

Stack Allocation	<p>n.a.</p>	<p><i>global</i> < <i>local</i></p> <p>Locality future</p> <p>SAFETY: <i>local</i> will not outlive its region NOT ALLOWED: return, escape, global store or capture <i>local</i> parameter isn't requirement, it's behavior guarantee LEGACY NO CAPTURE/NEST: <i>local</i> Applies to non immediate values</p>
	Applies to mutable or mutable nesting data	Applies to functions or function nesting data
Ownership	<p>Uniqueness past</p> <p>unique < <i>aliased</i></p> <p>LINEAGE: unique has not been aliased ALLOWED: unique may be overwritten</p>	<p><i>many</i> < once</p> <p>Affinity future</p> <p>SAFETY: once will not alias unique value NOT ALLOWED: call once twice or more LEGACY NO CAPTURE: once, unique</p>
Shared Memory	<p>Contention past</p> <p>uncontended < shared < <i>contended</i></p> <p>LINEAGE: at most one thread retains uncontended access ALLOWED:</p> <ul style="list-style-type: none">uncontended: thread may read or writeshare: thread may only read	<p><i>portable</i> < nonportable</p> <p>Portability future</p> <p>SAFETY: nonportable will not give access to non <i>contended</i> NOT ALLOWED: call nonportable in another thread LEGACY NO CAPTURE: nonportable, uncontended, shared</p>
Effects	<p>n.a.</p>	<p><i>unyielding</i> < yielding</p> <p>Yielding future</p> <p>SAFETY: yielding function will not perform effect handled in parent stack NOT ALLOWED: yielding ...</p>
Mutable Data	<p>Visibility past</p> <p>read_write < read < <i>immutable</i></p> <p>LINEAGE: Non <i>immutable</i> value ... ALLOWED:</p> <ul style="list-style-type: none">read_write: may be read or writtenread: may only be read	<p><i>stateless</i> < observing < stateful</p> <p>Statefulness future</p> <p>SAFETY:</p> <ul style="list-style-type: none">observing: will not write on read_write datastateful: will neither read nor write on non <i>immutable</i> data <p>NOT ALLOWED:</p> <ul style="list-style-type: none">observing: writestateful: <p>LEG. NO CAPT.: observing, stateful, read_write, read</p>