In the Dancer's Mind
Course Pack

I*a* *video*	I*b* *activity*	I*e* *activity*	I*f* *move*	I*g* *discuss*
V*a* *video*	V*c* *activity*	V*e* *move*	V*f* *discuss*	
S*a* *video*	S*d* *move*	S*e* *discuss*	S*f* *activity*	
K*a* *video*	K*b* *activity*	K*d* *move*	K*f* *activity*	
C*a* *video*	C*c* *activity*	C*d* *move*	C*f* *discuss*	
M*a* *video*	M*c* *activity*	M*d* *move*	M*f* *discuss*	

In the Dancer's Mind: Course Pack

This course pack contains thirty seven exercises, grouped into six Targets. Each target addresses a core theme of the overall course, and each exercise has stated objectives.

The Teacher's Guide explains how to adapt and combine these exercises to suit your own needs and timetable constraints. The exercises do not need to be completed in the exact order presented here, although there are some pragmatic orderings described below. The precise wording given in each exercise is there as an indication of the content that you could follow, but you can edit and adapt these in any way provided that your changes still support the objective of the exercise.

There are four types of exercise, identified by the icon in the upper right of the page:

      Video (available online from www.dancersmind.org.uk)
      Activity
      Move
      Discuss

Some exercises introduce key concepts or vocabulary, and need to be used in the course. These Key exercises are indicated by filled icons.

Each exercise has an approximate minimum and optimum duration indicated in the hourglass icon at the lower right of the page.

Some exercises require others to have been completed previously, and this is indicated by the heading *'Requires….'*

Overview of exercises

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)
> to 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

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 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.

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 a 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

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; to introduce the idea of three loops overlapping on specific ideas.

Kf: Record notes (activity; 5 to 10 mins)
Allow students to consolidate experience

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 effects

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

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

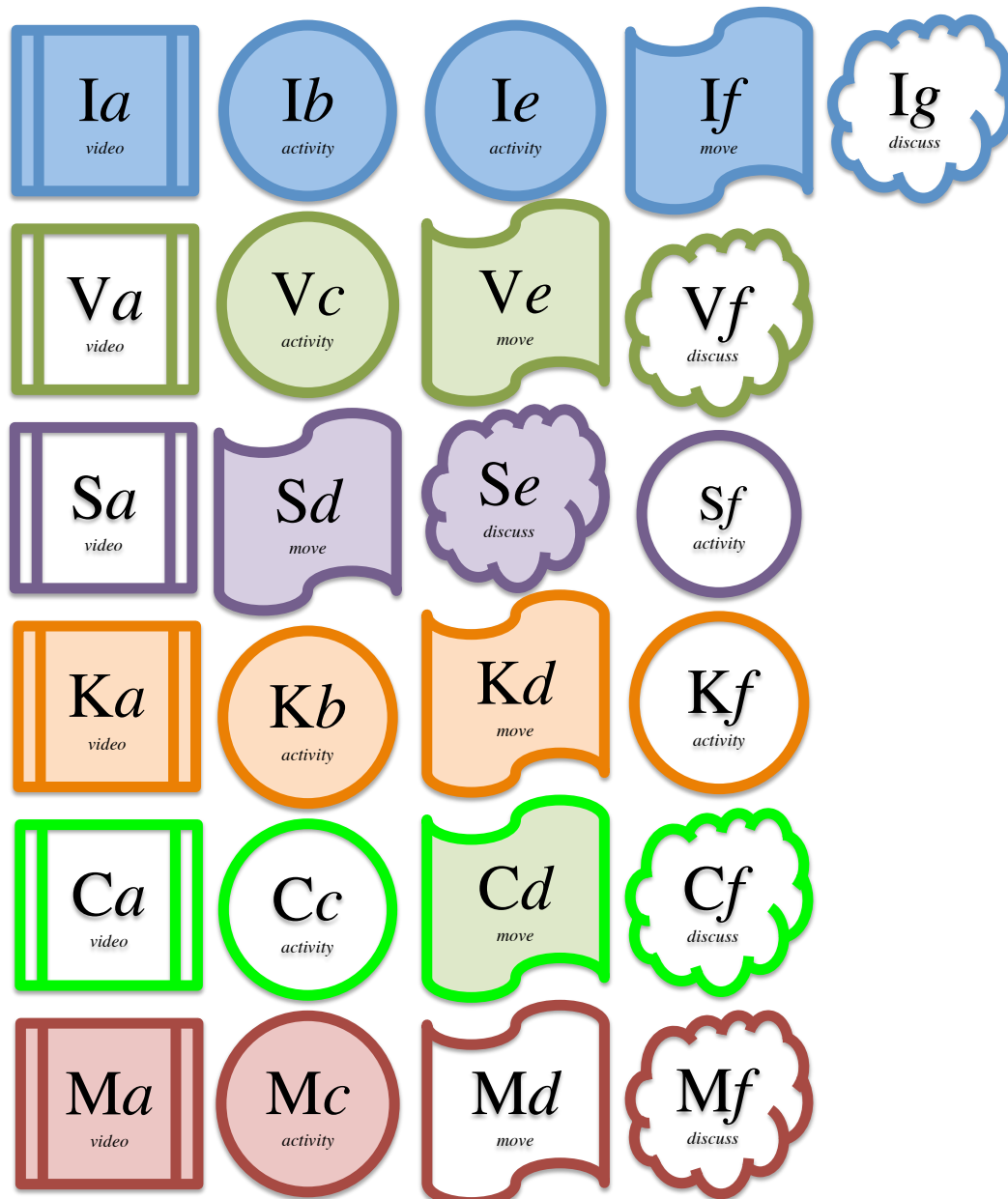Me: Group improvisation (move; 30 to 45 mins)
Responding together to prompts; Awareness of interaction of others' schemas with own

Mf: Reflection on novelty (discuss; 5 to 15 mins)
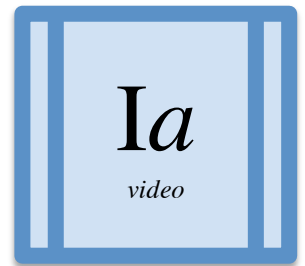Consolidate overall learning

Trinity-Laban Session Plan – Six sessions

I*a* video	I*b* activity	I*e* activity	I*f* move	I*g* discuss
V*a* video	V*c* activity	V*e* move	V*f* discuss	
S*a* video	S*d* move	S*e* discuss	S*f* activity	
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C*a* video	C*c* activity	C*d* move	C*f* discuss	
M*a* video	M*c* activity	M*d* move	M*f* discuss	

Introduction

Objective: Introduce the project and provide an overarching rationale in terms of learning to use one's imagination strategically to enhance novelty

Hello, my name is Phil Barnard, and I'd like to welcome you to these exercises you'll be taking part in to find out about some ideas that we've been developing to help you create innovative dance.

I'm a cognitive psychologist, which means that I've been studying the way that the mind processes information, the way that attention and memory combine with our senses to build an understanding of the world around us, in which we move, eat, drink, make friends and enemies, and live our lives.

Everything we do rests upon this world that we create inside our minds, and over the course of these exercises, I hope to give you some helpful insights into some of the ways your mind, and your imagination, work. We hope that these insights will help you use your imagination to become a more creative, and innovative, dancer.

One of the most amazing things about the human mind is the way that it interacts with our body, apparently effortlessly, normally without us needing to attend to any of the hundreds of highly co-ordinated muscle movements that we make every minute. This is nothing to take for granted – the first months of a child's life are spent learning how to control its body, with difficulty and with great attention. Most of us took at least a year to be able to stand up and balance. Yet a few months later, we were able to run around, and later jump and hop and skip, and dance.

Most people soon stop thinking about how they move, and many of their movements become automatic, and even though they choose to make some movements, at will, they do not consciously attend to those movements unless something is going wrong.

But as dancers you have learnt to pay attention to your bodies, and over thousands of hours of experience have become skilled, experts in movement. You have much greater awareness of your body, and the ways that you can move, than most people.

You might have been trained in a somatic method, to perceive your body 'from within', and so be able to focus your attention upon sensations that most people remain unaware of. You can use this deeper awareness to gain finer control over your body, and to move in novel ways that most people would never do.

I want to help you to do the same with your imagination. Through these exercises I hope to show you that some of the ways of thinking that you do naturally, perhaps without attention, can be brought more clearly into your awareness, and that you can wilfully direct your imagination, focussing on different modalities and driving changes in your mental world that you can use to influence your feelings, and your dance. One way of thinking about this is to consider that just as there are points of space around you that you can move between, there are 'points of mental space' inside your mind, that you can move your attention around -- using your imagination.

We will not be showing you a secret part of the mind that you've never used. You will not discover a new facet to your imagination. You already know how to create things in your imagination, in rich and vivid ways, seeing colour and movement, hearing sound, sensing texture, and all the other sensory modalities. Everything we can sense in the world, most of us can imagine too.

But just as you can direct your attention around the external world, and to your body, you can become an expert in directing changes in your imagination, just as you have learnt a greater expertise in movement. In the same way that most people are unaware of how they move, people have rarely thought about how they imagine things. I'd like you to start thinking abut your attention as having a score, much like a piece of music. You can move your attention around your mind in much the same way as a composer chooses different instruments and themes, playing faster or slower, louder or softer. By becoming familiar with your attentional score you will be able to create and change your mental world.

We are going to lead you through a series of exercises that are based upon our scientific research into the mind, and the way that it works with different aspects of our imagination to build, enrich and transform our inner mental space. You will be introduced to some ideas and concepts from our science, like 'attentional score' but the way that you use them is up to you. We want you to think of them as tools that you can use to create.

At the heart of this work is the idea that our imagination has four main aspects, and that these influence each other. This diagram, of three intersecting loops, is one that you will become familiar as you work through the exercises.

After working through these exercises, our belief is that when you need to do something novel, you will be able to choose a part of your imagined world to focus upon, and to modify. This is at the heart of creativity: thinking ordinary things in new ways, in new combinations or relationships.

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Attending to different sensory modalities

Ib
activity
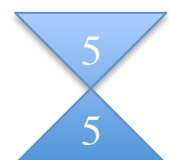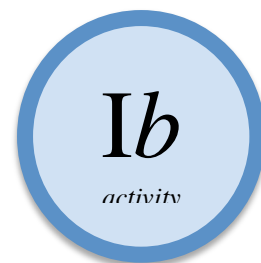
Objective: Demonstrate that sensation has a hierarchical nature, and
that focal attention can be moved around the hierarchy at will.

Adapt from this wording according to the situation, and using any exercises that allow you to use bold 'key terms'.

In this exercise you will spend a few minutes moving your **attention** around the world, to become familiar with the way that we can **focus** down into details, and then back up to larger **structures**.

Take a moment now to look around the room that you are in. It has a physical structure that you can see, and there are other people here. Think of each part of the scene as an object: each person, each piece of furniture, each wall, the ceiling – all are objects. You can move your attention between these objects at will, becoming more **aware** of each one as you do so.

While attending to any one object, though, you become less aware of the others. Not unaware – you know they are still there, and that you could attend to them if you wanted, but your awareness of them is not as sharp, it has become **diffuse**. We can recognise a difference between **focal attention and diffuse attention**.

Now attend to a person in the room – any one person. Of course, you can see that they are made up from different parts – you might be able to see their head, arms, legs, body. Just as you could **move your attention** around the room, you can **focus in detail** on each of these parts in turn.

Choose one part of their body now and focus upon it. Once again notice how you become less keenly aware of the other parts of their body – your focal attention is on one part of them. Keeping your attention there, how aware are you of the other people in the room, of the walls, and all the other objects you were just attending to? Unless you actually stop attending to the part of the person you have focussed on, you will probably have very little awareness of those other objects. They are there, but you could not easily answer a question about their appearance.

We could go on like this, focussing our **visual attention** deeper in, part by part. If you had been looking at the person's hand, you could focus in onto their finger, and then perhaps a knuckle.

The visual world has a **hierarchy**: you perceive it as a set of parts, and each part can be seen as parts, and so on, in a structure. You can move your attention between parts, focus down into their component parts, and up again to their larger structure. With each movement, your awareness of things that are part of the same structure becomes less sharp, more diffuse, and parts that are elsewhere in the structure become even vaguer, and less difficult to be confident that you can really see them, or if you are just recalling them.

Our other senses work in the same way. Close your eyes, and listen to the sounds that you can hear. You were probably only vaguely aware of them until now, but there are sounds from the room, from the building, and from outside. While you were focussing on your visual sensation, all of these different sounds were happening, but most of the time you were not aware of them as separate sounds, they were just background noise.

Open your eyes again. You can still focus on these sounds. Notice that the sound world has parts too, just as the visual world does. Each sound is a separate part, and each sound has a **structure** that you can attend to.

[Choose a sound that has a repeated structure – examples follow; any or all or similar as appropriate]

People are talking outside – you can hear different voices, and within each voice, different utterances, perhaps words, and each word has many sounds, in a sequence.

The traffic outside – different vehicles, each with an engine noise, throbbing in rapid pulses of sound, getting louder and quieter.
The quiet hum of the air conditioning – pulsing gently in sequence, each pulse with its own structure.
Can you hear your own breathing? a sequence of breaths, inhaling, exhaling in sequence.

You can attend to each sound, and each part of each sound, just as you could attend to parts in the visual world. As you move your attention between different sounds, the others become less detailed, and their internal structure less apparent.

Notice that when your **focal attention** is within a sound, you are less aware of the visual scene? You can switch your focal attention between your senses very rapidly, but really you are only fully aware of one at any moment, and of one part of the scene within that sense.

Now attend to the sensations from your body. You have probably done some form of body scanning before, in fact in dance there are many exercises involving this, moving your attention in sequence through your body, feeling the sensations form your skin, and from your muscles. Whether you have done it, or whether it is new to you, focus now on your left leg. And now on your left knee. …. And now on the back of that knee. You can probably tell that your bodily sensations are also structures, just like the visual and sound sensations are, and that as your focal attention moves around and between parts of all of these sensory worlds, other parts fade in your awareness, remaining vaguely present, potentially available for your attention.

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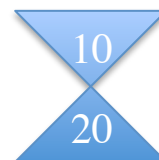
Experience of imagery

Objective: Become aware that attention can move within imagery as well as within the world, and that imagery can be transformed.
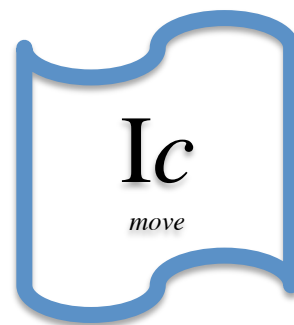
Requires: Ib

The main issue here is to move the dancers' attention to different elements within a remembered structure, and to transform them as a cue to introducing principles. Allow plenty of time between each cue for the dancers to make the changes and create movement.

For the next few minutes I'd like you to make some movement, using your memory of the last task where we moved our focal attention around the world.

Start by remembering one of the sounds that you attended to in the last task, even if you can no longer hear it. Choose a part of that sound and start your movement by building on that sound.

All the while, I'd like you to move in response to this sound.

Go into the detail of that sound – find a part of the sound and develop it.

Change the speed of the sound.

Let your movement reflect this change.

What was the thing that might have made the sound?

What larger group did the thing belong to?

Did the group change over time?

What sounds would be made by another part of this group?

Focus in on part of that sound.

Change the sound – make it softer or louder; higher or lower.

Now think of whatever makes the sound, or something the sound reminds you of, and see this in your mind's eye.

When you can see it vividly, try changing your point of view of it. See it from another side, or move around it in your imagination.

Where are you located? Can you be outside, in a wide open field?

Can you feel a gentle breeze in your hair?

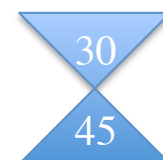Make the wind stronger, and feel it on your skin.

Reflection

What is your usual experience of imagery when making movement?

Did this feel strange or different?

How did changing the sounds feel? Was it easy or hard?

When you were asked to visualise something, did you realise that you were already seeing it in your minds' eye before we asked?

Attentional score

Objective: Understand that our attentional focus can be attracted by changes in the sensory world, and directed by our mental processing
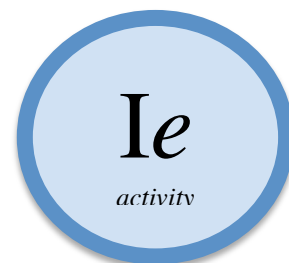
Requires: Ib

Teacher led discussion, using questions to raise points.

> Did you find it easy to move your attention between different things in the world?
>
> Which sense was it easier to move around?
>
> Did you find your attention jumping around against your will?
>
> What sort of things caused that to happen?
>
> Why do you think your attention sometimes moves 'by itself'?
>
> When you were moving your attention within a part of the world, was the structure obvious?
>
> Did the structure change at any point?
>
> You know what the parts of a human body are – but what about an unfamiliar insect, or an alien?
>
> How about a rhythm?
>
> What influences the way parts of the world form groups?

Key Points to cover:

> Sudden changes in sensory information attract focal attention – objects appearing or disappearing; sounds starting or stopping, sensations in the body changing abruptly.
>
> Changes in the world might be important so require attention briefly before we can return to our task.
>
> The structure of something is sometimes explicit but sometimes imposed by our knowledge or reason for attending to the thing.
>
> Sometimes our knowledge can override explicit sensory information; sometimes this can override our knowledge
>
> *'Gestalt' Cues to the way structures can be perceived:*
>
> Proximity – things close together in space or time can form higher level parts (dots, dashes = lines)
>
> Similarity – objects or sounds or sensations that are similar form groups (beats = rhythm; stars = constellation)
>
> Common Fate – things that are changing in the same way (motion, tone…) group (even across senses)

Id

discuss

5

15

Manipulation of imagery

Objective: Practice using The 12 Principles for transforming imagery.

Requires: Ib

Pace to allow students time to transform imagery. Adapt wording or exercise to suit context. Use principle cards. See Teacher's Guide for further details.

So far you have learnt that mental imagery has structure, just as the sensory world does, and that you can move your focal attention between different aspects of your mental space, and that you can change the part that you are focally aware of. You can also modify it, and these twelve principles can be used as reminders of ways of modifying your mental focus.

We have grouped them into three sets of four to help you remember and use them.

The first four all **change the whole** image.

The Assign principle is always the starting point, as it gives you the initial idea.

> Use your mind's eye to imagine a hat, any hat. (Assign)
>
> Can you make it a hat that belongs to you? (Personalise).
>
> Can you see the hat in a familiar place, such as your bedroom? (Exemplify)
>
> Can you focus on a part of the hat – the brim, the top, the sides? (Deconstruct)

The next four all **edit part** of the image, without changing the whole:

> Can you change the kind of hat it is? (Substitute).
>
> Can you add a feather to the hat? (Add)
>
> Can you see the hat getting shabby and wearing out? (Develop).
>
> Choose an object in the space around you, any object, and add the hat to it. (Superimpose)

The other four all **modify** the image in different ways:

> Can you move the hat to the other side of your familiar place (Relocate)
>
> Can you change the size of the hat - make it bigger or smaller? (Scale)
>
> Can you put hat and object together in another scene? (Recontextualise)
>
> Can you see the hat from underneath, or from inside looking out? (Perspective)

We can make the same range of transformations within sound imagery by applying these principles:

> Imagine a variety of forms of some common sound (Assign).
>
> Choose one specific form of that sound (Exemplify)
>
> Realize that you are making the sound or that it is meant for you to hear (Personalise)
>
> Choose one part of the sound (Deconstruct).
>
> Change the start or end of the sound (Substitute).
>
> Add a new sound onto the start or end of it (Add)
>
> Imagine the sound speeding up or slowing down (Develop).
>
> Imagine a second sound joining the first one (Superimpose).
>
> Make it come from further away in space, or from the other side of you (Relocate)
>
> Make the sound louder or quieter, or change in pitch (Scale).
>
> Shift these sounds to another place (Recontextualise).
>
> Imagine the sound close at first then moving away and back and forth (Perspective).

Now try doing some of these things::

> Imagine the sensation of holding a spring (Assign) and stretching and releasing it (Develop).
>
> Imagine it as smaller and bigger (Scale).
>
> Change the part of your body holding each end of the spring (Substitute).
>
> Change the orientation of the spring (Relocate).
>
> Be aware of the sense of muscle tension and of different textures on the surface (Exemplify).

Becoming familiar with these twelve principles will help you find ways to transform any image. Some of these changes may not help, or might not produce a novel idea or way of moving, so you can try another, and another until your familiar thought has been left behind and you have moved out of the ordinary, into a new range of thought. We will work more with these principles in the exercises that follow.

I*e*

activity

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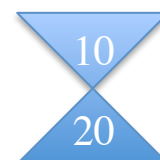
Continuous imagery

Objective: Pactice transforming imagery while moving.

Requires: Ie

The point here is to practice principles and moving focal attention between vision, sound and schematics, with cues being given to drive transformations

For the next [period of time] I'd like you to make some movement, while we practice applying the principles.

Begin by imagining that your arms are springs. Feel the sensations in your body as the springs stretch and move.

Scale those springs - make them larger or smaller.

Assign a sound to them as they move – now you are focussing on the acoustic image, but you can still feel the sensation of the springs. You can move your focal attention rapidly between hearing them and feeling them.

While you focus on one aspect, the other aspect is still there, in diffuse attention.

Now add something to the sound the springs make.

Focus now on how the springs appear – moving to visual imagery, but still hearing the springs and feeling them move in your diffuse attention.

Change perspective - Imagine how you look to an observer.

[…and so on, working through principles and visual, sound or schematic imagery]

If
move

25
60
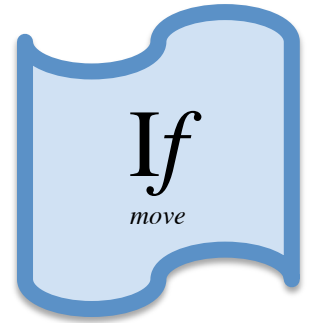
Reflection upon imagery

Objective: Consolidate understanding about structures, focal
attention, and transformations.

Requires: any of Ib Ic Id Ie If

Teacher led discussion

We have covered several important concepts here. Which did you find most helpful?

Have you thought about your imagination in this way before?

Do you think it is useful to control your imagination?

When you have a creative idea, where does the idea come from?

Can you imagine something you've never experienced?

Did you find it easy to shift your attention between visual imagery and sound imagery?

Which of the principles can you remember now?

How would you group them?

Ig

discuss

Awareness of internal & external visual imagery

Objectives: 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.

Requires: Ib

In the next exercises you will be working with visual imagery, your mind's eye. You will explore the relationship between your visual imagery and your feelings and meaning. You will learn about the different ways that visual world – externally and internally – can be structured according to your expectations.

In an earlier exercise you found that the external visual world has a hierarchy. You can see it as a set of parts, and each part can also be perceived as parts, and so on, in a structure. You can move your attention between parts, and down into their component parts, and up again to their larger structure. With each movement of attention, your awareness of things that are part of the same structure become less sharp, more diffuse - parts elsewhere in the structure become even vaguer, and you may be less confident that you can really see them, or if you are just recalling them.

The same is true for your internal visual world, your mental imagery. Imagine for a moment a table, with breakfast things set out upon it, including a cup. See the whole table for a moment, and then focus on the cup. As soon as you do so, your mind fills in details that were not there before.

Visualise it now. Are you aware of any liquid in the cup – and is that liquid coloured? Does the cup have a handle, and which side is it on? If you are right handed, the chances are that the handle is on the right, ready for you to pick the cup up. If you are left handed, it is probably on the left. As you focus on the cup, can you still see the rest of the tabletop, or is it fading away, becoming harder to keep in mind?

These small details were not important when the whole table was the main focus, but when your focus moved down to the cup, its parts became important, and the rest of the tabletop faded away. The detail about the cup came from your memory – probably not a particular memory, of a specific time or place, but a general memory about cups. Maybe you saw your own favourite breakfast cup, but you built the image from your experience of the cup. The liquid was probably brown. Your typical pattern of physical, bodily interaction with the cup influenced where you imagined the handle would be.

All of this knowledge came from your memories about cups, and each element that appeared in your image was driven by a single specific piece of knowledge, drawn from these memories. This is how our minds create specific images; each time slightly different, but related because they come from a common source, our own memory and experience.

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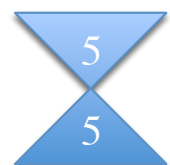
Choreographic use of visual imagery

Objective: Develop awareness of contemporary use of visual imagery.

Small Groups

Depending upon knowledge / level of students, this may be more teacher led or more student led.

In groups, students choose, or the teacher describes two or three contemporary choreographers and discuss their use of visual source material. They may not refer to these sources as imagery, but the material or scene acts as an artistic starting point which inevitably makes use of various forms of image in its development.

Examples could include:
Forsythe's improvisational technologies;
Rosemary Butcher's use of radiographic images as a source of inspiration in SCAN;
Lisa Nelson's 'Tuning Scores'.

Identify similarities and differences – compare and contrast.

Why do you think each choreographer uses imagery in this way?

How sympathetic do you feel towards each choreographer's approach?

Each group could then describe one of the main differences or similarities that they have identified.

Reading:

DeLahunta, S., Clarke, G. & Barnard, P. (2012) A conversation about choreographic thinking tools. *Journal of Dance and Somatic Practices, 3*, 243-259.

Manipulating visual imagery

Objectives: 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

Requires: Ib

Teacher led exercise, perhaps using pencil/pens and paper

Look around the room and try to recognise the structure you see in the visual scene. Remember that every part of the room is built up of other parts, which also have parts. We will try to sketch this structure out on paper as a diagram. Begin by writing 'room' at the top in the middle, and then in a horizontal row just underneath this, write down a few things that form the scene in the room – wall, floor, people, and so on – and draw lines linking them to the room.

Now, take each of these parts in turn. Focus on the first of them. Look at the structure within it. Write down each part of it underneath, and draw a line from the first part to its parts. Do the same with the next part, and so on (you might need to spread the rows out vertically).

Here is an example of the structure of a typical office, with the structure of the far wall drawn out

(diagram also included on a separate page)

If you want to continue, do another level of deconstruction, taking some of these elements and attending to them, breaking them down into their components.

There is no right or wrong way to draw these diagrams. They only really exist in your mind, and can change from moment to moment, defined by your experience of the world, and the ways that you have seen it and moved within it. The structures you see here, now, are based upon your schematic understanding of the world, based upon your previous experience and the current context.

Take the diagram you have just drawn out, and look at it again at the scene it represents. Let your attention move around the scene. Focus in turn on some of the smaller parts that you identified within the scene. Move your focus of attention between them.
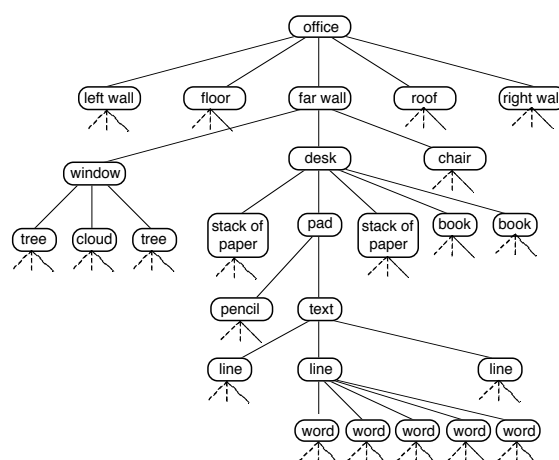
As you do so, do you find that you move briefly 'up' to a higher level and then 'down' again into the structure, rather than hopping directly from part to part? Try moving your attention randomly around the scene, looking here, looking there. The ease with which your attentional focus moves is determined by the structure that you have created from the scene.
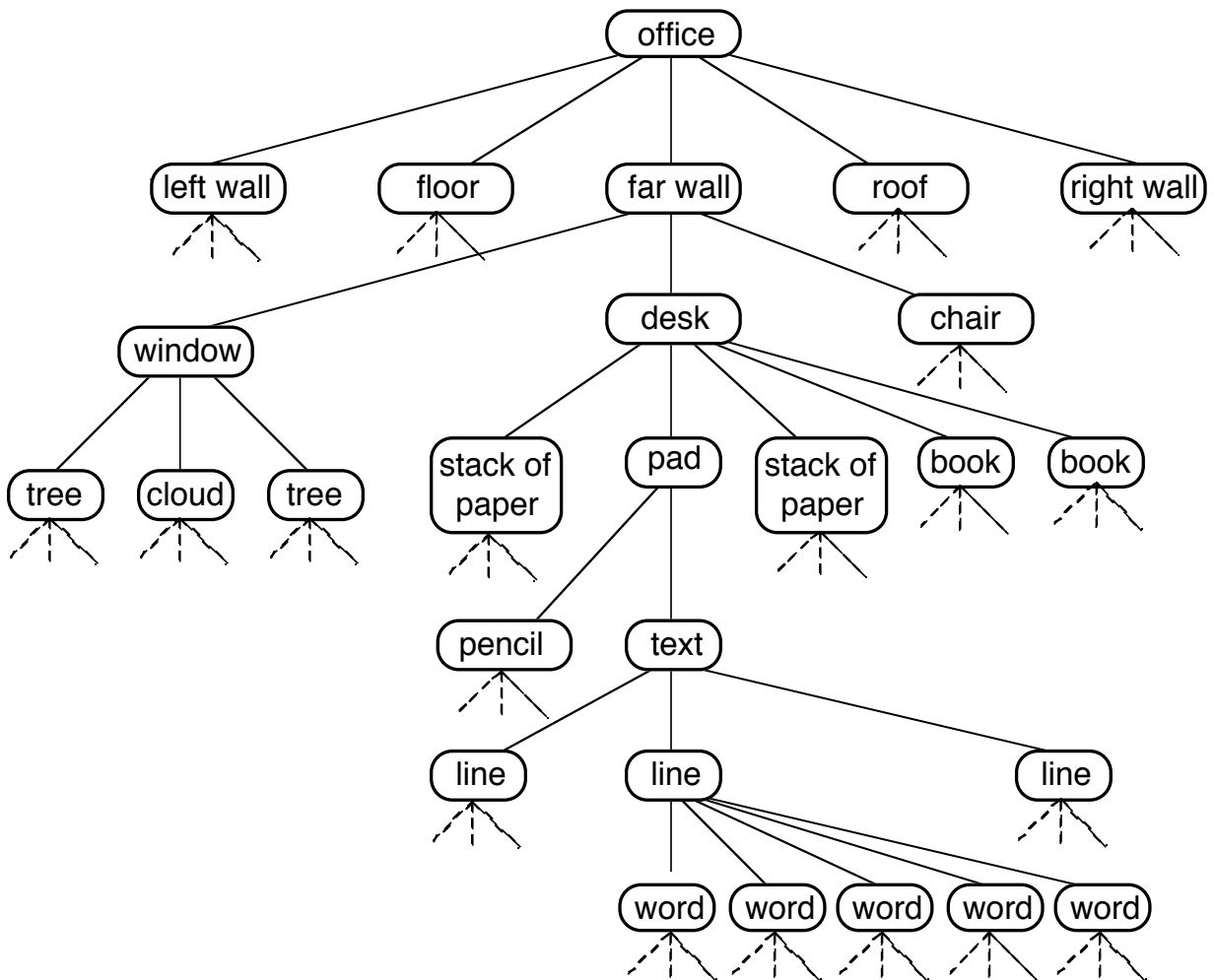
Now do the same thing in your mind's eye. Construct a scene at will, any scene will do. Focus in on a part, and become aware of its structure. Move down into a part of the structure, and then again, down and further down.

Now come back up, up to the first part of the scene you focussed on. Are you still aware of the lowest, most detailed level you just attended to, or has that faded? Do you have to attend to it to know?

At any moment we only hold in our image the level of the part that we are focussing upon, the whole it belongs to, and its immediate structure. The rest is there, diffusely, but to become aware of it we have to make changes in the focus of our attention and so we lose awareness of the part we are moving away from.

To move focus rapidly or easily between different aspects of an image, they need to be part of the same structure. If they are part of the same structure, they share a common specific idea, and so are linked. This can be an interesting way for feelings evoked by one part of a scene to be transferred to another part of it.

```
                              office
         ┌──────────┬───────────┼───────────┬──────────┐
     left wall    floor      far wall      roof     right wall
                                 │
                         ┌───────┴───────┐
                      window            desk ──────── chair
                   ┌────┼────┐      ┌────┬──┼───┬────┐
                 tree cloud tree  stack  pad stack book book
                                  of          of
                                 paper       paper
                                        ┌────┴────┐
                                      pencil    text
                                        │    ┌───┼─────────┐
                                      line  line  line    line
                                         ┌──┼──┬──┬──┐
                                       word word word word word
```

Using visual imagery

Vd
move

Objective: Practice using principles upon visual imagery.
Develop confidence in moving attention around the visual world .

Requires: Vc

Students in pairs using flashcards:

In pairs, students write down four situations, each on a separate piece of paper or card. They can be any place or time, e.g., queuing for lunch; sitting on the bus; watching TV at home.

They also use the twelve principle cards provided.

One student begins by directing, the other by dancing.

The director picks a situation and leads the dancer through a few minutes of improvisation driven by imagery of the idea. They should observe the dancer carefully.

The dancer starts with the situation, visualises it, and uses Assign to attend to a focus within it. Although we have not yet introduced the idea, this allows the loop between specific and schematic meaning to help them interpret the situation. They can talk aloud if they want to describe their chain of thought.

They may find themselves leaving the original situation behind.

Whenever the director thinks fit, they pick a principle card at random and read it out for the dancer to apply to their idea, to transform the content.

After a few minutes swap roles and begin again.

Repeat this so that each student dances and directs twice.

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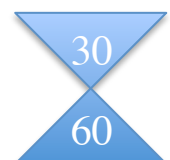
Developing visual imagery

Objective: Develop confidence in applying principles to visual imagery.

Requires: Vc

Students moving independently; Teacher can provide layered cues

Ask students to individually practice manipulating & transforming visual imagery.

The principles have been grouped into three sets of four, with a general theme linking them.

This is mainly as a memory aid.

The teacher should ask students to apply the principles introducing one or more of them from each set, depending upon time.

We recommend starting with Assign, and then Personalise or Exemplify, followed by some of the Edit and Modify principles. However, any sequence can be used.

Change the whole image: Assign, personalise, exemplify, deconstruct

Assign	– choose a focus, something, a property to work with, and imagine it
Exemplify	– Make your imagery specific, add meaning to your imagery
Personalise	– make the imagery important to yourself, with feelings and meanings derived from your own experience
Deconstruct	– select part of the imagery, leaving the rest present but diffuse

Edit part of the image: Add, substitute, superimpose, relocate

Add	– bring something new into the imagery; whether different or related
Substitute	– replace part of the imagery with another thing, whether subtle or unbelievable
Superimpose	– combine your imagery with something else, part of this idea or something new
Relocate	– change the relationships between part or all of the imagery

Modify the image: Scale, Perspective, Develop, Recontextualise

Develop	– allow the imagery to follow its course over time, following a direction, perhaps shifting between specific and general
Scale	– change the size, volume, force, pressure, quantity, degree of the imagery
Perspective	– change viewpoint, moving around, into or out of the imagery
Recontextualise	– move the focus of your imagery to a different scene in time or space; or change the emotional context

V e

move

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Reflection upon visual imagery

Objective: Consolidate understanding about structures, focal attention, and transformations.

Requires: Any of Vb Vc Vd Ve

Teacher led discussion

How has this session helped you think about the way that your knowledge of the world influences your visual imagery?

Can you describe your earliest visual memory?

Do you think that babies see the world differently, and how?

Do you think this is all nonsense and that the world just 'is' the way it is?

Awareness of sound imagery

Objective: Sound has internal structure that can be focussed upon
The structure of sound is interpreted and can be manipulated.

This could include recordings of sound examples…

We are surrounded by sound, even in the quietest places. Even when the world is as quiet as it can be, we can hear our bodies, our breathing, our movements.

Some sounds in the world are short, brief noises that start, stop and are gone. We can repeat them in our minds for a while, but as we do so their essence changes. Is what we imagine really the same sound we heard? What drives these changes?

When we hear a continuous sound, like a rhythm, machinery, or speech, we can immediately identify structure within it. Whatever caused the sound might have had a repeated action within it, and in our minds we can extract this repetition from the sound and use it to break the sound up into units.

As well as hearing the whole sound stream, we can attend to the units within the sound. They might be beats, or words, or notes. Focussing in on a unit within a stream of sound is like focussing in on an object within the visual scene, or to a part of an object.

Some sounds consist of several strands woven together. When listening to an orchestra, you may be able to pick out a single part or instrument, maybe a violin, or a trumpet; maybe a clarinet or an oboe. When you focus on any of these, you can still hear the orchestra, and the music as a whole. But can you attend to the violin and the clarinet at the same time? You might be able to switch rapidly between them, in the same way you can look at different things in the world, but that is not the same as focussing on both sounds simultaneously. You can only listen to them both at once if they are playing the same phrases or if their notes combine into a single line of music.

In a room full of people all talking at once, you can pick out on person's vice, or another, but you cannot listen to both of them at once, unless they are saying the same thing. The structure of the sound world influences the way we can focus our attention and move our attention around it; and this is also true for sound that we imagine.

Sometimes sound units mean something – words are obvious examples, but we also recognise other sounds and give them identities – we can name them.

If we recognise a sound, then are we really hearing the sound, or are we now hearing our idea of the sound?

It is all too easy to 'mishear' things people say, because our minds create the words from the sounds we hear, and we do this using our knowledge of what they are likely to say.

We can also build sounds in our minds, and can imagine that we are hearing quite complicated sounds such as an orchestra, a party full of people talking and chattering, a road full of traffic.

Imagining a sound like this is different to having a memory of that sound – if you imagine the sound of a party it isn't an actual party that you are remembering, but one you are creating, from your knowledge of parties in general.

This is the knowledge that would let you identify sounds coming from behind a door, to know that there was a party going on in there.

Knowledge can be used to build sounds in your mind as well as to recognise them. We can use this knowledge and imagery to build sounds in different ways, and to take the apart, and to build them again in different ways.

In the next exercises, you'll experience attending to different parts of sounds, both in the world and in your mind. You'll notice that imagery of sound is closely linked to visual images, and to meanings and feelings.

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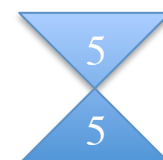
Using sound imagery

Objective: awareness of the variety of ways that ideas about sound influence movement

Student led discussion with feedback.
The aim of this task is to contextualise the rest of the session so that students are thinking about sound in its broadest sense.
Depending upon student experience and knowledge,e you might have to provide examples.

Group students in small groups of two to four.

Ask them to think of examples of pieces they know that have used ideas about sound as a basis or inspiration for the choreography.

Stress that 'ideas about sound' does not just mean explicit sound accompanying the dance, but also pieces inspired by sounds.

In what different ways has sound been used or applied?

Do the choreographer and dancer think about sound in the same way?

What might have inspired the choreographer to develop a piece in the way that they did?

Does the idea of sound change during the piece?

Towards the end of the time allowed for this task, ask each group to briefly describe their best example.

Summarise.

Points to make clear in summary:

A sound can be identified in the external world, and then imagined; or it may be entirely imagined. Even an external sound is 'recreated' in the mind when it is used as inspiration for movement.

Basic acoustic elements of sound such as pitch or rhythm have obvious parallels in movement, but the meanings or feelings associated with or generated by a sound are just as important.

Sounds are often closely linked to ideas about the things or processes that create them.

Movements motivated by sounds may reflect the ideas, meanings or feelings associated with the sounds.

Manipulating sound imagery

Objective: attentional focus can be shifted within sounds;
              the three loops intersect and influence each other

Paced task, requiring focus on external, internal and images of sounds

This script can be used as a basis, but will need to be adapted to the situation. It relies on there being appropriate sounds in the room, or using a source such as a free sound effects app, so will need modification according to what can be heard – the first section on sound in the room could be skipped if no rhythmic background noise heard.

> In this task you'll practice attending to sounds and hearing their structure, being able to attend to different aspects of the sound.

> Let's start by finding a continuous background sound we can all hear in the room – can anyone suggest something?

{ask for appropriate repetitive background sound to be suggested, or chosen from FX app }

> OK, that's good – now lets all listen to that sound. Does it have a rhythm?

> Now instead of hearing the whole sound, lets focus on the repeated unit or element that makes the sound up. How does the sound change within that unit?

> Are all of these units the same? How can we tell that?

> How different could they be without the overall sound losing its repetitive structure and becoming noise?

> Now listen to your own breathing – a rhythmic sound.

> Each breath has a structure. There are sounds within each breath.

> Notice how, as you attend to a sound, you cannot but help to visualise it too.

> The idea in your head of a sound crosses over into your visual imagery through the intersection of the sound and vision loops.

> Attending to your breath is probably calming, relaxing. It is often used in meditation as a way of focussing your awareness.

> As you listen to your breathing, the sounds directly affect your feelings, and those feelings influence the way you would move.

The Sonic Landscape

Sd
move

Objective   familiarity with accessing sound imagery and driving
changes within it;
using visual and schematic loops together with sound
role of visual loop in movement

Slow-paced movement task, much time between each line - using student's own personal inspiration.

Find somewhere to stand, and listen to the sounds around you for a moment.

Focus now on the feelings those sounds give rise to in your mind.

Let's begin by using these sounds and feelings to start moving.

As you do so, notice the visual images that the sounds are forming in your mind.

What is the relationship between the sounds, the visual images and your movements?

Now take the sound you were first using and focus in on some unit within its structure.

Notice how that change of focus has influenced your movement

Gradually, think of something the sound reminds you of, and build a new sound in your mind.

Use the principles to modify the sound. Try changing it, or owning it.

Now imagine a heartbeat. Hear it in your head… and then notice how it makes you feel.

What does a heartbeat mean? Move for the meaning and the sound together.

If the heartbeat gets faster, the meaning changes.

The sound in your mind, its identity, and its meaning – these are driving your movement.

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Reflection on the process.

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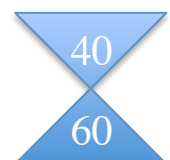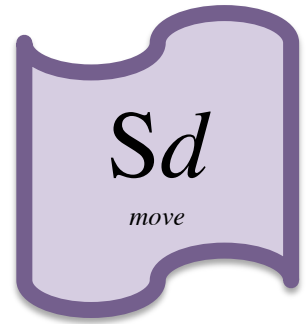
discuss

Objective: to consolidate understanding about sound, meanings, and the three loops as mind within body within world

Requires: Sd

Teacher led discussion

> Consider any differences to their previous experience of sound in improvisation.
>
> Is the idea that sound has structure and that our attention can move through that structure interesting? Is it useful?
>
> Does understanding the structure of sound help you change it using the principles?
>
> Does the idea about the intersection of three loops help you think about the influence that different forms of imagery have on each other?
>
> How do sound, identity and meaning relate to each other and to movement?

Introduce the ARCS diagram (see Sf in this pack and poster; more detail in the Teacher's Guide: Essay)

> The loops are embedded within the mind; the mind exists within the body; the body within the world Outside the circle is the world, inside is the mind.
>
> The upper arc is the external world, sensed by our bodies. Just inside the upper arc are our sensations of the world
>
> The lower arc is the world that we can act upon and move within.
>
> Just inside the lower arc is the bodily knowledge that will move us.
>
> Between sensation and movement lies the inner mind.
>
> These loops have no direct contact with world, but discover it through sensation, and affect it through the body.
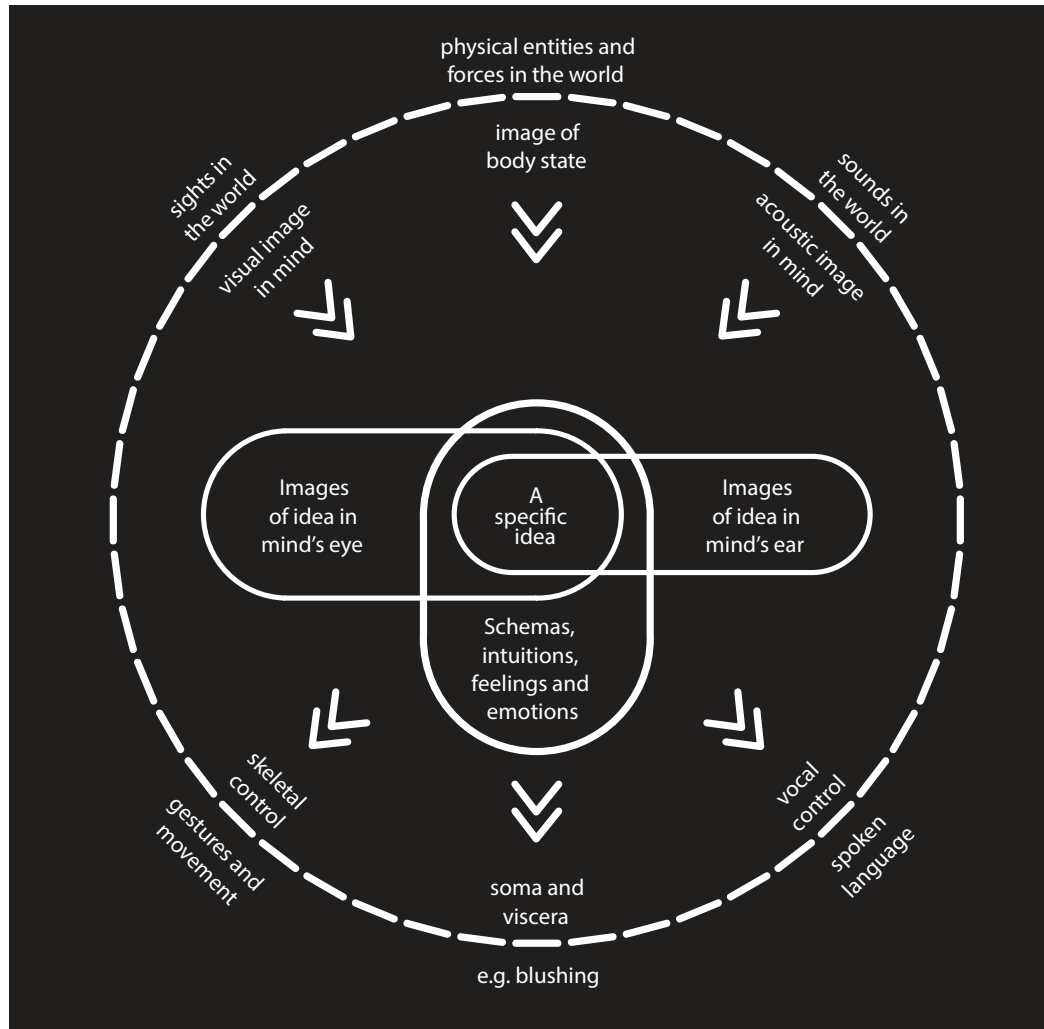
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Record imagery insights in Notebooks

Objective: to allow students to consolidate experience.

Requires: Sd

Encourage students to make notes about the session, the ideas and concepts.
Provide ARC diagram.

Thinking schematically

Objective: Introduce the schematic loop and the relationship
              between movement, sensation and meaning.

Two readers – a dancer and a psychologist

DANCER:

As dancers, we are very aware of our bodies, perhaps more so than most people. We are used to working with emotion, sensation and movements, and have an intimate understanding of the relationships between them. Some of this understanding we gain through practice in the studio, in technique, improvisation and composition trainings. And we have ways of describing these experiences, the feelings and intentions behind a movement, for example, and our sensations as we move. Those sensations are thought of as kinaesthetic.

However, dancers have the tendency to think that 'thinking' itself has more to do with the world of verbal or written forms which language gives rise to, which is then also the world of ideas and concepts. The experiencing of emotion, sensation and movements we tend to believe is not the experience of thinking, sometimes we believe they are quite separate things.

But that is not the case, all of these various aspects of experience, our thinking, feeling, sensing, moving selves are always working together. And these different parts are always in a relationship, for example, sensing through feeling, or the sensing through thinking, or thinking through movement.

Some of these things we can be aware of and some not. But they are always operating together either behind or in front of the scene. What we lack are the means to explain much of this, but a psychologist can provide some insight.

PSYCHOLOGIST

It is true even when we are reacting in the moment, making movement in a close immediate relationship with the sensations from our body - we are engaging other processes at the same time. The way we perceive bodily sensations is different to the way we perceive the visual and acoustic world: instead of identifying objects and patterns, and recognising their meaning, we directly perceive the meaning of sensations. The sharp prick of a pin means pain; a sweet smell is delicious – the recognition of the pin or the naming of the smell is secondary and may not even be possible. Sensation is very difficult to put into words, because it is an abstract and high level form of meaning. How exactly does a pin prick feel? What does a rose smell like? We know, but it is hard to say.

Our spoken thoughts are several steps in our minds away from our feelings, but our feelings and our bodies are in direct connection. This does not mean that when we move, we do so without conscious thought or control. Uncontrolled movement would not be dance, after all! It is just that the relationship between our thoughts and our movements is not something that is easy to put into words: it is easier to do than to explain.

This is because there are two ways in which we can understand meaning. There is the factual, verbally expressable sort of fact, like 'I'm standing on tip toes' or 'My arm is raised, slightly bent', and then there are the implied, harder to convey meanings that come with the context. Are you on tip toes because you are reaching for something up high, or because you are trying to walk quietly? Is your arm raised because you want to attract attention, or are you fending something away? The real meaning of the movement is more than the movement itself.

Higher level meanings exist for all forms of thought. When we read something, the higher meaning is called the gist, and this is what we remember, rather than the exact words. When we hear a poem, or a song, for the first time, we experience feelings and emotions, and later may recall these feelings more than the exact words or notes.

One way that has been used to describe these two levels of meaning is as hot thought and cold thought. Cold thoughts are conventional knowledge, facts, identities and descriptions. Hot thought includes feelings and emotions, the real meanings of cold thoughts.

Another way to think of them is between the fast, immediate thoughts we get whenever we perceive something, and the slow, considered thoughts that come later. The fast thoughts are the hot, emotional sort; the slow thoughts are the cold, factual or logical ones.

In the following exercises, we will explore the relationship between these two levels of meaning, hot and cold, fast and slow, to explore the link between mind, and movement.
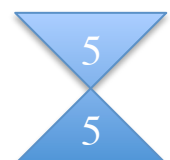
Manipulating schematic imagery

Objective: using the schematic loop; the mutual interaction between meanings and feelings; understanding factual (propositional) and schematic (implicational) meanings.

Requires: Ka

Teacher led exercise, based upon the following ideas:

The purpose of this exercise is to illustrate the interaction between the **hot and cold meanings** of things.

You know that different emotions lead you to move in different ways, and that different movement patterns can signify particular emotions to you and to observers of your movement. Here we will use mental imagery to show that just imagining different movements can affect your feelings, and that these in turn influence real movement.

For this exercise I'd like you to lie flat on the floor with your eyes closed, and to relax your body so that you are completely comfortable.

Now in your head, and without moving, **imagine that you are standing up**. Imagine that you are looking up, and reaching up with both hands, high above your head, as high as you can. You are standing on one foot, rising onto the ball of your foot, stretching up. Push your hands up. Try to grasp something.

Imagine the tension in your muscles: Your shoulders, neck, arms, calves and your fingers as you stretch up.

Can you also feel the emotion this pattern of movement brings? What might that be?

[the intention here is to produce a negative, tense feeling or emotion]

What has happened here is that in trying to construct this movement, **the cold, factual part of your mind has fed back the movement to the hot, schematic part of your mind. This has interpreted the movement, and generated the appropriate emotion.**

Now relax your mind again, and feel this: you are **lying flat on a warm, sandy beach** and above you is a clear blue sky. A gentle wind is blowing the salty smell of the sea towards you and the waves are breaking in a slow rhythm. **Notice your feelings.**

[the intention here is to produce a more positive feeling than when imagining standing and stretching up]

Imagine moving. If you were to move to represent these feelings, your pattern of movement would be very different.

Take the image of the beach and in your mind, stand up and move around on the beach. Let's **apply some of the principles**. **Assign** a focus: Identify some object in your beach scene, and name it – this gives it a cold meaning. Does it have any hot meanings too? **Personalise** it – make it a beach you remember. Now what hot meanings does it have? Where have those meanings come from?

Perhaps you can change the hot meanings by returning to the object, and transforming it. Apply one of the principles: change it in size, or change perspective, or deconstruct it; relocate it.

Now relax your mind again.

Hot and cold meanings influence each other. In our mind we constantly build meanings in both forms. It is difficult to have one in mind for long without it colouring the other.

Cold meanings are facts, and hot meanings are what psychologists call schemas.

Normally, when we are told something factual, we generate a schema to fill in the gaps and to understand the relevance of the facts. If you ask someone 'Can I borrow your car?' and they say 'The keys are on the table in the hall', have they said yes? Or did you use a schema to infer that they were giving you permission to take them?

The link between facts and schemas and back again is so tight and we are so skilled at it that we do not usually realise that we are using it.

Someone who didn't use schemas would be irritatingly literal and pedantic. They would seem to have no real understanding, no 'hot' thoughts. They would not seem human.

At the other extreme, someone who just had schemas and no factual meaning, would react to events emotionally and have enthusiasms and fears and intentions, but would be impossible to talk to or reason with.

Neither of these people would really be human: **it takes both forms of meaning to make our thoughts flow** in the way that they do, able both to focus on specific details and yet see relationships and patterns. Knowing that you can step from the facts to schemas, or from schemas to facts, gives you a way to drive changes in your ideas.

Using schematic imagery

Objective: Develop confidence in using schematic meaning.

Students in pairs using flashcards:

In pairs, students write down four schematic ideas, each on a separate piece of paper or card.

They can be any emotion or feeling or qualitative idea, e.g., happiness, generosity, warmth, togetherness, insecurity, austerity, distance, division.

They also write down any four of the twelve principles on different pieces of card or paper – choose them at random.

One student begins by directing, the other by dancing.

The *director* picks an idea from the set and leads the *dancer* through a few minutes of improvisation driven by the idea. They should observe the dancer carefully to see if they can pick out the relationship between the movement and the schema that is being used.

The *dancer* starts with the idea, and attends to the chain of thoughts that follow as they move between specific instances and the general ideas that these instances create. They can talk aloud if they want to describe their chain of thought.

They will soon find themselves leaving the original idea behind.

Whenever the *director* thinks fit, they pick a principle at random and read it out for the dancer to apply to their idea, to transform the content.

After a few minutes swap roles and begin again.

Repeat this so that each student dances and directs twice.

Kc

move

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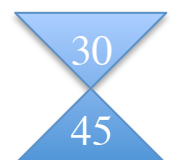
Applying schematic imagery

Objective: Develop familiarity with The 12 Principles.

Students moving independently; Teacher can provide layered cues

Ask students to create a schematic image: a feeling or meaning, e.g., happiness, generosity, warmth, togetherness, distance, division.

Ask students to apply the principles to schematic imagery, introducing one or more from each set, depending upon time.

We recommend starting with Assign, and then Personalise or Exemplify, followed by some of the Edit and Modify principles. However, any sequence can be used.

Change the whole image: Assign, personalise, exemplify, deconstruct

Assign	– choose a focus, something, a property to work with, and imagine it
Exemplify	– Make your imagery specific, add meaning to your imagery
Personalise	– make the imagery important to yourself, with feelings and meanings derived from your own experience
Deconstruct	– select part of the imagery, leaving the rest present but diffuse

Edit part of the image: Add, substitute, superimpose, relocate

Add	– bring something new into the imagery; whether different or related
Substitute	– replace part of the imagery with another thing, whether subtle or unbelievable
Superimpose	– combine your imagery with something else, part of this idea or something new
Relocate	– change the relationships between part or all of the imagery

Modify the image: Scale, Perspective, Develop, Recontextualise

Develop	– allow the imagery to follow its course over time, following a direction, perhaps shifting between specific and general
Scale	– change the size, volume, force, pressure, quantity, degree of the imagery
Perspective	– change viewpoint, moving around, into or out of the imagery
Recontextualise	– move the focus of your imagery to a different scene in time or space; or change the emotional context

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Reflection upon schematic imagery

Objective: to raise questions and share understanding about
             specific facts and more general, deeper schemas.
             To focus on the three loops overlapping on specific ideas.

Requires: Kc

Teacher led discussion, using these prompts

> Does this distinction between slow, cold specific ideas and fast, hot general schemas make sense to you?
>
> Is it a way of thinking that you now realise you understood before?
>
> Do you find it easy or difficult to move your focus between specific and general meanings?
>
> When you moved from general to specific and then back to general, how did the original and new imagery relate?
>
> Which do you think is more important to you when you are improvising, the specific fact or the deeper schematic level of meaning?

Use the back of the principle cards to focus on the central part of the Arcs Diagram:
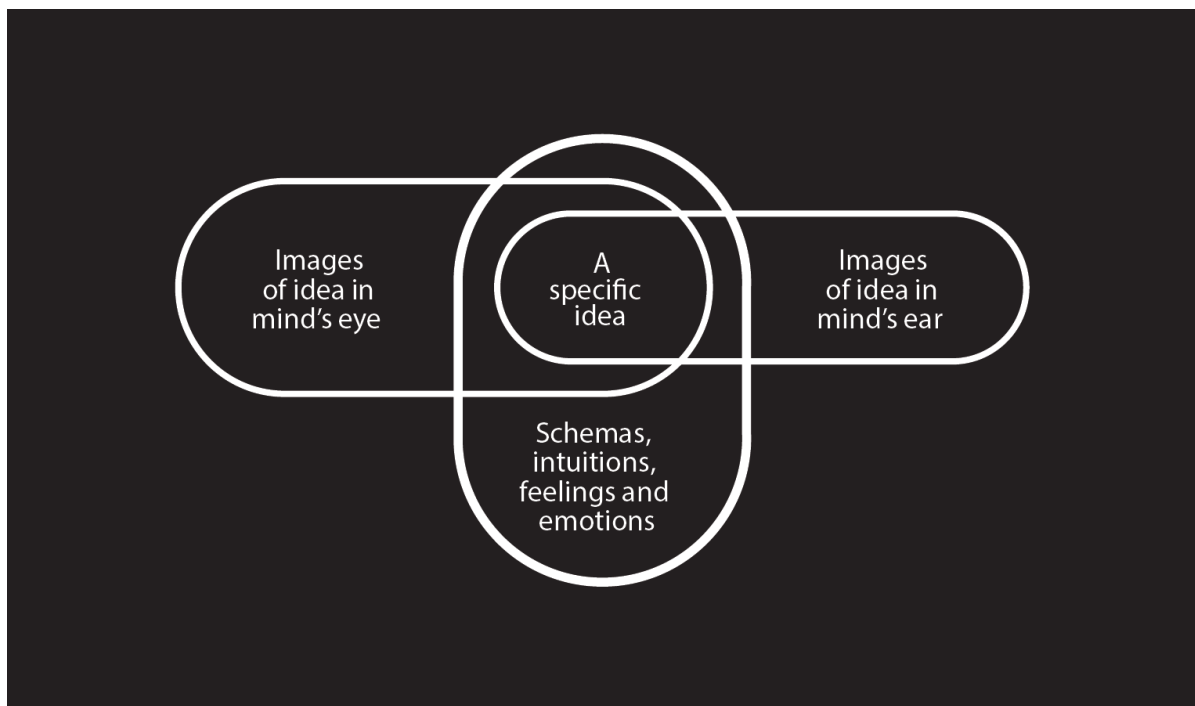
> The 'specific idea' is the slow, cold factual meaning.
>
> 'Schemas, intuitions, feelings and emotions' are the fast, hot general meaning.
>
> The central, vertical loop illustrates the interaction between specific ideas and general schemas that we have been exploring.
>
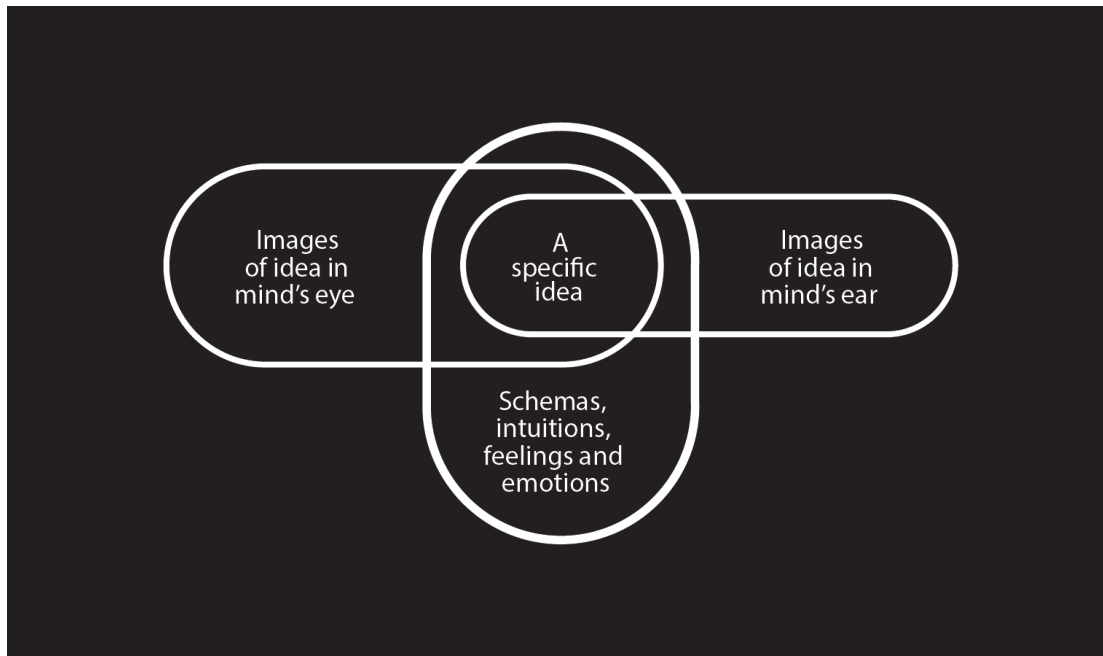> Point out that specific ideas can also be used to create visual and acoustic imagery.
>
> The specific ideas link feelings with the visual and sound imagery, in both directions.

Record notes

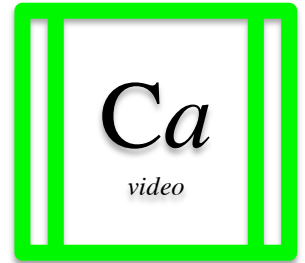## Objective: to allow students to consolidate experience.

Requires: Any of Kb Kc Kd Ke

Encourage students to make notes about the session, the ideas and concepts.

Objective: 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

Creativity is usually defined as coming up with new ideas, or linking things together in a new way.

Looking around you now, almost everything that you can see has been created by people, and the first time that they were made, that act of making was a creative act; the person who thought of making them was being creative.

Is that true for everything you can see? Maybe some were copies of other existing things. Maybe only the first thing was creative; or maybe the copy was in itself a creative departure from or improvement upon the first thing. Novelty is an important part of creativity.

When we are trying to be creative, we can feel ourselves coming up with ideas, and rapidly discarding them, searching for the novel idea amongst other ideas. Many ideas are novel, but we discard those too, because we cannot see how they help, or they do not feel right. Sometimes a novel idea just won't work.

The second part of creativity, is to recognise the useful novel idea, and to be able to reject the not-so-useful ideas. This is where expertise helps – to know that an idea is not going to be useful, it helps to have a lot of experience and skill in a domain.

Having recognised that a novel idea is useful, then we have to build on it, to develop it. Now the emphasis changes from being novel to following skilled pathways, to turn the idea in our minds into something in the world to share with others. Again, skill and expertise are essential here.

The difficult and frustrating thing about trying to be creative is the first step, coming up with novel ideas. Our minds are built to help us live in the everyday world around us, and to recognise common things rapidly. Much of the time, our ideas leap to common conclusions, to identify normal things and to carry out familiar actions. Our thoughts are biased towards being mundane, because most of the time, that is what we need to be. No-one would be safe crossing the road in a creative way, and you would not want your bus driver to be creative. Even making a cup of tea creatively could be dangerous.

When we want to be creative we have to enter a different way of thinking, one that puts aside the mundane to come up with unusual ideas, or to see usual things in unfamiliar ways. Artists do this all the time and the best artists are experts at this and have well worked out techniques already that work for them, but their ability to articulate how this works is often limited, sometimes in part because they gain little from exposing these ideas to others. At the same time many artists have found a way to share and even teach these techniques.

The twelve principles are an attempt to do just that - to share these ideas more widely, allowing you to take something in mind and to have easy ways to change it so that you can think of it afresh. It is to offer you a technique or something like a skillset for doing so, a toolkit you can reach into whenever you feel the need.

The main point of these principles is to help you to generate and refine the initial novel ideas. They cannot help you choose the right one, or to turn it into movement, because those skills are the skills you learn as dancers over thousands of hours of practice. But by providing seeds that you are able to grow, they can expand your movement repertoire.

What is creativity?

Objective: awareness of novelty as foundation of creativity
creativity requires initial novel idea; selection of useful from
not-useful; development of initial useful novel idea

Student led discussion with feedback
The aim of this task is to define creativity in students' mind as novel ideas, rapidly assessed and discarded or built upon.
Generation, Selection, Development

Group students in small groups of two to four.

Brainstorm a list of keywords to answer the question 'What is creativity in dance'?

Collect words from groups. Highlight the ideas of novelty, selection and development if they occur; prompt for them if they do not.

Now, in your groups think about other ways that people can be creative. Make a list of examples of people or ideas you'd say were creative.

Collect ideas from groups. Cluster into broad areas such as science, business, arts.

Does creativity differ between these areas? What are the similarities?

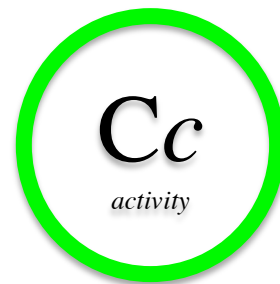Elicit concepts like process/product; originality/novelty; where ideas come from.

Remind that all creation begins in the mind, so mental imagery is vital tool/skill for developing novel/original material.

Resources:

http://music.hyperreal.org/artists/brian_eno/obliques.html

Jonathan Burrows A Choreographers Handbook.

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Imagination game

Objective: recognise that the first thing that comes to mind is the most predictable

Uses the Imagination GamePack of 18 cards.
Each card has a stimulus cue and four possible images on one side; the typical answer on the other.
The pack has 6 visual, 6 sonic, 6 movement.

Divide students into pairs and provide each pair with a pack of cards.

Each student in a pair takes half the cards.

One student reads out the **image cue** on the card, and asks their partner to imagine it, without letting them see either side of the card.

The partner should just think of the first thing that comes to mind – be honest, no need to try to be creative or clever, just the first thing.

The reader they show the cue/options side and ask their partner to pick the answer that best describes their image.

When they've chosen, show them the Cue/Answer side

If the partner chooses the typical answer the questioner shows it to them and the card is discarded.

If the partner chooses a non-typical answer, they win the card.

Continue until all cards used, then count up to see who is the least typical.

Example card:

Cue/options side:
   Imagine seeing a staircase
          you are at the foot of the stairs, looking up.
          you are looking at the side of the staircase
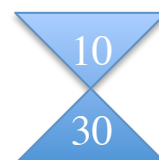   you are at the top of the stairs, looking down
          you are on the stairs, going up or down

Cue/Answer side:
   Imagine seeing a staircase
   97% choose 'you are at the foot of the stairs, looking up.'

Alternative Movements task

Cd

move

Objective: switching focus rapidly between loops
different imaginal focus leads to different ideas

Requires: Vc Sd Kd

The timeframe for this task can be longer if this is desired, so long as everyone gets a chance to move and to observe.

Form small groups of 3-6 students (smaller if less time available), or use the class as a whole.

The Teacher can act as Reader for the whole class, or students within each group can take turns, as described below.
If students act as Reader they can observe the changes in movement.

'In this activity we're going to ask you to switch rapidly between the different forms of imagery for a particular idea, based upon an object, action or scene. You'll have a minute or so to develop the idea in one imagery domain, and then you'll be asked to switch to another.'

Provide a list of objects, actions, scenes, e.g.:

	OBJECT	ACTION	SCENE
1.	money	swing	beach
2.	coffin	bend	farm
3.	clock	pull	river
4.	ship	push	party
5.	horse	roll	office
6.	gun	squeeze	hospital

One student in group is the 'Reader'. They choose a line and read out one of the objects, or actions, or scenes. This is the source for the exercise.

The rest of the group imagine the source, and then move based upon their image.

Reader watches for a minute or so until all moving, then chooses to call out **visual** or **sound** or **schematic**

The rest of the group have to focus attention on that aspect of their image.

After a couple of minutes, Reader chooses either of the other loops, and the group now focus on that aspect while moving.

After a couple of minutes, another Reader is chosen, and they repeat the exercise

And so on…. Until all in group have acted as Reader

When time called, group feedback:

How much did movements change when cued to change imagery types?

What ideas were generated that might otherwise not have occurred?

What might this say about the effects of changes in imagery upon creativity?
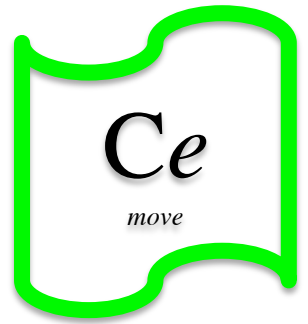
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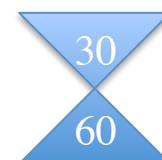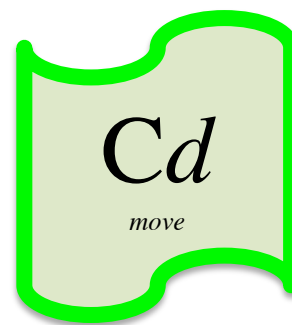
Imagery Comparison task

Objective: intentionally applying imagery strategies leads to different creative effects

Requires: Vc Sd Kd

Individual movement, partly prompted by teacher.
May need support in form of display of principles on chart / screen.

SCENE
1. beach
2. farm
3. river
4. party
5. office
6. hospital

Choose one of the scenes and ask students to form an image of that scene, using all modalities.

Develop movement for that scene using a layered approach. Allow time for the movement to develop following each prompt.

After about five minutes, ask students to **choose principles** from the pack/poster to **transform the image**.

Allow students **at least five minutes** to work on this.

Repeat with another scene… and so on.

End by allowing students to choose a scene and **develop it themselves without prompting**

Ce
move

30
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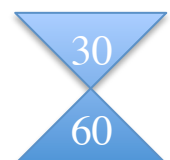
Reflection on novelty

Objective: link to personal experience of movement creation

Requires: Any of Cb Cc Cd Ce

Teacher prompted discussion of experience of 5e.

NB – these questions can be used in other discussion exercises, or this exercise lengthened.

Did applying the principles feel 'creative'?

Did you feel you were being more creative when frequently switching between imagery forms, or when developing more multimodal imagery over a longer timeframe?

How did choosing the principles yourself change your movement compared to following the cues?

What led you to recognise the need to apply a principle to change your imagery?

Do you think someone watching you move could tell if you were following cues or applying principles?

Did you feel you were more creative when you were externally focused, or focusing internally?

Did you notice your attention shifting between internal & external focus? Would an audience have been able to detect this? Does that matter?

Is it more important to create for yourself, or to create for an audience?

Is creative performance different for the dancer than for the audience? In what ways?

Take a moment now to record your experiences and notes in your notebooks.
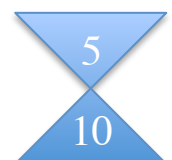
Maximising creativity skills

Objective: Consolidate overall message about imagination

Requires: Ia Ka

Over the series of exercises that you have worked through, you have been introduced to some psychological ideas about the way our imagination works.

You have learnt that the mind represents information in several different ways, and that these representations influence each other.

In particular, we have talked about three mental loops which create visual imagery, sound imagery, and schematic imagery.

Because these loops intersect through specific ideas, each form of imagery leads to associated ideas in the other loops to give our imagination a fully multimodal content.

Within each form of representation, we have looked at the way information is structured, and learnt how to focus our mind upon parts within the structure.

You have reflected upon creativity, and the hard work that is needed to come up with novel ideas, and how hard it is to reject conventional ideas as well as the not-useful novel ideas.

You have learnt twelve principles that you can use to control and direct changes in your imagery, so that when you need to create novel ideas, you have strategies that you can use.

You probably realise that they can also be applied beyond dance, to enhance creativity in other areas.

Dance, though is special, because of the close relationship between the body and the mind. That is why we – as psychologists - have chosen to work in this challenging area – to use the experience and knowledge of dancers to help us reason about the way that the mind and body interact.

The Principles and Loops that we have described to you are based upon a psychological theory called Interacting Cognitive Subsystems, or ICS, and we have produced a booklet that explains the principles behind the model, if you would like to know more.

You do not need to know about the ICS theory to use this knowledge, though. It is enough to be aware of the three loops, to know that you can change part of one representation and so change imagery in other representations.

This knowledge gives you the ability to take hold of your thoughts and shake them up when you need to generate novel ideas.

Then it is up to you to choose the useful idea, and to develop it, using your expertise as a dancer.

In this final session, we want to maximise your imagery skills to create novel movement material through a series of improvisations.
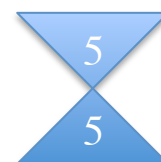
Objective: knowledge about benefits of understanding imagery

Requires: Sc

This repeats a task from the start of the materials to allow introspection into changes in the use of imagery.

> We are going to repeat a task that you did at the start of these exercises, where you moved your attention around your imagination.
>
> We listened to a sound in the room, and then you remembered that sound and imagined it, focussing upon its parts.

[you can of course prompt them about what that sound was]

> Start now by remembering that sound. Choose a part of that sound.
>
> Go into the detail of that sound – find a part of the sound and develop it.
>
> Continue to develop your imagery of the sound, being aware of the visual and schematic images that come into play as you do so.

Reflection

> Were you consciously using any principles to develop the imagery?
>
> Were you more aware of the influence your sound imagery had upon the visual, factual and schematic imagery?
>
> Did these other forms of imagery influence the sound image?
>
> Do you believe that being consciously aware of your movement choices supports more creative work than working 'intuitively'?
>
> Or do you find that thinking about your movement in this way is limiting you?
>
> Do you think that your awareness of imagery has changed since you first did this task? If so, how?
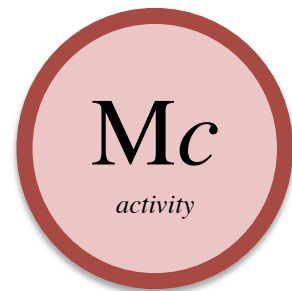>
> How easy would it be to integrate these principles while receiving direction from a choreographer?
>
> What sorts of opportunities or limitations might there be for you as a dancer?
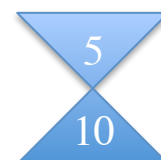
Cues for improvisation

Objective: formalise strategic cueing of imagery

Requires: Vc Ve Sd Ka Kb Kd

Form students into pairs.

Each student **suggests a landscape (a place/setting)** that they are happy to discuss and work with. It could be something vibrant, or recent, or historic… anything they feel that they have sufficient knowledge about to work with.

Taking the other student's landscape, each student writes **three improvisation prompts**, combining **visual, sound and schematic prompts with three different principles**.

e.g. the landscape 'a Moroccan bazaar' might produce prompts:

Sound/Exemplify: 'listen to the sound you can hear; focus on part of that sound'

Visual/Superimpose: 'take something from the scene you can see and bring it here into this room'

Schematic/Scale; 'what are your feelings in this place? magnify that feeling; let it take over your whole body'

Write each cue onto flashcard.

When done, **exchange cards and discuss whether or not they could be applied**.

Can you identify a way that you would respond to each card?

Group discussion:

Did you find it easy to come up with combinations of loop and principle?

Were any combinations difficult?

Was your memory or experience rich enough to provide material for the prompts?

Do these prompts differ to ways that you might normally approach improvisation?

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Responding to prompts

Objective: applying principles in practice
               noticing what is useful and what isn't

Requires: M*c*

Teacher led using prompts and experiences from Mc.

Working individually, each student takes the **flashcards that their partner produced in Mc** and lays them on the floor face down.

Each student begins with their own landscape from Mc,

Assign a starting point and begin moving.

On a prompt from the teacher, **turn over one card at random** and follow the prompt.

Notice yourself how you feel about the prompt and movement.

Is the prompt working? Is your movement novel?

Continue until prompted to choose another card [allow ten to fifteen minutes per card]

Continue until all three prompts used.

Group Discussion

Each student nominates one of the prompts that they found particularly useful.

Teacher reviews them – are any principles recurring, or avoided?

Did feelings or intuition play the same role as usual in creating movement?
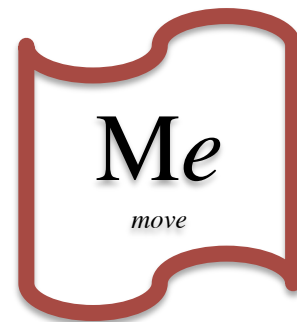
M*d*

move

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Group improvisation

Objective: responding together to prompts
             awareness of interaction of other's schemas with own

Requires: M*c*

Teacher led using prompts from Mc.

Working with others provides external input, especially for the schematic loop.

Form students into small groups of 2-4.
Give each group a landscape from M*c* and ask them to improvise together, reacting to each other.

After a few minutes, **read out a prompt**.
Students develop movement from own changed imagery in combination with others' movement.

Continue with new prompt, and so on.

Group discussion

How did this experience differ from the previous exercise [if M*d* used]?
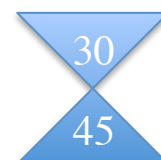How does working with other people affect your ideas?
What levels of representation were affected by the other person's movements?
Were their movements congruent with yours, or incongruent?
Which was more useful to you?
How could you use this in your individual work?

M*e*

move

30

45

Reflection on novelty

Objective: to consolidate overall learning

Requires: Md or Me

Teacher prompted discussion

What do you think is the most important thing that you will be taking away from these Principles?

Do you think that the Twelve Principles have given you anything new?

What similarities are there between the Principles and the way you usually create movement?

Do you find it hard to work with any of the three loops?

How much freedom do you feel as a dancer in response to task instructions?

Do you consider movement creation to be a task?

Where and how can you best use imagery in your work?

How useful might imagery be for differentiating yourself in your future career?

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