

# Exercises

## Exercise #1

## Brainstorm uses of a Pencil

Five minutes:

Write down as many uses for a pencil as you can.



Please download the exercise in the assignments tab:

<https://ex-situ.lri.fr/teaching/fundamentals-of-situated-interaction#assignments>  
then upload it with **your name** and **exercise #1**.

## Exercise #2

## Situated Pencil Activities

Five minutes:

Think of four activities such as:  
gardening, cooking, dressing

For each, come up with at least  
five new uses for a pencil



Please download the exercise in the assignment

<https://ex-situ.lri.fr/teaching/fundamentals-of-situated-i>

then upload it with **your name** and **exercise #2**.

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# Reflection

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Was it easier the second time?

Did you find any uses *across* activities?

# Exercises



We define physical tools through use

What can we learn from physical tools ?

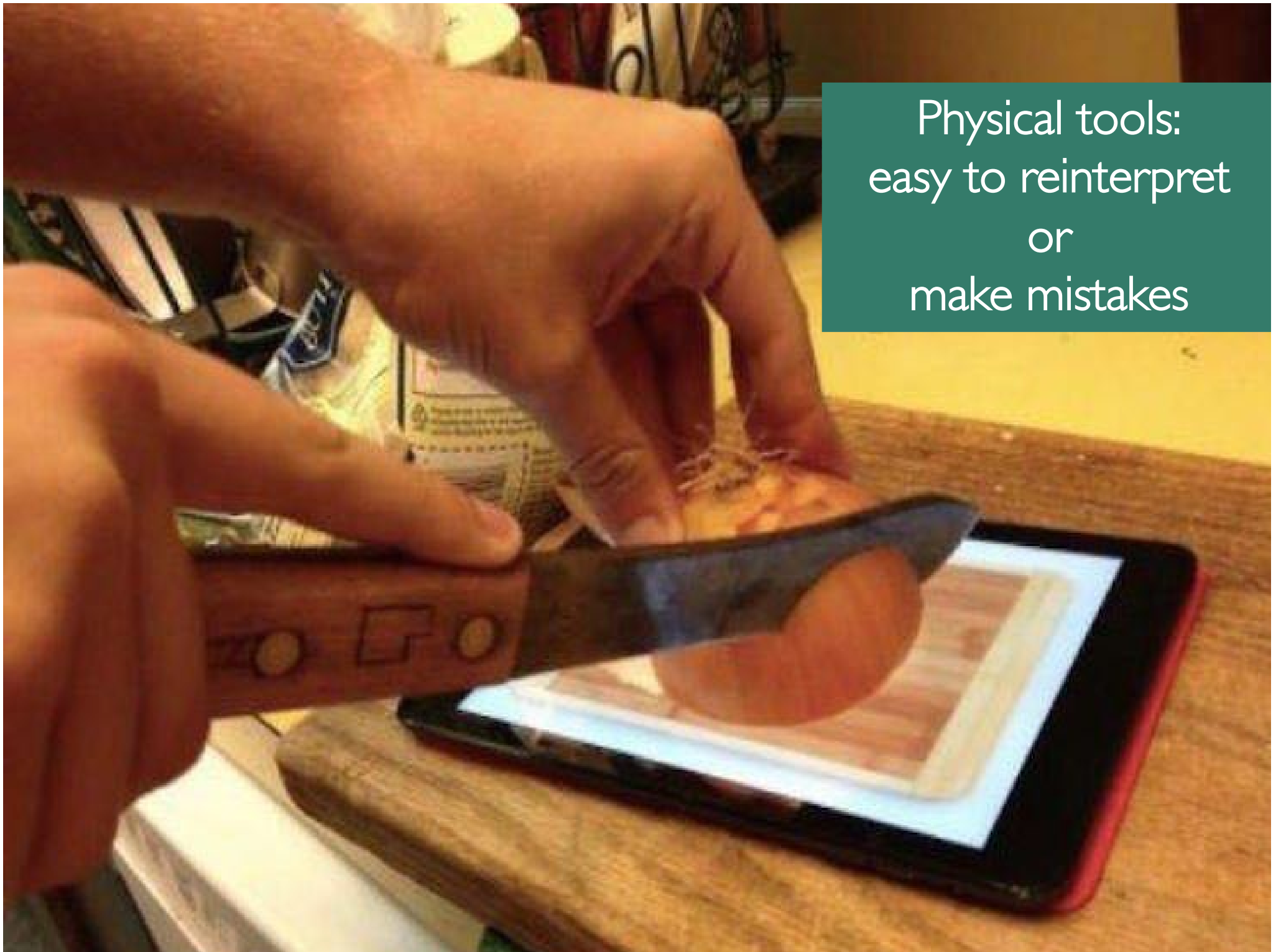


What can we learn from physical tools ?





Physical tools:  
easy to reinterpret  
or  
make mistakes



We can appropriate physical tools



# We can appropriate physical tools



# We can appropriate physical tools

why not software ?



## Exercise #3

## Graphical Objects as Tools

Create a drawing with properly aligned and distributed objects without using any 'official' tools:

No "align" command

No "distribute" command

No "rotate" command

Just:

create, copy, paste,

move, resize, and color


circles, rectangles and text

Download from the assignments tab:

<https://ex-situ.lri.fr/teaching/fundamentals-of-situated-interaction#assignments>

Upload with **your name** and **exercise #3**.



A close-up photograph of a drummer's hands and arms as they play a drum set. The drummer is wearing a dark, textured long-sleeved shirt. The drum set includes several brass cymbals and a red drum. The lighting is dramatic, highlighting the metallic surfaces of the cymbals and the drum head. A teal-colored text box is overlaid on the right side of the image.

Imagine needing the  
manufacturer's stick  
to hit a drum !

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We also choose our own physical tools

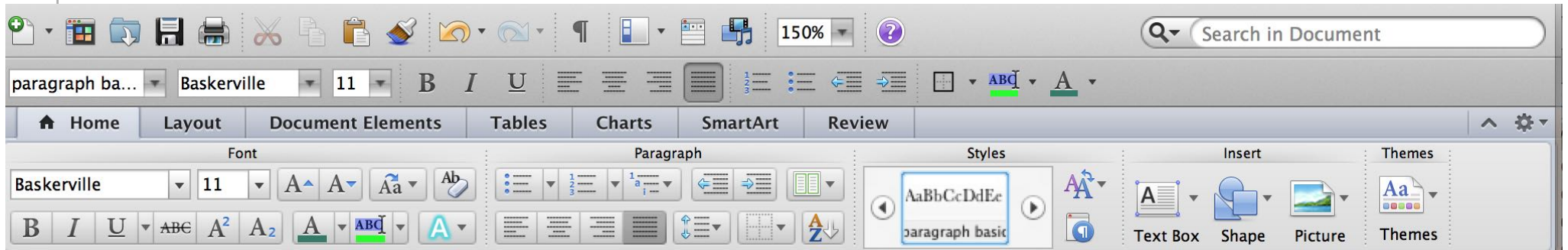
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Why do software applications choose for us ?



# Exercise #4 Finding Digital Tools

Choose a creative software application such as Microsoft Word



Take a screen shot of one toolbar.

Count how many discrete tools appear on the screen

Give each tool a name and a brief description of what it does,  
with pointers to the screenshot

Please download the exercise in the assignments tab:

<https://ex-situ.lri.fr/teaching/fundamentals-of-situated-interaction#assignments>

then upload it with **your name** and **exercise #4**.

↑  
**Shape:**  
choose a shape  
to insert



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## Next Week

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Send:

Exercises 1, 2, 3 and 4

Bring a printout of Exercise 3

Read:

Beaudouin-Lafon, M. (2000). Instrumental Interaction: an Interaction Model for Designing Post-WIMP User Interfaces. *Proc. ACM Human Factors in Computing Systems, CHI 2000*, The Hague (The Netherlands), CHI Letters 2(1):446-453, ACM Press.

Beaudouin-Lafon, M. & Mackay, W. (2000). Reification, Polymorphism and Reuse: Three Principles for Designing Visual Interfaces. *Proc. Advanced Visual Interfaces, AVI 2000*, Palermo (Italie), ACM Press, pp 102-109.