

**map**    `_.map(list, iteratee, [context])`    *Alias: **collect***

Produces a new array of values by mapping each value in **list** through a transformation function (**iteratee**). The **iteratee** is passed three arguments: the `value`, then the `index` (or `key`) of the iteration, and finally a reference to the entire `list`.

```
_.map([1, 2, 3], function(num){ return num * 3; });
=> [3, 6, 9]
_.map({one: 1, two: 2, three: 3}, function(num, key){ return num * 3; });
=> [3, 6, 9]
_.map([1, 2], [3, 4], _.first);
=> [1, 3]
```

**reduce**    `_.reduce(list, iteratee, [memo], [context])`    *Aliases: **inject, foldl***

Also known as **inject** and **foldl**, **reduce** boils down a **list** of values into a single value. **Memo** is the initial state of the reduction, and each successive step of it should be returned by **iteratee**. The **iteratee** is passed four arguments: the `memo`, then the `value` and `index` (or `key`) of the iteration, and finally a reference to the entire `list`.

If no **memo** is passed to the initial invocation of **reduce**, the **iteratee** is not invoked on the first element of the list. The first element is instead passed as the **memo** in the invocation of the **iteratee** on the next element in the list.

```
var sum = _.reduce([1, 2, 3], function(memo, num){ return memo + num; }, 0);
=> 6
```

**reduceRight**    `_.reduceRight(list, iteratee, [memo])`,

`[context]`    *Alias: **foldr***

The right-associative version of **reduce**. **Foldr** is not as useful in JavaScript as it would be in a language with lazy evaluation.

```
var list = [[0, 1], [2, 3], [4, 5]];
var flat = _.reduceRight(list, function(a, b) { return a.concat(b); }, []);
=> [4, 5, 2, 3, 0, 1]
```

**find**    `_.find(list, predicate, [context])`    *Alias: **detect***

Looks through each value in the **list**, returning the first one that passes a truth test (**predicate**), or `undefined` if no value passes the test. The function returns as soon as it finds an acceptable element, and doesn't traverse the entire list.

```
var even = _.find([1, 2, 3, 4, 5, 6], function(num){ return num % 2 == 0; });  
=> 2
```

**filter** `_.filter(list, predicate, [context])` *Alias: **select***

Looks through each value in the **list**, returning an array of all the values that pass a truth test (**predicate**).

```
var evens = _.filter([1, 2, 3, 4, 5, 6], function(num){ return num % 2 == 0; });  
=> [2, 4, 6]
```

**where** `_.where(list, properties)`

Looks through each value in the **list**, returning an array of all the values that contain all of the key-value pairs listed in **properties**.

```
_.where(listOfPlays, {author: "Shakespeare", year: 1611});  
=> [{title: "Cymbeline", author: "Shakespeare", year: 1611},  
   {title: "The Tempest", author: "Shakespeare", year: 1611}]
```

**findWhere** `_.findWhere(list, properties)`

Looks through the **list** and returns the *first* value that matches all of the key-value pairs listed in **properties**.

If no match is found, or if **list** is empty, *undefined* will be returned.

```
_.findWhere(publicServicePulitzers, {newsroom: "The New York Times"});  
=> {year: 1918, newsroom: "The New York Times",  
   reason: "For its public service in publishing in full so many official reports,  
   documents and speeches by European statesmen relating to the progress and  
   conduct of the war."}
```

**reject** `_.reject(list, predicate, [context])`

Returns the values in **list** without the elements that the truth test (**predicate**) passes. The opposite of **filter**.

```
var odds = _.reject([1, 2, 3, 4, 5, 6], function(num){ return num % 2 == 0; });  
=> [1, 3, 5]
```