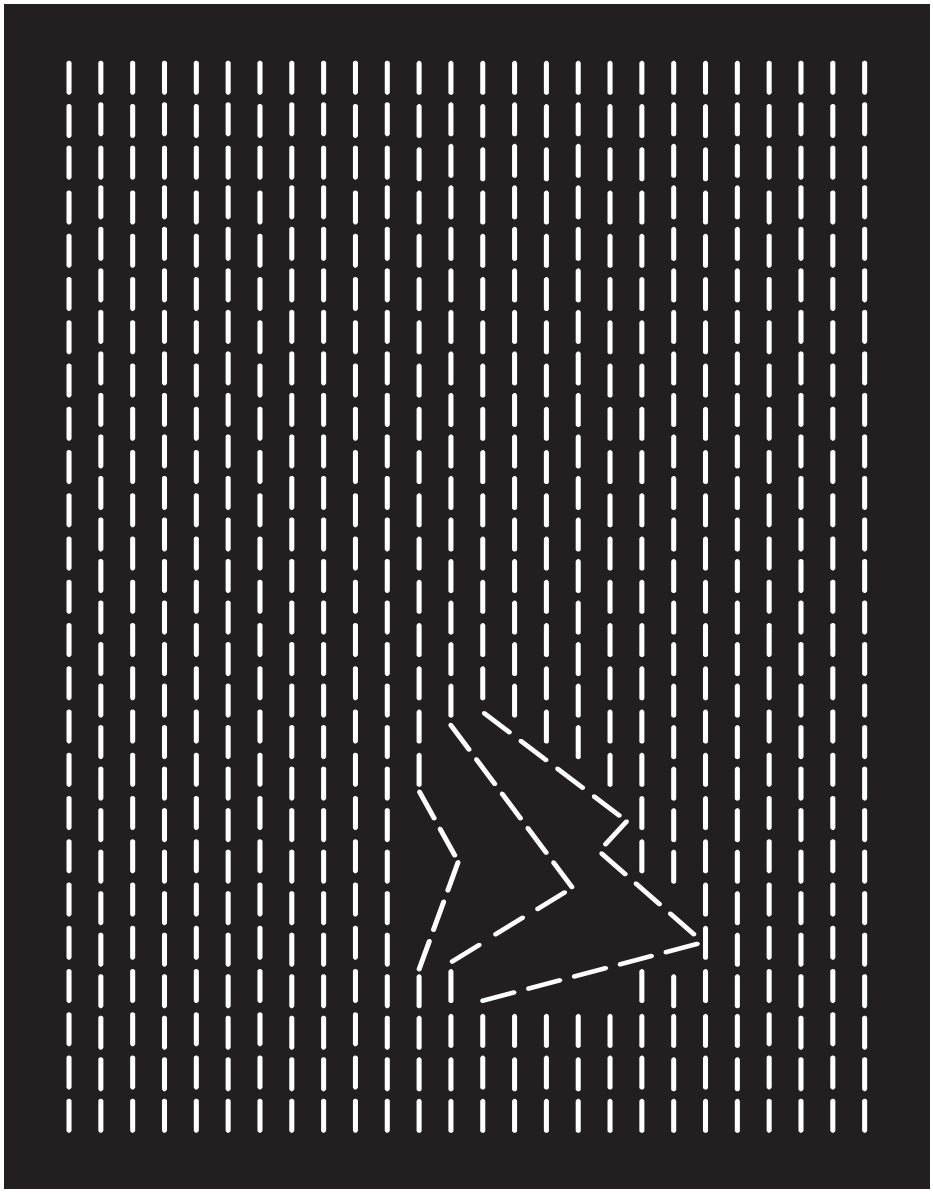
PSYCHOLOGY WITH PLYMOUTH UNIVERSITY
Coventry University
TRINITY LABAN MUSIC DANCE
Wayne McGregor | Random Dance
The Leverhulme Trust

In the Dancer's Mind
Teacher's Guide



A creative imagery and movement toolkit prepared to support the Leverhulme Trust research project.

This toolkit is based on and adapted from the contents of Mind and Movement, a choreographic resource developed and delivered by the R-Research and Creative Learning departments of Wayne McGregor | Random Dance.

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Mind and Movement : Choreographic Thinking Tools
originally produced by Wayne McGregor | Random Dance.
Additional material has been produced by the ItDM project team.

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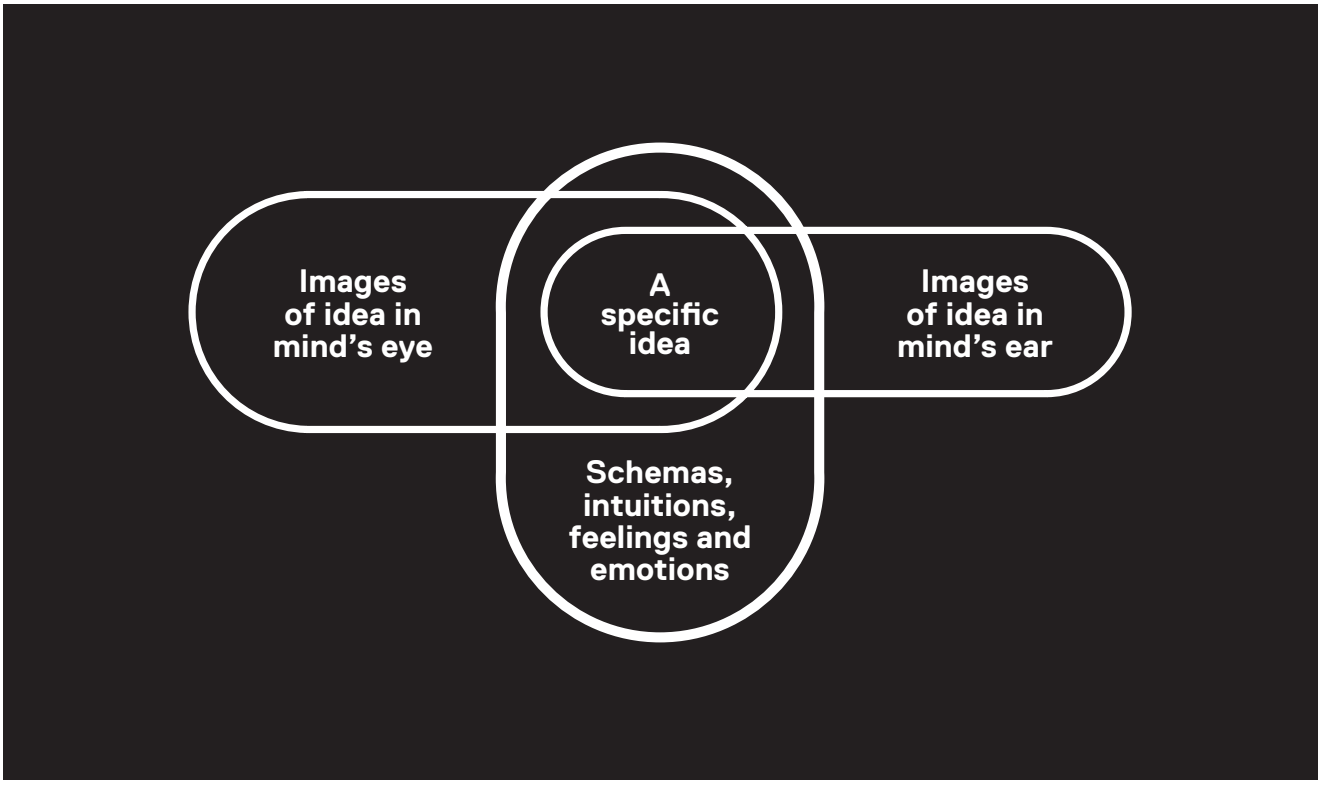
Introduction

In the Dancer's Mind is a resource that enhances the creation of new and original dance movement through the development of imagination skills. The resource is based on choreographic thinking tools developed originally by Wayne McGregor | Random Dance in the rehearsal studio. These tools emphasise exploring and reflecting on relationships between imagery and movement creation.

The resource is a collection of teaching ideas that draw on a theory from cognitive science about how attention is directed within our whole mental landscape. This theory is based on the idea that we share the ability to imagine some things in the mind alone. For example, you can imagine your favourite cup or your favourite song without actually seeing the cup or hearing the song. Imagining your cup takes place in one part of the mind, sometimes referred to as 'seeing in your mind's eye', and imagining the song takes place in another part, 'in your mind's ear'.



The thoughts and associated feelings you have about your favourite cup or song form a third part of your ability to imagine things in the mind alone. This is where the imagination draws on your life experiences and brings meaning to the particular images you are creating in your mind. This third part is important as it is the source of your intuitive decisions and it is directly connected to your body state. You can also imagine movement without moving and the sensation of rough sandpaper on your skin; these are kinaesthetic and sensory images that support these three parts. Using the focus of your attention, you can move around these different parts of the imagination and combine them in different ways. You can also move between what can be imagined in the mind alone and what is 'out there' in the world and alter these relationships.

Experiencing the possibilities of creating images and moving attention in the mind is the foundation for building skills in imagery. At the core of the resource is a set of twelve principles designed to build these skills and each of the five lessons successively develops an understanding of these principles, as well as a range of movement skills. By the end of the course all twelve principles will have been used, many more than once, and the students should be able to:

- Recognise and work with different principles applied to imagery and movement.
- Switch or combine different principles.
- Recognise different parts of the imagination and make connections between them.
- Make clear decisions and be able to express why they made them.
- Apply the principles to any future stimulus, internal or external.

Experiencing the possibilities is the foundation for building skills in imagery

How to use In the Dancer's Mind

The Course

In the Dancer's Mind is made up of thirty-seven exercises, grouped into six Targets. Each Target consists of six or seven exercises which can be combined to suit different teaching schedules.

An important point to remember when exploring the resource with your students is that there is room for ambiguity and individual interpretation within the lessons and use of the principles. The emphasis for the students is on finding their own source for creativity as there is no right or wrong way of using the imagination.

Targets

The six Targets cover related themes:
Introduction
Visual Imagery
Sound Imagery
Schematic Imagery
Creative Imagery
Maximising Creativity

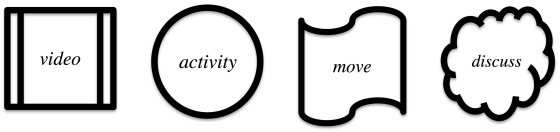
While the Targets have been designed to work best in this order, as six 90 minute sessions, the exercises can be rearranged to suit your own needs and preferences.

We have provided suggested plans for courses of three to six sessions, lasting 60 to 120 minutes.

It is helpful for the students to have a notebook for each session to record their ideas and impressions.

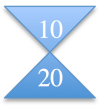
Exercises

There are four types of exercise: Video, Activity, Move, and Discuss, each with its own icon:



Some exercises introduce key concepts or vocabulary that are used in later exercises. Key exercises are indicated by filled icons.

Each exercise has an approximate minimum and optimum duration indicated. For example this indicates that at least ten minutes should be allowed, but twenty minutes would allow fuller exploration of the content:



You should feel free to modify and adapt any exercises, especially the suggested wordings, to suit your own ideas and the background of your students.

Principles

Alongside the exercises, a central part of the course are the Twelve Principles, which help students explore their imagination in creative and novel ways. These are introduced early in the course and then applied many times.

We recommend that the principles are integrated through the course of each session so students can build up their knowledge and awareness.

Overview of Course

Target I: Introduction

Ia: Introduction (video; 5 mins)
Introduce the course and provide an overarching rationale in terms of learning to use one's imagination strategically to enhance novelty

Ib: Attending to different sensory modalities (activity; 10 to 20 mins)
Demonstrate that sensation has a hierarchical nature, and that focal attention can be moved around the hierarchy at will.

Ic: Experience of imagery (move; 30 to 45 mins)
Become aware that attention can move within imagery as well as within the world, and that imagery can be transformed.

Id: Attentional Score (discuss; 5 to 15 mins)
Understand that our attentional focus can be attracted by changes in the sensory world, and directed by our mental processing

Ie: Manipulation of imagery (activity; 10 to 20 mins)
Practice transforming imagery using principles

If: Continuous imagery (move; 25 to 60 mins)
Practice transforming imagery while moving

Ig: Reflection upon imagery (discuss; 5 to 15 mins)
Consolidate understanding about structures, focal attention, and transformations

Use one's imagination strategically to enhance novelty

Overview of Course

Target V: Visual Imagery

Va: Awareness of internal & external visual imagery (video; 5 mins)
- Understand the visual loop and its relationship between schematic meaning and the external world;
- Move attentional focus at will between different levels of structure in the world and in the mind;
- Use specific ideas to change visual structures.

Vb: Choreographic use of visual imagery (activity; 10 to 20 mins)
- Develop awareness of contemporary use of visual imagery.

Vc: Manipulating visual imagery (activity; 10 to 20 mins)
- Move attentional focus at will between different levels of structure in the world and in the mind;
- Experience the influence of structure on attentional focus

Vd: Using visual imagery (move; 30 to 60 mins)
- Practice using principles upon visual imagery;
- Develop confidence in moving attention around the visual world.

Ve: Developing visual imagery (move; 30 to 60 mins)
- Develop confidence in applying principles to visual imagery

Vf: Reflection upon visual imagery (discuss; 5 to 15 mins)
- Consolidate understanding about structures, focal attention, and transformations.

Overview of Course

Target S: Sound imagery

Sa: Awareness of sound imagery (video; 5 mins)
Sound has internal structure that can be focussed upon;
The structure of sound is interpreted and can be manipulated.
Sb: Using sound imagery (activity; 15 to 20 mins)
Awareness of variety of ways that ideas about sound influence movement
Sc: Manipulating sound imagery (activity; 15 to 25 mins)
Attentional focus can be shifted within sounds;
The three loops intersect and influence each other
Sd: The Sonic Landscape (move; 40 to 60 mins)
Familiarity with accessing sound imagery and driving changes within it;
Using visual and schematic loops together with sound;
Role of visual loop in movement
Se: Reflection on the process (discuss; 10 to 20 mins)
Consolidate understanding about sound, meanings, and the three loops as mind within body within world
Sf: Record imagery insights in notebooks (activity; 5 to 10 mins)
Allow students to consolidate experience

The mutual interaction between meanings and feelings

Overview of Course

Target K: Schematic Imagery

Ka: Thinking schematically (video; 5 mins)
Introduce the schematic loop and the
relationship between movement, sensation and meaning
Kb: Manipulating schematic imagery (activity; 10 to 20 mins)
Using the schematic loop;
The mutual interaction between meanings and feelings;
Understanding factual (propositional) and
schematic (implicational) meanings
Kc: Using schematic imagery (move; 30 to 45 mins)
Develop confidence in using schematic meaning
Kd: Applying schematic imagery (move; 30 to 60 mins)
Develop familiarity with principles
Ke: Reflection upon schematic imagery (discuss; 10 to 20 mins)
Raise questions and share understanding
about specific facts and deeper schemas;
Introduce the idea of three loops
overlapping on specific ideas.
Kf: Record notes (activity; 5 to 10 mins)
Allow students to consolidate experience

Why K? At first we called this kinaesthetic imagery, but on reflection felt that kinaesthetic had a wider meaning - so changed the name to schematic.
We had already used S to label the sound exercises, so kept the K for these - and if you feel that kinaesthetic is a better description, please feel free to use it in your teaching instead of schematic.

Overview of Course

Target C: Creative imagery

Ca: Creativity/novelty/dissolving habits (video; 5 mins)
- Creative thought is difficult because we normally think of common things;
- Rejecting familiar ideas provides a basis for creativity but choosing and developing the novel idea requires experience

Cb: What is creativity? (activity; 10 to 25 mins)
- Awareness of novelty as foundation of creativity;
- Creativity requires initial novel idea;
- Selection of useful from not-useful;
- Development of initial useful novel idea

Cc: Imagination game (activity; 10 to 30 mins)
- Recognise that the first thing that comes to mind is the most predictable

Cd: Alternative Movements task (move; 30 to 60 mins)
- Switching focus rapidly between loops;
- Different imaginal focus leads to different ideas

Ce: Imagery Comparison task (move; 30 to 60 mins)
- Intentionally applying imagery strategies leads to different creative effect

Cf: Reflection on novelty (discuss; 5 to 10 mins)
- Link to personal experience of creating movement

Awareness of novelty as foundation of creativity

Overview of Course

Target M: Maximising Creativity

Ma: Maximising creativity skills (video; 5 mins)
    Consolidate overall message about imagination
Mb: Experiencing imagery (activity; 5 to 10 mins)
    Knowledge about benefits of understanding imagery
Mc: Cues for improvisation (activity; 15 to 25 mins)
    Formalise strategic cueing of imagery
Md: Responding to prompts (move; 30 to 45 mins)
    Applying principles in practice;
    Noticing what is useful and what isn't
Me: Group improvisation (move; 30 to 45 mins)
    Responding together to prompts;
    Awareness of interaction of other's
    schemas with own
Mf: Reflection on novelty (discuss; 5 to 15 mins)
    Consolidate overall learning

Essay:
Imagery and Mind

Philip Barnard is a theoretical Cognitive Psychologist who has been working since 2003 with Wayne McGregor and Scott deLahunta in collaborative research into choreographic thinking. His macro-theory of mental architecture (Interacting Cognitive Subsystems) has centrally underpinned the development of the choreographic thinking tools. Here, he presents some ideas about imagery use.

Most people know that imagery, in one of its many forms, plays a vital role when people innovate and create. The development of your students' imagery skills is at the heart of Mind and Movement.

Dance, perhaps more than any other art form, relies on **diverse forms of imagery** of the body, of movement, of sights, of sounds and of music. Imagery can also be more abstract when we take into account our experience of specific ideas about the self, others and all forms of things 'out there' in the world as well as the feelings, emotions and intuitions that come with those ideas and underpin narratives. There are many ways of thinking about the power of imagery. Given the tremendous scope for imagery use in making dance, our approach examines **the whole mental landscape** and how attention is directed within it as we work with both mind and body together.

The world of our minds and what they are capable of experiencing and doing is fascinating but complex. Human experience varies enormously from one individual to another and from one culture to another. Senses of meaning, what we know, as well as how we think about, and act upon, what we know in creative activities are all topics that need addressing. These topics are also hard to describe accurately and to share. In Mind and Movement we will focus on a number of simple guides to help grasp the diversity of images in the mind; how we focus and move our attention among and within those images; how thinking with images is organised in terms of three loops that all intersect one with another; and how artistic decisions are framed in the context of mental and physical habits. The imagery exercises and principles in this resource are devices to help explore larger fragments of what our mental landscapes can accommodate in terms of patterns in image content. Such content, in minds of whatever age or skill level, creates conditions to both ground and guide innovative artistic decisions.

This essay was written for the original 'Mind and Movement' tools produced by Wayne McGregor | Random Dance.

Essay:
Imagery and Mind

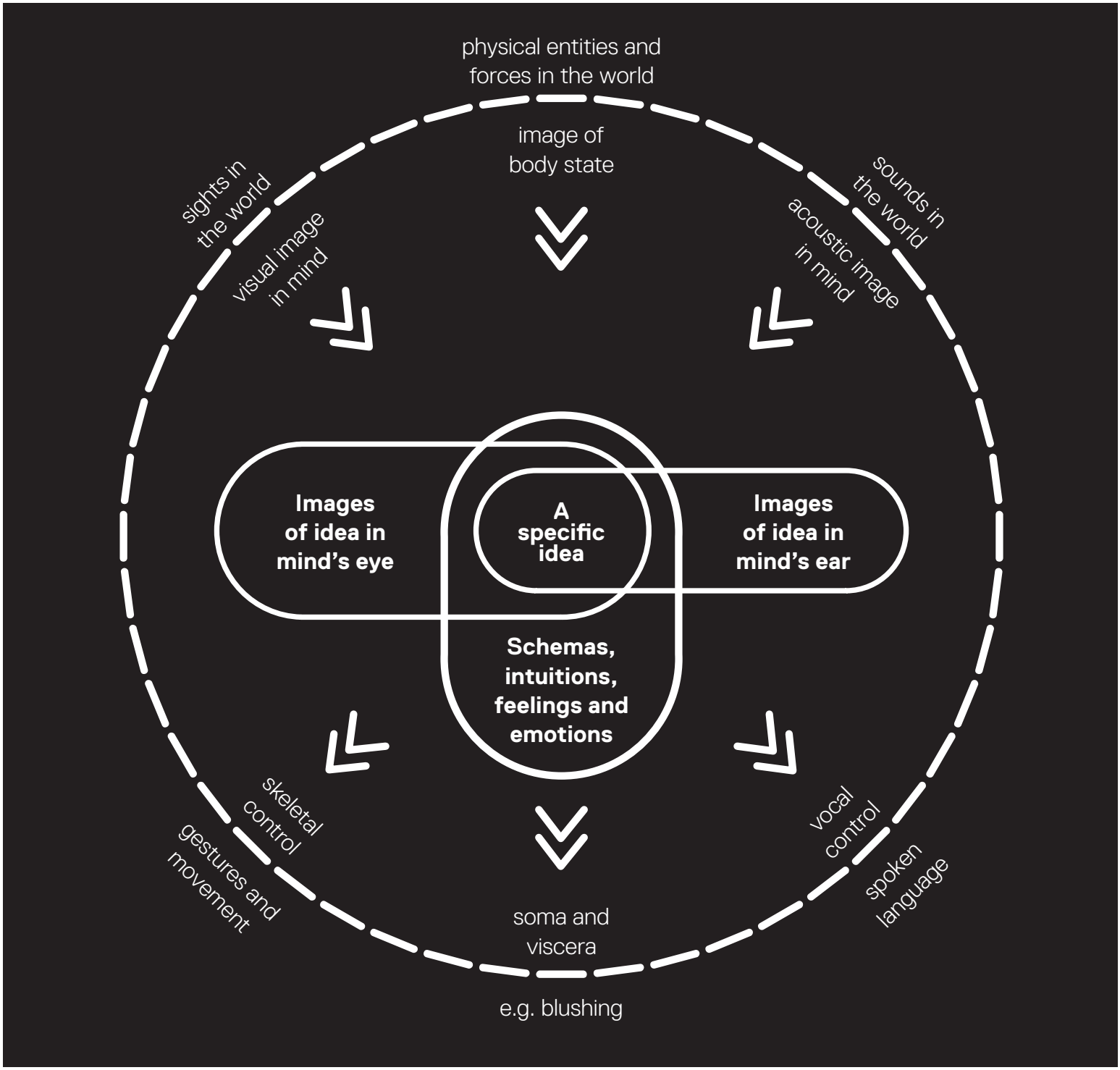
The arc diagram

This diagram schematically represents our minds as a bounded space of images.

The upper arc identifies images of what we see and hear 'out there in the world right now' as well as what we feel 'in here in our bodies right now'. Our body state is affected by both what is inside it and by those entities and forces 'out there' in the world that interact physically with it.

The lower arc depicts the potential for bodily expression through skeletal and vocal action as well as somatic (e.g. blushing or sweating) and visceral reactions.

In the centre of the space are three intersecting loops to capture how, over time, specific ideas emerge out of embodied schemas, intuitions and feelings and how those specific ideas can lead to images in the mind's eye and in the mind's ear. ›



Essay:
Imagery and Mind

The diversity of images in the human mind

While we are awake, a rich array of sensations is available for our conscious minds to inspect, to interpret and to guide our actions. Our mental landscape includes different kinds of images that have distinct qualities. Along with the physical sensations in and on our bodies, including touch, taste and smell, our senses create images of the visual and auditory scenes that surround us 'out there' in the world. These images of sensations (upper arc of diagram) we can change through actions; by moving our bodies in space to reorient to sights and sounds or by altering the physical configuration of our body parts. We can also direct our attention intentionally to different parts of our visual, auditory and bodily landscapes.

We also experience senses of meanings and emotions that are real but more abstract and ethereal than direct perceptions. These rather ineffable senses of meanings about the self, the world, and others we refer to as 'deep schema'.[1] The senses of meaning and emotion encapsulated in schemas summarise and integrate experiential aspects of the self, experienced through the body and within the current physical and social environment.

The central loop in the diagram envelops schemas, intuitions, feelings and emotions in one part and specific ideas and properties at the other end. Ideas evolve in real time with schemas generating ideas and ideas feeding back to the schemas, like two people changing each other's understanding over the course of a conversation. This 'deep schema loop' is the engine of thought, innovation and wider creativity. Specific ideas are qualitatively different from intuitions, wisdom or feelings. A good example is something called the 'tip of the tongue' phenomenon. Sometimes we know that we know a word, and our knowledge of its properties is quite specific – we may know what the word means, how many syllables it has and its initial letter, but we cannot find the full word. This is what we mean by specific ideas in this 'deep schema loop'. The experience of knowledge embedded in the deep schemas themselves is a sense of knowing a bigger pattern: an intuition about something or a feeling that could be 'unpacked' over time into ideas. That process of unpacking is accomplished within the deep schema loop.

The content of these fleeting images of meaning can be given more precise form when fleshed out with detail over time. In between our rich array of sensations and our deeper senses of meaning, we have two other internal loops that enable us to give ideas more precise form either by picturing them in the mind's eye (the horizontal loop in the diagram on the left hand side) or by giving them auditory or verbal form in the mind's ear (the horizontal loop in the diagram on the right hand side).

[1] In psychology, a schema is an organised pattern of thought or behaviour.

Essay:
Imagery and Mind

When we create images in the mind's eye or ear, either static or dynamic, they do not have the detail of real sensations. These images do, however, encapsulate how sights, sounds and movements are organised and how they can change over time. These images are what we use in mental activity whether using our imagination for fun, to solve problems or to mentally rehearse or make things. You can picture in the mind's eye, or imagine, how to rotate a sofa to get it through a door. You can also imagine how to execute a sequence of movements with a dance partner on the floor but you would need the deep schema loop to come up with the idea that it could be better to try bringing the sofa in through a window, or that the dance material might be more interesting if executed on a staircase, rather than on the floor. Similarly, you might use the loop involving the mind's ear to imagine and rehearse a friend's phone number or some sound or music to accompany dance movements in the staircase.

The three loops in our diagram are integral parts of the mind's resources used in the day-to-day skills of interpreting our physical and social worlds and guiding the explicit and implicit decisions that are involved in what we think, do and say. Their use in creative contexts is, like any other domain of mental life, a skill that can be developed through experience and training. In the upper part of the diagram arrows indicate that these three loops are fed continuously by what we experience as physical sensations in the body and as sights and sounds in the outside world. This immediate experience intersects with what is constructed purely in the mind in the three loops and the way in which those loops behave will depend on what has been learned about life's patterns through our social and cultural experience encompassed by the deep schema loop.

Many textbooks and debates would be needed to fill out the detail of how all these intricate subsystems of the mind work. Here we simply draw your attention to five cognitive aspects you might like to keep in mind when developing your students' imagery skills. ›

Essay:
Imagery and Mind

Cognitive aspects of imagery skills to bear in mind:

1 Mental work of image generation

Our images of what is 'out there' in the world and of our body are created from sense receptors and have a continual presence in the wider mental landscape, but ideas and images generated solely in the mind must be developed and refreshed and this is very real mental work. If ideas and images are not maintained they will dissolve away as our attention or thinking moves to something else.

2 Modes of attending within our mental landscape

We can focus our attention on one part of a visual scene, on one part of a sound or voice in our auditory landscape or on one part of our body rather than another. We can shift our attention within these scenes or from one type of scene to another (visual, acoustic, body state or feelings about them). When we shift our attention, what is in focus determines what we are thinking and feeling at the time. Shifting the focus of attention is also a mental skill, and our principles, exercises and Discover questions are devices designed to develop and enrich such skills in your students.

3 Patterns: generalisation, differentiation and abstraction

We have the ability to quickly and often automatically **generalise** and **differentiate** in our responses to stimuli from the world around us. We know, either implicitly or explicitly, what makes patterns similar or different in the realms of shape (e.g. the essence of triangularity), sounds (e.g. what distinguishes a wind instrument from a string instrument) and body states (the sensory sources that feed the three loops). We also can **abstract** and react to deeper patterns that link forms, meanings and their emotional significances. We know the kinds of visual and sound patterns associated with heavy and light things; we know heavy things are more likely to hurt when they hit us than light things etc. These patterns are what we attend to in the three intersecting loops running across our mental landscape. The exercises in this resource help to explore the connections between things we know explicitly and things we sense, feel or intuit.

Essay:
Imagery and Mind

4 Patterns: habits in mind and in movement

Patterning is also the way we acquire habits, both in the way we think and in the way we act. Habit formation is one way that minds and brains have of being economic and effective in choosing the most appropriate action for different contexts. Often we don't even notice we are behaving or thinking habitually. If you are asked to create an image in your mind's eye of a staircase, most people imagine it as if they are looking up the staircase from the bottom. Similarly, bridges tend to be imagined as if seen from the side and over rivers or estuaries. Habits in the imagination can constrain creativity and the exercises in this resource aim to help you and your students quickly recognise and avoid or find interesting ways of using them.

5 Use of focus of attention to differentiate and enrich what comes to mind

Imagine in your mind's eye looking up at a bridge from underneath it. What you see in the mind's eye will now be very different from the habitual choice described in Point 4. If you move your attention to your mind's ear under that imagined bridge it might evoke sound properties linked to an echo. From there connections can be made to ideas and emotions linked to darkness or dampness, while moving back to the mind's eye might call to mind geometric properties of girders or brickwork. The act of imagining walking under the bridge might evoke an upright posture, but making it a low bridge over a small stream might then lead to exploring the sensation of a stooped posture. This new body shape might draw your attention to the arc of your spine and muscle tension in your legs. In this way, you have shifted the focus of attention across the entire landscape of the mind, including not only the mind's eye and mind's ear but also the body and the deep schema. From a single starting point, each shift of attention brings to mind new properties that might be translated into movement material. ›

Essay:
Imagery and Mind

Create space for mental as well as physical exercise

Finally, it is worth re-iterating that imagery is very real mental work. It takes time and practise to develop and extend the skills in a way that is no different from practicing movement skills. The development of these skills does not require a deep understanding of cognitive or brain science or their theories. Very useful effects can be achieved through following the simple guidelines, grounded in theory, that we have built into the Imagine exercises, Discover questions and the twelve principles brought into play over the course of the five lessons. Mind and Movement shows that dance is not only about making movements up but it relies on much of what goes on across the entire mental landscape.

However, the broad scope of imagery skills that are called upon this way in dance are used in many other circumstances in life. The skills sharpened across the five lessons should find beneficial application outside as well as inside the dance studio. The basic organisation of the mental landscape shown in the diagram is shared by all of us. Skills of attending to ideas, exploring and modifying properties and reflecting on decisions will bring into view new options and enrich the space within which creative decisions can be made and evaluated in any domain.