

//country/city[population > 1000000][5] → 8 results
 see next slide →

//country/descendant::city[population > 1000000][5] → 16 results

all 5th big cities in and from B

for every country there are at least 5 big cities → return the 5th
 → implicit grouping by the "context"
 ⇒ one group for each country

How to obtain the 5th such city in the whole DB?

/descendant::city[population > 1000000][5]

all cities

/descendant::city[population > 1000000][position() <= 10]

first 10 such cities

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//country/descendant-or-self::*/city[population > 1000000][5]

one context for each pointer node

5th

for each pointer → 5th big city

→ 8 results

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```
//country[@area>1000000]/descendant::city[population > 1000000]
```

→ 210 cities

stop here → for each such city

[5]

10 results

→ from the 16 results before, 6 were in countries with area < 1000000

```
((//country[@area>1000000]/descendant::city[population > 1000000])[5])
```

↑

↑ result ↓

↑

were explicit with XPath:

```
let $x := //country[@area>1000000]/descendant::city[population > 1000000]
return $x[5]
```

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