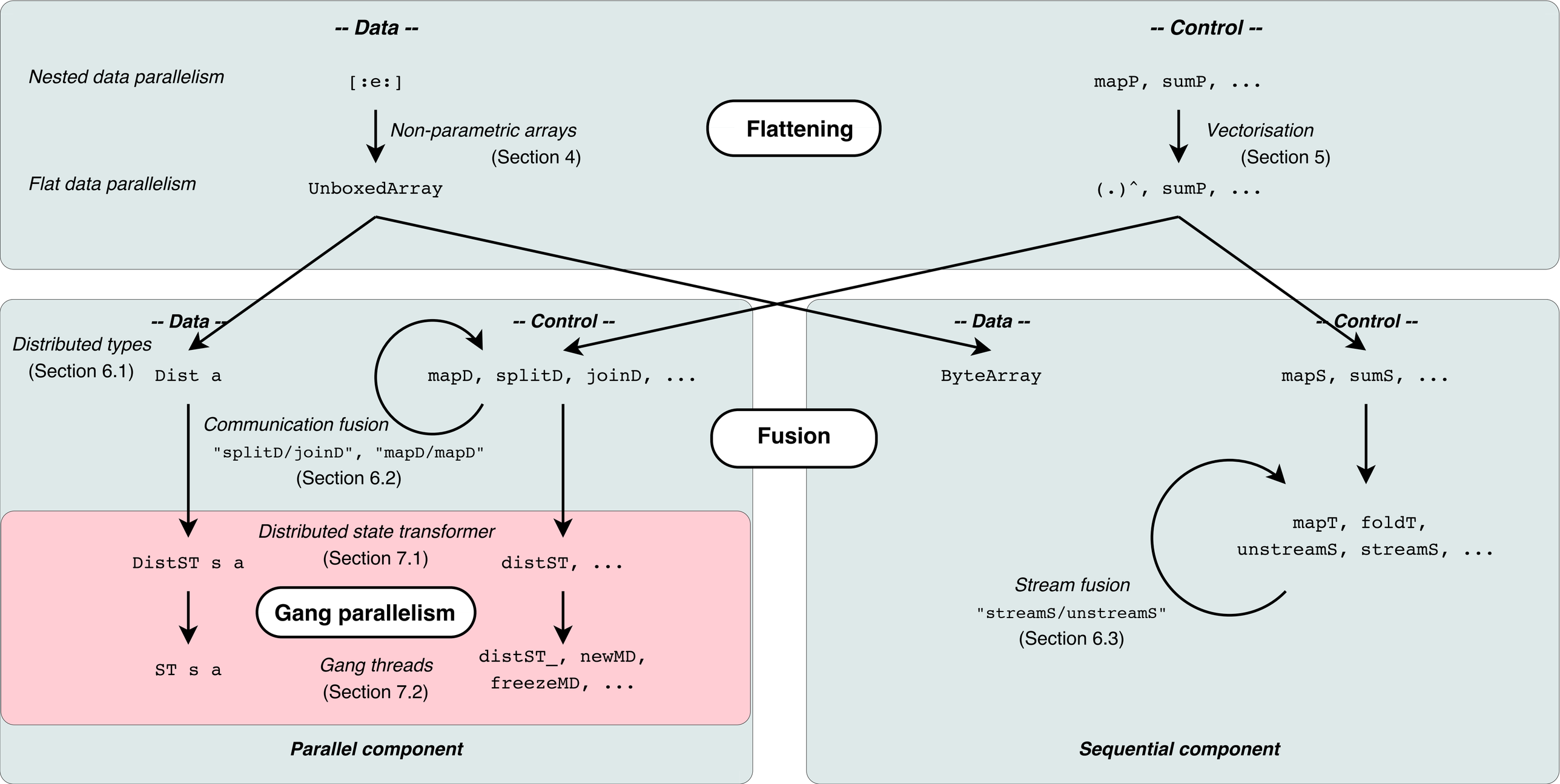
-- Data --
-- Control --
Nested data parallelism
[:e:]
mapP, sumP, ...
Non-parametric arrays
(Section 4)
Flattening
Vectorisation
(Section 5)
Flat data parallelism
UnboxedArray
(.)^, sumP, ...
-- Data --
-- Control --
-- Data --
-- Control --
Distributed types
(Section 6.1)
Dist a
mapD, splitD, joinD, ...
ByteArray
mapS, sumS, ...
Communication fusion
"splitD/joinD", "mapD/mapD"
(Section 6.2)
Fusion
Distributed state transformer
(Section 7.1)
DistST s a
distST, ...
mapT, foldT,
unstreamS, streamS, ...
Gang parallelism
Stream fusion
"streamS/unstreamS"
(Section 6.3)
ST s a
Gang threads
(Section 7.2)
distST_, newMD,
freezeMD, ...
Parallel component
Sequential component