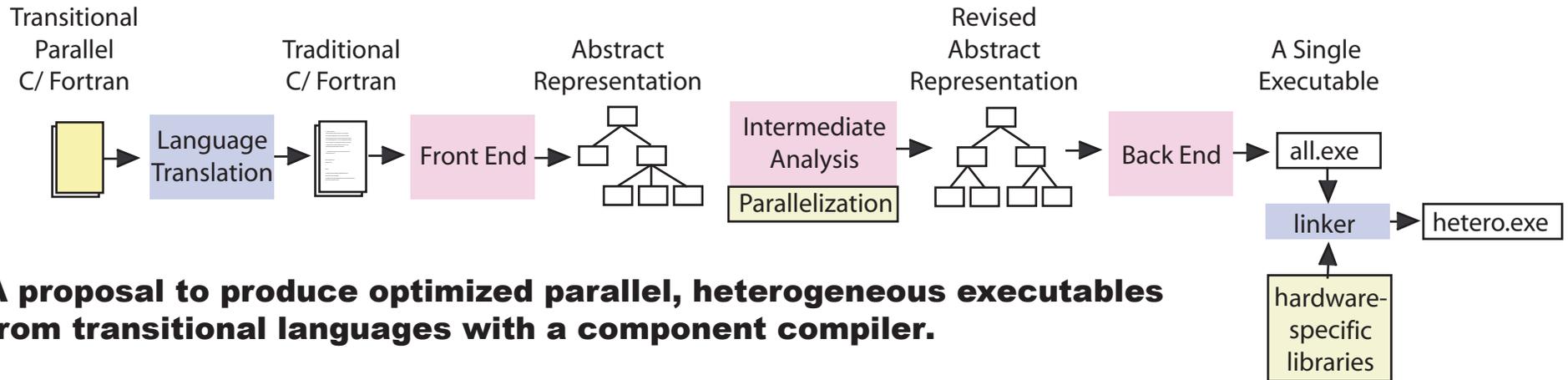
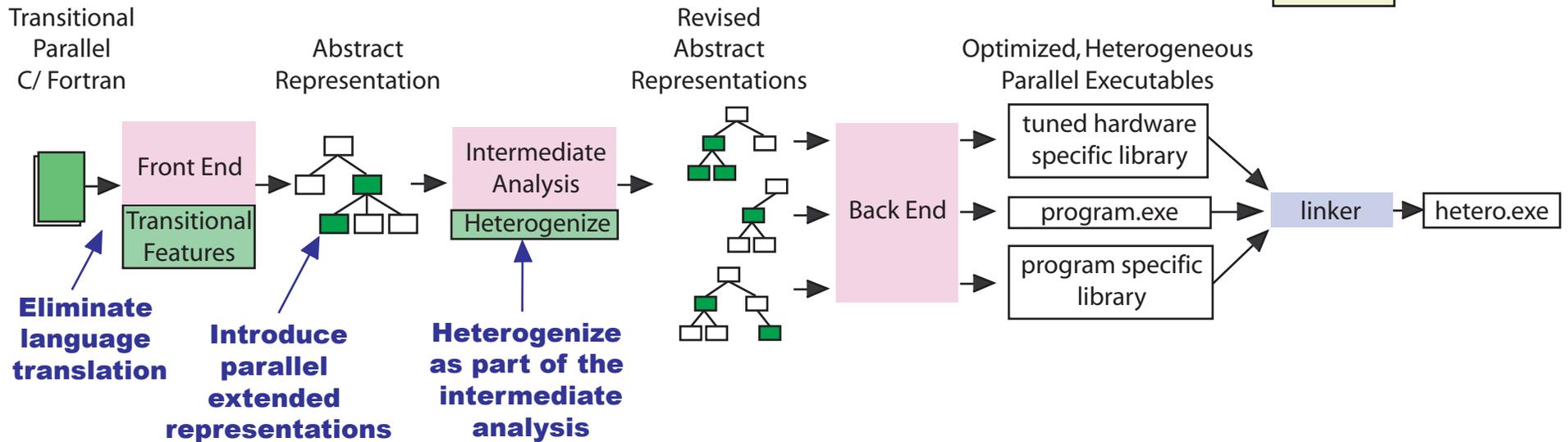


How transitional languages are made to work in parallel applications and on heterogeneous architectures using current compilers.



A proposal to produce optimized parallel, heterogeneous executables from transitional languages with a component compiler.



Transitional Language - traditional languages like Fortran or C that have been extended to include parallel language constructs.

Heterogenize - to analyze the abstract representation of the program (including data and control flow analysis) to identify blocks that are best suited for different architectures and data flow patterns.

Methods for parallelizing and heterogenizing transitional C/Fortran

Current
 Proposed

Processes

Compiler
 Pre/post-processing