Re-expressing actions in MobileVisFixer

Cicero expressions for the MobileVisFixer rules

```
1  // For A0--7, we assume specific
      chart size intended for a view

2  // A0&2: decrease X axis scale range
                           = chart width
3  { specifier: { role : "view" },
4    action: "modify",
5    option: { width: 375 }}

6  // A1&3: increase X axis scale range
7  { specifier: { role : "view" },
8    action: "modify",
9    option: { width: 1024 }}

10 // A4&6: decrease Y axis scale range
11                         = chart height
12 { specifier: { role : "view" },
13   action: "modify",
14   option: { height: 200 }}

15 // A5&7: increase Y axis scale range
16 { specifier: { role : "view" },
17   action: "modify",
18   option: { height: 600 }}

19 // A9: decrease font size
20 { specifier: { role : "text" },
21   action: "modify",
22   option: { fontSize: { prod:  0.8 }}}

23 // A10: increase # of axis lables/ticks
24 { specifier: { role : "axis" },
25   action: "add",
26   option: { values : "odd" }}

27 // A11: decrease # of axis lables/ticks
28 { specifier: { role : "axis" },
29   action: "remove",
30   option: { values : "even" }}

31 // A12: skip, unrecognizable

32 // A13: break text line = wrapping text
33 { specifier: { role : "text" },
34   action: "modify",
35   option: {
36     width: { prod:  0.8 },
37     wrap: true }}
```

```
38 // A14: decrease the X offset min
                         = left margin
39 { specifier: { ... },
40   action: "modify",
41   option: { marginLeft: { prod: 0.9 }}}

42 // A15: increase the X offset min
43 { specifier: { ... },
44   action: "modify",
45   option: { marginLeft: { prod: 1.1 }}}

46 // A16: decrease the X offset max
                         = right margin
47 { specifier: { ... },
48   action: "modify",
49   option: { marginRight: { prod: 0.9 }}}

50 // A17: increase the X offset max
51 { specifier: { ... },
52   action: "modify",
53   option: { marginRight: { prod: 1.1 }}}

54 // A18: decrease the Y offset min
                         = top margin
55 { specifier: { ... },
56   action: "modify",
57   option: { marginTop: { prod: 0.9 }}}

58 // A19: increase the Y offset min
59 { specifier: { ... },
60   action: "modify",
61   option: { marginTop: { prod: 1.1 }}}

62 // A20: decrease the Y offset max
                         = bottom margin
63 { specifier: { ... },
64   action: "modify",
65   option: { marginBottom: { prod: 0.9 }}}

66 // A21: increase the Y offset max
67 { specifier: { ... },
69   action: "modify",
69   option: { marginBottom: { prod: 1.1 }}}
```

The list of rules supported by MobileVisFixer

A0: decXAxisRangemin
A1: incXAxisRangemin
A2: decXAxisRangemax
A3: incXAxisRangemax
A4: decYAxisRangemin
A5: incYAxisRangemin
A6: decYAxisRangemax
A7: incYAxisRangemax
A8: incFontSize
A9: decFontSize
A10: incTickNumber
A11: decTickNumber
• A12: callVegaLabel
A13: breakTextLine
A14: decXOffsetmin
A15: incXOffsetmin
A16: decXOffsetmax
A17: incXOffsetmax
A18: decYOffsetmin
A19: incYOffsetmin
A20: decYOffsetmax
A21: incYOffsetmax
• A22: changeOffset

• When the meaning of the rule cannot be determined because they are not defined in the paper.

For A14–21, we assume that the speicifer of each rule (i.e., the element to transform the offset) can be parameterized wihtin the recommender's pipeline.