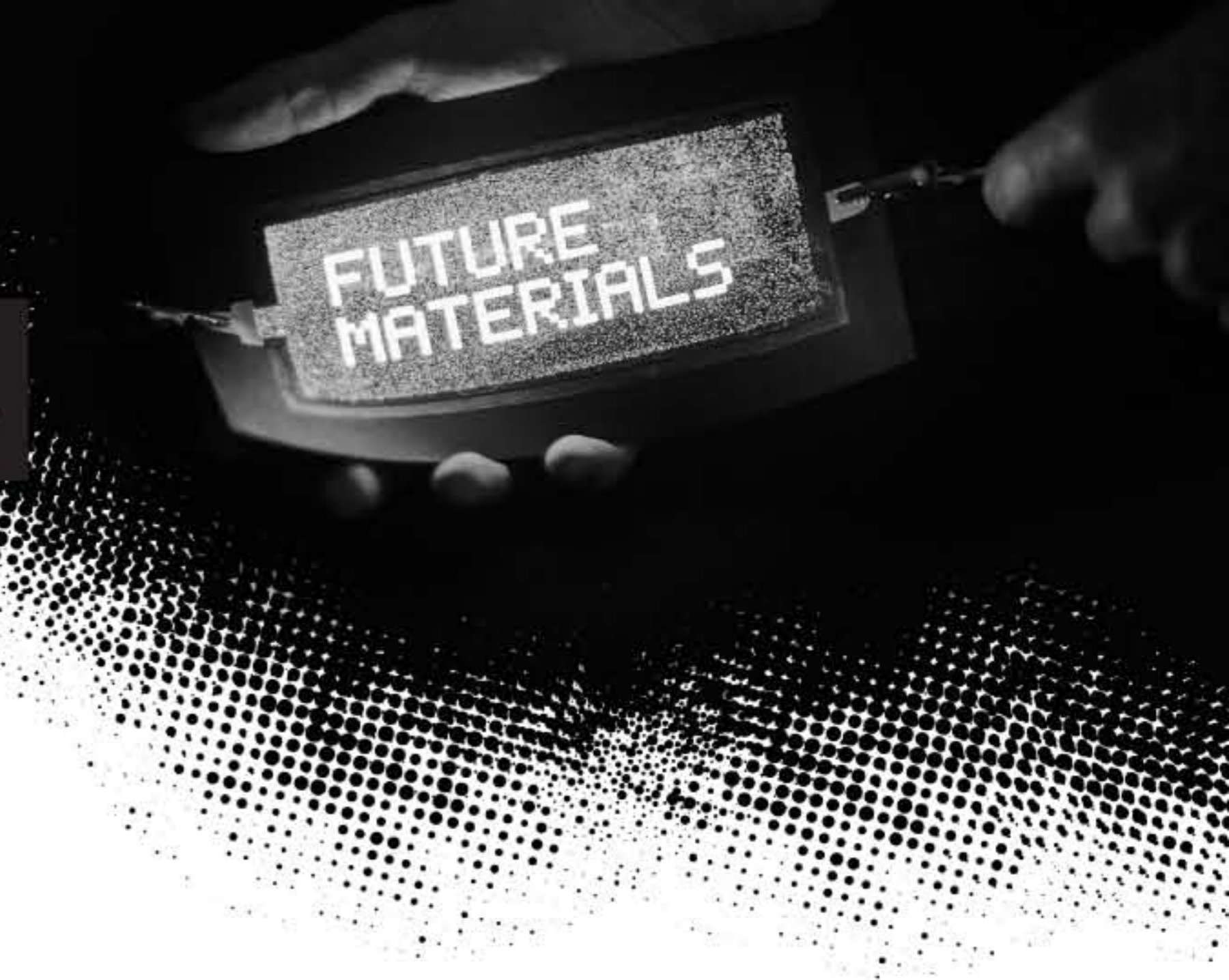


# LIGHT.TOUCH.MATTERS

## EXPLAINING RADICAL INNOVATIONS



I AM WORKING TOWARDS CREATING A SYSTEM THAT HELPS EXPLAIN RADICALLY INNOVATIVE MATERIALS AND STUDY HOW WE CAN IMPROVE THE DISSEMINATION OF THESE AMAZING NEW TECHNOLOGIES

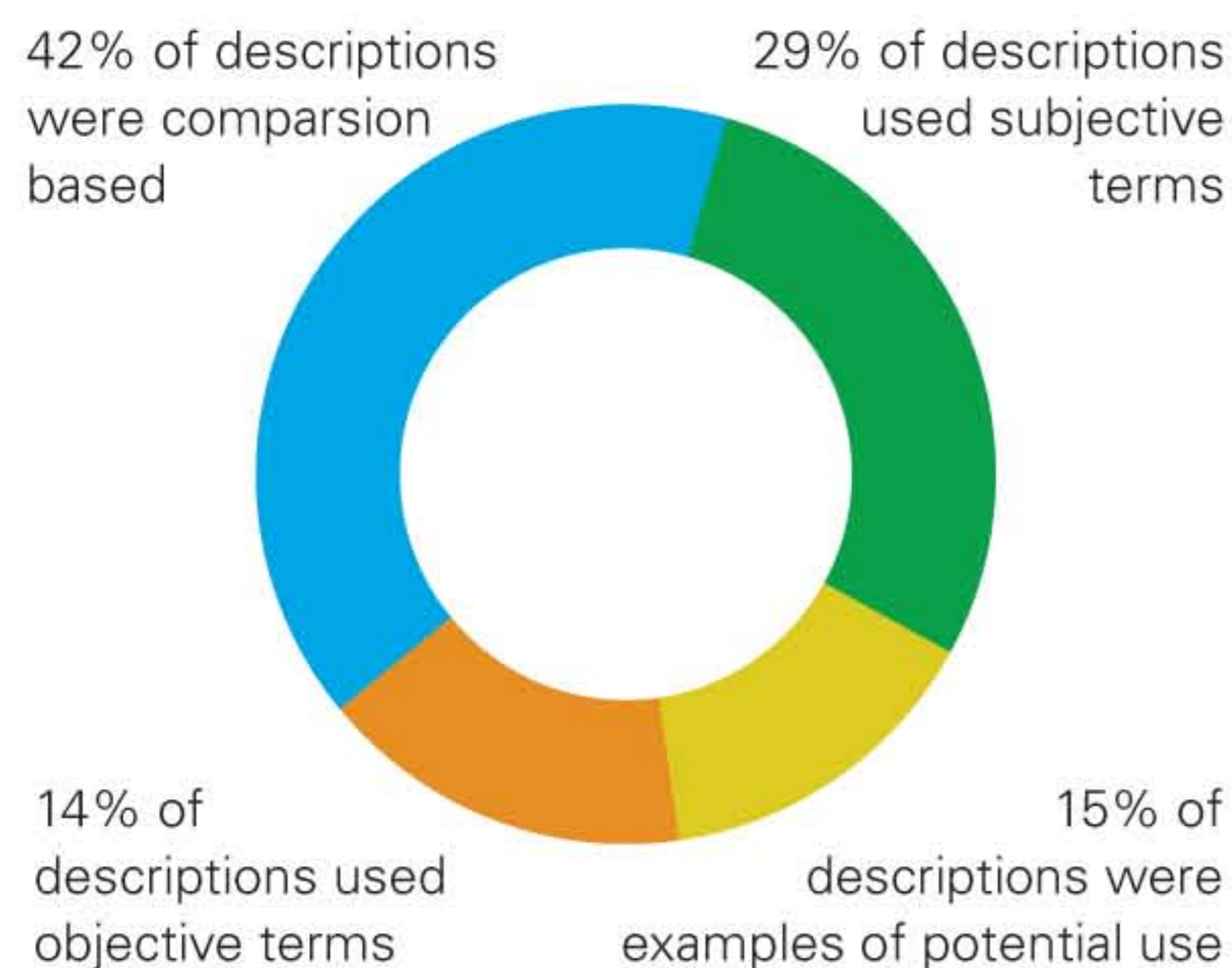
### MAKING THE RADICAL SIMPLE

More materials are being developed now than ever before but designers are locked out of using these materials as they are often described with specialist technical jargon which hides the design potential. These innovations are often underused or sit on a shelf for years. Without better explanations we are losing opportunities to use amazing innovations which can completely change what is possible with design, adding new functions, manufacturing options or changing a products life cycle

My research focuses on creating a repeatable method to explain these radical innovations, trying to get across the potential use and limitations of the material by focusing on the details designers want to know. I focus on how to accomplish this in two ways, the online explanation and real world workshops. The goal is to empower designers to use these new materials in future designs creating innovative products that would not be possible with other materials.

### DESIGN TESTING

Testing these theories with workshops has shown that the most used tool for communicating about new innovations is comparison. This under utilised tool is proving to be the best way to explain complex material properties.



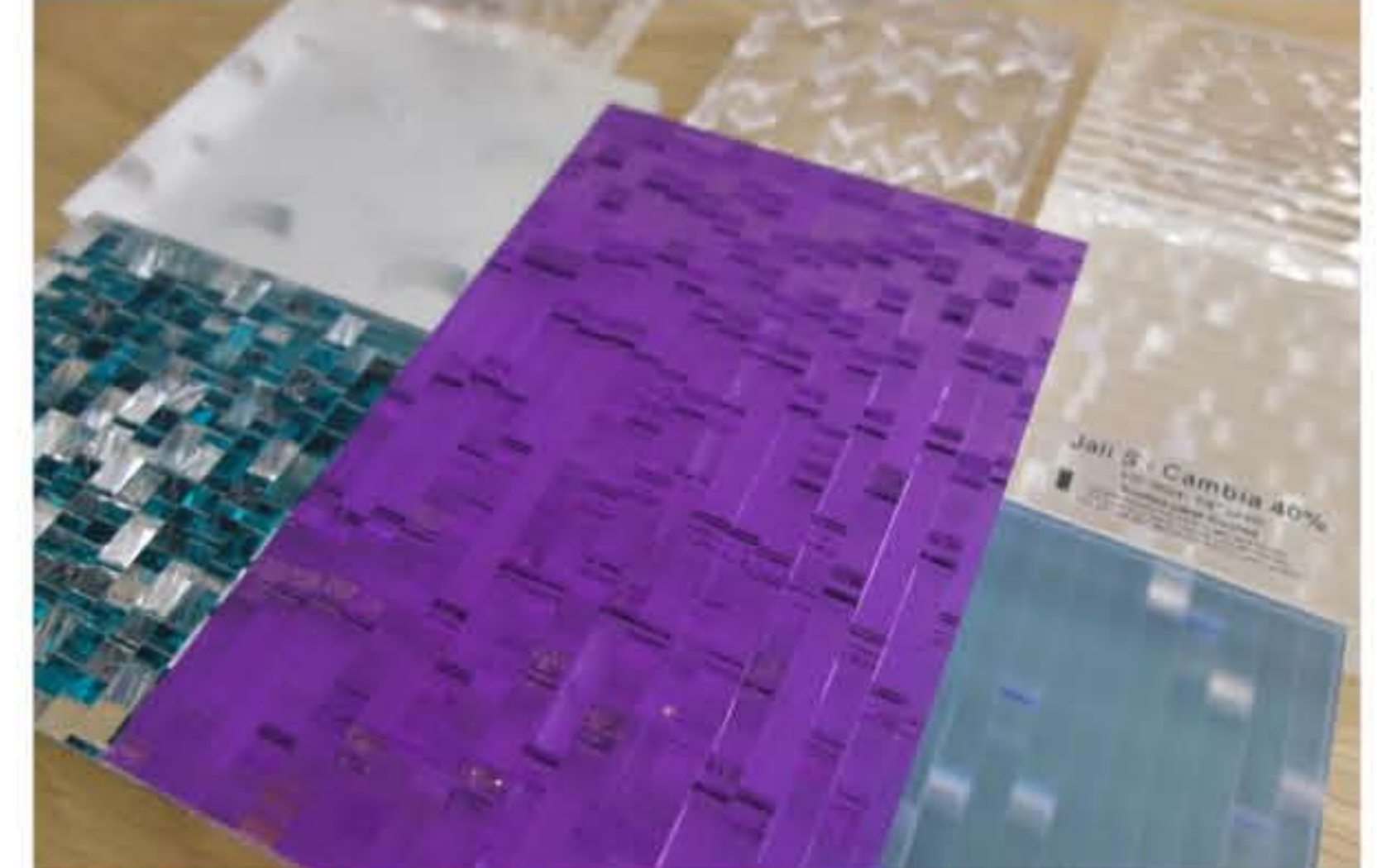
Workshops completed with UCL and Material Connexion to introduce Light Touch Matters and test concepts.

### WE CAN USE COMPARISON TO APPLY PEOPLE'S UNDERSTANDING OF EXISTING SYSTEMS AND MATERIALS TO RADICALLY NEW CONCEPTS

### USING COMPARISON

The main outcome of the testing has led to an in depth study of how to use comparison to create effective explanations. This involves some difficult challenges.

- What do you compare to? Not everyone has the same basic knowledge. Saying a material is as strong as steel means nothing if the listener has no appreciation of steel's strength.
- Is the comparison singular or mixed? Can the property be compared to one item or does it need to be compared to a mixture of existing concepts?
- What do we need to explain to ensure the explanation is useful? There is on going research to establish exactly what information designers need to have to use materials effectively.



Some of Brunel Material libraries innovative material samples.

EXPLAINING RADICAL INNOVATIONS  
USE OF DIGITAL MEDIA TO EXPLAIN RADICALLY INNOVATIVE MATERIALS TO DESIGNERS

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the product is the interface

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