked to a degree of liberation and inhibition as commonly observed in children who are less apologetic for expressing themselves in comparison to adults (Csikszentmihalyi xix). The intrinsic rewarding component of play allows for both the death of one's ego and their own self-perception. The more disconnected that a person is from their own identity and how they appear to others, the easier it is for them to relinquish any potential anxieties and lack of confidence that could potentially hinder performance. Play is enjoyable, can be structured, but can also be less consequential than a defined competitive setting with particular consequences and external metrics of what constitutes the success or failure of a performance. Structure and composition are necessary to facilitate play, but as stated by Csikszentmihalyi, a survey of modern psychology identified links between play and creativity, but there was a less substantial work that investigated why someone would engage in play (xix).

Through the investigation of flow as a phenomenon and the role of play in knowledge acquisition and task performance, Csikszentmihalyi reached a key observation that directed future work in flow studies:

> In reading the literature I realized that all the studies of play were explaining it in terms of distal causes—which were perfectly good explanations of why such a practice

> survived generation after generation. But they were ignoring the proximal causes—namely, the reason why children—and adults—actually bother to spend their scarce psychic energy playing. The reason why they do so seemed obvious to me: play was fun. It was enjoyable. It was what the Greeks called an autotelic activity; namely, one whose goal was simply to be experienced, because the experience was worth it. (xx)

His concluding speculation encapsulates one of the primary points of interest of this project: the autotelic experience as the pinnacle of joyful experiences and intrinsic motivation; one of the nine component prerequisites for a flow state. The role of play, its connection to pleasure and positive feedback mechanisms all reinforce the positivist paradigm in which a substantial body of flow literature resides. The qualities of joy and pleasure which can be measured with greater ease during discrete task accomplishment in comparison with dynamic environments are heavily dependent on the context, setting, goals, and affordances of the particular activity or field. Although enjoyable, play also holds a degree of utility.

"Playing allows us to practice skills that in later life will be useful–sports help us to develop discipline and persistence as well as good health; board games like chess prepares us to become good architects, accountants, or military strategists; social games like charades prepare children to be good communicators" (Csikszentmihalyi xx). Csikszentmihalyi clearly holds the position that the autotelic nature of play and engaging in tasks for their own intrinsically rewarding nature also holds a functional component for knowledge acquisition and learning. Csikszentmihalyi's observation aligns with the conclusions brought forth by Jinmin and Qi. Similarly, flow experiences occur in similar environments wherein one can experience play. "Surgeons or computer programmers described the phenomenology of their work in terms very similar to how athletes or artists described theirs. I called this common experience the autotelic

experience, a term [Csikszentmihalyi] used interchangeably with optimal experience, and finally with flow" (xx). Both action and opportunities are created by and dependent upon existing structures of the particular activity (Jackson and Csikszentmihalyi 73).

> In fact, whether one is in flow or not depends entirely on one's perception of what the challenges and skills are. With the same objective level of action opportunities, a person might feel anxious one moment, bored the next, and in a state of flow right afterward. So it is impossible to say with complete assurance whether a person will be bored or anxious in a given situation. (Csikszentmihalyi 147)

Csikszentmihalyi articulates the impossibility to determine whether or not the misalignment of the challenge-skills balance will result in anxiety or boredom. Alternatively, he is sure that "although it is possible to flow while engaged in any activity, some situations (i.e., games, art, rituals, etc.), underneath their social historical overlay, appear to be designed almost exclusively so as to provide the experience of flow" (146). He proposes that it is useful to analyze and standardize ways of understanding which kind of activities lend themselves to facilitate flow environments or enable the possibility of flow experiences (146).

Csikszentmihalyi attests that the general field of athletic physical performance settings have "theoretically unreachable ceilings, although record-breaking performances are nearing the asymptote. Other flow activities, like art, creativity, and religious ecstasy also have infinite ceilings, and thus allow an indefinite increase in the development of skills or in the ability to organize experience" (149). The metaphor of a theoretically unreachable ceiling is core to the conceptualization of flow in positive psychology. Once you are in a state of flow, you continue to move through it and strive to the more challenging aspects of task accomplishment that are

facilitated by the act of being in a state of flow. One exits a flow state when either the task has concluded or flow is disrupted by an external prompt or stimulus.

Fundamentally, Csikszentmihalyi's reflections of the scope of his career and investigations of flow and the psychology of optimal experiences rely heavily on certain metrics of perception, evaluation, but also simultaneously contain a great deal of nuance and abstraction. Recent advancements in flow research have identified the limitations and gaps in Csikszentmihalyi's work and the lack of consistency across systematic reviews, yet they acknowledge that the breadth and depth of his body of work is substantial in understanding flow, attention, and concentration (Carter et al. 27). The possibility for play exists in virtually every discipline or activity, yet some environments are more conducive to relinquishing self-consciousness and anxiety. It has been difficult for researchers to pin down optimal environments for flow because controllable variables shift depending on the activity.

On Interdisciplinary Work

Csikszentmihalyi's work identifies the universality of the flow experience and how vastly different contexts and individuals engaging with certain experiences or tasks can enter flow states. He gravitated to psychology as a way to fundamentally examine how flow can be achieved and recorded. Throughout his career, he has documented flow experiences from artists, athletes, engineers, architects, and individuals with various backgrounds and professions across the world. The universality of flow experiences across disciplines is undisputed, but is still quite difficult to quantify and qualify depending on the context.

The underlying assumptions behind Csikszentmihalyi's work seek to investigate, "how [people can] find more creativity and joy in their lives" (Csikszentmihalyi xi). He asserts that the human sciences are human constructions and that the collective knowledge of humanity and the

systems that we use to understand the perceivable universe is a product of human minds. His seemingly obvious observation provides a key insight as to why his investigation of flow states attempt to understand how sources for focus, creativity, play, and joy ultimately contribute to individuals leading richer lives in the context of human behaviour and cognition. It is the richness of the creativity and joy that living a life with one's presence in flow that structures the positivist paradigm for which Csikszentmihalyi's work in flow and flow states is situated.

Csikszentmihalyi employs a practice of self-situation and positionality in the introduction to his collected works. He begins to articulate, "whatever I have written over these past 40 years has been filtered through my own unique place in the cosmos," and then proceeds to assert how, where, and why his work came to be (xi). I admire how Csikszentmihalyi's own self-awareness and self-situation seeks to contextualize his work for the readers who engage with it. This is precisely the same strategy that I seek to employ in this thesis.

At its core, positive psychology is a branch of psychology that searches for optimization in order to yield positive outcomes while simultaneously mitigating maladaptive outcomes in alignment with the hedonic principle. Csikszentmihalyi as a young man was greatly inspired and fascinated by Carl Jung's Complete Works from the Bollinger series (xii). In his early years in academia, Csikszentmihalyi took a critical look to philosophy based upon the tumultuous experiences that he and his family endured after the second world war and his personal criticisms about power and conflict. He took to literature, philosophy, religion, and other radical perspectives of understanding human behaviour, but what he identified was that the various approaches to solving the mysteries of the human condition were completely distanced from the realities of Csikszentmihalyi's lived experiences (xiii).

"In psychology, attention plays a role in many ways analogous to the role that energy plays in physical mechanics" (xv). Csikszentmihalyi developed a fascination with psychic energy and task-accomplishment. He was fascinated with what constitutes attention and how attention and a certain degree of focus is required in order to have an experience; psychic energy causes them to exist. Csikszentmihalyi refers to experiences as ordered patterns of information. Some of the key questions that he addresses are: "On what basis do we decide what to pay attention to? And how do we order experiences out of what has been attended to" (xvi)? The ordering and patterning of information in the process of task-accomplishment to achieve a specific result is dependent on the activity. I investigate the variance across flow environments that aim to either facilitate or disrupt flow in performance and acknowledge the complexities surrounding how goals relate to optimal performance.

Pil Hansen's reflections upon interdisciplinary work situates their research in the realm of cognitive performance studies. They note that "it is a recurrent challenge that the engaged performing artists, cognitive scientists, and dance and theatre scholars speak different languages that render integration of inquiries, exchange, or even just communication highly difficult." One of their observations reflected upon a stereotypical scenario where "the scientist is cast as a 'hard' researcher, the humanities scholar is considered the 'soft' communicator, and the artist is reduced to a research subject" (Arlander et al. 34). Their work aims to understand some of the divides across the various disciplines and paradigms in which scientists, scholars, and artists reside. I admire that Hansen's work not only contributes to bridging the gap between different disciplines and their roles in collaborative projects, but also highlights the translation errors that can occur in interdisciplinary environments.

The act of integrating mixed methods approaches when attempting to understand and evaluate a phenomenon such as flow creates challenges. Discipline-specific definitions risk being conflated with specific ideas, concepts, and analogies. I argue that understanding a central phenomenon from multiple perspectives and fields can be a valuable way to intersect different worldviews and understandings through both a comparative and collaborative process. I question the outcome-centered nature of flow performance due to differences in terminology from different fields which illustrate the lack of consistency across flow literature. It is noteworthy that the list of prerequisites to enter flow as per Csikszentmihalyi in comparison to Bogart's Viewpoints have some conceptual overlap (see table 1).

Table 1. A comparison between Mihaly Csikszentmihalyi's prerequisites for flow and Anne Bogart's Viewpoints.

Viewpoints' *In the Zone* phenomenon	**Flow**
Relaxation	Challenge-skills balance
Confidence	Action-awareness merging
Focus	Clear goals
Effortlessness	Unambiguous feedback
Self-containment	Concentration on the task at hand
Joy	Loss of self-consciousness
	Transformation of time
	Autotelic experience

There are some intriguing similarities and differences between Bogart and Landau's prerequisites to enter what they term as the *In the Zone* phenomenon and Csikszentmihalyi's flow state. Bogart and Landau describe confidence as a "belief in yourself, your fellow athletes, in the integrity of the sport" (208). Alternatively, in flow psychology confidence is termed as the

lack of self-consciousness. Both phrases are generally understood to reflect one's belief in their own capabilities without fears or anxieties regarding task-execution. What is termed in Viewpoints as focus is synonymous with Csikszentmihalyi's prerequisite of flow described as concentration on the task at hand. According to Bogart and Landau, effortlessness as a quality of being *In the Zone* is explained in a rather abstract manner as "ebb and flow in the grasp of something greater than human frailty, smooth and inexorable, beyond the inconveniences of gravity, fatigue, failure. Graceful, easy, connected and light" (208). This description is a poetic depiction of what Jackson and Csikszentmihalyi term as action-awareness merging at the point where one becomes totally absorbed in what they are doing. "A sense of lightness and ease of movement is often mentioned, as the athletes experience changed perceptions of effort and of their physical body in space" (Jackson and Csikszentmihalyi 20). A common conclusion across dance, sport, and performance psychology is the ease of appearance when a difficult task or dynamic act is being performed. Peter Brook once said that "a performance is a flow, which has a rising and a falling curve" (Bogart and Landau 147). Csikszentmihalyi's conceptualization of flow identifies its roots across a broad scope of fields, literature, and culturally specific contexts. There is an extensive body of work connected to flow, meditation and how being in a state of flow renders people more joyful and present in their lives (137).

Carter et al. surveyed the current state of flow literature in 2013 and came to the conclusion that 'research within the area of flow and its applications is still young. There are several areas within flow research that researchers can explore and develop" (24). They continue to cite the autotelic experience of flow, and reference a study conducted in 2011 that found a negative relationship between the autotelic aspect of flow and performance outcomes in the context of high performing squash players (27). "Research has focused most intensively on the

individual's experience of flow in sports, games, and other kinds of structured leisure; in educational pursuits; and in artistic and other types of work. Other important areas remain relatively unexplored, and their investigation might contribute to further development of the flow model" (Csikszentmihalyi 258).

Qualitative and quantitative research on the topic has led to a definition of flow that includes nine sub-experiences that culminate to a flow state. While conceptualized based on the nine components of flow, flow is a diverse experience, which is not only based on the person's level of ability as either an expert or rookie, but also the nature of the skill, sport, or activity, and cultural background from which an experience is situated. The daunting and variable nature of methods in flow literature are also saturated with a lack of consistent conclusions. Following their survey of flow literature, Carter et al. posed a discussion exercise toward future scholars who intend to investigate the phenomenon. The provocations include three prompts:

Considering the present discussion on flow, how do you define flow?

List two strengths and two weaknesses of the current flow model.

What elements of the flow model would you change? (31)

I engage with the prompts offered by Carter et al. as a way to not only make present their provocations in this study, but to understand the difficulties in forecasting how flow research can move forward from an interdisciplinary perspective. When asked to respond to the question, "how do you define flow?" I am immediately flooded with a sea of follow-up questions where I am acutely aware of the fact that flow can be universally experienced, yet is subjective in its experience as a performer or an external observer. How do I, as a dancer, describe flow? I think of flowing movement. How can I describe flow while knowing that the state can be empirically evaluated based on nine factors of the FSS? Do I shift my response to fit into a categorical

definition? How can one possibly articulate a succinct and universal definition of what it is to be in-flow during a dynamic performance such as dance or a rugby game? Flow extends beyond the state of being in flow—it is embodied, it is felt, it exists between people; it can be an aesthetic ideal or internal process of immersion and acute concentration. Many understandings of flow exist in my mind simultaneously, and I do not believe that any one conception is more or less valid or correct than the others.

The strength of the current flow state model is its complexity that accounts for all nine prerequisites to enter a flow state. The current model and the FSS and DFS are both thorough questionnaires that have a high degree of cross-cultural research validity across various physical disciplines and activities to understand flow states (Carter et al. 22). A weakness of the current flow model is the lack of standardization across disciplines and the limitations of self-reporting measures that retrospectively evaluate flow. Alternatively, the neuroscientific methods to evaluate flow can only occur in controlled laboratory settings for disciplines that support that means of measurement. I would not change the current flow model, but rather offer an extension of the current model to account for the differences between observed and experienced flow.

This project not only aims to uncover underlying value assumptions placed on performance outcomes of certain performing contexts, but identify the benefits of how specialists and practitioners use their knowledge to understand when to optimize certain outcomes, and when to shift focus towards the performers themselves. If you ask a dancer what it feels like to be in flow, a psychologist, a coach, an athlete, or various other professions that have an understanding of the phenomenon from their history training in a particular discipline, their experience inherently influences the context and value that is ascribed to flow as well as the terminology that is used when discussing the complexity of the concept.

A wide body of studies and systematic reviews on an international scale have investigated various variables and data correlated between definitions of flow, education, and how one enters a state of flow (Jinmin and Qi 2). There is, however, significantly less scholarship which investigates the disruption of flow as it is often assumed to be a hindrance to optimal performance. Understanding specific situations illustrates how the disruption of flow can aid in obtaining certain performance outcomes depending on the context of the performance. The foundational question that a breadth of research talks around, but has yet to confront, is the universality of flow and its utility depending on the discipline. So therein lies the question: why flow? The universality of flow is a state of which one can understand through embodied experience, yet empirical conceptions of this work are still quite abstract. There is no scarcity of flow literature and recently, there have been a large degree of systematic reviews that call to address potential flaws in current flow models and move toward evidence-based and theoretically viable methods. Many studies include statements in the discussion section of their reports that encourage future research based upon results which are often inconclusive or too variable in nature to assert definitive conclusions. Conclusions such as: “it depends on the context” and “further investigations and studies will need to be conducted in order to progress this work” are not satisfying and further solidify the lack of certainty surrounding how one makes sense of flow in performance.

Although Csikszentmihalyi has pioneered a substantial body of work in flow studies, many other frameworks have been developed from disciplines outside of the realm of behavioural sports psychology to evaluate and understand flow. The abstract nature of the concept of flow resists a standardized definition and I suggest that continuing conversations that account for interdisciplinary conceptualizations of this phenomenon will break down some of the

disciplinary hierarchies in flow research that are reflected in Pil Hansen's work. The siloed nature of flow research has allowed for methodologies to be perfected in highly specific circumstances with controllable variables, yet few have yielded conclusive results. Although there is variance across evaluation and measurement methods of flow, the ways in which creative flow is defined across disciplines, neural activations in flow, the rewarding nature of play, and the autotelic nature of flow are present across definitions. As I see many parallels throughout the substantial literature across different disciplines that focus on the phenomenology of flow, a question arises: Who has the power to define flow, when it is useful, or when it is disruptive? Throughout discipline-specific conceptualizations of flow and flow states, power also plays a pivotal role in not only how flow is defined, but the factors that determine the desirability of flow as a process or outcome.

Chapter 2: The Power to Flow or the Flow of Power

There is a clear and distinct polarity that is present in flow research: one can either be in flow or out of flow. The nature of either entering or exiting a flow state is quite difficult for a person to describe, discern, or even objectively measure (Csikszentmihalyi xx). Despite the complex nature of flow as a phenomenon, many have attempted and succeeded in establishing measures that are widely accepted in flow performance research. As discussed in chapter 1, the measurement of flow and flow states is discipline-specific. Measurement relies on contextual factors and the values and biases that researchers and performers ascribe to certain conditions. There are also many assumptions embedded in both the measurement tools and processes. For example, a majority of flow research assumes that flow will always optimize performance within a particular context. Once flow is measured, the findings are then integrated into training processes where athletes and performers aspire to enter flow in both training and competition settings. When the actor/athlete is in flow and has reached a point where a complex task appears to become effortless, there is little conclusive information regarding whether or not the flow state is productive for the performer or the performance outcome. In this chapter, I trace a variety of interpretations regarding literature on flow and power, and investigate the institutional values placed on physical movements. The theoretical investigation of this work aims to highlight how the structures of various sporting and artistic contexts place value on a performer's ability to enter a flow state. I draw on the theories of power and movement capital, desire, and network theory from the works of Gilles Deleuze, Félix Guattari, Judith Butler, Pierre Bourdieu, René Girard, and Bruno Latour to explore the relationship between structures of power in-relation to bodies and flow. Recent research investigates how various hierarchies and power relations inform the way in which bodies in motion are validated and qualified. This chapter elaborates on

how understanding structures of power that place value qualifications over particular movements and bodies in performance influence how the phenomenology of flow is articulated or experienced in competitive and artistic contexts. The theoretical perspectives in this chapter will then inform the analysis and thematic interpretation in chapter 3 of the series of interviews that I conducted with ten specialists across various disciplines of performance.

In order to understand the underlying assumptions in flow research across disciplines, I use the disruption and the absence of flow as a primary mode of inquiry. The disruption of flow and its context-specific implications are brought into conversation with Henry S. Roane's concept of behavioural momentum to illuminate perceptions of the consequences and benefits of flow. Then, I extend how institutional values qualify physical movements in competitive and artistic contexts to the phenomenon of flow. I the values and expectations that are placed on ideal movement to the function of desire in flow performance. Finally, to clarify how structures of power influence performance, the role of the actor/athlete/performer is then discussed and framed as an actor in what Bruno Latour terms as a socio-material network in the context of sporting and artistic movement. The critical perspectives articulated in this chapter illustrate both the visible and invisible dynamics present in how flow is qualified in spaces of performance and interrogate who has the power to ascribe the term flow to movement.

Disrupting Flow

A particularly fascinating aspect of how one enters a flow state and how that state can be disrupted pertains to one's subjective temporal perception and phenomenological experience of a flow state. "External stimuli, such as the efforts of other people to interfere with concentration, novel environments or situations, and pressure in the form of daunting challenges, can disrupt concentration" (Gallucci 136). However, being in a state of concentration and focus should not

be conflated with that of being in a flow state. In Csikszentmihalyi's reflections, there is an account of a chess match that quite accurately describes both the role of immersion and disruption of flow in a context wherein neither state is more beneficial than the other. In his work on the balance between skills and challenges, Csikszentmihalyi additionally states that "a chess player will concentrate on the game only when the opponent's skills match [their] own; if they do not, attention will waver" (8). The object of the player's concentration is linked to their flow experience in the game. The wavering of attention that a player experiences when their opponent's skillset is not aligned with their own can disrupt the flow state experienced by the player but also the perceived flow of the match by witnesses.

Positive psychology and flow research "suggest[...] that people voluntarily concentrate on tasks when they perceive environmental demands for action matching their capacity to act. In other words, when situational challenges balance personal skills, a person tends to attend willingly" (Csikszentmihalyi 8). Csikszentmihalyi elaborates on the disruption of flow while discussing the phenomenon merging action and awareness:

> A chess master focuses on the strategy of the game, most states of religious ecstasy are reached by following complex ritual steps, yet for flow to be maintained, one cannot reflect on the act of awareness itself. The moment awareness is split so as to perceive the activity from ''outside,'' the flow is interrupted. Therefore, flow is difficult to maintain for any length of time without at least momentary interruptions. Typically, a person can maintain a merged awareness with [their] actions for only short periods interspersed with interludes (from the Latin inter ludes, ''between plays'') in which the flow is broken by the actor's adoption of an outside perspective. (138)

This example illustrates that while a person is in a state of flow, although small disruptions of the activity can occur, it is the actor's self-perception of their actions that allows them to remain in flow. Similarly, a performer holds a degree of power and autonomy over their own actions and movements in performance. It is only when a performer has submitted their conscious thought to a state of complete immersion in flow that they relinquish control to the stimulus (i.e. become enveloped in their action merged with the object/activity/performance). The effect of external stimuli on performers in flow often diverts their focus and concentration. Although the disruption of flow can occur by an individual either shifting their perspective or attention, there are also a variety of environmental influences that can remove a performer from or are counterproductive to them remaining in a flow state.

The most likely triggers to disrupt flow are often external and environmental stimuli, and thus, many performance training practices (whether theatrical, dance, or sport) have techniques to avoid the effects of external triggers that are counterproductive to concentration and performance.

> Optimal environmental and situation conditions relate to flow, and with familiar environments often seem less daunting or unfriendly. Prior experience in venues where competitions occur is especially helpful and serves to limit the influence of hostile crowds. Other environmental factors that disrupted flow states among elite athletes [are] the behavior of competitors and bad calls from referees. (Gallucci 42)

Gallucci additionally references the work of Jackson and Csikszentmihalyi and observes that "when [an] athletes' attention [is] given the assertive play of competitors or other environmental disturbances, performance suffer[s] and flow stop[s]" (42). This example clearly articulates that the ability for an athlete or performer to remain in a state of flow is constantly shifting along with

the performer's attention. Thus, when flow is measured retrospectively by athletes and dancers following their training or a performance, their experience of flow may not have been constant, and might have also been disrupted by other bodies or stimuli in the performance setting.

Jackson et al. assert that various studies identify cognitive interference and anxieties are antithetical to flow experiences (373). Cognitive interference is defined as "internal thoughts that can disrupt concentration through task-irrelevant or self-preoccupied thinking including components of worry about performance" (Stanger et al. 114). Irwin G. Sarason has conducted extensive work on the relationship between cognitive interference, test anxiety, and test performance. Recently, numerous studies have sought to identify the role of cognitive interference and performance outcomes in various sporting contexts. Cognitive interference consists of three main subcomponents: performance worries, thoughts of escape, and task-irrelevant thoughts (Stanger et al. 114). All three components are collectively viewed as counterproductive to creating flow experiences in performers. In Csikszentmihalyi's example of the chess match, there are reflections of the player experiencing cognitive interference during the interludes of disruption as they re-enter and maintain their state of flow during the game.

Flow states have been linked to happiness, presence, and create a state of immersion between the actor and their task that they are more likely to maintain their concentration and focus (Csikszentmihalyi 4). Although flow states can often have optimal and positive impacts on performance, the context in which flow states are experienced varies. Flow that is created in dynamic settings among the interrelations between multiple bodies is quite different from that of the performance of an individual accomplishing a discrete task (i.e. a curling athlete throwing the rock toward their target). The variability of distractions for performers also increases when one

accounts for situations such as potential opposition in a sporting context, audience members in spectated performance, and other performing bodies with unpredictable actions.

> The additional attentional resources that are available with automization of skills can also be captured by distractions. Distractions divert attention from the instrumental tasks necessary for skilled performance. Distractions include internal thoughts or worries and stimuli from the environment, and compete for attentional resources in working memory. Distractions can also disrupt the flow of automated actions and cause sportspersons to become more self-conscious. (Gallucci 138)

According to Gallucci, not only can environmental factors contribute to the disruption of flow, but there is a degree of variability across controllable factors that can facilitate flow that are very much discipline-specific. It is noteworthy that the context-specific nature of flow environments can socialize or train performers to ignore or reappraise distractions. For example, an oppositional player trash-talking an offensive team to intentionally disrupt the offensive team's momentum could be understood as a stimulus to disrupt team flow. Specific to the context of competitive sport, teams who work with sports psychologists to develop personal reappraisals or interventions may have cultivated the skills to either ignore trash-talk or rather find it empowering or productive which motivates the individual or team to accomplish their performance goals. Similarly, dancers and theatre performers are trained to continue their performances amidst potential disruptions from audience members (i.e. unsilenced cell phones, coughing, mild chatter, and other unanticipated actions or stimuli). Although there are some genres of performance that invite audience participation or sounding (i.e. a relaxed performance where patrons are invited to attend performance art without the conventional expectations of remaining quiet and seated) artists will often remain professional and carry on with the

performance as if unaffected by external stimuli. There are additional interventions that can be adopted by performers or sports teams and integrated into their training processes in order to anticipate potential disruptions. There distinction between the perceived disruption of flow in a performance by a witness and the individual performer's perceived entrance into or exit from a flow state from their subjective experience.

Behavioural Momentum

While one is in flow, once disrupted due to external stimuli, the performer can then re-enter the flow state upon immersion and re-focusing on their activity. Henry S. Roane cites Newtonian mechanics and the second law of motion as the foundation for the property of momentum. "Although there are likely sport-specific variables that affect an individual's or a team's momentum, some researchers have cataloged events that seem to influence an observer's interpretation of momentum" (Luiselli and Reed 147). Combined results from studies conducted by Mace et al. and Roane et al. "suggest that the behavioral momentum metaphor can be applied to the sports performance" and its impact can be felt by not only the team, but individual athletes (Luiselli and Reed 151). Momentum has been described as both a metaphor for quality of motion, a descriptive kind of physical mechanics, or as an analogy of how one experiences or perceives the performance they are witnessing. The way in which a phenomenon is described and understood reflects the disciplinary assumptions embedded in the structure of a particular definition. Ascribing the metaphor of momentum to a quality of movement or group cohesion is different from an individual's entrance into a flow state, which can be generally determined by the current measurement techniques discussed in chapter 1. The metaphor of momentum in relation to behaviour is technically inaccurate as you cannot empirically quantify behaviour with mass (Luiselli and Reed 146). In order to analyze the ways in which behaviour is qualified as

displaying momentum, the distinction between psychological momentum and behavioural momentum must be asserted. “The metaphor of ‘behavioral momentum’ is used to describe the relationship between response rate and resistance to behavior change when certain ‘disrupter’ events occur” (Luiselli and Reed 146). Momentum is a term that is often used to qualify the gradual increase in some sort of advantage, typically in the context of team environments, which may appear more and more effortless in proportion to the magnitude of the perceived momentum.

In the context of behavioural psychology and conditioning, developing a major intervention requires both the ability to learn and unlearn particular reflexes as well as understanding the voluntary behaviours of athletes (Luiselli and Reed 5). Similar to behavioural momentum, the concept of psychological momentum has been conceptualized in different ways across sports psychology literature and there exists various models to qualify psychological momentum.

> Taylor and Demick (1994) described a model of psychological momentum in sports in which momentum is accounted for by changes in precipitating events (i.e., events in the course of a game that might be deemed positive or negative by the players), cognition/affect (e.g., reports of how likely a player/team will make another goal, shot, etc.), and changed in behavioral persistence and performance (e.g., altering shot selection), which result in changes in the behavior of the target individual or team and the opponent. (Luiselli and Reed 145)

Roane continues on to clarify the complexities in researching patterns in behavioural and psychological momentum in sporting performances due to the context-specific needs of particular sporting frameworks and the variable nature of particular factors that influence

performance. “As might be expected from the varying ways in which momentum has been conceptualized and quantified, research in sports psychology has demonstrated wide-ranging results about the extent to which certain variables affect momentum” (Luiselli and Reed 145). Over the course of surveying a variety of sports psychology literature, Roane asserts three common conclusions that seem relatively consistent across sporting contexts and studies.

> Collectively, the results of previous investigations afford the following conclusions: (a) scoring first is better in terms of increased likelihood of winning a game, (b) experiencing events that are more favorable is associated with a greater probability of winning, and (c) good performance is associated with reports of better psychological function regarding gameplay. (Luiselli and Reed 145)

There are again, in the case of momentum, two directional potentials: for one to either experience momentum as a performer, or to perceive the momentum through the act of witnessing performers display momentum through their actions. Similar to flow, the perceived behavioural momentum of a team or individual in a performance setting can increase the performer or witness’ perception of the athlete’s capabilities. Since “flow is experienced when people perceive opportunities for action as being evenly matched by their capabilities” as one’s performance reinforces the performer’s capabilities, they also become further immersed in the flow experience (Csikszentmihalyi 146). The power to disrupt what is perceived as individual or group flow, which can also be viewed as momentum, during a game or performance is shared among various agents with general goals and objectives. Each objective (i.e. to slow a play, to pass a ball, or to execute a specific movement) can either remain fixed or fluctuate over the course of the performance.

One of the limitations of understanding flow and momentum in this manner is that Csikszentmihalyi's flow state model hinges upon relationships between action opportunities (challenges) and action capabilities (skills) and the assertion that a relatively equal value in both variables is likely to yield a state of flow. Where are the challenges and opportunities in a dynamic territory sport match in comparison to that of aesthetic team or individual performance context? Flow research and sport studies understand that there is no simple answer, and even with the possibility to control several variables in a performance context, there are far too many factors that influence one's subjective experience of flow. Thus, understanding momentum as a psychological behaviour in sport that can be intervened upon varies from the metaphor of momentum that can be witnessed by a spectator when referring to a performance. Both lenses from which the momentum is perceived differ from the role of the subject and the direction of the movement. The momentum perceived by the witness differs from that of the performer who subjectively experiences gaining or losing momentum in performance. The way in which behavioural momentum in sport is qualitatively described additionally resembles conceptions of the flow phenomenon.

A key insight is that momentum, when describing sport, can easily refer to the performance of a series of isolated events or matches, whereas flow rather pertains to a single performance or one's embodied experience of an event. The flow state exists as something experienced inward, and shifts depending on the perspective from which one observes and records the phenomenon. This conception of flow differs from behavioural momentum, which tends to be defined in a specific frame or circumstance in a sporting context. A team, for instance, could be described as gaining momentum over an entire season with a gradual increase in games won or in the case of a specific game where an offensive team is viewed by spectators

as losing momentum following a foul or turnover of possession (Luiselli and Reed 144). In the latter example, the loss of momentum for one team may be perceived as a result of their opposition performing in flow which led to a favourable result. The frame of the performance is integral to distinguishing between what is perceived as flow versus momentum.

When I refer to different performance frameworks, I reference three major concepts that triangulate to form the frame of the performance. The first is the physical architecture of the space of the performance, the second is the rules, attitudes, and behaviours exhibited by the performers in the performance space, and the third is the movement of performer bodies. The movement of performer bodies activates the space of the performance through either reinforcing or rejecting the collective expected behaviours of the performance. A performance framework enables the permissibility of movement: which movements are accepted or rejected within a particular frame. I extend this idea of permissibility to the phenomenon of flow that is either inwardly experienced by a performer or perceived externally by that of a witness.

Both behavioural momentum and flow can be described and qualified differently depending on whether they are subjectively experienced or observed. Different performance frameworks additionally contribute to both one's presence in flow as well as removal from a state of flow. For example, a dynamic territory acquisition sport such as rugby, soccer, or hockey relies on accomplishing certain goals that advance the game state in the favour of the team over their opposition. Team synergy, or momentum, is quite desirable to be experienced by the players, but also by the spectators who are witnessing the sporting performance. In an aesthetic sport that also displays a form of team synergy, like synchronized swimming, the performance may be described as a flow by witnesses, rather than each athlete displaying momentum over the course of their performance. This distinction is critical to understanding that the embodied

experience of flow on the part of the performer/athlete or the perceived flow from a witness are different in how they are valued in a particular activity.

Value Qualifications on Movement and Flow

There are widely accepted benefits for a performer to be in a flow state: increased joy, concentration, reduced injury, and the seamless execution of a particular task or movement. A performer must have clear goals regarding what they seek to accomplish in their activity to be in flow. I am interested in the values that govern the movements that performers aspire to achieve in performance. A complex and nuanced understanding of the values that inform favourable movement outcomes allow for understanding structures that permit performers or athletes to enter a flow state. In order to extend the value qualifications that are placed on movements to the phenomenon of flow, there are two key concepts that theoretically inform this exploration: Pierre Bourdieu's conception of the habitus, and Judith Butler's notion of performativity.

In the second volume of his lecture collections from the Collège de France from 1982-83, Pierre Bourdieu provides a detailed account of two major concepts: the habitus and field. Bourdieu defines the habitus as "the structures constitutive of a particular type of environment (e.g. the material conditions of existence characteristic of a class condition) produce habitus, systems of durable, transposable dispositions, structured structures predisposed to function as structuring structures" ("Outline" 72). The habitus is a relational term which encapsulates "a series of oppositions and consequently takes place within a whole field of positions manipulated consciously or unconsciously by the author or user of these options and [their] audience" (*Habitus and Field* 7). Bourdieu further identifies that in the habitus-field relation, "the habitus helps to determine the determinations that affect it" (*Habitus and Field* 39). The habitus can be distinguished from the field through an analogy of how we speak about an object of study

wherein the habitus is defined as the social lodged in the biological and the field is the social lodged in the physical (*Habitus and Field* 31). Bourdieu cites an example which may be brushed off as dated for contemporary scholarship, yet nonetheless encapsulates how the field of sporting disciplines exist within a habitus between the disciplines of football (soccer) and rugby.

> If you study the space of sports activities, which functions to some extent as a field, it is interesting to study the terms in which the adepts of one sport discuss rival sportsmen. [...] Rugby players call football players 'armless' and say they don't know what to do with their hands, with whatever that may imply, whereas the footballers accuse the rugby men of 'having a finger in the pie', with all sorts of social and sexual overtones. The way that agents spontaneously discuss these practices concerned and the taxonomies that they use to think of these practices are related to the very structure of the space where these discourses and systems of classification apply. (*Habitus and Field* 190)

It is here that Bourdieu's observation on how rugby players view footballers and vice versa "reveals a series of differences or rejections" across both sporting fields with a shared common understanding of sport (*Habitus and Field* 7).

> One of the fundamental effects of the orchestration of habitus is the production of a commonsense world endowed with the *objectivity* secured by consensus on the meaning *(sens)* of practices and the world, in other words the harmonization of agents' experiences and the continuous reinforcement that each of them receives from the expression, individual or collective (in festivals, for example), improvised or programmed (commonplaces, sayings), of similar or identical experiences. ("Outline" 80)

Bourdieu's notions of the habitus and field are critical to understanding how one's perception of the world is attributed to many co-existing and contradictory social structures that create the makeup of collective social opinion and ideology.

Alternatively, in *Gender Trouble*, Judith Butler defines the concept of performativity primarily in-relation to gender. Butler later extends their notion of performativity to how value qualifications and social expectations are placed on particular bodies in *Bodies That Matter*. Butler states that their conception of performativity and exploration of feminism and gender is rooted in French Theory, yet "emerges from a long engagement with feminist theory" in conversation with the character of gender and its social construction, psychoanalysis, sexuality, kinship, and drag (*Gender Trouble* x-xi). Butler claims that "performativity is not a singular act, but a repetition and a ritual, which achieves its effects through its naturalization in the context of a body, understood, in part, as a culturally sustained temporal duration" (*Gender Trouble* xv). Butler clarifies that this conception of ritual performativity is influenced by Bourdieu's notion of the habitus and explore both concepts in *Excitable Speech: A Politics of the Performative*. There is a point of intersection at which both theorists make sense of how particular bodies and movements are valued by internal and external relations that are continually reinforced by their structures. Butler identifies "what Bourdieu fails to understand, however, is how what is bodily in speech resists and confounds the very norms by which it is regulated. Moreover, he offers an account of the performativity of political discourse that neglects the tacit performativity of bodily 'speech,' the performativity of the habitus" (*Excitable Speech* 142). Butler's assertion that a habitus is informed by an individual's movement and comportment holds the ability to resist the very structures of its production and legitimization. Butler continues to identify that even though

Bourdieu's notion of the habitus raises attention to the role of corporeal knowledge, he does not agree that the habitus is structured by a kind of performativity (*Excitable Speech* 154).

> Bourdieu offers a theory of bodily knowingness in his notion of the habitus, but he does not relate this discussion of the body to the theory of the performative. The habitus refers to those embodied rituals of everydayness by which a given culture produces and sustains belief in its own "obviousness.'' In this way, Bourdieu underscores the place of the body, its gestures, its stylistics, its unconscious "knowingness" as the site for the reconstitution of a practical sense without which social reality would not be constituted as such. The practical sense is carried by the body, where the body is not a mere positive datum, but the repository or the site of an incorporated history. (*Excitable Speech* 153)

Roslyn Kerr and Seònaid Mary-Kate Espiner conducted an analysis of "the role of human movement and the ways in which it can be understood and valued," that draws on the two major theoretical concepts of Bourdieu's habitus and Butler's performativity (Kerr and Espiner 170). Upon engaging with this work, I was immediately critical of how competitive sport is a large category that encapsulates many different genres of sport which value particular movements over others. The idea of movement and performance capital also impacts the inclusion of particular bodies and discriminates which kind of bodies are desirable or dismissed in a particular performance context. In theatre and performance studies, the genre or mode of performance provides a frame for the performance. Within the frame, certain movements and forms of creative exploration are permissible, but the genre of each movement then drastically informs the goals of the performance. For example, in the majority of sporting contexts, training settings are designed to emulate the way in which individuals perform in competition. In dance and theatre performance, creation and rehearsal practices vary depending on the genre, collective, and

overall focus of each rehearsal. Each practice holds particular biases and assumptions regarding the discipline's aims and goals. Disciplinary assumptions then affect the structure of the process that performers undertake to achieve their objectives. Herein lies the argument: the fluidity of movements are shaped by the structures that govern them while simultaneously shaping and reinforcing new structures through the act of performance.

Kerr and Espiner argue that the conversation between the French poststructuralist work of Bourdieu and the postmodernist work of Butler on the deconstruction of gender are not inherently oppositional. The philosophical differences between both theorists fundamentally rely on understanding status and power that inform how particular movements are collectively interpreted, although they derive from starkly different research paradigms and scope (Kerr and Espiner 170). I do not intend to compare the research of Bourdieu and Butler, but identify some of the intersections observed by Kate and Espiner which apply to not only movement capital, but to how performance is valued and qualified which impacts conceptualizations of flow.

In the article, "Theorizing the Moving Body in Competitive Sport," Kerr and Espiner not only identify the similarities between Bourdieu's concept of habitus and Butler's ideas on performativity, they argue that both theoretical concepts have a crucial and exciting point of convergence. Butler admits that, "both habitus and performativity emphasize that social action is generative as opposed to representative, and in that sense, we can understand the value of sporting movement as in flux and constantly reforming, depending on the performances of individual athletes and the reactions to these movements" (Kerr and Espiner 175-6). In the article, the authors elaborate on the observation that in order for movements to be recognizable, they must be legitimized. For a movement to be validated as legitimate, there must be a body of

authority that qualifies or renders a particular movement or series of movements acceptable within its respective context.

Social conventions are heavily constructed by the field in which movements take place. Bourdieu makes the distinction between the field of action and "the field as objectified structure exercising a structural conditioning" (*Habitus and Field* 39). The act of legitimizing movements is also dependent on the recognition of said movements from an institution that holds a degree of respect and authority (Kerr and Espiner 176). Thus, the institutions that legitimize movements project their values onto the bodies that they qualify in performance. For example, the International Olympic Federation (IOF) alters evaluation criteria for gymnastic performances every four years to account for the movements and routines created by previous athletes. These changes "[attempt] to adapt the rules to encourage more artistic performances, [but fail] to meet the expectations of fans, who continue to complain that the beautiful esthetic performances last seen in the late 1980s and early 1990s no longer occur" (Kerr and Espiner 172). There is a disparity between the expected movements for the audiences of Olympic gymnastics and the bodies regulating the sport and their decisions to enable creative opportunities for athletes. The movements that are permissible in the sport are thus only legitimized by the IOF.

> Movements are embodied and recognized as such by the one performing the movement, but they might also be felt by those who can imagine how it feels to perform the movement. They might also be recognizable because they invoke an emotional reaction as a result of being particularly "something"—for example, perfect, smooth, or graceful—and, finally, because of their relationship to historically important movements, often held through collective memory. (Kerr and Espiner 176)

The observation that collectivity contributes to the degree of power that certain movements hold over others is critical to understanding the ideals that are both institutionally modeled and reinforced. The reinforcement of movement capital is also, in part, determined by the stakeholders and bodies that align with particular institutional values. Institutional legitimization of movements then can be understood as a process that is constantly in motion, being reinforced and subverted, wherin movements that are seen as anomalies or outliers may be viewed as either antithetical or exceptional relative to the individual or collective expectations of a performance (Kerr and Espiner 176).

Kerr and Espiner further elaborate on the implications of which bodies are in a position of power to validate or recognize the movements of other bodies (174). In a dynamic sporting context such as the sport of rugby, the way in which movements can be qualified and valued can be based upon the attribution of particular values by audiences onto performers. Kerr and Espiner cite the notion of "flair" and movements that are perceived as spontaneous or exceptional which contribute to feelings of awe or excitement as perceived by the witnesses of those movements (174). Julien Clément traces the genealogy of rugby athletes playing with "flair" across France, the Pacific Islands, and Sāmoa (369). Clément discovered the Samoan style of rugby which was typically recognized through characteristics of "flair" and "aggression" originates from stereotypical perceptions of the masculine qualities of Pacific Islanders. Clément throughout their research on this notion critiques the application of the term "flair" through understanding "the social formation of techniques of the body" (370). Clément's criticism is grounded in the incongruence between the institutions that name and describe the Samoan rugby style and the origins and social development of the athlete's movements.

The history of this so-called "flair" from Pasifika players stems from aesthetic judgements placed upon movements from the Siva Tau, a dance fight ritual performed by Polynesian men that represents the image of a warrior. The performance commonly occurs prior to the start of a rugby match both locally and in global contexts to illustrate the duality of the team's "players [who] tackle with great force [and] also feint and sidestep with impressive agility and lightness of foot in one-on-one situations" (Clément 371). The international perception of the Siva Tau performance and aspects of Samoan rugby in conversation with how flair has been used in sports media to describe the style of French rugby illuminates the cultural assumptions that Western media has disseminated from interpretations of the movements. Clément identifies the differences between growing up in a "native suburb of Paris, where access to a rugby pitch is contingent upon registration in a club" and how "Samoans of various ages can be seen playing informal games on the front lawn of their houses, on school playgrounds, in communal village spaces, on the beach, or even in the lagoon itself" (375). Kerr and Espiner identify in Clément's work that the term "flair" describes Polynesian rugby players and the Samoan style of play which is globally attributed to the biology or physiological conditions of the people, rather than their social conditions and environments (174).

"The body technique that identifies Polynesian players is tackling the upper body. The aim is to dislodge the ball from the carrier, as well as to clash with him to make the tackle more spectacular for the spectators" (Clément 377). There is a clear value placed on the spectacle experienced by the witnesses that is embedded in the style of Polynesian technique. The International Rugby Board (IRB)'s regional development manager from Oceana illustrated a blindness to the origins of particular body techniques due to their personal ignorance and potential personal biases. The representative was present to aid the coaches in Sāmoa and

described the rugby games that were played in the villages as not “structured” (Clément 378). Clément further identifies that Samoan rugby has a vibrant history of challenges between villages and the strength and skills present in a Samoan player’s embodied repertoire is “not understood to be the product of the social environment of these teams” (378).

As a rugby player myself, it is very clear that the way in which rugby is culturally integrated across various levels of training extends beyond the discipline and rigor which increases as a player moves forward from recreational and amateur levels to elite performance. In Canada, various clubs and training cultures vary depending on not only the level of rugby, but the particular values and environments created by the team. Those who train in the sport or watch rugby matches on a global scale understand comments such as the Italian style, New Zealand style, or English style of play; all of which have embedded connotations of the degree of strategy and aggressiveness each team applies to the sport. The ascriptions of certain values to particular sets of movements that are recognized or legitimized in greater cultural contexts depend on the degree of validity or recognizability of those movements from the perspective of the bodies in power to legitimize them. The process of essentializing certain movements to specific cultural contexts, much like ascription of “flair” to Pacific Islanders and their play style of rugby, not only illustrates the values that are placed on particular movement cultures, but also the malleable and fluctuating nature of the power within performance as Butler and Bourdieu describe.

The assumptions placed on the Pasifika rugby players and their tackling techniques outline Kerr and Espiner’s investigation on gendered and context-specific value qualifications of particular body movements where they argue that “it is not about how the body ‘is,’ as if it is a static and unchanging form, but about how the body is used (in movement), and this is highly

contingent on how its movement is socially and culturally valued" (172). The value placed on certain movements over others illustrates not only the power that is required to recognize bodies, but also how context-specific knowledge is transmitted as an institution of legitimized practices.

I argue that similar vocabularies and institutional values placed on movements are also ascribed to performers in flow. Although the difference lies primarily in the difficulty to discern if a flow performance is facilitative for performance outcomes or disruptive, the very habitus of the performance context already has structural values embedded within it. The values placed upon movements have gendered assumptions regarding depictions of masculinity which translate directly into movement capital. The case of the Samoan rugby players illustrates the agency of moving bodies in sport and how they are valued. Flowing movement in sport holds agency is through structures which value particular movements of specific bodies over others. Kerr and Espiner additionally highlight that "in opposition to the studied perfection apparent in a sport, such as figure skating, is appreciation for unexpected movements, which is more likely to occur in team sports" (174). A team sport's dynamic field of play affords greater opportunities for surprise from the perspective of audience members which is directly linked to the value spectators place on the perceived flow of the team's performance.

Similar to Butler's work which investigates the relationship dynamics between how the repetition of movement is related to capital, David Brown attests that Bourdieu's observation on the deceptive nature of familiar processes that bind people to their traditions is directly related to sport and also topically relevant in the power dynamics present in sporting cultures. Brown claims that "the performing body is both a product and symbol of the socio-culturally constructed self for present and future generations" (167). Each sporting genre or discipline carries their own histories and institutional values. As the discipline grows, culturally embedded

practices and values are extended and further reinforced. It is a combination of the growth, scale, transmission, and dissemination of particular values which impact the reinforcement of a discipline's ideals. In performing arts, dance, and sport studies, there is not a single optimal outcome, but rather context-specific outcomes that are reflections of the rules, values, and goals of each discipline.

The Role of Agency and Desire

The comparison between Butler and Bourdieu also illuminates the dynamic nature of performance as well as the generative agency held by performers. Bourdieu's concept of the habitus "raised the possibility of movement being relevant to the accumulation of capital (and therefore status and power), while Butler's focus on performativity and embodiment highlights the role of physical movement, with feminist scholarship more generally acknowledging the gendered nature of movement and its masculine/feminine interpretations" (Kerr and Espiner 170). Butler also further attests that generative agency is present and made possible through repetition, yet also argues that through multiple repetitions of movement, variance is possible (Kerr and Espiner 174). Although Kerr and Espiner interpret Butler to acknowledge it is possible to generate agency through variations in a repeated movement, the degree of variance must be related to a standard within the discipline. In order to signify change from a hegemonic movement, subtle variance of a repeated movement is insufficient to reject or subvert the values within a particular habitus. Butler's observation here is key to understanding institutional value qualifications placed on the movement and performance capital of bodies. If institutions are able to create and reinforce their own structures, values, and ideals through the act of repetition, then each repeated movement holds a form of agency and power in itself.

Christine Mazumdar claims that in the context of elite rhythmic gymnastics, “the female aesthetic athlete’s body becomes regulated by the sport and through the expectations it carries with it” (Walsh 124). The generative agency of performance is linked to the expectations of movements established from previous performances. In the case of rhythmic gymnastics, the ideal feminine body is not only objectified, but highly scrutinized under the constantly-changing Code of Points system. The shifts in rhythmic gymnastics’ evaluation criteria creates a habitus for the repetition of movements which can either reinforce or resist the notion of the ideal body which does not remain fixed. I argue that this same dynamic is evident in the generative agency held by performers in a state of flow or who are viewed to exhibit flowing movement. If a performance asserts values and structures in its own right which influence the agency of movements, the very same values can be ascribed to those who perform or witness movements.

The generative component of social action rather than the representation of social action is a crucial observation in understanding how movements and embodied practices are valued. In the case of flow, the activity, sport, task, or performance operates under a particular set of values that are embedded not only in the practice, but constantly reinforced by regulatory bodies such as the role of the IOF in the case of rhythmic gymnastics. Kerr and Espiner “in contrast to Bourdieu’s focus on the body moving a certain way in order to gain value through social expectations, [...] have taken a broader view in exploring the various ways that movement can be or has been identified as holding value in sport. In taking such a stance, [the authors] view ‘sport’ as a field of practice in its own right” (171). Extending this observation further beyond the power structures of movement capital, Kerr and Espiner’s exploration on the work of Bourdieu acknowledges that a field is structured internally by power relations. Analyzing sport must not be viewed separate from its histories but rather as part of a greater system (171).

Large systems uphold rules of governance which determine what are deemed as acceptable practices. Gilles Deleuze states that "a society, a social field does not contradict itself, but first and foremost, it leaks out on all sides" (*Two Regimes* 127). Genres of performance enforce permissible movements through the act of repetition. Some refer to the kinesthetic memory that is developed through the repetition of a movement colloquially as muscle memory. The idea of muscle memory depicts a great deal of training in a specific repertoire of movements which are advantageous in a particular sport, dance, or activity. As a performer develops this capacity through skill-acquisition, they are not only repeating movements, but embedding values into an embodied repertoire such as ballet positions or katas in karate. The phenomenology experienced by a performer in flow is then created as a result of the institutional values and structures of governance placed upon movements that are permitted to be repeated and practiced. The perceived seamless execution of a particular movement indicates a high degree of both training and expertise on the part of the performer. Alternatively, the rules and policies of a governing practice are further projected onto the bodies who engage in those practices. Kerr and Espiner further identify that "another aspect of the rules of a sport is their role in defining the types of movements that are permitted or banned. For example, swimming permits only four types of strokes, and football [soccer] bans a player's hands from touching the ball while dribbling, passing, or scoring. Within each sport, certain movements are identifiable as meeting the requirements" (171). The discipline-specific legitimization of particular movements over others is defined based on not only the rules of the particular discipline, but the movements that are informed by institutional training in an activity.

Alexander Baervoets articulates an experience of being present in flow through recounting the ephemeral nature of dance and live performance:

> Imagine you are a dancer in performance: when you try to foresee where a dance will lead to, you are no longer dealing with the here and now, and thus you lose the essential of the dancing—you start anticipating, and therefor[e] you cut off the movement: you do not sit, but you prepare for the next step, you do not step because you prepare the next jump [...] It sounds odd, but dancers often fake dance! (Baervoets 1)

The author elaborates on how the strength of dance is its ephemerality and then proceeds to claim that dance is "the ultimate expression of human life" (2). In this instance, the dancer is liberated from the constraints of perfection when they reach presence and immersion in performance. Baervoets identifies the separation between dance and theatre where dance "is a matter of the body" whereas theatre is that of the mind (2). This distinction in Baervoets' account of dance aligns with a sentiment that the embodied movement is distinct from that of consciously anticipating one's repeated and refined choreography in performance. The idea of what he refers to as fake dance bears likeness to a misalignment between Csikszentmihalyi's challenge-skills balance. When the dancer becomes one with their body and the movement, they relinquish self-consciousness.

Viewing sporting and artistic performances as valuable in their own right illustrates the dynamics between micropolitical and macropolitical activities that further place value on how a performer perceives and experiences phenomenon. Bourdieu contends that "a particular sport cannot be analyzed independently of the totality of sporting practices; one must conceptualize the space of sporting practices as a system within which each element receives its distinctive value" ("Program" 153). Baervoets' values the point at which dance becomes personal to the dance performer and their embodied experience of the activity. The depiction of dance

metaphorically taking over suggests that the agency of the performer has blurred into the medium of their activity and the two fold together into one to create action.

René Girard, French historian and literary critic, was fascinated by human desire and took interest in the ways in which humans have such a capacity for conflict. In his work *All Desire is a Desire for Being,* he articulates that "we are consequently free to desire the same object as our model and that is what we almost always do, without stopping to reflect upon the conflicts that we provoke ' (10). Girardian desire functions wherein the object of one's desire is not the object nor the subject itself, but rather the very structure desire which is why "we imitate the desires of those we admire" (9). Girard cites the literary example of Salomé's dance of the seven veils to illustrate the function of mimetic desire and mimetic rivalry. "Mimetic theory affirms that people's desires are not really rooted in either desired objects or the subjects who desire those objects, but rather in a third party: the model or mediator of our desires" (Girard 208). He further elaborates that in a mimetic rivalry, that "we are always close to our rivals, and the more we compete with them, the more we resemble them, and the more our two identities become one and the same" (208). The Girardian structure of desire illustrates a form of mimetic rivalry present in sport, dance, and theatrical contexts. The athletes, dancers, and performers are trained to achieve an outcome that may be almost unattainable due to how each repeated performance sets the new standard for progression or mastery. Girard claims that "behind our desires lurks a mediator or model who most often goes unrecognized by others, including the person doing the imitating" (9). Sport and art both create the environmental conditions within which the clear set of goals for the performance are modeled. The Girardian model for mimetic desire creates a dynamic where the desiring subject desires a desired object by function of the model that enables the very directional subject-object relation of desire.

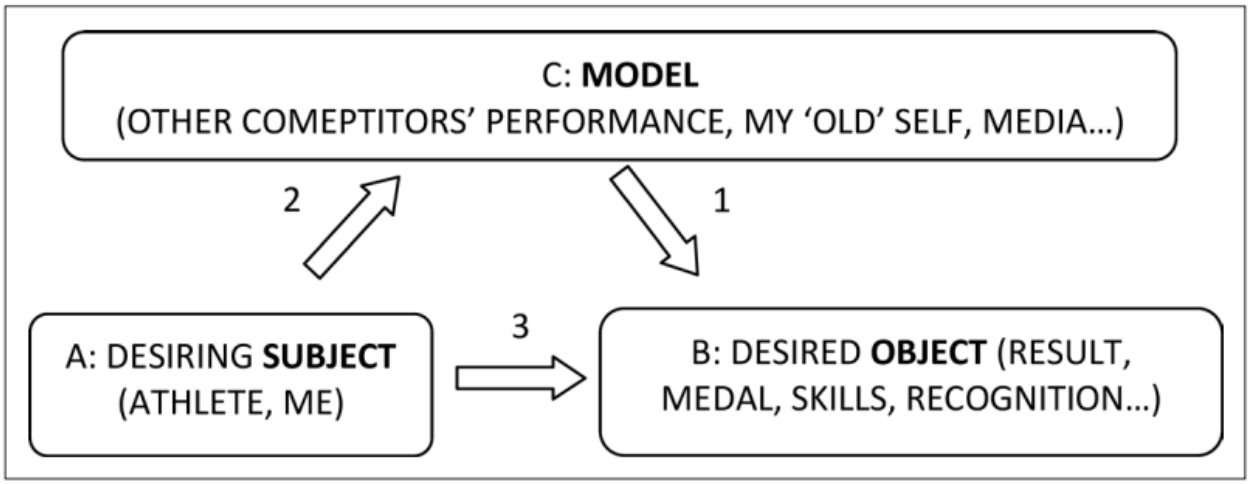

Figure 2. Jernej Pisk's "Triangular structure of mimetic desire in sport."

Simone Bignall claims that understanding agency mandates a "need to reconsider the nature of power and desire, which together constitute the impetus for social action" (129). Bignall further suggests that "agents should cultivate critical reflexivity in their approaches to their political relations, and should strive to institutionalize mechanisms that encourage and foster this reflexivity" (136). The roles of particular individuals are reflections of institutional values and exemplify how institutionalized desire is propagated through both micro and macropolitics. Bignall identifies that the work of Michel Foucault expands upon Deleuze's reading of Friedrich Nietzsche's connection between will and power and incorporates it into a theory for social power through references to the development and structure of modern societies (130). Foucault believes that power extends far beyond "a negative instance whose function is repression" and further into networks of discourse, knowledge production, material objects, and various dimensions of the social fabric of society (Bignall 132). Bignall claims that, "as a relation between bodies, power refers to a subject's capacity to act upon another's actions. In this sense, power operates at a local, 'micropolitical' level, but through its circulation it becomes concentrated in general 'macropolitical' institutions such as prisons, schools, and state apparatus,

and structuring discourses such as delinquency, health and morality" (132). The key aspect of Bignall's observation is the distinction between the micropolitical level of power and the macropolitical level of power. Relations between bodies on a local level hold a degree of agency to uphold or reject institutional values.

The difference between micropolitical and macropolitical spheres are the degree of scale, scope, and perceived influence. Micropolitical chasms for sporting, dance, and other forms of performance are functions of their macropolitical context, and vice-versa (Bignall 132). Deleuze also clarifies that the micropolitical cannot have the degree of scope of power and influence as the macropolitical simply due to the structural inequalities of both spheres. The role of agency in sporting contexts and artistic disciplines operates differently depending on the level of inquiry and analysis, as well as the historic traditions of the practice. In sporting contexts, micropolitics mutually informs the macropolitics of institutional sport. The mutual direction of influence becomes not only cyclical but perpetuates itself and promotes both the growth and acceptance of particular institutional norms and practices. Bignall also extends the distinction between the micropolitical and the macropolitical to encompass spatial relations of spheres of influence and their interrelationships (132). In sport and dance and their surrounding spheres of influences can either explicitly (i.e. rules, regulations, and evaluation criteria) or implicitly (through expected comportment and behaviours) inform the movements and phenomena that are accepted and permitted in each practice.

As previously established in my observations on the assumptions of flow literature in positive psychology, Jackson and Csikszentmihalyi outline that clear and specific goals are necessary for one to enter a state of flow (79). Obtaining a goal or the act of attempting to obtain the goal, whether it be crossing a finish line, scoring a goal, or executing a grand jeté, are all

actions that within the context of their respective fields are clear. One can understand the inherent spontaneity if they were to witness an 100m sprinter attempting to execute a flawless jeté and a ballet dancer racing to a particular point on the stage in a quicker time relative to their fellow dancers. In sport and dance, the performer's desires are often quite clear but not entirely fixed; they shift toward what the apparatus of the performance demands. In the final minute of a basketball game with an even score among both teams, the increased stakes demand heightened focus and attention from the players rather than if there were a point difference of twenty. Alternatively, the medium of art allows for a degree of liberation and play within the structure of performance, that which is typically not as flexible in the context of sporting regulations.

In studies of power and politics, a primary object of one's desire is a sort of ideal or task that is sought to be accomplished. In sporting and performance contexts, goal orientation is critical and used to periodize training and performance outcomes in a structured manner to achieve a desired result. Bignall observes that the relational component of power imbues active contexts with movement (132). The institution of sport is deeply rooted in the reciprocal impacts that bodies have onto each other's actions: whether that be in a training, competition, or peripheral context. Bignall contends that "desire brings about a process of the association of bodies, which creates new forms of existence. As the cause of the emergence of all forms of material existence, including social organization, desire is immanent to the productive process" (138). Bignall also cites Deleuze and Guattari who argue that "when desire is conceptualized in terms of the acquisition of that which is missing or lacking, it immediately becomes separated from reality" (138). This key observation is what I believe undergirds a large majority of sporting, dance, and elite performance contexts as performers seek to attain an ideal that is almost intangible. In *Two Regimes of Madness*: "Desire and Pleasure*,"* Deleuze articulates that

"assemblages of desire have nothing to do with repression" (125-6). In the case of an athlete, there is a historically defined ethic of sport that governs the attitudes of participants who train and work within a particular sporting context. Institutionalized dance creates a similar socialization in the habitus of each particular genre. Typically, many hierarchies in athletic performance create forms of mimetic rivalry among participants. Deleuze articulates that the very "assemblage of desire will include power arrangements [...] but these must be located among the different components of the assemblage" (125).

Therefore, that which is demonstrated as a baseline example that needs to be replicated must always be surpassed in some way, shape, or form. The absence of a particular skill or the intangible idea of elite levels of performance then becomes something non-existent toward which a large majority of goals and training is oriented. The function of these training practices inherently aligns with optimization frameworks which push toward maximizing effective training while permitting necessary time for recovery. Periodization models are institutionalized in sport and continue to permeate training across all levels from recreation to elite.

There is a dynamic relationship between bodies that often holds a degree of agency to either reinforce or subvert the expectations of movement in a particular context. Agency is a term that refers to holding power, but not necessarily enacting said power. Re-framing this idea of power in the form of potential energy which manifests as mimetic desire, fuels and propagates the structures that reinforce desirable physical movements and actions. In order to evaluate whether or not a performer is in flow or a performance resembles that of flow, it is crucial that metrics of performance are defined in order to create systems of evaluation that seek to attain or optimize performance.

Brown makes sense of Bourdieu's concept of the habitus in relation to the agency held through the repetition of movements in embodied practice. He writes:

> A useful analogy of this is the embodied performances of boxers. Thousands of practice hours, "burning in" movement pathways, provide a pyscho-physical grammar for engagement that is deployed spontaneously and creatively in each new confrontation with an opponent. There are clear limits, however, for the improvization of these movements, as they must be recognizable within the limits of a system of movement that is recognized as legitimate boxing. Therefore, it is this creative *potential* of the habitus and its interaction with the social world that creates struggle and change or continuity. (164)

Brown discusses the way in which movements and actions are justified or socially accepted when they are deemed as masculine. "Therefore, the paradoxical doxa of masculine domination is the everyday practical orthodoxy of symbolic violence that operates to naturalize the social order and render it ahistorical and dehistoricized" (Brown 167). He declares that the process is crucial to understanding sport "because of the way in which the performing body is both a product and symbol of the socio-culturally constructed self for present and future generations." Brown highlights an observation of Bourdieu that identifies a dynamic self-perpetuating process where we tend to reduce aggressive acts as natural "rather than as socially constructed, rehearsed, and ritually performed social acts" (167).

Foucault's theories of power are additionally linked to the notion of desire as a process. Foucault views the production of desire as a process that also generates desire in itself (Bignall 138).

> The process of desiring-production satisfies desire by creating it, in a perpetual feedback

> motion, which is not driven by negativity in the form of lack or absence but by creativity and the positivity of production, and by the feeling of intensity that results from the creative transformation of being. In this process, the subject is produced by desire, but not as an intended aim or endpoint of the process. (Bignall 138)

The role of desire in performance involves relationships between bodies and the contexts within which said bodies are valued and validated. The desiring-production process is constantly at play in performance contexts. Although, from Bignall's perspective, desire can be driven by the creativity of production, it can also be generated through negativity in the form of lack or absence. The absence of a particular goal in sport, aesthetic ideal, or perceived flow in an individual or group performance can be generated through the absence of the very ideal that performers aspire to achieve. Bignall's work on the theories of Gilles Deleuze applies to sport and flow due to the component of flow oriented toward achieving a goal or objective. As previously established, one of the prerequisites for psychological flow is the necessity for clear feedback and goals. In flow literature, there must be clear and continuous feedback regarding if one has attained a particular goal or set of goals (Jackson and Csikszentmihalyi 16). The role of desire is important in flow as the self-perpetuating movement of desire affects motivation and the intrinsic goals that one seeks to achieve.

Desire is a component of flow embedded within the prerequisites for flow performance. When looking at deeply rooted structures and values that are created to accomplish particular outcomes, the institution of elite sport extends far beyond the structures of power and desire that exist in the ephemeral performances of athletic competition. Pirkko Markula observes that "the historical formation of sport, for example, is not only talked about in terms of the scientific aspects of training, but also in terms of ethics,[…] aesthetics,[...] or how sport is used to promote

nationalism, support economics, or endorse peace" (151). This observation highlights that the lens in which one observes a particular sport has an influence on how it is interpreted. The complex and multifaceted nature of sport, sport science, and the dynamic ways in which sport has been sociologically developed, all hold within them power structures and hierarchies that contribute to public perceptions of sporting bodies in performance.

Foucault's work in *L'archéologie du savoir* (1969), marked a shift in his opinion on the formation of knowledge and highlights the distinction between discursive and non-discursive forms (Collett 379). To understand the weight of various dimensions of the sporting institution, it is noteworthy that both Foucault and Deleuze believed in various means of knowledge acquisition and found literature just as valid a means of investigating the world as the natural sciences (Markula 151). Markula identifies in her book, *The Physically Active Body,* that she developed a fascination with "how physically active bodies have been divided based on identity categories" (x). The act of categorization and forms of knowledge-acquisition is key to this project of understanding discipline-specific conceptualizations of flow. "Deleuze conceptualized knowledge in Foucault's work as kinds of strata: 'as sedimentary beds they are made from things and words, from seeing and speaking, from the visible and sayable, from bands of visibility and field of readability, from contents and expressions'" (Deleuze in Markula 151). Markula identifies that Deleuze's analogy and use of the term *strata* to describe "historically formed knowledge beds […] that differ in the terms of the composition and combination in each historical formation" was additionally influenced by the work of Foucault (150). She elaborates that "the idea of statements as multiplicities formed within specific historical contexts, functions as the foundation of Foucault's later understanding of conditions for knowledge formation that Deleuze characterized using his own concept, *strata*" (Markula 150). Markula additionally links

strata to the context of how we talk about physical forms of activity and practice (Markula 150). The observation that "there is nothing prior to knowledge, because it is a combination of separate visible and articulable elements specific to each historical formation" is core to understanding the role of power in explorations of phenomena from the perspectives of different disciplinary backgrounds (Markula 151). Markula provides some examples of structures in the realm of sport and recreation which are shaped and reinforced through their historical context:

> Consider a stadium as a way of displaying and competition as a new way of understanding physical activity within a specific historical formation that then became talked about as sport. Or [...] consider the health club as a new way of displaying a healthy-looking body and commercialism as a new way of understanding physical activity within a historical formation where it became talked about as fitness. Or consider a physiotherapy clinic as a new way of displaying illness or the injury free body and a new way of understanding physical activity in the historical formation of public health. (150)

Markula is describing how structures with particular historical formations represent both the emergence and reinforcement of knowledge. She highlights that different perspectives of science provide elements for how we can understand and practice sport, exercise, and dance (150).

Object and Subject Relationships

In the context of both dance and sport, the dynamic nature of various performance contexts involves many human-human relationships and interactions in addition to those between humans and nonhuman entities. Sporting and dance contexts require performers to interact with their material environments. There are a great deal of object-subject relationships in any aspect of a sporting or artistic performance. In many territory-driven sporting situations, the most important

nonhuman object is indisputably the ball or the object which determines the score or outcome of the sport. In the sport of rugby, the location of the rugby ball in-relation to the human performers' possession and location is what determines the state of the game at all times. Alternatively, in various genres of dance the amount of bodies present varies, yet a performance can also incorporate a dancer's work in relation to non-human and material objects with which they interact and improvise over the course of the performance. Aerial silk dance requires the dancer to be suspended in-relation to the silks in order to create movement, structure, or stasis. An actor or human performer can be in a flow state, but the object or subject of their concentration could be another human, non-human, or a myriad of entities in a dynamic context which encapsulates a variety of human-human and human-nonhuman relationships.

Roslyn Kerr has taken the work of the late French philosopher and anthropologist Bruno Latour and his understanding of actor-network theory (ANT) and applied his framework of interrelations to a variety of sporting contexts. A key observation of Kerr's work is the power dynamics that are present in the connections between human and nonhuman actants that form together to create what Latour refers to as assemblages. A Latourian onto-epistemological framework highlights the interrelated human-human and human-nonhuman relationships that enable action through their integration in structures, or what he terms as networks.

As mentioned earlier in this chapter, in the field of behavioural psychology, it is generally accepted that a performer holds a degree of power and autonomy over their own actions and movements in performance. "ANT claims that it is possible to trace more sturdy relations and discover more revealing patterns by finding a way to register the links between unstable and shifting frames of reference rather than by trying to keep one frame stable" (Latour 24). This observation is key to understanding the dynamic contexts of artistic and sporting performances.

The frame of a staged performance is somewhat fixed, yet attempting to believe that every variable can be controlled is to disregard the agency that is shared among human and non-human actants. When viewed as a socio-technical assemblage, action is no longer simply reduced to the agency of the human performer, but is rather mutually constituted by interrelations with other human and nonhuman entities in the network. Reducing the power and agency of a single entity within a network runs the risk of attributing action to a major body rather than the interactions between multiple actors.

In 1978, the French anthropologist, sociologist, and philosopher, Jean-Marie Brohm, published a series of Essays entitled *Sport, A Prison of Measured Time* where "he described how the body came to be treated as a machine and training was structured to produce maximum efficiency" (Kerr 30). Roslyn Kerr further observes that:

> Interestingly, Frederick Taylor, the originator of scientific management in the workplace, was also one of the first to introduce efficiency into sports training and sport technologies. While Taylor is best known for his work in conserving resources and producing maximum efficiency throughout the workplace (Taylor and Bedeian, 2007; Tenner, 1995), what is less well known about him is the way he applied these same principles to sport. Through applying his principles to the sports of tennis and golf, he invented and patented a number of new technological innovations (Taylor and Bedeian, 2007). Taylor was ahead of his time in determining that the design of the equipment utilised in sport could strongly influence one's ability in the game. (Kerr 30)

The history of incorporating technologies into the discipline of sport has embedded the fundamental values of efficiency-driven and optimized performance outcomes as desirable. Thus, technologies were developed, prototyped, and perfected, with the aim of training and

maximizing aspects of athletes' elite performance. Kerr elaborates and cites the historical conditions that must exist in order for elite performance to develop and expand in scope, outreach, and performance.

> Essentially, discussions around agency revolve around conceptions of power. Rather than viewing power as incorporating deliberate intent, ANT views power as an effect. Utilising such a definition, anyone or anything that affects action can potentially hold power. The form this action may take varies depending on the individual study, but a simple example of the way that technology in sport can affect the action comes from my own ethnographic work in the sport of gymnastics, which utilised an ANT approach. (Kerr 4)

ANT is helpful as an onto-epistemological framework that illustrates the power relations between object-subject and subject-object relationships. If a network is defined as per Latour, then one can trace the interrelationships within that network through its assemblages and connections to identify the flattened agency among actants that create action. In *Second Source of Uncertainty*, Latour additionally references the work of Bourdieu and his notion of the habitus to refer to the elements that make up one's perception of the world which include a series of nonhuman and human interactions (44). Latour also defines what he terms as two potential categories of actants within a network: mediators and intermediaries.

> Mediators demonstrate how it is that non-humans can act to disrupt the desired action, holding power through causing unexpected outcomes, while intermediaries hold power through ensuring action and at times suppressing mediators to perform as desired. However, Latour's central point is that in all contexts, humans work together with non-humans in order to function, and that therefore *both* the human and non-human can cause

> action: hence the emphasis on seeing the world as networks, not individual components. A cyclist is an assemblage of human and non-human actants that act together to travel faster than either can alone. Agency is shared equally between the human and non-human actants. (Kerr 53-4)

The role of mediators and intermediaries hold both generative agency and power which depends on their place in-relation to other actants within the context of the network. The generative agency held in each actant is analogous to a form of potential energy. For example, the enrollment of a camera as an intermediary into the sociotechnical Latourian network of a screen dance performance affords the dancer the opportunity to dance with the camera as a partner. If the camera is either handheld or on a battery, the movements in the screen dance performance are now at the mercy of the mediative properties of the camera such as its mobility or battery life. Thus, Latourian assemblages operate under the same phenomenological paradigm as the work of Deleuze and Guattari who argue that assemblages share power among actants through their interrelatedness. Markula remarks that Deleuze and Guattari's notion of assemblage is similar to that of strata as it "include[s] both expression and content [… and] should be treated as separate from the strata" (Markula 42). Deleuze and Guattari's assemblage differs from that of Latour's concept, yet throughout the various developments and translations of the term assemblages involve the relationship between knowledge, power, behaviour, and thought created from natural and artificial elements (Markula 40). Adopting a Latourian notion of how objects have the capacity to influence action in conversation with the agency of objects in performance enables a different lens from which performance can be analyzed. "Viewing athletes as assemblages of humans and technologies creates a significant shift in thinking for the sports policy-maker" (Kerr 5). This type of thinking serves as an example of how the

micropolitical can influence the macropolitical sphere where the enrollment of technologies into a network enables certain affordances that then influence policy and regulatory decisions.

In the case of individual or target performance sports, the experienced or perceived flow is generated by not only the athlete, but also their relationship to the other objects that assemble with humans to create the performance. As previously established, one of the prerequisites to enter a state of flow relies on predictable feedback and clear goals. If a player shoots a basketball into a hoop through applying the same force that they have trained through countless hours of practice, there is a degree of confidence felt by the player in their skills to execute a successful shot. The predictable outcomes of the applied forces, weight of the basketball, and angles at which the player is taking the shot are all factored into the player's training. Certain factors are easily translated from training into competition settings, and the predictable factors that are within the player's degree of control are targeted in training. It is important for athletes to understand which factors are controllable and which are uncontrollable in the context of their sport so that their time is optimized toward creating desired outcomes. Sport is similar to artistic contexts such as dance and theatre where an ephemeral event becomes the culmination of masterful training and skills that performers obtain in order to eliminate unpredictability.

The power relations that govern moving bodies in artistic and sporting contexts permeate the affective results and phenomena that are felt by moving bodies in performance. As someone who has lived and trained as a dancer and athlete in a variety of sporting contexts, I have an embodied repertoire of movement that is validated and qualified based upon the structures and institutions within which I engage. The nature of repetition reinforces predictable outcomes in performance which allows for institutional values to inform which outcomes and movements are desirable. Certain dance, theatre, and sporting contexts structurally resist flow or create

environments where the flow state that exists in positive psychology becomes difficult for actors to enter. Breaking or disrupting flow is not always maladaptive nor undesirable.

In chapter 3, I analyze a variety of testimonies from artists, practitioners, athletes, and academics and their experiences of experiencing and witnessing flow in performance. The way in which individuals in this study describe flow either derives from a subjective embodied experience, the individual's point of view as a witness, or oscillates between both perspectives. In performance one's agency and ability to enter flow can be disrupted or easily shifted. Understanding the desirable outcomes in performance that are then contingent upon various actors and individual agents in the performance context allows for a re-framing of how flow is valued from the perspective of a performer or witness.

CHAPTER 3: Interdisciplinary Conceptualizations of Flow

Upon surveying various fields of flow literature and investigating how institutional values are embedded in structures that qualify movement and flow in performance, this chapter synthesizes various theoretical explorations of flow in the context of ten interviews. Initially, this project aimed to uncover some of the inherent value qualifications that are embedded within particular artistic practices, dance, and sporting contexts to denote markers of when flow is deemed as either useful or counterproductive to performance. Currently, a large breadth of scholarship investigates how to create performance environments that are likely to yield a flow state for performers. As mentioned in chapter 1, this research operates under the assumption that a flow state is beneficial for desired performance outcomes. Through interviewing ten specialists primarily based in Alberta, Canada, the utility of flow in performance was not defined as universally beneficial nor valued in the same manner across disciplines. Furthermore, definitions of flow in performance varied when participants spoke about flow from their subjective embodied experiences in comparison to when they witnessed a performance. There were discrepancies among various definitions of flow, reflections on the value of disrupting flow, and reasonings behind the desire to enter a flow state as a conduit for optimal performance. This survey across intersections of academic, artistic, and sporting contexts in performance illuminates the differences in values placed on flow through dialogic engagement.

Methodology

I interviewed ten specialists who have extensive experience in their respective fields which are concerned with performance in some capacity. Interview participants were contacted independently and the entire process of this study was explained to them. Informed consent was obtained from each individual for their participation and contributions to this study as per the

Research Ethics Board 1&2 guidelines. The interviews were conducted either in-person or virtually over Zoom or Google Meets software. Each participant was asked a series of open-ended questions in a semi-structured interview format which sought to examine the correlations between each professional's lived experience in a particular discipline in relation to how they value or conceptualize flow and flow states. All ten interviews were inductively coded as the participants expanded upon their conceptualizations of flow, its utility, disruptions of flow, and how they value flow from their own positionality. In studying flow with specialists and practitioners across the fields of psychology, sport, dance, sociology, and theatre performance, each conversation led to different understandings of the same phenomenon that spanned across various fields of specialization. This research will expand upon the scope of literature on flow, identify, and critically investigate some value assumptions that shift depending on how flow is evaluated across disciplines. Conducting this study allows for further understanding the assumptions that influence conceptualizations of the phenomenon of flow in performance.

In order to understand the themes present in the interviews, I engage with a reflective interpretation of the data from my conversations with each of the interview participants. As someone who has trained in both athletic and artistic disciplines, my positionality is a crucial point of intersection that affords me the ability to interpret the interviews across various definitions of the flow experience in performance. I remain critical of the positivist psychological paradigm from which the flow state itself is primarily conceptualized as per Csikszentmihalyi and believe that flow allows for a degree of immersion and concentration in performance that although beneficial, is not universal across contexts.

In interviewing the participants of this study, I identify the aspects of the psychological groundings of flow that can be enriched through dance and performance studies

conceptualizations of the same phenomenon. This research also assumes that creating dialogues of interdisciplinary investigations of phenomena can be used to foster empathy across different fields of study that operate from different modes of inquiry. This work offers a method to understand the phenomenon of flow through a mixed methods approach that intersects qualitative research and coding strategies with dramaturgical interpretations of the interviews conducted between the study participants and I. As the primary investigator of this project, my interpretations of the interviews are through the lens of my lived experience. I found myself able to understand the moments of the interviews where participants discussed flow in-relation an event that was similar to something that I have experienced in my performance history.

Preliminary Data and Observations:

Prior to coding the series of interviews, I returned to the central question of this thesis: why does the way in which we value flow in performance depend on specific disciplinary structures? The universality of the flow state has been both quantified and phenomenologically understood, yet empirical conceptions of this work are still quite abstract. Qualitative embodied experiences of Csikszentmihalyi's flow state are different from flow that is witnessed. This research project began out of an acute interest in the intersection between the aesthetic goals that performers seek to achieve and the process of training performers to optimize particular favourable outcomes in performance. The high-order themes and subthemes yielded various correlates between participant sentiment and conceptualizations of flow. The higher order themes include: the disruption of flow, direction of flow, value of flow, conditions for flow, and interventions for flow (which includes experiences that account for non-human objects that are used to either qualify the flow experience or enable the flow experience). Example snippets from select

interview quotes provide context for lived experiences from the individuals that informs their understanding of flow (see table 2).

In order to investigate how various disciplines embed value qualifications of the flow experience, it is important to recognize that there is a point of mediation between one's subjective experience of a phenomenon, their experience as witness to a phenomenon, and ability to articulate the experience in a descriptive manner. The flow experience is often described through the use of analogies and metaphors when the participant depicts their embodied or witnessed experience of the phenomenon.

Table 2. Codebook for high-order themes and subthemes.

Theme	Subtheme	Definition	Example
Disruption of Flow	Facilitative	This code is applied to any instance where a participant indicats that the flow experience (embodied or witnessed) is beneficial.	"And so injury is what I'll pull out as being something that reminded me that when I'm in a moment of capturing something where my technology is going to capture me at this age stage, this moment in my life, my flow is absolutely present and focused." Jennifer Nikolai
	Counter-productive	This code is applied to any instance where a participant indicates that the flow experience (embodied or witnessed) is not productive for performance.	"With curling being such as turn based and very intermittent in the way that it's structured, you get very few moments where you can actually get into that state, but I'll say that when you're actually throwing a rock the less thinking you can do the better you're gonna do, and it's always been one of those sports is like the less you can get in your own way." Gabe Dyck
Direction of Flow	Witnessed	Any time flow is described from the position as an external observer.	"If everything, the best compliment for a coach: it's you're standing there and watching the kids playing and you have to say nothing because they're doing exactly what they have to do, they're in the moment, they're in the flow, so they're playing, you just watch them." Mattia Tagliarini
	Embodied	Any time flow is described from the subjective embodied experience.	"I feel like it frees up part of my brain because that's been, that's now like automated, right? Like you know, all the connecting steps in ballet [...] and even just walks and runs--it's so automated. I don't really think my brain has to deal with that. It can deal more with dancing to the music and connecting and experiencing it with the whole body." Emily Noton
Value of Flow	Effect on Performance	This code is applied to any value association with the flow experience as either productive or counterproductive to performance.	"Yeah, I think about this in terms of almost like momentum and energy because it's a big part of team sports and every athlete will say it's there, but you can't touch it. You can't measure it. And I think, you know, athletes have a very strong sense of when it's sort of tipping. And you do find, again, for lack of a better phrasing, like some of your goons or your enforcers may make a stronger hit in order to get some of that momentum back if they feel it's slipping away." Alissa Overend
	Certainty	This code is applied when a participant asserts their personal experience as a general fact or claim.	"I say primarily it's my role to disrupt flow, obviously." Ricardo Eguren-Echaiz
	Uncertainty	This code is applied when a participant declares a degree of uncertainty regarding the flow phenomenon.	"So the conditions are, a lot of these variables outside your control and a lot of them feel it's just an elusive place to be. And a lot of them just really like the concept of, you know, digging deep in a form of grit, and you're really going to want to be in control of something, right? So there's a struggle with letting go, right? So there's a discipline piece, which they're good at, but there's a surrender piece, which is necessary for flow, and then a lot of them struggle with the surrender. And then there's this ongoing kind of debate or concept of flow versus clutch." Marek Komar
	Absence of Flow	This code is applied when a participant describes an experience without the presence of flow.	"Through kind of my sports psych courses and in in undergrad or graduate school, you're introduced to a lot of different concepts and so flow being one of them. But those never kind of really resonated with me. Like it was one of those things where intuitively it made sense but it wasn't something that I'd ever kind of experienced in sport. I don't know, maybe just the kind of being an endurance sport athlete, there's not a lot of flow, it's just a lot of kind of like there's a lot of self-talk going on and pacing and just you're always thinking and kind of strategizing as you're in a race or just feeling like every muscle in your body on fire. So I could not resonate with this idea of like being in flow." Geri Ruissen
Conditions for Flow	Environmental	This code is applied when a participant describes the environmental conditions that contribute to the flow experience.	"Some sports just naturally have more, you know, just the conditions for it, more, I mean, I think that kind of target-based sports, or individual sports, where it's like, it's just you, and there's a certain objective, and there's not many variables kind of affecting it, that can be sometimes kind of easier to get into, and you understand kind of flow more often, the more variables you add into it, the less, you know, the more elusive it kind of tends to be." Marek Komar
	Personal	This code is applied when a participant describes a subjective context-specific instance of the flow experience.	"Sitting volleyball requires a lot more mental attention and capacity because it's just, it's just quicker. Like you have less court to move through. It's easier than to score a point because you can block a serve." Kate Rosendaal
	Group	This code is applied when a participant describes a collective or group experience of flow.	And then that's the kind of feel of the play, right? As the actors create the emblems, even though you don't say, do it this way, or this is what I want it to look like, because they're working from that play, the emblems will begin to take on an outward, physical style that is informed by the actual play. So if I have a group of actors making statues, it was one of the emblems, for like a Greek play. That's going to look very different than if I have actors making emblems for some crazy, wacky, farce comedy. So what I love about it is that the play creates the physical, outward look of the emblems, but the emblems come from within the actors and have this deep embodiment and ownership." Kathleen Weiss

Theme	Subtheme	Definition	Example
Interventions for Flow	Nonhuman technologies used to qualify flow	This code is applied when a participant describes an intervention with technology that is used to determine the presence of flow.	"I watch the flow and then we have this program, this software, so we make clips. It helps a lot because sometimes, I don't know, you think a player played amazing, then you re-watch the recording and it wasn't so good." Mattia Tagliarini
	Flow with Objects	This code is applied when a participant describes a relationship with an object that influences the flow experience.	"So I find that when there is the presence of a recording, a recording device, so a camera, the complete immersion from a flow perspective is absolutely like it's acute. It's highlighted. I'm more astute." Jennifer Nikolai

Data Interpretation: A Conversation Among Disciplines

The process of interpreting the interview data identified patterns across participant depictions of the flow experience. Many of the participants articulate an idea of flow that is shared through their personal experience and informed by their background training in a particular field. Many participants provided analogies that depict the aesthetic quality of flow or performance environments that facilitate the flow experience based on anecdotal and embodied understandings. When participants described flow from the objective position as a witness, if the participant possessed a high degree of knowledge in the particular skill or an understanding of what the flow "should" resemble as per their degree of expertise, they spoke with certainty regarding their ability to discern whether or not the performers were in a state of flow. The following critical reflections serve as a conversation between the themes in the interviews that I conducted with Gabe Dyck, Ricardo Eguren-Echaiz, Marek Komar, Jennifer Nikolai, Emily Noton, Alissa Overend, Kate Rozendaal, Geri Ruissen, Mattia Tagliarini, and Kathleen Weiss. The disciplinary backgrounds of the study participants spanned across sports psychology, behavioural and clinical psychology, performance psychology, sociocultural kinesiology, volleyball, curling, soccer, rugby, classical ballet, contemporary dance, sociology, theatre directing, and performance studies. Many of the participants have expertise in a particular field in an academic context in addition to an embodied practice training in a particular sport or artistic discipline. The intersection of the unique viewpoints among each of the specialists

illustrates various conceptualizations of flow in performance that are qualified and influenced by rigorous training and lived experience in a particular discipline.

Marek Komar, flow performance consultant and career coach, identifies that “a lot of, actually, even martial arts and fighters, they understand the concept [of flow] a lot as well, I think it's just the fear, and the stress of that moment, really kind of just chop kicks you into flow, a necessity, so they kind of, they're really interested in that concept a lot.” Komar further elaborates on the conditions for creating flow environments and operates under the assumption that living a life in-flow is linked to the positive outcomes explored in the realm of positive psychology. He states:

> “Some sports just naturally have more, you know, just the conditions for it, more, I mean, I think that kind of target-based sports, or individual sports, where it's just you, and there's a certain objective, and there's not many variables affecting it, that can be sometimes kind of easier to get into, and you understand flow more often. The more variables you add into it, the less, you know, the more elusive it kind of tends to be.”

Komar identifies the environmental conditions required to enter a flow state while articulating that the more variables present that could affect flow create elusive flow environments where performers enter and exit the state multiple times throughout a performance. The dynamic nature of a team territory sport has a plethora of opportunities for performers to enter flow, yet also for potential disruptions.

Within the context of a rugby game, a performer can have a heightened degree of concentration and acute focus and be in a state of flow either in-relation to their own performance or among their teammates. Any disruptions are fleeting as the dynamic nature of the game facilitates the players to become immersed in the match upon exiting flow. It is noteworthy

that the sport of rugby is inherently much less stop-and-start in comparison to that of American football where each down resets the game state of each play. In rugby, set-piece plays such as a scrum or a lineout are only called in order to maintain an equal opportunity for both teams to contest for ball possession following the stoppage of play. The chasm of rugby as such a dynamic context where players are constantly immersed in the game affords few moments where the sport stops entirely–the only exception being the point where a try is scored where the offensive team is successful in entering the defensive team's territory and touching the ball to ground. Alissa Overend, associate professor in sociology at MacEwan University and previous rugby player, depicts the transferability of game contexts in the sport of rugby to that of their professional teaching environment:

> I think a lot of those skills specifically as a nine [the scrum half position in rugby] were really helpful for academia. And I think, you know, despite it being a thinking position that there's something going back to maybe that flow state or that embodied thing when I, you know– I'm biking now 'cause I have all kinds of back issues. I'm into mountain biking, so as long as I stay on my bike, I'm good. But I can get into this position where I'm such an overthinker in so many other parts of my life that it's just so nice to be like, I'm kicking a ball and I'm running and I'm supporting a teammate or I'm on a trail and I need to like get over this little tree stump or something. Like, it's just, there's something very nice about that and I don't wanna, I think that not contaminating it with analyzing it all the time.

Overend likens their embodied activities of mountain biking and enjoying physical activity in the moment to that of playing a game of rugby, but with the necessity to not overthink or analyze the strategy of the experience in order to enjoy the activity. A similar idea regarding the

transferability of skills or embodied experiences of flow were named by the other interview participants.

Bourdieu asserts that “in order to be able to constitute a sociology of sport, one must first realize that a particular sport cannot be analyzed independently of the totality of sporting practices; one must conceptualize the space of sporting practices as a system within which each element receives its distinctive value” (“Program” 153). Bourdieu additionally articulates the mediative properties of the sporting body which “link[s] individuals to the broader socio-spatial processes of power, reproduction, and change” (Brown 163). The mediative aspect of the sporting body allows witnesses to objectify the athlete as a way to mediate their own immersion into the sporting performance. The athlete or performer hereby becomes a vessel for the witness. A witness can feel immersed in the sporting performance through a heightened degree of focus and attention. Witnesses who also have a degree of specialization in the performance skill, task, or activity that they are viewing possess the discernment to qualify whether or not the performer appears to be in flow.

In dance, sport, and theatre there are such clear goals and objectives that a performer rigorously aspires to attain that are informed by the habitus of the discipline. Throughout the interview process, I found myself both relating to and misunderstanding the performer, practitioner, and athletes’ experiences depending on the degree to which my personal experience as a witness and embodied practice resonated with that of the participant. Two dance scholars and practitioners, Jennifer Nikolai (Auckland University of Technology) and Emily Noton (University of Alberta), both depicted their experiences of witnessing flow in the context of contemporary dance.

> The flow, the intense focus, concentration, dedication to screen dance, and working with dance and camera as improvisation was very much informed by my beautiful, amazing students. I taught undergrad students and it was witnessing their flow and their intense focus in the field of screen dance that really emphasized for me how important it was and how motivating it was to them. And that very much informed my own research and my contemporary practice. (Nikolai)

Nikolai's experience as witness to the flow experience in her students' performances from the position of a teacher/mentor was then integrated into reflections of her individual practice. Nikolai mentioned in the interview that her reflections and understandings of flow are dynamic and constantly shifting. She earnestly declared that, "if you were to interview me a year from now, I'm sure my thoughts would change because with screen dance, it constantly changes based on the context of the of the work or the provocation–whether or not I'm doing something purely for production or whether or not I'm doing something for collaboration." Nikolai identifies the strong influence that a performance context has on her ability to enter or observe flow in performance. Not only do Nikolai's reflections identify the vastness of applications of the flow experience, but the structures that influence the ability for a performer to enter flow. Her flow experience solo, duet, duet with camera, or piece among numerous collaborators changes the nature of the flow experience. In a similar line of thought, Noton articulates the flow experience as one which is context-specific and depends on the particular practice, exercise, rehearsal, or performance.

> I think it's quite situation-dependent. I think the most impressive and kind of awe-inspiring experience of flow is the, what we would call, you know, contemporary dance today that is not based on codified movement. Like less and less and less codified

> movement and more based on creation out of improvisation. because when that is achieved, when that is done really well, it's stunning–probably more stunning than a more codified, choreographed, you know, technical motor skill-based piece of work. (Noton)

The flow experience is then something that can be aesthetically qualified based upon how the movement is viewed by the perspective of the spectator. Noton summarizes that, "contemporary is really about having the movement originate from the body and what the body is asked to do and how it responds to music." The role of music is additionally integrated into the structure of a performance that provides a new affordance for various movement qualities to be perceived. Music forms an assemblage with bodies in the genre of contemporary dance wherein the flow of movement from the position of a spectator is contingent upon not only the performer body's movement, but the relationship between the performer body and musical accompaniment.

Director and educator at the University of Alberta, Kathleen Weiss, similarly articulates the flow experience in her directing process through embedding what she terms as emblem work in her rehearsal processes for actors. She describes a process that is deeply rooted in physicality, grown, repeated, and explored to a point where the physicality has permeated the world of the actors' performance so that the play is deeply enriched with this embodied process. Weiss describes her emblem work which affords the actors to be completely concentrated and immersed in their performance. Additionally, she articulates barriers on integrating this training into institutional North-American rehearsal practices. "So, there's a lot of suspicion. I would say I've encountered a great deal of suspicion. I've been told, even though my work is recognized as being of a certain kind of quality, I also have been told, you know, 'you wouldn't fit in here.'" She acknowledges the generalization yet iterates that "professional actors tend to be, one, very protective. Actors will often say, 'I have my own. I have my own.' They wouldn't use the word

methodology, but they would go, ‘I have my own way of working.’ or ‘I don't want to do this.’ You know, they don't want to be challenged.” Weiss articulates her rehearsal process of emblem work as one which is difficult to describe, but evident in the product of the art. Weiss’ sentiment is one that resonates with me heavily in the realm of dramaturgy, where often a large amount of creative work is valued for its richness in the enhancement of a project, but can often be overlooked or difficult to articulate in practice. Weiss describes the process of emblem work quite figuratively in the context of greater relations to the overall play or project. She states:

> As the actors create the emblems, even though you don't say, ‘do it this way,’ or ‘this is what I want it to look like,’ because they're working from that play, the emblems will begin to take on an outward, physical style that is informed by the actual play. If I have a group of actors making statues, one of the emblems, for like a Greek play, that's going to look very different than if I have actors making emblems for some crazy, wacky, farce comedy. What I love about it is that the play creates the physical, outward look of the emblems, but the emblems come from within the actors and have this deep embodiment and ownership. You can do the performance, but the work is not coloured with all of this other stuff. There's no time for exploration and experiment. [...] Like physically, we can have a choreographer. We can have someone come in and do choreography. That's fine. Or we can have stage fighting, or we can have a clown, but to actually have a director who is integrating physicality at every step of the way, the conventional theatre finds this very weird and strange, and it's much more common in Europe. It's much more common in Europe [or] Japanese companies that work with this kind of physicality, and that's standard practice, but it isn't in North America.

Weiss describes the canon of North American rehearsal etiquette and institutionalized practice as an environment that resists change due to the constraints of the industry and funding structures. She mentions the richness of a deeply embodied creative rehearsal process that cannot be integrated into a two-week professional rehearsal process due to logistic restrictions. The acute focus and presence required by an actor in the context of a conventional play that is performed multiple times to yield a similar result differs from the sporting context where the performance outcome is not predetermined.

The flow experience as described by two soccer players and coaches Ricardo Eguren-Echaiz and Mattia Tagliarini (University of Alberta) in the context of a competitive dynamic team sport requires not only a deep embodied challenge-skills balance, but is specific to the particular state of the game at any given moment. These observations also apply to similar dynamic team territory sports such as rugby, hockey, lacrosse, and American football.

> The most important aspect of defining flow is just like there's no processing time. It's just executing skill after skill after skill to the point where the ball is exactly where you want it to go. And it's maybe, you know, you've had the idea, you've had this idea or this plan beforehand and you're just executing it now. Or everyone just understands wordlessly what they need to do. (Eguren-Echaiz)

Eguren-Echaiz additionally answered with a degree of certainty upon reflecting on his values associated with the flow experience in soccer. The way in which he describes the flow of the game in a hypothetical and ideal context comes from both an embodied understanding of the sport and also degree of authority from his position as a coach and educator.

> I feel like that's the way the game should be played. In a sense, like everyone's like, ‘oh yes, this is what we're all shooting for.’ It's so difficult to say because it's obviously

> subjective to say ‘that was a beautiful play,’ but plays with flow are beautiful. They're so exciting because you see like the ball is just dancing around. It's not, nothing's being forced. There's no resistance in terms of, you know, there's opposition, but again, it's just one of those, the ball is just cutting through it like it's not there. It's just so satisfying to see, especially at those higher levels when you do have the absolute best of the best defending against you. And you just have that, you have that ability to see there's probably like a one-inch gap here where I can just squeeze the ball through. No one's got their feet aren't gonna be long enough. And it's gonna skip once, land on my teammate's foot. He's gonna drop it back. And then it's gonna be a shot on net. And the ball just bounces exactly where you hope and expect it does. (Eguren-Echaiz)

Eguren-Echaiz’s observation depicts the flow experience in soccer as analogous to that of dance. He also mentions a degree of immersion into the state of focus, team cohesion, and also depicts an aesthetic value to the play by referring to it as “beautiful.” This terminology is not uncommon when describing sporting performances. His reflections also speak to group flow and cohesion among a team that can be both witnessed and embodied. Eguren-Echaiz additionally articulates a unique positionality as player-witness through his unique role on the field as a goalkeeper. The role of the goalkeeper on the field is quite static for the majority of the game, but they are constantly witnessing, planning, and adapting to the state of the game as it progresses. At any given moment they need to react to the play that yields both high-stakes for the influence of the keeper’s actions and the outcome of the game. If the goalkeeper has little work to do on the field, their team is likely playing well and in flow.

Tagliarini distinguishes a good player from a great player by how they view the game as both a performer and a witness. He says “it's about how they understand the game, how they can

see the game, and how they can interact between each other because that's the real difference between an amateur, good player, and a very good player because you can have a player who is very skillful but he can't understand the game" (Tagliarini). The distinction between different skill levels in players are not directly translated into how they view the game; their position as an observer is an entirely other skill. Tagliarini and Eguren-Echaiz depict elite soccer players that display flow as an ideal that influences training from the top-down; elite players set the desirable standards for semi-professional, club, and recreational teams.

An ideal context for a high-level competition of soccer depicts the Girardian conception on mimetic rivalry where "if models only inspired in their imitators a desire for objects that they then agreed to share with them, violent rivalry would be avoided. What makes such rivalry inevitable is the thirst for exclusive possession, which most often characterizes the imitator's desire precisely because it already characterizes the desire of his or her model" (Girard 208). The ideal chasm of sporting rivalry is a field where both parties possess the same degree of challenge-skills balance and exist in the habitus which propagates the same model of desire. Girard states that "as a general rule, we desire what those around us desire. Our models can be real or imaginary, collective or individual. We imitate the desires of those we admire. We want to 'become like them', to spirit away their very being" (9). This entire model relies on a desire that is accepted as a goal orientation to which members of that discipline should aspire to achieve. Models of mimetic desire then become complex in the chasm of sport where the inclusion and exclusion of particular bodies that are within the habitus of the performance context differ from that of the source model. There are different affordances for performance structures that embed within them structural values which legitimize desirable movements for what is witnessed as flowing performance or experienced as a flow state.

Kate Rozendaal, clinical psychologist and Assistant Coach for Team Canada's Paralympic Volleyball Team, discusses the flow of a sitting volleyball game that exists in its own structural context from standing volleyball.

> Sitting volleyball requires a lot more mental attention and capacity because it's just quicker. You have less court to move through. It's easier to score a point because you can block a serve. The game physically goes faster. As in, the game sometimes finishes in, you know, an hour and a half. It still does as in indoor volleyball, but the game goes quicker and then the contacts are faster. Reaction time is something we also help train just because of the nature [of the sport] and [that it is] closer to the ground. It's just easier to score a point because the ball hits the ground. It's a point. (Rozendaal)

The performance framework of a sitting volleyball match differs from that of a standing match. The flow in sitting volleyball described by Rozendaal is structurally created by a sport which has a lower net and a faster tempo. A study that surveyed the performance model based on data from the final matches from the 2016 Rio Paralympic Games Sitting Volleyball tournament. Researchers found that:

> The high correlation regarding all attack phases lead to classify Sitting Volleyball as a game devoted to attack, which makes the third touch, in the classic form of the dunk, one of the foundations of the Performance Model. The block also has a very important value. Like receiving, it can be seen as a block [that] also has a very important value. Like receiving, it can be seen as a requirement, in this case a tactical one, without which it is impossible to think of limiting the opponent's attacks and serves. In particular, the structuring of modern Sitting volleyball, with the low net and one of the smallest fields

> among all the Sports Games, requires its constant presence both on the serve and on the opponent's attack. (Morelli et al.)

The act of trying to articulate the differences in the values placed upon bodies in performance propagates the very thinking that is a product of value qualifications. The performance framework of sitting volleyball creates a flow of the game that differs from the standing equivalent of the sport. Not only do athlete abilities inform how the flow of the game is qualified, but they are subjected to different criticisms informed by the discipline.

An observation from scholar and dancer, Jennifer Nikolai, also articulates the role of the camera in-relation to her dance practice. The ability for her as a performer to engage with a non-human object was facilitative for her entrance into the flow experience. Nikolai continually describes her experience as more immersed and focused when working with a camera in her dance performance as practice-based research. Nikolai reflects upon camera recording in relation to her dance practice. She claims that, “when there is the presence of a recording, a recording device, so, a camera, the complete immersion from a flow perspective is absolutely acute. It's highlighted. I'm more astute.” The integration of objects in the flow experience provides a different quality and opportunity for flow than that which can be felt or witnessed in dynamic performance contexts with many human-human relations.

Coach and elite curler, Gabe Dyck describes the flow experience as something universally understood but difficult to articulate in practice.

> My understanding of flow is that it's very tough to think about. I think the common flow that everyone talks about is like the runner's high and just being in that state and continuing on. But with curling being such a turn-based sport and very intermittent in the way that it's structured, you get very few moments where you can actually get into that

> state. I'll say that when you're actually throwing a rock the less thinking you can do the better you're gonna do and it's always been one of those sports. The less you can get in your own way. (Dyck)

Dyck's reflections highlight that flow in the sport of curling is different than in a team territory sporting context. Dyck's concentration and focus is relative to inanimate objects and the only moment of true focus required is the point when the rock is thrown. Although the team trains in order to anticipate and create unpredictable game situations, Dyck articulates that although he has trained in flow performance, its utility for competition may not be applicable. The sport of curling requires skills and practice to be ingrained into the athlete so that they can perform best with absence of thought and trust in their skill.

> As soon as I established that foundation, then it was really getting all my thinking out of the way before I even stepped into the hack and before I even grab onto a rock to throw and that came with support from the varsity. The head coach, he would say there's two different sides of when you're throwing the rock. There's like your think-box and there's your play-box. Your think-box, you do get all your thinking out of the way. It's deciding how much weight am I gonna throw? It's deciding kind of visualizing your process of how you're gonna make that shot before you even get into that hack and those sorts of things. If you can get that all out of the way you made all those decisions before then you can just go and execute and it's very semi-conscious and it's a little bit more automatic than having to think through. "All right, I'm doing this now. I need to make sure I'm here and that now I'm directing it when I'm doing that" and then it's just like I've made the decision now to just be an athlete and throw the rock. [...] Personally, the less self-talk the better. (Dyck)

Similarly, Overend depicts another account of an affective description of the flow experience in the context of a team gaining momentum. As mentioned in chapter 2, behavioural momentum as a metaphor resembles the phenomenon of flow when it is used to describe a single instance of performance. In describing behavioural momentum, Overend observes the difficulty in defining momentum when it's occurring, but the universality of the experience which can be felt among participants.

> I think about this in terms of almost like momentum and energy because it's a big part of team sports and every athlete will say it's there, but you can't touch it. You can't measure it. And I think, you know, athletes have a very strong sense of when it's sort of tipping. And you do find, again, for lack of a better phrasing, like some of your goons or your enforcers may make a stronger hit in order to get some of that momentum back if they feel it's slipping away. (Overend)

Overend's depiction of group momentum in rugby and the idea of regaining an advantage requires multiple bodies in a team to enact strategic decisions that are permissible depending on the structure and regulatory institutions of the sport. "Team flow is conceptualized by van den Hout et al. (2018) as a state of flow shared by a small group that results from a dynamic and optimal interaction between people while executing interdependent individual tasks" (Alameda et al. 357). The nature of flow as a process is constantly in-flux and in motion. It is only at the moment where you stop to measure or cognitively assess that activity to which you are witness, that you can make sense of the phenomenon. Alameda et al.'s study further identified the difficulties in identifying if the activation of neural correlates was a consequence of the flow experience or a similar state such as full attention (357).

Over each of the interviews, multiple participants described not only their inability to articulate the flow phenomenon, but additional concepts that relate to similar experiences of concentration in performance. Marek Komar mentions the ongoing debate in performance psychology between flow and clutch states. Clutch is generally referred to as a state of immersion wherein a performer, typically in a competitive context to achieve a specific goal, requires pressure to achieve the goal and a relatively direct path toward achieving their desired objective in order to enter clutch. Geri Ruissen, health psychologist and assistant professor at the University of Alberta, is critical of flow and is additionally interested in the relationships between affect and physical activity.

> And so, in these sorts of kind of ideas when you think about affect and these kind of non-rational, non-cognitive, kind of more automatic processes, I'd say it's kind of similar in that automaticity to this idea of flow but more on these actual physiological sensations that you're having and how that's going to influence behaviour. How kind of these physiological affects of psychobiological processes are kind of continuous and they're always varying to different extents. (Ruissen)

Ruissen additionally mentions that as an athlete, skier, and cross-country runner, that she never really related to flow due to the degree of self-talk that she experienced in performance contexts. She articulates the nuance across performance training and the lack of universality for specific interventions.

> And so, what works well for one person doesn't necessarily work well for others. So while some person may swear by flow or like and that is like the key to their success, it's kind of this idea that there's a lot of kind of causal heterogeneity in that people different things are gonna work well for different people and trying to paint everyone with the

> same brush on what is kind of these optimal kind of characteristics to have or these optimal sort of traits or interventions to be aspiring to isn't going to be kind of what's going to do the most amount of good for the most amount of people. It might help a couple people but when you think about what's optimal for the average person, that average person might not actually represent any individual and so it might not actually be optimal for them. (Ruissen)

I have embodied experience in flow which has varied from artistic and creative experience to sporting and competitive contexts. Through the act of identifying the differences in my embodied experiences, I simultaneously begin to take part in, reinforce, and ascribe certain ideological values and hierarchies to the very structures about which I am speaking. Bignall articulates that "as a relation between bodies, power refers to a subject's capacity to act upon another's actions" (132). The notion of the self is developed, reinforced, and refigured by mirrors of one's actions that appear in others. Bignall claims that, "while they show different orientations of the subject in her or his relationships, these registers are clearly not able to be detached from each other, since one's capacities and constraints in relations with others are simultaneously constitutive of one's subjectivity and sense of self" (135). Across the various interviews, it is evident that the way in which an individual conceptualizes flow in performance is not only a product of their subjective experience, but an accumulation of the values and assumptions embedded within the habitus of the discipline in which they perform.

~~CONCLUSION~~ CONTINUATION

Over the course of this project, I have illustrated conceptualizations of flow in performance through a variety of methods. The current breadth of research on flow relies on a foundational assumption embedded within the positivist paradigm of flow psychology: to maximize presence, focus, enjoyment, and efficiency in performance. This project's primary mode of inquiry was prompted and developed from the research question: how do discipline-specific conceptualizations and evaluation methods of flow value and qualify performance? Over the course of participant interviews were multiple examples of how each individual shifts their depiction of the flow experience based upon the performance framework within which they engage. The majority of efficiency-driven frameworks that foundationally shape our collective consciousness of aesthetic flow, competitive flow, and flow for optimal performance have embedded values and assumptions that often illustrate and perpetuate the model of Girardian mimetic desire. Re-framing performance outcomes as products and processes linked to structural and embodied desires enables a critique of why performance practices hold particular ideals. This work continues to illuminate how conceptualizations of flow informed by dance, theatre, and performance studies can work alongside psychological and competitive sport conceptualizations of flow to create co-existing interdisciplinary discourses of understanding not only flow, but the values placed upon bodies in performance.

An observation by Kerr and Espiner illuminates a key sentiment present throughout my interviews: "sociologists and historians of sport have demonstrated, not only are there informal normative structures that influence sport and movement, but the techniques, styles, and types of sporting movements are rarely stable" (170). The lack of stability of the structures that influence movement as per the investigation of Kerr and Espiner extends beyond understanding moving

bodies in sporting contexts and is applicable to the phenomenology of a flow state and flow performance. If bodies in performance are also further valued as a result of the habitus within which they perform, then the same influence can be said onto the phenomenology of one's experience in flow.

As I engaged with interview participants and retrospectively interpreted our conversations, I became aware of the tension between the knowledge that each participant possesses from their lived practice training in a particular discipline and how they articulate their experiences through the instability of language and testimony. There is something that extends beyond discourse when looking how power and agency are held within and placed upon bodies in flow and as an embodied phenomenon. Despite the universality of the flow experience, much of the embodied agency of a performer remains at the level of the individual that reinforces itself through repetition and scale.

Butler's observation on Foucault and the materialization of the prisoner's body is a form that relies on power and discourse for the actualization of a body.

> At times it appears that for Foucault the body has a materiality that is ontologically distinct from the power relations that take that body as a site of investments. And yet, in *Discipline and Punish*, we have a different configuration of the relation between materiality and investment. There the soul is taken as an instrument of power through which the body is cultivated and formed. In a sense, it acts as a power-laden schema that produces and actualizes the body itself. (*Bodies that Matter* 8)

Butler observes that "Foucault argues in *Discipline and Punish* that the 'soul' becomes a normative and normalizing ideal according to which the body is trained, shaped, cultivated, and invested; it is an historically specific imaginary ideal (idéal speculatif) under which the body is

effectively materialized" (*Bodies that Matter* 9). The institutionalization of particular movements is further reinforced through the training of athletes in vigorous processes with structures that permit particular movements. Bignall continues to clarify Foucault's understanding of power is privileged as the cause for social existence and does not delve into the way in which desire takes form in social relationships. "By privileging the category of power in his analyses, and reducing desire to a power effect, Foucault obscures how desire itself is a causal force, as the qualitative and ethical aspect of a will to power" (Bignall 137). Butler identifies Foucault's observation on the role of power in the formation of bodies:

> But power is that which forms, maintains, sustains, and regulates bodies at once, so that, strictly speaking, power is not a subject who acts on bodies as its distinct objects. The grammar which compels us to speak that way enforces a metaphysics of external relations, whereby power acts on bodies but is not understood to form them" (*Bodies that Matter* 9).

To understand bodies in flow requires analyzing desire, agency, and influential structures of power which constitute the formation of sporting and artistic bodies in performance.

The coexistence of all of these various ways in which I experience, value, and live in-flow reflects the ideas reflect disciplinary ideas and desires. In *Two Regimes of Madness*, Deleuze reflects upon various forms of creative acts: cinema, the novel, painting, and science. Deleuze claims that there is no idea that exists in a general context. "An idea—like the one who has the idea—is already dedicated to a particular field" (317). I am critical of how the field in which the idea resides can be so easily categorized. Deleuze elaborates that "ideas have to be treated like potentials already engaged in one mode of expression or another and inseparable from the mode of expression, such that I cannot say that I have an idea in general. Depending on

the techniques I am familiar with, I can have an idea in a certain domain" (317). Deleuze identifies the disciplinary conditioning within which we generate and grow ideas.

This project has become more than just an exploration of how different disciplines define the same phenomenon. Through illuminating the values which inform how movements are valued and institutionalized, it becomes evident that the habitus of a discipline seeps into how individuals develop knowledge in a particular embodied practice. The way in which athletes describe a competitive context of performance requires a degree of immersion and focus to achieve the goal associated with winning or a strategic advantage. Aspects of artistic flow were linked to descriptions of uninterrupted movement sequences that could not only be embodied, but witnessed by external observers. The position of the witness to view flow performance was not only integral for describing flow, but the witness often required high-level skills in the discipline that they were observing in order to place value judgements onto the performance.

Throughout the series of interviews that I conducted with ten individuals with various artistic, athletic, academic, and professional backgrounds, I have identified moments of divergence and convergence across their experiences. The methodology employed in this study highlights tensions in discipline-specific modes of investigation. Taking the time to meet and connect with each of the participants and listen to them speak about their subjective experience and work with flow can only truly be reflected in the personal reflections of each of my interactions with the participants. This project fundamentally understands the precarity surrounding the in-flux nature of interactions, relationships, and the way in which individuals articulate how they experience phenomena.

When understanding flow as a phenomenon relative to its sociopolitical, spatial, and human and non-human relations, a perpetual schema of desire can then be identified in spaces of

performance. This investigation lives, grows, and learns just as I have throughout this project. Rather than conclude, I continue this project forward with a series of provocations just as encouraged by the work of Carter et al.:

Why are certain disciplines obsessed with finding a way to concretely define and measure flow?

Does the desire for optimization in performance have an end?

Can there be beauty in the bifurcation of flow?

References

Alameda, Clara, et al. “The Brain in Flow: A Systematic Review on the Neural Basis of the Flow State.” *Cortex: A Journal Devoted to the Study of the Nervous System & Behavior,* vol. 154, Sept. 2022, pp. 348–64. EBSCOhost, https://doi-org.login.ezproxy.library.ualberta.ca/10.1016/j.cortex.2022.06.005.

Arlander, Annette, et al. *Performance as Research: Knowledge, Methods, Impact*. First edition., Routledge, 2018.

Bignall, Simone. “Postcolonial Agency and Poststructuralist Thought: Deleuze and Foucault on Desire and Power.” *Angelaki*, vol. 13, no. 1, Apr. 2008, pp. 127–47.

Bogart, Anne, and Tina Landau. *The Viewpoints Book : A Practical Guide to Viewpoints and Composition*. Theatre Communications Group, 2012.

Bourdieu, Pierre. *Habitus and Field: General Sociology, Volume 2 (1982-1983)*. Polity Press, 2020.

—. *Outline of a Theory of Practice*. Edited by Richard Nice, Cambridge University Press, 1977.

—. “Program for a Sociology of Sport”. *Sociology of Sport Journal* 5.2 (1988): 153-161. https://doi.org/10.1123/ssj.5.2.153.

Brown, David. “Pierre Bourdieu’s ‘Masculine Domination’ Thesis and the Gendered Body in Sport and Physical Culture.” *Sociology of Sport Journal*, vol. 23, no. 2, June 2006, pp. 162–88. *EBSCOhost*, https://doi-org.login.ezproxy.library.ualberta.ca/10.1123/ssj.23.2.162.

Butler, Judith. *Bodies That Matter: On the Discursive Limits of “Sex.”* Routledge, 2011.

—. *Excitable Speech: A Politics of the Performative*. Routledge, 2021.

—. *Gender Trouble: Feminism and the Subversion of Identity*. Routledge, 2007.

Carter, Leeja, et al. "Flow in Sport, Exercise, and Performance: A Review with Implications for Future Research." *Journal of Multidisciplinary Research (1947-2900)*, vol. 5, no. 3, Fall 2013, pp. 17–31. *EBSCOhost*, search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=94445009&site=eds-live&scope=site.

Clément, Julien. "Participating in the Global Competition: Denaturalizing 'Flair' in Samoan Rugby." *The Contemporary Pacific*, vol. 26, no. 2, Jan. 2014, pp. 369–87.

Collett, Guillaume. "Assembling Resistance: From Foucault's Dispositif to Deleuze and Guattari's Diagram of Escape." *Deleuze and Guattari Studies*, vol. 14, no. 3, Aug. 2020, pp. 375–401. *EBSCOhost*, https://doi-org.login.ezproxy.library.ualberta.ca/10.3366/dlgs.2020.0409.

Csikszentmihalyi, Mihaly. Flow and the Foundations of Positive Psychology: The Collected Works of Mihaly Csikszentmihalyi. Springer, 2014.

Deleuze, Gilles, and David Lapoujade. *Two Regimes of Madness: Texts and Interviews 1975-1995*. Semiotext(e), 2007.

Foucault, Michel. *Discipline and Punish: The Birth of the Prison*. Edited by Alan Sheridan, Penguin Books, 2020.

—. *L'archeologie Du Savoir*. Gallimard, 1969. *EBSCOhost*, search.ebscohost.com/login.aspx?direct=true&db=cat03710a&AN=alb.9488414&site=eds-live&scope=site.

Gallucci, Nicholas T. *Sport Psychology: Performance Enhancement, Performance Inhibition, Individuals, and Teams*. Second edition. Psychology Press, 2013.

Girard, René. *All Desire Is a Desire for Being: Essential Writings*. Edited by Cynthia L. Haven, Penguin Books, 2023.

Goffey, Andrew. "Guattari, Transdisciplinarity, and the Experimental Transformation of Research." *Deleuze, Guattari, and the Problem of Transdisciplinarity*. First edition. Bloomsbury Academic, 2019.

Greipl, S., et al. "When the Brain Comes into Play: Neurofunctional Correlates of Emotions and Reward in Game-Based Learning." *Computers in Human behaviour*, vol. 125, Dec. 2021. *EBSCOhost*, https://doi-org.login.ezproxy.library.ualberta.ca/10.1016/j.chb.2021.106946.

Jackson, Susan A., and Mihaly Csikszentmihalyi. *Flow in Sports*. Human Kinetics, 1999.

Jackson, Susan A., and Robert C. Eklund. "Assessing Flow in Physical Activity: The Flow State Scale-2 and Dispositional Flow Scale-2." *Journal of Sport & Exercise Psychology*, vol. 24, no. 2, June 2002, pp. 133–50.

Jackson Susan A., et al. "Long and Short Measures of Flow: The Construct Validity of the FSS-2, DFS-2, and New Brief Counterparts." *Journal of Sport & Exercise Psychology*, vol. 30, no. 5, Oct. 2008, pp. 561–87.

Jinmin, Zhang, and Fang Qi. "Relationship between Learning Flow and Academic Performance among Students: A Systematic Evaluation and Meta-Analysis." *Frontiers in Psychology*, vol. 14, Nov. 2023. *EBSCOhost*, https://doi-org.login.ezproxy.library.ualberta.ca/10.3389/fpsyg.2023.1270642.

Kerr, Roslyn. *Sport and Technology: An Actor-Network Theory Perspective*. Manchester University Press, 2016.

Kerr, Roslyn, and Seònaid Mary-Kate Espiner. "Theorizing the Moving Body in Competitive

Sport." *Sociology of Sport Journal*, vol. 39, no. 2, June 2022, pp. 170–77. *EBSCOhost*, https://doi-org.login.ezproxy.library.ualberta.ca/10.1123/ssj.2020-0150.

Latour, Bruno. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford University Press, 2007.

Lucznik, Klara, et al. "A Qualitative Investigation of Flow Experience in Group Creativity." *Research in Dance Education*, vol. 22, no. 2, Jan. 2021, pp. 190–209. *EBSCOhost*, https://doi-org.login.ezproxy.library.ualberta.ca/10.1080/14647893.2020.1746259.

Luiselli, James K., and Derek D. Reed. *Behavioral Sport Psychology: Evidence-Based Approaches to Performance Enhancement*. Springer Science, 2011.

MacLean, Malcolm, et al. *The Philosophy of Play*. Routledge, 2013.

Markula, Pirkko. *Deleuze and the Physically Active Body*. Routledge, 2019.

Morelli, Giulio, et al. "Performance Model in Sitting Volleyball: The Rio 2016 Paralympic Games Case." *Studia Universitatis Babeş-Bolyai: Educatio Artis Gymnasticae*, vol. 66, no. 4, Dec. 2021. *EBSCOhost*, https://doi-org.login.ezproxy.library.ualberta.ca/10.24193/subbeag.66(4).31.

Obel, Camilla, and Roslyn Kerr. "The Cultural Politics of the Paralympic Movement - through an Anthropological Lens." *Leisure Studies*, vol. 28, no. 4, Jan. 2009, pp. 497–500. EBSCOhost, search.ebscohost.com/login.aspx?direct=true&db=edswss&AN=000275323600011&site=eds-live&scope=site.

Pisk, Jernej. "Mimetic Desire and Scapegoat Mechanism in Sport." *Acta Universitatis*

Palackianae Olomucensis. Gymnica, vol. 42, no. 4, Dec. 2012, pp. 9–17. *EBSCOhost*, search.ebscohost.com/login.aspx?direct=true&db=edsdoj&AN=edsdoj.900a4b12dbef490ba48f0c7455f69499&site=eds-live&scope=site.

Sarason, I. G. "Stress, Anxiety, and Cognitive Interference: Reactions to Tests." *Journal of Personality and Social Psychology*, vol. 46, no. 4, Apr. 1984, pp. 929-938–938.

Stanger, Nicholas, et al. *The Role of Pre-Performance and in-Game Emotions on Cognitive Interference during Sport Performance: The Moderating Role of Self-Confidence and Reappraisal*. 2018. *EBSCOhost*, search.ebscohost.com/login.aspx?direct=true&db=edsoai&AN=edsoai.on1387558925&site=eds-live&scope=site.

S. Victoria Jaque, et al. "Creative Flow and Physiologic States in Dancers During Performance." *Frontiers in Psychology*, vol. 11, May 2020. *EBSCOhost*, https://doi-org.login.ezproxy.library.ualberta.ca/10.3389/fpsyg.2020.01000.

Walsh, Shannon L. *Sporting performances: politics in play.* Routledge, 2021.

Wilson, Mark. *Sport and the Brain: The Science of Preparing, Enduring and Winning, Part B*. 2017. *EBSCOhost*, search.ebscohost.com/login.aspx?direct=true&db=edsoai&AN=edsoai.on1342718526&site=eds-live&scope=site.