

Beanoves demonstration manual

Introduction

Beamer named **overlay** specifications

- ▶ This rich presentation is made with Beamer
- ▶ Visual effects will appear only on supporting viewers (like Acrobat Reader)
- ▶ 3 parts:
 1. an example with great photos of animals.
 2. How to declare named overlay specifications with \Beanoves,
 3. How to use ?(...) queries in overlay specifications.
- ▶ Some basic knowledge of standard beamer overlay specifications is required.

Beanoves demonstration manual

Beamer facts

Beamer uses overlay specification aware commands to associate material to slides. The command

```
\only<2-4>{TEXT}
```

will display “TEXT” on slides 2, 3, and 4 only.

Using explicit slide numbers is sometimes difficult, incremental specifications like

```
\item<+>{TEXT}  
\item<+(-1)--+>{TEXT}
```

may help in linear situations, but this does not fit to next simple example, to which suit **named overlay specifications**.

Beanoves example about animals: Simple items

Slide 1

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

Beanoves example about animals: Simple items

Slide 2

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

Let us add some dynamism and uncover items one by one

Beanoves example: Uncovered items

Slide 1

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

Beanoves example: Uncovered items

Slide 2

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

Beanoves example: Uncovered items

Slide 3

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

Beanoves example: Uncovered items

Slide 4

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

Beanoves example: Uncovered items

Slide 5

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

We jumped directly to the last slide...

Beanoves example: Uncovered items

Slide 6

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

```
\begin{itemize}
\item Air
\begin{itemize}
\item
\only<-+>{\transparent{0.3}}
Chameleo
\item
\only<-+>{\transparent{0.3}}
Gannet
\end{itemize}
\item
\only<-+>{\transparent{0.3}}
Water
...
\end{itemize}
```

... and the source code reads:

Beanoves example: Uncovered items

Slide 7

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

```
\begin{itemize}
\item Air
\begin{itemize}
\item
\only<-->{\transparent{0.3}}
Chameleo
\item
\only<-->{\transparent{0.3}}
Gannet
\end{itemize}
\item
\only<-->{\transparent{0.3}}
Water
```



Notice the very handy incremental overlay specifications
in `\only<-->{...}`.

Beanoves example: Uncovered items

Slide 8

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

```
\begin{itemize}
\item Air
\begin{itemize}
\item
\only<-->{\transparent{0.3}}
Chameleo
\item
\only<-->{\transparent{0.3}}
Gannet
\end{itemize}
\item
\only<-->{\transparent{0.3}}
Water

```



Notice the very handy incremental overlay specifications
in `\only<-->{...}`.

Beanoves example: Uncovered items

Slide 9

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

```
\begin{itemize}
\item Air
\begin{itemize}
\item
\only<-->{\transparent{0.3}}
Chameleo
\item
\only<-->{\transparent{0.3}}
Gannet
\end{itemize}
\item
\only<-->{\transparent{0.3}}
Water

```

-  Notice the very handy incremental overlay specifications in `\only<-->{...}`.
-  Unfortunately, they won't help when different layers are involved.

Beanoves example: Uncovered items

Slide 10

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

```
\begin{itemize}
\item Air
\begin{itemize}
\item
\only<--+>\transparent{0.3} Chameleo
\item
\only<--+>\transparent{0.3} Gannet
\end{itemize}
\item
\only<--+>\transparent{0.3}

```

Beanoves example: Uncovered items

Slide 11

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

```
\begin{itemize}
\item Air
\begin{itemize}
\item
\only<--+>\transparent{0.3} Chameleo
\item
\only<--+>\transparent{0.3} Gannet
\end{itemize}
\item
\only<--+>\transparent{0.3}

```

Beanoves example: Uncovered items

Slide 12

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

```
\begin{itemize}
\item Air
\begin{itemize}
\item
\only<--+>\transparent{0.3} Chameleo
\item
\only<--+>\transparent{0.3} Gannet
\end{itemize}
\item
\only<--+>\transparent{0.3}

```

Beanoves example: Uncovered items

Slide 13

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

```
\begin{itemize}
\item Air
\begin{itemize}
\item
\only<-->{\transparent{0.3}}
Chameleo
\item
\only<-->{\transparent{0.3}}
Gannet
\end{itemize}
\item
\only<-->{\transparent{0.3}}
Water
...
\end{itemize}
```

Beanoves example: Uncovered items

Chronology



We had 7 slides

Beanoves example: Uncovered items

Chronology

Slide: 1 2 3 4 5 6 7 →



We had 7 slides

Beanoves example: Uncovered items

Chronology

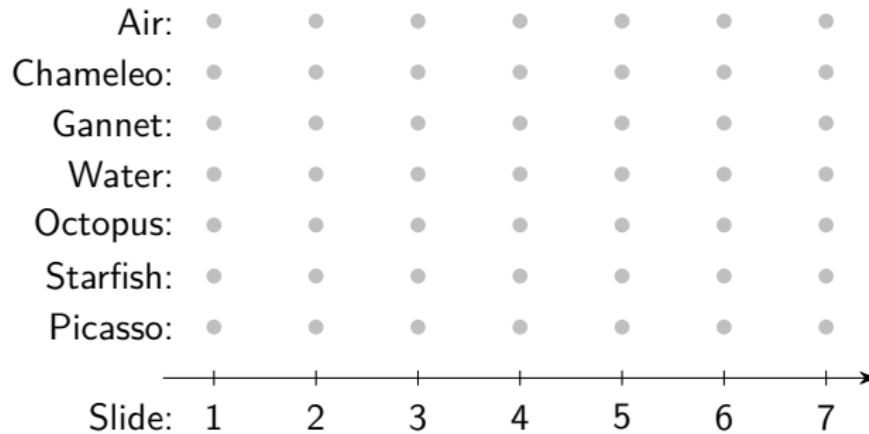
Slide: 1 2 3 4 5 6 7 →



We had 7 slides for 7 texts

Beanoves example: Uncovered items

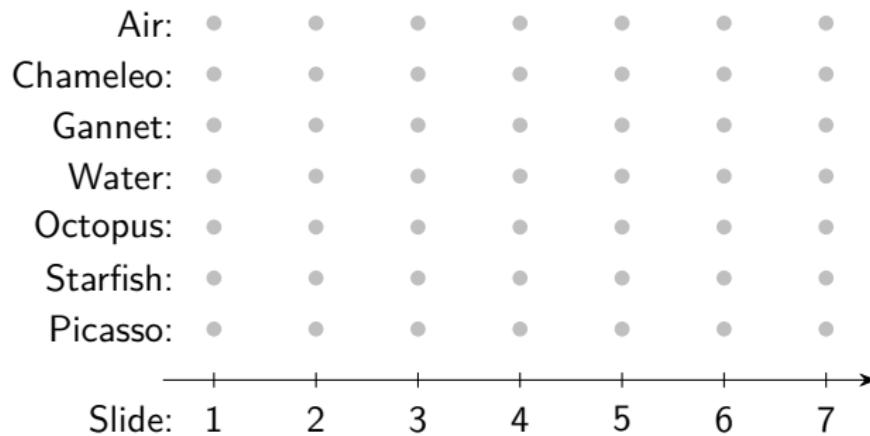
Chronology



We had 7 slides for 7 texts

Beanoves example: Uncovered items

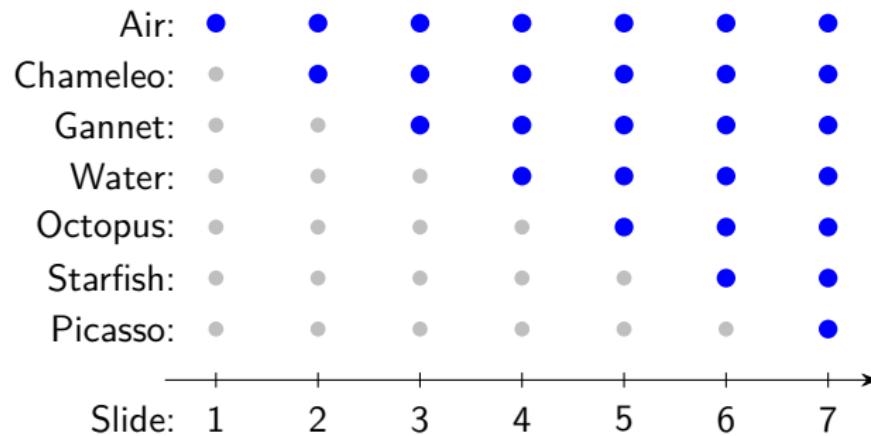
Chronology



We had 7 slides for 7 texts
Blue dots for uncovered text

Beanoves example: Uncovered items

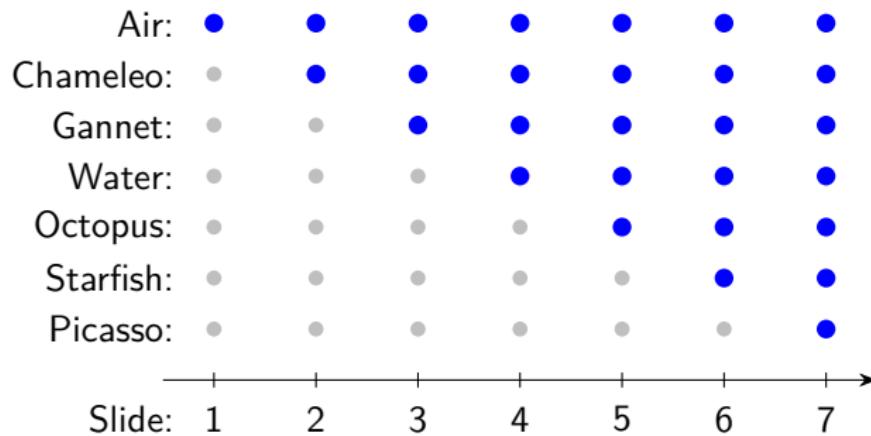
Chronology



We had 7 slides for 7 texts
Blue dots for uncovered text

Beanoves example: Uncovered items

Chronology



We had 7 slides for 7 texts



Blue dots for uncovered text



Very regular behavior

Beanoves example: Uncovered items + images

Slide 1

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

Beanoves example: Uncovered items + images

Slide 2

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish



Beanoves example: Uncovered items + images

Slide 3

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish



Beanoves example: Uncovered items + images

Slide 4

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish



Notice how the chameleon image is transparent

Beanoves example: Uncovered items + images

Slide 5

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

Beanoves example: Uncovered items + images

Slide 6

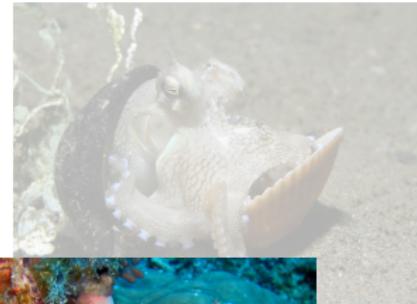
- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish



Beanoves example: Uncovered items + images

Slide 7

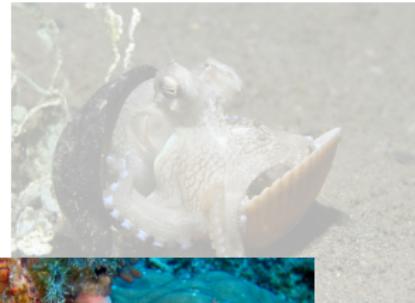
- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish



Beanoves example: Uncovered items + images

Slide 8

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish

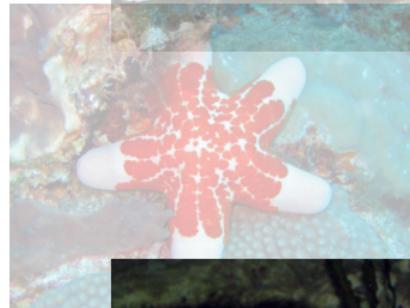


Overlap allows for larger images

Beanoves example: Uncovered items + images

Slide 9

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish



Beanoves example: Uncovered items + images

Slide 10

- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish



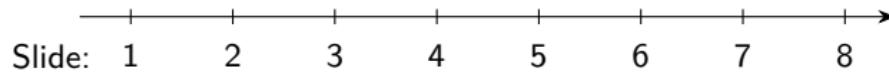
Beanoves example: Uncovered items + images

Chronology

- We had 8 slides

Beanoves example: Uncovered items + images

Chronology



- We had 8 slides

Beanoves example: Uncovered items + images

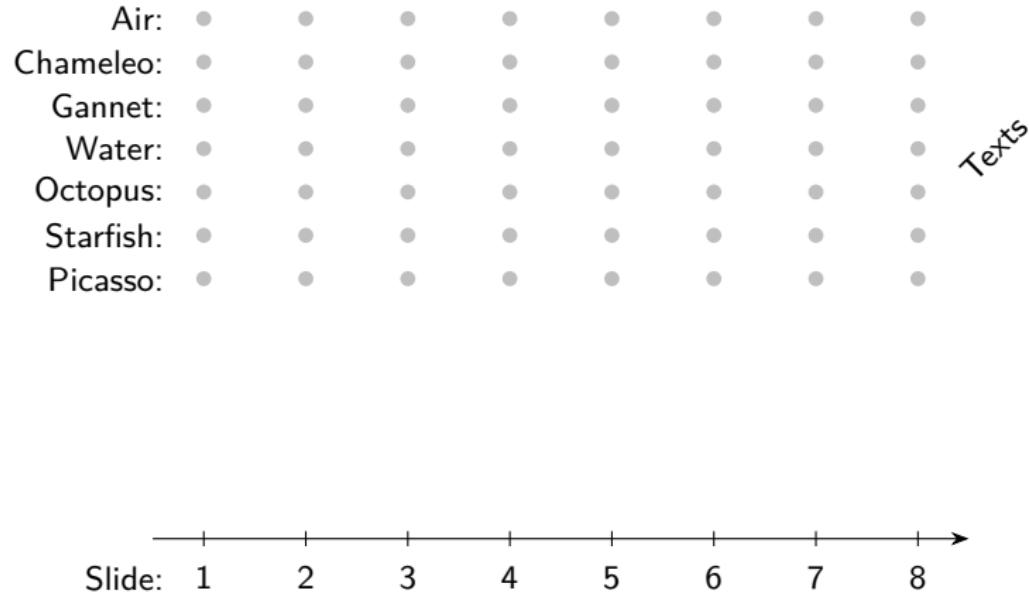
Chronology

Slide: 1 2 3 4 5 6 7 8

- We had 8 slides for 7 texts

Beanoves example: Uncovered items + images

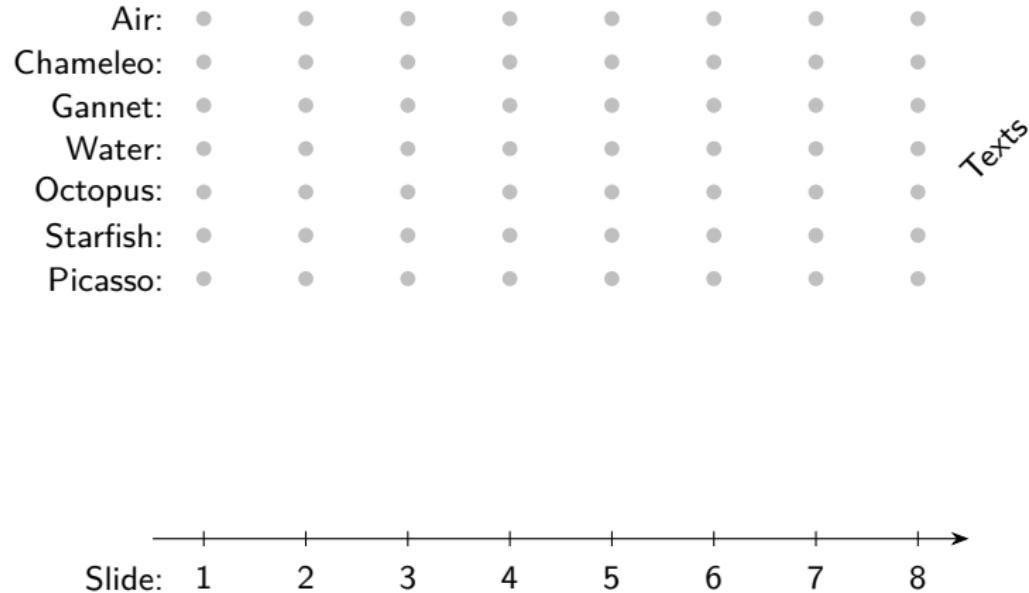
Chronology



- We had 8 slides for 7 texts

Beanoves example: Uncovered items + images

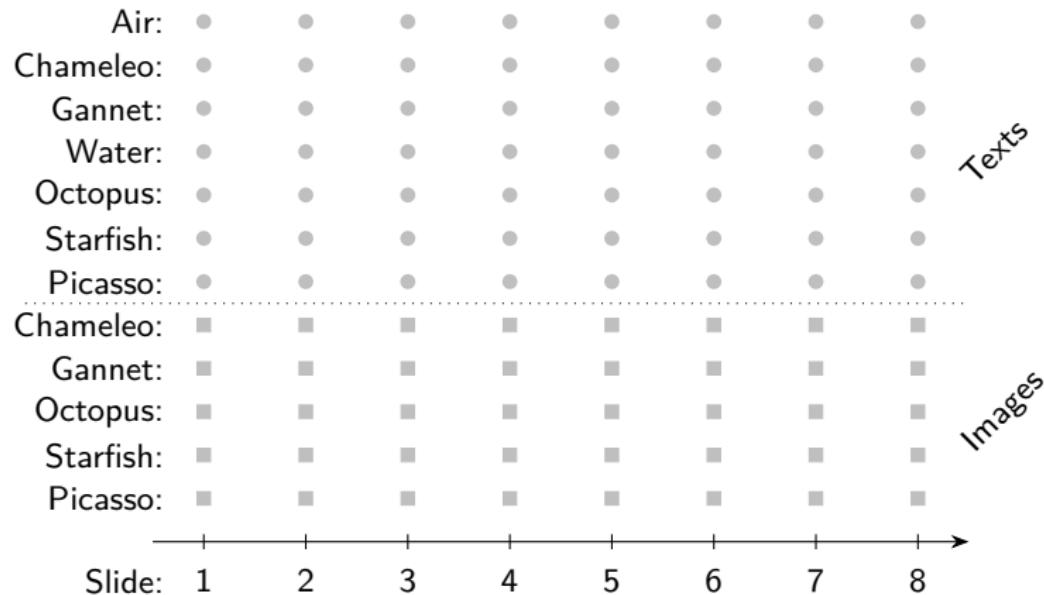
Chronology



- We had 8 slides for 7 texts and 5 images

Beanoves example: Uncovered items + images

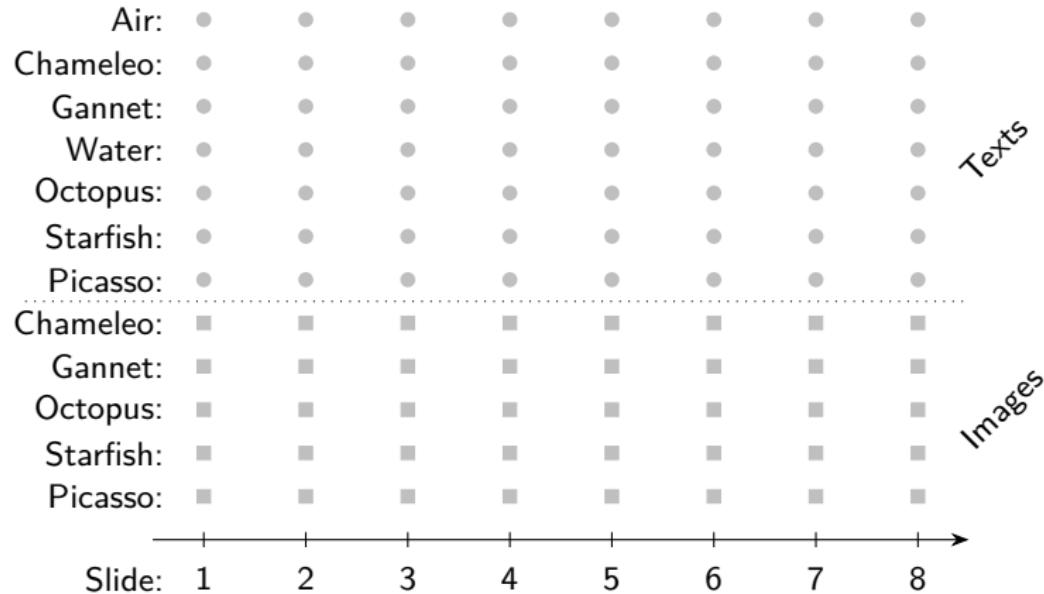
Chronology



- We had 8 slides for 7 texts and 5 images

Beanoves example: Uncovered items + images

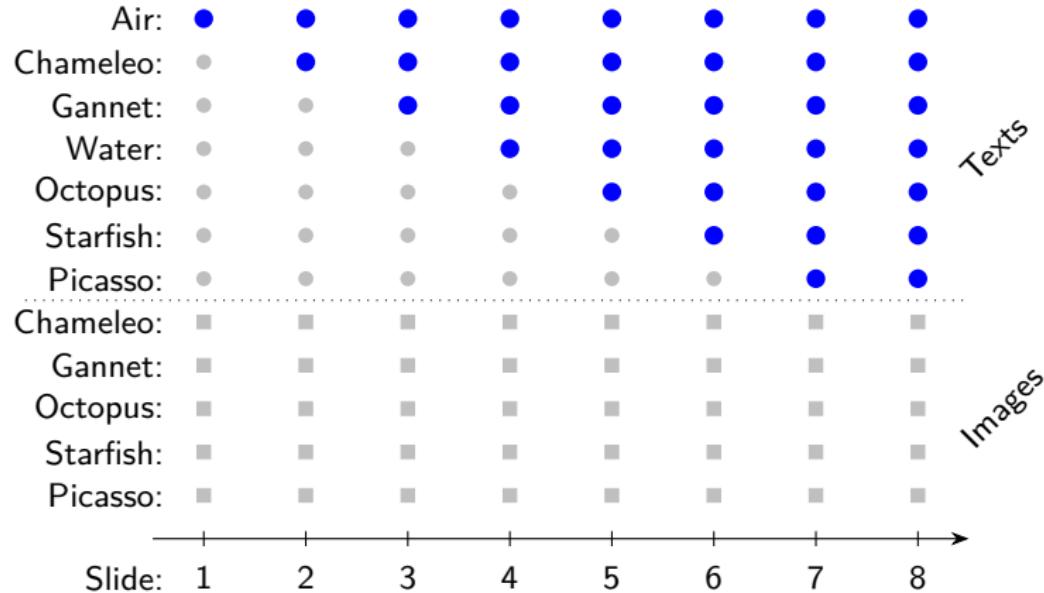
Chronology



- Blue dots for uncovered text

Beanoves example: Uncovered items + images

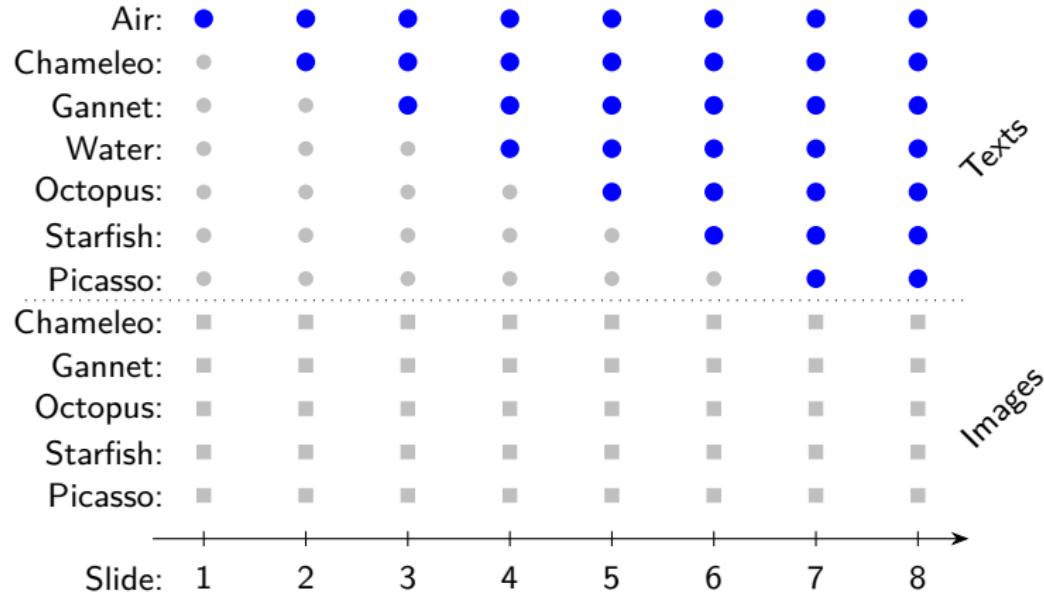
Chronology



- Blue dots for uncovered text

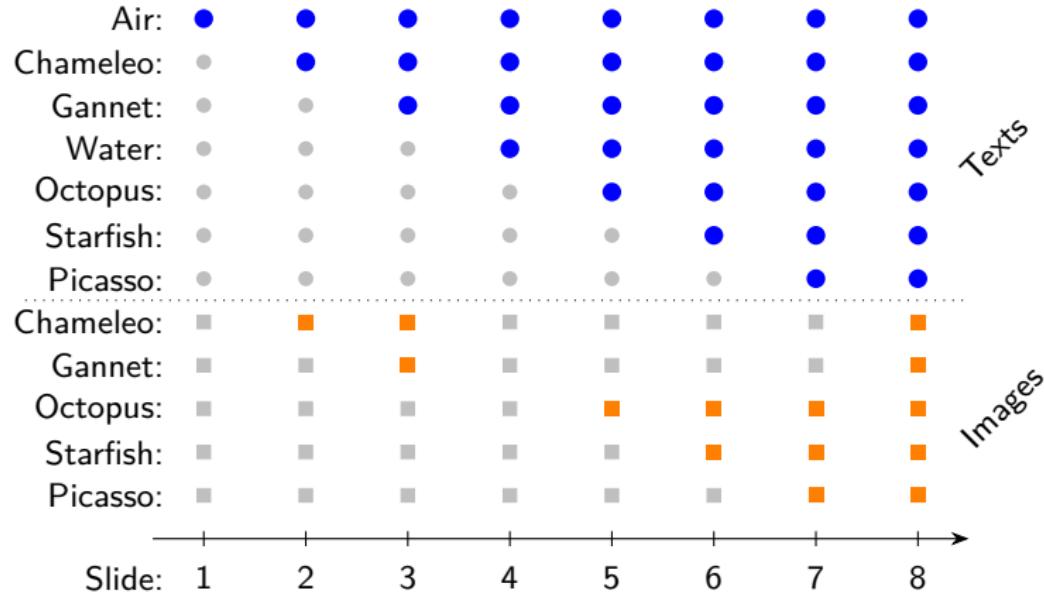
Beanoves example: Uncovered items + images

Chronology



Beanoves example: Uncovered items + images

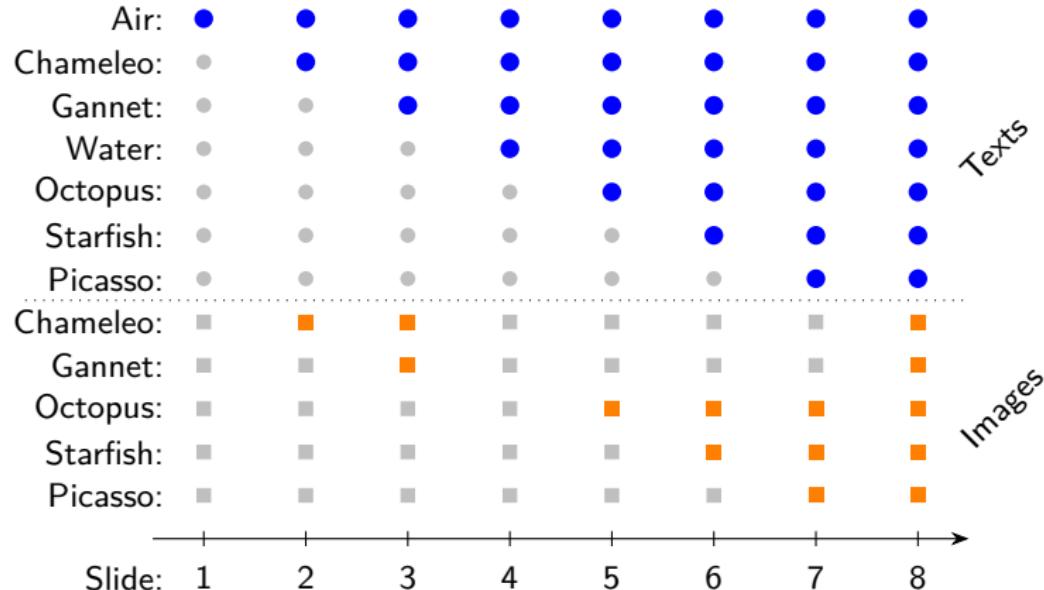
Chronology



- orange squares for uncovered images

Beanoves example: Uncovered items + images

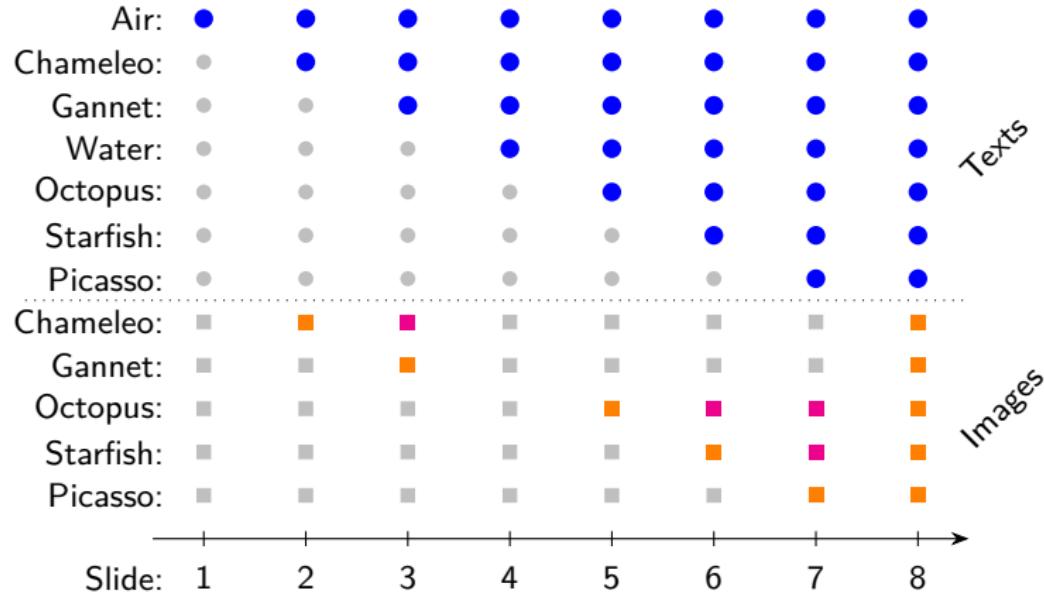
Chronology



- magenta squares for uncovered transparent images

Beanoves example: Uncovered items + images

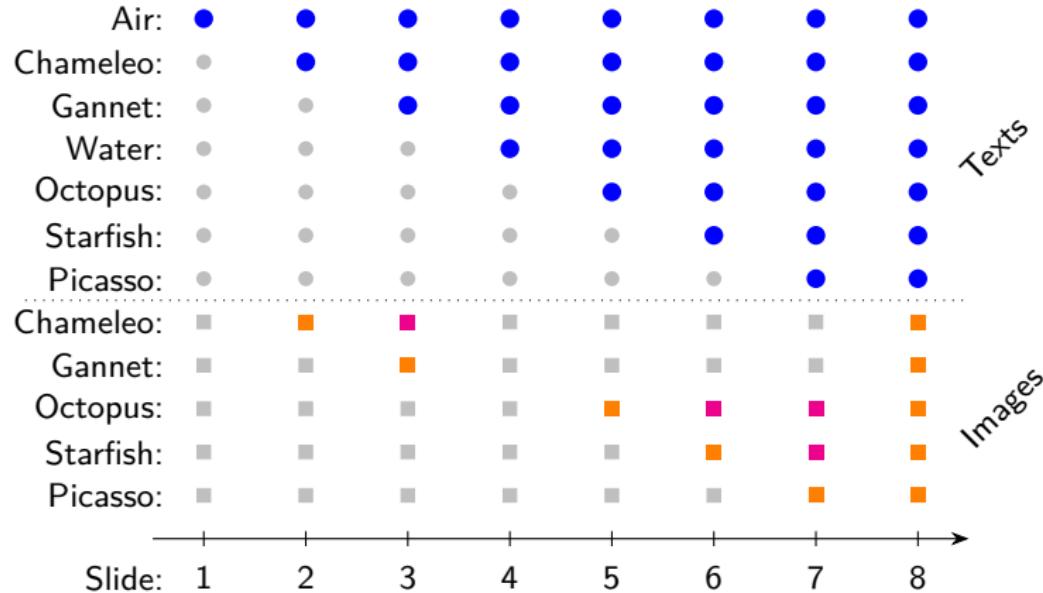
Chronology



- magenta squares for uncovered transparent images

Beanoves example: Uncovered items + images

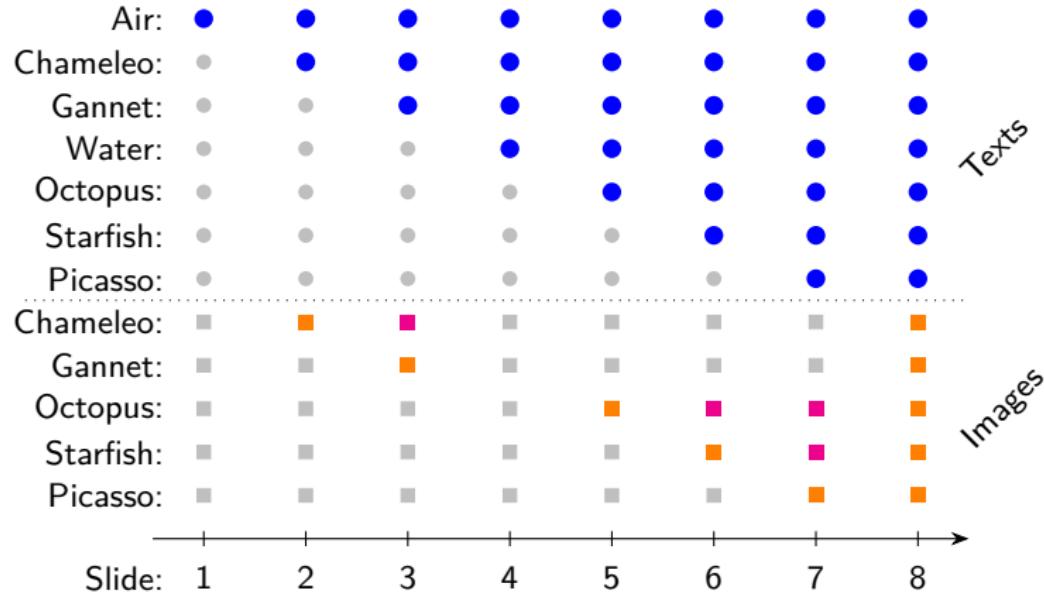
Chronology



Let us organize all this

Beanoves example: Uncovered items + images

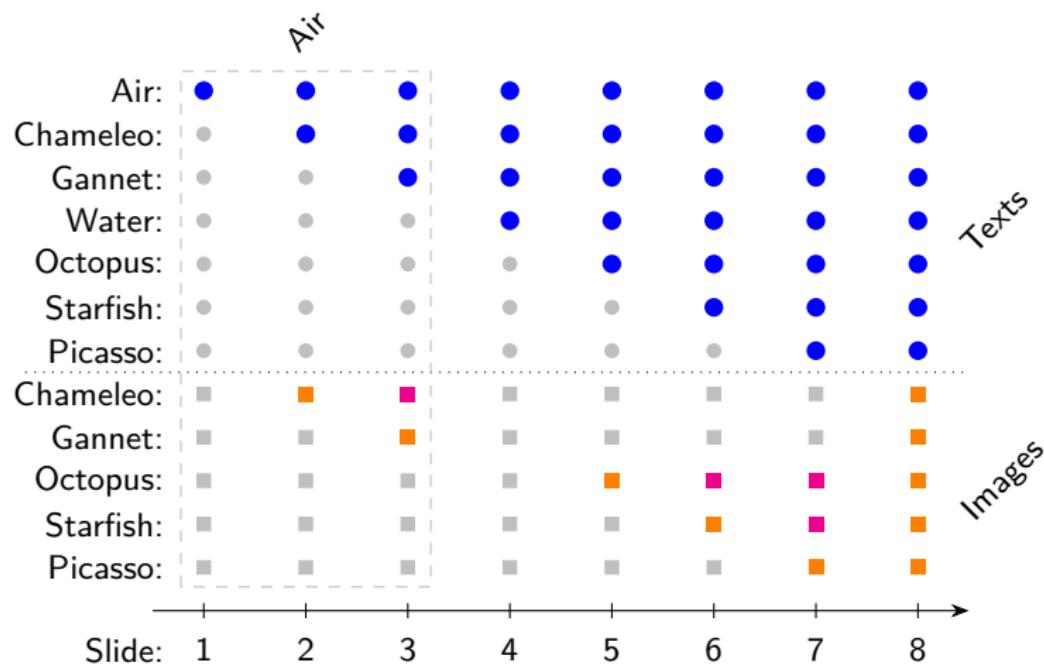
Chronology



- 3 slides for the Air, 4 for the Water, 1 to summarize

Beanoves example: Uncovered items + images

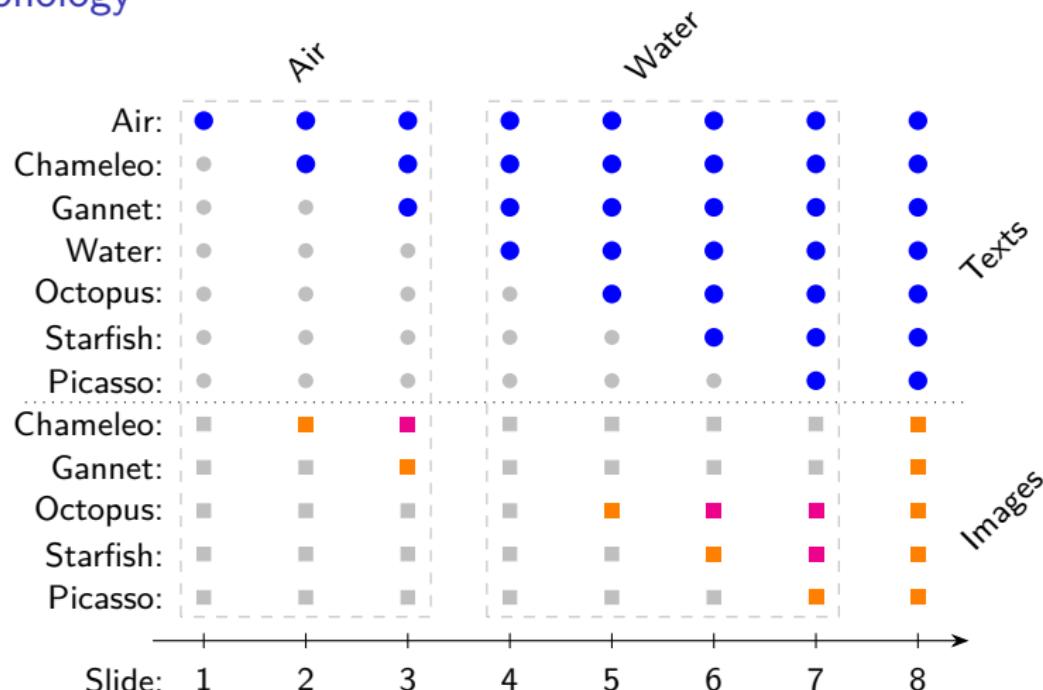
Chronology



- 3 slides for the Air, 4 for the Water, 1 to summarize

Beanoves example: Uncovered items + images

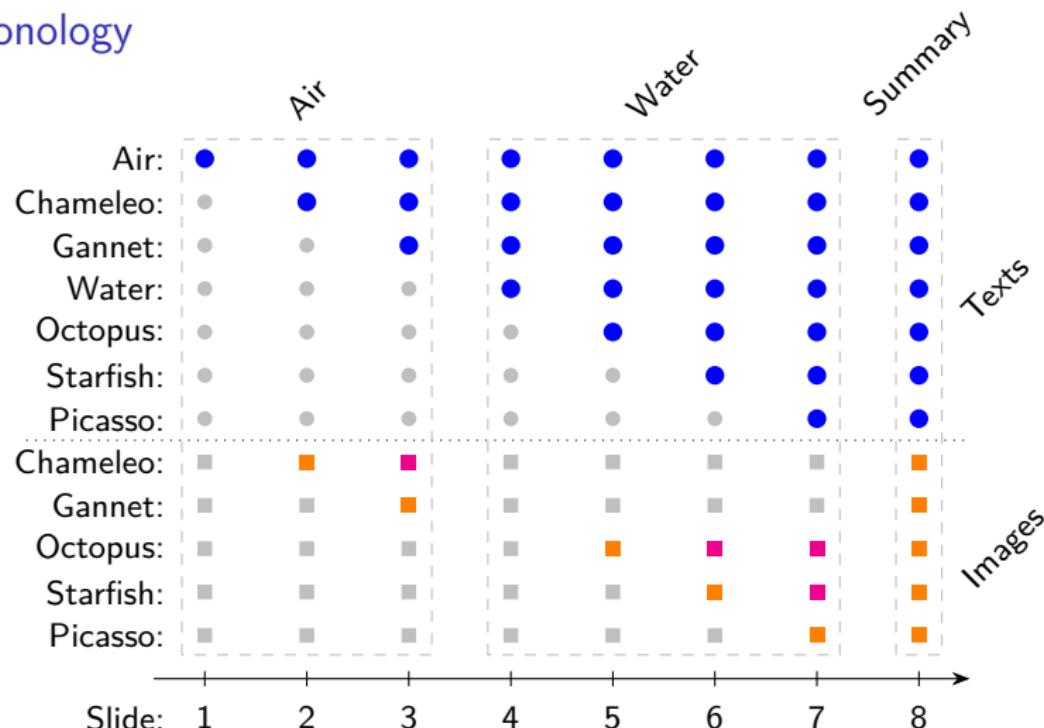
Chronology



- 3 slides for the Air, 4 for the Water, 1 to summarize

Beanoves example: Uncovered items + images

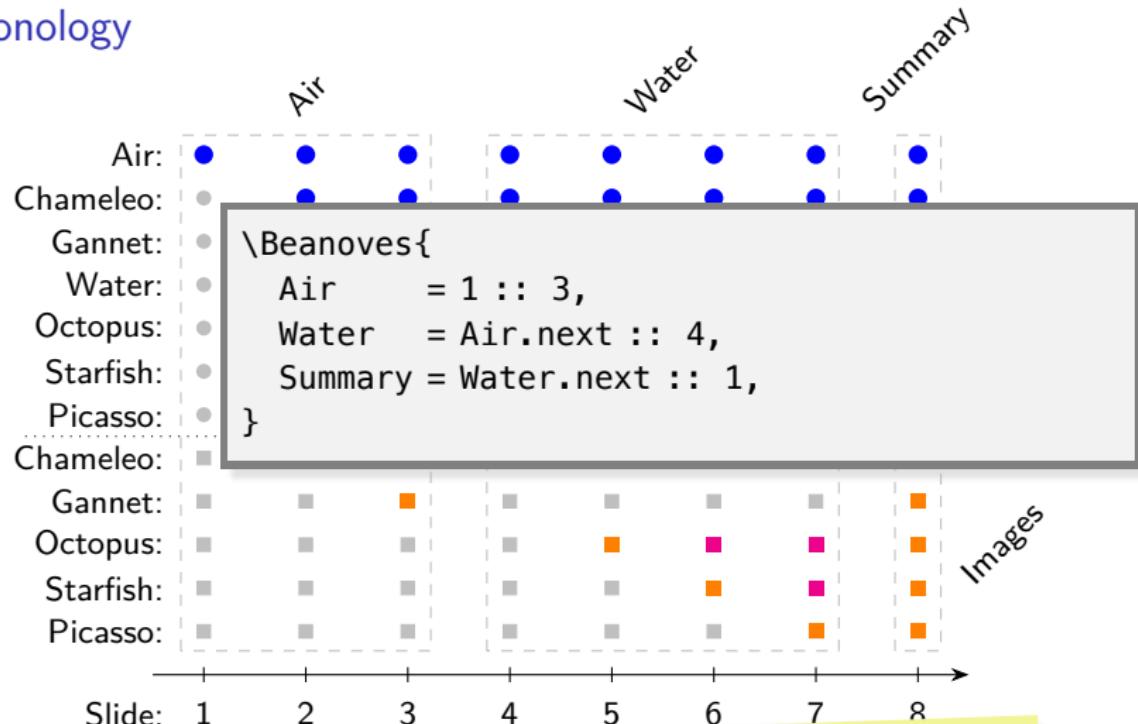
Chronology



- 3 slides for the Air, 4 for the Water, 1 to summarize

Beanoves example: Uncovered items + images

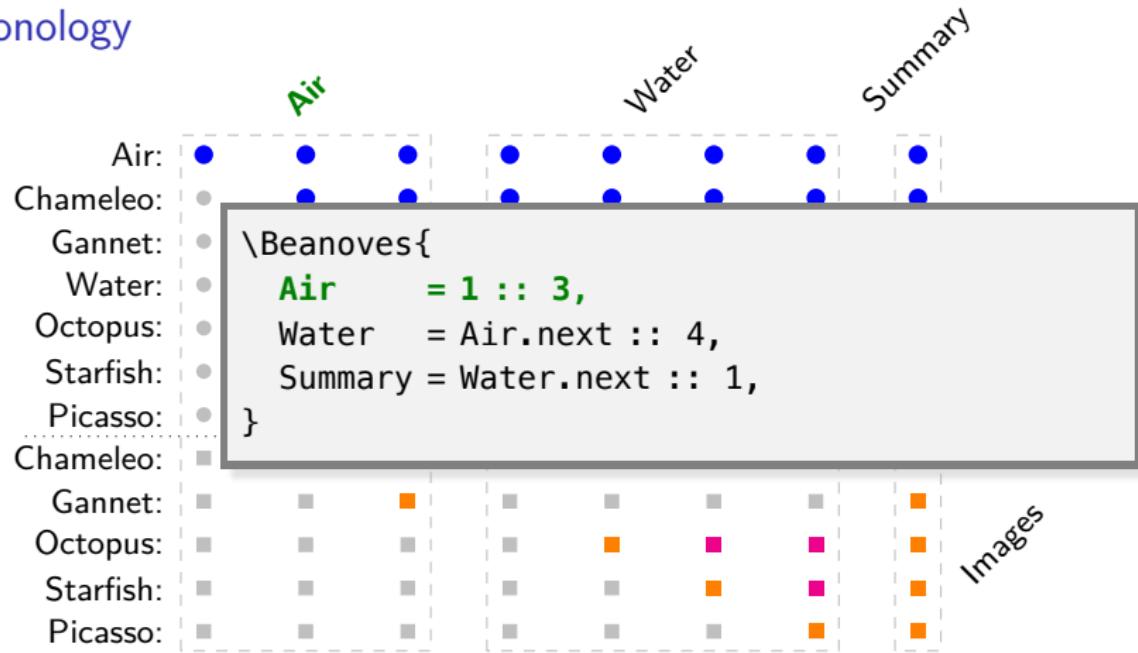
Chronology



- This code declares the logical overlay ranges
- Before the frame source

Beanoves example: Uncovered items + images

Chronology

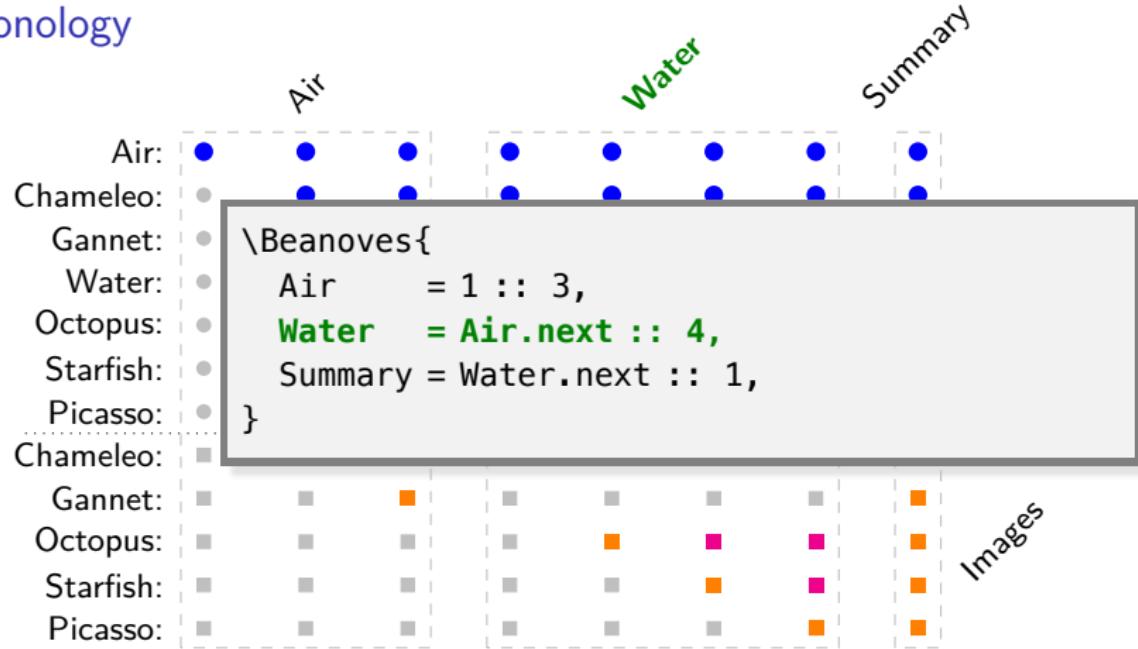


S

- Air is a variable like name
- 1 is the position of the first slide
- 3 is the duration (or length) of the range

Beanoves example: Uncovered items + images

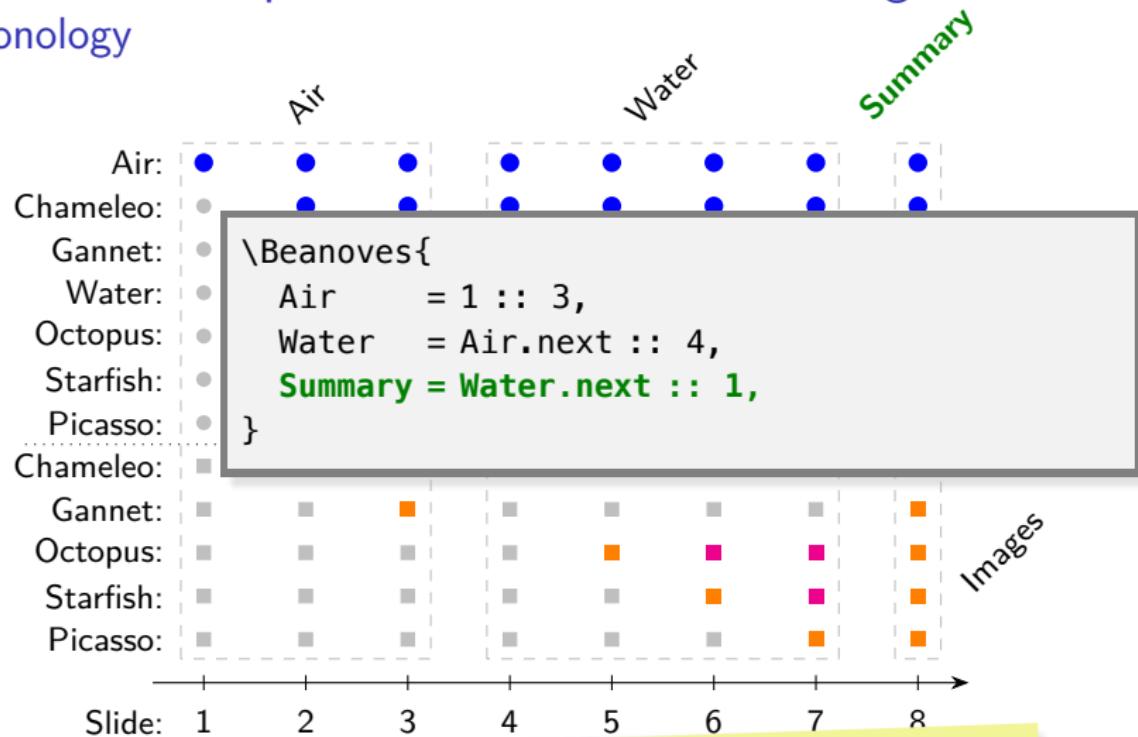
Chronology



- S • The "Water" topic follows the "Air" topic:
• `Air.next` is the first slide after the `Air` range
• 4 is the duration (or length)

Beanoves example: Uncovered items + images

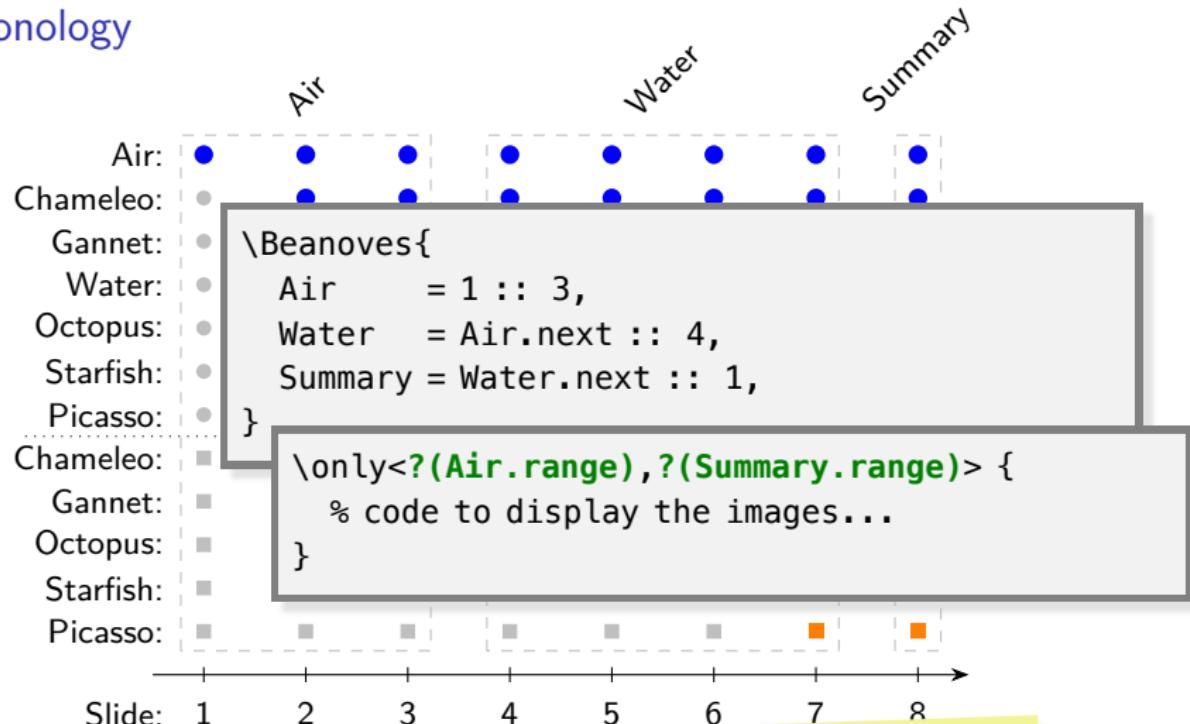
Chronology



- The "Summary" follows the "Water" topic:
- `Water.next` is the first slide after the Water range

Beanoves example: Uncovered items + images

Chronology



To limit "Air" topic images to the Air and Summary ranges, use a logical overlay specification...

Beanoves example: Uncovered items + images

Chronology

| | Air | | Water | | Summary | |
|-----------|-----|---|-------|---|---------|---|
| Air: | ● | | ● | | ● | |
| Chameleo: | ● | ● | ● | ● | ● | ● |
| Gannet: | ● | ● | ● | ● | ● | ● |
| Water: | ● | ● | ● | ● | ● | ● |
| Octopus: | ● | ● | ● | ● | ● | ● |
| Starfish: | ● | ● | ● | ● | ● | ● |
| Picasso: | ● | ● | ● | ● | ● | ● |
| Chameleo: | ■ | | | | | |
| Gannet: | ■ | | | | | |
| Octopus: | ■ | | | | | |
| Starfish: | ■ | | | | | |
| Picasso: | ■ | ■ | ■ | ■ | ■ | ■ |

Texts

Slide: 1 2 3 4 5 6 7 8

```
\only<?(Air.range),?(Summary.range)> {  
    % code to display the images...  
}
```

- `?(Air.range)` is automatically replaced by 1-3
- `?(Summary.range)` is automatically replaced by 8-8

Beanoves example: Uncovered items + images

Step back



- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water
 - ▶ Octopus
 - ▶ Starfish
 - ▶ Picasso fish



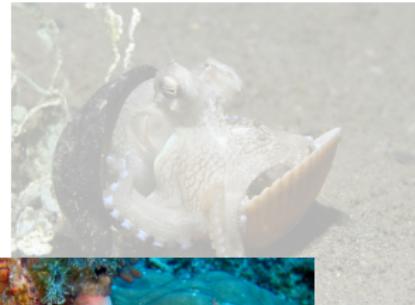
On next slide, the "Octopus" image is expected to
be transparent



Let us see the source code

Beanoves example: Uncovered items + images

Step back



- ▶ Air
 - ▶ Chameleo
 - ▶ Gannet
- ▶ Water



```
\visible< ?(Octopus.1) -> {  
    \only < ?(Starfish.1) -> {\transparent{0.3}}  
    % code to display the Octopus...  
}
```

💡 ?(Octopus.1) is replaced by 5 and
?(Starfish.1) by 6

💡 The octopus is displayed from slide 5 and
transparent from slide 6

Beanoves manual

Defining named overlay sets

```
\Beanoves{  
    <math_k> = <start_k> :: <length_k>,  
    ...  
}
```

Range starts and lengths are arithmetical expression involving raw integers as well as next ***named overlay references***.

| Reference | \leftrightarrow | Integer value |
|--|-------------------|--|
| $\langle name_k \rangle . 1$ | \leftrightarrow | $\langle start_k \rangle$ |
| $\langle name_k \rangle . 2$ | \leftrightarrow | $\langle start_k \rangle + 1$ |
| $\langle name_k \rangle . \langle i \rangle$ | \leftrightarrow | $\langle start_k \rangle + \langle i \rangle - 1$ |
| $\langle name_k \rangle . length$ | \leftrightarrow | $\langle length_k \rangle$ |
| $\langle name_k \rangle . next$ | \leftrightarrow | $\langle start_k \rangle + \langle length_k \rangle$ |
| $\langle name_k \rangle . last$ | \leftrightarrow | $\langle start_k \rangle + \langle length_k \rangle - 1$ |
| $\langle name_k \rangle . previous$ | \leftrightarrow | $\langle start_k \rangle - 1$ |

Beanoves manual

Defining named overlay sets

```
\Beanoves{  
    <math_k> = <start_k> :: <length_k>,  
    ...  
}
```

Range starts and lengths are arithmetical expression involving raw integers as well as next **named overlay references**.

| Reference | \leftrightarrow | Integer value |
|--|-------------------|--|
| $\langle name_k \rangle . 1$ | \leftrightarrow | $\langle start_k \rangle$ |
| $\langle name_k \rangle . 2$ | \leftrightarrow | $\langle start_k \rangle + 1$ |
| $\langle name_k \rangle . \langle i \rangle$ | \leftrightarrow | $\langle start_k \rangle + \langle i \rangle - 1$ |
| $\langle name_k \rangle . length$ | \leftrightarrow | $\langle length_k \rangle$ |
| $\langle name_k \rangle . next$ | \leftrightarrow | $\langle start_k \rangle + \langle length_k \rangle$ |
| $\langle name_k \rangle . last$ | \leftrightarrow | $\langle start_k \rangle + \langle length_k \rangle - 1$ |
| $\langle name_k \rangle . previous$ | \leftrightarrow | $\langle start_k \rangle - 1$ |

Revisit the example...

Beanoves manual

Defining named overlay sets

```
\Beanoves{  
    Air = 1      :: 2,  
    Water = Air.next :: 3,  
}
```

Range starts and lengths are arithmetical expression involving raw integers as well as next **named overlay references**.

| Reference | ↔ | Integer value |
|--------------------------|---|---------------------|
| Air.1 | ↔ | 1 |
| Air.2 | ↔ | 2 |
| Air. $\langle i \rangle$ | ↔ | $\langle i \rangle$ |
| Air.length | ↔ | 2 |
| Air.next | ↔ | 3 |
| Air.last | ↔ | 2 |
| Air.previous | ↔ | 0 |

Revisit the example...

Beanoves manual

Defining named overlay sets

```
\Beanoves{
    Air    = 1          :: 2,
    Water = Air.next :: 3,
}
```

Range starts and lengths are arithmetical expression involving raw integers as well as next **named overlay references**.

| Reference | ↔ | Integer value |
|----------------------------|---|-------------------------|
| Water.1 | ↔ | 3 |
| Water.2 | ↔ | 4 |
| Water. $\langle i \rangle$ | ↔ | $\langle i \rangle + 2$ |
| Water.length | ↔ | 3 |
| Water.next | ↔ | 6 |
| Water.last | ↔ | 5 |
| Water.previous | ↔ | 2 |

Revisit the example...

Beanoves manual

Defining named overlay sets

```
\Beanoves{  
    Air    = 1          :: 2,  
    Water = Air.next :: 3,  
}
```

Range starts and lengths are arithmetical expression involving raw integers as well as next ***named overlay references***.

| Reference | ↔ | Integer value |
|----------------------------|---|-------------------------|
| Water.1 | ↔ | 3 |
| Water.2 | ↔ | 4 |
| Water. $\langle i \rangle$ | ↔ | $\langle i \rangle + 2$ |
| Water.length | ↔ | 3 |
| Water.next | ↔ | 6 |
| Water.last | ↔ | 5 |
| Water.previous | ↔ | 2 |

Revisit the example...

Water.1 = Air.next
Air.last = Water.0

Beanoves manual

Defining named overlay sets

```
\Beanoves{
    Air = 1      :: 2, 1
    Water = Air.next :: 3,
}
```

Range starts and lengths are arithmetical expression involving raw integers as well as next ***named overlay references***.

| Reference | ↔ | Integer value |
|----------------------------|---|-------------------------|
| Water.1 | ↔ | 3 |
| Water.2 | ↔ | 4 |
| Water. $\langle i \rangle$ | ↔ | $\langle i \rangle + 2$ |
| Water.length | ↔ | 3 |
| Water.next | ↔ | 6 |
| Water.last | ↔ | 5 |
| Water.previous | ↔ | 2 |

If the duration of the Air section happens to change,

Beanoves manual

Defining named overlay sets

```
\Beanoves{  
    Air    = 1          :: 3,  
    Water = Air.next :: 3,  
}
```

Range starts and lengths are arithmetical expression involving raw integers as well as next ***named overlay references***.

| Reference | ↔ | Integer value |
|----------------|---|-------------------------|
| Water.1 | ↔ | 4 |
| Water.2 | ↔ | 5 |
| Water.< i > | ↔ | $\langle i \rangle + 3$ |
| Water.length | ↔ | 4 |
| Water.next | ↔ | 7 |
| Water.last | ↔ | 6 |
| Water.previous | ↔ | 3 |

If the duration of the Air section happens to change, all the integer value automatically update

Beanoves manual

Overlay specification query

- ▶ Simple specifications
- ▶ Incremental specifications
- ▶ Specification queries

```
\only < 4 >      {...}  
\only < 1 - 3 >  {...}
```

```
\only < + >      {...}  
\only < +( <i>) >  {...}
```

Beanoves manual

Overlay specification query

- ▶ Simple specifications
- ▶ Incremental specifications
- ▶ **Specification queries**

```
\only < 4 > {...}  
\only < 1 - 3 > {...}
```

```
\only < + > {...}  
\only < +( <i>) > {...}
```

```
\only < ?(<query>) > {...}
```

Beanoves manual

Overlay specification query

- ▶ Simple specifications
- ▶ Incremental specifications
- ▶ **Specification queries**

```
\only < 4 > {...}  
\only < 1 - 3 > {...}
```

```
\only < + > {...}  
\only < +( <i>) > {...}
```

```
\only < ?(<query>) > {...}
```

A query may be used in an overlay specification wherever an integer or a range can be.

\only may be replaced by any specification aware command.

Beanoves manual

Overlay specification query syntax

- ▶ Position specifications

```
?(<integer expression with aliases>)
```

- ▶ Explicit range specifications

```
?(<start expression> :: <length expression>)
```

Both integer expressions accept aliases.

- ▶ Logical range specifications with a **range alias**:

$$\langle name_k \rangle . range \leftrightarrow \langle name_k \rangle . 1 - \langle name_k \rangle . last$$

where “–” stands for a dash and not a minus sign.

```
?(<name_k>.range)
```

Beanoves manual

Overlay specification query syntax

- ▶ Position specifications

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Range queries and beamer ranges must not be combined like in
?(Air.range)-10, leading to the incorrect syntax **1-2-10**.

Beanoves manual

Overlay specification query syntax

- ▶ Position specifications

```
?(<integer expression with aliases>)
```

- ▶ Explicit range specifications

```
?(<start expression> :: <length expression>)
```

Both integer expressions accept aliases.

- ▶ Logical range specification

The middle slide of the Air topic is
 $\langle r \rangle$ where $r = ?((Air.1+Air.last)/2).$

What corresponds to next query?

```
?(Water.0 :: Water.length + 2)
```

Range expressions can be combined like in

$?(Air.range)-10$, leading to the incorrect syntax 1-2-10.

Beanoves manual

Incremental specifications

```
\begin {frame}
\Beanoves {
  <namek> = <startk> :: <lengthk>,
  ...
}
```

Each logical overlay range has a **counter**, with dedicated alias and operations. Within a specification query:

- ▶ $\langle name_k \rangle$, with no trailing “.”, is an alias for the **counter**
- ▶ $\text{++}\langle name_k \rangle$ stands for the **counter** once incremented by 1
- ▶ $\langle name_k \rangle \text{+=}\langle i \rangle$ stands for the **counter** after being incremented by $\langle i \rangle$.
- ▶ $\langle name_k \rangle.\text{reset}$ stands for the **counter** once reset to its initial value.

Beanoves manual

Incremental specifications

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Beanoves manual

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Beanoves manual

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Beanoves manual

Incremental specifications

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Beanoves manual

Incremental specifications

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Revisit the example...

Beanoves manual

Incremental specifications in practice

```
\Beanoves{
    Water = 1 :: 3,
}
\begin{frame}

\begin{itemize} [ <?(Water++)-> ]
    \item Octopus
    \item Starfish
    \item Picasso fish
\end{itemize}
\end{frame}
```



To uncover items one at a time,

Beanoves manual

Incremental specifications in practice

```
\Beanoves{
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\begin{frame}

\begin{itemize} [<?(Water++)->]
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    \item Starfish
    \item Picasso fish
\end{itemize}
\end{frame}
```



To uncover items one at a time, we use
beamer's advanced overlay specifications.

Beanoves manual

Incremental specifications in practice

- ▶ Octopus

```
\Beanoves{
    Water = 1 :: 3,
}
\begin{frame}

\begin{itemize} [ <?(Water++)-> ]
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    \item Starfish
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\end{itemize}
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Beanoves manual

Incremental specifications in practice

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```



Notice how the lines of code are highlighted at the same time the items are uncovered...

Beanoves manual

Incremental specifications in practice

- ▶ Octopus
- ▶ Starfish
- ▶ Picasso fish

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Beanoves manual

Incremental specifications in practice

- ▶ Octopus
- ▶ Starfish
- ▶ Picasso fish

```
\Beanoves{
    Water = 1 :: 3,
}
\begin{frame}
\setbeamercovered{ transparent = 30 }
\begin{itemize} [ <?(Water++)> ]
    \item Octopus
    \item Starfish
    \item Picasso fish
\end{itemize}
\end{frame}
```



Managing transparency is straightforward

Beanoves manual

Incremental specifications in practice

- ▶ Octopus
- ▶ Starfish
- ▶ Picasso fish

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\end{itemize}
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```



Managing transparency is straightforward
we use beamer's facilities.

Beanoves manual

Incremental specifications in practice

- ▶ Octopus
- ▶ Starfish
- ▶ Picasso fish

```
\Beanoves{  
    Water = 1 :: 3,  
}  
\begin{frame}  
\setbeamercolor{covered}{ transparent = 30 }  
\begin{itemize} [ <?(Water++)> ]  
    \item Octopus  
    \item Starfish  
    \item Picasso fish  
\end{itemize}  
\end{frame}
```



Once again the code is properly highlighted to illustrate the behavior of the itemized list...

Beanoves manual

Incremental specifications in practice

- ▶ Octopus
- ▶ Starfish
- ▶ Picasso fish

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Beanoves manual

Incremental specifications in practice

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Once again the code is properly highlighted to illustrate the behavior of the itemized list...

Beanoves manual

Why aliases are helpful

- ▶ As soon as one leaves basic frame layouts to make presentations more attractive and efficient, then beanoves aliases should come into play.
- ▶ One can organize the slides with logical names for a better understanding: aliases and integer expressions rather than raw integers make specifications more explicit
- ▶ Adding or removing a slide from one slide range does not significantly affect the other slide ranges.