Figure 1. Procedure of the experiment. The layout configurations were counter-balanced across participants.


Table 1. Significance test results for Hypothesis 1

| Task | Embedded vs. Linked vs. Mixed | Pairwise Comparisons |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Comparison | $Z$ | $p$ |
| Filtering $+$ Situatedness | $\chi^{2}(2)=8.979, p=0.011$ | Embedded vs. Linked | -2.180 | 0.029 |
|  |  | Embedded vs. Mixed | -1.336 | 0.181 |
|  |  | Linked vs. Mixed | -2.830 | 0.005 |
| Refocusing $+$ Situatedness | $\chi^{2}(2)=11.787, p=0.003$ | Embedded vs. Linked | -2.805 | 0.005 |
|  |  | Embedded vs. Mixed | -0.314 | 0.754 |
|  |  | Linked vs. Mixed | -2.824 | 0.005 |
| Connecting $+$ <br> Situatedness | $\chi^{2}(2)=17.167, p<0.001$ | Embedded vs. Linked | -2.119 | 0.034 |
|  |  | Embedded vs. Mixed | -2.984 | 0.003 |
|  |  | Linked vs. Mixed | -3.059 | 0.002 |

Table 2. Significance test results for Hypothesis 2

| Task | Scene | Embedded vs. Linked vs. Mixed | Pairwise Comparisons |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Comparison | $Z$ | $p$ |
| Filtering + <br> Situatedness <br> (Analytics) | Simple | $\chi^{2}(2)=.409, p=0.815$ | Embedded vs. Linked | -1.035 | 0.300 |
|  |  |  | Embedded vs. Mixed | -0.358 | 0.720 |
|  |  |  | Linked vs. Mixed | -0.299 | 0.765 |
|  | Complex | $\chi^{2}(2)=6.048, p=0.049$ | Embedded vs. Linked | -1.774 | 0.076 |
|  |  |  | Embedded vs. Mixed | -1.542 | 0.123 |
|  |  |  | Linked vs. Mixed | -0.677 | 0.498 |
| Refocusing + <br> Situatedness (Analytics) | Simple | $\chi^{2}(2)=18.500, p<0.001$ | Embedded vs. Linked | -3.062 | 0.002 |
|  |  |  | Embedded vs. Mixed | -2.555 | 0.011 |
|  |  |  | Linked vs. Mixed | -2.988 | 0.003 |
|  | Complex | $\chi^{2}(2)=15.500, p<0.001$ | Embedded vs. Linked | -2.988 | 0.003 |
|  |  |  | Embedded vs. Mixed | -1.453 | 0.146 |
|  |  |  | Linked vs. Mixed | -3.065 | 0.002 |


| Task | Scene | Embedded vs. Linked vs. Mixed | Pairwise Comparisons |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Comparison | $Z$ | $p$ |
| Filtering + <br> Situatedness <br> (Situatedness) | Simple | $\chi^{2}(2)=15.744, p<0.001$ | Embedded vs. Linked | -2.952 | 0.003 |
|  |  |  | Embedded vs. Mixed | -2.379 | 0.017 |
|  |  |  | Linked vs. Mixed | -2.311 | 0.021 |
|  | Complex | $\chi^{2}(1)=12.000, p<0.001$ | Embedded vs. Linked | -3.075 | 0.002 |
|  |  |  | Embedded vs. Mixed | -1.000 | 0.317 |
|  |  |  | Linked vs. Mixed | -3.075 | 0.002 |
| Refocusing + <br> Situatedness <br> (Situatedness) | Simple | $\chi^{2}(2)=13.351, p=0.001$ | Embedded vs. Linked | -2.687 | 0.007 |
|  |  |  | Embedded vs. Mixed | -2.714 | 0.007 |
|  |  |  | Linked vs. Mixed | -1.736 | 0.083 |
|  | Complex | $\chi^{2}(1)=8.333, p=0.004$ | Embedded vs. Linked | -3.095 | 0.002 |
|  |  |  | Embedded vs. Mixed | -2.060 | 0.039 |
|  |  |  | Linked vs. Mixed | -2.924 | 0.003 |

Table 3. Significance test results for Hypothesis 3

| Task | Task Type | $Z$ | $p$ |
| :---: | :---: | :---: | :---: |
| Filtering $+$ Situatedness | Analytics | -0.356 | 0.722 |
|  | Situatedness | -1.000 | 0.317 |
| Refocusing $+$ Situatedness | Analytics | -0.118 | 0.906 |
|  | Situatedness | -2.236 | 0.025 |
| Connecting Situatedness | Overall | -1.471 | 0.141 |


| Task | Task Type | $\boldsymbol{Z}$ | $\boldsymbol{p}$ |
| :---: | :---: | :---: | :---: |
| Filtering |  |  |  |
| + |  |  |  |
| Situatedness | Analytics | -1.703 | 0.089 |
|  | Situatedness | -1.832 | 0.067 |
| Refocusing |  |  |  |
| + | Analytics | -2.787 | 0.005 |
| Situatedness | Situatedness | -2.944 | 0.003 |
| Connecting <br> + <br> + <br> Situatedness | Overall | -1.786 | 0.074 |

C 2 with alignment vs. without alignment

| Task | Task Type | $\boldsymbol{Z}$ | $\boldsymbol{p}$ |
| :---: | :---: | :---: | :---: |
| Filtering <br> + <br> + <br> Situatedness | Analytics | -2.326 | 0.020 |
|  | Situatedness | -1.000 | 0.317 |
| Refocusing | Analytics | -2.483 | 0.013 |
| Situatedness | Situatedness | -0.513 | 0.608 |
| Connecting <br> + <br> + <br> Situatedness | Overall | -0.402 | 0.687 |
| C3 with alignment vs. without alignment |  |  |  |

Table 4. Accuracy

| Task | Scene | Layout | Accuracy |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Question1 | Question2 |
| Filtering + <br> Situatedness | Simple | Embedded | 100\% | 100\% |
|  |  | Linked | 100\% | 100\% |
|  |  | Mixed | 100\% | 100\% |
|  | Complex | Embedded | 100\% | 100\% |
|  |  | Linked | 100\% | 100\% |
|  |  | Mixed | 100\% | 100\% |
|  | Complex with Alignment | Embedded | 100\% | 100\% |
|  |  | Linked | 100\% | 100\% |
|  |  | Mixed | 100\% | 100\% |
| Refocusing + Situatedness | Simple | Embedded | 100\% | 100\% |
|  |  | Linked | 100\% | 100\% |
|  |  | Mixed | 96\% | 100\% |
|  | Complex | Embedded | 100\% | 100\% |
|  |  | Linked | 100\% | 100\% |
|  |  | Mixed | 100\% | 100\% |
|  | Complex with Alignment | Embedded | 100\% | 100\% |
|  |  | Linked | 100\% | 96\% |
|  |  | Mixed | 100\% | 100\% |
| Connecting + <br> Situatedness | Simple | Embedded | 100\% | 100\% |
|  |  | Linked | 96\% | 100\% |
|  |  | Mixed | 100\% | 100\% |
|  | Complex | Embedded | 100\% | 96\% |
|  |  | Linked | 100\% | 100\% |
|  |  | Mixed | 100\% | 100\% |
|  | Complex with Alignment | Embedded | 100\% | 100\% |
|  |  | Linked | 100\% | 100\% |
|  |  | Mixed | 100\% | 100\% |

