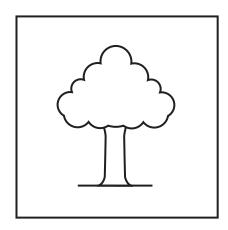


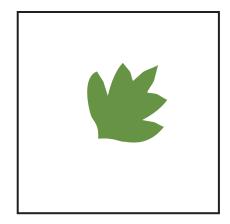
Communicating tactile story ideas to young visually impaired children

What do you think is a more meaningful representation of a tree for a young visually impaired child - a raised outline silhouette shape of the whole tree, or a single, touchable leaf?

We naturally identify the outline shape as being a representation for a 'tree', however this depiction would be challenging for a blind child to interpret.

The scaled down shape is based essentially on visual knowledge; it is only a schematic representation and actually has very little to do with a 'real' tree.





Blind individuals gain much of their experience and knowledge of the world around them through touch. Therefore, the **tactile** quality of a leaf, or a piece of bark, can provide a much more meaningful representation for a blind child, based on the experience of rustling leaves in the park, for example, or touching the rough bark of the tree. The previous example shows that, with a little extra consideration, books can be illustrated with **meaningful** 'tactile' representations for blind children, which enhance the text in much the same way as pictures do for sighted children. As within all books for children, illustrations not only provide a source of interest and entertainment, but also help with education and literacy.

Tactile picture books feature illustrations that can be explored and perceived purely through touch. Tactile elements allow blind children to **feel**, **stroke**, **pull**, **lift**, **shake**, **rattle** and **squeak** their way through the story. These features are also enjoyed by children with some sight, as well as children with other learning difficulties.

This booklet is designed to help you consider the best way in which to communicate ideas and stories through touch. Simple examples and illustrations are provided, which will offer some inspiration and ideas for you to expand upon.

A story can be brought to life with a variety of **interesting and contrasting textures**. Many things can be incorporated into tactile pictures; whatever best conveys the ideas in the story or text. **Interactive features** and elements that stimulate other senses, such as smell and sound, can also be used to enhance the story. Good contrast between colours is also beneficial for children with some sight. Some visually impaired children can also enjoy the sparkle from reflective materials.

Examples of materials that can be incorporated:

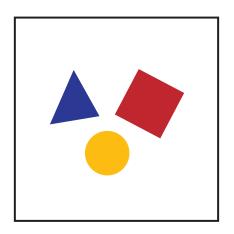
velvet, fur fabric, pvc, netting, laces, buttons, beads, artificial leather, quilting, sponges, rubber mats, carpet, clay, balsa and sanded wood, spoons, plastic lids, lolly-sticks, socks, hair bobbles, tinsel, dolls' house items, small cracker and joke-shop toys, squeakers, sound buttons, bells, artificial flowers and leaves, pom-poms, feathers (shop bought), braid...

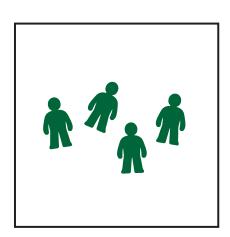
Note:

It is important not to feature too many elements within a page as this can lead to confusion. All elements must be securely attached and suitable for enthusiastic exploration (Removable objects can be fastened with velcro, or placed in pouches). Avoid using toxic glues and anything sharp.

Examples of materials also accompany some of the illustrations throughout this booklet.

As with all children's picture books, tactile pictures are suited to story lines that are **simple and easy to follow**. Stories incorporating rhyme and humour can be educational as well as being fun; many popular tactile books use step-by-step narration and strong recurring characters to help guide young readers through the book. As with the text, tactile pictures for children should be simple with not too much detail.



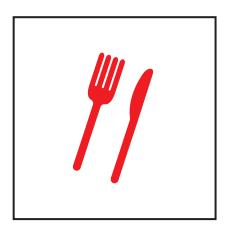




Young children's counting book

Pages feature tactile elements for counting - shapes, toys, fingers...

'Real-life' objects and textures provide an ideal basis for tactile pictures. Objects can be incorporated or attached directly onto the pages, or vacuum-formed into plastic. Raised vacuum-forms (or thermoforms) provide accurate 'touchable' copies of objects - you may have access to a vacuum-forming machine. A story accompanied by real objects will help the reader to engage with the text; simple stories based around everyday routines can help young children with literacy, and familiar references can provide a foundation for introducing ideas.

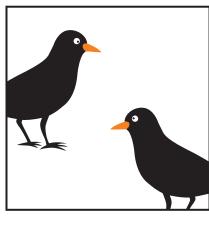


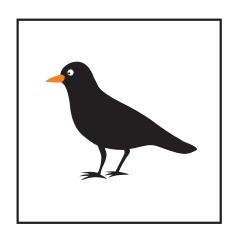
Simple tactile objects can be used to represent more difficult concepts. For example, a small ceramic tile or piece of towelling can represent the entire bathroom. A thermoform of a real knife and fork can represent a trip to a restaurant.

A raised version of a regular printed picture will often not make sense as a tactile picture. Images conveyed through print include variations in shading, subtle details and stylisation. Many of these details will be confusing in tactile form. Stylised and illusory representations, such as 'sketched' illustrations, thought bubbles and strokes indicating movement will be less obvious for visually impaired children to interpret.

Objects, people and animals are easier to decipher if shown in their entirety. Sometimes, however, it may be appropriate to choose one feature to represent the whole subject, such as a cat's head or piglet's curly tail.





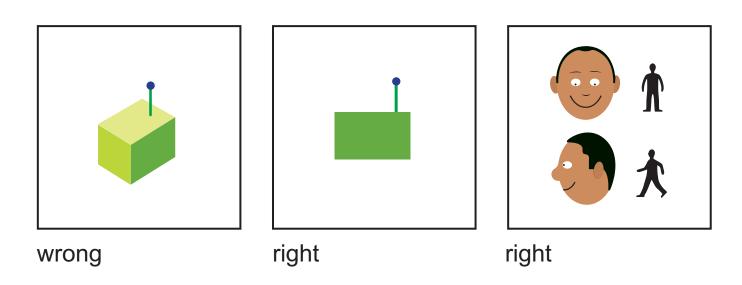


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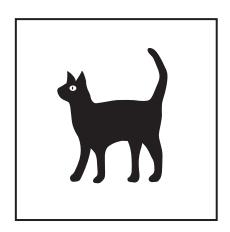
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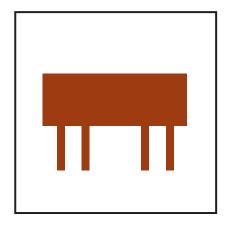
Objects and figures illustrated at an 'angle', for example using angles of perspective or foreshortening, will be challenging for a young visually impaired reader to interpret (a relief display of a three-dimensional object may seem like a muddle of lines and textures, and a figure turned at an angle may seem physically 'deformed' to a young blind reader). It is best to illustrate objects in full frontal view (as if they are facing you), on a flat plane. Figures, faces and animals are easier to identify in **full frontal view**, **or in profile** (side on).



Tip: When designing and making your illustration try feeling the page as you work on the image. It is beneficial to ask somebody to try and interpret the page blindfolded (or ask a visually impaired person) without having seen it in advance. This way you can get an impression as to how easy your image is to comprehend.

Representational shapes can be more successfully interpreted with a **solid infill and relevant textures**. For example, a fur texture can be cut into a sillhouette shape of a cat. This shape can be used to illustrate, as simply as possible, the features of a cat: four legs, paws, a tail, a head with whiskers and pointed ears. A simple, accurate representation can illustrate the key features of an object, which a blind child may have learnt through touch. A visually impaired child, through touch, may recognise that a table has four legs and a flat top. Therefore, a depiction with four 'touchable' legs and a top surface will make more sense than a 'side-on' depiction with only two visible legs.





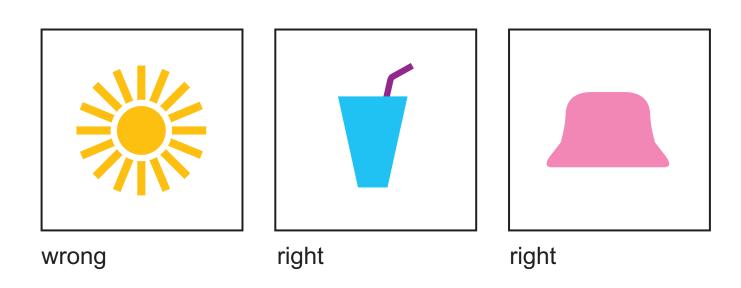
Cat
Fur - long-haired fabric, plastic eye or button

TableSmooth wooden strips or robust card

Thinking about processes which involve touch can help when narrating and illustrating your story. **Relevant tactile references** can be a substitute for well known 'visual' references.

For example: 'It was a hot, sunny day'.

A sun symbol with radiating lines will mean little to a blind child. Using a relevant reference can provide a solution: 'It was a hot, sunny day. "I need a nice cold drink!" said Amy'. A glass and straw depiction would thus provide a meaningful tactile illustration for the 'sunny day'.



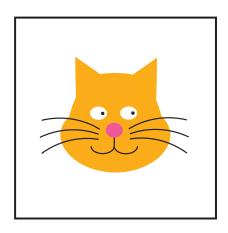
Glass and straw

Glass - shaped plastic or glossy card, Plastic straw

Sun hat

Attached small hat or sewn fabric shape

When thinking about story lines, characters and illustrations, consider a young blind child's experience of the world. Sighted children are naturally digesting information and learning through looking at the world around them. Many of the observations we make to easily distinguish between 'cat' and 'dog', 'bus' and 'truck', or 'zebra' and 'horse', for example, a blind child cannot. Emphasising particular elements or features can help identify the subject, such as a cat's whiskers or a zebra's stripes.





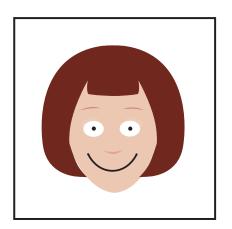
Cat

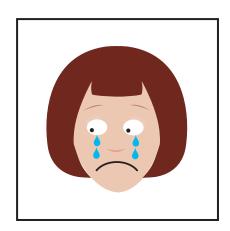
Fur - felt or longhaired fabric, whiskers - string or flexible plastic

Zebra

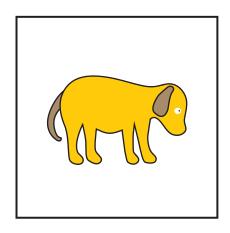
Stripes emphasised with contrasting texture or height button or plastic eye

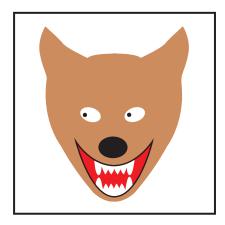
As with visual representations, the features of a face can be used to successfully convey emotion. Simplified features can depict the essence of an emotion, such as a large smile for happiness, tears for sadness and bared teeth for anger. Simple bodily gestures can also be used to show emotion, such as a lowered head for sadness. These will of course need to be explained to the child.





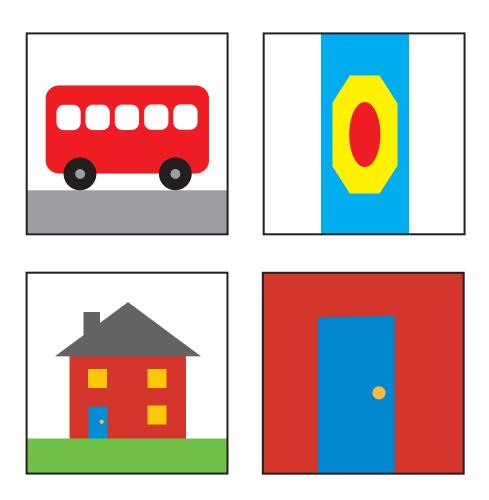
TearsShiny card or sequins





Wolf
Teeth - shaped plastic, beads or shiny card

Based on touch and experience, a blind child will recognise aspects of a journey or routine differently to a sighted child, who will more naturally recognise the visual aspects. Using the bus example, emphasising the seat and the bell push will **provide a relevant reference** based on the experience of being on a bus, opposed to a typical sighted representation such as a rectangular shape with circles to represent the wheels. A door with a handle can be a more meaningful reference for a 'house' than a scaled down representation of the building.

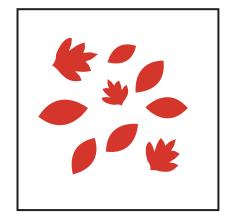


Door

Ice-lolly sticks for panels, or painted hardboard. Hinged or glued on one side for opening. Bead for the handle. **Overlapping shapes** and outlines on a page can **lead to confusion**, especially if little contrast is provided between the texture or height of each shape. Tracing the shape of one element may accidently lead onto the shape of another. It is beneficial to have all elements as clear, **separate shapes**, and a layout which relates easily to the story or narration.

For example: 'It was autumn with lots of leaves on the ground'. It would be difficult to distinguish the shape of each leaf within a pile of leaves. Providing space between the leaves would enable the reader to trace each individual shape.

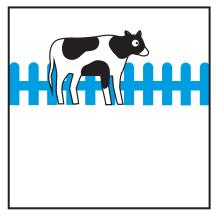


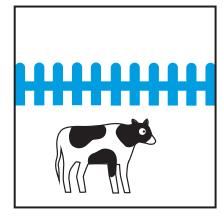


LeavesSynthetic leaves
Textured fabric

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right





Fence Ice-lolly sticks Plastic strips

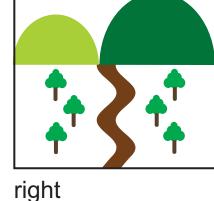
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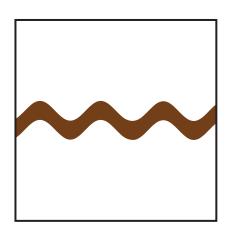
It is very difficult to understand depth in tactile pictures; many believe that it is virtually impossible for a blind child to read 3-D scenes and perspective in pictures through touch.

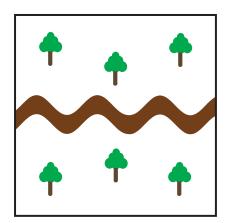
Simple 2-D viewpoints, with clear spacing between areas, are much easier to interpret. An alternative way of showing distance is to provide '**step-by-step**' narration within the story, which takes the reader 'through' the picture.

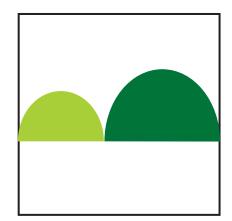
For example: 'It was a long, winding path, with trees all around. Ahead were two steep hills'.











Path

Sand paper or painted woodchip.

Tree

Artificial leaves and bark.

Summary

In tactile pictures for young children, aim to have...

- ✓ A variety of textures and touchable elements, which
 convey the essence of ideas, objects and
 characters. Elements which are securely attached and safe
 for enthusiastic exploration
- ✓ A simple and easy to follow story line
- ✓ Colourful, simple and 'complete' shapes
- ✓ Clear spacing and discrimination between elements
- ✓ Details which are easy to comprehend
- ✓ Meaningful references based on a blind child's experience
 of the world (elements conveyed through a touch perspective,
 opposed to vision)
- √ Simple 2-D viewpoints

Try to avoid...

- Too many textures and elements on a page
- Linear outlines of shapes
- Sharp elements and toxic glues
- Too much detail
- Representations based on visual knowledge
- Illusory, abstract and 'stylised' images
- Cluttered, overlapping shapes which are difficult to trace
- Confusing layout
- Images with perspective

Design and compilation

Neil Johnston, North Wales School of Art & Design, (2005) for Clearvision, 61 Princes Way, London SW19 6JB. www.clearvisionproject.org

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