

Intuitive Driving
Primarily subconscious - parallel - processing.
Reduces the Sensation of Speed (SOS)
The more time spent on the 'green'
path (subconscious processing),
the greater the SOS reduction.

Navigating the track using a cyclical (alternating)
combination of focus attention and subconscious
pattern matching, which is used to compare holistic
sensory input to a full sensory mental model
of the track, all timed by an internal 'rhythm' track.

Holistic Sensory Input from Driving
(Continuous flow of sensory input from all senses.)

Programmable/Adaptive
Attention Filter
(controlled by rhythm track)
toggles back and forth between
sharply focused attention
(serial processing)
and attention focused on
awareness (parallel processing)

Serial (Conscious) Processing - Analysis
Focused attention used to consciously
identify/process specific visual targets that
are used to trigger specific critical tasks.
Typically used for tasks that are critical
to maintaining reality/model synchronization.
(E.g. processing timing-critical visual
information such as important high-speed
braking & turning points.)
Consciously trigger the automatic execution of
the critical task related to the visual target.
Once the task is initiated, attention immediately
switches back to 'parallel processing' so the progress/results
can be more accurately sensed, and so pattern matching
can be done for the track/corner model and goals.

Parallel (Subconscious) Processing - Pattern Matching
For information that is to be subconsciously
processed, attention is focused on awareness,
which enables holistic (parallel)
processing of the sensory information.
Typically used for all but the timing-critical tasks
because parallel processing provides much
faster and much higher-resolution feedback from
the stream of kinesthetic and tactile sensory input
while still providing adequate visual resolution.
Perform continuous pattern match comparisons
between sensory input (reality) and the stored:
Track model, timing track and track navigation plan.

Full Sensory (holistic) Track Model & Rhythm Track
Stored 'Rhythm Track'
(variable timing sequence)
Track / Car / Conditions specific
Holistic Track Model
Defines what each location around the track should:
• Look like
• Feel like - Vestibular (forces & loads)
• Feel like - Tactile (physical sensations)
• Sound like
• Smell like

Track Navigation Plan
Execute Automated
Corner-Specific
Navigation Plan
Corner-by-corner
Track navigation plan.
Trajectory & rotation point
The Loading Plan
(Beginning to End of turn.)
Supports trajectory &
rotation point
objectives.
Driving Macros
Pre-defined / Automated
Objective Driven
Technique
Combinations

Goals/Experience/Knowledge
Goals
Session-by-Session
Lap-by-Lap
Turn-by-Turn
Lessons learned
from experience.
Database of
Driving Techniques

Emergency Pattern Match Error Recovery
Dynamic Attention Filter
Switches into Emergency Mode.
(Perceived as ultra-slow motion - or stop motion,
along with the sensation of being along for the ride.)
Emergency self preservation instinct takes over.
Automatically interrupts the pattern matching routine
and instinctively take action to
eliminate/minimize the danger.
Conscious mind gives full control
to the Subconscious so that it can
deal with the situation. Conscious mind
is left to observe; often experiencing the
sensation of ultra slow motion or stop motion.
By some miracle,
did I save it?
(and by 'I' I mean the
He or She inside you
who did the actual saving.)
Hit the Kill switch and get out
or wait for help.
Automatic Emergency Response Routine
(for large or fast-trending pattern/reality deviations.)
Work back up to speed until you can
re-establish 'synch' between reality and
your model.
Evaluate off track why the issue occurred
and how to avoid a reoccurrence.

Acceptable Pattern Match Error Recovery (Automatic Recovery)
Predefined, location specific, allowable
pattern match deviation threshold.
Is the deviation
within the predefined (modeled)
acceptable variance and/or
is it trending like it
will stay within tolerance?
Automatic correction feedback loop.
(restrictive car control
-slide correction- skills/routines.)
Automatic adjustment,
if needed, does not
require, or attract, any
conscious attention.

Unacceptable Pattern Match Error Recovery
Evaluate pattern mismatch and tack corrective action
to reestablish pattern match
Dynamic Attention Filter
Focuses attention on the mismatch to
enable evaluation and response selection,
and then back to awareness again after any
required adjustment is begun so that the
adjustment can be monitored accurately
and completed successfully.
Am I in Danger?
Self preservation instinct
takes over and automatically
breaks the pattern matching routine
so that corrective action can be taken.
Semi-automatic pattern match deviation
adjustment for out of tolerance
(or trending out of tolerance)
pattern/reality deviations.
The smaller (or slower trending) the mismatch
the more automatic the correction.
After the Adjustment
does reality (both current
and trending) match
the track model?
After adjustment, resynchronize
with rhythm track/ track model.

Large (Dangerous) Pattern Match Error Recovery
Perform Corrective Action.
Self preservation instinct
takes over and automatically
breaks the pattern matching routine
so that corrective action can be taken.
Methods for correcting for pattern match deviations
(base on the magnitude and/or rate of deviation)

Continue navigating the track using a cyclical
(alternating) combination of focus attention
and subconscious pattern matching.