Change Array by copy
For Stage 1

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https://github.com/rricard/proposal-change-array-by-copy

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A Record & Tuple update

Array/Tuple prototype analogy

Tuple.prototype !== Array.prototype / TypedArray.prototype

Added methods in Tuple.prototype compared to Array.prototype / TypedArray.prototype:

+ .popped()
+ .pushed(...*args*)
+ .reversed()
+ .shifted()
+ .sorted(*compareFn*)
+ .spliced(*start*, *deleteCount*, ...*items*)
+ .unshifted(...*args*)
+ .with(*index*, *value*)

Non-mutator methods

And a few others...

The current draft of Tuple omits these, but we think they should be added to Tuple.prototype, Array.prototype & TypedArray.prototype:

+ .filled(*value*, *start*, *end*)
+ .copiedWithin(*target*, *start*, *end*)

Ergonomics!

Before:

```
const arr2 = [...arr].sort();
const arr3 = [...arr2];
arr3[arr2.length - 1] = 2;
```

After:

```
const arr2 = arr.sorted();
const arr3 = arr2.with(-1, 2);
```
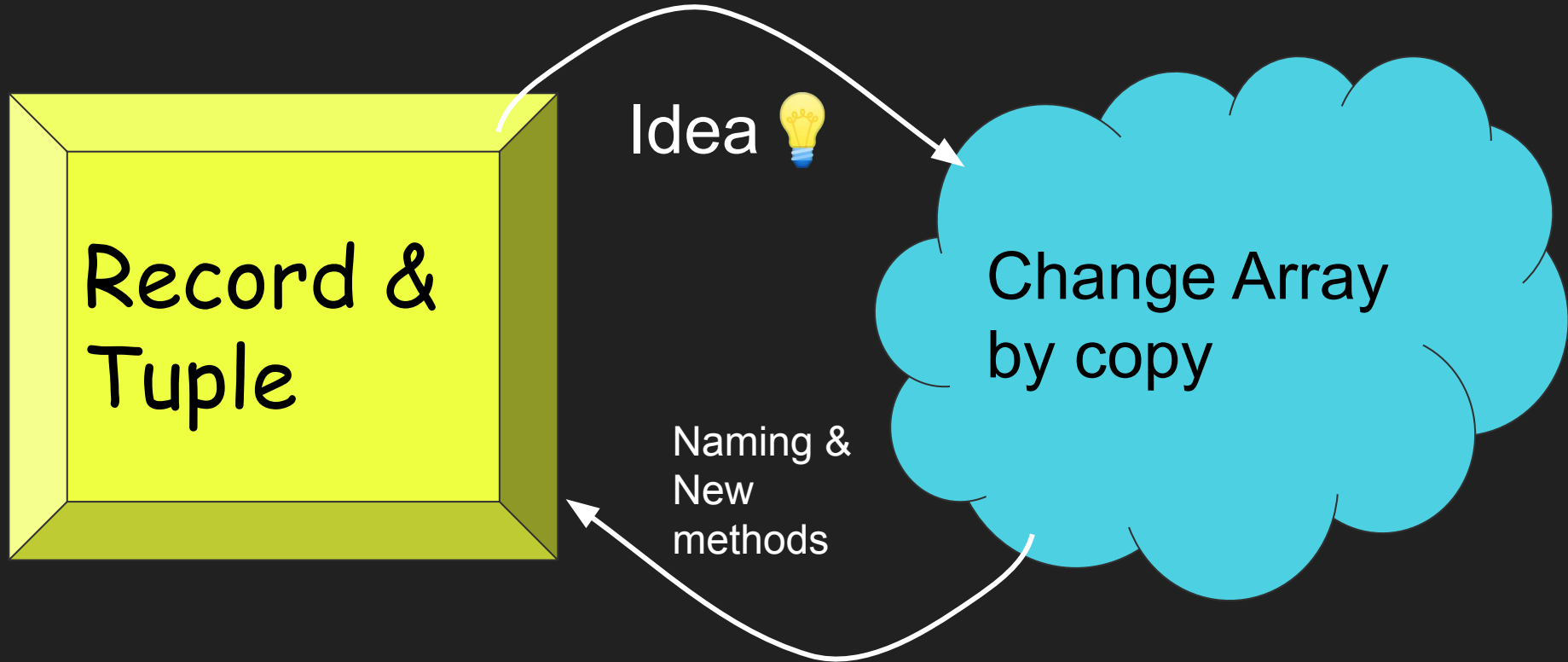
Status

- Spec draft started (major changes required but already identified)
  - http://www.rricard.me/proposal-change-array-by-copy/
- Polyfill
  - https://github.com/rricard/proposal-change-array-by-copy/blob/main/polyfill.js

Beyond stage 0 - foreseen issues/open questions

- **Web compatibility & general naming** [#10](#)
  - Champion's preferred alternative: `copy<PastTense>`: `copyPopped` / `copyReversed` / …
  - Propose to handle in Incubator call
- Sparse array handling? [#8](#)
  - R&T meeting's attendees: we prefer to not preserve holes
  - The changed copy will have holes filled in with `undefined`
  - Rationale: Holes increase complexity and cause bugs
  - Analogous to ES6 Array methods, Tuple and TypedArray
- Species
  - Probably skip it and just create an Array/TypedArray
  - Follows new trend for new methods
  - https://github.com/tc39/proposal-rm-builtin-subclassing

Interaction with Record & Tuple

Record & Tuple

Idea 💡

Change Array by copy

Naming & New methods

Interaction with Record & Tuple

Record & Tuple needs to share names with Change Array by Copy

The concrete plan for ensuring alignment is a Stage 3 condition for both

Queue?

Stage 1?