

Test-suite Augmentation with Change-Propagation Analysis

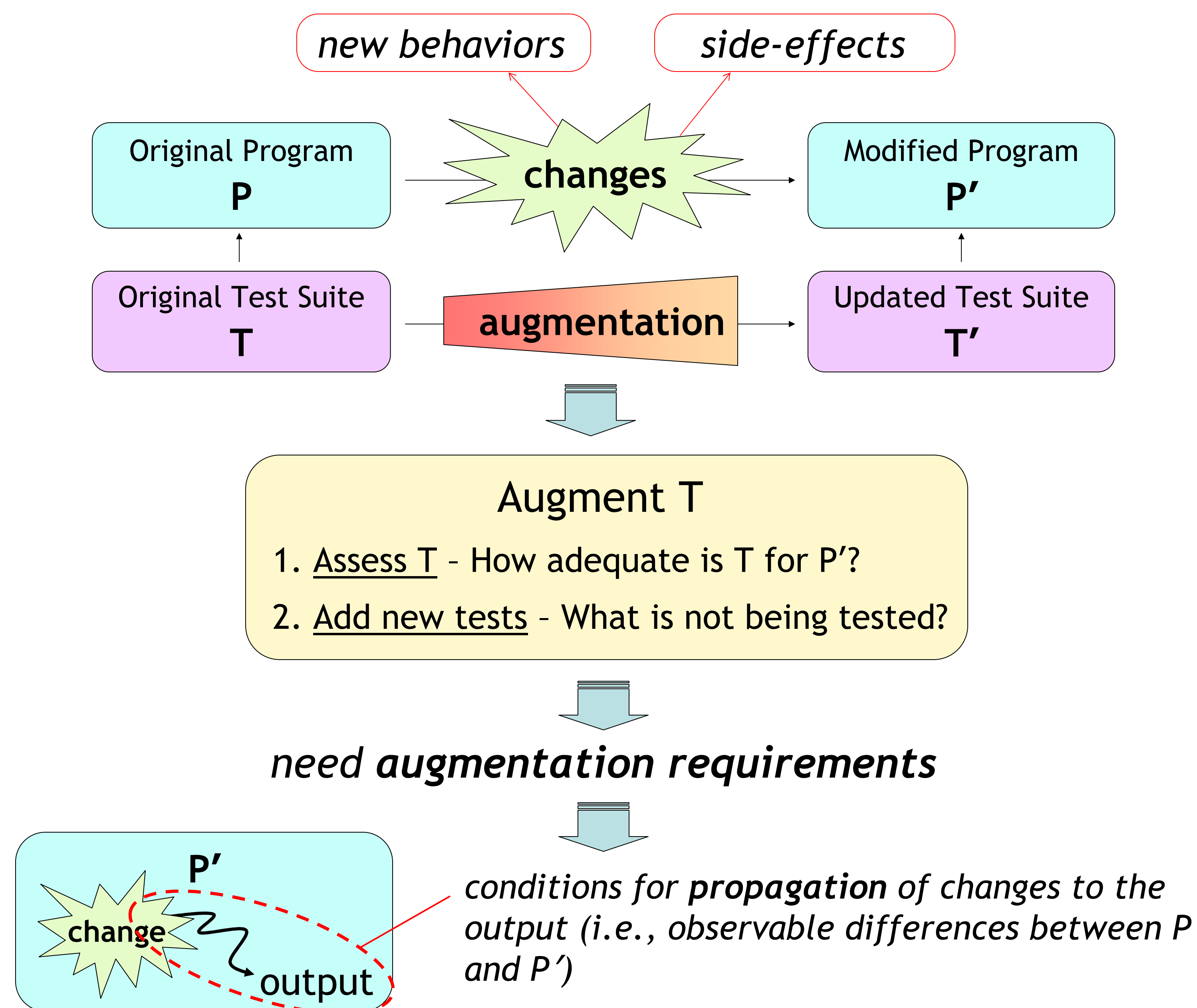
Using Comparative Partial Symbolic Execution^{1,2}

Raul Santelices

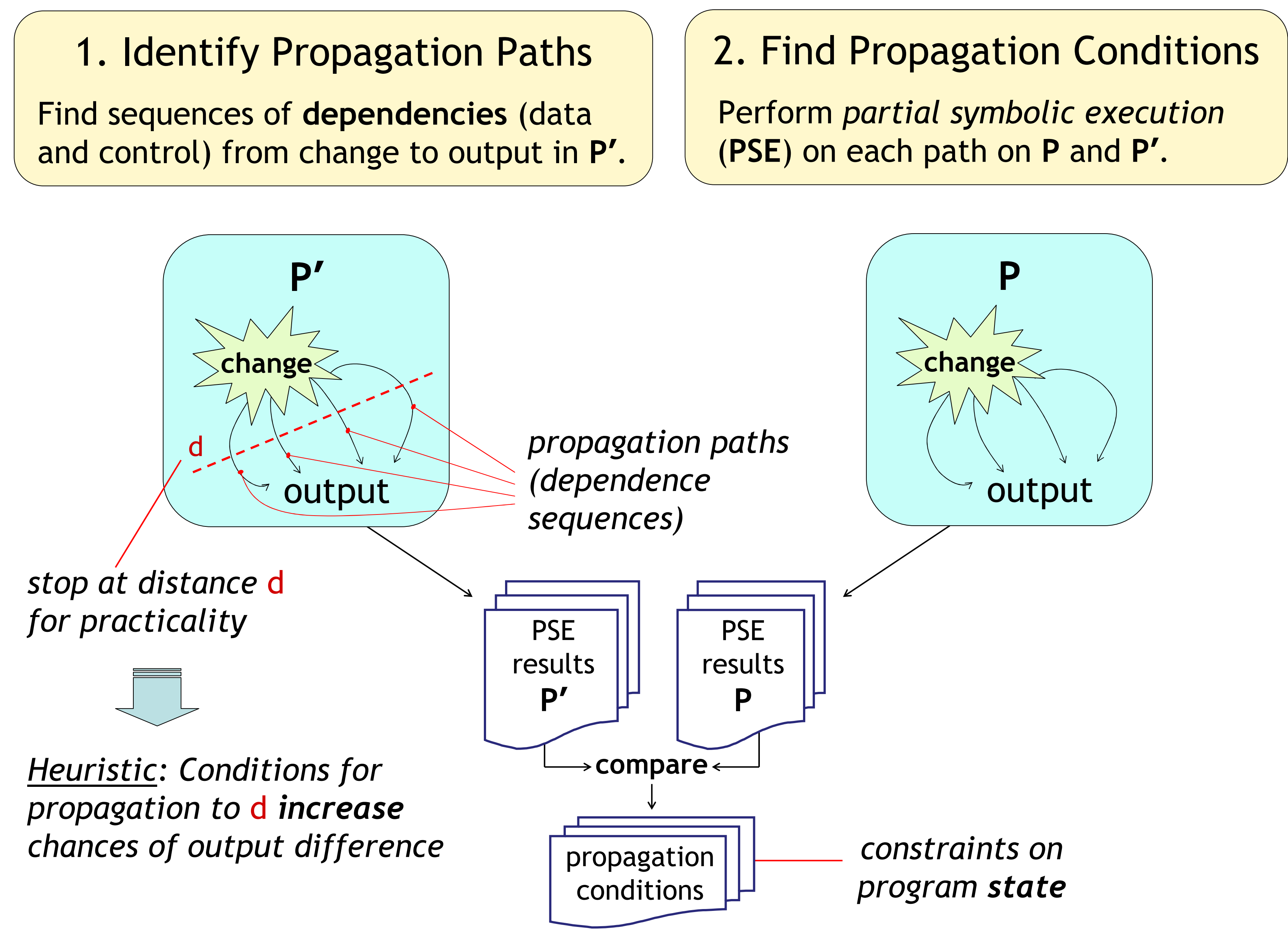
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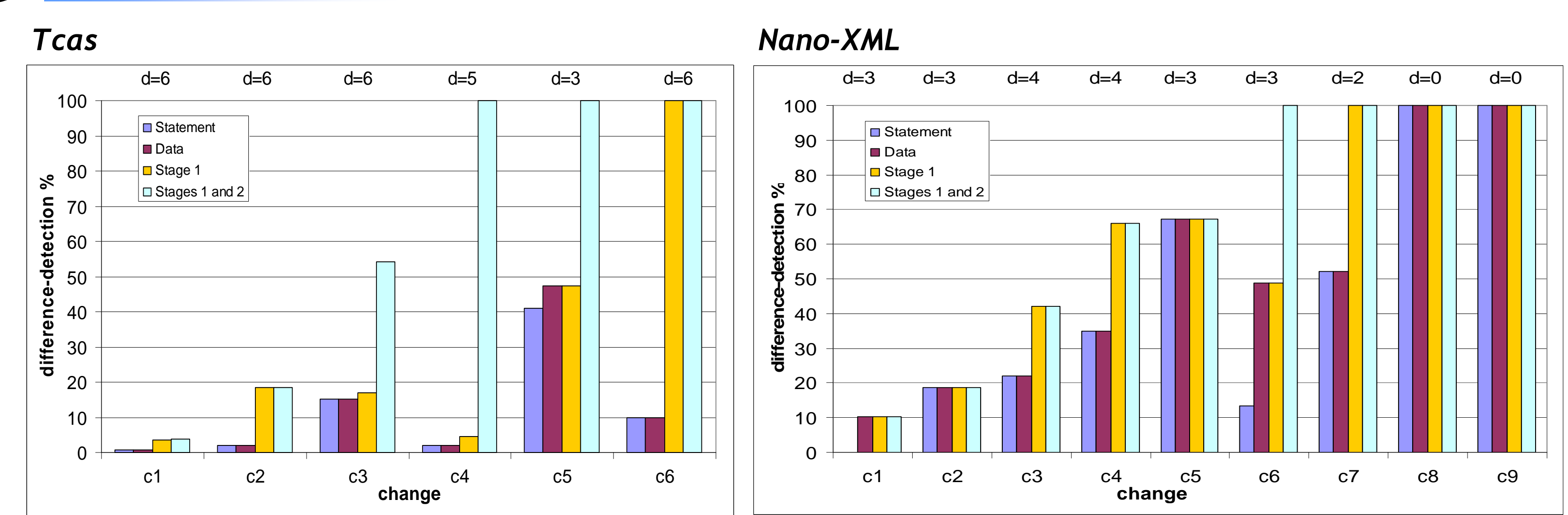
1 Test-suite Augmentation Problem



2 Technique²



3 Results



4 Contributions

- Technique that finds *how* effects of changes propagate
 - It is practical: distance limit on dependencies and on comparative PSE^{1,2}
 - It applies to realistic scenarios: multiple changes²
- Full implementation for evaluation, promising results²

References

¹ Apiwattanapong, Santelices, Chittimalli, Orso, and Harrold. TAIC-PART 2006

² Santelices, Chittimalli, Apiwattanapong, Orso, and Harrold. ASE 2008